

# **Disaster Preparedness Manual**

## **for Minnesota Building Officials**

Based on Original Collaboration with the Association of Minnesota Building Officials  
(AMBO)

Eighth Edition – March 2024

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## Forward

Over a 70-year average, there are typically [29 tornadoes reported in Minnesota](#), with some of these striking cities and causing structure damage. Less frequent, but equally devastating, are floods which periodically inundate river cities and towns.

When natural disasters strike a community, and cause structure damage, the local department of building safety plays a key role. This role typically includes **Damage Assessment**, the initial phase of inspecting the damage inflicted on each structure, and **Damage Recovery**, the much longer phase during which a community rebuilds. In each phase citizens rely heavily on the department of building safety staff for expertise, guidance, and assistance.

In these emergency response situations, it is important that the department of building safety respond quickly and effectively. Few other departments work as closely with citizens whose lives have been placed in turmoil. Not only must the department of building safety perform damage assessment inspections amid this turmoil, but it is also necessary to assist the public by effectively communicating the role the department is performing and what citizens should do to repair and reoccupy their homes.

Often, the local building official will have had no previous experience responding to these types of emergencies. The local jurisdiction may have a city **Emergency Management Plan** with the building official's duties listed; however, this list is often very general with few directions of the specifics necessary for proper guidance.

Working in collaboration with the Construction Codes and Licensing Division (CCLD) at the Minnesota Department of Labor and Industry (DLI), the Association of Minnesota Building Officials' (AMBO) Disaster Mitigation Committee was created to assist DLI by informing, educating, and assisting building departments facing this challenge. The Disaster Preparedness Manual for Minnesota Building Officials is designed to help building officials, building inspectors and permit technicians become better prepared for natural disaster emergencies

and to respond more effectively when catastrophe strikes. One of the goals was to create a Disaster Preparedness Manual (tailored to conditions in Minnesota) for departments of building safety to reference when preparing for, or responding to, a disaster striking their community. As a quick reference guide, it has intentionally been written as a short, nuts-and-bolts-type guide containing practical information.

However, this manual should not be confused with, or used in place of, a local jurisdiction's emergency management plan. This preparedness manual should be used in **conjunction** with local emergency management plans which take precedence.

The **Building Officials Disaster Preparedness Manual** contains information, guidance, and advice for the building department. The four stages of a disaster are described along with information helpful in addressing the numerous dilemmas and decisions the department of building safety will face in each phase. An overview (Chapter 1) is also provided to explain how the department's role changes as the emergency moves from phase to phase. In the Appendix are sample forms, placards and recommended policies and procedures which a local jurisdiction may find useful.

With the information, support, and suggestions offered by the **Disaster Preparedness Manual**, it is intended that local departments of building safety will more effectively assist their community in a time of critical need.

Suggestions for improvements to this manual are welcome. Please contact Franklin Martin by email at [franklin.martin@state.mn.us](mailto:franklin.martin@state.mn.us), Construction Codes and Licensing Division, Minnesota Department of Labor and Industry, 651-284-5012 or 800-657-3944 (Code Services).

## Advice from other jurisdictions

Following is advice offered by building officials who have experienced first-hand, the effects of natural disasters. Each disaster experience is unique, and this advice should be considered based on the severity of the event.

1. Do not waive permit fees following a natural disaster. The first inclination is to be compassionate; however, many additional expenses will be incurred by the Department of Building Safety (e.g., inspection assistance, printing, fuel, materials, overtime, etc.). The cost of permits is typically covered by homeowners/business insurance. Waiving the fees may likely affect the municipalities' ability to obtain reimbursement for department activities.
2. The amount of effort and work required to complete damage assessment inspections is typically underestimated. With adequate, qualified assistance, the process will be completed much sooner.
3. Depending on the severity of the occurrence, it is recommended that the building official remain in the office to coordinate inspection/office activities, make decisions, and answer questions.
4. When performing initial damage assessment inspections, inspectors should work in pairs so that one inspector can talk with the homeowner, while the other inspector performs the inspection. This is particularly important for inspector safety when inspecting a severely damaged structure.
5. Inspect homes adjacent to visibly damaged buildings for damage not readily apparent from the exterior. For example, a change in air pressure can damage a home (interior sheetrock cracks can indicate hidden damage).
6. If you are volunteering to help another city in the damage assessment phase, do not arrive until the municipality has notified you to arrive at a predetermined location and time.

7. Be aware that city, state and federal damage assessment forms are not interchangeable and may not be compatible as each agency requires different information for processing.
8. When roofing companies come into town following an event, verify they have a valid State Contractor, Remodeler, or Roofing License. Review requirements for inspections based on workload, staffing, and availability due to prioritization.
9. Following a windstorm/tornado event, attic insulation is often displaced from the wall line resulting in cold spots and/or ice dams the following winter season. Attics should be included in all inspections of buildings to ensure code compliance.
10. It can be helpful to set up districts or quadrants and to assign specific inspectors to each area.
11. Keep detailed records of inspection results and record the purpose of the inspection. Other groups may need this information for their own purposes later.
12. Other groups (i.e., Red Cross or FEMA) may perform their own surveys; however, only the building inspector (or other assigned personnel) has the authorization to placard damaged structures.
13. Accurate maps (with addresses on them, if possible) are very valuable. Often house numbers and street signs have blown away. Consider working with other departments to create and install temporary signage indicating streets and providing spray paint to inspectors for posting numbers and information.
14. Have handouts available. It is much easier to deal with residents if you have good handouts to give covering the most common types of repairs (roofing, siding, windows, garages, fences, etc.). [Code Administrative Manual](#) Many homeowners will want the building inspector to solve their problems dealing with insurance companies. The best you can do is provide good advice, provide copies of code sections and try to stay out of the middle (also refer them to the Minnesota Commerce Department).
15. Fractured and/or damaged foundations are a problem as to whether they were caused by the event. Inspectors should document observations but not speculate on the cause.
16. The designated building official needs to already have created a Policy or Procedure based upon direction from local landfill and/or regulators in dealing with construction debris and contents of structures. Refer to local Building Official's Policy and Procedures of the jurisdiction to determine the demolition and structure disposal process to avoid conflicts and unrecorded documentation requirements (e.g., lead paint, asbestos wrap, hazardous materials, petroleum-based contaminants). Additionally, hazardous materials contained in debris, waste, and deleterious material.
17. Portable kiosks/displays can be placed in damaged neighborhoods to quickly inform residents.
18. Do not stop unpermitted roof repairs without consulting the local building official. All permitting questions, and work activity, are to be referred to the local building official.
19. If entry passes are necessary to pass through National Guard, or other security stations, have someone obtain them in bulk for inspectors. In the past, damage assessment inspections have been delayed when each inspector has had to wait for hours to obtain a pass.
20. Beware that some insurance adjusters have used placards to their advantage. You may be requested to re-inspect a structure you initially placarded as "unaffected".
21. It is beneficial for the building official to project an image of a helper and not an impediment to the recovery process.
22. Assign qualified permit technicians to organize and assist in the permitting process to avoid delays, mistakes, and confusion.

23. It is recommended that the building official standardize permit fees with flat rates for common repairs such as reroofs and residing.
24. As many as four out of five construction permits (vs. reroof/siding) will require input/assistance by a building inspector. It is recommended to have staff in the office that can perform plan reviews and answer questions.
25. Arranging for inspection assistance by email is less likely to tie up valuable phone lines.
26. Unless a severely damaged structure is in danger of collapse, requiring demolition may not be necessary. Insurance adjusters often classify these as not worth repairing (costing more to repair than rebuild). This avoids negative publicity and still results in the building's removal.
27. A significant part of your time will be spent answering questions such as:
  - What do the placards mean?
  - What does 'condemnation' mean?
  - What is required of me before I can move back into my home?

***Because of this, you should become familiar with this subject matter and have prepared handouts to save the building official time.***
28. Emphasize patience, tolerance, and compassion to all staff members repeatedly. As busy and difficult as the work is, it's much worse on the homeowner and family.

Since the start of this manual terrorism has risen as a national disaster concern. Consequently, there is now more government entities involved in developing disaster plans. While the focus of this manual will continue to be providing building officials with recommendations, information, and tools they can use in the field. References have been added to other entities also involved in disaster planning activities and the resources they have developed, such as:

- [Minnesota Hazard Mitigation Plan Manual, Department of Public Safety \(2019\)](#)
- [Minnesota Disaster Management Handbook, Department of Public Safety, Division of Homeland Security and Emergency Management 3-8-2011](#)
- [FEMA P-2055, Post-disaster Building Safety Evaluation Guidance, Report on the Current State of Practice, including Recommendations Related to Structural and Nonstructural Safety and Habitability June 9, 2021, Version](#)

## Using the Disaster Preparedness Manual

This manual is intended to help define the role of the building official in the development of a community disaster plan and, to identify the forms and supplies needed before a disaster has occurred. Once your role is defined, select, and refine the information and tools provided in this manual to prepare you for a disaster. Although the internet is a frequently used resource, during a disaster, phone and internet service might not be available. Have a plan, prepare your tools, and know what State resources are available, and how to access them long before a disaster strikes.

### Disaster assistance volunteers

CCLD coordinates the volunteer program to identify individuals who can be called upon to assist with a disaster event. A [volunteer registration fillable form](#) is on the [CCLD disaster preparedness volunteer webpage](#).

## Chapter 1: Overview of a natural disaster experience

This chapter gives an overview of a building department's typical role in a disaster event, so that its role in each of the four phases can be understood in context of the whole.

First, the four phases of a disaster will be described, next, the typical role and responsibilities of a building department will be explained, then, various tasks and duties performed by building departments are identified, and lastly, how a response progresses is detailed.

### The four phases of a disaster event

Disaster events are separated into four separate phases. However, keep in mind these four separate phases overlap.

- **Phase I – Preparedness**
- **Phase II – Damage Assessment**
- **Phase III – Mitigation**
- **Phase IV – Recovery/Reconstruction**

### Phase I - Preparedness

This phase is basic preparation for a disaster event. It is here where preparations made County, City, and Township departments (including the building department) will be most evident.

It is essential that the local building official be knowledgeable of the department's role and responsibilities, as described in the local jurisdiction's Emergency Management Plan.

The building official should be knowledgeable about how local building departments have responded during past disaster events, the duties, tasks they have carried out, and how volunteer assistance is provided. To be truly effective, the building official must learn all the department's responsibilities and how to effectively carry them out.

Basic preparation efforts may include:

- Having the local Emergency Management Plan available (and read).
- Having the Disaster Preparedness Manual available (and read).
- Forms and maps stockpiled.
- Having important phone numbers updated and available.
- Understanding the roles of other departments and agencies.
- Knowing how to quickly obtain inspection assistance.
- Knowing how damage assessment inspections are performed.
- Being knowledgeable of insurance and liability issues.

### Phase II - Damage Assessment

This phase is when a jurisdiction inspects and documents the damage caused by the disaster event. In this phase the role of a building department is to send inspectors to assess damage to structures, placard damaged buildings



for occupancy worthiness, and produce reports about the numbers of damaged and destroyed buildings. Often a combination of Federal, State, County, City, Township, and private agencies are also involved in assessing damage to buildings. Because this role must be completed very quickly, additional inspection and office assistance is most often necessary, and it usually can only be obtained from other jurisdictions.

Residents impacted by a disaster event (by way of damage to their homes or businesses), must be kept informed as to the status of any restrictions on the use of their building, and steps necessary to reconstruct and/or reoccupy.

The department's role in documenting structure damage is critical because this documentation is necessary for the disbursement of State and Federal reimbursement funding if, an official disaster declaration is declared.

### **Phase III– Mitigation**

This is the phase of reducing the risk from damage associated with a disaster. Additionally, this is when owners want to reenter their structures, secure non-damaged property, and allow adjusters to begin collecting information about the damaged structures to compile insurance claims. Preliminary structural evaluation must be completed to ensure that the structure is able to endure occupants entering, beginning the mitigation of interior damage, and restoring elements of the structure to prevent further intrusion from the elements.

### **Phase IV- Reconstruction/Recovery**

This phase of a disaster event is when a community responds to, and repairs the damage inflicted by a disaster. It often begins immediately following an event and overlaps the Damage Assessment and Mitigation phase. This overlap adds to the workload, and if preparation or organization are lacking it will cause confusion.

The building department's primary role in this phase is performing plan review, issuing permits, inspecting repairs, and enforcing contractor licensing laws. This will be a very significant workload increase and opposition to code/zoning enforcement in the name of expediency will add stress to the effectiveness of the building department in communicating with the affected public.

Additionally, this phase is when a community evaluates the natural disaster experience and initiates changes or improvements (physical or procedural), so that less damage, and/or, a more effective response, will result in future occurrences.

Here, the building department's role will largely depend on direction from the local jurisdiction's administration, however, the daily routine of reviewing plans and performing inspections will have a significant impact on the ability of structures to withstand damage from future natural disasters.

This phase often lasts for up to a year and additional paid assistance during this period is almost always necessary.

### **Roles and responsibilities of a building department**

Each jurisdiction should have an Emergency Management Plan on file. It typically spells out the role of the building department; however, these plans are usually very general and lack specifics. Typically, the building department's roles and responsibilities will be stated as:

- Inspect each damaged structure; placard it for habitability and complete a damage report.



- Maintain accurate records of all damaged structures.
- Create maps identifying damaged areas and structures.
- Obtain inspection/office assistance if necessary.
- Report to supervisor (may often be different from one's normal supervisor).

Often, the difficulty is knowing before-hand, what is involved in carrying out and completing these responsibilities. The building official will be asked:

- What are the department's immediate goals and objectives?
- How will the department accomplish them?
- How will all buildings be inspected, and, within what time frame?
  - Establish the timeframe based upon the event-and scope of damage.
- Will outside assistance be necessary?
  - How many?
  - From where?
  - Are they paid?
  - How soon will they arrive?
  - Are there supplies for them?
  - Who will supervise and coordinate them?

These are questions the building department will be asked. The building official will be expected to know what to do and to have answers to these questions. Your response should be:

- This is how a typical response progresses ...
- These are some of the issues and situations that will arise ...
- These are some decisions the building department and city administration will be faced with in the next few hours and days ...
- And finally, this is how the building department will accomplish its goals and objectives ...

Each building official should have an overall understanding of a disaster response, an understanding of its department's role in a disaster, access to outside resources, and minimal supplies, including forms, on hand.

## **Various tasks and duties of a building department**

Following are some of the typical tasks and duties a building department might initiate following a disaster event:

- Identify areas of structure damage:
  - Ask police or fire which neighborhoods or areas have been damaged.
  - Do a "windshield survey." No inspections are performed at this time. The purpose of driving around is to identify the overall area of damage and to approximate how many structures must be inspected.
- Plan out the department's response (for the damage assessment, mitigation, and recovery phases). Set goals and objectives – for example:
  - Inspect all damaged structures:
    - Complete as quickly as the scope of damage allows.
    - Complete a damage assessment (not a financial assessment) report for each damaged structure.

- Post a placard on each damaged structure.
- Create a document file for each damaged structure.
- Obtain [inspection assistance](#) for the Damage Assessment Phase:
  - Enough assistance to inspect each building as quickly as the scope of damage permits.
- Obtain outside assistance for office operations:
  - Assistance for phones, permit issuance, inspection recording, etc.
- Make decisions regarding policy and procedural issues:
  - Will there be extended office hours? (typical)
  - Will the building official remain in the office to oversee operations, make decisions, assign staff to organize inspections?
  - Who will conduct orientations for assisting inspectors and what will it include?
  - Will dollar valuations be assigned to damage assessment reports?
  - What are the right-of-entry parameters for inspectors?
  - Who will have authority to order dangerous buildings demolished?
  - What information will inspectors give residents at inspections?
  - Will permit fees remain, be waived, or special fees created based upon the event?
  - Will fees be paid at the time of permit issuance or be assessed to the property? Be reminded that waiving fees may prohibit the department from being reimbursed by federal agencies at a later date.
  - How best to inform citizens of required permits for repairs and about contractor licensing requirements?
  - Will assisting inspectors have authority to stop work where there is no permit or where unlicensed contractors are working?
  - At what point will a structural review by an engineer be required?
- Prepare for additional office and field staff:
  - Distribute written policies and procedures to all staff and post throughout the office space.
  - Create or obtain necessary forms (damage assessment reports, placard, etc.).
  - Create a file for each damaged property.
  - Create maps for inspectors with instructions on how to record or update damaged areas.
  - Create inspector packets (containing maps, forms, pens, tape, etc.).

In an organized response, you set goals, objectives, policies, and procedures, so that all staff understand their part of the puzzle, and the public is given accurate and consistent information.

### **How a response progresses:**

Following is an example of how a building departments response to a disaster event would progress:

#### **Disaster response:**

- Staff performs a windshield survey to identify numbers of structures damaged, define specific areas of immediate concern, and create an initial 'Area of Effect'.
- Building official meets with supervisor to verify and coordinate the role and responsibilities of the building department.

