

Appendix F

Damage Assessment Plan

Damage Assessment

Purpose:

Damage assessment is the process of identifying and quantifying damages that occurs as a result of a disaster. The objective of damage assessment is to provide situational awareness to the EOC about the state of critical (must be in place for recovery to begin) and essential (must be in place for recovery to continue) functions to help facilitate the EOC move from response into recovery and decisions to appropriately direct resources and teams. Additionally, the damage assessment results are used as the initial basis to justify or determine state or federal assistance.

Scope:

Immediately following, and even during the initial response to a disaster or major emergency, it will be necessary to quickly and as accurately as possible assess the damages and impacts.

Situation Reports:

Immediately following a disaster (within 8 hours), it will be the responsibility of the Eagle County Emergency Manager to develop a local situation report.

- Situation reports provide an overview of areas within the County that have sustained damage and will need to be surveyed to determine the extent of damage.
- Situation reports shall include at a minimum; names of jurisdiction(s) involved, casualty estimates, areas of reported damage, probable extent of damage, category of damages (residential, business, public infrastructure), impacts to critical facilities/services, local and mutual aid resources deployed, and outside assistance needed and/or anticipated.
- Critical facilities (e.g., hospital, airport) and special needs populations should be contacted directly to determine degree of damage.
- Situation reports provide a “footprint” of locally damaged areas to that will need to be prioritized and assessed in more detail.
- Situation reports shall be posted on WebEOC (a statewide web base information sharing tool) to keep the State Office of Emergency Management (COEM) and surrounding counties informed on the current Eagle County situation.
- Larger, more severe disasters require less detail to support a disaster declaration than smaller situations.

Damage assessment is conducted in the following three phases:

Windshield Damage Assessment:

This assessment begins immediately after the incident occurs. It is conducted by first responders (EMS, fire service, law enforcement, public works, etc.) and helps to determine life safety issues and identify the hardest hit areas. Responding resources should report type, extent and general location of damage to their Public Safety Answering Point (PSAP), the Vail Public Safety Communications Center, Colorado State Patrol or the Pitkin County Regional Emergency Dispatch Center. It will usually be the dispatcher who first recognizes a disaster situation and begins the assessment process by requesting activation of the Eagle County EOC. The EOC activation will relieve the PSAP of the responsibility for resource management and it will begin the process of damage assessment with the goal of quickly initiating a disaster declaration when applicable.

Initial Damage Assessment (IDA):

The initial damage assessment focuses on damages to residences, businesses and public infrastructure. This is the first attempt to assign a dollar amount to a disaster situation. Following the determination that a disaster situation exists, and the identification of affected areas, the damage assessment team(s) will respond into the disaster area armed with address maps and/or GPS units to conduct the initial damage assessment. The initial damage assigns a simple percentage of damage to affected infrastructure at a 25%, 50%, 75%, 100% or totally destroyed threshold based upon what can be observed from a safe location. This assessment information shall be provided to the Assessor's Office for assignment of dollar values and to the GIS Department (towns and county will work cooperatively) for damage mapping purposes. This assessment also determines whether more detailed damage assessments are necessary and identifies those areas where further efforts should be concentrated.

Preliminary damage assessment (PDA):

This PDA is done to verify the initial damage assessment (especially for state/federal assistance) and gather additional information on areas or functions that are going to require additional resources so recovery can be prioritized. Engineering departments shall be the key resources in order to provide more detailed assessment which guides the recovery process.

Damage Assessment Teams:

A Damage Assessment Coordinator shall be appointed by the EOC Manager. The Damage Assessment Coordinator shall appoint teams to perform the initial damage assessment. Suggested candidates for these teams include building officials, parks and recreation employees, public works employees, utility providers, real estate appraisers, American Red Cross, chamber of commerce, facility managers and other volunteers.

Each Damage Assessment Team shall have a leader who is responsible for team safety, assignments and overall team coordination as well as reporting results to the Damage Assessment Coordinator. Each team should include an assessment specialist who is

responsible for evaluations at each site to determine damage levels and a data recorder who is responsible for recording damage data on forms and compiling summary reports which are included in the damage assessment kits.

Damage Assessment Teams will:

- Conduct site by site assessments, unless otherwise instructed by the Damage Assessment Coordinator.
- Report any unsafe conditions to the EOC.
- Report severe damage with no emergency services on site.
- NOT discuss the damage assessment with the public or the media.
- NOT comment on possible assistance.
- Maintain communications and keep the EOC informed.

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; and
- **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.

Further details regarding the Disaster Declaration process can be found in Appendix H.

Damage Assessment Team Guidelines

Damage Assessment Teams will be deployed to assigned sites/areas to perform damage assessment as prescribed in the operations briefing.

