

Briefing for PWSRCAC Board of Directors – May 2021

ACTION ITEM

Sponsor: Austin Love and the Scientific Advisory Committee

Project number and name or topic: 9650 – Coping with Technological Disasters: A User Friendly Guidebook

1. **Description of agenda item:** This agenda item seeks Board approval of the Council document titled “Coping with Technological Disasters: A User Friendly Guidebook” and the appendices associated with the Guidebook. Beginning in the fall of 2019, the Guidebook’s appendices were reviewed and updated by a project team including: Davin Holen, Jeffrey Brooks, Patience Andersen Faulkner, Betsi Oliver, Joe Lally, and Jeremy Robida. The work of the project team was coordinated by Joe Banta. Based on the work of the project team, starting in the winter of 2020, Council staff including Hans Odegard, Amanda Johnson, Brooke Taylor, and Austin Love finished updating the 11 appendices and also reviewed and revised the Guidebook so its content and organization would parallel the updates made to the appendices. The dedicated work by the project team and Council staff have resulted in the third revision of the Guidebook (Version 4) and the second revision of the associated appendices. The original Guidebook and appendices were created in 1999.

A presentation by Austin Love and Davin Holen regarding the significance of the Guidebook and appendices, how they can be used, as well as plans for their future revision will be provided as part of this agenda item.

2. **Why is this item important to PWSRCAC:** As stated in the foreword of the Guidebook, “The purpose of the Coping with Technological Disasters Guidebook is to help community officials and individuals throughout a region affected by a technological disaster recognize, identify, and mitigate the adverse psychological effects associated with these events. In essence, it is an assessment tool and road map for dealing with these disasters so that communities, businesses, and individuals alike understand what a technological disaster is, how it differs from a natural disaster, and what to expect both during the disaster and in the years following the event. Although natural disasters occur more often, technological disasters, which are human-caused, tend to have a greater, more profound emotional impact on people. And, natural disasters can cause technological disasters such as the oil spills caused by Hurricanes Katrina and Harvey in 2005 and 2017 respectively.”

3. **Previous actions taken by the Board on this item:**

<u>Meeting</u>	<u>Date</u>	<u>Action</u>
Board	5/5/1999	The Board accepted the guidebook and appendices, and approved them for general distribution.
Board	1/24/2019	The Board accepted the revised and updated version of the Council’s “Coping with Technological Disasters - A User Friendly Guidebook”.

4. **Summary of policy, issues, support or opposition:** None.

5. **Committee Recommendation:** The Scientific Advisory Committee recommends that the Board accept the revised Guidebook and associated appendices as final and that they be made available to the public.
6. **Relationship to LRP and Budget:** Project 9650 - Coping with Technological Disasters Guidebook fell under program number 4000 in the FY21 budget.
7. **Action Requested of the Board of Directors:** Accept the document titled “Coping with Technological Disasters: A User Friendly Guidebook” Version 4 and the 11 associated appendices, titled as Appendices A-K, as final and allow them to be distributed publicly.
8. **Alternatives:** None.
9. **Attachments:** “Coping with Technological Disasters: A User Friendly Guidebook” Version 4. The 11 associated appendices, titled as Appendices A-K, can be found [here](#).



Coping with Technological Disasters:

A User Friendly Guidebook

For community groups and counselors, individuals and families, local governments, local businesses, and volunteers

Prepared by:

Prince William Sound Regional Citizens' Advisory Council

Version 4

About the Council

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) is an independent nonprofit corporation whose mission is to promote environmentally safe operation of the Valdez Marine Terminal and associated tankers. Our work is guided by the Oil Pollution Act of 1990 and our contract with Alyeska Pipeline Service Company. PWSRCAC's 18 member organizations include villages, cities, and groups representing Alaska Natives, conservation, tourism, commercial fishing, and aquaculture. All member entities were affected in some way by the 1989 Exxon Valdez oil spill, and all have a significant stake in the prevention of oil pollution and protection of marine resources in the area.

Member entities:

- Alaska State Chamber of Commerce
- Cordova District Fishermen United
- Chugach Alaska Corporation
- City of Cordova
- City of Homer
- City of Kodiak
- City of Seldovia
- City of Seward
- City of Valdez
- City of Whittier
- Community of Chenega
- Community of Tatitlek
- Kenai Peninsula Borough
- Kodiak Village Mayors Association
- Kodiak Island Borough
- Port Graham Corporation
- Prince William Sound Aquaculture Corporation
- Oil Spill Region Environmental Coalition

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Acronyms

ADEC – Alaska Department of Environmental Conservation

EVOS – Exxon Valdez oil spill

FEMA – Federal Emergency Management Administration

HAZWOPER – Hazardous Waste Operations and Emergency Response Training

ICS – Incident Command System

IMT – Incident Management Team (the people doing the actual work under the ICS structure)

PWS – Prince William Sound

PWSRCAC – Prince William Sound Regional Citizens' Advisory Council

RCP – Regional Contingency Plan

RP – Responsible Party (the entity legally responsible for an incidence and its clean-up)

RRTs – Regional Response Teams

UC – Unified Command

VM – Volunteer Manager

VRC – Volunteer Referral Center

Use and Distribution

The Prince William Sound Regional Citizens' Advisory Council grants permission for the use and/or distribution of any portion of this guidebook and its appendices.

