

Rapid Damage Assessment

Standard Operating Guide



A partnership with public and private sectors and
Kootenai County Office of Emergency Management

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*Points of view or opinions expressed in this document are those of the authors
and do not necessarily represent the official position or policies of
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Introduction to Damage Assessment

When an event occurs and damage has been inflicted on our communities, response and recovery begins immediately, as soon as it is safe to enter the field of destruction. Our partners, those responsible for performing daily functions in the field, maintaining our streets and roads, overseeing the power and communication structures, managing our municipal infrastructures, and sustaining our vital services will be the primary providers of damage assessment information.

- The County will deploy damage assessment teams to assess the damage in the unincorporated areas of the county.
- Tribes and Municipalities will conduct damage assessment within their jurisdiction.
- Other private and public sector entities will assist municipalities and the county by providing their critical damage assessment information.

Damage assessment provides situational awareness and vital information that presents a snapshot of the situation, detailing the extent and location of damages through oral or written reports and pictures. This information is provided to the respective municipalities and the Kootenai County Office of Emergency Management.

The information provided:

- assists in the direction of emergency response,
- assists in determining the needs of the survivors,
- assists in identifying the need for additional resources, and
- assists in establishing an estimated dollar value of the losses.

This vital information helps set the tone for the entire response operation and can drive the recovery process.

After the event is long over, recovery is complete, and we are looking to the future, this same information can help identify future mitigation actions and projects that will make our community more disaster-resistant and resilient.

This Standard Operating Guide (SOG) for Rapid Assessment is the first assessment that is taken in the community following the disaster – and perhaps the most important. Other assessments, the State's Assessment and Joint FEMA/State/Tribal/Local Preliminary Damage Assessment, occur later in the recovery process and will be briefly described. If further information is desired for these types of assessments, please contact the Kootenai County Office of Emergency Management at (208) 446-1775 or kcoem@kcgov.us.

Types of Assessments

The **Baseline Assessment** is conducted prior to a disaster. This assessment is completed by the tribal/local jurisdiction pre-event in order to provide documentation of a pre-event baseline. This assessment serves as the basis for both fiscal and functional assistance in restoring damaged areas to their pre-disaster conditions as well as providing life-sustaining and recovery assistance to individuals impacted by a disaster or emergency event.

During and after an event that leaves our community damaged, there are three types of assessments that may need to be performed and are dependent upon the scope and severity of the damages:

Rapid Assessment (RA)
State Assessment (SA), and
Preliminary Damage Assessment (PDA).

This Standard Operating Guide (SOG) deals only with the RA; however, we have defined the other two assessments for a better overview of the assessment process.

First, the **Rapid Assessment (RA)** is a local jurisdiction responsibility and may be conducted during an event and updated throughout the event. At a minimum the RA should be completed no later than 36 hours after the damage occurs. The assessment information is transmitted to the Kootenai County Office of Emergency Management or if activated, the County Emergency Operations Center (EOC). They will collect, consolidate and disseminate this information for the purpose of supporting response and recovery efforts.

The RA includes both public infrastructure and privately-owned assets; i.e., critical infrastructure, houses, businesses, etc. From this preliminary information, the following may be determined in order to support response and recovery efforts:

- What is needed?
- When is it needed?
- Where is it needed?
- How much is needed?
- For how long will it be needed?

As recovery proceeds, RA observations and information will continue to be updated. More detailed assessments will provide information that enables the county and possibly the state and federal governments to determine financial impact; and whether state and/or federal assistance is warranted.

Secondly, the **State Assessment (SA)** is a responsibility of state and local representatives to validate the RA when state assistance is requested by the county. The purpose of performing this assessment is to determine if the extent of damage from the disaster is sufficient to warrant:

- a. The Governor's declaration of the State of Emergency to support the local jurisdiction in the response and/or recovery; and/or
- b. The Governor's request to FEMA to conduct a joint FEMA/State/Tribal/Local Preliminary Damage Assessment (PDA); or
- c. Requesting a Fire Management Assistance Grant (FMAG) in support of a wildland fire event.

Last, is the **Preliminary Damage Assessment (PDA)** performed after a major event, jointly by FEMA/State/Tribal/Local. The PDA provides validation of the State Assessment (SA), and ensures the state has met financial indicators to support the Governor's request for a Presidential Major Disaster Declaration. The PDA is shared between FEMA and Idaho BHS, and the local jurisdictions.

