

Communication Strategy Toolkit

► Communication Strategy

Guidance document that establishes a team concept of capturing and promoting effective mitigation ideas and techniques.

- Executive Summary
- Introduction
- Background
- Strategy Objectives
- Criteria
- Target Audiences
- Key Messages/Benefits
- Materials and Methods
- Delivery Plan
- Roles and Responsibilities

■ Standard Operating Procedures

Step-by-step process for team member functions before, during and after disaster response and recovery operations.

- Appendices

► Forms and Reference Materials

- **FEMA Publication** *Telling the Tale of Disaster Resistance... A Guide to Capturing and Communicating the Story*
Guidebook that outlines the process of capturing mitigation ideas and techniques – from finding and producing the story to promoting disaster-resistance efforts.



FEMA

DEVELOPING AND PROMOTING MITIGATION BEST PRACTICES AND CASE STUDIES

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Executive Summary

For years, mitigation actions have been taken throughout the United States to save lives, reduce property damage and decrease the money spent on disaster recovery efforts.

Documenting and promoting these actions have proven to be equally valuable – to the public, government decision-makers and recovery entities – because people can learn by example how to better protect themselves and their communities.

The Communication Strategy for Developing and Promoting Mitigation Best Practices and Case Studies is designed to facilitate the sharing of effective mitigation strategies and practices, to increase public awareness and to compel citizens to take action. Documented accomplishments include individual, business and community initiatives as well as those involving program areas (e.g., Hazard Mitigation Grant Program (HMGP), National Flood Insurance Program (NFIP), Flood Mitigation Assistance (FMA) Program, Pre-Disaster Mitigation (PDM), Planning, 406 Mitigation, Map Modernization), community education and outreach activities, and training and academic initiatives.

For the purposes of this Communication Strategy, by definition:

Best Practices tell a story and generally use a human-interest approach to document a variety of mitigation ideas and techniques that will reduce adverse impacts from natural and man-made disasters.

Case Studies provide a greater in-depth, technical and/or statistical look at some of these same effective mitigation practices.

The strategy builds on the longtime efforts by federal, state, local and private-sector entities that have invested resources to implement and document effective mitigation measures.

In summary, the strategy:

- **Utilizes a team approach** among federal and state Mitigation and Public Affairs staffs to identify, research, write, photograph, distribute and promote Best Practices and Case Studies;
- Sets forth both a **formalized process and operational procedures**, including staff roles and responsibilities, to effectively guide the team's efforts;
- Provides **objectives, criteria, key messages, a delivery plan**, and additional resources to help with documentation efforts.

This strategy is intended to support opportunities for capturing and promoting examples of effective mitigation during Disaster Field Office (DFO) operations and non-disaster periods whenever possible.

The products developed using this strategy will be promoted through a variety of methods – chief among them being the FEMA.gov and Mitigation Best Practices and Case Studies web pages, as well as other internal and external publications. Utilizing these web pages not only provides value in audience reach, but also establishes a solid, long-term resource capability.

A review process for the strategy by local, state and federal emergency management representatives throughout the country occurred in spring 2004 to garner additional expertise and input. The strategy was finalized after FEMA management review and approval.

The Communication Strategy is a cooperative agreement initiative of the FEMA Mitigation Division, Office of Public Affairs and the Recovery Division, to include the Federal Coordinating Officers (FCOs) and Community Relations staff.

Introduction

Mitigation has long been perceived and practiced as an essential tool for helping to save lives, reduce property damage and decrease the money spent on disaster recovery efforts.

Historically, those actions to minimize damages have been **proven to be effective** in life safety and in reduced personal, structural and economic costs.

As a result, both citizens and governments have realized the need to create change in their communities and have undertaken efforts to provide better long-term protection. Those efforts ultimately become Mitigation Best Practices.

Implementing sound mitigation techniques is just one component in the overall goal of reducing the impact of natural and man-made disasters.

Another key element is **communication**. The ability to illustrate how and why mitigation is effective plays a major role in nationwide efforts to affect change that will minimize or eliminate disaster damages.

It is well known that:

- People seek information within familiar networks, i.e. family, friends, neighbors, business associates, schools, community leaders and governments;
- Sharing ideas, resources and expertise among these networks enables people to see what is possible and to take action that can lessen the impact of a disaster;
- Mitigation Best Practices and Case Studies – especially when told by those who have taken action – are a credible, effective way to illustrate the methods, means and benefits of mitigation;

Success generates interest, action and ultimately more success. Providing accurate, understandable and timely information is key to effective mitigation strategies. The accessibility and impact of this information, as well as the ability to employ effective mitigation measures, can be influenced by:

- Public interest in mitigation, which is usually heightened by the adverse impacts on individuals and communities following a disaster. This interest often results in increased awareness and action to protect against future losses.
- Available funding for mitigation projects, which sometimes competes with other fiscal priorities as well as limited resources.
- Geographic, cultural, socioeconomic and linguistic factors.

These factors should not be viewed as an impediment to success. Rather they are considerations that can help achieve a positive outcome.

Lastly, it is important to note that there is significant economic value to documenting and promoting Mitigation Best Practices and Case Studies. Traditionally, FEMA mitigation ‘brick and mortar’ projects are evaluated for direct benefits and compared to the project cost. The true success and long-term **benefit** of this or any other communication strategy will be based on actual measurement and quantification of the economic benefits derived from such action(s).

Background

Documenting and promoting mitigation efforts, both during and after disaster recovery operations, have long been undertaken by many federal, state, local and private-sector entities.

These efforts have proven to be valuable because they often have increased public awareness and compelled citizens and communities to take action.

But disaster recovery operations also have presented some institutional challenges, specifically in resources and staffing, resulting in reduced opportunities to capture and showcase mitigation ideas and practices.

To minimize these challenges and to meet increased requests from journalists, researchers, congressional staff, private-sector organizations and others, a Communication Strategy for documenting and promoting Mitigation Best Practices and Case Studies has been developed.

The intent of the strategy is to better utilize operational resources in a Disaster Field Office (DFO) to achieve the goal of promoting sound, effective mitigation techniques and practices to the public-at-large and several targeted audiences.

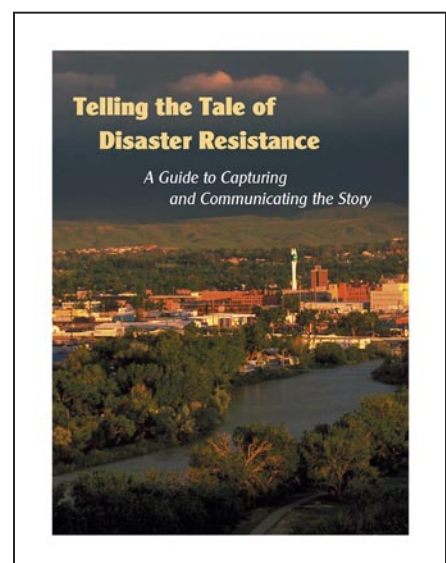
By definition, **Best Practices** tell a story and generally use a human-interest approach to highlight a variety of mitigation ideas and techniques that will reduce adverse impacts from natural and man-made disasters. **Case Studies** provide a greater in-depth, technical look at some of these same effective mitigation practices. Both kinds of documents provide a proven method for communicating the direct and indirect benefits of minimizing or preventing potential disaster damages.

The Communication Strategy is a cooperative agreement initiative of the FEMA Mitigation Division, Office of Public Affairs and the Recovery Division, to include the Federal Coordinating Officers (FCOs) and Community Relations staff.

Initial input for the strategy came from a two-day focus group meeting in October 2003 at the Hurricane Isabel North Carolina DFO. Meeting participants included Mitigation and Public Affairs representatives from FEMA Headquarters, Regional Offices and active DFOs.

Additional guidance for the strategy was adapted from the FEMA guidebook “*Telling the Tale of Disaster Resistance ... A Guide to Capturing and Communicating the Story*,” first published in 2001 and based on extensive field experience documenting Mitigation Best Practices and lessons learned.

A review process for the strategy by local, state and federal emergency management representatives throughout the country occurred in spring 2004 to garner additional expertise and input. The strategy was finalized following FEMA management review and approval.



To meet the strategy's goals and objectives, certain criteria have been established to maximize efforts to document and communicate Best Practices and Case Studies.

Disaster Operations:

Among those criteria is the **recommendation that from two to six Mitigation Best Practices documents be produced during a disaster operation**, depending on its size and scope.

In addition, it is strongly recommended that documentation and promotion of Best Practices and Case Studies regularly be included within state and federal coordinating officers' operational priorities during disaster recovery, and that the strategy be field tested in one or more DFO operations.

Non-Disaster Environments:

Opportunities are bountiful throughout the year in regional, state, local, other federal agencies and private-sector entities for the development and promotion of Mitigation Best Practices and Case Studies.

This strategy will support local and regional efforts to promote mitigation by providing ideas, guidance and tools to help achieve overall success. The strategy also will support opportunities to follow up on implemented projects.

Strategy Objectives

The purpose of this Communication Strategy is to help achieve the following tangible results:

1. To **increase public understanding** of the value and use of mitigation measures as a sound investment for individuals, businesses and communities nationwide.
2. To **document and promote effective mitigation techniques** and actions through actual Best Practices and Case Studies that are understood by, and that resonate with, a variety of audiences.
3. To **use Mitigation Best Practices and Case Studies** as a means to:
 - **Help convey** the importance of identifying hazard risks and then taking action to address and minimize those risks;
 - **Communicate mitigation ideas**, expertise and resources that can be utilized on an individual, business or community level to lessen the impact of disasters;
 - **Show that mitigation** is both effective and affordable;
 - **Further economic stability and growth** for a community that takes mitigation action.
 - **Foster local, state, federal, private and academia partnerships** that promote mitigation opportunities and efforts;
 - **Further support research and academic studies** on effective mitigation theories and practices;
 - **Help secure funding** and other resources to make additional mitigation projects possible.
4. To **build a national, accessible portfolio** of Mitigation Best Practices and Case Studies that appeals to a variety of audiences. **NOTE:** FEMA web server statistics for the Mitigation Best Practices Database cite 44,000 successful requests to the site from 08/01/03 to 04/30/04).
5. To **improve and expand outreach** with other voluntary, local, state and federal agencies which also promote or fund mitigation efforts.
6. To **provide an internal framework** for continually assessing, analyzing and adjusting communication efforts to promote Mitigation Best Practices and Case Studies.
7. To **provide an opportunity for follow-up** on performance of implemented and tested mitigation strategy(ies) post disaster.
8. To **provide information** for policy development.

Criteria

There are key elements that should always be considered when documenting and promoting effective mitigation measures:

- Best Practices and Case Studies should reflect FEMA, state and/or local mitigation strategies and priorities whenever possible.
- To be the most effective, these examples must have a human focus.
- Ideally, Best Practices and Case Studies should feature a variety of:
 - a) **Hazard Types** – floods, tornadoes, hurricanes, earthquakes, severe storms, fire, droughts, man-made, technological, acts of terrorism, etc.
 - b) **Subjects** – individuals, businesses, communities, public infrastructure, non-profit organizations, etc.
 - c) **Social and Cultural Environments** – Multilingual, socioeconomics, Americans with Disabilities, special needs populations, etc.
 - d) **Mitigation Measures** – ranging from basic steps such as raising electrical outlets; landscaping; and elevating appliances, furnaces/air conditioners, washers and dryers, etc.; to more complex measures such as major retrofitting; elevating structures; acquisition (buyouts); stormwater management projects; community mitigation planning; legislation; building codes, etc.
 - e) **Funding Sources** – private (business or individual), non-profit, public/government.
- To **promote consistency**, each Mitigation Best Practice and Case Study should contain the following essential elements:
 - a) Illustrate disaster risk/problem, including hazard to be avoided;
 - b) Feature human/local appeal;
 - c) Promote change (attitude, behavior, perception) through education and example;
 - d) Show easily identifiable value/benefit;
 - e) Promote methods and techniques that make sense and are achievable;
 - f) Provide clear and concise information that enables the reader to take action and to be successful;
 - g) Show economic savings/impact;
 - h) Identify funding sources;
 - i) Include visual elements such as photographs, drawings, and diagrams.

NOTE: Whenever possible, each documented Best Practice should follow or include the basic elements shown in the Guided Format (see Appendices).

- All Best Practices and Case Studies must be factual, technically accurate and substantiated prior to public release. This includes compliance with **FEMA technical guidance and recommendations or private-sector consensus standards**. In short, trustworthy information is the key to effective risk mitigation communications.
- Subject matter experts, Mitigation Staff, Public Affairs Officers, Congressional Affairs Officers, and any others, such as state/local partners should review all Best Practices and Case Studies **prior to public release**. Mitigation review and approval should include a technical expert **from the Technical Services Branch at the DFO**. **If appropriate expertise is not available at the DFO, clearance can be obtained from the Mitigation Division at a Regional Office or at FEMA Headquarters.**
- To maximize documentation and promotion efforts, it is recommended that the following number of Best Practices be produced per corresponding DFO operation:

30-day DFO Operation = At least 2 Best Practices

45 to 60-day DFO Operation = At least 4 Best Practices

60+ day DFO Operation = At least 6 Best Practices

This strategy is intended to routinely be used in state/federal disaster operations. However, it is recognized that documenting Best Practices may not be applicable to some disaster operations. Therefore, it is recommended that the Mitigation Division Lead and the Lead Public Affairs Officer jointly decide when to utilize the strategy on a disaster recovery operation.

- Topics chosen for case studies will typically demonstrate outstanding or unique aspects related to cost effectiveness, broad public benefit, excellence in design, public-private partnership, statewide impact, and ability to be replicated in other communities or regions of the country. Case studies are developed and produced on a national level for a nationwide audience by the FEMA Headquarters Mitigation Division in collaboration with regional staff. Decisions regarding case study development are made by Mitigation staff at the DFO, regional and headquarters levels.
- All Best Practices and Case Studies, whether produced as part of response and recovery activities or in a non-disaster environment, should be submitted for posting to both the FEMA home page at www.fema.gov, and the Mitigation Best Practices and Case Studies web page at www.fema.gov/fima.

Target Audiences

There are a variety of stakeholders who can benefit from the promotion of Mitigation Best Practices and Case Studies, both during a disaster operation and well beyond the initial recovery period.

As a result, consideration should be given to a variety of audiences when Best Practices and Case Studies are developed and communicated.

In general, some of the **key audiences** to target are:

- Property owners and renters
- State and local elected officials
- State and local governments
- Tribal governments
- Community leaders
- Business sector
- Insurance industry
- Public and private utilities
- Academic institutions
- Media outlets
- Federal departments and agencies
- Congressional members and staffers
- FEMA Headquarters, Regional Office and DFO staff
- U.S. Department of Homeland Security staff

Key Messages/ Benefits

Key Messages are designed to convey the main points of a particular topic or event to one or more target audiences.

It is recognized that every disaster is unique and that specific messages, audiences, methods and materials will vary from one event to another.

However, there are some **fundamental mitigation messages** that support the objectives of this Communication Strategy and most disaster recovery operations. These key messages are:

- *There are steps that people can take to better protect themselves and their communities from the effects of disasters.*
- *Disaster resistance actions save lives, properties and money.*
- *Disaster resistance efforts enhance the well-being of individuals, businesses and communities.*
- *Disaster-resistant techniques run the gamut in size, are often easy, self-affordable and worth the investment.*
- *FEMA and its partners can provide resources and expertise to help citizens and communities take steps to reduce their risks from disasters.*

Benefits derived from promoting the key messages, and Best Practices and Case Studies include:

- Decision-making and action that will reduce the adverse impact of natural and man-made disasters;
- Teaching personal responsibility for better protecting lives and property;
- Providing a positive opportunity to “lead by example”;
- Improving understanding of Mitigation Best Practices and Case Studies that will result in decisions and actions that avoid economic losses to communities;
- Sharing effective community education and outreach tools to support and promote local officials in decision-making and planning;
- Enhancing “team effort,” coordination and collaboration with local, state, federal, private and public organizations and sectors;
- Empowering states and local communities to make smart, long-term sustainability choices;
- Demonstrating the added value of FEMA mitigation and public affairs staff as “ambassadors” in the internal and external promotion of Mitigation Best Practices and Case Studies;
- Demonstrating the value of multi-phase program funding, such as large-scale elevation projects.

Materials and Methods

The materials and methods used to promote Best Practices and Case Studies will depend on the disaster size, type, location, target audience, operational needs and state/federal priorities.

Therefore, it should be noted that these materials and methods may be prioritized differently, depending on the needs identified on a given disaster. Also, it is noted that many of these materials and methods could be utilized concurrently.

In general, **materials** should include:

- A print document with photographs and/or other graphics such as charts, maps, diagrams, etc., for each Best Practice and Case Study;
- Corresponding handouts and Fact Sheets that can promote the mitigation techniques featured in a Best Practice or Case Study;
- Electronic version(s) of the print documents;
- Still photographs and videotape that have been identified and catalogued;
- Usable audio sound bites or taped interviews.

Methods can include:

Primary

- Mainstream media outlets
- Internet web pages
- Best Practices and Case Studies web page at www.fema.gov/fima
- External disaster recovery communication documents, such as *Recovery* newsletter (formerly *Recovery Times*).

Secondary

- Trade publications and journals
- Partner stakeholder web pages and distribution channels
- Special events such as open houses, booths at home improvement stores, neighborhood and business association functions, etc.
- Periodic CD or print compilations of Best Practices and Case Studies for public distribution
- Video documentaries
- National and regional conferences, meetings and workshops
- Internal communication documents such as *DHS Today*, *Under Secretary's Bulletin*, etc.
- Toolkits for individuals and entities wanting to document Best Practices and Case Studies on local and state levels.

Delivery Plan

Implementation of the Communication Strategy is dependent on a delivery plan that outlines several key activities. Although most of these actions will occur primarily in a DFO operation, some also can effectively be used in a non-disaster environment as well.

Key activities:

- **Establish DFO operational priority** to capture mitigation Best Practices and Case Studies;
- **Build a joint Mitigation/Public Affairs team** in a DFO setting to identify, gather, document and promote mitigation Best Practices and Case Studies;
- **Utilize Standard Operating Procedure (SOP)** to guide Best Practices and Case Studies documentation efforts in a DFO;
- **Enhance nationwide mitigation web page** of Best Practices and Case Studies to:
 - Improve accessibility to information on disaster-resistant techniques and methods in an understandable, visually appealing manner;
 - Foster an exchange of ideas through mitigation best practices;
 - Provide a credible resource for researching techniques, methods and cost-benefit analysis of disaster-resistance efforts;
 - Create shared links among public, state, federal, local and private-sector web pages.
- **Deliver training** on documenting and promoting Mitigation Best Practices and Case Studies for internal audiences (i.e. DFO program areas, to include mitigation components for Human Services, Infrastructure, etc.), Disaster Field Training Office (DFTO), Public Affairs and Mitigation;
- **Proactively communicate** and promote disaster-resistance efforts to all public, private and governmental stakeholders to encourage their own Best Practices;
- **Strengthen outreach** to other federal agencies that also promote/facilitate mitigation efforts, e.g. U.S. Small Business Administration (SBA), U.S. Forest Service (USFS), National Weather Service (NWS);
- **Conduct field test(s)** of Communication Strategy and Best Practices Team in an open DFO environment within the operational priorities of the FCO;
- **Transition documentation efforts** from the DFO to FEMA regional offices and, where applicable, other partner entities.

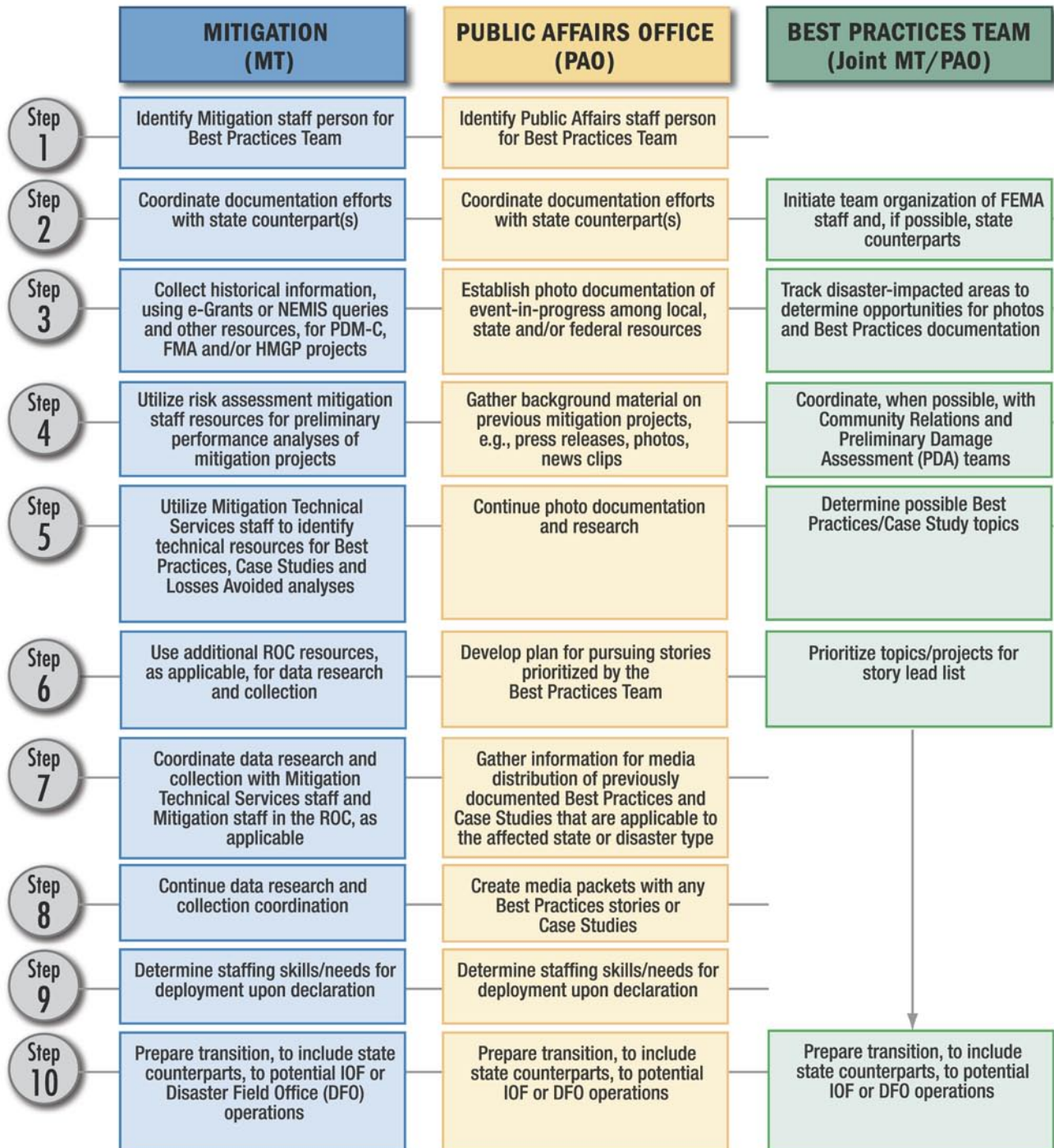


Roles and Responsibilities

- ***Pre-Declaration***
- ***Declaration – Operational Disaster Field Office***
- ***Post-Disaster Field Office Closure***

PRE-DECLARATION

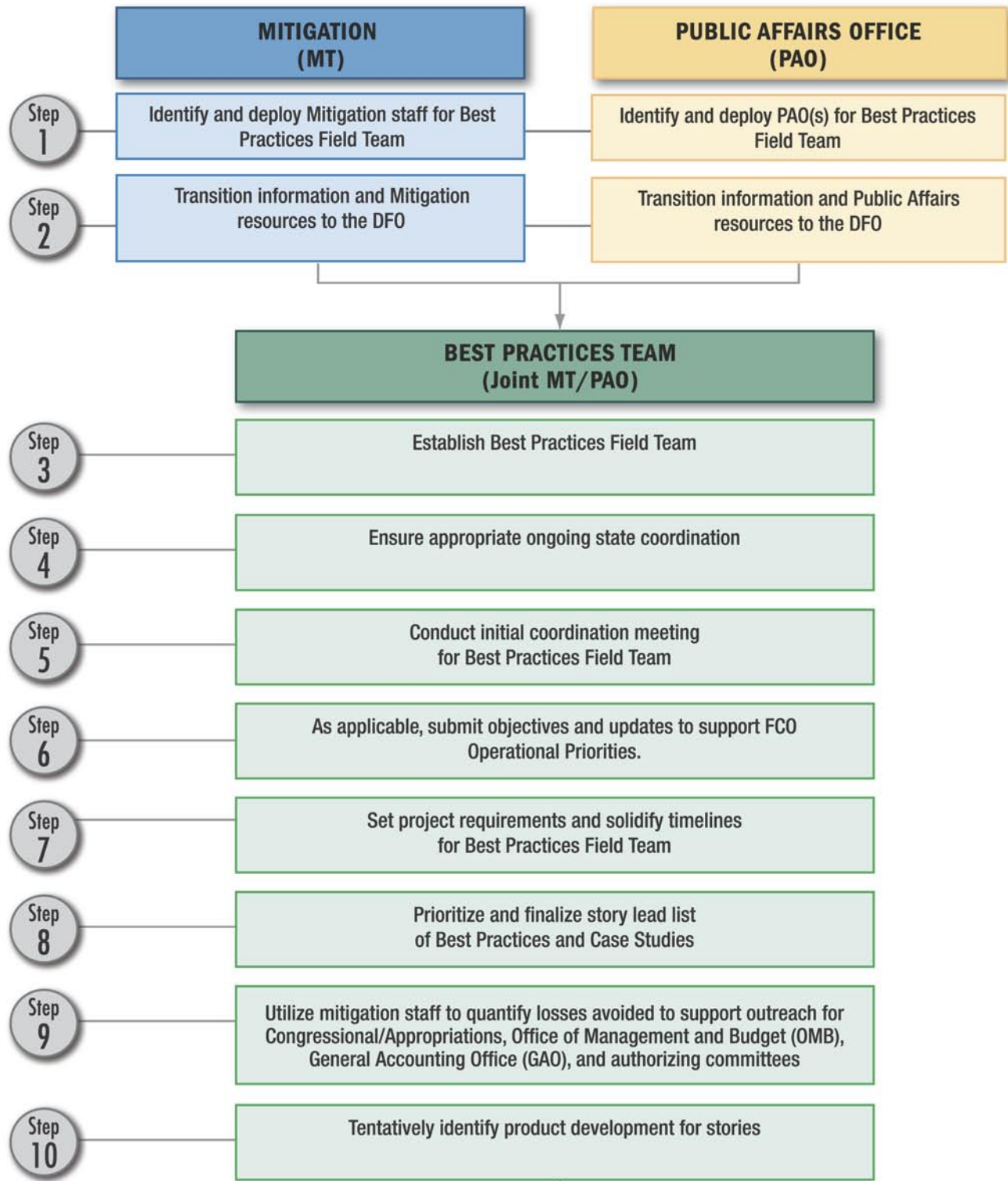
Includes the period that **precedes** a presidential disaster declaration, and encompasses activities that occur in a Regional Office, at the site of a disaster event, in a Regional Operations Center (ROC) and/or in an Interim Operating Facility (IOF). These activities also include those that occur in non-disaster environment.