- Each Damage Assessment Team shall have a leader who is responsible for team safety, assignments and overall team coordination as well as reporting results to the Damage Assessment Coordinator.
- Teams shall maintain communications with the Eagle County EOC and keep the Damage Assessment Coordinator apprised of progress.
- Team Leaders shall make contact and coordinate activities with the Incident Commander operating in that area.
- Assessments will be conducted street-by-street and property-by-property unless otherwise instructed by the Damage Assessment Coordinator.
- If teams encounter conditions that will make it unsafe to perform their assigned damage assessments, the team leader will report these conditions to the Damage Assessment Coordinator and await instructions on how to proceed.
- If areas of severe damage are encountered and public safety personnel are not on scene, the team leader shall report the situation to the EOC immediately, so that emergency personnel can be dispatched to protect life and property.
- Teams that encounter members of the public or media should not discuss potential or anticipated damage assessment outcomes. Teams should not volunteer commitments to the public concerning disaster response or assistance.
- Upon completion of assigned inspections, teams will report to the Eagle County EOC and provide all data collected to the Damage Assessment Coordinator.

Estimating Damage:

- With different individuals assessing damage and different agencies applying the information to their own needs, it is important to establish consistent standards in estimating damage. Estimating damage costs, as described in these guidelines, will generally relate to residential dwellings, small business facilities and other smaller structures. These procedures will usually not be appropriate for estimating damage costs to public facilities.
- A ten level damage scale will be used to estimate the level of damage to a particular property.

0-	11 -	21-	31-	41 -	51-	61 -	71 -	81 -	91 -
10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

- Damage assessment worksheets for the initial damage assessment phase can be found in the EOC folder on the “R:” Drive

- 100% is the most severe damage, and 10% is the least severe. This scale provides specific guidance in determining damage levels and was compiled using resources from federal, state and private agencies. It is designed to help make a somewhat subjective process more objective and consistent across different assessors.
- The ten level scale can be used to provide:
 - a damage description
 - guidance concerning the structure’s habitability
 - things for damage assessors to look for in evaluating a structure
 - water level assessments when flooding is involved. (Note: water levels are general guides. Flood damage intensifies with the force of the water, duration of the flood and the degree of contaminants and sediments in the water.)
 - an indication of how FEMA and the ARC would categorize the damage to a structure in each damage level (i.e. Destroyed, Major, Minor, Affected Habitable) and given definitions for these four damage categories.

In general do not enter a building. It should not be necessary to enter a building in order to assess the damage level.

Assessors must consider all areas of damage to a structure in deciding an overall damage level for the entire property.

If a damaged area appears to border between two levels, choose the higher or more severe level.

Estimating Dollar Amount of Damage:

Estimated Dollar Damage = [Damage Level x .1] x [Pre-Disaster market value x 1.1]

1. Multiply the pre-disaster market value of structure by 1.1 or 110% of pre-disaster value.
2. Multiple the percent of damage by 110% of pre-disaster market value.

Example:

Pre-disaster market value is \$100,000 and damage is estimated at 70%

$$\$100,000 \times 1.1 = \$110,000$$

Estimated Dollar damage is .7 x \$110,000 or \$77,000

Estimating Damage to Contents:

Estimating damages to contents will assist the family service caseworkers as well as increase the total damage cost estimates. Contents will include food, clothing, furniture and major appliances. An estimation of probable damage to contents is obtained from asking occupants of the property, if at all possible.

Damage Assessment Team Briefing Checklist

General:

- Provide current update concerning the disaster event
- Review purpose and importance of damage assessment mission
- Designate team members and assign designated team leader
- Outline geographic areas affected by the event and designated for IDA
- Distribute prioritized list of sites/areas to be assessed
- Assign sites/areas to specific teams
- Anticipate degree of damage and destruction the should be encountered
- Designate level of detail needed for damage assessment
- Stress importance of expediting the process (objective is to obtain information as accurately as possible with as little delay as possible)
- Refer to IDA guidelines

Safety and Maneuvering:

- Unstable/Unsafe buildings, structures (identify know areas)
- Weather forecast (any potential for weather hazards)
- Potential hazards that may be encountered and how to handle (downed wires, etc.)