Rapid Assessment (RA)

Functions of Rapid Assessment

The Rapid Assessment is easily defined. It is quick, it is immediate, and it is often through a windshield (thus often called a windshield assessment which provides a quick, cursory evaluation). The primary functions of the Rapid Assessment are to:

- Describe the impact on the community
 - What is the magnitude of the event
 - How severe is the damage
 - What are the current unmet needs created by the event

- Describe the damage to both public and private property
 - Damage to life-sustaining infrastructure
 - Power
 - Light
 - Water
 - Damage to public structures
 - Roads
 - Dams
 - Levees
 - Communication Facilities
 - Damage to residences
 - Apartments
 - Single-Family residences
 - Condos
 - Damage to businesses
 - Strip malls
 - Major malls
 - Small, single operator establishments
 - Critical Infrastructure
 - Hospitals
 - Schools
 - Public Facilities

- Provide an estimate of the type and the extent of damages, including probable costs
- Provide an estimate of residences uninhabitable and potential for sheltering needs
- Provide an estimate of damage to businesses and ultimate economic impact on the community
- Provide situational awareness of the damages associated with the event to Incident Command, Elected Officials, Tribal Leadership, and the Kootenai County Office of Emergency Management.

Who Should Be Involved in Rapid Assessment?

Local rapid assessment can be activated following any event where disaster intelligence is needed. The quickest sources for rapid assessment personnel are those persons who normally, on a day-to-day basis are responsible and are accountable for assets in our community. These assets and personnel can include:

- Public Works
 - Water companies – public and private
 - Sewer – municipal personnel
- Communications
 - Telephone – landline and cellular
 - Radio – repeaters and towers
- Transportation Infrastructure
 - Highway Districts
 - State Highway Department
 - Municipality Roads and Street Departments
 - Railways
- Life-Line Utilities
 - Electric
 - Gas
 - Pipelines
- Public Facilities
 - Schools
 - Municipalities
 - Tribal
 - County
- Private Industry
 - Local Businesses
 - Manufacturing

Other resources that can provide damage assessment:

- Law Enforcement
- American Red Cross
- Fire/EMS

Designated Personnel's Area of Responsibility

Generally speaking, the personnel providing rapid assessment should be primarily concerned with the areas within which they normally work. For instance, highway district personnel are well suited for assessing damage to roads, whereas utility companies are better suited to assess damage to utility infrastructure. However, in some instances where damage is excessive and assessment personnel are limited, the use of assessment personnel in non-familiar areas may need to be utilized. Likewise, during training, general assessment personnel can be assigned to specific areas in order to familiarize themselves with their assigned area prior to the event. Training and assignment of specific areas or categories of review are key to a successful assessment plan.

The most important factor to consider is that all of the tribal, city and county's jurisdictions' infrastructure and facilities are assigned for assessment. Murphy's Law is that the one area that is not assigned will be the one affected.

What Do Partners Need to Do Before the Emergency or Disaster?

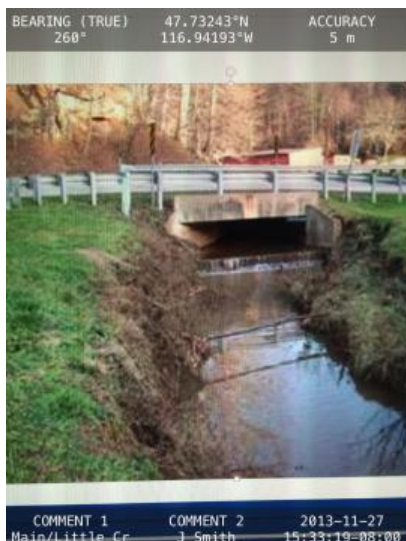
Pre-Planning and Training:

- Appoint a Damage Assessment Coordinator
- Designate personnel to conduct damage assessment after the emergency or disaster
- Have designated personnel attend training provided by the Office of Emergency Management
- Perform a **Baseline Assessment**:
 - Identify critical infrastructure:
 - Take pictures of these assets showing the current condition, utilizing the Field Data card (copy attached) or a smart phone that has an application that takes pictures of the asset, provides longitude, latitude, photographer, date, time, and a brief description.
 - Maintain these photos for easy access after a disaster for comparison of pre-disaster conditions to establish scope of work needed to return to pre-disaster condition. A “before and after” photo provides the best supportive evidence available when proving the damages sustained in an event.
 - Identification of areas requiring mitigation
 - Documentation of areas susceptible to potential damage



Date: 01/12/14 __
Site Number: Main Street05
Location/Project Name: Main Street over Little Creek
LAT: 47 .73240 __ __ N
LONG: -116.94191 __ __ W

Taken with standard camera holding data information card.