Note: The tasks listed here are intended to be followed as closely as disaster operations allow. It is recognized that there will be some variation in tasks, timeframe and availability of resources among disaster size, location and types.

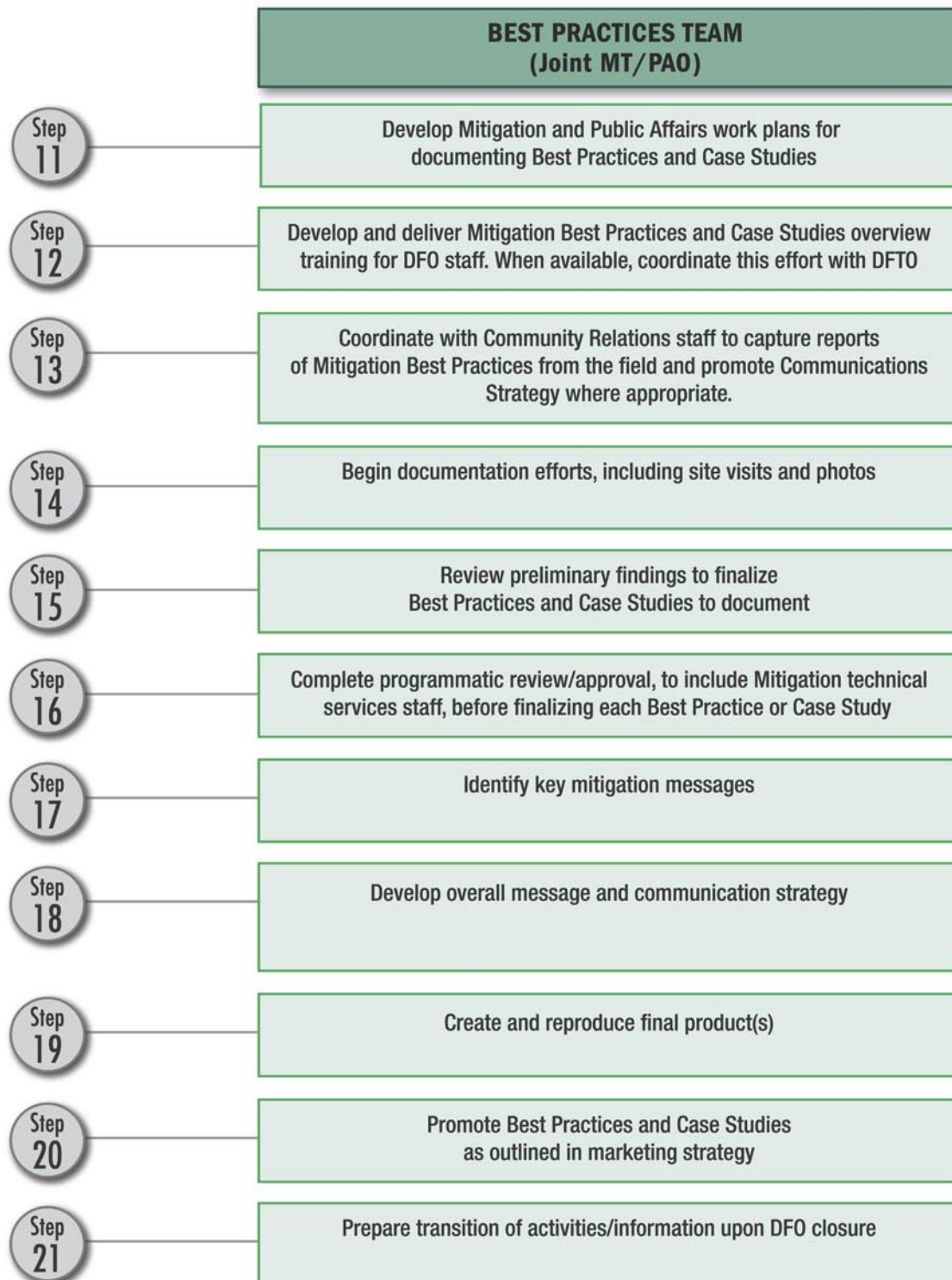
DECLARATION – OPERATIONAL DISASTER FIELD OFFICE

Includes the period following a Presidential disaster declaration, and encompasses activities that occur in a Regional Office, at the site of a disaster event, in a Regional Operations Center (ROC) and/or in an Interim Operating Facility (IOF), to and through operation of a Disaster Field Office (DFO).



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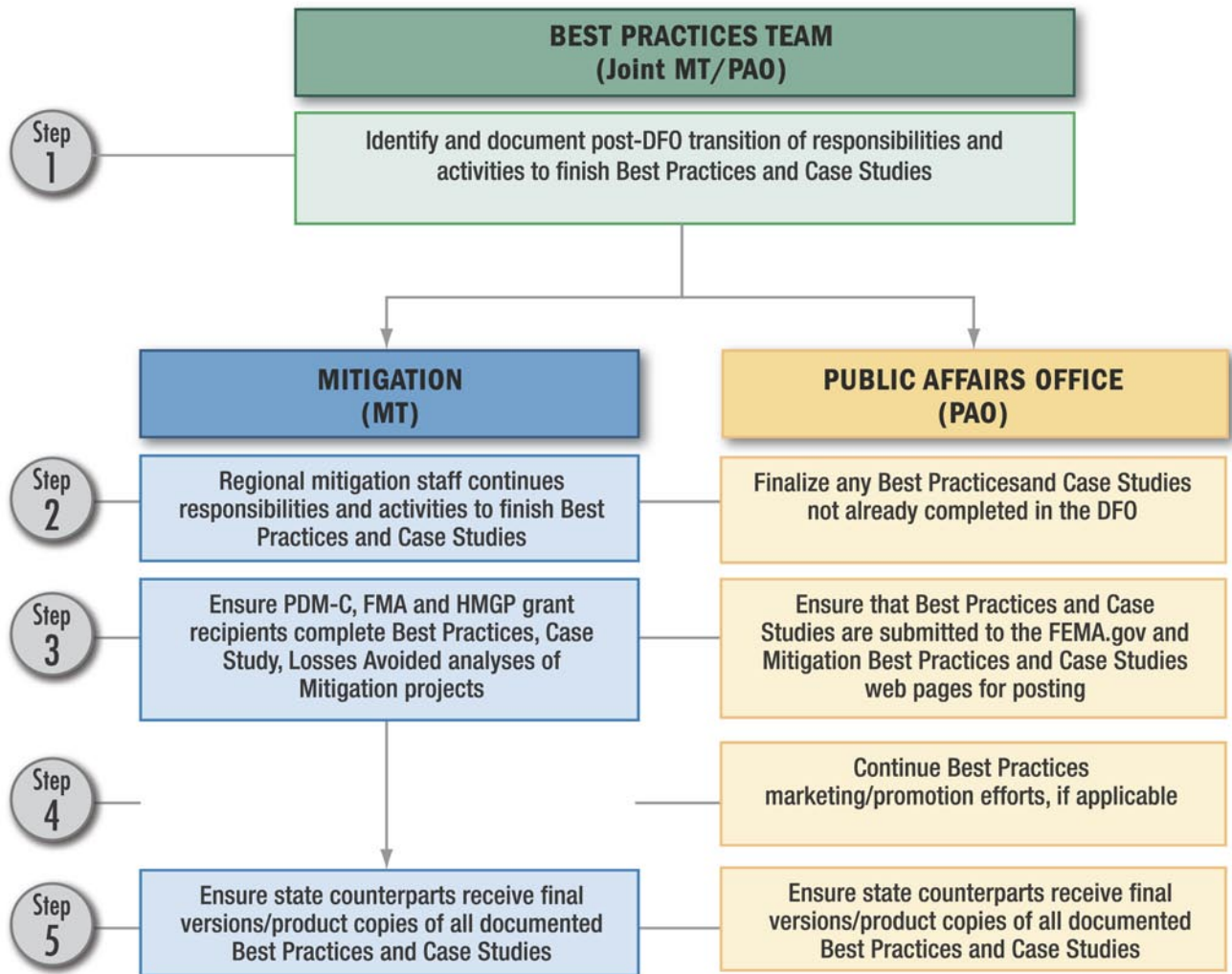
DECLARATION - OPERATIONAL DISASTER FIELD OFFICE (Continued)



Note: The tasks listed here are intended to be followed as closely as disaster operations allow. It is recognized that there will be some variation in tasks, timeframe and availability of resources among disaster size, location and types.

POST-DISASTER FIELD OFFICE CLOSURE

Includes the period following the closure of a Disaster Field Office (DFO) as activities transition back to a Regional Office and to the state.



Note: The tasks listed here are intended to be followed as closely as disaster operations allow. It is recognized that there will be some variation in tasks, timeframe and availability of resources among disaster size, location and types.



Standard Operating Procedures

Set forth a step-by-step process for team member functions before, during and after disaster response and recovery operations.

- **Mitigation**
- **Public Affairs**

Standard Operating Procedures: Mitigation

Pre-Declaration:

- Identify Mitigation staff as Point of Contact (POC) for Best Practices Team.
- Establish contact with Public Affairs POC to initiate development process.
- Obtain and utilize Best Practices and Case Studies Worksheet (see Appendices) for data collection.
- Initiate contact with state counterpart. Conduct joint identification and prioritization of Best Practices documentation and development.
- Research and gather pertinent data to help identify possible story leads. Information should reflect Best Practices in the residential, public and private/commercial sectors.
- Gather key mitigation project (PDM-C, HMGP, FMA, DRU) information using National Emergency Management Information System (NEMIS), program files, etc. Coordinate with Mitigation Headquarters staff.
- Utilize Mitigation Technical Services staff to identify technical resources for Best Practices, Case Studies and losses avoided analyses.
- Examine opportunities to capture potential successes utilizing other program areas and other federal agencies (OFAs), e.g., Voluntary Agencies, Community Relations, Infrastructure, U.S. Small Business Administration.
- Identify and secure opportunities on the Preliminary Damage Assessment (PDA) Teams.
- Collect historical information for comparison to other prior events.
- Coordinate data research and collection with Mitigation Technical Services staff and Mitigation staff in the Regional Operations Center (ROC), as applicable.
- Identify and coordinate necessary staff resources, skill sets for deployment request.
- Maintain liaison with Public Affairs. Provide updates to all applicable state and federal mitigation staff.
- Maintain operations in a ROC, non-ROC activation or Interim Operating Facility (IOF) setting for pending transition to the DFO.

Declaration – Disaster Field Office:

- Identify and deploy Mitigation staff for Best Practices Field Team.
- Coordinate with Public Affairs to develop joint Mitigation and PAO team for DFO and field development of Mitigation Best Practices and Case Studies.
- As applicable, submit objectives and updates to support Federal Coordinating Officer (FCO) Operational Priorities.
- Coordinate, when possible, with Community Relations and Preliminary Damage Assessments (PDA) teams to obtain early reports/observations of Mitigation Best Practices and Case Studies.
- Maintain liaison and coordinate with state mitigation staff for information of Best Practices and Case Studies.
- DFO, Regional, and Headquarters Mitigation staff collaborate to identify possible case studies. Authorization to develop a case study is given by Headquarters Mitigation staff.
- Collect and maintain data to provide ongoing updates for Headquarters, Mitigation and DFO staff meetings and briefings.
- Optimize the number of Best Practices based on projected scope of the Recovery effort:

30-day DFO Operation – At least 2 Best Practices

45 to 60-day DFO Operation – At least 4 Best Practices

60+ day DFO Operation – At least 6 Best Practices

- Confirm state’s mitigation priority and collect data to support as determined.
- Coordinate between Mitigation and Infrastructure for HMGP and 406 Mitigation projects.
- Continue to use NEMIS database and other resources for location, number and type of mitigation projects.
- Coordinate efforts for mitigation assessment team development with state and FEMA Hazard Mitigation Officers for field activities.
- Incorporate efforts with state and FEMA NFIP and Community Outreach objectives.
- Identify potential state, local and FEMA Mitigation Community Education and Outreach DFO activities for documentation and submission to the Early Implementation Strategy (EIS) report.
- Coordinate state and FEMA Mitigation Technical Services staff for validation of data.

Note:

- a) All Best Practices and Case Studies must comply with FEMA technical guidance and recommendations or private-sector consensus standards.**

- b) Each Best Practice or Case Study must be reviewed and cleared by a technical expert from the Technical Services Branch at the DFO. If appropriate expertise is not available at the DFO, clearance can be obtained from the Mitigation Division at a Regional Office or at FEMA Headquarters.**
 - c) Best Practices and Case Studies cannot showcase or otherwise overtly promote an individual private business.**
- Coordinate with Public Affairs needs for Congressional or other delivery mechanisms.
 - Initiate coordination with OFAs and DFO program areas to secure additional opportunities to document Mitigation Best Practices and Case Studies.
 - Utilizing Guidebook story lead format, document and submit story lead data to PAO staff.
 - Coordinate state, FEMA Mitigation and OFA review and concurrence process of developed stories.
 - **Ensure that all photographs are captioned and have proper photo credit information.**
 - Upon completion and authorized release of Mitigation Best Practices and Case Studies, confirm postings as applicable, to:
 - FEMA home page – www.fema.gov
 - Best Practices and Case Studies web page – www.fema.gov/fima
 - FEMA Tornado Safe Rooms and Community Shelter web page – www.fema.gov/mit/saferoom
 - Coordinate with Headquarters Mitigation the submission and verification of documentation for Mitigation Performance Measurements.
 - Coordinate with Public Affairs for written updates to DFO management staff: FCO operational objectives, Daily Situation Reports.
 - Identify and document post-DFO transition of responsibilities and activities to complete Best Practices and Case Studies.
 - Notify FEMA Regional State Grant Program Specialist.

Post-Disaster Field Office:

- Regional mitigation staff continues responsibilities and activities to finish Best Practices and Case Studies.
- Ensure PDM-C, FMA and HMGP grant recipients complete Best Practices, Case Studies, Losses Avoided analyses of mitigation projects.
- Ensure state counterparts receive final versions/product copies of all documented Best Practices and Case Studies.

Standard Operating Procedures: Public Affairs

Pre-Declaration:

- **Identify Public Affairs person as POC** for Best Practices Team
- **Establish contact with Mitigation POC** to initiate development process
- **Contact state PAO** to establish mitigation documentation efforts
- **Establish photo documentation** of event-in-progress among local, state and/or federal resources
- **Identify PAO and/or photographer** for advance field documentation
- **Gather background material** on previous mitigation projects, i.e. press releases, photos, news clips, etc. Note: Mitigation staff will be gathering the key mitigation project information using NEMIS, program files, etc.
- **Develop plan** for pursuing stories prioritized by the Best Practices Team
- **Gather information for media distribution** of previously documented Best Practices and Case Studies that are applicable to the affected state or disaster type
- **Create media packets** using completed Best Practices stories or Case Studies

Declaration – Disaster Field Office:

- **Identify and deploy PAO(s)** for Best Practices Field Team
- **Transition information and Public Affairs resources** to the ROC, IOF or DFO.
- **Designate PAO(s)** to meet with Best Practices Team to identify potential stories to pursue
- **Meet with Lead PAO** to establish the following:
 - Story leads prioritized by the Best Practices Team
 - Expected work plan, including timelines for story research, interviews, writing, final product
 - Arrange for use of a photographer to provide visual documentation of story
 - Establish method of updating Lead PAO on work progress

- **Begin research on Best Practices and Case Studies prioritized for the disaster operation**

- **Research:**

- Background material – information and documentation related to a specific story

- How did the project come about, i.e., result of a disaster? If so, how many times did disaster strike? What's been the level, cost of damages?
 - How was the disaster-resistance measure chosen?
 - What work was done?
 - What agencies are involved?
 - Was there an environmental review?
 - How much did the project cost?
 - How was it funded?
 - What is the expected benefit?

- **Sources to check:**

- Internet
 - Government agencies
 - Local newspapers
 - Public libraries
 - College or university libraries
 - Historical societies
 - State or local archives
 - Weather service offices

- **Identify key story sources** for interviews

- **Begin interview process**

- Call and arrange interview and/or photo opportunities
 - Identify yourself and explain purpose of the interview.
 - Tell your source how the information will be used. ***Be sure they are clear that this will be publicly used, including on the FEMA Web site.***
 - Ask if you can take photographs of your source and/or whatever the story is about. If so, allow extra time.

- Interviewing:
 - Secure written permission for interview and/or photographs.
 - Cover the Basics ... who, what, when, where, why, how. (For additional guidance, see *Questions You Can Ask for Disaster-Resistance Stories* in the PAO Toolkit).
 - Arrange for photos to be taken.
- **Write first draft of story**, pre-identify key photos

- **Fact-check story**

Accuracy is paramount. **Be sure of your information.** Use reliable sources. Verify important information from a second source. If you can't back it up, either through documentation or by direct attribution to a reliable source, don't use it.

- Submit draft to story sources **first** for technical accuracy
 - Submit to Mitigation technical expert for initial review
- **Edit story** as necessary
- **Resubmit to local sources**, if necessary, for secondary review and approval
- **Have each reviewer sign and date** a news release form when they have approved the story
- **Resubmit to Mitigation technical expert** for secondary review and approval

Note:

- All Best Practices and Case Studies must comply with FEMA technical guidance and recommendations or private-sector consensus standards.**
 - Each Best Practice or Case Study must be reviewed and cleared by a technical expert from the Technical Services Branch at the DFO. If appropriate expertise is not available at the DFO, clearance can be obtained from the Mitigation Division at a Regional Office or at FEMA Headquarters.**
 - Best Practices and Case Studies cannot showcase or otherwise overtly promote an individual private business.**
- **Circulate draft for approvals** within DFO, using established sign-off procedures
 - **Make necessary edits/changes**
 - **Work with photographer** to select visual elements for the story; review final selections with Mitigation staff
 - **Finalize story for release**; prepare in guided format

- **Ensure that all photographs are captioned and have proper photo credit information**
- **Reproduce** Best Practice or Case Study for distribution
- **Identify potential Best Practices and Case Studies promotion opportunities**, e.g., posters, special events, media hot sheets, news desk callouts
- **Coordinate promotion efforts** with Best Practices Team and Lead PAO
- **Submit story electronically to FEMA HQ Public Affairs** for posting on FEMA home page
- **Submit story electronically to FEMA HQ Mitigation** for posting to Best Practices and Case Studies web page (database)

Post-Disaster Field Office:

- **Finalize any Best Practices and Case Studies** not already completed in the DFO
- **Submit remaining Best Practices and Case Studies to FEMA HQ Public Affairs** for posting to the FEMA Home page and to Mitigation for posting to the Best Practices and Case Studies web page
- **Continue Best Practices and Case Studies marketing/promotion efforts**, if applicable
- **Ensure state counterparts receive final versions/product copies** of all documented Best Practices and Case Studies



Appendices

Helpful tools and resources to use in developing and promoting Mitigation Best Practices and Case Studies.

- **Best Practices Guided Format**
- **Best Practices Samples**
- **Case Studies Sample**
- **Checklist for Success**
- **Common Sources for Story Leads**
- **Interview Authorization Form**
- **Photograph/Video/Audio Consent and Release Form**

Best Practices Guided Format



FEMA

Locator Map
(Inserted upon web posting)

(Best Practices Title)

Photo or Artwork
(Inserted upon web posting)

First Paragraph – Synopsis

Give a brief overview of the situation—Who? What? When? Where? Why?— including the positive results of the risk mitigation measures used. If the reader only sees the first few sentences, he/she leaves with the message that mitigation works!

Second Paragraph – Introduction

Acquaint the reader with the “star of the story”, and why this testimonial is germane to the recent disaster and any state/local/community hazard mitigation efforts. Is there a FEMA partner in this story? Link all involved and clarify the

collaborative effort. This is a good place to use the first quote of the story.

Third/Fourth Paragraphs – Tell the Tale

Begin weaving the factual, cultural and emotional elements of the story, and how the activity introduced earlier produced results. Reinforce the value/benefit of the risk mitigation measure taken. What were the economic savings? The emotional savings? What secondary impacts of a hazard were spared? Here is where you gain the reader’s trust, and validate his/her reasons for wanting to continue reading.

Fifth Paragraph – Promote Change

Risk mitigation measures come in all sizes; many are simple to implement and incredibly affordable. Is it clear that the reader DOES have the capacity to take the mitigation measure(s) promoted in the story? Can the reader substitute him/herself in the story?

Sixth Paragraph – Take Action

Provide the reader with the information necessary to be successful. Where can the reader get help? Be supported in future efforts? Is it a phone number? Web site? Community meeting? Home improvement store?

Final Paragraph – Positive Reinforcement

In the final sentences, reinforce the message that mitigation works and that the action(s) taken are likely to make a difference in the future. Consider using a strong quote from the story participant to send the message they’re safer because of mitigation.

Photo or Artwork
(Inserted upon web posting)

Best Practices Sample



FEMA

Locator Map
(Inserted upon web posting)

Moving Out of Harm’s Way Pays off for Southampton County, Virginia Family During Hurricane Isabel



Gayle Stradley, in front of her dry home.