- At this point many departments of building safety request assistance from the state's Construction Codes & Licensing Division. The department has trained staff who can provide the local building official with valuable advice about organizing a response.
- Building official creates goals and objectives for responding to the disaster event as well as continuing normal daily operations.
- Building official makes decisions about policies and procedures.
- Staff begins implementing policies and procedures:
  - Creating files, maps, handouts, packets, etc.
- Volunteer inspector assistance (usually) arrives on the first day following an event.
- Orientations begin and are a daily occurrence as each day brings new volunteer inspectors and permit technicians.
- Damage assessment inspections (usually) begin in the afternoon of the first day, are in full swing the next day, and completed within three to four days (more for major events).
- Documentation of inspections progresses, files are created, maps of damaged areas are updated daily.
- Information requests come in from other departments and from the public (for various types of reports and maps related to the damage). Accurate documentation is critical.
- Permits to repair damaged structures will pile up quickly. Applicants want permits issued without delay so that repair work can begin.
- Controversy may arise as unlicensed contractors are discovered and stop-work orders issued.
- Regular non-disaster work, including plan reviews and inspections, continues.
- Inspections of damage and placarding of structures is completed in a few days, however, re-inspections and re-classification of damaged structures will occur over the next few weeks for a variety of reasons.
- The workload stays very high as the Disaster Response Phase moves into the Mitigation and Recovery/Reconstruction Phases.

### **Mitigation**

- Demolition of buildings will be ordered (or requested) and permits must be coordinated with the [Minnesota Pollution Control Agency](#) for removal of hazardous materials.
- The reconnection of utilities must be coordinated so all parties are aware of reconnection procedures and restrictions.
- Disputes will arise between homeowners and insurance companies which will involve the building official and take significant amounts of time.
- While critical, documentation of structure damage and labor expenses are very time consuming; however any disaster-caused damage must be identified as such. This could be very important for future reimbursement funding.
- Determine how structure contents and debris will be collected and stored onsite.
- Create protocols for classifying contaminants and the impact to the occupancy of the building.

### **Recovery/Reconstruction:**

- Additional paid assistance for inspections must be found as volunteer inspectors are usually only available for a week or two.

- A significant increase in office work results as phone calls increase, permit issuances increase, plan reviews increase, documentation increases and requests for report summaries and updated maps continue.
- As unpermitted repairs are discovered and stop-work orders are issued, frustrated and angry homeowners will require assistance.
- Demolition of buildings will be ordered (or requested) and permits must be coordinated with the Minnesota Pollution Control Agency for removal of hazardous materials.
- The reconnection of utilities must be coordinated so all parties are aware of reconnection procedures and restrictions.
- Disputes will arise between homeowners and insurance companies which will involve the building official and take significant amounts of time.
- While critical, documentation of structure damage and labor expenses are very time consuming; however, any disaster-caused damage must be identified as such. This could be very important for future reimbursement funding.

The Damage Assessment and the Recovery/Reconstruction Phases will run in tandem and while damage assessment work tapers off relatively quickly. The Recovery/Reconstruction Phase continues often for up to a year or more.

## Chapter 2: Phase II – Damage Assessment

The Damage Assessment Phase is when a local jurisdiction assesses the damage caused by a natural disaster. Often a combination of state, county, city and private agencies are involved assessing damage. The building department's role (consult your jurisdiction's Emergency Management Plan) typically will be to assess the damage inflicted on structures, evaluate occupancy worthiness, document, and report this information to the assigned authority. The building official should understand that property owners impacted by their homes and businesses, need to be kept informed about the status of restrictions (e.g., access and occupancy) on their buildings and any steps necessary to reoccupy and/or rebuild.

### Determining the scope of damage

- Damage assessment for building departments usually begins with a preliminary report from the police or fire department about the area of damage. A "windshield survey" is often then conducted by the building department to identify those areas requiring damage assessments and approximately how many structures must be visited. It is recommended to inspect homes beyond the perimeter of obvious damage as often damage is not readily apparent.
- Most often the local building department is not used for purposes of quickly compiling a count of damaged structures to determine if a state or federal emergency is to be declared. Initially, a quick survey of structures and infrastructure is performed by the Disaster Coordinators staff to determine a base Area of Effect.

### Setting goals and objectives

Consult with the building official's supervisor to determine goals and objectives.

- **Sample goals:**
  - Complete a damage assessment report and placard each structure as soon as possible.
  - Document inspection reports and placards used for each structure and report this information to supervisor. Also, map all damaged structures by placard status.
  - Maintain communications with emergency coordinator (through supervisor) to verify additional responsibilities due to state or federal declarations.
  - Open communication channels with the public regarding placarding, inspections and permits. Many complaints following an event are related to property owners not being informed about steps necessary to rebuild and/or reoccupy the structure resulting in delays.
- **Sample objectives:**
  - Determine if outside assistance will be required in the field or office and acquire if necessary.
  - Set up files to document all assessed structures, additional personnel, hours worked, inspections performed, permits issued and expenses incurred (see Appendix for sample forms).
  - Contact CCLD to see what [assistance](#) may be available.
  - Create a map of assessed properties based on placards posted. A map that is color-coded has proven to be an extremely beneficial tool. This can also assist with assigning resources to deal with issues as they arise. This map will change frequently and be in high demand from other departments and agencies.
  - Decide department policy about potential issues and share with staff for consistent messaging:
    - Extended office hours are typical.
    - Will permits fees be charged, waived, or assessed back to the property? Cities often consider eliminating charges for permits during an emergency; however, they are usually covered by insurance and the building department will require additional paid staff following a disaster event.
    - How often to meet/report to the supervisor?
    - When will a plan review be required?
    - How will contractor licensing be enforced? In the past, departments have enforced licensing by utilizing the rapid contractor licensing with Department of Labor and Industry Licensing personnel. Often, jurisdictions will request a Labor and Industry licensing representative to assist.
    - Who will assign dollar valuation to structure damage? (It is extremely difficult for volunteer inspectors to estimate damages). Once a damage assessment approach has been determined by the Assessing Department, to establish an average value per home in the area, and then apply a standard multiplier to the damage identified on the damage assessment report:
      - Destroyed – 100% of average value (major damage).
      - 50% of average value (minor damage).
      - 25% of average value (Negligible damage).
    - It is recommended that volunteers should not stop work encountered without required building permits. The address should be recorded, brought back to the office, and staff can review whether permits have been issued. Additionally, City Staff should be the designated municipal representative to go back to the address and issue Stop Work orders. Volunteers assessing the properties do not have the authority to initiate independent action without the building official's approval.
      - Utility reconnection process (Utilities operate differently everywhere. It must be coordinated with utility companies to determine how reconnections will occur).

- What additional information, if any, will the field inspector give to the homeowner or post, when placarding a structure? Communication with the public is critical. In addition to the placard, it is recommended that the following also be given to the homeowner or posted, possibly in the form of a policy page (see sample public information handout in Appendix):
  - A statement as to the purpose of damage assessment inspections and placarding.
  - A copy of the damage assessment report.
  - When a permit may or may not be required.
  - How and where to obtain a permit.
  - Building department office hours.
  - Phone numbers of city offices, utility companies, Red Cross, tree removal service and debris haulers.
  - When a licensed contractor is required and the protections afforded the property owner.
  - Advice on finding reputable contractors and avoiding scams.
  - Any other city-produced handouts as appropriate.
  - At the damage assessment inspection the inspector could identify if any permits are required based on the damage assessment report.

### Obtaining inspection/office assistance

- See Chapter 7 which describes how to obtain [volunteer assistance](#).
- Also be aware that the CCLD regional representatives can be a valuable and immediate resource, particularly in outstate areas. It is recommended they be contacted immediately.
- The building official, prior to inspections commencing, should give an orientation to all staff. Volunteer inspectors should be given an overview of the city and briefed about any important policies/priorities. The documentation of damage, public information handouts and record-keeping procedures should be discussed. Priority inspection sites should be identified. Also, it should be specified what would constitute an "uninhabitable" home. This is a significant action that should be carefully thought through and then uniformly enforced.

### Office organization

- Phone calls, counter calls, permits and plan reviews will multiply. Typically, assistance is needed.
- Create a damage area map to identify the damage report/placard classification on individual properties. Maps of the area of damage which include individual property addresses should be produced for field inspectors. Street signs and addresses on homes will be missing.
- Additional copies of various forms and applications must be readied. (See samples in Appendix).
  - Damage Assessment Inspection Reports
  - Placards – color coded
  - Permit applications
  - Timecards (for volunteers)
  - Policies and handouts
- If the jurisdiction does not have paper "property files" organized by address, a file for each property should be created.
- Accurate documentation of damage assessment reports, individuals, hours worked, expenses, etc. is

critical following disaster events for potential reimbursement.

- The building official will need to determine what information is required to be retained/captured for reimbursement from Federal agencies once a Disaster Declaration is made.
- The waiving of building permit fees can be detrimental to the financial operations of the department when contract inspection firms are needed for back-up inspection operations.

## Field inspections

The primary focus of Damage Assessment is to placard those structures that could pose life-threatening hazards to the occupants. The secondary focus is to perform damage assessment inspections on each structure and document the findings.

Placarding categories: (see copies of placards for damage assessment in Appendix):

- **Unaffected Habitable** No Damage Observed – blue
- **Habitable** Repairs Required –green
- **Uninhabitable** Limited Entry Enter at Your Own Risk – yellow
- **Unsafe Structure Keep Out** –orange
- **Dangerous Keep Out Uninhabitable** – red
- **Sorry We Missed You** –white

*Performing a damage assessment inspection identifies its level of damage and whether a structure can be safely occupied. Regardless of the classification, a placard is posted on the front of the structure, visible from the street. The damage assessment and placarding of the structure are usually performed at the same time.*

While often the damage level and placard categories do correlate, sometimes they do not. For example, an undamaged shopping mall, but without power for smoke evacuation, would have no physical damage but be placarded as uninhabitable. In the Appendix are information sheets that advise how to categorize both the placarding and damage reporting.

It is recommended that inspectors performing damage assessments and placarding structures together work in a team of at least two inspectors. If possible, assisting inspectors should be teamed with inspectors of the affected jurisdiction. The combined experience and familiarity with the area can help the assessment process. If occupants are present during an inspection, one inspector can perform the assessment while the other answers questions. An additional benefit to working in teams is safety. Inspectors can look out for each other while working in damaged buildings. See the [list of equipment](#) inspectors should carry into the field.

The following should be considered when inspecting a damaged structure:

- Right of entry – Usually owners will be home and be grateful for the inspection. If no one is present inspectors typically leave a note requesting the owner arrange/schedule an inspection; however, if doors and windows are blown out and the structure is “open” to the public, a full inspection and placarding is typically performed (verify right of entry procedures with city attorney).
- Is it safe to enter? If the structure is in danger of collapse, it should be inspected from the outside only.
- Are power wires down or is gas escaping?
- Is the structure displaced from its foundation, twisted, leaning, or bowed? This is usually an indication of major damage.



- Make exterior observations first and then proceed to the interior (using the damage assessment report form). It is suggested to use a specific pattern for inspections, i.e. begin in the basement and then work upwards using a clockwise movement while going through all rooms on all levels. If you use the same pattern on all structures, you are less likely to miss something.
- Different inspectors will provide strikingly different levels of detail in their documentation; therefore, they should be instructed about the level of detail required.
- Reconnecting utilities will differ depending on location but should be coordinated with the utility companies and the electrical inspector. Procedures should be written down and given to all staff and affected property owners.
- Placards should be posted near building entrances and visible from the street.
- Provide each inspection team a digital camera. No one should use their personal cell phones for municipal operations.
- Taking at least one picture of the structure (and one of the placards to identify the structure) documents the building condition at the time of the event. This additional documentation can be invaluable later (after repairs have been made to the structure) for purposes of reimbursement funding. State and Federal agencies will require documentation of a structure's damaged condition prior to releasing funds.
- Office debriefings should occur daily to determine progress, identify, and resolve problems, and coordinate future inspections.
- Daily Activities to be Performed:
  - Inspection results need to be recorded in the municipality's official record(s).
  - Timecards should also be collected daily from volunteer staff and filed.
  - Expenses should be recorded daily.
- Consider scheduling meetings and inviting everyone assisting with inspections to sign in or take a roll call at these times.

## Communicating with the public

Communicating information to affected property owners, whether over the counter or at the inspection, is a critical function of the department. Owners will want the damage to their properties repaired immediately. They will want to know what restrictions the placard places on their structure, what the damage report identifies and what steps they must take to begin repairs and/or reoccupy their structures. Delivering messages approved by the Public Information Officer is critical in maintaining response operations. Conveying general permitting information to affected property owners through handouts can significantly reduce confusion, frustration, and confrontations while speeding up the recovery process. (See public information handout example in the Appendix).

## Preparedness checklist

The following are recommendations designed to allow for an immediate response to a disaster event which overwhelms a local jurisdiction's capabilities and requires outside inspection assistance.

## Organizational

**To be on hand and available.**

- \_\_\_\_\_ A copy of the community's Emergency Management Plan.
- \_\_\_\_\_ An [organizational chart](#) (typically it is different under emergency conditions).
- \_\_\_\_\_ Identity of who has authority to request outside inspection assistance.
- \_\_\_\_\_ A copy of Minnesota Building Officials Disaster Preparedness Manual.
- \_\_\_\_\_ A list of staff and their contact information.
- \_\_\_\_\_ Contact information for CCL, CAS, and for BIS regional staff.
- \_\_\_\_\_ Copies of any mutual aid agreements.

**Forms - On hand to be copied. Examples contained in the appendix.**

- \_\_\_\_\_ Damage Assessment Inspection Form
- \_\_\_\_\_ Placards
  - **Unaffected Habitable** No Damage Observed – blue
  - **Habitable** Repairs Required –green
  - **Uninhabitable** Limited Entry Enter at Your Own Risk – yellow
  - **Unsafe Structure Keep Out** – orange
  - **Dangerous Keep Out Uninhabitable** – red
  - **Sorry We Missed You** –white
- \_\_\_\_\_ Deputizing form for assisting staff
- \_\_\_\_\_ Map of the jurisdiction which includes individual addresses (invaluable)
- \_\_\_\_\_ See appendix for additional forms

**Equipment to be available to each inspector/team - To be purchased once an event occurs.**

- \_\_\_\_\_ Large flashlights
- \_\_\_\_\_ Extra batteries
- \_\_\_\_\_ TYVEK Suit (Size appropriate)
- \_\_\_\_\_ N95 Masks
- \_\_\_\_\_ Rolls of duct tape
- \_\_\_\_\_ Clip-on nametags
- \_\_\_\_\_ Black markers, pens
- \_\_\_\_\_ Clipboards/notebooks

- \_\_\_\_\_ First-aid kit (small)
- \_\_\_\_\_ Work-issued mobile phone and USB Connector
- \_\_\_\_\_ Work-issued laptop and power cord
- \_\_\_\_\_ Charging cords for equipment, flashlights, laptops, and phones

**Request assisting staff to bring**

- |  |                                       |
|--|---------------------------------------|
| _____ Hard-sole knee-high waterproof boots | _____ Hard hat                        |
| _____ Identification as building inspector | _____ Sharps-proof Gloves             |
| _____ Code books                           | _____ Tape measure                    |
| _____ Cell phone                           | _____ High visibility safety vest     |
| _____ Rain gear                            | _____ Insect repellent, if applicable |

**Miscellaneous recommendations**

- \_\_\_\_\_ Attend educational opportunities about disaster mitigation.
- \_\_\_\_\_ Provide staff training by assisting other jurisdictions struck by disasters (both field and office staff).
- \_\_\_\_\_ In city ordinance, require a demolished building to have its foundation removed vs. buried. This will allow reimbursement funding to pay for foundation removal.

**FEMA/HSEM vs. building damage assessment inspections/reports**

The Minnesota Department of Public Safety – Homeland Security and Emergency Management (HSEM) puts out a lengthy damage and impact assessment form as a tool to be used by a local emergency manager to determine the extent of damages so that a decision can be made on whether to request federal and state financial assistance. This form reports damage on many more listings than just buildings (bridges and roads for example). The inspection criteria and classifications listed on these forms are similar to forms shown elsewhere in this manual.

Red Cross criteria, however, is slightly different with fewer levels of damage listed.

## Chapter 3: Phase III – Recovery/Reconstruction

The Recovery Phase is when a community repairs and reoccupies damaged structures following a disaster event. This phase will begin almost immediately and must be dealt with in tandem with Phase II - Damage Assessment. Recovery may often last for up to a year or more as the community rebuilds. The building department will likely face a significant workload increase during this period. If state and/or federal disaster declarations have occurred, additional work in the form of re-inspections and providing documentation will be necessary.

### Setting goals and objectives

Establish goals and objectives (with approval from your supervisor) to provide guidance to staff and the public.

#### Sample goals may include:

- **Issuing permits, scheduling inspections, performing inspections, and documenting work to the public.** This can be difficult due to the significant workload increase.
- **Assist the affected public through effective communications.** The rebuilding process will likely be confusing to the public (and contractors). Effective communications can greatly speed the recovery process.