Equipment:

- Assign vehicles, if appropriate
- Assign team equipment kits
- Review damage assessment forms and guidelines
- Procedures for obtaining additional supplies if needed

Communications:

- Radios, cell phones (operations check and establish check-in time frames)
- Guidelines for interacting with the public and media
- List of emergency shelters, recovery centers, mobile feeding sites
- Contact Eagle County EOC to clarify questions, instructions

Team Equipment Checklist

- | | |
|--|----------------------|
| <input type="checkbox"/> Photo identification badges | for each team member |
| <input type="checkbox"/> Hard hat | for each team member |
| <input type="checkbox"/> Rubber pull-over boots (if necessary) | for each team member |
| <input type="checkbox"/> Protective gloves | for each team member |
| <input type="checkbox"/> Reflective traffic vests | for each team member |
| <input type="checkbox"/> Insect repellent | |
| <input type="checkbox"/> Protective eyewear | for each team member |
| <input type="checkbox"/> Hearing protection | for each team member |
| <input type="checkbox"/> Rain gear (if necessary) | for each team member |
| <input type="checkbox"/> First aid kit | |
| <input type="checkbox"/> Trash bags (to store personnel equipment) | for each team member |
| <input type="checkbox"/> Vehicle, 4WD (recommended) | 1 |
| <input type="checkbox"/> Full tank of fuel | |
| <input type="checkbox"/> Shovel | |
| <input type="checkbox"/> Sand/Rock Salt (if necessary) | 50# bag |
| <input type="checkbox"/> Road flares | |
| <input type="checkbox"/> “CAUTION” tape | |
| <input type="checkbox"/> “DO NOT ENTER” tape | |
| <input type="checkbox"/> Binoculars | |
| <input type="checkbox"/> DTR Radio | |
| <input type="checkbox"/> Spare battery (charged) | |
| <input type="checkbox"/> Perform operational check | |
| <input type="checkbox"/> Cellular telephone | |
| <input type="checkbox"/> Vehicle charger | |
| <input type="checkbox"/> Perform operational check | |
| <input type="checkbox"/> Duct tape | |
| <input type="checkbox"/> Maps (highway, assigned area) | |
| <input type="checkbox"/> Note pads | |
| <input type="checkbox"/> Pens | |
| <input type="checkbox"/> Clip boards | |
| <input type="checkbox"/> Whistle for signaling | |
| <input type="checkbox"/> Flashlights (w/extra batteries) | |

Safety Checklist

General:

9-1-1

EOC Situation Desk telephone number:970-328-3438

Electricity:

Holy Cross Energy (all areas of Eagle County EXCEPT Hwy 24 South of Dowd Jct.)
(970) 949-5892 or (970) 945-5491

Xcel Energy (Hwy 24 South of Dowd Jct., including Minturn and Red Cliff)
(800) 847-4970 Transmission or (800) 895-2999 Distribution

- Notify EOC
- Do Not attempt to remove a tree limb or other object from power lines. Do Not attempt to use a branch, board fiberglass etc. These can conduct electricity.
- If you are in a vehicle and a power line fall on it, **STAY IN THE VEHICLE**. If for some life-threatening reason, you must exit the vehicle, jump. **Do Not** touch both the vehicle and the ground at the same time.

Natural Gas:

Black Hills Energy (all areas of Eagle County West of Miller Ranch Road and Hwy 6) (800) 563-0012 Distribution or (866) 477-1190 Transmission

Xcel Energy (all areas of Eagle County East of Miller Ranch Road and Hwy 6) (800) 308-3978

- If you Smell Gas:
 - Immediately extinguish all open flames
 - Prohibit smoking
 - DO NOT operate electrical switches or machinery, use telephones, ring doorbells, use flashlights or two way radios
 - Avoid any actions that could produce sparks
 - Notify the EOC

- If you discover a broken Natural Gas Line:
 - Immediately extinguish all open flames and turn off all machinery
 - Avoid all actions that could produce sparks
 - Alert everyone in the area of the potential danger and evacuate the area
 - Cordon off the area with CAUTION or DO NOT ENTER tape

- Notify the EOC
- Wait for professionals. NEVER attempt to fix a gas line

Animals – Avoiding Dog Bites:

- When Dogs Might Bite:
 - They feel threatened, are afraid, are protecting their territory/food/family/pups
 - They don't know you
 - Their chase response is triggered
 - They are in pain or irritated
- Warning Signs a Dog Might Bite:
 - Dog stands stiff and still, hair may be up
 - Dog stares at you
 - Dog's tail is stiff and wagging very fast, ears erect.
 - Dog growls, snarls, shows teeth
- What to do if Threatened by a Dog:
 - Do not trigger the natural instinct to chase
 - Stand still, remain calm, don't run or turn your back to the dog. Wait until the dog leaves, then back away slowly
 - If a dog comes to sniff you, let it. Don't try to pet it
 - Don't make any fast or jerky movements
 - Don't stare into the dogs eyes. This is a challenge to fight
 - Speak in a loud, calm, low voice, "GO HOME", "NO", or "STAY"
- If the Dog Attacks:
 - Shield yourself by keeping something between yourself and the dog
 - Feed the dog your jacket, anything that will give it something else to bite
 - If you get knocked down, curl into a ball with hands over your head and neck. Don't scream or roll. "Play Dead"
 - Report the incident and get medical attention