Southampton County, VA— For 30 years, Robert and Gale Stradley’s home on Canal Drive in Southampton County escaped the intermittent threat of flooding.

In 1999, Hurricane Floyd changed all of that.

“Floyd was a very, very different storm,” said Gale Stradley. “It dumped an unbelievable amount of water on us and then the wind just held the water in.”

Stradley and her husband stayed with friends while they waited for floodwaters to recede.

“The water came up above our windows and our house sat in water for seven long days,” she said. “It was a scary picture. We lost every single thing, and my husband’s business was (run) out of our house.

“I can’t say enough about what the people at FEMA did for us,” she continued. “There was a woman from New York state named Rosa and she was so wonderful, she walked us through every last thing we had to do (for FEMA assistance). I can’t say enough about the help we received.”

With the help of FEMA grants for temporary housing and a low-interest loan from the U.S. Small Business Administration through their own bank, the Stradleys were able to rebuild and elevate their home, moving it out of harm’s way.

“We never wanted to go through that again,” Stradley said, adding that by taking the mitigation measure to elevate their home, the retired couple’s flood insurance premiums were reduced.

“Thanks to government’s help, we’re still independent and living in our own home,” she added.

Unfortunately, not all the residents and businesses in the area where the Stradleys live were protected from Isabel’s wrath.

“I feel so badly for those folks,” she added. “If you don’t think they were sweating this one ...” her voice trailed. “It was bad.”



During Hurricane Isabel the Stradleys’ home stayed high and dry.

Activity or Project Facts

State: Virginia	Project Type: Elevation
County: Southampton	Cost:
Hazard: Flooding	Cost-Benefit:
Year: 1999	
Funding: FEMA, SBA , NFIP	

Best Practices Sample



FEMA

Locator Map
(Inserted upon web posting)

Mobile Electronic Classroom Provides Mississippians Access to Modern Computer Technologies for HAZUS Training



The Mississippi Global Education Mobile (GEM).

Providing adequate technological infrastructure to support HAZUS training is a challenge to many rural communities. FEMA and the State of Mississippi have a valuable ally in overcoming this hurdle in GEM, the Global Education Mobile, managed by the Mississippi Institutions of Higher Learning's Office of Academic Affairs.

Making sophisticated technology available to rural communities, GEM offers a network server, 13 computer work stations, 20 laptop computers connected with a wireless local area network, and a satellite internet system capable of providing internet access in highly remote locations.

partnership between the State of Mississippi, the University of Mississippi, NASA, and private industry, GEM was originally designed to serve as a resource for K-12 schools to get technology incorporated into the classroom in areas where access to technology is limited. In fact, while GEM remains available free of charge to all eligible educational institutions, its ability to serve rural communities has grown considerably. On display at a ESRI conference, FEMA recognized GEM's capabilities and a partnership was forged allowing FEMA's Mitigation Division to bring HAZUS trainings to rural communities that would not otherwise be able to support such trainings.

What is the result of FEMA and GEM teaming up?

By making HAZUS more readily available, communities can better understand and plan for the risks that may affect the physical, social, and economic components of their individual community. GEM's ability to bring HAZUS to communities that wouldn't otherwise have access to this sophisticated tool allows for better planning to minimize damage and loss of life, working to prevent natural hazard events from becoming natural disasters.

The success of GEM is a result of partnerships and innovative thinking. Funded through a grant from the Mississippi Space Commerce Initiative (MSCI), a joint



Sophisticated technology allows HAZUS training in rural communities.

Case Studies Sample

Case Studies showcase effective mitigation practices by providing an in-depth, technical look at a given project or method. Often, these documents will provide such detail as statistical comparisons, cost-benefit analysis, performance measurements and specific Mitigation Best Practices examples.

Topics chosen for case studies will typically demonstrate outstanding or unique aspects related to cost effectiveness, broad public benefit, excellence in design, public-private partnership, statewide impact, and ability to be replicated in other communities or regions of the country. Case studies are developed and produced on a national level for a nationwide audience by the FEMA Headquarters Mitigation Division in collaboration with regional staff. Decisions regarding case study development are made by Mitigation staff at the DFO, regional and headquarters levels.



Checklist for Success

Key considerations for documenting Mitigation Best Practices and Case Studies

In Search of Disaster Resistance

Identify Action

Public – Infrastructure, Codes/Ordinances, Insurance, Emergency Operations Plans, Emergency Response Training, Public Education, Public-Private partnerships

Residential

Commercial

Environmental

Historic

Determine Impact – Injury or death, structural damage, failure of critical facilities or infrastructure, wear and tear on government resources, psychological injury, etc.

Measure Benefit – Fewer injuries or deaths, less damage to homes/businesses, reduced government costs, continued operation of critical facilities, schools, businesses

Strategic Planning

Establish Objective – Desired result in documenting Best Practices and Case Studies

Identify Audience – Property owners, businesses, elected officials, other disaster-stricken communities

Choose Format – Print, photographs, audio, video, electronic

Determine Final Product – Newspaper, photo essay, radio news/feature story, video documentary, CD-ROM, web

Identify Distribution – Resources needed, timeframe, budget/funding, delivery mechanisms

Project Management and Buy-in – Federal, state, local, private-sector stakeholders

Documenting Best Practices and Case Studies

Developing and Tracking Leads – Specific case or event, story leads, dates, contacts

Choosing a Best Practice or Case Study – Measurable benefit, human element, unique theme, strong visual support, interest to audience, positive outcome, lessons learned

Research – Disaster event, project details, calculating cost-benefit/losses avoided, agencies involved

Interviews – Purpose, authorizations, covering the basics: who, what, where, when, why, how

- ❑ **Site Visits** – Firsthand look to verify project; enhance story details
- ❑ **Fact Checking** – Reliable sources, information checking, documentation
- ❑ **Visual/Audio Elements** – Strong images capturing action, people, equipment, lighting, taping interviews, writing scripts, choosing video images

Telling the Tale

- ❑ **Format** – Print/photo/audio/video stories – keep it interesting, add credibility, be accurate
- ❑ **Editing** – Content, copy editing
- ❑ **Approvals** – Story review by appropriate sources, agencies on local, state, federal levels

Creating a Finished Product

- ❑ **Print** – Typestyle, color photos, graphics, layout
- ❑ **Photo** – Vertical and horizontal orientation, vary sizes, layout
- ❑ **Video** – Format, presentation
- ❑ **Audio** – Format, presentation
- ❑ **Production Points** – Finished product, quantity, reproduction, cost, turnaround time, distribution

Getting the Word Out

- ❑ **Developing a Strategy** – Objectives, promotion plan
- ❑ **Determining Key Messages** – Support objectives, target audiences, promote disaster resistance, promote final product
- ❑ **Using Talking Points** – Short, usable comments, summarize the issue, provide focus, soundbites
- ❑ **Creating Promotional Products** – Copies of final product, press kits, media advisories, story briefs, posters
- ❑ **Communicating/Promoting** – Media pitching, special events, business and professional organizations, web sites

Information Management

- ❑ **Organizing Materials** – Interview notes, photos, and negatives, supporting documentation, leads list, approval signoffs, contact(s) names and numbers, financial receipts
- ❑ **Archiving** – Preparing organized materials for storage, safeguarding

Leave No Stone Unturned

Common Sources for Story Leads

The following lists identify the most common sources for story leads. Exact agency names will vary depending on the locality or state.

Local level

- Emergency management office
- Mayor/City Manager
- City or County Clerk
- City Council/Board of Alderman
- Floodplain Manager
- Public works department
- Street, roads, or highway department
- Planning department
- Building inspections department
- Fire department
- Parks department
- County extension services
- Health department
- Schools, colleges and universities
- Hospitals
- Chamber of Commerce
- Economic development councils
- Historical society
- Homebuilders' associations
- Trades professionals such as contractors, plumbers, electricians, etc.
- Philanthropic foundations (commonly provide grants for special projects)
- Private non-profit organizations

State level

- Emergency management office
- Governor's office
- Transportation department
- Fire marshal (in some states, this could be part of a public safety department)
- National Guard
- Forestry department
- Natural resources department
- Parks and Recreation department

- Health department
- Environmental protection division
- State historical society
- League of Municipalities
- Professional trade associations

Federal level

- Federal Emergency Management Agency (FEMA)
- U.S. Department of Homeland Security (DHS)
- U.S. Small Business Administration (SBA)
- U.S. Department of Housing & Urban Development (HUD)
- U.S. Department of Commerce/Economic Development Administration (EDA)
- U.S. Department of Defense/Department of the Army/U.S. Army Corps of Engineers (USACE)
- U.S. Federal Highway Administration (FHA)
- U.S. Department of Agriculture (USDA), including Natural Resources Conservation Services (NRCS) and Farm Service Agency (FSA)
- U.S. Department of the Interior— including U.S. Geological Survey (USGS) and National Park Service (NPS)
- U.S. Fish and Wildlife Service (USFWS)
- National Weather Service (NWS)

Keep in mind other resources can be found among non-profit organizations, such as the National Historic Trust for Preservation, and voluntary agencies, such as the American Red Cross, the Salvation Army, etc.

*“*Telling the Tale of Disaster Resistance*” – FEMA 2001

Interview Authorization Form

AUTHORIZATION FOR USE OF PERSONAL INFORMATION

I, the undersigned, authorize the Federal Emergency Management Agency (FEMA), to use my name and photos of myself and/or property in one or more stories about Mitigation Best Practices for publication, or for use on its Web site. I understand that the stories will include information pertaining to the mitigation measures taken to secure my home from future storm damage. This authorization permits the release of information that is deemed confidential under Federal and State Privacy Acts.

I understand that it is my choice to sign this Release.

Name (printed): _____ Date: _____

Signature: _____

Current Address: _____ Phone: _____

Photograph/ Video/ Audio Consent and Release Form

I consent and agree that the Federal Emergency Management Agency (FEMA), which has been incorporated into the Department of Homeland Security, Emergency Preparedness and Response Directorate, may take photographs or record film or videotape of me (and of my property), and record my voice, and use all these in any media format.

I also agree that my name, identity, and the content of my spoken words may be revealed in these media or by descriptive text, transcription or commentary. I understand that my likeness, my voice, images of my property or business, and my personal name or my business name may be used by FEMA and the U.S. Government and disseminated through various media, including the Internet, radio and television and via CD-ROM. These photographs, films, audiotapes or videotapes may be posted on the FEMA web site or included in the FEMA photographs, film, audiotape or videotape archive, which may be accessible to the public, and used in training presentations and similar aids.

I release to FEMA and the Government all rights to exhibit the described works in print, photographic, audio and electronic form publicly or privately.

I waive any rights, claims or interest I may have to control the use of my identity or likeness in the photographs or videos taken of me, as well as any rights I may have in my recorded voice, or to images of my property or business, and agree that any of these uses of the video/photograph/audio may be made without compensation or additional consideration to me.

I represent that I am at least 18 years of age, that I have read and understand the above statement, and that I am competent to execute this consent and release.

This authorization is submitted pursuant to 28 U.S.C. § 1746 under penalty of perjury.

Name (printed): _____ Date: _____

Signature: _____

Business Address: _____ Business Phone: _____

Guardian (Required for minor): _____

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Forms and Reference Materials

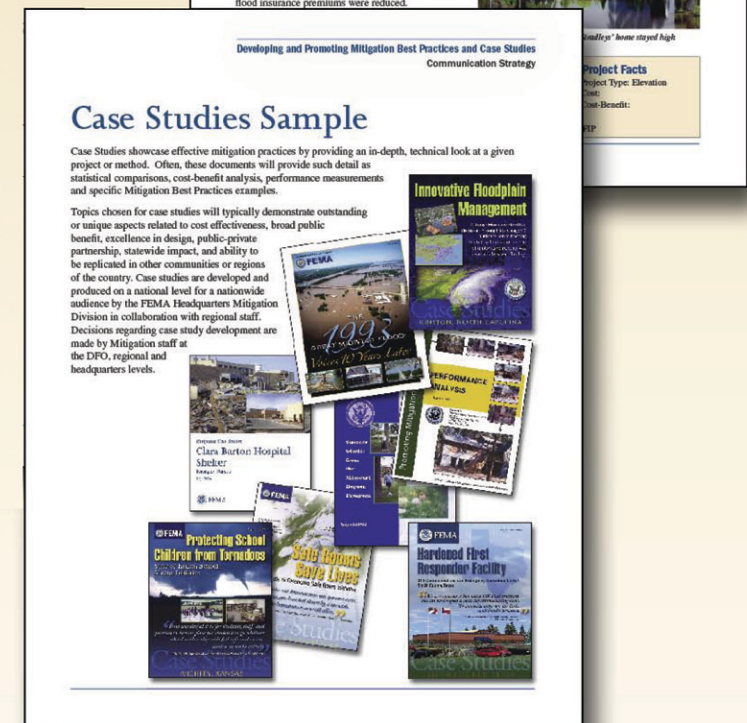
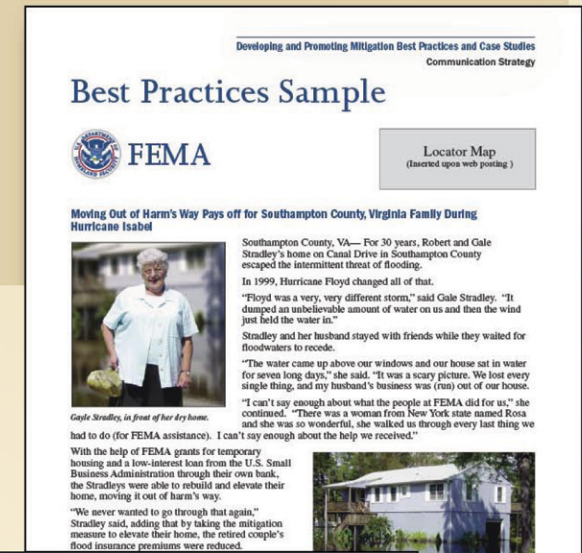
Helpful tools and resources to use in developing and promoting Mitigation Best Practices and Case Studies.

- Best Practices Guided Format
- Best Practices Guided Format (MS Word® Template)
- Best Practice Samples
 - Moving Out of Harm's Way
 - Global Education Mobile
 - FEMA and AISC Collaborate
- Case Studies Sample
- Checklist for Success
- Common Sources for Story Leads
- Interview Authorization Form
- Photograph/Video/Audio Consent and Release Form
- Target Audiences
- Questions You Can Ask for Disaster-Resistance Stories
- Lights, Camera, Action
- Getting the Best Printed Product
- 25 Ways to Promote Best Practices and Case Studies

Best Practices and Case Studies web page: <http://www.fema.gov/fima/bp.shtm>



FEMA



Return to start page

Best Practices Guided Format



FEMA

Locator Map
(Inserted upon web posting)

(Best Practices Title)

Photo or Artwork
(Inserted upon web posting)

First Paragraph – Synopsis

Give a brief overview of the situation—Who? What? When? Where? Why?— including the positive results of the risk mitigation measures used. If the reader only sees the first few sentences, he/she leaves with the message that mitigation works!

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Acquaint the reader with the “star of the story”, and why this testimonial is germane to the recent disaster and any state/local/community hazard mitigation efforts. Is there a FEMA partner in this story? Link all involved and clarify the

collaborative effort. This is a good place to use the first quote of the story.

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Begin weaving the factual, cultural and emotional elements of the story, and how the activity introduced earlier produced results. Reinforce the value/benefit of the risk mitigation measure taken. What were the economic savings? The emotional savings? What secondary impacts of a hazard were spared? Here is where you gain the reader’s trust, and validate his/her reasons for wanting to continue reading.

Fifth Paragraph – Promote Change

Risk mitigation measures come in all sizes; many are simple to implement and incredibly affordable. Is it clear that the reader DOES have the capacity to take the mitigation measure(s) promoted in the story? Can the reader substitute him/herself in the story?

Sixth Paragraph – Take Action

Provide the reader with the information necessary to be successful. Where can the reader get help? Be supported in future efforts? Is it a phone number? Web site? Community meeting? Home improvement store?

Final Paragraph – Positive Reinforcement

In the final sentences, reinforce the message that mitigation works and that the action(s) taken are likely to make a difference in the future. Consider using a strong quote from the story participant to send the message they’re safer because of mitigation.

Photo or Artwork
(Inserted upon web posting)

Best Practices Sample



FEMA

Locator Map
(Inserted upon web posting)

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Gayle Stradley, in front of her dry home.

Southampton County, VA— For 30 years, Robert and Gale Stradley’s home on Canal Drive in Southampton County escaped the intermittent threat of flooding.

In 1999, Hurricane Floyd changed all of that.

“Floyd was a very, very different storm,” said Gale Stradley. “It dumped an unbelievable amount of water on us and then the wind just held the water in.”

Stradley and her husband stayed with friends while they waited for floodwaters to recede.

“The water came up above our windows and our house sat in water for seven long days,” she said. “It was a scary picture. We lost every single thing, and my husband’s business was (run) out of our house.

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“Thanks to government’s help, we’re still independent and living in our own home,” she added.

Unfortunately, not all the residents and businesses in the area where the Stradleys live were protected from Isabel’s wrath.

“I feel so badly for those folks,” she added. “If you don’t think they were sweating this one ...” her voice trailed. “It was bad.”



During Hurricane Isabel the Stradleys’ home stayed high and dry.

Activity or Project Facts

State: Virginia	Project Type: Elevation
County: Southampton	Cost:
Hazard: Flooding	Cost-Benefit:
Year: 1999	
Funding: FEMA, SBA , NFIP	

Best Practices Sample



FEMA

Locator Map
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Mobile Electronic Classroom Provides Mississippians Access to Modern Computer Technologies for HAZUS Training



The Mississippi Global Education Mobile (GEM).

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Making sophisticated technology available to rural communities, GEM offers a network server, 13 computer work stations, 20 laptop computers connected with a wireless local area network, and a satellite internet system capable of providing internet access in highly remote locations.

partnership between the State of Mississippi, the University of Mississippi, NASA, and private industry, GEM was originally designed to serve as a resource for K-12 schools to get technology incorporated into the classroom in areas where access to technology is limited. In fact, while GEM remains available free of charge to all eligible educational institutions, its ability to serve rural communities has grown considerably. On display at a ESRI conference, FEMA recognized GEM's capabilities and a partnership was forged allowing FEMA's Mitigation Division to bring HAZUS trainings to rural communities that would not otherwise be able to support such trainings.

What is the result of FEMA and GEM teaming up?

By making HAZUS more readily available, communities can better understand and plan for the risks that may affect the physical, social, and economic components of their individual community. GEM's ability to bring HAZUS to communities that wouldn't otherwise have access to this sophisticated tool allows for better planning to minimize damage and loss of life, working to prevent natural hazard events from becoming natural disasters.

The success of GEM is a result of partnerships and innovative thinking. Funded through a grant from the Mississippi Space Commerce Initiative (MSCI), a joint



Sophisticated technology allows HAZUS training in rural communities.

Best Practices Sample



FEMA

Locator Map
(Inserted upon web posting)

FEMA and American Institute of Steel Construction Collaborate for Research and Training



Following discovery of hidden damage in Los Angeles area buildings, the potential for similar, undiscovered damage in San Francisco and other communities affected by past earthquakes was raised.

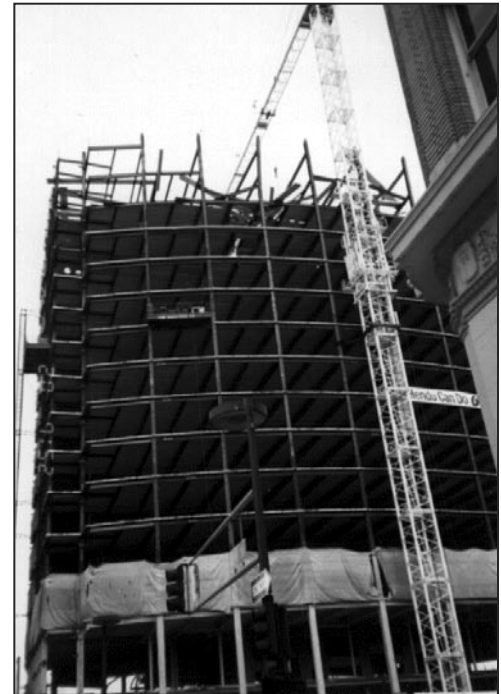
The Northridge earthquake of January 7, 1994 caused widespread building damage throughout some of the most heavily populated communities of Southern California, resulting in estimated economic losses exceeding \$30 billion. Much of the damage sustained was predictable, occurring in types of buildings that engineers had previously identified as having low seismic resistance and significant risk of damage in earthquakes. Surprisingly, however, a number of modern, welded, steel-moment-frame buildings also sustained significant damage.

Responding to the challenge, FEMA sponsored the SAC Steel Project, a joint venture program of research, investigation and professional development to identify the cause of the damage, quantify the

risk inherent in steel structures, and develop practical and effective engineering criteria for mitigation of this risk. As a result of these studies, four engineering practice guideline documents were published, providing practicing engineers and the construction industry with important information on the lessons learned, as well as recommendations for investigation, repair, upgrade and design of steel moment-frame buildings.

Ensuring the SAC Steel Project's findings were widely distributed, FEMA teamed up with the American Institute of Steel Construction (AISC), a not-for-profit technical institute and trade association to ensure the structural engineering and building regulation communities were well trained on the latest research and guidance.

Based on the SAC findings, FEMA delivered three workshops to the structural engineering and building regulation communities. AISC then continued offering 1-day workshops through the spring of 2002, ensuring structural engineers and building regulators are aware of and incorporate state-of-the-art guidance and recommendations reducing earthquake risk in our communities.



Construction of a modern steel frame building in which the ends of beams are rigidly joined to columns by welded connections.

Case Studies Sample

Case Studies showcase effective mitigation practices by providing an in-depth, technical look at a given project or method. Often, these documents will provide such detail as statistical comparisons, cost-benefit analysis, performance measurements and specific Mitigation Best Practices examples.

Topics chosen for case studies will typically demonstrate outstanding or unique aspects related to cost effectiveness, broad public benefit, excellence in design, public-private partnership, statewide impact, and ability to be replicated in other communities or regions of the country. Case studies are developed and produced on a national level for a nationwide audience by the FEMA Headquarters Mitigation Division in collaboration with regional staff. Decisions regarding case study development are made by Mitigation staff at the DFO, regional and headquarters levels.



Checklist for Success

Key considerations for documenting Mitigation Best Practices and Case Studies

In Search of Disaster Resistance

Identify Action

Public – Infrastructure, Codes/Ordinances, Insurance, Emergency Operations Plans, Emergency Response Training, Public Education, Public-Private partnerships

Residential

Commercial

Environmental

Historic

Determine Impact – Injury or death, structural damage, failure of critical facilities or infrastructure, wear and tear on government resources, psychological injury, etc.

Measure Benefit – Fewer injuries or deaths, less damage to homes/businesses, reduced government costs, continued operation of critical facilities, schools, businesses

Strategic Planning

Establish Objective – Desired result in documenting Best Practices and Case Studies

Identify Audience – Property owners, businesses, elected officials, other disaster-stricken communities

Choose Format – Print, photographs, audio, video, electronic

Determine Final Product – Newspaper, photo essay, radio news/feature story, video documentary, CD-ROM, web

Identify Distribution – Resources needed, timeframe, budget/funding, delivery mechanisms

Project Management and Buy-in – Federal, state, local, private-sector stakeholders

Documenting Best Practices and Case Studies

Developing and Tracking Leads – Specific case or event, story leads, dates, contacts

Choosing a Best Practice or Case Study – Measurable benefit, human element, unique theme, strong visual support, interest to audience, positive outcome, lessons learned

Research – Disaster event, project details, calculating cost-benefit/losses avoided, agencies involved

Interviews – Purpose, authorizations, covering the basics: who, what, where, when, why, how

- Site Visits** – Firsthand look to verify project; enhance story details
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- Visual/Audio Elements** – Strong images capturing action, people, equipment, lighting, taping interviews, writing scripts, choosing video images

Telling the Tale

- Format** – Print/photo/audio/video stories – keep it interesting, add credibility, be accurate
- Editing** – Content, copy editing
- Approvals** – Story review by appropriate sources, agencies on local, state, federal levels

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- Print** – Typestyle, color photos, graphics, layout
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- Video** – Format, presentation
- Audio** – Format, presentation
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Getting the Word Out

- Developing a Strategy** – Objectives, promotion plan
- Determining Key Messages** – Support objectives, target audiences, promote disaster resistance, promote final product
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- Creating Promotional Products** – Copies of final product, press kits, media advisories, story briefs, posters
- Communicating/Promoting** – Media pitching, special events, business and professional organizations, web sites

Information Management

- Organizing Materials** – Interview notes, photos, and negatives, supporting documentation, leads list, approval signoffs, contact(s) names and numbers, financial receipts
- Archiving** – Preparing organized materials for storage, safeguarding

Leave No Stone Unturned

Common Sources for Story Leads

The following lists identify the most common sources for story leads. Exact agency names will vary depending on the locality or state.