#### Sample objectives may include:

- **Obtain adequate staffing.** Volunteer and mutual aid inspectors are often ~~only~~ available for about a week and may be needed longer for major events. By the third day following an event, the building official should be considering the necessity of, and obtaining approval for, additional paid office and field staff. This additional staffing is often necessary for up to a year; therefore, careful consideration should be given before eliminating permit fees for damage repair work.
- **Provide written policies to staff.** Office and field staff will be busy handling questions and workload. The department should provide and operate under consistent and accurate information. Some policies and procedures will have been previously implemented in the Damage Assessment Phase (e.g., what work will require a work permit, when will a plan review be required, how will contractor licensing be enforced, etc.).

#### Additional policies may include:

- Will certain permits be issued in the field by inspectors such as reroofing or residing?
- How will zoning and engineering issues such as non-conforming uses or utility repairs be verified and coordinated into the permit process?
- Under what conditions must a structure be demolished and by whose authority?
- Under what conditions and time frame must damaged buildings be boarded up?
- Will office hours be extended during the recovery phase (usually a longer period of time)?
- How will the reconnection of utilities be coordinated and communicated to building inspectors, property owners, contractors, etc.?

Many other decisions regarding policy issues will be necessary as each event and jurisdiction is unique. It is critical to document decisions and distribute information to minimize confusion and frustration.

- Use clear, consistent, and timely communication when addressing the public regarding damage assessment results to decrease confusion and frustration.
- The information given out during the Damage Assessment Phase, should include:
  - The restrictions the placard places on their structures.
  - The purpose of the Damage Assessment Report and what it says about their structure.
  - What steps must be taken to begin repairs on their structures and reoccupy (see sample in Appendix).
- The following additional information may prove useful to property owners of damaged property:
  - Precautions to consider when demolishing a structure.
  - An inspection checklist for the property owner's follow-up (see sample in Appendix).
  - Recommendations such as contacting insurance agents before signing contracts.
  - Explaining the process of reconnecting the utilities (e.g., electrical, gas, and water).
  - Provide procedures for demolition of structures if insurance companies declare structures destroyed (costing more to repair than replace).
  - Recommendations in identifying reputable contractors for permanent repairs (see Appendix).
  - Recommendations in how to avoid scams.

Communicating information to affected property owners and contractors is a critical function for the recovery process to be successful (also see [Chapter 8](#)).

- Communicating with supervisor and the disaster coordinator. Following disaster events, one of the biggest complaints from building officials is that during the initial stages of the event they were not kept informed of decisions directly affecting their role and responsibilities. Decisions made by local officials, required documentation due to state or federal declarations. Decisions about coordinating resources by the disaster coordinator often are not relayed to the building official who sometimes has primary responsibility for implementation. The building official must impress on their supervisor that they be informed of decisions affecting the recovery process. The municipality's Disaster Response Manual needs to outline these communications are to be handled.

### **Additional issues a building official may face during this phase include:**

- If building permits are issued for emergency repairs to allow habitability, it should be identified that separate permits for permanent repairs are required. This is to avoid homes being occupied but not repaired. A time frame should be stipulated.
- Pressure will often be placed on the building official to forgo the requirements of some permits and many types of plan reviews to expedite repairs. A balance should be considered so that building code, engineering department requirements, and zoning ordinance issues can be adequately addressed. If plan reviews are not required, some property owners may obtain permits to repair or expand a non-conforming structure or use that should be denied.
- Residents will often want to incorporate expansions, additions, and further remodeling as long as they are hiring contractors to perform repairs. If plan reviews are not required, this complicates the field inspection process.
- Contractor licensing laws can be difficult to enforce by an overworked staff in the rush to rebuild.

- The Minnesota Pollution Control Agency (MPCA) may request the jurisdiction’s inspectors verify hazardous materials have been removed from structures prior to demolition. An affected jurisdiction may not have adequate staffing to perform this function.

## Chapter 4: Phase IV - Mitigation

The Disaster Mitigation Phase is when a community evaluates the natural disaster experience and initiates changes or improvements (physical or procedural) so that less damage or a more effective response will result in a future occurrence.

Many of the mitigation efforts a community will undertake will be beyond the scope and involvement of the building official. Improvements of this nature typically include enhancements to the public infrastructure to ensure continued public services during an emergency; however, mitigation efforts by the building department after an occurrence can have a significant impact and may include:

- Discussions among inspectors and support staff as to what worked, what did not, and then revising procedures, policies, handouts and forms.
- Discussions with citizens impacted by the disaster occurrence to better understand the problems and difficulties they faced (both immediately after the occurrence and in the longer recovery phase) so that the public's interaction with the building department can be improved.
- Discussions with other area building departments to compare and share knowledge, experiences and other mitigation efforts.
- Meetings with other area building officials to discuss assistance prior to occurrences.
- Sending staff to educational opportunities, or disaster simulation training, or allowing them to participate in assisting jurisdictions working through a disaster response.
- Developing a disaster response plan for the building staff, tailored to the community, to function in tandem with the community’s Emergency Management Plan.

## Chapter 5: Flood type events

Typically, flood events are not the immediate devastation that tornadoes cause; however, they can be just as devastating to structures and the lives of inhabitants. This chapter discusses the four phases of a flood disaster and, while the bulk and principals of this entire manual still apply, it highlights those aspects which are unique to floods.

Floods and tornadoes come in all shapes and sizes. Flood response principles apply even to a single home which has had its basement flooded. Flood damage to a structure, the assessment of damage incurred, and recommended repair methods, are similar regardless of the size of the event. Clean-up and recovery State Resource Information for homeowners and renters are available from [Homeland Security and Emergency Management \(HSEM\)](#).

As in any other disaster event, there are four phases to a flood disaster:

- Preparation
- Damage Assessment

- Reconstruction/Recovery
- Mitigation

## Preparation

The preparations taken before a flood will provide the most benefit to both the building department and the public. While in a tornado the damage is immediate and any preparation a definite forethought, often (but not always) flood events develop over a longer period, allowing more time to prepare.

First and foremost, preparation includes training about disaster response. Many classes and seminars are available as well as what is some of the most effective training – volunteering and assisting another jurisdiction’s building department struggling through a flood event. Preparation also includes gathering supplies for the anticipated work.

Assisting inspectors can be asked to bring:

- tape measure
- hard hat
- identification
- boots
- gloves
- rain gear
- flashlight

Supplies a jurisdiction may be expected to provide each team include:

- large flashlights
- duct tape
- ring binder notebook
- fluorescent vests
- local Identification badges
- informational handouts
- maps

Office preparations may include:

- Creating handouts for inspectors identifying what to inspect, document, and what qualifies a structure to become uninhabitable (sewage in basement, leaking fuel oil tanks, sprinkler system not functioning, etc.).
- Making copies of the Damage Assessment Inspection form (see Appendix)
- Making color copies of the six Placards (see Appendix).
- Making copies of building permit applications.
- Modifying and making copies of handouts describing, for the public, the damage assessment process (see Appendix). Also include phone numbers.
- Making copies of handouts relating to flood damage and clean-up (see Appendix).
- Making copies of handouts so that all staff are aware of policies, procedures, sharing accurate information, and consistent answers.
- Possibly adding and training additional office staff for the anticipated workload increase.
- Creating a command structure diagram (with names), so that staff will know where to direct questions.
- Creating or copying color-coded maps of the jurisdiction with individual property addresses.
- Timecards and sign-up sheets for staff and assisting volunteers (see Appendix).
- Creating a color-coded map that will visually record the placard and level of damage of each structure. Copies of this map will be in demand by other agencies (see Appendix).



- Creating a document that will visually convey the progression of individual property, and structures, through the Assessment/Recovery process.
- Some miscellaneous preparations may include:
  - Reading your jurisdiction's Emergency Management Plan to verify the building department's role and responsibilities.
  - Informing your supervisor of the building department's proposed actions, anticipated additional expenses, additional personnel requests, potential problems, confrontations, and explaining your response in enough detail to keep your supervisor well informed.
  - Meeting with the local disaster coordinator to verify the department's role and responsibilities, so that there are no unfulfilled expectations by others (first get approval from supervisor).
  - Meeting with Minnesota Department of Natural Resources representatives to discuss flood plain issues such as identifying (and potentially prohibiting the rebuilding), homes within the flood plain with more than 50% of the home damaged. Also, identify procedures and responsibilities for determining the percent of damage incurred.
  - Meeting with Pollution Control Agency representatives to discuss possible inspections, prior to demolitions, to verify that the removal of hazardous household debris (fluorescent light bulbs, mercury in thermostats, etc.)
  - Locating the property owners of vacant structures so inspections after the flood can be scheduled.
- Creating notebooks for each inspection team:
  - Sign-in sheets
  - Timecards
  - Map – with individual property addresses
  - Damage Assessment Inspection forms {and instructions for use}.
  - Placard copies in colors {and instructions for use}.
  - Handouts explaining the damage assessment process, storm damage clean-up, and other important information (see Appendix).
- Informing the public, **before a flood occurs**, about how best to prepare a structure for anticipated flooding:
  - Keeping a basement pumped dry may lead to its collapse due to hydrostatic pressure.
  - The wave action of driving past flooded mobile homes can significantly weaken foundations. Signs should be posted to minimize this from occurring.
  - Secure fuel and fuel oil tanks so that when nearly empty or empty will not tip over, float, or swept away. If possible, have fuel removed from tanks located in the basements of homes to limit contamination. If fuel oil does spill inside homes, have the homeowners contact the MPCA Customer Assistance Center at 1-800-657-3864.
  - Recommend to homeowners that identifying and marking high-water elevation level on trees, poles, around the structure (after floodwaters have subsided) for future reference on their own property.

Preparations will directly impact the success of both the Damage Assessment and Recovery Phases for both the building department and the affected the public.

## Damage Assessment

Damage Assessment in a flood event is when building inspectors physically inspect the exterior and the interior of a flood affected structure, complete a Damage Assessment Report, and then, placard the structure for habitability. This information is then documented and mapped by office staff. These inspections should occur as soon as possible after flood waters have subsided (and basements are emptied). As in a tornado event, a “windshield survey” is first conducted to identify the scope and boundary of those flooded structures requiring inspection. Also of note:

- For safety, assisting inspectors should be organized in teams of two or more.
- Each team should be given supplies (see Preparation) and assigned a territory which is recorded (for safety purposes).
- Assisting inspectors should receive an orientation when they arrive and then be deputized. The orientation should include those issues listed in Chapter 8, but to also include:
  - Specifics for how to inspect flood damage (discussed later), how to complete the Damage Assessment Report (see Appendix) and Instructions about how to placard a structure and what constitutes an uninhabitable structure (see Placarding – Floods in Appendix).
  - An explanation of why the DNR wants specific structures identified on damage report forms (if over 50% of market value is damaged and within the 100-year flood plain).
  - Informational handouts to be given out (by inspectors) to the affected public at inspections.
  - Sanitation warnings and guidelines as some inspectors, and building owners, will inevitably encounter sewage in basements or other contaminants.
  - Documentation requirements for volunteers (such as: name, jurisdiction, home phone number, emergency contact information, days/hours worked, when deputized etc.).
- Assisting permit technicians should be given the same orientation when they arrive so that they also understand the role of the inspector. Additionally, permit technicians should be instructed about:
  - The local permitting process.
  - Documentation procedures.
  - Creating maps from damage/placard reports.
  - File storage.
  - Informational handouts to include with issued permits.
  - Phone numbers of various agencies and utility companies.
  - The expectation of dealing with residents under significant stress.

## Damage Assessment Report

A [Damage Assessment Report](#) is required for each water-damaged structure (which should be recorded on the form); however, this additional information should also be documented:

- The height the flood water reached on the structure.
- Evidence of any sewage within the structure.
- If flood water reached portions of the electrical service, furnace, water heater and/or appliances.
- If the basement walls were finished or unfinished.
- Presence of fuel oil tanks and/or fuel oil smell/spillage, or other types of contaminants.
- Which utilities are functioning, and which are not.

- Any observed cracks in basement walls (particularly low horizontal cracks which indicate potential wall failure).
- Debris in basements (such as an accumulation of mud, debris, deleterious debris).

## Placarding for habitability

Placarding a structure identifies its habitability to the public. In the Appendix are placard templates and the field handout for Placarding for Floods, which recommends criteria to help inspectors make consistent judgment calls when placarding flood damaged structures. This is suggested criteria only and may be adjusted by the building official as situations warrant.

Inform inspectors that if other than single-family structures are classified as uninhabitable, any persons encountered should be instructed to vacate the placarded structure. Enforcement is left to others (i.e., police – if deemed necessary by the local building official). The same applies to single-family structures classified as “Unsafe” and “Dangerous”, however, with single-family structures classified as “Limited Entry – Uninhabitable” or “Affected – Uninhabitable” it is not always appropriate to instruct residents to vacate. This decision should be made by the local building official following consultation with the disaster coordinator.

These structures may be technically uninhabitable from a building code standpoint but if they are not dangerous, residents may not have optional housing available and may choose to stay in these structures.

## Damage specific to manufactured homes

A separate chapter addresses some of the issues inspectors may encounter when inspecting manufactured homes for flood damage. See [Chapter 6](#).

## Miscellaneous information regarding flood inspections

- Beware of unexpected dangers such as rodents and snakes.
- Beware of contact with sewage on hands, clothing or boots, the possibility of disease and the necessity for cleanliness.
- Empty fuel-oil tanks often float resulting in bent and leaking fuel lines.
- Look closely for plumbing breaks as wet ground in crawl spaces can settle and waste and vent lines then snap off.
- Sight down basement walls looking for bowing of walls.
- While single-family homes without electricity may not cause classification to be “Uninhabitable”, lack of electricity will result in an “Uninhabitable” classification for businesses, restaurants, churches, etc.
- **Do not enter structurally unsafe areas or areas where hazardous material may be present.**

## Recovery

Recovery in a flood event is when the community repairs and rebuilds from damages caused by a flood. This stage usually begins right after flood waters subside, before the Damage Assessment Phase ends, and it can last for a year or more. Often additional paid office and field assistance is necessary due to the volume of work.

The recovery effort will begin sooner than expected and preparation for the Recovery Phase should be completed before the flood and during the Preparation Phase. Additional staffing for permit technicians, plan review and staffing for inspections, will likely be necessary. Volunteer inspectors will usually remain for the Damage Assessment Phase but not for the Recovery Phase. Guidelines should be in place as well as decisions made regarding permit fees, office hours, time frames for plan review, etc. (see [Chapter 4](#)). Handouts for the public should also be ready for distribution (see samples in Appendix). Staff should be reminded they are to regulate the public and also assist with recovery.

Permits should not be immediately issued over the counter. When an application is received it should be reviewed against the Damage Assessment Report to determine if it is for full or partial repair and the field permit card should document the scope of the permitted repair to keep field inspectors informed. When issuing permits, additional information can be given the public to inform, educate, and protect them. Information and handouts to possibly attach to permits include:

- Recommending to property owners communicate with their insurance company before beginning repairs.
- Documenting damages with photographs along with a list of damages for each structure.
- Contactor licensing requirements and the protections afforded them.
- Providing the attorney general's handout regarding hiring a contractor.
- Storm damage cleanup (see Appendix).

Additional considerations when issuing permits:

- The municipality's Policies and Procedures need to be predetermined, or established, for the handling of structures located in the Floodway/Flood Fringe that have been determined to be damaged more than 50-percent of the appraised value and are located within the Floodplain.
- Structures damaged over 50% - percent of the appraised value may now be defined as a non-conforming use where the building may not be allowed to remain or be repaired (per the local zoning ordinance).
- Flood-damaged foundation walls are to be assessed by a Registered Minnesota structural engineer's review.

## **Repairs to structures impacted by floodwaters should address the following potential damage:**

### **Electrical systems**

Generally electrical installations are inspected by electrical inspectors; however, building inspectors should understand circumstances where the integrity of electrical materials and equipment is affected by floodwater. In many instances, deterioration that affects insulation, current-carrying capability and mechanical operation may not develop immediately. In most instances the integrity of electrical equipment and devices are severely impaired by corrosive contaminants and sediments found in, or left behind by, floodwaters. Equipment and devices may operate in an unattended or unmonitored state; however, the operational failure of these devices or equipment exposes occupants, and property, to possible electrical shock and fire hazard.

All electrical equipment, panelboards, switchboards, receptacles, switches, controllers, furnaces, boilers, water heaters, appliances and similar electrical apparatus that have been submerged in floodwater must be replaced.

In addition, electrical wiring, including service conductors, feeder cables or conductors, and branch circuit cables or conductors, must be replaced where they have been either partially, or completely, submerged.

For help with questions about electrical work, and repairs to be completed, contact the local jurisdiction's electrical inspector or [CCLD's Electrical Inspection Unit](#) at 651-284-5026.

## Plumbing systems

- If water lines have been partially or fully submerged, they should be tested for leaks.
- After water lines have passed the working pressure test, they should be flushed with water and chlorine mixture (200 parts per million for 3 hours or 50 parts per million for 24 hours).
- Replace the water Heater Storage Tank when it has been partially or fully submerged in floodwater.
- For help with questions about inspection, testing, and corrections of the plumbing system, contact [CCLD's Plumbing Plan Review and Inspections Unit](#) at 651-284-5063.