Taken with smart phone with app that shows date, who took picture, address and coordinates

Types of Assistance Available

The **Public Assistance** grant program is to provide assistance to state, tribal and local governments, and certain types of private, non-profit organizations so that communities can quickly respond to and recover from a major disaster or emergency. Through the Public Assistance grant programs, FEMA may provide supplemental federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement or restoration of disaster-damaged, publicly-owned facilities and the facilities of certain private, non-profit organizations.

According to FEMA, Public Assistance may be eligible in the following categories of work for damages occurring in both federal and state disaster emergency events:

Emergency Work: Work performed to reduce or eliminate an immediate threat to life, protect public health and safety, and to protect improved property that is threatened in a significant way as a result of the disaster emergency.

- A. Debris Removal
- B. Emergency Protective Measures
 - a. Eliminate or reduce an immediate threat to life, public health or safety
 - b. Eliminate or reduce an immediate threat of significant damage to improved public or private property through cost-effective measures
- C. Direct Fire Support (Fire Management Assistance Grant, FMAG)

Permanent Work: Work performed to restore a damaged facility, through repair or restoration, to its pre-disaster design, function and capacity in accordance with applicable codes or standards, which may include

- A. Roads and Bridges
- B. Water Control Facilities
- C. Buildings and Equipment
- D. Utilities
- E. Parks, Recreational Facilities and other items

The objective of the **Individual Assistance Grant Program** is to provide assistance to individuals and households as well as businesses impacted by the disaster or emergency event. Documentation of the numbers of households and businesses impacted by a disaster or emergency event as well as the degree and extent of damage is a critical factor in seeking state or federal assistance.

The Individual Assistance program varies based upon the severity of the event; and if the event is a non-federally declared event or is a Presidentially-declared event. Individual assistance that may be available is:

- Temporary Housing
- Home Repair Grants
- SBA Disaster Loans
- Disaster Unemployment Assistance
- Food Commodities
- Relocation Assistance
- Disaster Legal Services
- Crises Counseling Assistance
- Tax Relief

Additionally, assistance may be available through non-profit volunteer organizations such as Volunteer Organizations Active in Disaster (VOAD) and faith-based organizations.

In all cases, the Rapid Assessment will provide initial information that may assist individuals, government and private industry in obtaining assistance.

Date: / /

Site Number: _____

Location/Project Name: _____

LAT: . ^N

LONG:- . ^W

GLOSSARY OF TERMS

Asset: Any manmade or natural feature that has value, including, but not limited to people; buildings; infrastructure like bridges, roads, and sewer and water systems; lifelines like electricity and communication resources; or environmental, cultural or recreational features like parks, dunes, wetlands, or landmarks.

Building: Any structure that encloses a space used for sheltering and occupancy; including a gas or liquid storage tank that is principally above grade; and shall include manufactured homes.

Damage Assessment: Process for determining the severity and magnitude of a hazard event on the public and private sectors of a community.

Debris: Scattered remains of assets broken or destroyed in a hazard event. Debris caused by a wind or water hazard event can cause additional damage to other assets.

Disaster: Dangerous event that causes significant human and economic loss and demands a crisis response beyond the scope of any single agency or service, such as the fire or police department. Disasters are distinguished from emergencies by the greater level of response required. Disasters require resources beyond those available locally.

Emergency Operations Center (EOC): A pre-designated facility established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency.

Emergency: Absent a presidentially-declared emergency, any incident(s), human-caused or natural, that require responsive action to protect life or property. Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, an emergency is “any occasion or instance for which, in the determination of the President, federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.”

Essential functions and services: Functions that enable agencies to provide vital service, exercise civil authorities, maintain the safety and well-being of the general populace, and sustain the industrial/economic base in an emergency.

Extent: The size of an area affected by an incident.

Event: Planned, non-emergency activity.

Federal Emergency Management Agency (FEMA): An agency within the U.S. Department of Homeland Security charged with responding to Presidentially-declared disasters.

Geographic Information System (GIS): The computer software application that relates to physical features on the earth to a database to be used for mapping and analysis.

Incident: Occurrence, natural or manmade, that requires a response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

Individual Assistance (IA): Funding or direct assistance to individuals, families, and businesses in an area whose property has been damaged or destroyed and whose losses are not covered by insurance. It is meant to help with critical expenses that cannot be covered in other ways. This assistance is not intended to restore damaged property to its condition prior to the disaster.