Local level

- Emergency management office
- Mayor/City Manager
- City or County Clerk
- City Council/Board of Alderman
- Floodplain Manager
- Public works department
- Street, roads, or highway department
- Planning department
- Building inspections department
- Fire department
- Parks department
- County extension services
- Health department
- Schools, colleges and universities
- Hospitals
- Chamber of Commerce
- Economic development councils
- Historical society
- Homebuilders' associations
- Trades professionals such as contractors, plumbers, electricians, etc.
- Philanthropic foundations (commonly provide grants for special projects)
- Private non-profit organizations

State level

- Emergency management office
- Governor's office
- Transportation department
- Fire marshal (in some states, this could be part of a public safety department)
- National Guard
- Forestry department
- Natural resources department
- Parks and Recreation department

- Health department
- Environmental protection division
- State historical society
- League of Municipalities
- Professional trade associations

Federal level

- Federal Emergency Management Agency (FEMA)
- U.S. Department of Homeland Security (DHS)
- U.S. Small Business Administration (SBA)
- U.S. Department of Housing & Urban Development (HUD)
- U.S. Department of Commerce/Economic Development Administration (EDA)
- U.S. Department of Defense/Department of the Army/U.S. Army Corps of Engineers (USACE)
- U.S. Federal Highway Administration (FHA)
- U.S. Department of Agriculture (USDA), including Natural Resources Conservation Services (NRCS) and Farm Service Agency (FSA)
- U.S. Department of the Interior— including U.S. Geological Survey (USGS) and National Park Service (NPS)
- U.S. Fish and Wildlife Service (USFWS)
- National Weather Service (NWS)

Keep in mind other resources can be found among non-profit organizations, such as the National Historic Trust for Preservation, and voluntary agencies, such as the American Red Cross, the Salvation Army, etc.

**"Telling the Tale of Disaster Resistance"* – FEMA 2001

Interview Authorization Form

AUTHORIZATION FOR USE OF PERSONAL INFORMATION

I, the undersigned, authorize the Federal Emergency Management Agency (FEMA), to use my name and photos of myself and/or property in one or more stories about Mitigation Best Practices for publication, or for use on its Web site. I understand that the stories will include information pertaining to the mitigation measures taken to secure my home from future storm damage. This authorization permits the release of information that is deemed confidential under Federal and State Privacy Acts.

I understand that it is my choice to sign this Release.

Name (printed): _____ Date: _____

Signature: _____

Current Address: _____ Phone: _____

Photograph/ Video/ Audio Consent and Release Form

I consent and agree that the Federal Emergency Management Agency (FEMA), which has been incorporated into the Department of Homeland Security, Emergency Preparedness and Response Directorate, may take photographs or record film or videotape of me (and of my property), and record my voice, and use all these in any media format.

I also agree that my name, identity, and the content of my spoken words may be revealed in these media or by descriptive text, transcription or commentary. I understand that my likeness, my voice, images of my property or business, and my personal name or my business name may be used by FEMA and the U.S. Government and disseminated through various media, including the Internet, radio and television and via CD-ROM. These photographs, films, audiotapes or videotapes may be posted on the FEMA web site or included in the FEMA photographs, film, audiotape or videotape archive, which may be accessible to the public, and used in training presentations and similar aids.

I release to FEMA and the Government all rights to exhibit the described works in print, photographic, audio and electronic form publicly or privately.

I waive any rights, claims or interest I may have to control the use of my identity or likeness in the photographs or videos taken of me, as well as any rights I may have in my recorded voice, or to images of my property or business, and agree that any of these uses of the video/photograph/audio may be made without compensation or additional consideration to me.

I represent that I am at least 18 years of age, that I have read and understand the above statement, and that I am competent to execute this consent and release.

This authorization is submitted pursuant to 28 U.S.C. § 1746 under penalty of perjury.

Name (printed): _____ Date: _____

Signature: _____

Business Address: _____ Business Phone: _____

Guardian (Required for minor): _____

Target Audiences

There are a variety of stakeholders who can benefit from the promotion of Mitigation Best Practices and Case Studies, both during a disaster operation and well beyond the initial recovery period.

As a result, consideration should be given to a variety of audiences when Best Practices and Case Studies are developed and communicated.

In general, some of the **key audiences** to target are:

- Property owners and renters
 - State and local elected officials
 - State and local governments
 - Tribal governments
 - Community leaders
 - Business sector
 - Insurance industry
 - Public and private utilities
 - Academic institutions
 - Media outlets
 - Federal departments and agencies
 - Congressional members and staffers
 - FEMA Headquarters, Regional Office and DFO staff
 - U.S. Department of Homeland Security staff
-

Questions You Can Ask for Disaster-Resistance Stories

The People

- Name
- Street address
- City/State/Zip
- Phone
- Date of birth for story subjects (this helps you determine accurate age, especially if story doesn't run for awhile or needs to be updated)
- Occupation (if retired, previous occupation)
- Family info—Number of children, pets, grandchildren

The House/Business

- Description of the structure (color, number of stories, number of bedrooms)
- How long have they lived in the house or worked in the business?
- Did they build the house/business?
- Type of business, number of employees, how long in business, etc.

Disaster Info

(Note: For this section, it's important to get as many direct quotes as possible because you want people to paint the picture in their own words.)

Past Disasters

- Have they sustained disaster damage in the past?
- If so, when?
- From what type of event?
- Did any physical injury result from the event?
- What sights, sounds, smells do they remember from that disaster?
- Did they lose family treasures? Important business documents or inventory?
- What was the worst part of the disaster?
- What kind of mark has the disaster left on them (sad, fearful, determined to be better protected)?

Current or Recent Disasters

- Get them to describe the disaster itself— flood, severe storm, earthquake
 - What was it like to watch/hear news accounts of the event? (Note: Get them to describe the emotional feeling as the floodwaters rushed through town or tornadoes bounced about or power lines broke under the weight of snow and ice...)
-

- What did they do during the storm? Where did they go to ride it out?
- Was their home/business damaged?
- Were neighboring homes/businesses also damaged? Who are the contact people for more information on that damage?
- Why was this disaster different?

Measures They Put In Place

- What convinced them to make changes to their home/business?
- When did they do it?
- What did they do? (Note: Get specific—e.g., how far off the ground did they elevate, how much dirt was hauled in, etc. Remember, no action is too small or insignificant to find out about. You can always decide later whether to include it.)
- What kind of building materials did they use?
- Did they use a contractor to do the work? If so, get name and phone number to contact for additional technical information (or for other clients who've done things as well).
- Did the work require permitting or compliance with certain local ordinances, such as floodplain development?
- Did they encounter difficulties along the way? If so, what were they and how were they resolved?
- How much money did they spend to make modifications?
- How did they pay for it—loans, grants, savings?

Future Impact

- Now that they've taken action(s), do they feel better prepared for future disasters? How?
 - What lessons have they learned from the disaster/rebuilding experience?
 - What advice would they give to others in their situation?
 - Has the action(s) given them better peace of mind in the event of another disaster?
 - Do they expect to realize a financial benefit/savings by adding disaster resistance measures? Is that savings over-and-above what they spent on the measures?
-

Lights, Camera, Action

Photography can be both fun and challenging. A lot depends on what you know, what kind of equipment you have and what you're trying to accomplish.

Here are some points to ponder:

Camera—film or digital?

Film cameras

Advantages: Generally cheaper than digital; can give you more creative images by using a variety of lenses and filters.

Disadvantages: Film has to be processed and then scanned into a computer.

Digital cameras

Advantages: More compact than a film camera; produces instant results; images can immediately be transferred to computer.

Disadvantages: At present, still more expensive than film cameras. Image quality is not as good as with film or slides so keep this in mind if you're using offset printing methods. Need at least 300 dpi at required image size. Otherwise, your photos will have to be small to maintain clarity.

Film

Types available, speeds, care and handling

Print film (negative)

Advantages: Can be easily and quickly processed almost anywhere.

Disadvantages: Most consumer-quality prints are not very high quality.

Slide film (transparency)

Advantages: Printers' color separations are generally higher quality because slides are sharper and have greater tonal range than consumer-quality prints.

Disadvantages: Consumer outlets (grocery or discount stores) may take longer to process slides—professional labs usually can do it within an hour. Slide scanners for home/office use are more expensive than standard flatbed scanners.

Film speed

This refers to the sensitivity of the film to light, and is indicated by an ASA number. Slower speeds, such as 50 or 100, will produce a very high resolution, high-quality image but are only useful in bright daylight or with a very powerful flash. High-speed film (400–800 ASA) has a larger “grain” pattern, which can be very visible and will make the photo look granular and fuzzy. These speeds can be used on dark, overcast days and will produce good results indoors with small flash units. The closest thing to a universal film is 200 ASA—a good compromise between quality and speed.

Care and handling

Avoid exposing your film to heat and sunlight. Leaving film and your camera in a hot car is tempting—especially when you’re on the road.

But on a summer day, the interior of a car can reach 150 degrees, and it doesn’t take long for the undeveloped film to start fading and turning yellow. Carry your camera and film with you until you can leave them somewhere indoors.

Lighting

Natural outdoor lighting is the type you’ll most commonly use. In bright sunlight, use a “fill flash” setting on your camera if you have one to lighten the shadows. If you have to photograph someone with the sun behind them, put your flash on the appropriate setting (see your instruction manual) to avoid losing their face in shadow.

Avoid taking pictures of people in the shade on a sunny day with few clouds. Although your eyes compensate for it, camera film sees things exactly as they are. If a person stands in the shade on a cloudless day, his/her face will appear bluish on film (this is because the face actually is illuminated by the blue sky, not by the sun). A flash will compensate for this, as will some white clouds in the sky or a white wall.

Indoor lighting—Most cameras have an automatic flash setting, so use it. Keep in mind that fluorescent lighting will give a greenish or bluish cast to a picture and if bright enough, it can even overpower a camera’s flash unit. Take indoor pictures in a room with sunlight coming through windows to reduce the color shift of fluorescent lights.

The Golden Rule:

Shoot lots of pictures—more than you think you could ever use. A photo can be ruined by so many things you won’t notice until it’s too late—people blinking, looking off-camera, something distracting in the background, etc. Remember, in the grand scheme of your project, film is cheap.

Getting the Best Printed Product

Cost Considerations

A number of factors can affect the cost of producing your publication and, ultimately, your bottom line. These include: number of pages; weight of paper, including cover; trim size (size of paper for finished product); number of photos; number of ink colors; quantity of books; printing method. Again, decide what you can afford.

Printing Methods

There are several ways to print your final product, depending on its size and specifications. Here's what you want to know about those methods:

Photocopying— High-speed copiers can do short-run books economically but the quality is not equal to other printing methods. All copiers can work from a hard-copy original; some will be able to accept electronic files as well.

Digital imaging— Uses a sophisticated high-speed color photocopier. The original can have any amount of full-color photographs and artwork. Offers quick turnaround and better cost-effectiveness for short-run jobs. Needs an electronic file for the original.

Offset printing— Uses a press with plates made from negatives or from a computer-driven laser onto a light-sensitive drum. Needs an electronic file for an original. This is more expensive because of the needed prep work and the high-tech machinery. Usually most cost-effective for 1,000 or more copies.

Binding Methods

How are you going to join all the pages? There are several choices to consider:

Saddle-stitched or saddle-stapled— Commonly used for magazines such as *Time* or *Newsweek*, this method staples or stitches on the spine from the outside inward. An inexpensive method, especially for large print runs; best suited for a thinner book.

Side-stapled— Staples are inserted from the front cover through to the back. Not as common as saddle stitching, but it can accommodate thicker books.

Perfect bound— Used for paperback books, this method has a glue binding; creates a very professional look.

Glue/tape binding— This binding wraps over the spine and onto both covers. A good method for smaller quantities; can be done by local photocopy shops.

The teeth of a plastic spine are inserted through rectangular holes punched in the pages. Inexpensive for short runs; main advantage is that the book will lie flat when open.

Wire binding (also known as spiral binding, coil binding and Wire-O binding) — A coiled spiral of wire is wound through small, round, punched holes. Again, the book can lie flat when opened or be folded back onto itself for handy use.

Selecting a Printer

Know what you want the final product to be prior to choosing a printer. Some projects may be beyond a printer's capabilities and you'll need to find that out before deciding which company to use.

If a bid is required, start early and provide as much detail about the final product as possible. This improves your chances of getting an accurate bid and lets you know approximate cost before proceeding. There's no sense in continuing with a project you can't afford.

Ask to see samples of their work and/or references involving similar projects.

Once a printer is chosen

Discuss your project in greater detail. The printer will be able to recognize potential pitfalls and help you deal with them before problems arise.

Make sure you understand what factors will constitute cost changes beforehand. For example, if you order more than one proof, is there a charge? If you change a photo or copy text once it's been set, is there a charge?

Ask your printer what software program(s) he/she prefers to work with. Some printers still can use hard copy or camera-ready art, but most work now is done from computer files. You don't want to submit your final product in a format the printer can't use.

Ask about getting a proof of the product for a final sign-off. A printer should be willing to do this—quantity, types of proofs, and costs should be agreed upon before the printer begins work.

Deliver all needed components—page layout file, fonts, and all scanned photos and computer illustrations—when you're ready to begin production. The preferred format is TIF because it contains all the digital information (this is the best file format for photos). Another common format is JPG but be careful if you use this format. A JPG is a compressed file and if a user repeatedly opens and re-saves information, the file can lose quality.

Other considerations

Graphics— If you use photos in the book, make sure the resolution is high enough to produce quality halftones. The general guideline is 300 dots-per-inch (dpi) scans for a halftone screen of 133–150 lines-per-inch (lpi). Check with your printer for more details.

If you create graphics on the computer, save them in a TIF or EPS format. These formats can be easily and accurately imported into your page layout program.

25 Ways to Promote Best Practices and Case Studies

The real-life examples of disaster resistance featured in your story, photo essay, book or video can be emphasized in conjunction with a variety of events and activities.

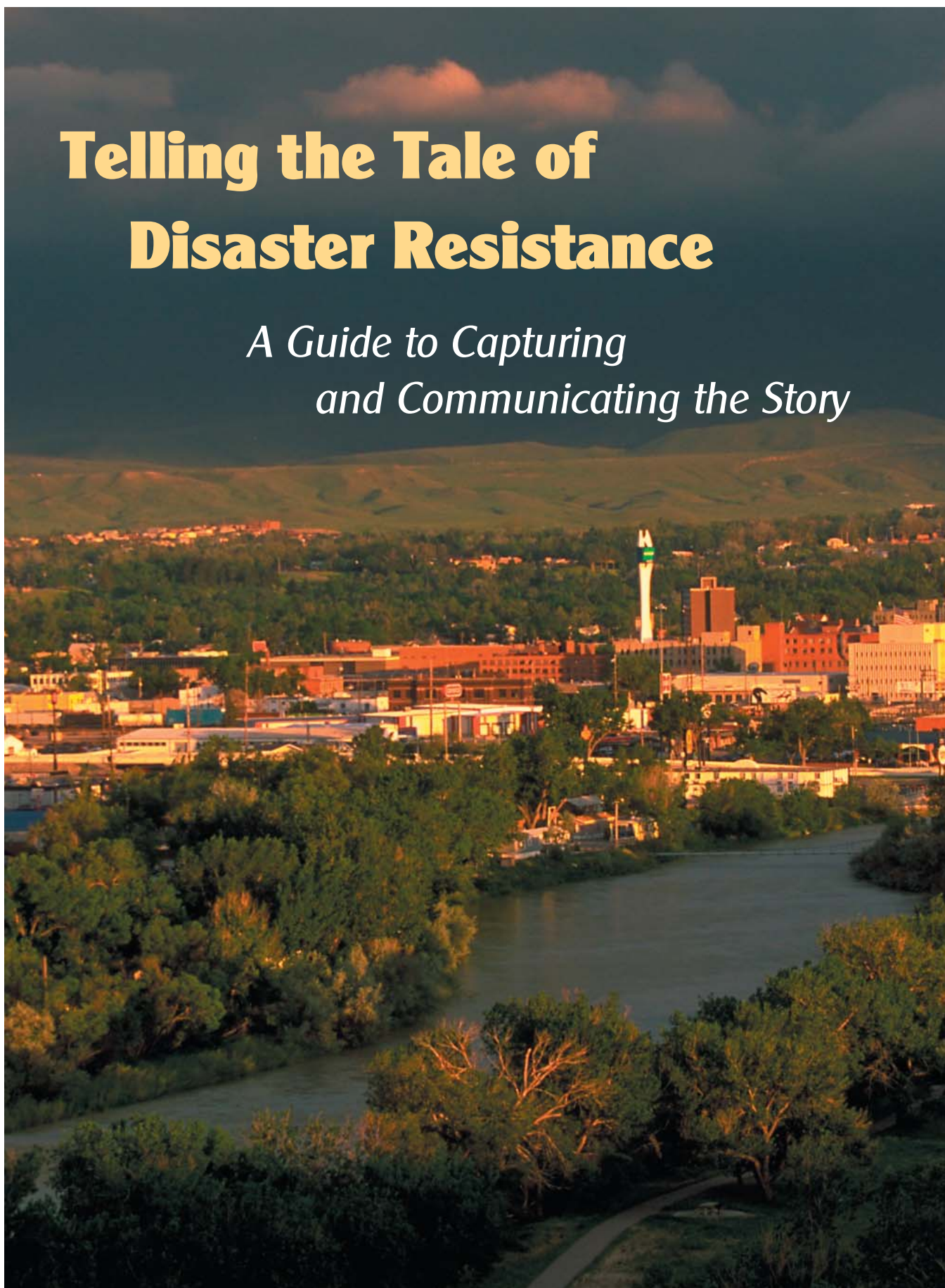
Here are some ideas:

- Launch a media tour to generate news coverage of the disaster-resistance example(s) you've found.
 - Create a press event – ribbon cutting, celebration party, etc. at the site of a disaster-resistance project.
 - Feature a house with disaster-resistance measures on a homes tour.
 - Sponsor a booth at a county or state fair. Hand out copies of your story and other disaster-resistance materials.
 - Create a photo essay showing the steps featured in one story.
 - Adapt your story to a school-age audience – then tell the tale to a classroom of children.
 - Partner with hardware or home-improvement stores on a how-to workshop of disaster-resistance ideas.
 - Develop a “road show” about your story that can be used for speaking engagements. Include visual elements such as photos or PowerPoint®.
 - Get a disaster-resistance proclamation from local or state officials – use your story with the proclamation to convey the message.
 - Promote a different disaster-resistance idea each month – use your stories as examples.
 - Submit a story to local, regional or national magazines.
 - Launch a “Safe Business” campaign to encourage disaster-resistance action within business communities. Feature a business case study.
 - Sponsor a coloring contest that features disaster-resistance ideas. Then, put the winner on a billboard.
 - Get your story on related Web sites– government, public safety, lawn & garden, home remodeling, business, etc.
 - Get a radio station to do a live remote at the site of a disaster-resistance project you're featuring. Arrange for giveaways or money-saving coupons on building supplies to those who visit the site.
 - Encourage fire service agencies to incorporate disaster-resistance into their public-education campaigns.
-

- Partner with meteorologists to incorporate disaster-resistance ideas into their weathercasts and special severe weather awareness programs.
 - Enlist the help of law enforcement agencies in promoting disaster resistance.
 - Create displays that feature your stories — put them in high-traffic stores throughout town.
 - Use your stories during disaster recovery to promote damage-prevention ideas as part of the rebuilding.
 - Give awards for homeowners, businesses, neighborhoods or communities that undertake a certain number of disaster-resistance projects.
 - Encourage PTAs to take on a disaster-resistance project for a local school.
 - Launch a community effort to preserve historical properties by using disaster-resistance measures.
 - Arrange for a school newspaper to do a story on one of your projects.
 - Use your stories in conjunction with special campaigns or events—e.g., “Severe Weather Awareness Week,” “Fire Prevention Week,” “Safe Kids Week,” etc.
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Telling the Tale of Disaster Resistance

*A Guide to Capturing
and Communicating the Story*



Cover photo: Casper, Wyoming by Andrea Booher

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and Communicating the Story*



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Preface

We've all seen the powerful images that make real the heartbreak of disaster.

But we don't often see the images or hear the stories that capture efforts to minimize the effects of disasters.

Nationwide, individuals, businesses and communities are fighting back against Mother Nature by taking action to reduce or prevent future disaster damage. In many cases, these actions already have proven to be successful. In others, the "test" is yet to come.

Either way, there is a story to tell. Our challenge is to capture and promote these efforts in an interesting and effective way. When we succeed, we motivate others to better protect themselves and their communities.

This guidebook provides some of the "best practices" of those who have promoted disaster-resistance efforts throughout the country. It is largely based on the lessons learned during a project by FEMA Region VIII and the North Dakota Division of Emergency Management to document disaster resistance.



The result of that joint effort is a collection of stories, compiled into a book and published by FEMA in 2001, titled, *Journeys, North Dakota's Trail Towards Disaster Resistance*. Two of those stories are included in the *Appendices* of this book. The entire book can be found online at www.fema.gov/regions/VIII.

In this guide, you'll find the key considerations for successfully telling the tale of disaster resistance – developing story leads, researching and documenting projects, creating a finished product and promoting those projects.

If you've never told a disaster-resistance story, we hope you'll use this guide as a starting point. If you're already promoting disaster-resistance efforts, we hope this book will add to what you already know... and can pass on to others.

Some day, the impact of disasters on our nation will be less severe than we've ever before seen. At the root of that change will be successful disaster-resistance efforts.

Won't that be a story to tell...



Why Document Disaster Resistance?

We know that taking action to reduce damages goes a long way toward minimizing the physical, psychological and financial impact of disasters.

But that's only part of the journey to disaster resistance.

The other part is to tell the story of disaster resistance – what it is, how it works and why it makes a difference. In doing so, we can:

- ▶ ***Motivate by example***

Damage-prevention measures taken by individuals, businesses, communities and government give others ideas of what they can do to better protect themselves *before* disaster strikes. Often, those ideas lead to action, and that leads to better protection when it really counts.

- ▶ ***Instill public confidence***

Many people expect government to take care of them when things go wrong. Some would argue that this expectation is improper or unrealistic. But we know that when political leaders are proactive in helping to build a safer community, state or nation, it builds public confidence in government.

- ▶ ***Give hope***

A sentiment voiced by many who've been battered by a disaster is, 'I don't want to ever go through this again.' Telling disaster-resistance stories helps victims know that there *is* something *they* can do to minimize or avoid their pain and suffering another time.



▶ ***Support economic development efforts***

After a disaster, state and community leaders often believe that the event will reflect negatively on the area as a good place to live and work, thus thwarting economic-development efforts. But promoting disaster resistance actually demonstrates vision and responsibility on the part of government to minimize the effects of events they can't control, e.g., bad weather, technological hazards, which ultimately *does* better protect citizens and businesses.

▶ ***Demonstrate value for the dollar***

Communities and states that invest in disaster resistance often find themselves trying to justify that what they spent was worthwhile – especially when the citizenry doesn't believe they'll be affected by a disaster. In addition, taxpayers expect government to make smart choices with their money (i.e., not pouring good money after bad in repetitive-loss areas).

Promoting disaster-resistance projects can show that what's been spent has value and *is* making a difference. It also can help generate additional funding – public or private – to continue long-term, disaster-resistance efforts.