Mechanical metal ductwork that has been partially or fully submerged may have to be removed and cleaned. If ductwork is the fiberglass board type, it must be removed and replaced with new ductwork. Appropriate ductwork insulation must be replaced or installed.

- Gas lines and connections may require testing for leakage.
- If furnace insulation has been partially or fully submerged, replace the insulation in accordance with the manufacturer recommendations. See the electrical section for actions if furnace electrical equipment or components have been partially or fully submerged.

## Main structure

- Remove and replace all insulation in the floor and walls of a home that has been subjected to floodwater.
- Inspect all floor decking that were submerged in floodwaters. If necessary, replace with approved materials.
- Allow areas to dry thoroughly prior to replacement of components such as insulation, vapor barriers, or {gypsum board}.
- Flood water will wick through construction elements extending the damage beyond the benchmark of the actual floodwater.

## Wells

Water from wells cannot be regarded as safe for drinking or food preparation until the well and plumbing system have been flushed, disinfected, and a water test shows that it is safe to drink.

- A well should be considered contaminated anytime the floodwater comes in contact with the well casing.
- The [Minnesota Department of Health's web page](#) contains additional information regarding flood waters reaching wells

## Septic systems

- If a septic system has been flooded it is likely the septic tank has collected silt. Owners should have flooded tanks pumped out as soon as possible taking care that ground water pressure does not damage the tank.
- A Compliance Inspection must be performed on the drainfield to ensure its continued use. Flooding of the drainfield can destroy the biomat and operation of the drainfield.
- Septic systems should not be driven over when they are saturated. This will reduce the ability of the drain field to treat wastewater.

## Other agencies

Other agencies involved in flood events are largely the same agencies involved in tornado events (see [Chapter 9](#)). However, some agencies play larger roles in flood events as opposed to tornado events, these include:

### *Minnesota Department of Natural Resources (DNR)*

The DNR will likely ask the building department to identify those structures both located within the 100-year flood elevation and that have received damages in excess of 50% of their appraised value. The problem may arise where the building official does not have adequate staffing to inspect these structures to the level of detail requested (as damage assessment inspections and placarding are the department's top priorities). Historically, some jurisdictions have told inspectors to highlight the structures they believe are candidates for follow-up inspections later. These properties are not issued building permits pending further inspections. The local building official determines who will perform the subsequent inspections. They could be performed by the local building department or by an independent inspection firm paid for by the property owner.

### *Army Corps of Engineers*

This agency will typically have a larger presence in a flood event. However, its direct interaction with the local building department will be minimal as it deals more with infrastructure and the local engineering/public works departments.

### *Minnesota Department of Health (MDH)*

This agency will also have a large role (if not an actual presence) in flood events. The health dangers in a flood are very high for both victims of floods, and those working in and around flooded areas, due to the presence of sewage. MDH also deals with food establishments, wells, septic systems, and it is a very good source of information for identifying and relaying proper sanitation precautions in and around floods (e.g., flood clean-up). It is recommended to attach flood clean-up information from the Department of Health and Pollution Control Agency (in Appendix) to issued permits.

## Chapter 6: Manufactured (mobile) home flood damage assessment mitigation

The following are items CCLD encourages municipalities with manufactured homes to share with residents about possible damage-and hazards caused by flooding. These items may also be used by the authority having jurisdiction to determine corrections that may be required to the manufactured homes, home installation, or if the manufactured home should be tagged as uninhabitable.

The three types of pressures associated with flooding are hydrostatic, hydrodynamic and debris impact. Damages associated with flood water that will affect manufactured homes are:

- Saturation of soils causing footings, piers, and foundations to become unstable or fail.
- Floation may cause support and anchoring systems to become unstable or fail.
- Lateral displacement of the home's ceilings walls and floors.
- Cracking of wall and ceiling finishes.
- Saturation of insulation materials in floors and walls.
- Saturation of floor framing and decking materials (floor decking is typically structural particle board and is damaged by water) render the structure uninhabitable.
- Siding, wall sheathing, and interior wall finishes.
- Mechanical duct work located in belly (floor) area of home (metal or fiberglass or flexible connector).
- Gas and oil lines and connections in, and under, the home.
- Plumbing systems of the home (drain/waste/vent and water).
- Electrical systems of the home in floors and walls.
- Furnace and water heater.
- Mold from water damage or sustained high humidity levels.

### Support system and anchoring

- Remove skirting to allow drying under the home.
- Remove and replace vapor barriers under the home after the ground is dry.
- Check soils in areas of footings/piers for undermining.
- Check anchors for damage to anchor, strapping or strapping connectors.
- Check anchors to verify that they are solidly in the soil.
- Check pier supports and blocks to verify they are not loose or damaged and verify that shims between pier and home frame are secure.
- If soil erosion has occurred or if lack of soil exists to create positive drainage away from home have it reworked. Note: All manufactured home installations or re-installations are to be completed by a Minnesota-licensed/registered installer in Minnesota. Effective since June 26, 2000, all HUD-labeled manufactured homes installed or re-installed in Minnesota are required to be anchored.



## Electrical systems

Generally electrical installations are inspected by electrical inspectors; however, building inspectors should understand circumstances where the integrity of electrical materials and equipment is affected by floodwater. In many instances, deterioration that affects insulation, current-carrying capability, and mechanical operation may not develop immediately. In most instances the integrity of electrical equipment and devices is severely impaired by corrosive contaminants and sediments found in, or left behind by, floodwaters. Equipment and devices may operate in an unattended, or unmonitored, state; however, the operational failure of these devices or equipment exposes occupants to possible electrical shock and fire hazard.

All electrical equipment, panelboards, switchboards, receptacles, switches, controllers, furnaces, boilers, water heaters, appliances, and similar electrical apparatus that have been submerged must be replaced. In addition, electrical wiring, including service conductors, feeder cables, conductors, branch circuit cables, or conductors, must be replaced where they have been either partially, or completely, submerged.

For help with questions about electrical work, and repairs to be completed, contact the local jurisdiction's electrical inspector or [CCLD's Electrical Inspection Unit](#) at 651-284-5026.

For questions on electrical work to be completed, contact [CCLD's Electrical Inspections Unit](#) at 651-284-5026.

## Plumbing systems

- Check drain/waste/vent lines and connections under the home for leaks, proper slope, and pipe support.
- Drain/waste/ and vent lines should be air tested, and able to hold a one-inch water column.
- If water lines have been partially or fully submerged, they must be tested for leaks (The potable water test pressure shall be greater than or equal to, the working pressure under which the system is to be used. MPC 4714.609.4) Do not pressure test water heaters when testing water lines.
- After water lines have passed the working pressure test, they are to be flushed with chlorinated water. (200 parts per million for 3 hours or 50 parts per million for 24 hours).
- Replace the water heater storage tank when it has been partially, or fully, submerged in floodwater.
- For help with questions about inspection, testing, and corrections for the plumbing system, contact [CCLD's Plumbing Plan Review and Inspections Unit](#) at 651-284-5063.

## Mechanical systems

- Metal ductwork that has been partially or fully submerged may have to be removed and cleaned. If ductwork is fiberglass board type it must be removed and replaced with new ductwork. Appropriate duct insulation must be replaced or installed.
- Test gas lines and connections for leakage.
- Test fuel oil lines for leakage.
- If furnace insulation has been partially or fully submerged, replace the insulation in accordance with the manufacturer recommendations. See the electrical section for actions if furnace electrical equipment or components have been partially, or fully, submerged.

## Main structure

- Remove bottom board (belly paper) if the area was partially or fully submerged to allow inspection and corrections to electrical, plumbing and mechanical systems/materials.
- Remove and replace all insulation in the belly (floor) area or walls of the home exposed to floodwater.
- Remove and replace all floor decking that was submerged with structural rated floor sheathing ~~is~~ installed in accordance with a Minnesota licensed structural engineer repair requirement.
- Treatment of floodwater-soaked construction elements for bacteria and potential mold and mildew growth (contact the Minnesota Department of Health for suggested treatment). Allow areas to dry thoroughly before replacing components such as insulation, vapor barriers, drywall, and decking.
- Remove and replace all gypsum board products that have been subjected to floodwaters. A vapor barrier is required to be replaced on the warm side of exterior walls and ceilings.
- When replacing floor decking, no interior walls of the manufactured home may be removed, or relocated, because of shear wall designs of the manufactured home. Removal, or relocating, the walls constitutes an alteration and is a violation of MSBC 1350.3800.

Floodwater will wick through construction elements, extending the damage beyond the benchmark of the actual floodwater.

Repairs or corrections to the construction elements of the home by other than the titled owner must be completed by a Minnesota-licensed contractor or remodeler. For information about licensed contractors or remodelers, contact [CCLD's Licensing and Enforcement Unit](#) at 651-284-5034

Any alteration of the construction, plumbing, heating, cooling, or fuel-burning system, electrical equipment, or installations which bears a seal or label (state seal on homes manufactured from July 1, 1972 to June 14, 1976, or HUD label on homes manufactured after June 14, 1976) voids the approval, and the seal or label must be returned to the commissioner (Minnesota Building Code 1350.3800, Alterations)

The authority having jurisdiction, local building officials, or CCLD personnel may inspect the manufactured home and consider it beyond repair, and not fit for habitation, based on the amount of flood damage; or that repairs would constitute re-manufacturing of the manufactured home. The local building official will inform individuals of what permits are needed for repairs to ensure that all work is properly completed and inspected. For help with questions about the required corrections, contact the local building official having jurisdiction or [CCLD](#) at 651-284-5012.

If the authority having jurisdiction, local building officials or CCLD, determine that the home is beyond repair and not fit for habitation the following procedures are to be used to salvage/scrap the manufactured home.

- State construction seals (July 1, 1972 – June 14, 1976) or HUD construction labels (June 14, 1976, to the present) are to be removed and returned to CCLD.
- Homeowner or owner of title is to return the manufactured homes original Minnesota title to CCLD along with a letter indicating why the title is being surrendered. Surrendered titles will be forwarded to the Department of Public Safety for recording.
- Include a letter indicating the final disposition of the manufactured home, salvaged, destroyed sold as salvage (include buyers name and address). Form FM-1, 2/3/03, rev MS017

## Chapter 7: Obtaining damage assessment inspection assistance

During and after a disaster, a local jurisdiction's building staff is often overwhelmed by the amount of work. There can be more structures to inspect, permits to issue, plans to review, questions to answer, and decisions to make than existing personnel can effectively handle. Putting in extra hours may not be enough. In these cases, a building department may need immediate, and ongoing, assistance in the form of additional qualified building inspectors to conduct damage assessment inspections and qualified clerical staff to process permit applications.

**Building officials often obtain additional inspection personnel (after receiving approval from a supervisor) by the following methods:**

Contacting the [State Duty Officer](#) for them to notify the CCL State Building Official for assistance with the disaster: 651-649-5451 or 1-800-422-0798.

**CCL contacts:**

- Scott Wheeler, 651-284-5876 (Code Services Supervisor)
- Tim Manz, 651-283-5286
- Franklin Martin, 651-529-0779
- Adam Schminski, 320-815-2314
- Paul Swett, 651-303-2854

Additionally, request assistance by contacting other area building inspectors you know and requesting assistance.

- Contacting certain building officials with many contacts that can put out the word of needed assistance.
- Contacting local building official chapter groups and other similar organizations to spread the word.
- Requesting the assistance of city or other local engineers.

*Note: Obtaining assistance from other Minnesota governmental jurisdictions may allow legal and insurance issues (and reimbursements) to be relatively straight forward along legislated guidelines. Often, inspectors currently working for one jurisdiction, and volunteering to assist another jurisdiction, do not anticipate reimbursement to their jurisdiction. However, if state/federal disaster declarations occur, this may result in reimbursement being offered and accepted.*

Prior to making requests for inspection assistance, the following issues should be considered and decided:

- Approximately how many buildings must be inspected? Often the number will be more than originally estimated.
- How quickly must the initial inspection of all damaged buildings be completed?
- Will inspectors be working alone or in pairs? It is preferred that two inspectors work together as a team.
- How many additional inspectors per day will be needed to have all damaged sites inspected?
- Should a separate "coordinator" be utilized? If supervising "volunteer" inspection teams, this is recommended.
- How long will assisting inspectors be available? You may need to schedule and stagger volunteers.

- How long will volunteer assistance be available? This varies significantly on the type, size, and location of the event. One week to ten days is average unless it is a major event.

The following should be communicated to assisting inspectors prior to their departure:

- The location of the department of building safety offices.
- Who is the inspection coordinator to contact at the municipality?
- Equipment the assisting inspector should bring, and what will be provided.
- Anticipated use of their vehicle.
- Timeframe of assistance and expectations of reimbursement.
- Bring municipal identification that includes a photo.

When assisting inspectors arrive, an orientation should be conducted (preferably as a group) and include:

- Staff introductions
- Sign-in sheet
- Any initial documentation required of the assisting inspector (i.e. deputizing, entry passes, etc.)
- Goals and objectives of the effort
- Timecard use
- Damage Assessment Forms and how to complete them
- Placards, definition, and use of each (Why, When, and Where)
- Right-of-entry issues
- How to conduct inspections, what to look for, what to document, how to document and how long an average inspection should take
- Handouts and information sheets about the Jurisdictions policies and procedures.
- Who has demolition and/or condemnation authority?
- What to say if contacted by the media
- What to say to homeowners – anticipated/typical questions
- Any handouts intended for residents and where to obtain copies of them
- What to do, and who to call/notify, if a dispute erupts with a resident
- Color-coded city maps (identifying damaged areas, closed roads, and individual addresses)
- Phone numbers (office, police, fire etc.)
- City's extended hours of operation (If any)
- Minimum equipment supplies each inspector should have
- Information sheet identifying restaurants, local housing – clinics, Etc..

At the end of each morning and at the end of each day the coordinator should:

- Verify all inspectors return safely
- Collect all inspection results
- Verify time sheet submittals
- Verify inspector teams for the following day
- Answer policy and interpretation issues that may have come up
- Forward all Field Documents generated to administrative staff for data Entry into the Systems
- End of day sign-out sheet

Assisting another city will undoubtedly be a burden on the jurisdiction providing assistance, and except in extreme cases, help is offered for the damage assessment phase only. If needed, the affected city will typically be responsible for hiring additional personnel for the recovery stage. Obtaining this type of short term, temporary inspection help, for the recovery stage can be difficult.

Offering assistance is valuable training for both office and field staff. If possible, offer assistance in the second, or third week, instead of the traditional first week. This provides additional help and allows staff to receive valuable training at a minimal cost. Assisting personnel are usually offered for perhaps one or two days on an individual basis unless it is a major event and specific arrangements are made.

## **Chapter 8: Communications during an emergency**

Communication is critical and has a significant impact on the success of department of building safety efforts. Just as important as communicating with staff will be communicating information to citizens whose homes or businesses have been damaged. Some recommendations about communications include:

### **Communicating with staff**

- Conduct orientations (including both office and field staff) prior to beginning each day (group sessions if possible).
- Conduct debriefings at the close of each day (group discussions of work status).
- Provide policy handouts both to office and field personnel to ensure accuracy and consistency of information.
- Each field inspector (or pair) should have a cell phone or radio for communications. If not possible, field personnel should check in with the office every four hours (for both safety and communication reasons).
- Building official/ coordinator should keep their supervisor updated frequently.
- Building official must be aware of any disaster declarations that would necessitate additional responsibilities in reports and/or documentation.

### **Communicating with the public**

- Most property owners impacted by a disaster will be unfamiliar with the recovery process. This will also be a highly emotional time for them. Emphasize to staff; patience, tolerance and compassion when dealing with individuals struggling to recover from a disaster event.
- Have policy handouts available for the public regarding building department activities (examples in Appendix). Including:
  - The purpose and process of damage assessment inspections.
  - What the different placards mean, what restrictions they impose, and what actions are necessary to change those classifications.
  - Phone numbers of agencies the public may need to contact when dealing with repairs to structures, such as: building department, utility companies, fire and police departments, public works department, Department of Commerce, Minnesota Homeland Security Emergency Management, FEMA, Red Cross, MDH and volunteer centers.
  - Information regarding obtaining building permits:

- When permits are required.
- How to obtain permits.
- When plans and/or reviews are required.
- How long it takes to obtain permits.
- Contractor licensing requirements and benefits.
- Steps necessary prior to utility re-hookups.
- Steps necessary to obtain an occupancy certificate on a structure placarded as uninhabitable.
- Building department hours of operation and phone numbers.

## **How to communicate with the public**

- Through office staff – over the counter, on phones, and through email
- Jurisdiction web pages and social media
- City email alerts
- Inspection staff – flyers/handouts given to the public or posted when inspecting.
- Flyers/handouts given out by volunteers.
- Flyers/handouts posted on telephone poles or portable kiosks.
- News media (through your city’s communication person).

## **Communicating with the media**

- View as an asset that can pass information to the public.
- Pass information through the city’s communication representative.
- Instruct inspectors/office staff about what to say if contacted by news crews.
- Learn dos and don’ts of talking to the media - attend classes before an emergency strikes.