Infrastructure: Public services of a community that have a direct impact on the quality of life. Infrastructure includes communication technology such as phone lines or internet access, vital services such as public water supplies and sewer treatment facilities, and includes an area's transportation system such as airports, heliports, highways, bridges, tunnels, roadbeds, overpasses, railways, bridges, rail yards, depots; and waterways, canals, locks, seaports, ferries, harbors, drydocks, piers, and regional dams.

Intensity: Measure of effects of a hazard event at a particular place.

Just-in-Time Training (JIT): Training provided to any personnel who have not received position specific training for the position they are assuming.

Jurisdiction: Range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, state or federal boundary lines) or functional (e.g., law enforcement, public health).

Lifelines: Systems that provide for health and safety such as water, sewer and electric.

Life-safety issue: Any issue that presents an immediate hazard. Examples are live power lines, leaking chemicals, gas leaks, and wild animals.

Local government: Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under state law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska native village or organization; and any rural community, unincorporated town or village, or other public entity.

Magnitude: Measure of the strength of a hazard event. The magnitude of a given hazard is usually determined using technical measures specific to the hazard.

Mitigation: Activities designed to lessen the impact of disasters to reduce loss of life and property.

Multi-jurisdictional incident: An incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of an incident. In ICS, these incidents will be managed under Unified Command.

Mutual aid agreement: A written agreement between agencies and/or jurisdictions to assist one another upon request, by furnishing personnel, equipment, and/or expertise in a specific manner.

Natural disasters: Naturally occurring incidents such as earthquakes, tornadoes, hurricanes and flooding that have occurred in the past or are likely to occur.

Natural hazards: Natural hazards are caused by natural events that pose a threat to lives, property, and other assets. Examples include hurricanes, earthquakes and tornadoes.

Operational Period: The period of time scheduled for execution of a given set of operation actions as specified in the EOC Action Plan. Operational Periods can be of various lengths, although usually not over 24 hours.

Preparedness: Actions taken to plan, organize, equipment, train, and exercise to build and sustain the capabilities necessary to prevent, protect against, mitigate the effects of, respond to, and recover from those threats that pose the greatest risk to the security of a community. Preparedness is a continuous process.

Public Assistance (PA): Reimbursement and emergency assistance provided to State and local governments and certain types of private, non-profit entities from the federal government.

Radio Amateur Civil Emergency Service (RACES): RACES stands for "Radio Amateur Civil Emergency Service," a protocol created by the Federal Emergency Management Agency (FEMA) and the Federal Communications Commission. Many government agencies across the country train their volunteers using the RACES protocol. The volunteers serve their respective jurisdictions pursuant to guidelines and mandates established by local emergency management officials.

Severity: Measure of the seriousness of the effects of a disaster.

Structure: Any combination of materials used to form a construction for use, occupancy, or ornamentation whether installed on, above, or below the surface of land or water.

Windshield survey: Damage is recorded and/or photographed while driving through affected areas from the vehicle.

Acronyms

ARRL	Amateur Radio Relay League
BHS	Bureau of Homeland Security
BOCC	Board of County Commissioners
DECON	Decontamination
DOA	Department of Agriculture
DOFW	Department of Fish and Wildlife
DOH	Department of Health
DOT	Department of Transportation
EAS	Emergency Alert System
EIS	Environmental Impact Statement
EMI	Emergency Management Institute
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ESF	Emergency Support Function
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency
GIS	Geographic Information Systems
HAZMAT	Hazardous Materials
HF	High Frequency
IDEOC	Idaho Emergency Operations Center
ICP	Incident Command Post
ICS	Incident Command System

IEMS	Integrated Emergency Management System
JIC	Joint Information Center
JIT	Just-in-Time Training
KCEOC	Kootenai County Emergency Operations Center
LEPC	Local Emergency Planning Committee
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NEIC	National Earthquake Information Center
NTSB	National Transportation Safety Board
NWS	National Weather Service
OEM	Office of Emergency Management
PIO	Public Information Officer
POC	Point Of Contact
SAR	Search and Rescue
SBA	Small Business Administration
SOP	Standard Operating Procedures
UBC	Uniform Building Code
U/FOUO	Unclassified/For Official Use Only
USCG	United States Coast Guard
USCGA	United States Coast Guard Auxiliary
USDA	United States Department of Agriculture
VHF	Very High Frequency