▶ ***Provide opportunities for positive media coverage***

It's human nature to love triumph-over-tragedy stories. That's often how disaster-resistance efforts come about. We know that the more devastating the event, the more it's covered. The public sees a community that is broken; a future that is bleak. Examples of disaster resistance, however, send a different message. They show hope. They illustrate the benefits of smart choices. They provide opportunities for a community or state to accentuate the positive. In short, they make great stories. And, like us, the media love a great story.

*Never lose sight of the vision...
that disaster resistance
is making a difference.*

In Search of a Disaster-Resistant Story

The basic premise of disaster resistance is taking an action that will reduce or prevent the impact of a disaster.

And that's just what you need to tell a story – action and impact that, together, produce a benefit.

Identifying Action

The easiest stories to recognize are those involving an obvious physical action – building something new, fortifying something old, or tearing something down. For example, it's easy to see the intent of elevating structures in a floodplain or removing homes from floodplain, landslide or fire-prone areas.

But there are many other actions that can make excellent disaster-resistance stories. These actions can be funded using local, state, federal and/or private resources. Here are just a few examples:

◆ *Public Infrastructure*

- Raising, grading or resurfacing roads
- Building bigger, longer or stronger bridges
- Cleaning out, widening or redirecting drainage ditches
- Reinforcing culverts to counteract washouts
- Constructing retention ponds to handle excess water runoff
- Adding lift stations
- Putting in flood-control measures such as levees and dikes



- Improving water-pumping capacity
- Elevating and securing fuel tanks
- Fortifying critical public facilities such as water treatment plants, electrical and gas utilities, sewage lagoons, police and fire stations, hospitals, and communications systems
- Installing back-up generators to run communications systems or other key facilities
- Burying power lines to protect against high-wind events

◆ *Residences*

- Elevating utilities such as water heaters, furnaces, washers, dryers
- Adding shutters, hurricane straps
- Installing drain tiles, sump pumps or backflow valves
- Using French drains or waterproof membranes to combat seepage
- Improving guttering and/or extending downspouts

- Adding window-well covers
- Landscaping to improve water drainage or to protect against fires
- Securing bookshelves or other tall objects to prevent movement in an earthquake
- Building a room or reinforcing an interior space to provide shelter from tornadoes and other high-wind events

◆ *Businesses*

- Installing back-up power or communications systems
- Elevating utilities
- Protecting inventory (e.g., moving it to shelving, securing it to walls, storing it at more than one location, etc.)
- Storing critical records in a safe, alternate location
- Adding floodgates
- Installing sump pumps; backflow valves for sewers
- Using equipment tie-downs

◆ *Environment*

- Creating greenways or other recreational areas in floodplains
- Planting trees and shrubs to minimize blowing and drifting snow
- Using vegetation to curb erosion along rivers
- Creating windbreaks to control soil erosion



Disaster resistance also can be accomplished using non-structural techniques. Here are some ideas for these kinds of stories:

◆ *Insurance*

- Securing flood insurance for buildings and/or contents
- Adding special riders that cover damages caused by earthquakes, sewer backup, sump pump failure, etc., to standard residential and commercial insurance policies

◆ *Codes and Ordinances*

- Regulating floodplain development
- Establishing disaster-resistance standards for new construction
- Requiring seismic or wind-resistance protection for commercial or public buildings
- Controlling urban runoff through proper development
- Incorporating disaster-resistance elements into land-use planning
- Securing rights-of-first-refusal to buy and remove properties in high-risk flood or landslide areas
- Deed-restricting land in high-risk areas against future development

Disasters create opportunity... to measure action, impact and benefit. Recovery creates opportunity... to do it right the next time, so be on the lookout for new disaster-resistance projects.

- ◆ ***Emergency Operations Plans***
- ◆ ***Specialized emergency response training***
- ◆ ***Public education programs or special events promoting disaster resistance***
 - Severe Weather Awareness Week
 - Fire Prevention Week
 - Workshops at building supply stores for do-it-yourselfers
- ◆ ***Public-private partnerships that foster disaster resistance***
 - Leveraging money and resources to better protect a business, a neighborhood, a school

Determining Impact

Impact is more than broken windows or collapsed structures. It's emotional and economic as well.

When you look at impact, consider what the disaster-resistance action does to reduce or prevent:

- ▶ Injury or death
- ▶ Structural damage
- ▶ Failure of critical facilities or infrastructure
- ▶ Wear and tear on government resources such as equipment and manpower
- ▶ Psychological injury

- ▶ Public panic
- ▶ Citizens, businesses from moving away
- ▶ Financial losses for citizens, businesses, local government
- ▶ Loss of jobs due to disaster damage or inability to do business
- ▶ Loss of tax revenue for local governments

Measuring Benefit

Benefit is the result of action and impact. Sometimes, the benefit isn't realized for years because future disaster losses can be infrequent. But when disaster does strike, here are the kinds of benefits you could see:

- ▶ Fewer injuries and deaths
- ▶ Less damage to homes and businesses
- ▶ Reduced personnel costs in taking emergency protective measures
- ▶ Continued operation of critical facilities like water treatment plants
- ▶ Schools and businesses that can immediately reopen because structural damage was avoided
- ▶ Preservation of historic structures (e.g., moved from repetitive-loss areas)
- ▶ Roads and bridges that remain open because of seismic retrofitting

Capturing the Basics

Documenting and promoting disaster-resistance efforts can be as basic or as in-depth as you choose to make it. If you want to write a story, produce a book, make a video, create a photo essay or promote disaster resistance to the public, this guide can help you with the key elements.

But if you don't have the time or resources to get that involved, you still can capture the basics.

Here's what you can do to help others tell the tale of disaster resistance:

✓ **Gather story ideas** for disaster-resistance projects, planned or completed. Include a brief description of the project, address, and contact name/phone number. (See *Disaster-Resistance Story Leads* form on page 47).

✓ **Collect photos** that document the project. These can be photos you take or get from someone else. Ideally, you want a series of pictures that shows the project from beginning to end. Digital images are OK, but you may want prints as well, because the negatives from those prints will produce a better quality image (although slides are the best quality). Save the photos with your story lead file.

✓ **Capture any media coverage** on an existing or potential project, such as newspaper clippings and radio or television stories. Include coverage of public meetings, planning sessions, project updates – anything that will provide good background.

✓ **Profile past disasters** for background information. Summarize type of event, date(s), number of injuries or deaths, level of damage and key response and recovery issues.

✓ **Keep a contact list** of other officials or agencies involved in funding or managing disaster-resistance projects for use as potential information sources.

✓ **Educate your media contacts** about disaster resistance. The best time to get your point across is before you need to make it. So help them learn what disaster resistance is and why it's important – before you approach them with a story.



- ✓ *Document projects during a disaster.* Have someone visit and photograph project sites when a disaster is in progress – especially if the projects are being directly impacted, (e.g., water up against a house, fire threatening a critical facility, blizzards closing down major roads). *Check those projects again after the event has passed to see how well they fared.*



Beginning the Journey

Once you've decided to promote disaster resistance, the next step is developing a game plan. This is where you'll set out what you want to do and how you're going to do it. It may involve just one story. Or, it may involve something bigger such as a book of stories or a 10-minute videotape.

To develop this plan, there are a number of things to consider:

What is your objective?

In short, what do you want to accomplish by documenting disaster resistance? Do you want to share ideas on how citizens can protect themselves from disaster? Do you want to justify money spent to reduce or prevent the impact of disasters? Do you want to promote special campaigns such as "Severe Weather Awareness Week" or local disaster-resistance programs?

It could be all of these examples or something altogether different. Your objective doesn't have to be limited to a single point. But you do need to be clear on the message(s) you want to communicate so you know what kinds of stories to look for, who to interview and what the end result should be.

Who is your audience?

Is it the do-it-yourselfer, home-improvement project person? Is it an elected official or governmental body? Is it a business owner? Is it another disaster-stricken community?

Identifying the audience helps you choose which disaster-resistance action(s) to feature



and can even dictate the style and method used to tell a story. For example, if the goal is to justify the financial investment in a project, you may want to include technical information such as a cost-benefit analysis, the probabilities of future occurrences and expected level of damage. This kind of story likely would appeal to audiences such as engineers, public-policy makers, analysts, or statisticians.

Conversely, if the story is meant for the general public, you may want to take a more human-interest approach that features an individual, family or business owner who can tell the tale from a personal point of view. This technique, also referred to as "testimonials," generally is more effective than using a highly technical approach. This style doesn't mean you can't include technical information – just make sure that it's understandable to people who don't know about the subject.

One final thing to consider: If you are targeting the general public in a given community, consider the demographics. For example, are there non-English speaking populations? Is there a large concentration of older adults? What is the average education level?

The answers to these kinds of questions will drive many of your other decisions such as story choices, final product, key messages and promotional techniques.

What is the format?

This refers to the method you'll use to tell the story – print, audio, photographs, video, electronic—and your decision will determine most of what is done from here on. You can use one or more formats for the final product.

What is the final product?

This is where you can be creative. Once you have the format, you can use it many ways. Here are some ideas to consider:

Print

- ▶ Newspaper story
- ▶ Technical report
- ▶ Magazine article
- ▶ Brochure
- ▶ Handout
- ▶ Public education display
- ▶ Book
- ▶ Case study

Photographs – film, digital or slides

- ▶ Photo essay (display that predominantly uses photos to tell the story)
- ▶ Computer presentations such as PowerPoint®
- ▶ Slide-show presentations

- ▶ Images for print or Web site stories
- ▶ Images for a video product

Audio

- ▶ Radio news or feature story
- ▶ Public service announcements
- ▶ Soundbites for a video product
- ▶ Interactive Web site

Video

- ▶ Disaster-resistance documentary
- ▶ Footage for television news or feature stories
- ▶ Interactive Web site

Electronic

- ▶ Compact disc/DVD
- ▶ Web-based story
- ▶ Disaster resistance-specific Web site

Have a good idea of what you want the final product(s) to be prior to doing your research. What you choose will dictate how the project is documented and how much you should budget from start to finish.

How will you distribute the product?

This is a must to consider early on because it will affect your timeline, needed resources and budget. Will it be faxed or mailed? Sent FedEx or UPS? Does it need a cover letter? Who will write that? Who will gather the addresses, and then stuff/label envelopes?

Will it take a special mailer like a padded envelope, custom box, and what is the approximate per-piece cost? What are the mailing costs (a book could cost \$2 to \$3 each)? Or, will it be hand-carried to the final destination. Either way, how many locations will receive it? Who will get it there?

What resources do you need?

Labor – Do you have the time and skills to do the writing and/or photography? If not, is there someone you can use to do the work such as a public information officer, journalism student, freelance writer or photographer, media person or public relations professional? If these options are not available, try to find someone who writes or takes photographs for a hobby.

Do you need other professionals such as videographers, editors (copy, photo, video), graphic designers? Do you need administrative support? The important thing is to get people with the skills you need.

Equipment – At a minimum, you’ll want notebooks, a typewriter or a computer with a printer, disks, a camera (35mm or digital), film, a tape recorder and tapes. If you don’t have this equipment, try to at least get access to it.

What is your time frame?

Count on this: The bigger the effort, the more time it will take. While that seems to be an obvious concept, sometimes your project can shift directions or grow beyond what you first intended. That’s why creating a timeline with key deadlines is essential. The timeline helps keep you on track and enables others to see what the project will entail, especially if you need approvals for time, financial or resource commitments.

The trick is determining how much time your story or project will take from start to finish. Although there’s no set answer to this question, you can get reasonably close by breaking down your effort into key elements and estimating how long each one will take.

Here are some of those elements:

Story/project development – Determining objective, audience, final product, resources, budget; securing project approvals

Research – Gathering facts and supporting materials, site visits, fact checking

Interviews – This may involve more than one person so allow time for each source. Remember, your sources may not be readily available,



*Good groundwork leads to good results.
Take the time to do it!*

so allow extra time to accommodate their schedules and, if needed, follow-up calls for additional information.

Writing – First drafts, editing, rewrites, approvals

Photography – Include time for film development, photo sizing, etc.

Design/Layout – Joining words and pictures; choosing typestyles and paper; typesetting

Production – Proofreading, printing, binding

Distribution – Getting the product out

Promoting the final product – Media pitching, special events, etc.

Again, the timeline is your *best guess* at what it will take to accomplish each step. It will probably need to be adjusted along the way, so be willing to do that. Be as realistic as possible and build in extra time to cover unexpected project delays or changes in your workload.

Is there funding for the project?

Even if you're only doing one story, you might have expenses. So you want to develop a budget and obtain funding before beginning the project. The amount of money you need depends on how much you do and what you choose for a final product. Some budget factors to consider are:

- ▶ Salary
- ▶ Travel costs – mileage, car rental, gasoline, airline, lodging, meals

- ▶ Office supplies
- ▶ Professional services – writers, photographers, videographers, editors, graphic designers, etc.
- ▶ Faxing and copying
- ▶ Film and processing costs
- ▶ Reproduction costs – printing, video duplication, etc.
- ▶ Distribution costs – envelopes, labels, postage or shipping, labor to hand carry
- ▶ Promotional costs – press kits, press conference, special events, etc.

Be sure to build in a cushion to cover cost overruns, changes or other unforeseen expenses.

Who's in charge?

Someone has to *manage* your disaster-resistance project from beginning to end. It could be you, or a colleague. But it should be someone who can be responsible for the overall effort and who has the power within the organization to make decisions, commit resources and spend money.

Who needs to be on board?

In most cases, you'll want to get "buy in" from key managers or partner agencies before beginning your project. Doing this enhances the team concept common in emergency management, preserves a respectful working relationship and opens up a world of support and resources.

Gathering the Goods

Now that the preliminary legwork is done, you're ready to begin creating a disaster-resistance story.

First, you'll want to explore story possibilities. This is where identifying leads comes in.

Developing Leads

A lead guides you to a *specific* story rather than a *generic* type of action.

For example, you might find that a community has built a new bridge, which will allow a river to flow unimpeded and eliminate flooding problems. *That* new bridge in *that* community is your story lead, because it represents a specific case where action was taken, rather than the fact that building a higher bridge is a way to reduce flooding.

Or, you might find a homeowner who has anchored bookshelves to a wall to prevent them from falling in an earthquake. In this example, *that* homeowner is your story lead because he/she represents a *specific case* where someone took action.

So how do you find these leads? By going to key people or places that could be involved in disaster resistance-related projects.

For example, check regulatory or enforcement agencies that have a responsibility to ensure certain actions and/or can provide funding for particular types of projects.

For ideas of where to look, see *Leave No Stone Unturned—Common Sources for Story Leads* on page 46.

Tracking Leads

An easy way to do this is to **create a list** of all the possible stories you discover. You'll likely find more leads than you can immediately use, but that's OK. These ideas can be used later as time and resources allow. Just remember, these are *unverified* suggestions at this point, not facts.

Organize your information in a way that is easy to use. For example, consider grouping

story ideas by location (city, county, state), by disaster risk (floods, winter storms, tornadoes),



by type of action (property buyouts, infrastructure enhancements), or by funding source (hazard mitigation grants, tax money, insurance money).

No matter how you keep track of story leads, here are some **key elements to capture**:

- ▶ Date you become aware of the story (this is especially helpful if you don't do the story right away)
- ▶ Name and phone number of the person(s) who told you about the story
- ▶ Name and phone number of the person(s) to interview for the story
- ▶ A brief description of what the story is about



A measurable benefit

The story should show that some measurable benefit is realized from taking disaster-resistance action. The benefit doesn't have to be in dollars and cents to be considered measurable. It could be preventing injury or saving lives. Or, it could be that good planning has improved the effectiveness of an emergency response, which has reduced damages.

A "face"

It's often easier to relate to people than to anything else (except maybe pets), so look for the human element or "face" in every lead. If the action involves protecting a rural road threatened by erosion from a nearby river, who benefits from

that? What does it mean to the farmer or resident who depends on that road for access to and from their property?

If the story is about a business, what does protecting that company mean? Does it keep a major employer in town, thereby ensuring jobs and economic viability? Does it mean that citizens will have uninterrupted health care because the hospital can continue to function even if there's a major power outage?

Choosing the Story

This is a key element to success because not every lead makes a *good* story. So how do you know which leads to pursue? Again, that depends on your objective, audience and message.

Good stories will have these common elements:

A unique theme

You want a story that has an interesting angle or unique element. This is particularly important when there are many leads involving the same kind of action.

For example, there are many cases of property buyouts from high-risk flood areas. Try to find one that has a compelling story, a different twist or a nuance that fits your goal. If you're targeting older adults, look for a story involving an older couple now enjoying safety and peace of mind because they no longer live along a river. If the goal is to promote greenway or open-space development, look for a case where buyout land is turned into a public recreational area.

Strong visual support

The best stories are those that have a visual element – photographs, illustrations, slides or videotape. So when you choose a story, think about it in more than just words. Can you also *show* people the problem and/or disaster-resistance element? And can you make it visually interesting?

For some stories, the answer to these questions may be “no.” In those cases, don't give up on doing the story if the concept is strong. Instead, enlist the help of a photo professional or graphic artist to help identify ways to illustrate the story.

Interest to the audience

Is the story something that people will want to read? Even a boring topic can be made interesting – it all depends on how you tell it.



This is when emphasizing the human element or looking for the unique theme helps.

To be or not to be ... successful

This *is* the question to consider when choosing stories. Do you want cases where someone took action and it was proven to work in a subsequent disaster? Or are you looking for examples of disaster resistance – proven or unproven? What about cases where measures were taken, but in a subsequent disaster, *didn't* work?

The debate on these questions continues among emergency management professionals because there are advocates on all sides. In reality, there is no wrong answer. How you choose to handle any of these stories depends on what works for your community or agency, and what best fits your objective and target audience.

Here are some points to consider in each case:

◆ “Success” stories

These are examples where disaster-resistance measures were taken and, in a subsequent disaster, the actions proved to reduce or prevent damage. These are the best stories to promote because people can relate to a concept

such as: everyday house... damaged by a bad disaster... fixed up in a special way... unscathed by the next disaster. That, of course, is what disaster resistance is all about—making a positive impact on an otherwise negative situation.

◆ *Disasters-in-waiting stories*

These are cases where disaster-resistance measures were taken but have not yet been proven to work because there hasn't been a disaster to test their effectiveness.

These stories have great value as well, even though there is no conclusive evidence that the action taken will reduce or prevent damage. Why? Because the goal is to get people to take action *before* disaster strikes so that the effects won't be so devastating.

The goal also is to get individuals, businesses and communities to make smarter choices



about where people live, where commercial developments should go, how structures are built and how infrastructure can better withstand disasters.

◆ *Lessons-learned stories*

These are stories that represent lessons learned from a disaster. They could be examples of steps taken *after* a disaster to prevent future damage *because* of what was learned in the event. Or, they could be examples of disaster-resistance measures taken before or after the event that, in the next disaster, did not work as intended.

Again, these stories are definitely worth telling. Post-disaster efforts to prevent future damage show that local leaders are serious about doing, and encouraging others to do, the right things to protect the community from future harm.

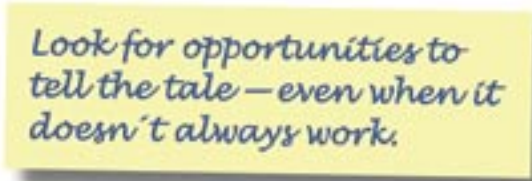
In the cases where measures didn't work, there are good lessons to be learned. Yes, the goal is to promote disaster resistance. But the reality is, not everything works right the first time. That's how we learn to do it better. And there's nothing wrong with promoting those stories if you can show that lessons have been learned and that the problem is being corrected.

You may, however, find it harder to get your sources to talk about less-than-successful outcomes because of political pressure or because they perceive the situation to be embarrassing, i.e., they spent money on something that didn't work after all.

Try to overcome this kind of problem. By pointing out the things that didn't initially work, you can help others avoid the same mistakes. And acknowledging an imperfection doesn't necessarily mean there will be a negative public reaction.

Generally, people can accept a less-than-perfect outcome as long as they're being told the truth and they know that someone is working to correct the problem.

Regardless of the story type you choose, think about how you will "bill" these stories in public. If you have a combination of story types, consider calling them "lessons learned." You still can communicate the concept of success by talking about the advantages of disaster resistance, e.g., "...it's been proven that for every dollar spent, two or more dollars are saved..."



Look for opportunities to tell the tale – even when it doesn't always work.

Timing is everything

Deciding *when* to promote a project can make or break your story.

Resist the temptation to promote a disaster-resistance project in extensive detail before it's done and signed off by the appropriate

authorities. You never know what could develop unexpectedly along the way to change your story information – such as cost overruns, techniques that didn't work, inability to certify that the work is done correctly, failure to get the proper permits or reviews, etc. These kinds of issues (yes, they *do* happen) will kill the credibility of your story if you report them inaccurately.

An exception to this would be a situation where a project is just beginning and you promote it as such, e.g., breaking ground for a new school outside the floodplain that is expected to keep children safer in the next flood. To get into detail on how the project will be done before it is done could bring on a flood of problems if you don't yet have all the facts.

Research

There is no substitute for having all the facts. Poor research can torpedo your story and your credibility. The last thing you want to do is publicly present a story and find out there is a problem or negative element that you didn't know about or couldn't account for. So keep an open mind and be thorough!

Good research involves these key elements:

- 1) Background material
- 2) Interviews
- 3) Site visits
- 4) Fact checking
- 5) Visual/audio elements

Background material

This includes all information and documentation related to a specific story.

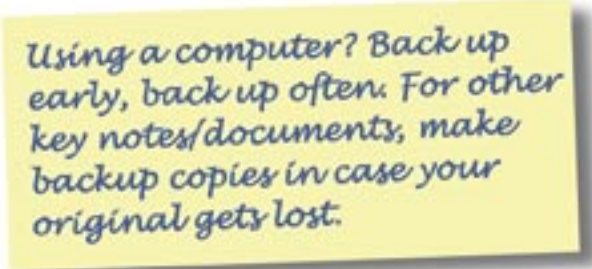
- ▶ How did the project come about, i.e., result of a disaster? If so, how many times did disaster strike? What's been the level, cost of damages?
- ▶ How was the disaster-resistance measure chosen?
- ▶ What work was done?
- ▶ What agencies were involved?
- ▶ Was there an environmental review?
- ▶ How much did the project cost?
- ▶ How was it funded?
- ▶ What is the expected benefit?

Get as much background material as possible before setting up interviews. This will help you formulate questions and decide who to interview. Also, your sources tend to respond better when they know you've done your homework.

There are number of ways to find information. Obviously, the place to start is the source of your lead or the contact person your source has identified. If you need to know more, try some of these areas:

- ✓ Internet
- ✓ Government agencies
- ✓ Local newspapers
- ✓ Public libraries

- ✓ College or university libraries
- ✓ Historical societies
- ✓ State or local archives
- ✓ Weather service offices



Using a computer? Back up early, back up often. For other key notes/documents, make backup copies in case your original gets lost.

This is a good time to look for photos, too. The impact of a disaster-resistance measure becomes clear when you can visually show what something looked like “before” and “after” the action was taken. So look for pictures from a disaster or the cleanup, a groundbreaking ceremony, a community celebration, or an individual's own collection.

If you find a photo you want to use, ask to borrow the negative—it will reproduce better than a print. If a slide is available, that usually provides the best quality. Otherwise, the photo can be scanned. Either way, make sure you return them as soon as possible. (See **Photographs** section on page 27 for more tips.)

▶ **Calculating Cost-Benefit**

For each story, it's important to try to show the relationship between the cost of a disaster-resistance measure and the benefit it's designed to provide. Often, this is a hair puller because there are many ways to calculate cost-benefit.

Another difficulty is that some benefits are hard to put a price on – a person’s life, for example. Or, perhaps the benefit of another disaster-resistance measure is a reduction in the manpower needed to take emergency protective actions during an event. In that case, accurately figuring the labor savings in dollars-and-cents can be tricky.

Furthermore, there’s the issue of “testing” the disaster-resistance measure to see if a benefit actually occurs. Sometimes, it can be years before the same disaster strikes again, which can complicate those calculations.

There is good news, though. Nowadays, most cost-benefit calculations are being done with the help of computer modeling, which has made the process somewhat easier.