## **Typical communications problems**

- Landlines and cell phone service may be down (possibly the citizen’s or the jurisdictions) or overloaded and difficult to get through.
- Citizen may be without electricity for radios and TV - no way of receiving communications.
- Some homeowners not allowed back into damaged homes and not knowing what to do next. Angry, confused and frustrated.
- Citizens will typically not be familiar finding contractors for either emergency or permanent repairs and often will request advice and assistance from building staff. Even if names can't be given, methods of finding contractors can be communicated. A list of licensed contractors from the CCLD’s Licensing Unit, or a list of local contractors could be made available.

## **Chapter 9: Other agencies**

Below are agencies often involved in natural disaster response efforts along with a brief description of their typical response activities.

This list is for information only – it is typically not the building official’s responsibility to contact these agencies directly (consult your jurisdiction’s Emergency Management Plan for your assigned responsibility); however, the building department’s role is significant, and the building official will be more effective if he/she is knowledgeable of the overall effort, the responsibilities of other agencies, and how the building official’s role fits and interacts.

Agencies that provide disaster recovery assistance establish their own criteria about whether it will provide assistance. Also, each agency’s role can vary from one disaster to the next depending on the area of the state affected, the degree and scope of the damage inflicted, and the capabilities of the local jurisdiction. This should result in a fluid condition, and any attempt to describe these roles must be limited to generalities.

## Local jurisdiction

- This is the affected area’s political subdivision – typically a city, township or county from which the immediate and primary response effort is launched and coordinated. Generally, the local jurisdiction has authority for the response effort.
- The role of departments within different jurisdictions will vary significantly depending on size and makeup. There may be an Emergency Management Plan in effect that outlines the general responsibilities of the various municipal departments and it will typically include any responsibilities assigned to the building official. In non-code enforcement areas, the local authority must decide the extent of this role (building official) with regards to damaged buildings (except for state-regulated buildings), and who is to perform it.

## County

- County government involvement will vary depending on the specific county involved, the extent and magnitude of damage, and the capabilities of the local jurisdiction. The more involvement a county has in the building permit and inspection process, the more directly it will be involved in this aspect of the response and recovery phases. Also, counties may act as a higher level of coordination between affected local jurisdictions.
- Each county has a County Disaster Coordinator for relief efforts. The building official should be aware of who fills this role and have the phone number.

## State of Minnesota

State involvement/assistance is offered in two ways:

- Assistance from state agencies.
- [Disaster relief funding may be possible](#). (if a state declaration is called).

### **Following are some state agencies and a description of their typical involvement:**

Department of Public Safety – Division of Homeland Security and Emergency Management (HSEM)

- This division coordinates the activities of state agencies during a disaster and is typically involved in all disasters. It assists the local jurisdiction and helps guide events rather than control them. It mainly operates at a higher level of coordination than the building official who would typically have more direct involvement with the other agencies it coordinates (such as CCLD or Pollution Control Agency). HSEM



regulates state assistance funding and the building official's damage assessment, and inspection reports may be used to qualify for state and national assistance and reimbursement funding. View [clean-up and Recovery State Resource Information from HSEM](#). If a local jurisdiction requests state assistance, the building official often becomes involved by providing documentation of structure damage (possibly with dollar loss estimates).

The HSEM Duty Officer System helps to ensure the proper receipt and dissemination of emergency notifications to state and local government agencies. Hazardous materials accidents and radiological incidents discovered by building officials should be reported to the HSEM (State) [Duty Officer](#) 1-800-422-0798 or 651-649-5451 (24 hours) in addition to the local jurisdiction.

### **Construction Codes and Licensing Division (CCLD)**

- CCLD's role will vary, primarily depending on the level of local code enforcement in an affected area. If requested by the local jurisdiction, this role can include:
  - In outstate areas CCLD's Code Administration Services representative may act as a coordinator between the local jurisdictions or actively assist the local building official.
  - Perform damage assessment inspections of state-funded buildings, hospitals and schools.
  - Offer advice and interpretation to local building officials and the public.

### **CCLD, Electrical Section**

- May coordinate efforts of local inspectors and utilities, if requested.
- Typically will not initiate inspections of damaged buildings.
- Will provide additional inspection personnel when recovery has begun if inspection requests increase.
- May send a representative to assist local officials with contractor licensing laws and enforcement. This can prove to be very valuable assistance.

### **Health departments(city/county/state)**

- Typically, will not initiate inspections in an affected area.
- Once notified a use (i.e. restaurant, food warehouse, etc.) has been damaged or affected, it would conduct inspections regarding health issues.

### **Department of Natural Resources**

- In flood events, DNR will work closely with the local building official regarding structures damaged over 50%-percent will not be allowed repairs.

### **Commerce Department**

- The Commerce Department regulates the insurance industry and can assist homeowners in dealing with the complex and often confusing questions arising from insurance claims.

### **Pollution Control Agency**

- Involved with demolitions and required hazardous material removals from structure debris, along with inspections to verify compliance. Typically, will send a representative but not inspectors. Local jurisdiction may not have staffing to assist.

### **National Guard**

- The National Guard may be called in to provide security to a damaged area. Inspectors may need authorization badges to enter these damaged areas. The potential exists for delays in beginning damage assessment inspections in a secured area if authority is not arranged immediately (see Appendix for a sample authorized pass).

### **Minnesota Historical Society**

- In communities with historic buildings, contact the Historical Society for a copy of their pamphlet – Disaster Plan for Historic Buildings.

### **Minnesota Voluntary Organizations Active in Disaster (MNVOAD)**

- Many volunteer organizations are active in Minnesota. MNVOAD was formed to ensure an efficient and effective response by these organizations. They can mobilize quickly and begin to meet basic human needs almost immediately, and often they become the only disaster assistance provider in the small disasters. The following are active in Minnesota: [www.mnvoad.org/](http://www.mnvoad.org/)
- American Red Cross – Note: the St. Paul Chapter of the American Red Cross serves as the overall coordinator of disaster recovery assistance provided by MNVOAD. The American Red Cross will assess damage to residences in the disaster area as a part of their disaster relief operations. You can obtain copies of their damage assessment reports by contacting their “job director.” Their procedures closely mirror those of FEMA inspectors, but FEMA and Red Cross damage assessment categories differ slightly.

### **Additional MNVOAD Organizations include:**

- |  |   |
|--|---|
| • Catholic Charities                       | • U.S. Army MARS.                         |
| • Civil Air Patrol                         | • American Radio Relay League             |
| • Mennonite Disaster Services              | • Christian Reform World Relief Committee |
| • R.E.A.C.T.                               | • MN Search and Rescue Dog Association    |
| • Salvation Army                           | • Church of the Latter-Day Saints.        |
| • Seventh-Day Adventists Disaster Services | • Minnesota Southern Baptist Convention   |
| • United Methodist Church                  | • Lutheran Disaster Relief                |

Building officials typically will not interact much with these organizations; however, some of the services they have provided in the past, such as distributing informational flyers that contain information about government services, have proven beneficial to building departments providing information to the public.

It is difficult for the local disaster relief coordinator to effectively organize all these groups. Typically, as a disaster event unfolds and progresses, the relationship and interactions between these agencies change. To expect numerous agencies to perform harmoniously without prearranged guidance and streamlined systems in a disaster event is unrealistic. The building official and staff should be aware of this and not contribute to it or aggravate it.

Therefore, the building official must be aware of changing conditions, duties and responsibilities expected of his/her staff.

## Public utilities

Public utilities (such as gas, electric and phone) will send crews into a damaged area immediately. Little interaction occurs here with the building official unless dangerous conditions are observed during an inspection and notification is necessary. However, what must be coordinated are any required inspections and signoffs prior to reconnecting individual structures to gas and electric lines. Procedures will vary significantly. Building inspectors should be aware of procedures so they can answer questions from property owners.

## Federal Emergency Management Agency (FEMA)

This federal agency coordinates the delivery of federal disaster recovery assistance in the event of a Presidential Public Assistance Declaration of a major disaster. Its main effort is to help re-establish local government and infrastructure; however, it also distributes emergency funds to citizens.

The FEMA Disaster Recovery Reform Act (DRRA) Section 1206 allows state and local governments to use general federal assistance funds in a cost share ratio of 75% FEMA and 25% local government for the administration and enforcement of building codes and floodplain management ordinances for a period of no longer than 180 days after the date of a presidential major disaster declaration. Normal operation cost of a building department during this disaster period do not qualify for FEMA funds.

Examples of eligible work: building code administration and enforcement, assessing and monitoring impacted areas, plan reviews, inspections, hiring and training qualified staff and other administration costs related to a major disaster declaration.

Local officials anticipating a presidential declaration are encouraged to take pictures of damaged sites soon after the event and to keep records of any restoration work. Additional inspections of damaged buildings and providing damage assessment documentation required by FEMA will be the building official's main interaction with FEMA.

FEMA is also involved in the demolition of structures by way of reimbursing disposal costs. This will directly tie into building staff work of damage assessment inspection/documentation and permit issuance on buildings set for demolition. Here, proper documentation is vital.

## Chapter 10: Legislation concerning disaster assistance

[Minnesota Statute 12.331](#) is an inter-local emergency assistance statute that applies to jurisdictions providing and/or receiving emergency assistance *when there is not a mutual aid agreement between them*. The League of Minnesota Cities provides specifics regarding [assistance in emergencies](#) (coverage and liability issues) for municipalities that send or receive personnel, equipment and supplies in an emergency.

[National Incident Management Systems \(NIMS\)](#) provides a nationwide template on how to prevent, protect against, respond to, recover from, and mitigate the effects of incidents.

# APPENDIX

## Public information handout

**City of:**

**Date:**

This handout is intended to inform property owners of what your building department will be doing to help make damaged homes and businesses functional again. *This form is a sample only – if used, it should be modified to specific circumstances and posted by inspectors when placarding structures.*

### Damage assessment inspections

- The building department will send inspectors to inspect each home/structure suspected to have been damaged during the recent event.
- The purpose of these inspections is to identify which homes and businesses are safe to continue to occupy, and to identify those structures which are unsafe. Inspectors will use a standard damage assessment inspection report form to identify the degree of damage to each structure. A copy of the report will be left at the building. The inspectors will also be “placarding” each damaged structure to identify its occupancy worthiness. Placards identify occupancy restrictions for the protection of the public and are posted on the front of each inspected building. It is anticipated all structures will be inspected by \_\_\_\_\_.
- If utilities (gas, water and electric) are not functional in your home or business and need to be reestablished:
  - If the structure has been placarded as ‘uninhabitable’, utilities will not be reestablished immediately.
  - If the structure has been placarded as “habitable,” utility companies must gain access to the structure to reestablish service. Please contact utility companies directly to coordinate. See phone numbers attached \_\_\_\_\_.
  - For reestablishing water/sewer service (if non-functional) please call \_\_\_\_\_.

### Structure repairs

Closing in a structure to protect it from the elements does not require a building permit. Examples include minor roof or shingle repair, covering a building with a tarp, window/glass repair and garage door repair/replacement.

Permanent repairs and/or alterations in conjunction with repairs will require the issuance of a building permit. Examples include: roof replacement, residing, any structural repairs, drywall replacement, foundation repairs, electrical work, plumbing work, mechanical work and fire sprinkler/alarm work (on commercial buildings).

For questions about permit requirements, please contact the building department at: \_\_\_\_\_.

## How to obtain a permit

To obtain a building/electrical/mechanical/plumbing permit, an application must be submitted to the building department at City Hall. Some permits can be issued immediately to homeowners and contractors while others may require a plan review. No permit will be issued for a structure until it has received the initial damage assessment inspection and the report has been recorded. Permits will be issued immediately for reroofs, residing, window replacements and other minor repairs. Permits will not be issued immediately for structural repairs, alterations, additions, demolitions, commercial work, and other significant work. These will require a plan review – ask the permits clerk for an estimated time frame. While there is a fee for most permits to cover inspection services, most permit fees are reimbursed by the insurance company.

Beware! Following disaster events, the desire for immediate repairs should be tempered by a few precautions so that you do not fall victim to unscrupulous practices or scam artists:

- Do not sign a contract until you have spoken with your insurance company.
- Get contracts in writing.
- Always use licensed contractors.
- Exorbitant prices and some repairs may not be fully covered by insurance despite what some contractors may say. Show your estimate to your insurance agent before you sign a contract.
- Watch for frequent informational notifications and postings from the building department.
- Obtaining building permits and using licensed contractors will provide the property owner additional protections and is required by law.

## Reoccupying your home/business

If your home or business has been placarded as "uninhabitable" it means the structure is no longer safe for human habitation. For the home/business to be reclassified as "habitable" the following steps are necessary:

- If repairs are not to be made by the property owner, any estimates or bid proposals should first be reviewed by your insurance agent to verify coverage.
- Obtain a building permit to repair those items listed on the Damage Assessment Report. Not all items in the report will affect habitability. Ask the building department which items must be repaired to gain occupancy. Note: some repairs, particularly to business properties, will require architectural/engineering plans prior to permit issuance.
- Complete at least those repairs which affect habitability (if not by the property owner, by a licensed contractor).
- Schedule any necessary inspections listed on the permit(s) of the work to be before it is covered.
- Once that portion of the work affecting habitability has been approved by the building department, request they issue a conditional or temporary occupancy certificate which allows occupancy of the structure while other repairs are completed.

**Miscellaneous**

For information about inspections, placards, building permits, utility reconnections and other structure related issues please contact the building department at \_\_\_\_\_.

Office hours are \_\_\_\_\_ Monday through Friday and \_\_\_\_\_ on the weekends.

For other assistance, information is available at \_\_\_\_\_ or please call the following:

Administration \_\_\_\_\_ Public works \_\_\_\_\_

Finance \_\_\_\_\_ Gas service \_\_\_\_\_

Electrical service \_\_\_\_\_ Phone service \_\_\_\_\_

American Red Cross \_\_\_\_\_ Salvation Army \_\_\_\_\_

Commerce Department \_\_\_\_\_ Other \_\_\_\_\_

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## Damage assessment checklists

The following checklists are intended for use by building departments when responding to disaster events requiring the inspection of damaged structures. They are intended to help speed the building department's response efforts and to ensure critical aspects of the response are not omitted. The checklists have been designed in conjunction with the [Disaster Preparedness Manual](#). They are basic and may not include all work required of the department if its role and responsibilities are more inclusive than would be typical.

[Document No. 1](#) - Setup and Preparation for the Response Phase:

Assists with identifying the roles and responsibilities of the building department in the Damage Assessment Phase and also with designing how the response effort is intended to proceed. It will offer example goals and objectives based upon the experience of other building departments.

[Document No. 2](#) – Implementing and Monitoring the Response:

Assists with implementing goals and objectives in the Damage Assessment Phase and ensures required work and reporting is being completed.

[Document No. 3](#) – Preparation and Monitoring the Recovery Phase:

Assists by identifying critical building department functions of the Recovery Phase that will help the community quickly rebuild.

A more thorough explanation of a building department's role and responsibilities in a disaster event is found in the [Disaster Preparedness Manual](#).

# Damage Assessment Checklist No. 1 – Setup and Preparation of Response Phase

**For use by building departments initiating a disaster response following an event**

Date:

Jurisdiction:

Building official:

## Set-up and preparation

Determine the building department's role and responsibilities:

- Review the local jurisdiction's Emergency Management Plan and then identify the building department's role and responsibilities. Typically, this will involve completing a damage assessment report and placarding each damaged structure, creating a map of the damaged area, and then, reporting this information to the building official's supervisor and/or local emergency coordinator.
- Verify the department's roles and responsibilities with both the building official's supervisor and the local emergency coordinator.

Determine scope of damage

- Conduct a quick "windshield survey" – identify areas with damage to structures and determine the areas and structures that require damage assessment inspections (include some structures beyond the area of obvious damage).
- Estimate the number of damaged structures requiring inspection.
- Identify if there are any high priority structures requiring inspection (those in danger of collapse, utilities, hospitals, nursing homes, schools, etc). Note: The state will inspect state-funded facilities.

Design the response:

- Set goals for the department: (suggestions)
  - Complete a Damage Assessment Report and placard each damaged structure within three days (one day is preferred, three days is typical, more if a large event).
  - Compile and maintain a color-coded map of all damaged structures (based upon the placarded color).
  - Daily submit documentation of damage to supervisor and/or emergency coordinator.
  - Maintain communications with emergency coordinator (through supervisor) to verify any potential additional responsibilities.
    - Open communications channels with the public regarding placarding, inspections and permits (provide the public with informational handouts when inspectors are conducting damage assessment inspections (see Appendix). Coordinate this with the local communications person.



- Set objectives: (these are suggestions for accomplishing each goal)
  - Decide if outside assistance will be required to inspect/document damaged structures within specified time period (for both field inspections and office functions):
- Identify number of volunteers needed in office. There will be an increase in phone calls, permits, documentation, etc.
- Identify number of volunteers needed for field inspections (typically two inspectors per team and 30 minutes per inspection).
- Decide on files to be created to document, monitor and report on activities:
  - A file for each damaged structure/property.
  - A file for volunteer documentation (include: sign-in information, deputizing form, timecards and inspection slips (see Appendix).
  - A file for departmental expenses.
  - A file for the different forms to be created/utilized (see Appendix).
  - A file for the different handouts to be created/utilized (see Appendix).
  - A file to document policies created (see policy issue below).
  - Other
- Decide on maps to create, such as:
  - Create small maps displaying street names and individual addresses – for field inspection personnel.
  - Create a color-coded map (with address numbers) of the overall damage area, where the individual properties can be color coded; based upon the placard posted.
  - Other
- Decide on methods of delivering reports/documentation and maintaining upward communications, such as:
  - Daily – deliver a revised color-coded map and a summary report of damaged structures to supervisor and/or emergency coordinator.
  - Create a spreadsheet to document damaged structures and their progression through the permit process (sample in manual from DLI).
  - Daily – discuss progress, problems, decisions, staffing, direction with staff and with supervisor (morning briefings, evening de-briefings).
  - Others
- Decide policy issues, such as:
  - Will extended office hours be implemented?
  - Will building permits for repairs require be fee based or will they be issued at no charge?
- For what work will a permit be required (also: will these permits be issued over the counter or will a plan review be required – if so, specify a timeframe):
  - Roof repair
  - Siding repair
  - Electrical repair
  - Mechanical systems repair
  - Plumbing systems repair
  - Fire sprinkler/alarm repair
  - Structure repair

- Structure demolition
  - Other
- How will contractor licensing be enforced (possibly the Commerce Department can assist with enforcement).
- Will dollar valuation of damage (per structure) be determined by the building inspector or will a percentage multiplier (per placard category) be used? The more common method is the percentage method (see manual for explanation) but building departments usually do not perform this task.
- What authority will be restricted from volunteer inspectors and/or office staff and be retained by the building official, such as:
  - Issuing a stop-work order.
  - Ordering non-licensed contractors off a job.
  - Issuing demolition permits.
  - Issuing permits on non-conforming uses/buildings.
- Research and document (for inspectors and the public) the utility reconnection processes for:
  - Damaged/disconnected electrical service.
  - Damaged/disconnected gas/propane/oil service.
  - Other
- Decide upon methods of communication with the affected public, such as:
  - Will the field inspector deliver handouts when inspecting and placarding a structure? Examples:
    - Public Information Handout – which explains the purpose of both inspections and placarding, when a permit is required, how and where to obtain a permit, the process for re-occupying a structure declared un- inhabitable and miscellaneous phone numbers (see sample in manual).
    - Contractor licensing requirements and the protections it affords the public.
    - Handout for avoiding scam artists and finding reputable contractors for repairs.
    - Handout for dealing with insurance companies (contact Commerce Department)
    - Other examples are available in manual Appendix.
    - Initiate contact with the local jurisdiction’s communications person to get necessary information out to the public through the media.
    - Other:
      - Other Objectives:
      - Notes:

# Damage Assessment Checklist No. 2 – Implementing and Monitoring of Response Phase

**For use by building departments initiating a disaster response following an event**

Date:

Jurisdiction:

Building official:

## Implementing the response – obtain approval for goals and objectives

Discuss the overall response effort design (goals, objectives, policies, reporting, etc.) with the building official's supervisor (and possibly the emergency coordinator) and obtain approval.

Specifically, discuss if volunteer assistance is necessary for inspections and/or office functions obtain approval (information regarding liability and insurance is in the manual).

Initiate the Damage Assessment response:

- Obtaining volunteer assistance if necessary (for both office and field functions):
  - Contact Regional Representative, DLI, local chapters, and/or AMBO Disaster Mitigation Committee to request volunteer inspectors and permit technicians.
  - Identify: numbers of inspectors and office staff required (in total as well as numbers required per day), when to arrive, where to arrive, who to see and what to bring (see manual for guidance).
  - If a very large event: assign assistants to coordinate/oversee; 1) assisting volunteers, 2) office functions and staff, 3) field inspections and staff, 4) supplies.
- Office functions to be completed (assign an office coordinator if possible):
  - Create all files previously decided upon.
  - Find/modify/create all maps previously decided upon.
  - Create documents of each/all policies previously decided upon (distribute to all staff).
  - Create and post an [organizational chart](#) (sample in Appendix):
    - Identify on the chart who each position reports to which positions are responsible for which tasks/responsibilities.
- Create a Public Informational Handout (see Appendix).
- Create local identification badges for assisting volunteers if necessary (see Appendix).
- Make enough copies of:
  - Damage Assessment Report forms (or obtain carbon-copy forms from CCLD).
  - Placards (of each color).
  - Structure damage/placarding guidelines.
  - Public Informational Handouts (to be distributed by inspectors).
  - Other forms and handouts:

- Look through I Appendix for any other forms and handouts (such as demolition permit requirements or Property Owners Inspection Checklist) that may be useful or applicable, then modify for use.
- Obtain supplies for each inspection team, typically including:
  - Large flashlight, duct tape, permanent markers, pens, small first-aid kits.
  - Notebook or folder for each inspection team, including:
    - Damage Assessment Report forms (25), placards (25 of each color/type), structure damage classification guidelines (1), address map of inspection area (1), any handouts intended to be given to property owners (25), departmental policies governing the event (1), timecards (2).
- Assign a staff member the responsibility for submitting Damage Assessment Reports, spreadsheets, and color-coded maps to supervisor and/or emergency coordinator.
- Field functions to initiate (assign a coordinator if possible):
  - Create a daily schedule for all staff and volunteer positions (for all days it is anticipated assistance will be needed).
  - Communicate with volunteers (inspectors and permit technicians) and inform them of which day(s) they are assigned and of what to bring (see list in manual).
  - Gather and prepare necessary information, equipment, and supplies for inspection teams.
  - Give an orientation to all newly arrived volunteers (for suggestions see manual).
- Assign inspection teams (two inspectors on each team) to specific areas to complete all damage assessment inspections and placarding within a specified time frame. Document each team's assignment and inspection area.
  - Require/verify inspection teams check-in at noon (safety check).
  - At end of day verify all inspectors return, are debriefed, and that both reports and timecards are submitted. Pass reports and timecards on for processing.
- Other:
- Notes:

## Monitoring the response

### Office functions

- Daily, discuss with staff any problems as well as potential solutions.
- Hold orientations for new permit technician staff each morning.
- Review staffing/volunteer requirements daily.
- Building official to verify assigned tasks being completed.

### Field functions

- Conduct orientations for new inspection staff each morning.
- Debrief inspectors at the end of each day.
- Review staffing/volunteer requirements daily.
- Building official to verify all assigned tasks are being completed properly.

## Reports

- Daily, verify maps, damage spreadsheets and structure damage reports are being completed and submitted to supervisor and/or emergency coordinator.
- Daily, verify deputizing authorization and timecards are completed.
- Daily, verify expenses reports are completed.

## Communications

- Daily, check-in with supervisor and communications person.
- Daily, update information being distributed to the public.
- Periodically verify if responsibilities include any new tasks (i.e.: are trailers for housing displaced residents being brought in which would require review and approval).

## Miscellaneous

- Plan for when volunteer assistance leaves (often paid assistance will be necessary).
- Notes

# Damage Assessment Checklist No. 3 – Preparation and Monitoring the Recovery Phase

**For use by building departments initiating a disaster response following an event**

Date:

Jurisdiction:

Building official

## Preparing for and monitoring the recovery phase

The **Recovery Phase** (as it relates to the building department's role) is when a community repairs, rebuilds and reoccupies damaged structures following a disaster event. This phase will begin almost immediately after the event happens and must be dealt with in tandem with the Damage Assessment Phase. The Recovery Phase will often last for up to a year or more. The building department will likely be faced with a significant workload increase during this period, and, if a state or federal emergency is declared, additional work in the form of re-inspections and documentation. Also, as volunteer assistance leaves, paid assistance often becomes necessary. Therefore, decisions affecting the Recovery Phase should be made relatively quickly following an event and in conjunction with the Damage Assessment Phase.

### Set goals and objectives:

Sample goals (note: have goals approved by supervisor):

- Issue repair permits, perform inspections, and complete repair documentation without delays to the public or the recovery process.
- Assist the public through effective communication, handouts and publications.
- Required records documentation.

Sample objectives:

- Obtain adequate paid staffing to achieve goals:
  - Inspectors
  - Permit technicians
- Create written policies to guide staff, such as:
  - What work will or will not require the issuance of a permit?
  - What work will require a plan review before issuance?
  - Under what conditions and timeframes must damaged buildings be boarded?
  - Utility reconnections – identify the process.
  - Required documentation.
- Communicate permitting requirements with the affected public:
  - Through inspectors, office staff, handouts, media
- Continuously communicate with supervisor and emergency coordinator (often thru supervisor).

## Initiate the Recovery Phase response:

- Obtain adequate staffing.
- Create written policies.
- Begin communications with the public.
- Continuous communications with supervisor.
- Notes:

## Minnesota contractor license laws

### Notice to homeowners: Be sure your contractor is licensed

#### Know your rights

Minnesota recently adopted a statewide Contractor and Remodeler License Law. This law protects consumers by requiring that contractors be licensed. Contractors must apply for a license, post a bond, and show proof of insurance and competency. The law gives homeowners reasonable assurance that they are dealing with a reputable, professional contractor, and a place they can call to get general contractor information.

#### Getting information about a contractor

Contractors, with a few exceptions, who contract with a homeowner to perform home construction, remodeling, or repair, must be licensed with the [Minnesota Department of Labor and Industry](#). Homeowners can call DLI's Licensing Unit at 651-284-5034 or email [dli.contractor@state.mn.us](mailto:dli.contractor@state.mn.us) to obtain information about a specific contractor. Contractors must display their license number on their advertising, and they must make it available to consumers. Residential contractors who perform roofing work must be licensed. They can be licensed as a residential roofer, residential building contractor or residential remodeler. Building permits cannot be granted to contractors who are not properly licensed by the state.

#### Exceptions to being licensed

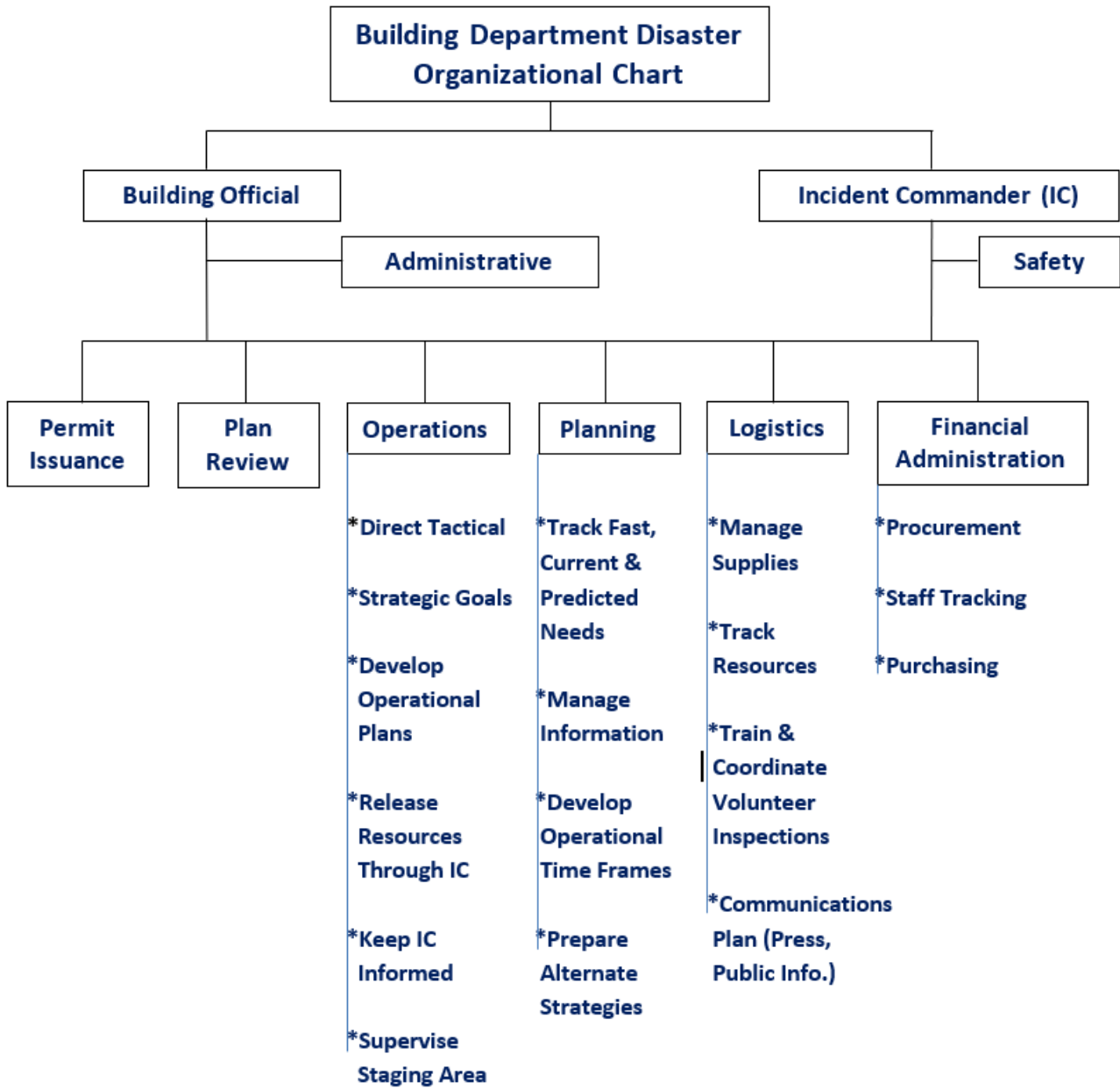
State law exempts contractors who have gross annual receipts from the construction business of less than \$15,000. Also exempt are specialty contractors who perform only one specialty skill.

#### Homeowner rights if a contractor is not licensed

If your contractor is required to be licensed and you find out that he/she is not, you may still have recourse under the law. Generally, the law provides that a contractor who is working without a license has no lien rights and may not be able to enforce a contract signed with a homeowner. If you find yourself in this situation, you should consult with an attorney to obtain legal advice.

#### Working on your own home

You can obtain permits to do work on your own home. For your safety, building permits are required for most construction projects. For more information contact DLI at 800-342-5354 or 651-284-5069.





# Authorization for appointment of a Deputy Building Inspector in the Municipality of

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(Municipality)

## **326B.133 Subd. 4. Duties of Building Officials**

Building officials shall, in the municipality for which they are designated, be responsible for all aspects of code administration for which they are certified, including the issuance of all building permits and the inspection of all manufactured home installations.

## **1300.0110 Subp. 2 Deputies of Building Official**

According to the prescribed procedures of the municipality and with the concurrence of the appointing authority, the building official may designate a deputy building official and related technical officers, inspectors, plan examiners, and other employees. The employees have the powers delegated by the building official.

### **Purpose**

In order to assist the building official of this community in carrying out the functions of the code enforcement agency including administering the Minnesota State Building Code, the undersigned is hereby appointed as a Deputy Building Inspector.

### **Responsibilities**

The Deputy Building Inspector shall take all work direction from the Building Official or their designee. The Deputy Building Inspector shall have the authority to perform their assigned duties as granted by the Building Official of this municipality.

### **Termination**

This appointment may be terminated at any time without advance notice by the Building Official of this municipality.

### **Appointment**

\_\_\_\_\_ is hereby appointed as a Deputy Building Inspector for this municipality and agrees to serve at the will of the municipality as stated herein.

### **Acknowledgements**

Deputy Building Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

Building Official: \_\_\_\_\_ Date: \_\_\_\_\_

City Administrator / City Manager: \_\_\_\_\_ Date: \_\_\_\_\_



## DAILY SIGN-IN AND TIME LOG

**MUNICIPALITY:** \_\_\_\_\_

NAME	TITLE	REPRESENTING
CELL PHONE	WORK PHONE	HOME PHONE

IN CASE OF EMERGENCY CONTACT PHONE RELATIONSHIP

DATE	START CHECK-IN TIME	NOON CHECK-IN TIME	CHECK-OUT TIME
COMMENTS:			

NAME	TITLE	REPRESENTING
CELL PHONE	WORK PHONE	HOME PHONE

IN CASE OF EMERGENCY CONTACT PHONE RELATIONSHIP

DATE	START CHECK-IN TIME	NOON CHECK-IN TIME	CHECK-OUT TIME
COMMENTS:			

NAME	TITLE	REPRESENTING
CELL PHONE	WORK PHONE	HOME PHONE

DATE	START CHECK-IN TIME	NOON CHECK-IN TIME	CHECK-OUT TIME
COMMENTS:			

IN CASE OF EMERGENCY CONTACT PHONE RELATIONSHIP

FORM MUST BE TURNED IN TO: \_\_\_\_\_ AT THE END OF THE DAY.

This form is a sample only – intended to be modified to specific circumstances.

## Damage assessment guidelines

The list below identifies each type of damage according to common observable evidence of damage. This is not a comprehensive list; various kinds of evidence of damage can indicate that a dwelling is destroyed or has sustained major or minor damage.