Also, projects funded by federal agencies are required to have both a cost-benefit analysis *and* a positive ratio (for every dollar spent, a dollar or more will be saved), before the money is approved. Therefore, the cost-benefit calculation may already be done for you, which can save time and work. Look for this analysis during your research.

For more information about the computer modeling or calculating cost-benefit in general, contact the mitigation division of your state emergency management agency or the Federal Emergency Management Agency.

Interviews

Talk to anybody and everybody who has a connection to the story. Again, keep an open mind as you go along. Sometimes, the story ends up being something totally different than what you first thought. If that happens, don’t worry. You want the *facts* to drive the story, not your preconceived idea of what it *should* be.



Keep in mind, too, that you don’t have to *use* every detail in the final product. But you do want to *know* every detail so that the story is accurate and balanced. The last thing you want is a surprise down the road – especially if it negatively impacts your story.

Time is a valuable commodity and most people will not want to talk to you on the spot, so plan to arrange a specific interview time.

For an interview, cover these points:

- ▶ Identify yourself
- ▶ Explain the purpose of the interview (doing a story on seismic retrofitting of the water treatment plant ...)
- ▶ Ask if they are willing to be interviewed
- ▶ Tell them how you'll use the information
- ▶ Ask if you can take photographs of them and/or whatever the story is about. (If so, allow yourself extra time)
- ▶ Tell them how much time you'll need; ask what day and time fits their schedule
- ▶ Provide your phone number so that if something comes up, they can call to reschedule

It's *very* important that your story source(s) understand that the information they provide will be made public, unless you mutually agree ahead of time about off-the-record elements.

This caveat is critical, especially if you are interviewing a business owner or private individual. They may not want their personal or company details revealed to the whole world.

Likewise, if you are interviewing a government employee, the information may have to be provided by an official spokesperson, especially if the comments may end up in the media.

If there is *any* chance the story could appear on a Web site, either by your own doing or by someone else picking it up (and if you use it publicly,

someone likely will), make sure the person you are interviewing understands what it means to be on a Web site and that they're agreeable to it. (There's a reason it's called the World Wide Web).

▶ ***Interview/photo authorizations***

It's advisable to get written authorization or a model release for interviews and/or photos. These authorizations, signed and dated by a story source, basically give you permission to use that person's name and statements (or in the case of photos, their image) in a format that is released to the public. Consult your legal counsel for advice on form and language, especially in the case of minor children. Or, check a photo store for a standard photo/model release. If an authorization is needed, get it *before* doing the interviews or taking photographs.

▶ ***Tape Recording***

If you want to tape record an interview, ask your source ahead of time for their permission. Taping is not always ideal – it can spook some people and stilt their answers. But recording is important if you want to use that person's voice as part of a video or as an audio track for a Web site story. Get their permission on tape before you start the interview.

If you are taping only to ensure accuracy, tell them that too. But be careful here. Don't rely solely on a tape recorder to capture your information. Take written notes as well. Tapes can break and equipment can malfunction. If that happens and you weren't taking written notes, your canoe just capsized.

► *Getting the right stuff*

When doing an interview, you want to cover the basics ... who, what, when, where, why, how.

But you also want to paint a picture with words. This is especially true if the person you're interviewing has been through a disaster. Tell the story in *their* words. What was it like for them to go through the event? How do they feel now after taking disaster-resistance measures?

Realize that interviewing a disaster victim can stir up powerful emotions for them so be considerate when you ask for these details.

What you should ask in an interview depends on the story. But there are some basic questions that will fit just about any story. For help with this, see *Questions You Can Ask for Disaster-Resistance Stories*, on page 48.

For additional questions, rely on your instincts and your own curiosity. Put yourself in the reader's place and find out what you would want to know.

Site Visits

It's very important to get a firsthand look at the project—especially if you were not directly involved in the work. By doing a site visit, you can be sure that the project is what you think it is, and that there's not something you can't explain. You may discover pertinent information that you didn't get from the background material or from interviews.

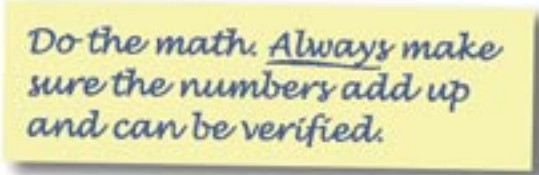
A site visit also can help you better describe what the project looks like, the setting it's in, and any other remarkable features. It can help you decide what project elements will photograph well. Remember, you're trying to paint a picture and if *you* don't know what the project looks like, it will be harder to describe it to someone else.

Fact checking

Accuracy is paramount to producing a good story. Therefore, **be sure of your information**. Use reliable sources. Verify the important stuff from a second source.

Most people will not purposely try to mislead you. But they can be mistaken. So if someone tells you that his or her house was damaged in the worst flood ever, check it out (the National Weather Service or local emergency manager would be good sources for this scenario).

The standard here is this: If you can't back it up, either through documentation or by direct attribution to a reliable source, don't use it. When you make mistakes, it lowers credibility—of the story information, of you, personally, and of your agency.



Do the math. Always make sure the numbers add up and can be verified.



Visual/Audio Elements

Capturing visual/audio elements is an important part of research and is key to getting what you need to produce a final product (audio is only needed if that is part of your final product).

Here are several pointers for each format to help you get the best results:

◆ Photographs

Pictures really can tell a story. Sometimes, images alone make your point and the words are just extra.

Capturing those breathtaking shots takes skill, good equipment and practice. Sometimes there's luck involved, too.

You don't have to be a professional photographer to take a good picture. But you do want to cover some basic elements – whether shooting to supplement a print story or to create a visual product:

▶ Show something that matters

Ideally, your photos should show key elements of the story. If the disaster-resistance action you're featuring isn't very photogenic, such as a backflow valve or underground drain, consider capturing the benefit – happy homeowners, a thriving business, a scenic spot in the community, (or a danger spot that relates to your story, such as a rushing river or sliding hillside). Strive for shots that will show the story logically from beginning to end.

▶ Put a person in it

Remember the human element? That extends to photographs as well. It's generally more interesting to look at someone *with* the something you're talking about. Avoid straight "mug shots" (head and shoulders). If you want a close-up, try to put the person slightly off center within the frame to enhance dimension. Or, take the photo slightly from one side. Choose a background that is interesting but not too distracting. Using a person in the photo also can help illustrate scale – how big that "something" is in relation to a human being, e.g., standing in front of a dam or levee.

Try not to photograph someone without advance warning. They'll want to look their best, and if they do, you'll have a better photograph. If children are important to the story, get permission from the parents before taking any photographs. They may not want their children's faces in the public domain for safety reasons and you want to respect those concerns.

▶ Capture action

Show your story subject doing something – checking a river level, installing hurricane shutters, cleaning out a gutter, etc. Include shots that show part or all of their face. If you can't get that angle, consider a profile that shows your subjects and the action they're taking. When all else fails, have them hold something, or lean on a piece of furniture or against a structure. At all costs, avoid "pointing shots," that show your subject pointing or gesturing.

▶ **Strive for good lighting**

This can be tricky to get right. As a rule of thumb, shoot within the first two hours after sunrise or before sunset. Schedule your indoor shooting during the middle of the day, unless you can use a “fill flash” to eliminate harsh shadows, or the day is overcast – perfect conditions for portraiture.

▶ **Take more than one photo**

Relatively speaking, film is cheap. And rarely does one photo turn out the way you want. So shoot several pictures of key story elements. Strive for variety by experimenting with different angles. Try some photos up close and some with distance. Take some horizontally and some vertically (if the object lends itself to both). This provides greater flexibility when it comes time to do the layout.

▶ **Develop your film or slides right away**

It’s maddening when your pictures don’t turn out or you’re missing *the right shot*. So don’t wait to develop your film. If you find a problem, re-shoot as soon as possible to avoid delays in your project. This is especially important if there is a time-sensitive activity, such as disaster cleanup or a structure demolition. You’ll have limited opportunities to get it again.

▶ **Consider getting a contact sheet instead of prints**

A contact sheet shows every image on a roll of film in a smaller size. By having a sheet made,



you can see all the photos at once and choose only those you need to print. That will save you money and the hassle of figuring out what to do with the leftover prints.

▶ **Get caption information**

Few pictures can stand alone without some explanation. When taking photos, write down pertinent information such as date, time, location (be sure to note street names if the road is visible), and the direction you are facing. You’ll thank yourself days or weeks later when it’s time to write captions.

Develop an organized system to keep track of your images, preferably when you first start your project.

One way to organize your shots is to group them by key photos (the very best) and extra photos (second, third choices) for each story. This will save you a lot of time when you're ready to do the final edit – especially if you are doing more than one story.

For more ideas on cameras, film and lighting, see *Lights, Camera, Action* on page 50.

◆ *Audio*

This format tells the story in sounds and words. Audio can be a very powerful method, depending on the strength of your story source. Is their voice pleasant? Does it convey feeling? Is their pronunciation good? Do they have the ability to be descriptive in their answers?

Here are some tips to achieve a good outcome:

▶ **Use the best equipment you can find**

With an audio product, quality counts. The new digital recorders are very sensitive, which is good because they produce excellent quality (they're bad news for heavy breathers, though, so watch that).

▶ **Do the interview in a quiet location**

Background noise can kill the quality. Also, try to pick a room that doesn't echo – preferably one with furniture and wall coverings or decorations.

▶ **Ask questions that will generate a full response**

You want answers that go beyond a simple “yes” or “no” answer.

▶ **Prepare your source for the interview**

Consider providing a list of the questions you're going to ask before the interview. This gives them time to compose their thoughts and, hopefully, gives you better answers.

▶ **As an interviewer, don't “step on” your source's comments**

Allow them to finish speaking before asking the next question.

▶ **Keep the tape running** for a few minutes before and after the interview. Sometimes the best comments come when the pressure is off.

▶ **Don't tape anyone surreptitiously**

This erodes their trust in you and it's not necessary to get your story.

◆ *Video*

Generally, these stories take a greater level of expertise, so consider hiring help. You want someone who can shoot footage, edit the images, overlay narration and/or music and give you a master tape that can be reproduced. Be sure to see samples of their work before you hire them.

Videos can be really expensive. So before beginning one, have a definite idea of what you want – concept, target audience, distribution and how it will be shown.

Many of the photo tips apply here as well but there are some other basics to keep in mind when doing a video story:

▶ **Choose a broadcast-quality video format** – digital, Beta, $\frac{3}{4}$ -inch – for shooting because you want your footage to have the best possible reproduction quality.

▶ **Have a script**, or at least a general concept, in mind before you begin. Note: You might even want that script or concept approved before you start so there are no surprises at the end.

▶ **Know what images you want** before you start shooting. If you've hired someone, they'll charge by the hour and you don't want to waste time and money figuring it out as you go along.

Consider developing a “shot list” that identifies the key elements you want to videotape so that you don't get a lot of what you don't need.

▶ **Sights and sounds are key to telling the story.** So make sure you have walking, talking, sounding film. Examples: Rushing water, hammering, digging in the dirt, splintering wood in a building demolition, etc.



▶ **Shoot more than you think you need**, but don't overdo it. You want plenty of footage to choose from to get the best images, but you don't want hours of tape for a 10-second clip. A good rule of thumb is 10 hours or less of raw footage per hour of finished product.

▶ **Get good audio**

Many perfect video clips have been ruined because of bad sound, so make sure you get good audio. Always put a microphone on your interview subject – using the camera mic can pick up background noise you don't want.

▶ **Consider shooting outside as much as possible**

By doing this, you can take advantage of natural lighting and, visually, it's generally more interesting.

▶ **Use a tripod**

You don't want your video to look like you're in an earthquake (unless you are, then it's OK).

▶ **Always shoot an “establishing shot.”**

This is something that sets the scene for the viewer of where the story is taking place.

For example, if you are photographing a disaster-resistance element inside a school, shoot the outside entrance of the school to establish where the story is taking place.

Telling the Tale

When your research is done, you're ready to tell the story. By now, you should know the main point of the story. If you don't, review your notes or do additional research.

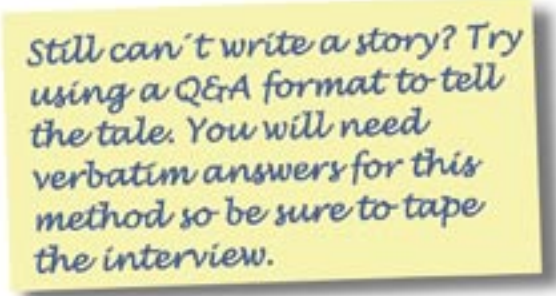
Print stories

There are many ways to write a disaster-resistance story. Mostly, it boils down to the style of the writer and the type of final product (e.g., magazine writing is different from news writing).

If you're inexperienced at writing, here are a few basic tips:

- ▶ Make the beginning interesting so the reader will want to know more.
- ▶ Use direct quotes to add credibility, color, emotion.
- ▶ Be accurate. Don't purposely or inadvertently slant the truth.
- ▶ Tell the reader what they need to know to get the point. Leave out the rest.
- ▶ Avoid using jargon. Instead, find a way to explain technical information in understandable terms.
- ▶ Wrap up the story with a logical ending rather than abruptly stopping because you don't know what else to write.

If you decide to hire a free-lance professional, know what you're getting into ahead of time and be prepared to do what it takes to support their efforts. For a list of pointers, see *Making the Most of your Contractor* on page 54.



Still can't write a story? Try using a Q&A format to tell the tale. You will need verbatim answers for this method so be sure to tape the interview.

Photo/Audio/Video Stories

Again, you want to tell the story in a logical way. This does not always have to be sequential (sometimes in video, a flashback technique is used effectively). But the audience should be able to follow the basic points of who, what, when, where, how and why.

This is a good time to look at your photos, unedited video footage, or audiotape to make sure that you have what is needed before the editing process begins. Your project can suffer a major setback if you wait until it's time to choose the final components.

Editing

Regardless of the format you choose, editing is one step in the process you cannot do without. *So don't overlook or skimp on this step!*

◆ *Print*

For written pieces, there are two kinds of editing — one for content, and one for grammar and punctuation (a.k.a. copy editing). You need both.

Editing for content means that someone reads the story as a whole piece. This person can be a colleague or just a friend who knows nothing about the topic. If time allows, use more than one person for this step to get a couple of different perspectives.

A content editor should look for the following things:

- ▶ Does the story tell the reader what they need to know?
- ▶ Is it understandable?
- ▶ Does it follow a logical sequence?
- ▶ Is the material supported by facts or an authoritative source?

If the answer to those questions is “yes,” the piece is ready to be edited for grammar and punctuation. If the answer is “no,” find out what changes are needed and make them before going to the next step.

For copy editing, choose someone who has good writing skills and who knows grammar and punctuation. One or two errors can undermine even the best story. Again, if possible, use more than one person.

A copy editor will look for the following things:

- ▶ Spelling
- ▶ Grammar
- ▶ Punctuation
- ▶ Sentence structure

This stage can be brutal if there are a lot of recommended changes. If so, don’t take it personally. Instead, focus on what it takes to get a quality final product.

A word of caution: Don’t rely heavily on computer spelling and grammar checks. They are *not* infallible (have you ever seen a “there” that should have been a “their”?) *Do* use a dictionary. Consider using a stylebook as well.

◆ Photo

This is the time when you look at your key photos and choose the absolute best – in quality, composition and reproduction. You want the overall piece to be powerful as well as informative.

- ▶ If you’re still missing a key element, look at your file of extra photos to see if something was overlooked the first time. If you still don’t like what you have and you didn’t get photos from your story source(s) during the research phase, consider doing that now.



Edits, corrections and re-edits can eat up a lot of time. Build a buffer for this into your timeline.

- ▶ Prepare the photos and/or negatives for the final format. If possible, have the negatives scanned by a professional photo shop onto a CD to get the highest-quality image and to make editing easier. If you just have prints, scan them into high-resolution (300 dpi or greater) electronic files.
- ▶ Next, do any needed fine-tuning. This could be cropping, resizing, color adjustments, or artistic enhancements like embossing or turning the image into a line drawing.

◆ Audio

- ▶ Again, decide what your final format will be – radio spots, Web site, audio for video, etc.
- ▶ Decide the length of the piece – a 30-second public service announcement (PSA), a five-minute feature story, or a series of soundbites.
- ▶ Choose the best quotes, regardless of the format – part of a video, a radio news or feature story, a PSA or a Web site. Here again, less can be more.
- ▶ If even your best quotes aren't that great, you still can create a strong overall piece. For a radio news or feature story, add powerful phrases before and after the quote to grab the listener's attention.

If the quote is part of a video, use strong visual images during that soundbite. Most people will tend to get caught up in the pictures and pay less attention to the words.

- ▶ If you need high production quality, you'll probably want to take the raw sound (and video if that's the case) to a professional studio for mixing, sound adjustment and post production.

You also can do the editing yourself. There are several basic sound-editing software programs available on the Internet, free of charge. Quality editing software is available both online and at retail stores.

◆ Video

Without question, well-done video stories can be enormously powerful because we live in such a visual world. Before proceeding with production, consider these points:

- ▶ Decide the approximate length of the finished piece before you begin editing. This can, of course, be adjusted along the way but you want to keep it within a usable time frame.

Note: If you intend for your video to be broadcast by a cable or local television station, check with them first for required time guidelines so that you're sure to have the right length.

- ▶ Fine-tune the script and/or music before you begin editing.
- ▶ If you use music, get the "rights" beforehand. Be prepared to pay for it. If you're on a tight budget, you can find inexpensive soundtracks on the Internet.

- ▶ Make clear to the editor what you want the final piece to be like or participate in the editing process. Changes after the tape is done can be complicated, time-consuming and enormously expensive.
- ▶ If you need to supplement your video footage, consider using slides or still photographs. As long as the image quality is there, a good editor can blend the photos with the footage and still create a good final product.
- ▶ Expect to pay approximately \$1,000 to \$3,000 per minute for a finished product. This estimate usually covers editing, producing and duplicating the final product. Other tasks such as shooting the raw footage, writing a script, and choosing music often are *extra!*

Approvals

Again, regardless of the format you choose, it's a good idea for key people to see the story before it's publicly released. This helps avoid unpleasant surprises and gives you another set of eyes to catch errors or inconsistencies.

If your agency has an approval process, use it. As a courtesy, consider getting the approval of other departments or agencies if the release of a particular story could impact them.

Also, consider having your source(s) read or view the story, especially if it involves a technical subject that you don't know well. This can help catch errors and ensure that your source is comfortable with the tone of the story.

When you circulate a story for approval, provide a deadline for when you need it back. Otherwise, your story could get lost in the shuffle of someone else's workload and your timeline is toast. ALWAYS keep a copy for yourself in case the one that's circulating gets lost altogether.

It's advisable to use a written sign-off sheet. This helps in two ways:

- 1) It documents that the story was, in fact, read (or seen, heard) and approved.
- 2) It helps you keep track of who has signed off on the story, who still needs to review it and any special instructions.

If you do get changes during the approval process, find out if the story needs to be re-routed for a second signoff. If so, make sure that happens – even if it costs you time. Generally, the good will this effort generates is worth more than the time delay.

When the fact-checking, editing and approval processes have been completed, your story is ready to be put into its final form. This is a good time to review it again to be sure that all the corrections have been made and that no new misspellings or errors have cropped up.

Develop a way to track your story through the approval process. That way, if it turns up missing, you know who had it last.

Creating a Finished Product

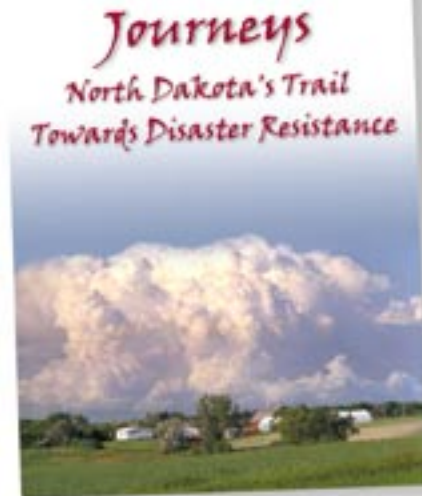
Now comes the fun part—creating a finished product. This is where you can really use your imagination to make the story or project interesting.

Good presentation – what your final product looks like—is really important. It should be neat and professional. That doesn't necessarily translate to big expense. You can do a lot just with typestyle and layout.

Print

If you can't use a graphic artist or designer, here are some basic things you can do to come up with a nice-looking print product:

- ▶ **Choose an interesting typestyle.** Try it out on the headline and at least one paragraph to be sure that it's easy to read. Also, make sure that the type size is big enough to read comfortably – in most fonts, this means using at least a 10-point size.
- ▶ **Consider using color** for the headline and any subheads. This provides emphasis and helps add visual interest. (It will cost more, though, so watch your budget.)
- ▶ **Add photos or graphics to break up the text.** A page with nothing but print lacks interest. One or two photos can really liven it up so pick your best shots. If possible, use comparative photos – before and after – to illustrate the point of the story.
- ▶ **Embrace white space.** Don't worry if you can't fill every square inch of the paper with text or artwork.



A little white space is OK – just make sure the page looks balanced.

- ▶ **Use a good paper stock.** Paper quality makes a difference in the overall appearance of your product. Use the best you can afford.

For more tips on print products, see *Getting the Best Printed Product* on page 52.

Photo

If you are using your photos for a storyboard or photo essay (lots of pictures, very little text), here are some pointers for creating your final product:

- ▶ **To generate interest, use both vertical and horizontal images** and vary the sizes. Be careful not to size a photo too small. You want it to be easily visible from across a room.
- ▶ **Don't crowd your images.** Allow some "breathing room" between photos. Often, less is more.

- ▶ **Choose a background color** that looks good with the majority of the photos. Black is always good. Royal or navy blue work too.
- ▶ **Consider having the photos dry-mounted** onto foam-core board before you put them on the background board. This enables you to change photos or rearrange the display without damaging the background.



- ▶ **Try varying the depth** of the photos as well. By adding a few scraps of foam-core board to the back of the photo, you can give it dimension and that can be very effective.
- ▶ **Look for good ways** to showcase your essay, such as floor-length or tabletop displays, easels, etc.

Video

- ▶ **Choose a format** that will accommodate the requirements of whoever is going to show your video.

For example, a cable television station may want a digital copy; your local television station may want a Beta master. Also, always plan to have some VHS copies as well. These work great for events such as public meetings or speaking engagements.

- ▶ **Get more than one copy** of the final product. Consider at least four or five cop-

ies of the digital, Beta or 3/4-inch format and more of the VHS format. For larger quantities, look for a video duplication service. They will charge a setup fee and a per-copy fee but usually it's reasonable.

- ▶ **Determine final presentation.** Will it be boxed? Is special artwork needed for the cover, or just titling and labeling? If you are already using a video duplication service, they should be able to handle these elements as well.

Audio

- ▶ **Select a format** that's compatible with your intended use. For example, a PSA for a local radio station can be put onto a CD. A quality video requires that the raw sound be integrated into the images digitally. For a Web site audio story or just a few sound-bites, the raw sound can be stored on your computer server and distributed over the Web.

Production Points

Be prepared to make a number of decisions when it comes to reproducing your final product—even if it's just one story.

First, have an idea of what you want the final product to look like, i.e., elegant, informal, flashy, etc.

Then consider the following points for each type of final product:

For a written piece, you'll need to decide:

- ▶ Size—both in dimension (6x9, 8½x11, 11x17) and approximate number of pages
- ▶ Quantity—number of copies
- ▶ Paper—color, weight, finish (glossy, matte)
- ▶ Color—black and white, one-color, two-color, three-color, etc.
- ▶ Binding method—stapled, saddle-stitched, side-stitched, perfect-bound, glue/tape, comb, wire
- ▶ Printing method—photocopying, digital imaging, offset printing
- ▶ Proofs—did you need or want them before the final printing is done?
- ▶ Cost—setup, per change, total quantity
- ▶ Turnaround time—how long will it take from setup through production?
- ▶ Delivery or shipping—mode and approximate cost (e.g., mail? UPS? FedEx? freight?)

Many of these decisions can be technical, so enlist the help of someone who has layout and design experience or who is familiar with printing methods.

For more tips, see *Getting the Best Printed Product* on page 52.