<b>Unaffected</b> (BLUE)	<ul style="list-style-type: none"> <li>• No damage observed</li> </ul>
<b>Affected, habitable, needs repairs</b> (GREEN) A structure which received damage, but it is useable for its intended purpose.	<ul style="list-style-type: none"> <li>• Structure may have intermittent shingle damage, broken windows, loose, missing, or damaged siding.</li> <li>• Water damage -             <ul style="list-style-type: none"> <li>➢ single/multi-family: less than 1 foot in basement, minor access problem.</li> </ul> </li> </ul>
<b>Moderate damage, uninhabitable</b> (YELLOW) A structure which received such damage that it is no longer usable for its basic purpose, but can easily be repaired and made useable in a short time	<ul style="list-style-type: none"> <li>• Structure may have one wall or section of roof damaged, missing windows, doors, or shingles that allow water penetration.</li> <li>• Structure may have broken waste lines, spilled fuel oil, etc.</li> <li>• Properties without life safety provisions (exiting obstructions, electricity, sprinklers, water, HVAC, etc.)</li> <li>• Water damage -             <ul style="list-style-type: none"> <li>➢ single/multi-family: less than 1 foot on first floor; no basement, or 1-8 feet in basement.</li> <li>➢ Mobile/manufactured home: utilities flooded, piers shifted/washed out.</li> </ul> </li> </ul>
<b>Major damage, uninhabitable</b> (ORANGE) Unsafe structure, keep out Structure has received substantial damage and will require considerable time to repair, but is economically feasible to repair.	<ul style="list-style-type: none"> <li>• Not in immediate danger of collapse.</li> <li>• 2+ walls and roof substantially damaged.</li> <li>• Portion of roof missing; twisted, bowed, or cracked walls; forceful penetration of the structure by a large object such as a car or tree; foundation damage.</li> <li>• Utilities not functioning, i.e. electricity, gas, water.</li> <li>• Water damage -             <ul style="list-style-type: none"> <li>➢ single/multi-family: 1 foot or more on first floor; structural damage; collapsed basement walls.</li> <li>➢ Mobile/Mfgd. home: water-soaked bottom board, shifted on piers.</li> </ul> </li> </ul>
<b>Destroyed, permanently uninhabitable</b> (RED) Dangerous, keep out	<ul style="list-style-type: none"> <li>• Structure totally gone, only the foundation remains.</li> <li>• Bearing walls missing or collapsed; structure shifted off foundation.</li> <li>• Repair not technically or economically feasible.</li> <li>• Utilities not functioning, i.e. electricity, gas, water.</li> <li>• Water damage -             <ul style="list-style-type: none"> <li>➢ single/multi-family: not economical to repair; home pushed off its foundation.</li> <li>➢ Mobile/Mfgd. home: water above floor level or unit off foundation.</li> </ul> </li> </ul>
<b>Sorry we missed you</b> (WHITE)	Used when interior inspection is necessary, but access is not achieved.

Many inspectors are concerned about their ability to make judgments about damage categories. Such workers should be advised to: 1) refer frequently to stated guidelines; 2) be consistent in assessments; 3) choose the more serious damage category in the structure appears to border between two categories; 4) always supplement their evaluation with comments, and 5) trust their judgment. When assessing structural damage, it is important to evaluate every structure within the affected area, even if the structure is unaffected. This ensures that isolated undamaged homes are identified and recorded and that the damage assessment is thorough.

# Damage Report

## DAMAGE REPORT (Initial Damage Assessment Only)

SITE ADDRESS / DESCRIPTION \_\_\_\_\_

P.I.N. \_\_\_\_\_

OWNER/OCCUPANT \_\_\_\_\_

OWNER/OCCUPANT ON-SITE?  YES  NO PHONE \_\_\_\_\_

INSURED:  YES  NO  UNKNOWN STRUCTURAL EVALUATION REQUIRED:  YES  NO

TYPE OF BUILDING:  APARTMENT  DWELLING  MANUFACTURED HOME  SHED

ATTACHED GARAGE  DETACHED GARAGE  COMMERCIAL  INDUSTRIAL

OTHER: \_\_\_\_\_

SPECIFIED ITEMS:  Inspected Interior and Exterior  Inspected Exterior Only  Interior Inspection Not Required

EXTERIOR:	UN A F F E C T E D	R E P A I R	R E P L A C E	INTERIOR:	UN A F F E C T E D	R E P A I R	R E P L A C E	UTILITIES:	UN A F F E C T E D	R E P A I R	R E P L A C E
ROOFING				CEILING STRUCTURE				PLUMBING			
ROOF STRUCTURE				INTERIOR				HEATING SYSTEM			
CHIMNEY				STAIRWAYS				WATER HEATER			
SIDING & TRIM				FLOOR SYSTEM				GAS SERVICE			
WALL STRUCTURE				BASEMENT				GAS PIPING			
WINDOWS				FOUNDATION				WIRING			
DOORS				ATTIC				ELECTRIC SERVICE			
								WATER SERVICE			
								SPRINKLER SYSTEM			
								ELEVATOR			

Barricades may be needed: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**PLACARDED FOR HABITABILITY**  
 Blue  Unaffected - No Damage Observed  
 Green  Habitable - Repairs Required  
 Yellow  Uninhabitable - Limited Entry  
 Orange  Unsafe Structure - Keep Out  
 Red  Dangerous Keep Out - Uninhabitable  
 White  Sorry - We Missed You, Contact Us

INSPECTOR: \_\_\_\_\_  
 DATE: \_\_\_\_\_

PICTURES TAKEN: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

MARKET VALUE \$ \_\_\_\_\_ ESTIMATED LOSS \$ \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_



## **Guidelines for disposal of private property pending demolition of a structure**

### **City of**

- Demolition permits must be obtained from city prior to removal of buildings.
- [White goods](#) or household appliances should be removed and kept separate at the curb.
- Food waste and other garbage must be removed prior to demolition.
- Other garbage, food, paper, clothing, dishes, TV's, radios, toys, plastics, etc. should be removed and placed in dumpsters or roll- off containers when available (these will be located at each intersection).
- Household hazardous waste includes thermostats, cleaners, paints, poisons, fuels, lawn and garden chemicals, batteries, smoke detectors, etc. These materials must be placed in white plastic pails marked "HHW" and left at the curb.
- Trees and brush should be kept separate and left at the curb.

## **Structures that can be entered safely must be inspected by a city building inspector prior to demolition.**

This handout is only a sample intended to be modified to specific circumstances following consultation with jurisdiction's Emergency Management Coordinator.

# Demolition completion report

Date Demo Performed: \_

Subcontractor: \_\_\_\_\_

Begin Time: \_\_\_\_\_ Completion Time: \_\_\_\_\_ Total Time: \_\_\_\_\_

**Truck Information:**

Truck #:	Driver:
Load Size:	Total Loads:
Truck #:	Driver:
Load Size:	Total Loads:
Truck #:	Driver:
Load Size:	Total Loads:
Truck #:	Driver:
Load Size:	Total Loads:
Truck #:	Driver:
Load Size:	Total Loads:
Truck #:	Driver:
Load Size:	Total Loads:

TOTAL LOADS FOR SITE:

Comments /Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



## FEMA information

FEDERAL EMERGENCY MANAGEMENT (FEMA)

Disaster Process and Disaster Aid Programs

(The Robert T. Stafford [Disaster Relief and Emergency Assistance Act](#), Public Law 93-288)

### Response and recovery:

First **Response** to a disaster is the job of local government's emergency services with help from nearby municipalities, the state and volunteer agencies. In a catastrophic disaster, and if the governor requests, federal resources can be mobilized through the Federal Emergency Management Agency (FEMA) for search and rescue, electrical power, food, water, shelter and other basic human needs.

It is the long-term **Recovery** phase of disaster which places the most severe financial strain on a local or state government. Damage to public facilities and infrastructure, often not insured, can overwhelm even a large city.

A governor's request for a major disaster declaration could mean an infusion of federal funds, but the governor must also commit significant state funds and resources for recovery efforts.

**A Major Disaster** could result from a hurricane, earthquake, flood, tornado or major fire which the President determines warrants supplemental federal aid. The event must be clearly more than state or local governments can handle alone. If declared, funding comes from the President's Disaster Relief Fund, which is managed by FEMA, and disaster aid programs from other participating federal agencies.

**A Presidential Major Disaster Declaration** puts into motion long-term federal recovery programs, some of which are matched by state programs, and designed to help disaster victims, businesses, and public entities.

**An Emergency Declaration** is more limited in scope and without the long-term federal recovery programs of a Major Disaster Declaration. Generally, federal assistance and funding are provided to meet a specific emergency need or to help prevent a major disaster from occurring.

### A major disaster declaration usually follows these steps

**Local government responds**, supplemented by neighboring communities and volunteer agencies. If overwhelmed, turn to the state for assistance; the state responds with state resources, such as the National Guard and state agencies; **Damage Assessment** by local, state, federal, and volunteer organizations determines losses and recovery needs; **A Major Disaster Declaration** is requested by the governor, based on the damage assessment, and an agreement to commit state funds and resources to the long-term recovery; **FEMA Evaluates** the request and recommends action to the White House based on the disaster, the local community and the state's ability to recover; **The president approves** the request or FEMA informs the governor it has been denied. This decision process could take a few hours or several weeks depending on the nature of the disaster.

### Disaster aid programs: There are two major categories of disaster aid:

**Individual assistance** for damage to residences and businesses or personal property losses, and

**Public assistance** for repair of infrastructure, public facilities and debris removal.

**Individual assistance:** Immediately after the declaration, disaster workers arrive and set up a central field office to coordinate the recovery effort. A toll-free telephone number is published for use by affected residents and business owners in registering for assistance. Disaster Recovery Centers also are opened where disaster victims can meet with program representatives and obtain information about available aid and the recovery process.

Disaster aid to individuals generally falls into the following categories

**Disaster housing** may be available for up to 18 months, using local resources, for displaced persons whose residences were heavily damaged or destroyed. Funding also can be provided for housing repairs and replacement of damaged items to make homes habitable.

**Disaster grants** are available to help meet other serious disaster related needs and necessary expenses not covered by insurance and other aid programs. These may include replacement of personal property, and transportation, medical, dental and funeral expenses.

**Low-interest disaster loans** are available after a disaster for homeowners and renters from the U.S. Small Business Administration (SBA) to cover uninsured property losses. Loans may be for repair or replacement of homes, automobiles, clothing or other damaged personal property. Loans are also available to businesses for property loss and economic injury.

**Other disaster aid programs** include crisis counseling, disaster-related unemployment assistance, legal aid and assistance with income tax, Social Security and Veteran's benefits.

**Assistance process:** After the application is taken, the damaged property is inspected to verify the loss. If approved, an applicant will soon receive a check for rental assistance or a grant. Loan applications require more information and approval may take several weeks after application. The deadline for most individual assistance programs is 60 days following the President's major disaster declaration.

Audits are done later to ensure that aid went to only those who were eligible and that disaster aid funds were used only for their intended purposes. These federal program funds cannot duplicate assistance provided by other sources such as insurance.

After a major disaster, FEMA tries to notify all disaster victims about the available aid programs and urge them to apply. The news media are encouraged to visit a Disaster Recovery Center, meet with disaster officials, and help publicize the disaster aid programs and the toll-free tele-registration number.

**Public assistance** is aid to state or local governments to pay part of the costs of rebuilding a community's damaged infrastructure. Public assistance programs may pay for 75% of approved project costs. Public assistance may include debris removal, emergency protective measures and public services, repair of damaged public property, loans needed by communities for essential government functions and grants for public schools.

**Mandatory purchase of flood insurance guidelines:** Title V of the Riegle Community Development and Regulatory Improvement Act of 1994 (the Reform Act) substantially amends the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The Reform Act tightens the mandatory purchase provisions that originated with the Flood Disaster Protection Act of 1973. Specifically, the Act imposes significant new obligations on lenders and their servicers.

**Hazard mitigation:** Disaster victims and public entities are encouraged to avoid the life and property risks of future disasters. Examples include the elevation or relocation of chronically flood-damaged homes away from flood hazard areas, retrofitting buildings to make them resistant to earthquakes or strong winds, and adoption and enforcement of adequate codes and standards by local, state and federal government. FEMA encourages and helps fund damage mitigation measures when repairing disaster damaged structures. Mitigation is the cornerstone of emergency management. It's the ongoing effort to lessen the impact disasters have on people's lives and property through damage prevention and flood insurance. Through measures such as, building safely within the floodplain or removing homes altogether; engineering buildings and infrastructures to withstand earthquakes: and creating and enforcing effective building codes to protect property from floods, hurricanes and other natural hazards, the impact on lives and communities is lessened.

## Flood cleanup information

From the [Minnesota Department of Natural Resources](#)

### Flood cleanup and safety

The flood waters have receded and it's time to get things cleaned up and back to normal. The first thing to do is establish your priorities for the required repair work. Your priorities list will generally depend on the seriousness and extent of the damages. Here are some suggested steps you can follow.

- **Look at the structure of the building:** Check the foundations for settling, cracking or undermining. Look at the walls, floors, doors and windows to determine what repairs are necessary. Before entering the structure, make sure that all electric, gas and oil valves are turned off.
- **If the basement is flooded, begin pumping the water in stages:** About 1/3 of the water per day. Make sure that the level of the flood waters is below the level of the basement floor. If not, do not pump the basement all at once because the saturated soil could cause the basement walls to collapse.
- **Get the electrical system back in operation:** Have the system checked by a qualified electrician. Take your electrical appliances to a serviceman before using.
- **If the furnace was inundated by flood waters have it inspected by a qualified serviceperson:** Before operating, the system may need to be cleaned, dried and reconditioned. Make sure the flue vents are clear.
- **Start up the heating system, if possible:** This can help in the drying process.
- **Get the water system back in operation:** Clean drains, pipes, etc. Disinfect wells and the water system. A qualified plumber can provide the "how to" and methods to use.
- **Shovel the mud and silt out before it dries:** Before the walls and floors dry, wash down with a hose, starting at the top of the wall and then working down. Scrub and disinfect walls and floors. Leave windows and doors open to speed up drying. A complete drying may take as long as a few months. Repair walls and floors that have buckled. Make sure that the underlying material is dry before installing new materials.
- **Throw out all food which has spoiled or has been touched by floodwaters:** Do not refreeze any vegetables, fruits or meats which have thawed completely. If there is any question, throw it away.
- **Clean and dry all household items which were affected by the flood waters:** This includes all furniture, carpets, clothing, dishes and bedding. Disinfect, if necessary. Treat household items of mildew, if

necessary. Before you begin to salvage damaged items, you must decide which pieces are worth restoring. These decisions are based on:

- the extent of the damage
- the cost of the article
- the sentimental value
- the cost of restoration
- **Clean up the yard:** Trim and care for damaged trees and shrubs. Rake and possibly reseed the lawn.
- **Cleaning supplies:** Some basic cleaning supplies and equipment that you may need for home cleanup.
  - low sudsing detergents
  - bleaches
  - disinfectants
  - ammonia
  - scouring power
  - rubber gloves
- **Equipment:**
  - buckets
  - small tools, (crowbar, hammer, screwdriver)
  - sponges and wiping clothes
  - scrub brush
  - broom or shovel
  - a mop that is easily squeezed out
  - throw away containers for garbage
  - water or garden hose
- **Cleaning and disinfectant products/mildew-removing products:** Other equipment to use with larger jobs may include wheelbarrows, dollies, wash tubs, etc. Most common household cleaners will do the trick with clean-up. Powder or liquid cleaners are more economical to use than aerosol sprays. Household cleaners help remove the dirt and disinfectants will help stop the growth of disease-causing organisms carried in the floodwaters. All products are not suited for all uses. Remember, read the label for specific directions and precautions. Certain products may be harsh on your skin and may burn your eyes. Protect your hands and eyes with protective gear. Wash your skin immediately if you splash or spill any cleaner on yourself.

## Information from the [Minnesota Department of Health](#)

**Is my drinking water safe? Contaminated drinking water can be a significant health concern during a flood, but it depends on the situation.**

### **Natural disasters - drinking water safety in emergencies**

#### **If you use a community water supply**

If you use "city water," the risk of contamination is very low. City wells are generally well protected from flood water. All community water systems are also carefully monitored, by the water supply operator and the state. If your water supply does become contaminated, you will be notified promptly.

#### **If you use a private well**

You should assume your private well is contaminated if the well casing was submerged or the flood water came within 50 feet of the well. Water from the well should not be used for drinking or cooking until the well and distribution system have been flushed out, disinfected, and tested for contamination.

- Use bottled water for drinking and cooking until your well is safe to use again.
- For detailed instructions on disinfecting and testing your well, contact the nearest Minnesota Department of Health District Office.

### **How can I protect my children?**

- Don't let children play in or near flood water, or in areas that have been recently flooded.
- Wash your child's hands frequently, especially before meals.
- Disinfect contaminated toys, using a solution of two ounces of bleach in one gallon of water.
- Discard any soft toys that may be contaminated with sewage. Children may place items in the mouth.

### **Can contact with sewage or floodwater make me sick?**

You should always assume that disease organisms may be present in floodwater or backed-up sewage. But common sense, combined with basic hygiene, can help you keep the risk low. Skin contact with floodwater, by itself, does not pose a health threat unless you have an open wound. The fecal material in sewage contains disease organisms, but it does not pose any risk unless you take it into your mouth. Follow these tips to keep your risks low.

- Always wash your hands thoroughly after working in a contaminated area.
- Always wear rubber gloves and boots to protect your hand and feet.
- Always take a shower after working in a contaminated area.
- Always assume that anything touched by floodwater is contaminated.

### **Do we need to get any shots?**

There is usually no increased risk of getting vaccine-preventable diseases - like diphtheria or tetanus - during a flood. However, you should always try to keep your immunizations up to date, as a matter of routine. A basic series of immunizations against diphtheria, tetanus, and pertussis is recommended for all children. Adolescents should get a booster for tetanus and diphtheria (Td) at the age of 11 or 12, and adults should get a Td booster every 10 years, throughout life. If you get a puncture wound, and you haven't had a Td booster within the last five years, ask your doctor whether you should get a tetanus shot.

### **What about private sewage treatment systems?**

If the top of your sewage treatment tank was under water, it must be pumped out - to remove all solids and liquids - before you can run sewage into it again. Pumping stations and drop boxes should also be pumped out.

### **What can I keep - and what should I throw away?**

As a rule, anything you can't wash and disinfect should be thrown away. Although you may need to use special cleaning methods for items like carpeting and upholstered furniture, it may be possible to salvage them.

## What about garbage?

Garbage attracts animals and insects, and rodent activity may increase in flooded areas as these animals seek food and shelter. Don't let garbage pile up. Dispose of all discarded items properly. There will usually be more frequent pick-ups after a flood.

## Is my food safe?

Food is generally safe unless it has been in direct contact with floodwater, or it hasn't been properly refrigerated, because of power failure. Here are a few simple food safety guidelines.

- Clean any canned goods you intend to keep. Commercially canned foods can be kept if you wash the can first with warm water and detergent, then disinfect the outside of the can, using a solution of two ounces of bleach in one gallon of water. Remove labels when cleaning the cans.
- Discard foods that may be contaminated:
  - Items pre-packed in paper, boxes, glass jars, or other non-waterproof packages that may have been in contact with flood water.
  - Frozen food that was thawed and held at room temperature for more than two hours should be discarded.
  - Any items with unusual color or odor.
- Keep refrigerated food cold.
  - If your power goes off, your refrigerator will keep food cool for 4-6 hours if left unopened. Try to keep foods as close to 41° F. as possible.
- Keep frozen food from thawing.
  - If your power goes off, your freezer will keep food frozen for one day if the freezer is half full. Up to two days, if the freezer is full and left unopened.

For questions about this information, please review the [Department of Health, Emergency Preparedness & Response](#) website or contact the [Main Environmental Health Receptionist](#): 651-201-4571

## Information from the [Minnesota Pollution Control Agency](#)

### Cleanup

The Minnesota Pollution Control Agency (MPCA) identifies, regulates and cleans up spills, leaks and other hazardous materials that can affect our health and our environment.

### Cleanup topics

- [Asbestos Program](#)
- [Brownfields](#)
- [Contaminated sediments](#)
- [Emergency response](#)
- [Karst in Minnesota](#)
- [Landfills/dumps](#)
- [Natural attenuation of ground water](#)
- [RCRA Corrective Action](#)
- [Remediation sites](#)
- [Storage Tanks](#)
- [Superfund Program](#)
- [Voluntary Investigation and Cleanup \(VPIC\) Program](#)
- [What's in my neighborhood](#)

## General Information

- [MPCA Publications](#)
- [Public Involvement with Cleanup Programs](#)
- [MPCA Regulations Assistance](#)

## MPCA Emergency Response

The [Minnesota Pollution Control Agency's \(MPCA\) Emergency Response](#) Team (ERT) members are responsible for organizing the MPCA's efforts for oil and hazardous material emergencies. Chemical fires, train derailments, pipeline breaks, tanker truck accidents and petroleum vapors in a sewer are response examples of environmental and public health emergencies by ERT members.

To request state assistance or to report a petroleum or hazardous materials spill, contact the [Minnesota Duty Officer](#) at 800-422-0798 or 651-649-5451. These are 24-hours emergency response phone numbers.

The ERT works closely with local, county, state and federal public safety and environmental officials. On-call staff field over 2,000 spill calls annually for the entire state--24 hours a day, 365 days a year. Internal and external spill prevention and preparedness is an important part of the ERT's strategic plan and is carried-out through proactive community planning, fire department training, exercises and drills, and enforcement.

## Floods

### [Minimizing pollution and health risks](#)

Floods can create environmental problems if precautions are not taken to minimize pollution and health risks. If your home or business is flooded this year, be sure to read the recommendations for cleaning up after a flood. Homeowners and businesses with other questions about preparing for floods or cleaning up afterward should contact the nearest MPCA office at the numbers listed below.

- \* Detroit Lakes Office 218-847-1519
- \* Duluth Office 218-723-4660
- \* Brainerd Office 218-828-2492
- \* Mankato Office 507-389-5977
- \* Marshall Office 507-537-7146
- \* Rochester Office 507-285-7343
- \* Saint Paul Office 651-296-6300 Toll-free 1-800-657-3864

## Hazardous household materials

Homeowners in areas that are likely to flood should move hazardous household materials to a safe area that is likely to remain dry throughout the flooding. [Hazardous household materials](#) include such items as:

- drain cleaner
- antifreeze
- furniture stripper
- pesticides
- motor-vehicle oil
- fertilizers
- toilet-bowl cleaner

Items such as vehicle batteries and propane tanks should also be moved to higher ground because they pose a danger if their contents are released to the environment.

## Basement cleaning

Ventilate your basement before and during cleaning with chemical solutions, and if oil is present. When basements flood, there is usually some sewer backup as well; therefore, after the water and/or sewage has been removed, it is important to disinfect the surfaces to eliminate odors and bacteria.

If your basement had oil spilled in it, use a detergent to clean oil off the surfaces. Sheetrock and paneling should be removed and properly disposed at a transfer facility, incinerator, or sanitary landfill. Concrete walls, wood supports, ceiling structures, and beams will soak up oil like a sponge. Therefore, those surfaces will need to be sealed with an epoxy paint sealer once they have dried out.

## Household chemicals

If you have chemicals that end up being flooded, keep all damaged household chemicals separate for later disposal. Place them in plastic bags and keep the product label with each bag. Call your County Solid Waste Officer for collection dates. Also, remember to always keep chemicals out of reach of children and pets.

Visit the [MPCA website](#) for additional information regarding:

- Asbestos
- Oil cleanup
- Oil or sewage-soaked debris
- Fuel oil tanks
- Septic systems
- Manure storage facilities
- Underground and above ground storage tanks industrial hazardous wastes
- Wastewater treatment facilities



## Disaster assistance volunteer memo

To: All building officials and interested parties

As we approach another severe weather season it's important to be prepared for the possibility of a weather-related event anywhere in our state. With this goal in mind, the Construction Codes and Licensing is again asking all interested code professionals and qualified assistants to consider participating as a Disaster Assistance Volunteer.

The list of Disaster Assistance Volunteers is used to link code officials and qualified assistants with state and county Emergency Management Officials and affected regional code officials. As a Disaster Assistance Volunteer, you will be asked to provide assistance with building evaluations and life safety habitability for structures affected by a disaster.

Others who have participated as a volunteer or received assistance from this program have found the experience to be very rewarding, both personally and professionally. As a volunteer, you will gain the very valuable, firsthand experience in what it takes to participate in an event as well as be a valued participant in assisting with the overwhelming needs following a disaster.

The Construction Codes and Licensing, Department of Labor and Industry continues to work cooperatively with the Association of Minnesota Building Officials to develop and improve the "Disaster Preparedness Manual for Building Officials." The Association of Minnesota Building Officials Disaster Mitigation Committee and building code representatives from CCLD meet regularly to review and evaluate the manual and strive to provide current guidance information for your disaster preparation.

We are requesting code officials, inspectors, and permit technicians to consider providing volunteer assistance to Minnesota communities affected by a disaster. There is a need for volunteers to participate in all regions of the state.

Please visit the [Department of Labor and Industry's disaster preparedness Website](#) to obtain a "Disaster Assistance Volunteer Form" and to view other disaster preparedness documents.

In the case of a disaster, a list of regional code officials, inspectors and permit technicians will be made available to the municipality requesting assistance.

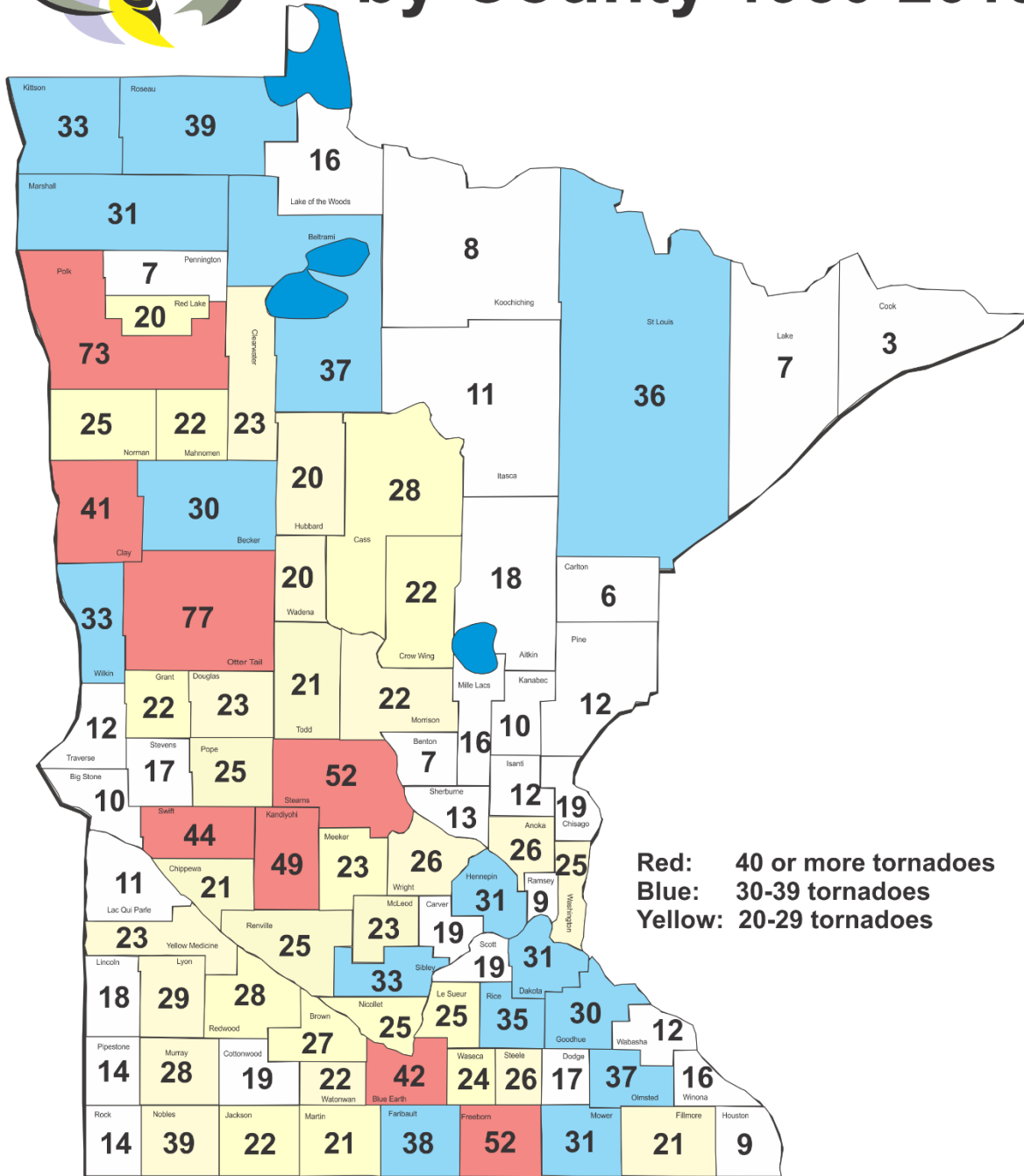
If you have any questions, need additional information, or need assistance with an event, contact:

- Scott Wheeler, Code Services Supervisor, 651-284-5876, [scott.wheeler@state.mn.us](mailto:scott.wheeler@state.mn.us)

- Tim Manz, Construction Code Representative, 651-283-5286, [timothy.manz@state.mn.us](mailto:timothy.manz@state.mn.us)
- Franklin Martin, Construction Code Representative, 651-529-0779, [franklin.martin@state.mn.us](mailto:franklin.martin@state.mn.us)
- Adam Schminski, Construction Code Representative, 1-320-815-2314, [adam.schminski@state.mn.us](mailto:adam.schminski@state.mn.us)
- Paul Swett, Construction Code Representative, 651-303-2854, [paul.h.swett@state.mn.us](mailto:paul.h.swett@state.mn.us)



# Minnesota Tornadoes by County 1950-2019



Department of Building Safety

\_\_\_\_\_  
JURISDICTION

\_\_\_\_\_  
PHONE

# **SORRY WE MISSED YOU**

**A damage assessment inspection is required – including the structure’s interior. Please contact the Building Department to arrange for an inspection.**

ADDRESS \_\_\_\_\_

INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_

BUILDING OCCUPANCY CLASS AND DESCRIPTION \_\_\_\_\_

**CONTACT BUILDING DEPARTMENT BEFORE PROCEEDING WITH ANY WORK (SEE INSPECTION REPORT)**

**DO NOT REMOVE THIS PLACARD UNTIL AUTHORIZED BY GOVERNING AUTHORITY**

(White)

Department of Building Safety

JURISDICTION \_\_\_\_\_

PHONE \_\_\_\_\_

**Unaffected**

**NO DAMAGE OBSERVED**

THIS STRUCTURE IS

**HABITABLE**

ADDRESS \_\_\_\_\_

INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_

BUILDING OCCUPANCY CLASS AND DESCRIPTION \_\_\_\_\_

CONTACT BUILDING DEPARTMENT BEFORE PROCEEDING WITH ANY WORK (SEE INSPECTION REPORT)

DO NOT REMOVE THIS PLACARD UNTIL AUTHORIZED BY GOVERNING AUTHORITY

(Blue)

Department of Building Safety

JURISDICTION \_\_\_\_\_

PHONE \_\_\_\_\_

**LIMITED ENTRY**

ENTER AT YOUR OWN RISK

THIS STRUCTURE IS

**UNINHABITABLE**

ADDRESS \_\_\_\_\_

INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_

BUILDING OCCUPANCY CLASS AND DESCRIPTION \_\_\_\_\_

CONTACT BUILDING DEPARTMENT BEFORE PROCEEDING WITH ANY WORK (SEE INSPECTION REPORT)

DO NOT REMOVE THIS PLACARD UNTIL AUTHORIZED BY GOVERNING AUTHORITY

(YELLOW)

Department of Building Safety

\_\_\_\_\_  
JURISDICTION

\_\_\_\_\_  
PHONE

**HABITABLE**  
**REPAIRS REQUIRED**

ADDRESS \_\_\_\_\_

INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_

BUILDING OCCUPANCY CLASS AND DESCRIPTION \_\_\_\_\_

\_\_\_\_\_  
CONTACT BUILDING DEPARTMENT BEFORE PROCEEDING WITH ANY WORK (SEE INSPECTION REPORT)

**DO NOT REMOVE THIS PLACARD UNTIL AUTHORIZED BY GOVERNING AUTHORITY**

(Green)

Department of Building Safety

\_\_\_\_\_  
JURISDICTION

\_\_\_\_\_  
PHONE

# UNSAFE STRUCTURE KEEP OUT

ADDRESS \_\_\_\_\_

INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_

BUILDING OCCUPANCY CLASS AND DESCRIPTION \_\_\_\_\_

\_\_\_\_\_  
CONTACT BUILDING DEPARTMENT BEFORE PROCEEDING WITH ANY WORK (SEE INSPECTION REPORT)

DO NOT REMOVE THIS PLACARD UNTIL AUTHORIZED BY GOVERNING AUTHORITY

(Orange)



Department of Building Safety

\_\_\_\_\_  
JURISDICTION

\_\_\_\_\_  
PHONE

**DANGEROUS - KEEP OUT**

THIS STRUCTURE IS

**UNINHABITABLE**

ADDRESS \_\_\_\_\_

INSPECTOR \_\_\_\_\_ DATE \_\_\_\_\_

BUILDING OCCUPANCY CLASS AND DESCRIPTION \_\_\_\_\_

CONTACT BUILDING DEPARTMENT BEFORE PROCEEDING WITH ANY WORK (SEE INSPECTION REPORT)

**DO NOT REMOVE THIS PLACARD UNTIL AUTHORIZED BY GOVERNING AUTHORITY**

(Red)

Department of Building Safety

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JURISDICTION

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PHONE

# APPROVED TO CONNECT

**Water**     No     Yes    **By:** \_\_\_\_\_    **Date:** \_\_\_\_\_

**Electric**     No     Yes    **By:** \_\_\_\_\_    **Date:** \_\_\_\_\_

**Gas**     No     Yes    **By:** \_\_\_\_\_    **Date:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**NOTES:** \_\_\_\_\_

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