For a videotape, you'll need to decide:

- ▶ Format—Digital, DVD, Beta, ¾-inch, VHS
- ▶ Quantity—number of copies per format
- ▶ Dubbing capability—how many tapes can be done in what amount of time?
- ▶ Cost—per piece in each format
- ▶ Turnaround time
- ▶ Delivery or shipping

For a CD, you'll need to decide:

- ▶ Quantity
- ▶ Jewel case—do you want a cover? What is the design?
- ▶ Disc label—will there be one? What is the wording or design? (If so, you'll need to provide artwork.) How will it be attached (peel-off, screen-printed)?
- ▶ Dubbing capability—how many discs in what amount of time?
- ▶ Cost
- ▶ Turnaround time
- ▶ Delivery or shipping

Getting the Word Out

Now you're ready to promote your story or project. This is an essential element to the overall success of your effort. Be as meticulous here as you were in documenting and producing the story.

Developing a Strategy

You need a plan for getting the word out. This is where your work in determining objective, identifying audience, establishing a time frame, and creating a budget comes in handy.

Look at those same questions again now. Are the answers still the same? If not, redefine what's needed and readjust your strategy.

Remember, you can use a number of different techniques to promote your message, some simultaneously and some over time.

Determining Key Message(s)

Here's where you figure out *what* to say and *who* to say it to.

Basically, your key messages should:

- 1) Support the objective
- 2) Relate to the target audience
- 3) Promote the featured disaster-resistance measure
- 4) Promote the final product

Generally, one set of messages doesn't fit all target audiences. But you will be able to reuse certain key points in each set of messages.

Talking Points

A good technique for communicating key messages is to turn them into talking points, which are one- or two-sentence statements that highlight your main points.

Talking points have a lot of advantages. They can be used as a way to summarize your issue. They can help you focus on what you want to say. They can act as soundbites—short, usable comments that the media (especially radio and television) can use in a story.

Here are sample talking points for one scenario:

Objective: Instill public confidence

Audience: Community-at-large

Disaster-resistance measure: Water treatment plant has been fortified to keep it operational, even during flooding.

Promotion: Special event to mark completion of disaster-resistance work at the plant.



Talking Points: (from Mayor)

- ◆ As you all know, our community has suffered two major floods in the past five years.
- ◆ Both times, our water treatment facility on the riverfront failed when our sandbag dikes were overtopped.
- ◆ These failures have severely impacted our citizens and caused considerable expense for the city – both of which are unacceptable.
- ◆ To keep this from happening again, we have put in a number of measures that will better protect the plant the next time the river floods.
- ◆ Some of these measures include:
 - ▶ Raising electrical transformers above previous flood levels to make sure the plant won't lose power;
 - ▶ Having metal shields that will fit over the plant's doors and windows to keep water out;
 - ▶ Moving critical equipment out of the basement to higher floors;
 - ▶ Developing an emergency operations plan that will help us conduct a better flood fight;
 - ▶ Constructing an emergency clay dike if we need a secondary line of defense.
- ◆ We know that our community will experience future floods.
- ◆ But now, because of these disaster-resistance measures, we also know that our water treatment plant will function better the next time the river comes calling.

Creating Promotional Products

When you're ready to promote your disaster-resistance story or project, you'll need some products to support your efforts.

These could include:

- ▶ Copies of your story, book or video to hand out
- ▶ A press kit with a copy of your finished product and other materials that promote disaster-resistance, such as tips for homeowners and businesses on what they can do to better protect themselves
- ▶ A media advisory or press release
- ▶ A public service announcement – could promote disaster resistance in general or just be a teaser for your story
- ▶ A story brief – a one-paragraph version of your story that summarizes the main points. (This is especially useful if you're pitching to magazines or trade publications.)

Here's a sample brief, based on a story from *Journeys, North Dakota's Trail Towards Disaster Resistance*. (See the full story on page 58.)

Home Away from Home... and the River... Brings Peace of Mind

Cliff and Eleanora Arntz had lived in their Grand Forks, North Dakota, home for 43 years. They had raised their six children there. But when a devastating flood hit the city and their house in April 1997, the couple knew they

could never return. Not wanting to leave Grand Forks, the Arntz' voluntarily sold their flood-ravaged home to the city and moved to the west edge of town – far from the river that swallowed their entire neighborhood. Now, the couple says, they feel safer because they no longer live in harm's way.

How to Get the Word Out

There are countless ways to promote your story or project, so choose the methods that work for you and that fit your strategy. The goal should be to talk about it as often as you can in as many places as possible – especially if your objective is to encourage others to embrace disaster resistance and to take action.

Media Pitching

Getting media coverage of the disaster-resistance measure featured in your story is one of the best tools available. The media can reach a large audience and can put a face on disaster resistance. A media outlet also can be a good potential partner in your ongoing effort to promote disaster resistance in a community, state, region or nationwide.

Before you approach a media outlet, do your homework.

- ▶ Know who the key managers are, what their story deadlines are, when they hold story-planning meetings, etc.
- ▶ Decide what you want the end result to be. Is it a front-page story? Is it a business-section



feature? Is it time on a Sunday public affairs program? Is it time on a call-in radio show?

- ▶ Based on the end result you're looking for, identify the best person to meet with. Is it the editorial page editor? Business section editor? Television assignment editor?
- ▶ Figure out your "hook" – what you're going to say to get them interested in doing a story.

At your meeting with that media outlet, use your hook. Describe how they can help promote your topic and why it would make a good story.

Gear your conversation toward the desired result, e.g., “This could make a great story for your business section because...” It’s better to let the media outlet decide how they want to use your story but you want to be ready to make a suggestion if they ask.

Be able to provide information that can help them do the story – contact names and phone numbers, etc.

Other Venues

Aside from the news media, you also can get the word out through:

- ◆ **Business groups** – such as chambers of commerce, businesswomen’s groups, tourism committees and economic development councils
- ◆ **Service organizations** – such as American Red Cross, Salvation Army, Rotary, Kiwanis, Masons and scouting organizations
- ◆ **Social organizations** – such as quilting clubs, church organizations, neighborhood associations and fire or police department auxiliaries

- ◆ **Professional associations** – such as emergency managers, bankers, realtors, floodplain managers, contractors, engineers, firefighters and peace officers
- ◆ **Web sites** – such as those belonging to businesses, news media, community organizations, governmental agencies and educational institutions.
- ◆ **Specialty magazines** – such as *Midwest Living, Lawn & Garden* and *Preservation* magazine
- ◆ **Trade publications** – such as *Firehouse, Architectural Record* and *American City & County*
- ◆ **Trade shows**
- ◆ **Business fairs**
- ◆ **Home & garden shows**
- ◆ **Special events**

For ideas on how to promote your project, see **25 Ways to Promote Disaster-Resistance Projects** on page 56.

Avoiding the Information Avalanche

You've found a great story, you've created a dynamic product, and you've successfully promoted disaster resistance. Now it's time to clean up after the guests have gone home.

Information Management

No doubt, you've accumulated materials and documents in the course of doing your story or project. Now you need to decide what to keep and how to organize it.

Those decisions boil down to a judgment call. Some agencies have certain requirements for records management; others just have recommended practices. Follow your internal policies first, then do what you think is important.

Note: You'll want to keep whatever is needed to back up your work and serve as a point of reference later in case someone wants more information, e.g., a magazine calls to get names and phone numbers so they can do their own version of your story.

With that in mind, here are some suggestions:

What to Keep

- ▶ One or two copies of the finished product
- ▶ Negatives, slides, contact sheets, key prints
- ▶ Interview notes
- ▶ Key supporting documentation such as maps, financial figures for the story
- ▶ Names, phone numbers, fax numbers, e-mail addresses of key contacts/information sources

- ▶ Story leads list
- ▶ Story sign-off sheet
- ▶ Interview/photo authorizations, if used
- ▶ Budget
- ▶ Receipts for expenses (unless those need to go to your agency's finance staff)

For at least a short time after you release a story, keep the edits in case there are questions.

You might also want to keep a separate file with items that you could use to do your project again. This would include things like your story leads list, planning notes, budget, checklists and promotional ideas.

How to Organize Your Stuff

Choose a method that quickly and easily puts key data at the fingertips of anyone who wants it.

For your notes and background material, a real space-saving idea – especially if most of your files are electronic – is to copy everything onto a compact disc. Otherwise, a three-ring binder with dividers is an easy, low-cost option that keeps everything in one place.

Consider creating electronic databases for your story leads and/or your finished product so that you can quickly retrieve information. There are a number of software programs that can help with this. Choose one that is easy to use and that allows you to continually add new information.

Telling the Tale in a Disaster

Disasters provide an excellent opportunity to measure the effectiveness of efforts to reduce or prevent damages. They also can reveal opportunities for new projects.

If you want to promote projects during disaster response and recovery, here's a quick checklist that can help you cover the bases:

Before a disaster

Do as much prep work as possible so you can quickly hit the ground running and take advantage of media coverage and high public interest.

Consider these steps:

- ▶ Decide what kinds of stories you would want to promote—Hazard Mitigation Grant Program projects? Individual mitigation? Infrastructure? Or a variety of types?
- ▶ Determine the audience and how you're going to promote the stories—written, photos, video.
- ▶ Geographically identify high-risk disaster areas.
- ▶ Look at disaster-resistance efforts that have been done in those areas (for example, projects funded by individuals, businesses, communities, states, FEMA, and other agencies).
- ▶ Are these efforts complete? Have they already been “disaster-tested?”
- ▶ Gather background information on these projects—at a minimum, a list of leads that includes location, address, type of project, when it was done, sponsoring agency, contact name and phone number. Look for photos as well.
- ▶ Assemble the information so that it's ready to go— one central list, a file folder, a computer disk or CD.
- ▶ Identify key media outlets you would want to contact as soon as you have a story (names, phone numbers, etc.)
- ▶ Add all of the above to the “first-out” materials you take on a disaster.



During a disaster

If conditions allow, take advantage of the event to document what's happening.

- ▶ Get someone to physically check the key sites throughout the event. Have them take notes, photos or video. This is probably the most critical time to get visual documentation of disaster-resistance measures.
- ▶ Make a preliminary list of the projects you want to feature (consider including some that didn't work) so you can check these sites again as soon as the event is over. If you have several, prioritize the best ones.
- ▶ Monitor disaster situation reports. This can help you with story leads by identifying good things as well as problem areas.

After a disaster

Be prepared to start the story process as soon as possible. The best window of opportunity to promote your projects can be narrow and you want to get in before it closes.

- ▶ Get buy-in for the documentation project from all key players before you begin.
- ▶ If you weren't able to gather information in advance, have someone start doing this as soon as possible. Use your local, state and federal emergency management sources. If they don't have enough to get you started, ask them for ideas of where to go next.
- ▶ Simultaneously, formulate a plan for your documentation project.

Include the objective, audience, format (press release, feature story, etc.), reproduction method and distribution mechanism.

- ▶ Assign at least one person to do nothing but the documentation project – at least initially. To be thorough and fast, they'll need to work on it full time.
- ▶ Prioritize the project(s) you want to feature.
- ▶ Begin documentation – site visits, research, interviews, taking photos, etc. The site visit is very important – *don't skip this step, especially after a disaster!* You want to know the project worked and be able to pick up on any potential issues before you go public with it. Also, be sure your story sources are agreeable to having their information released to the public.
- ▶ The fastest way to promote a project is to pitch it to the media and let them do the story (otherwise, *you're* spending time on interviews, photos, approvals, etc.) Do not, however, pitch this to the media before you have checked the site and verified your background information.
- ▶ In the meantime, consider doing your own story as well – you probably will want this for other uses down the road.
- ▶ Once you have a draft, run it through the editing and approval processes before it's released.
- ▶ Reproduce and distribute.

Appendices

Leave No Stone Unturned

Common Sources for Story Leads

The following lists identify the most common sources for story leads. Exact agency names will vary depending on the locality or state.

Local level

- ✓ Emergency management office
- ✓ Mayor/City Manager
- ✓ City Council/Board of Alderman
- ✓ City or County Clerk
- ✓ Floodplain Manager
- ✓ Public works department
- ✓ Street, roads or highway department
- ✓ Planning department
- ✓ Building inspections department
- ✓ Fire department
- ✓ Parks department
- ✓ County extension services
- ✓ Health department
- ✓ Schools, colleges and universities
- ✓ Hospitals
- ✓ Chamber of commerce
- ✓ Economic development councils
- ✓ Historical society
- ✓ Homebuilders' association
- ✓ Trades professionals such as contractors, plumbers, electricians, etc.
- ✓ Philanthropic foundations (commonly provide grants for special projects)
- ✓ Private non-profit organizations
- ✓ Schools, colleges and universities

State level

- ✓ Emergency management office
- ✓ Governor's office
- ✓ Transportation department

- ✓ Fire marshal (in some states, this could be part of a public safety department)
- ✓ National Guard
- ✓ Forestry department
- ✓ Natural resources department
- ✓ Game & parks department
- ✓ Health department
- ✓ Environmental protection division
- ✓ State historical society
- ✓ League of municipalities
- ✓ Professional trade associations

Federal level

- ✓ U.S. Dept. of Homeland Security (DHS)
- ✓ Federal Emergency Management Agency (FEMA)
- ✓ U.S. Small Business Administration (SBA)
- ✓ U.S. Department of Housing & Urban Development (HUD)
- ✓ U.S. Department of Commerce/Economic Development Administration (EDA)
- ✓ U.S. Department of Defense/Department of the Army/U.S. Army Corps of Engineers
- ✓ U.S. Federal Highway Administration (FHA)
- ✓ U.S. Department of Agriculture (USDA), including Natural Resources Conservation Services (NRCS) and Farm Service Agency (FSA)
- ✓ U.S. Department of the Interior – including U.S. Geological Survey (USGS) and National Park Service (NPS)
- ✓ U.S. Fish and Wildlife Service
- ✓ National Weather Service (NWS)

Keep in mind other resources can found among non-profit organizations, such as the National Historic Trust for Preservation, and voluntary agencies, such as the American Red Cross, the Salvation Army, etc.

Questions You Can Ask for Disaster-Resistance Stories

The PEOPLE

- ▶ Name
- ▶ Street address
- ▶ City/State/Zip
- ▶ Phone
- ▶ Date of birth for story subjects (this helps you determine accurate age, especially if story doesn't run for awhile or needs to be updated)
- ▶ Occupation (if retired, previous occupation)
- ▶ Family info—Number of children, pets, grandchildren

The HOUSE/BUSINESS

- ▶ Description of the structure (color, number of stories, number of bedrooms)
- ▶ How long have they lived in the house or worked in the business?
- ▶ Did they build the house/business?
- ▶ Type of business, number of employees, how long in business, etc.

DISASTER INFO

(Note: For this section, it's important to get as many direct quotes as possible because you want people to paint the picture in their own words.)

Past Disasters

- ▶ Have they sustained disaster damage in the past?
- ▶ If so, when?

- ▶ From what type of event?
- ▶ Did any physical injury result from the event?
- ▶ What sights, sounds, smells do they remember from that disaster?
- ▶ Did they lose family treasures? Important business documents or inventory?
- ▶ What was the worst part of the disaster?
- ▶ What kind of mark has the disaster left on them (sad, fearful, determined to be better protected)?

Current or Recent Disasters

- ▶ Get them to describe the disaster itself—flood, severe storm, earthquake
- ▶ What was it like to watch/hear news accounts of the event? (Note: Get them to describe the emotional feeling as the floodwaters rushed through town or tornadoes bounced about or power lines broke under the weight of snow and ice...)
- ▶ What did they do during the storm? Where did they go to ride it out?
- ▶ Was their home/business damaged?
- ▶ Were neighboring homes/businesses also damaged? Who are the contact people for more information on that damage?
- ▶ Why was this disaster different?

MEASURES THEY PUT IN PLACE

- ▶ What convinced them to make changes to their home/business?
- ▶ When did they do it?

- ▶ What did they do? (*Note: Get specific – e.g., how far off the ground did they elevate, how much dirt was hauled in, etc. Remember, no action is too small or insignificant to find out about. You can always decide later whether to include it.*)
- ▶ What kind of building materials did they use?
- ▶ Did they use a contractor to do the work? If so, get name and phone number to contact for additional technical information (or for other clients who've done things as well).
- ▶ Did the work require permitting or compliance with certain local ordinances, such as floodplain development?
- ▶ Did they encounter difficulties along the way? If so, what were they and how were they resolved?
- ▶ How much money did they spend to make modifications?
- ▶ How did they pay for it – loans, grants, savings?

FUTURE IMPACT

- ▶ Now that they've taken action(s), do they feel better prepared for future disasters? How?
- ▶ What lessons have they learned from the disaster/rebuilding experience?
- ▶ What advice would they give to others in their situation?
- ▶ Has the action(s) given them better peace of mind in the event of another disaster?
- ▶ Do they expect to realize a financial benefit/savings by adding disaster resistance measures? Is that savings over-and-above what they spent on the measures?

Lights, Camera, Action

Photography can be both fun and challenging. A lot depends on what you know, what kind of equipment you have and what you're trying to accomplish.

Here are some points to ponder:

Camera—film or digital?

Film cameras

Advantages: Generally cheaper than digital; can give you more creative images by using a variety of lenses and filters.

Disadvantages: Film has to be processed and then scanned into a computer.

Digital cameras

Advantages: More compact than a film camera; produces instant results; images can immediately be transferred to computer.

Disadvantages: At present, still more expensive than film cameras. Image quality is not as good as with film or slides so keep this in mind if you're using offset printing methods. Need at least 300 dpi at required image size. Otherwise, your photos will have to be small to maintain clarity.

Film

Types available, speeds, care and handling

Print film (negative)

Advantages: Can be easily and quickly processed almost anywhere.

Disadvantages: Most consumer-quality prints are not very high quality.

Slide film (transparency)

Advantages: Printers' color separations are generally higher quality because slides are sharper and have greater tonal range than consumer-quality prints.

Disadvantages: Consumer outlets (grocery or discount stores) may take longer to process slides—professional labs usually can do it within an hour. Slide scanners for home/office use are more expensive than standard flatbed scanners.

Film speed

This refers to the sensitivity of the film to light, and is indicated by an ASA number. Slower speeds, such as 50 or 100, will produce a very high resolution, high-quality image but are only useful in bright daylight or with a very powerful flash. High-speed film (400–800 ASA) has a larger "grain" pattern, which can be very visible and will make the photo look granular and fuzzy. These speeds can be used on dark, overcast days and will produce good results indoors with small flash units. The closest thing to a universal film is 200 ASA—a good compromise between quality and speed.

Care and handling

Avoid exposing your film to heat and sunlight. Leaving film and your camera in a hot car is tempting—especially when you're on the road.

But on a summer day, the interior of a car can reach 150 degrees, and it doesn't take long for the undeveloped film to start fading and turning yellow. Carry your camera and film with you until you can leave them somewhere indoors.

Lighting

Natural outdoor lighting is the type you'll most commonly use. In bright sunlight, use a "fill flash" setting on your camera if you have one to lighten the shadows. If you have to photograph someone with the sun behind them, put your flash on the appropriate setting (see your instruction manual) to avoid losing their face in shadow.

Avoid taking pictures of people in the shade on a sunny day with few clouds. Although your eyes compensate for it, camera film sees things exactly as they are. If a person stands in the shade on a cloudless day, his/her face will appear bluish on film (this is because the face actually is illuminated by the blue sky, not by the sun). A flash will compensate for this, as will some white clouds in the sky or a white wall.

Indoor lighting – Most cameras have an automatic flash setting, so use it. Keep in mind that fluorescent lighting will give a greenish or bluish cast to a picture and if bright enough, it can even overpower a camera's flash unit. Take indoor pictures in a room with sunlight coming through windows to reduce the color shift of fluorescent lights.

The Golden Rule:

Shoot lots of pictures—more than you think you could ever use. A photo can be ruined by so many things you won't notice until it's too late—people blinking, looking off-camera, something distracting in the background, etc. Remember, in the grand scheme of your project, film is cheap.

Getting the Best Printed Product

You've been introduced to a number of the decisions needed to produce a book (see *Production Points*, page 37). Here are some additional points to help you get the best print product.

Cost Considerations

A number of factors can affect the cost of producing your publication and, ultimately, your bottom line. These include: number of pages; weight of paper, including cover; trim size (size of paper for finished product); number of photos; number of ink colors; quantity of books; printing method. Again, decide what you can afford.

Printing Methods

There are several ways to print your final product, depending on its size and specifications. Here's what you want to know about those methods:

- ▶ **Photocopying** – High-speed copiers can do short-run books economically but the quality is not equal to other printing methods. All copiers can work from a hard-copy original; some will be able to accept electronic files as well.
- ▶ **Digital imaging** – Uses a sophisticated high-speed color photocopier. The original can have any amount of full-color photographs and artwork. Offers quick turnaround and better cost-effectiveness for short-run jobs. Needs an electronic file for the original.
- ▶ **Offset printing** – Uses a press with plates made from negatives or from a computer-driven laser onto a light-sensitive drum. Needs an electronic file for an original. This is more expensive because of the needed prep work and the high-tech machinery. Usually most cost-effective for 1,000 or more copies.

Binding Methods

How are you going to join all the pages? There are several choices to consider:

- ▶ **Saddle-stitched or saddle-stapled** – Commonly used for magazines such as *Time* or *Newsweek*, this method staples or stitches on the spine from the outside inward. An inexpensive method, especially for large print runs; best suited for a thinner book.
- ▶ **Side-stapled** – Staples are inserted from the front cover through to the back. Not as common as saddle stitching, but it can accommodate thicker books.
- ▶ **Perfect bound** – Used for paperback books, this method has a glue binding; creates a very professional look.
- ▶ **Glue/tape binding** – This binding wraps over the spine and onto both covers. A good method for smaller quantities; can be done by local photocopy shops.
- ▶ **Comb binding** – The teeth of a plastic spine are inserted through rectangular holes punched in the pages. Inexpensive for short runs; main advantage is that the book will lie flat when open.

- ▶ **Wire binding** (also known as spiral binding, coil binding and Wire-O binding) – A coiled spiral of wire is wound through small, round, punched holes. Again, the book can lie flat when opened or be folded back onto itself for handy use.

Selecting a Printer

- ▶ **Know what you want the final product to be prior** to choosing a printer. Some projects may be beyond a printer's capabilities and you'll need to find that out before deciding which company to use.
- ▶ **If a bid is required, start early** and provide as much detail about the final product as possible. This improves your chances of getting an accurate bid and lets you know approximate cost before proceeding. There's no sense in continuing with a project you can't afford.
- ▶ **Ask to see samples of their work** and/or references involving similar projects.

Once a printer is chosen

- ▶ Discuss your project in greater detail. The printer will be able to recognize potential pitfalls and help you deal with them before problems arise.
- ▶ Make sure you understand what factors will constitute cost changes beforehand. For example, if you order more than one proof, is there a charge? If you change a photo or copy text once it's been set, is there a charge?

- ▶ Ask your printer what software program(s) he/she prefers to work with. Some printers still can use hard copy or camera-ready art, but most work now is done from computer files. You don't want to submit your final product in a format the printer can't use.
- ▶ Ask about getting a proof of the product for a final sign-off. A printer should be willing to do this – quantity, types of proofs, and costs should be agreed upon before the printer begins work.
- ▶ Deliver all needed components – page layout file, fonts, and all scanned photos and computer illustrations – when you're ready to begin production. The preferred format is TIF because it contains all the digital information (this is the best file format for photos). Another common format is JPG but be careful if you use this format. A JPG is a compressed file and if a user repeatedly opens and re-saves information, the file can lose quality.

Other considerations

- ▶ **Graphics** – If you use photos in the book, make sure the resolution is high enough to produce quality halftones. The general guideline is 300 dots-per-inch (dpi) scans for a halftone screen of 133–150 lines-per-inch (lpi). Check with your printer for more details.

If you create graphics on the computer, save them in a TIF or EPS format. These formats can be easily and accurately imported into your page layout program.

Making the Most of Your Contractor

Hiring a free-lance professional to capture your disaster-resistance stories can be a real benefit. Or, it can be a real disaster. A lot depends on how prepared you are to hire the right person and to help them give you their best.

Here are some hints for making the most of your contractor.

Determine what you need

- ▶ Who are you trying to hire—writer, photographer, editor, etc.?
- ▶ What skills do you want them to have?
- ▶ How long do they need to be available?
- ▶ How much money can you spend? Will you pay expenses in addition to their professional fee, or are you including those in the total cost?
- ▶ Do you want to use a written contract? If so, have that ready before you start looking.

Strike the right match

- ▶ Where do you find someone?
 - Check with local media (sometimes reporters will free-lance)
 - Communications companies
 - Colleges and universities
 - Local or state economic development agencies (they often use writers and photographers for tourism brochures)
 - Ask your colleagues. Have they used someone? Was the work well done?

- If there's a specific project someone else has done that you like, find out who did it.
- ▶ Know the process required to hire someone. Do you need to advertise, or can you find someone through other agencies or communities that have used a free-lance professional?
- ▶ Ask to see a variety of work samples, regardless of their specialty (writer, photographer, videographer). Is the work thorough, well done? Do you like the style?
- ▶ Ask for references from former clients.
- ▶ Call those references. Ask about the quality of their work, how well they got along with people, whether they were able to meet deadlines.
- ▶ Consider a face-to-face interview. Involve those who will be working with the contractor to see how everyone gets along.
- ▶ Tell them what the project entails and ask if it falls within their expertise.
- ▶ Ask for their salary requirements.
- ▶ Tell them what you can provide—work space, camera, computer, etc.
- ▶ Tell them what they need to provide—car, any equipment, etc.
- ▶ Give them the project timeline—ask if they can meet it.

Provide clear direction

- ▶ Tell them your expectations for the project—scope, deadlines, finished product—and where they fit into the picture. Are you expecting the Great American Novel or Pulitzer Prize-winning photo? If not, say so.
- ▶ Give them the tools to do the job. Provide any necessary background, contact names and phone numbers.
- ▶ Set deadlines. Consider establishing periodic checkpoints, e.g., weekly, biweekly, to review the work so that you know it's still on track.
- ▶ Communicate with them in writing via e-mails, notes or letters. This helps them stay focused and helps you remember what direction you've been giving.
- ▶ For the final product, make sure they deliver it in a format that you can use, e.g., on paper, disk, CD, camera-ready, correct type of videotape, etc. It doesn't do you any good if they provide something that isn't compatible with your system (especially when it comes to types of software).
- ▶ In the case of a photographer, decide who keeps the negatives.

Pave the way

- ▶ Give them a “point person” for the project who they can call with questions, problems, or for further direction.

- ▶ If appropriate, call ahead to key contacts and make an introduction, e.g., “a writer who's working for us will be calling you about...” This lets your source(s) know that the writer has your endorsement to do the work and gives them time to pull together information ahead of an interview.

Provide feedback

- ▶ Let your contractor know how they're doing along the way. Are they on the right track? Are they talking to the right people? What do you think of the work so far?
- ▶ If you don't like what they're doing, tell them that too. It's a waste of their time and your money if you don't get what you want.

Follow up at the end

- ▶ Do an exit interview with your contractor when the project is completed. Tell them what went well and, if you want to, what things could have gone better.
- ▶ Arrange to get a “facts file” of pertinent information—names, phone numbers, key documents, etc. before they leave so, if necessary, you can defend the information long after they're gone.
- ▶ Be willing to write a letter of reference if you were satisfied with their work.
- ▶ Provide them with at least one copy—more if you can spare them—of the final product.

25 Ways to Promote Disaster-Resistance Projects

The real-life examples of disaster resistance featured in your story, photo essay, book or video can be emphasized in conjunction with a variety of events and activities.

Here are some ideas:

- ▶ Launch a media tour to generate news coverage of the disaster-resistance example(s) you've found.
- ▶ Create a press event – ribbon cutting, celebration party, etc. at the site of a disaster-resistance project.
- ▶ Feature a house with disaster-resistance measures on a homes tour.
- ▶ Sponsor a booth at a county or state fair. Hand out copies of your story and other disaster-resistance materials.
- ▶ Create a photo essay showing the steps featured in one story.
- ▶ Adapt your story to a school-age audience – then tell the tale to a classroom of children.
- ▶ Partner with hardware or home-improvement stores on a how-to workshop of disaster-resistance ideas.
- ▶ Develop a “road show” about your story that can be used for speaking engagements. Include visual elements such as photos or PowerPoint®.
- ▶ Get a disaster-resistance proclamation from local or state officials – use your story with the proclamation to convey the message.
- ▶ Promote a different disaster-resistance idea each month – use your stories as examples.
- ▶ Submit a story to local, regional or national magazines.
- ▶ Launch a “Safe Business” campaign to encourage disaster-resistance action within business communities. Feature a business case study.
- ▶ Sponsor a coloring contest that features disaster-resistance ideas. Then, put the winner on a billboard.
- ▶ Get your story on related Web sites – government, public safety, lawn & garden, home remodeling, business, etc.
- ▶ Get a radio station to do a live remote at the site of a disaster-resistance project you're featuring. Arrange for giveaways or money-saving coupons on building supplies to those who visit the site.
- ▶ Encourage fire service agencies to incorporate disaster-resistance into their public-education campaigns.
- ▶ Partner with meteorologists to incorporate disaster-resistance ideas into their weather-casts and special severe weather awareness programs.

- ▶ Enlist the help of law enforcement agencies in promoting disaster resistance.
- ▶ Create displays that feature your stories – put them in high-traffic stores throughout town.
- ▶ Use your stories during disaster recovery to promote damage-prevention ideas as part of the rebuilding.
- ▶ Give awards for homeowners, businesses, neighborhoods or communities that undertake a certain number of disaster-resistance projects.
- ▶ Encourage PTAs to take on a disaster-resistance project for a local school.
- ▶ Launch a community effort to preserve historical properties by using disaster-resistance measures.
- ▶ Arrange for a school newspaper to do a story on one of your projects.
- ▶ Use your stories in conjunction with special campaigns or events – e.g., “Severe Weather Awareness Week,” “Fire Prevention Week,” “Safe Kids Week,” etc.

Home Away from Home...

and the River...

brings Peace of Mind

Cliff and Eleanora Arntz no longer worry about losing their home to another flood.

They've moved far away now from the river that took the house in Grand Forks, North Dakota, where they had lived for 43 years and raised their six children.

In some respects, the move was hard, they say. They lived in an older, quiet, tree-lined area known as Lincoln Park. They had good neighbors. Cliff was especially proud of his evergreen trees. Eleanora's favorites were the apricot and walnut trees. And, after all, it was their house.

But in 1997, the Red River of the North took the house and the neighborhood they'd loved away from them. The river, a mere block or two away and behind an earthen dike, had gotten into the neighborhood three or four times over the years. Even so, water had never entered the Arntz' story-and-a-half house. Not even in the basement, Eleanora says firmly. When the river crested at 54.3 feet, water was up to the middle of the attic windows.

Because of that single flood event, Cliff and Eleanora, both 79, say they wouldn't live there again even if they could have saved their home.



Cliff and Eleanora Arntz feel safer now in their new home away from the river.

“To go back down there now, I'd be more afraid,” says Cliff. “Here, I have no qualms about a flood any more. We are far enough away that we never should be bothered again.”

The Arntzes were the first Grand Forks residents to accept a voluntary buyout of their flood-damaged

The Arntz's home for 43 years succumbs to floodwaters in April 1997. Cliff Arntz says when he saw this scene, he knew they'd never be able to go back home. Photo courtesy of Cliff and Eleanora Arntz.



property. The buyout of their entire neighborhood was funded with about \$12.5 million provided by the Federal Emergency Management Agency and about \$1.7 million from the State of North Dakota. The buyouts are part of a hazard mitigation grant program that provides federal and state money to projects that will reduce or prevent future disaster damages and eliminate the need for disaster-recovery funding.

New house, new home

Seven months after the flood, Cliff and Eleanora moved into a new house, in a new neighborhood that the city built to help relocate residents displaced from Lincoln Park and other flooded areas. It wasn't a hard choice to make, they say.

"The first time we saw the [old] house was a week after the crest," Cliff remembers. "The biggest share of it was still filled with water. The garage was still almost submerged. We knew we would never go back down there."

After the water subsided, they found that the house had shifted slightly off the foundation. Inside, there was about a foot of soggy insulation from ceilings that had

collapsed. Every possession they hadn't gotten out at the time of the evacuation was water-soaked or caked with sludge.

The couple feels fortunate to have been able to choose a buyout. They wanted to stay in Grand Forks. For both of them, long-since retired, the thought of starting over with a mortgage and living on Social Security was daunting. But with their buyout proceeds, their savings, money from fundraisers by family and friends, donations and gifts, they were able to buy their new \$110,000 house free and clear.

In all, about 350 flood-ravaged properties in their old neighborhood were voluntarily sold to the city. Another 249 properties, farther from the river but still in the floodplain, were bought out, too. The structures have since been demolished, leaving green space behind. According to the terms of the buyout, the land must remain open and undeveloped forever.

The old neighborhood is still quiet. Cliff still likes to visit his trees. But he also likes to go back at night to a home where he knows he is safe. For the two of them, life is still good.



Demolition was the best option for the Arntz's flood-ravaged home. The couple was the first to voluntarily sell their home to the city. Under the terms of the buyout, the land will forever remain as open space. Photo courtesy of Cliff and Eleanora Arntz.

Fargo Works to Build a Disaster-Resistant City

When a devastating flood hit Fargo, North Dakota, in 1969, it left a pretty strong calling card.

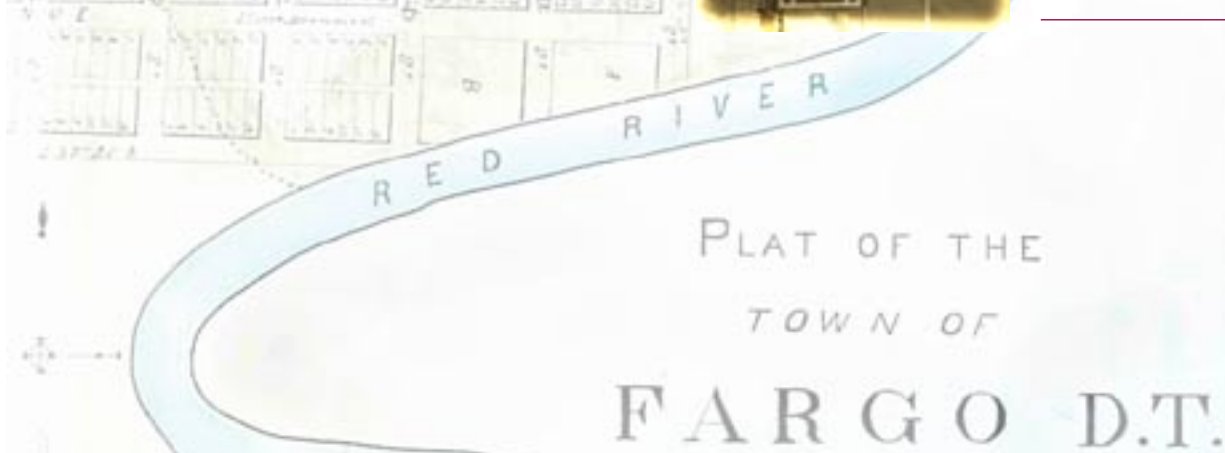
The message on that card was clear. Either give up your city to nature's whims or find a way to coexist with an often unpredictable river.

Fargo city officials weren't about to give in. Instead, they looked at the problem in earnest and set off on a journey that's been going strong for more than 30 years.

Their quest is to build a disaster-resistant city—a place where citizens and businesses not only can survive but thrive, even when Mother Nature has different ideas.



Piece by piece, Fargo has been building a defense to keep the Red River at bay during times of flooding. One day, city officials say, the river will just pass them by. FEMA photo by Andrea Booher.



The city has accomplished a lot in that period of time. Flood-control systems have been put in the place. The city's infrastructure has been shored up, rebuilt and newly built. Building codes have been upgraded. Residential structures in harm's way have been removed. Risk assessments and disaster planning have been continually refined. Public education about disasters and damage prevention is ongoing.

Step by step, piece by piece, Fargo is doing more than standing its ground. In many ways, the city is on the leading edge of smart growth and community viability.

What is perhaps most noteworthy about Fargo's efforts is the sheer tenacity the city has displayed in the face of repeated disasters. While the 1969 flood was one of the worst on record (the oldest was in 1882), it hasn't been the last. The city was hit again by river flooding in 1975, 1978, 1979, 1984, 1989, 1993 and 1997.

There have been other disasters, too. Eight blizzards and five winter storms in 1996–97 dumped a whopping 117 inches of snow on the city, contributing to its highest river level yet. On the Fourth of July 1999, damaging straight-line winds left tornado-like destruction in residential and commercial areas. In June 2000, about 7 inches of rain fell in seven hours, producing localized flooding. Fargo's annual rainfall is about 20 inches; a 100-year rain event is 5.5 inches in 24 hours.

It's enough to leave any city reeling. And yet, after each disaster, city officials have faced the good and the bad head-on. They've learned lessons and adjusted their short- and long-range strategies—all with the end goal of creating a safe and prosperous community.

The Problem

Fargo was born with some inherent challenges. It is located on the banks of the Red River, a northward-flowing river that begins in the southeastern corner of the state and ends in Lake Winnipeg, Canada. The river basin actually is some 45,000 square miles — 47 percent of which is in North Dakota.

When winter comes, the river freezes. When spring arrives, the river's headwaters in the south melt first. Because the northern reaches of the state thaw later, the river melts flows head-on into still-frozen conditions. When the river hits that ice barrier, it can overflow its banks and spread out for miles.

Secondly, Fargo was built on what was once the bottom of Lake Agassiz, an ancient glacial lake that encompassed much of North Dakota and some of Minnesota and South Dakota during the Ice Age. As a result, the city's terrain is flat — in fact, really flat. From the north edge of Fargo to its southern end — about 13 miles — there is only about a 10-foot difference in the elevation. Consequently, natural runoff is inhibited.

Spring snowmelt accounts for much of the rise in the Red River, which also is fed by a number of smaller tributaries. Also, heavy rains can quickly trigger localized flooding, which is exacerbated by the level land and by impervious clay soils.

So what does a city do when factors this big are relatively impossible to change? It finds ways to work with the hand it's been dealt. Here's a look at some of what Fargo has done to fortify itself against the effects of disasters.

The Solutions

Fargo has put in a number of structural and non-structural measures that work both singly and collectively to help the city reduce the impact of disasters.

◆ Permanent Flood Control Structures

Creating flood barriers is one of Fargo's most important floodfighting weapons, given that the flat terrain can cause 1 foot of water to spread a mile. Therefore, it is imperative to guard the city's perimeter against advancing floodwaters.

Fargo built one of its first lines of defense — a dike — in the mid-1960s. First constructed near the downtown business district as a floodfighting measure, the city has worked to make the mile-long earthen structure a certified and permanent means of protection.

Since then, the city has constructed additional flood-control barriers whenever and wherever possible. The barriers include floodwalls, more earthen dikes and a residential landscaping program where home-

owners along the river get a financial incentive to raise their backyards to a level even with another nearby city dike.

Now, a large portion of the city's boundary is protected by some kind of flood-control structure. The result has been better-protected homes, businesses and critical facilities, like the city's \$68 million water treatment plant, as well as reduced floodfighting costs.

◆ Property Acquisition

Fargo had a number of homes along the river and, predictably, they flooded over and over again. Many of them were either adjacent to a floodway or in an area that couldn't be defended.

After the 1997 event, residents in five flood-damaged neighborhoods were given the option to voluntarily sell their properties to the city. Fargo purchased 82 properties at a cost of about \$6.2 million and demolished the structures. (In 1997 alone, those properties had sustained about \$2.1 million in damages. About half that cost, or approximately \$1 million was spent on the more than 3 million sandbags that were used to fight the flood).

Now, those properties are open space and most are permanently deed-restricted to prevent future building. Since the acquisition program began, the city has purchased 88 flood-prone properties, saving homeowners emotional and financial costs, and the city repeated floodfighting costs.



A backup generator enables this lift station (brick building) to operate during a power outage.

Also, the city is negotiating with the owners of high-risk properties who didn't want a buyout to obtain a right-of-first-refusal. That would give the city first option to buy the property whenever it's offered for sale. In those cases, too, the structure(s) would be demolished, creating more open space. To date, the city has recommended purchase agreements on 20 properties.



Fargo Public Works Director Dennis Walaker stands among newly planted trees, designed to grow into a living snow fence. The natural fences are built by planting rows of trees and shrubs that, when mature, will reduce drifting and blowing snow from piling on nearby roads. For more than 30 years, Walaker has helped guide the city's efforts to become more resistant to many kinds of disasters. FEMA photo by Andrea Booher.

◆ Infrastructure Improvements

The city's **storm sewer system** has been improved to ensure that it remains operational during floods. To do this, the city has installed protective gates to prevent backup, and built 10 new lift stations to improve pumping capacity. The city now has a total of 56 such lift stations, 20 of which are directly related to flood prevention.

Normally, rain and snowmelt run off into the sewer system and gravity flows to outlets that discharge into the river. When the river level gets higher than the outlet, stormwater can't drain out. The lift stations then take over and actually pump or "lift" the water through pipes to a higher outlet that empties into the river. The

protective gates automatically close when the river level meets the outlet, preventing the Red from backing up into the system and causing an overload.

Backup electrical generators have been installed at six of 19 sanitary lift stations and four key city facilities to provide uninterrupted service if Fargo's power supply is compromised for any reason. Portable generator units or emergency pumps are available for those lift stations that do not have permanent generator backup power. The diesel-powered units, initially added in 1999 to handle any Y2K-related emergencies, ensure that the lift stations will continue pumping sewage to the city's treatment facility (without that capacity, the sewage could back up

into basements). The four facilities — city hall; the Fargo police station, which also houses the 911 Center; the city's central public works garage; and the water treatment plant — now can continue providing critical services even in the face of disaster.

Fargo has built **stormwater retention basins** throughout much of the city to augment the storm sewer capacity during heavy rains. The basins, built below street level, collect and hold water until storm sewer drains can catch up in removing the additional water volume.

Living snow fences have been planted to help protect key areas during blizzards and winter storms. These fences actually are strategically planted rows of trees and shrubs that act as a filter to catch and drop blowing snow before it gets to roadways and other critical areas such as airports. Fargo built its first snow fence in 1986 on the north and south sides of the city's airport. Airport officials report that the fence has reduced drifting by about 70 percent. The city, in partnership with the state department of transportation, has planted a number of other fences in problem areas along its two interstates and highways.

◆ **Flood Insurance**

In 1971, Fargo became the first city in North Dakota to join the National Flood Insurance Program (NFIP). As a result, residents and business owners have been able to buy flood insurance to financially cover flood-damaged structures and personal property. To participate in the NFIP, a governmental entity must adopt and enforce sound floodplain management ordinances. As of Jan. 1, 2001, there were 325 policies worth \$54,394,900 in effect throughout the city.

◆ **Upgraded Building Codes**

After the 1997 flood, city officials upgraded local building codes to better protect new construction in and around the floodplain. The changes require the lowest floor of newly built structures to be 2.5 feet above the base flood elevation (BFE). Previously, the lowest floor only had to be 1 foot above BFE. The change applies to new structures both inside and within 150 feet of the floodplain.

◆ **Digital Mapping**

The city is enhancing its floodfighting capabilities through the use of digital orthoimagery, a specialized system that takes aerial photographs of the city's topography. City engineers can use the photographs and related contour elevation maps to identify low areas that need to be built up during floods to hold back water.

◆ **Project Impact: Building Disaster Resistant Communities**

Fargo is bolstering its efforts to reduce the effects of disasters by becoming part of *Project Impact: Building Disaster Resistant Communities*. Launched in 1997 by Federal Emergency Management Agency (FEMA) Director James Lee Witt, *Project Impact* promotes taking action to reduce or prevent damage before disaster strikes. Nationwide, about 250 communities and more than 2,500 businesses are not only participating in *Project Impact* but are reporting positive results in subsequent disasters.

The Future

As city growth continues, so will Fargo's efforts to build a safer, more disaster-resistant community, city officials say.

Already, about \$20 million has been spent on the structural projects outlined. Much of the money has come from the Hazard Mitigation Grant Program, administered by the State of North Dakota and funded, in large part, by the Federal Emergency Management Agency.

The program helps pay for projects throughout the state that will reduce or prevent future disaster damages. Up to 75 percent of the project costs come from FEMA, the remaining 25 percent must come from non-federal sources such as state, local or private funds.

Other funds have come from the State of North Dakota, city coffers, Community Development Block Grants, private money and insurance proceeds for repairing disaster damages.

There is no shortage of ideas for Fargo's wish list of projects that will keep nature's impact at bay. And if history is any indication, there will be a great deal more to this story in another 30 years.

Fargo Public Works Director Dennis Walaker, who's helped guide the city's disaster-resistance efforts since 1974, believes there is a light at the end of the tunnel.

"We have reduced our flood risk tremendously in Fargo," Walaker said. "The whole flood problem is like a log chain with a lot of little links. Every link we get eventually becomes a big chain until one day, we will be able to watch the river go by."

Photo Credits

Pg. 3: Sunflowers aplenty, Aberdeen, South Dakota. Photo by Andrea Booher.

Pg. 5: Tornado damage, Spencer, South Dakota, 1998. FEMA Photo by Andrea Booher.

Building a safe room, Fort Morgan, Colorado, to protect against future tornadoes. FEMA Photo by Andrea Booher.

Pg. 7: Missouri flood victim, evacuated during the 1993 Midwest floods. FEMA Photo by Andrea Booher.

Pg. 9: Cleanup on the island of St. Thomas, U.S. Virgin Islands, after Hurricane Marilyn hit in 1995. FEMA Photo by Andrea Booher.

Pg. 10: One of the thousands of businesses affected by the 1993 Midwest floods. FEMA Photo by Andrea Booher.

Pg. 12: Press conference in Houston, Texas after Tropical Storm Allison, July 2001. FEMA Photo by Andrea Booher.

Pg. 13: Rebuilding Grand Forks Herald newspaper offices, devastated in 1997 by flood and fire. Photos by Barb Sturner.

Pg. 14: Cultural advisor for the tribal college, Flathead Reservation, Montana, enjoys a moment of solitude. Photo by Andrea Booher.

Pg. 18: New bridge (top) built higher and longer to minimize flooding problems along the North Dakota/Minnesota border. Old bridge (bottom) was removed in 1999, shortly after new bridge was completed. Photo by Randy Aarestad, Halstad, Minnesota.

Pg. 19: Environmental officer, Northern Cheyenne tribe, checks Missouri River levels. Photo by Andrea Booher.

Pg. 20: Clearing a stream near Lander, Wyoming before the spring runoff. FEMA Photo by Andrea Booher.

Pg. 21: Moving a church in Tivoli, Pennsylvania, 2001, to better protect it from flooding. FEMA Photo by Liz Roll.

Pg. 24: Sharing information during the recovery from Tropical Storm Allison, Houston Texas, 2001. FEMA Photo by Andrea Booher.

Pg. 27: Building a safe room, Fort Morgan, Colorado, 1999. FEMA Photos by Andrea Booher.

Pg. 28: Salvaging a prize photo after flooding in northern California, 1997. FEMA Photo by Andrea Booher.

Pg. 30: Firefighters from Ziwi tribe extinguish smoldering ruins from a forest fire, Los Alamos, New Mexico, 2000. FEMA Photo by Andrea Booher.

Pg. 32: Tornado devastation, Spencer, South Dakota, 1998. FEMA Photo by Andrea Booher.

Pg. 35: Book cover for "Journeys, North Dakota's Trail Towards Disaster Resistance."

Pg. 36: Record snowfall buried much of North Dakota during 1996-1997. FEMA Photo by Barb Sturner.

Pg. 38: Disaster-recovery press conference in Houston, Texas, after Tropical Storm Allison, 2001. FEMA Photo by Andrea Booher.

Pg. 40: Sheriff's deputy from Casper, Wyoming identifies area disaster risks. FEMA Photo by Andrea Booher.

Pg. 43: Freeway collapse after the Northridge, California earthquake, 1994. Photo by Bob Eplett, California Office of Emergency Services.