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Preface

Having experienced the Exxon Valdez oil spill first-hand, the stakeholders of PWSRCAC and affected regional citizens wanted to fill a large gap in technological disaster planning – addressing the human impacts. In addition to drawing upon the personal experiences of PWSRCAC’s members, PWSRCAC consulted experts in the field of socioeconomic and technological disaster research to help in the development of this guidebook. The results of years of work are contained in the following pages of this guidebook (currently in its fourth version).

PWSRCAC would like to thank the following former PWSRCAC volunteers for their vision, experience, and leadership in the development of the original version of the “Coping with Technological Disasters” guidebook and appendices:

- Peter Armato, Seward
- Gig Currier, King Salmon
- Jon Dahlman, Seward
- Kristin Stahl Johnson, City of Kodiak
- Margy Johnson, Cordova
- JoAnn McDowell, Valdez
- Michelle Hahn O’Leary, Cordova
- A.J. Paul, Seward
- Dick Tremaine, Anchorage
- Kelley Weaverling, Cordova

PWSRCAC would also like to acknowledge the research conducted for PWSRCAC by Steve Picou of the University of South Alabama. Those on his research team included:

- Kati Arata, University of South Alabama
- Stephen Couch, Pennsylvania State University
- Kai Erikson, Yale University
- William Freudenburg, University of Wisconsin
- Duane A. Gill, Mississippi State University
- Steve Kroll-Smith, University of New Orleans
- Dan Dunard, University of South Alabama
- Scott McNally, University of South Alabama
- Linda Burcham, University of South Alabama

In conducting his research, Dr. Picou relied heavily on the citizens of Cordova, Alaska, to share their experiences with the Exxon Valdez oil spill and to participate in the pilot mitigation efforts. PWSRCAC wishes to thank the following Cordova organizations in particular:

- Prince William Sound Science Center
- Cordova District Fishermen United
- Native Village of Eyak
- Sound Alternatives

- Cordova Family Resource Center
- Cordova City Council
- Cordova Mayor's Office
- Cordova Fisherman's Claims Office

PWSRCAC former and present staff who contributed their expertise and skills to the original version of the guidebook include Joe Banta, Lynda Hyce, Leann Ferry, Marge Fowler, Lisa Ka'ahue, Marilyn Leland, and Rebecca Lewis. We would like to especially thank Tim Jones for using his own experiences with the Exxon Valdez oil spill and writing skills to make our vision a reality.

For all their work in updating Versions 3 and 4, released in 2019 and 2021 respectively, we would like to recognize current volunteers Patience Andersen Faulkner, Davin Holen, and Jeff Brooks, along with staffers Amanda Johnson, Lisa Matlock, Jeremy Robida, Joe Banta, Austin Love, and Brooke Taylor.

PWSRCAC would like to acknowledge and express our deep appreciation for the contributions of the following who participated in the 2021 revision of the guidebook appendices:

- Duane Gill and Liesel Ritchie for their work in producing the Updated Curated Bibliography on Human Dimensions of Disasters found in Appendix J
- Stephen Sempier and other members of the Mississippi Alabama Sea Grant Consortium including Tracie Sempier, Melissa Schneider, and Melissa Partyka for their work in reviewing Appendix F – Peer Listener Training
- Janice Banta for her work on Appendix D – In-Service Training
- Danielle Stickman for her assistance in reviewing Appendix G – Talking Circle

For all their work, vision, experience, and leadership in updating the 2021 version of the appendices, PWSRCAC would like to recognize current volunteers Davin Holen, Patience Andersen Faulkner, and Jeff Brooks; along with staffers Joe Banta, Betsi Oliver, Hans Odegard, Joe Lally, Jeremy Robida, Austin Love, Amanda Johnson, and Brooke Taylor.

To all these, and to others we may not have mentioned, PWSRCAC owes their appreciation for helping to develop this guidebook and its appendices.

Foreword

The purpose of the Coping with Technological Disasters Guidebook is to help community officials and individuals throughout a region affected by a technological disaster recognize, identify, and mitigate the adverse psychological effects associated with these events. In essence, it is an assessment tool and road map for dealing

Technological disasters can disrupt an ecosystem for many years and tend to disrupt the psychological well-being of communities for long periods of time.

with these disasters so that communities, businesses, and individuals alike understand what a technological disaster is, how it differs from a natural disaster, and what to expect both during the disaster and in the years following the event. Although natural disasters occur more often, technological disasters, which are human-caused, tend to have a greater, more profound emotional impact on people. And, natural disasters can cause technological disasters such as the oil spills caused by Hurricanes Katrina and Harvey in 2005 and 2017 respectively.

This guidebook was originally developed following the Exxon Valdez oil spill in 1989, and based on the lessons learned by the people and communities impacted by that spill. Since then several hurricanes and the 2010 BP Deepwater Horizon oil spill have occurred and the guidebook was found useful and applicable in dealing with those disasters as well.

Community leaders and the general public will benefit by familiarizing themselves with this guidebook. Knowing what to expect during and post-disaster and whom to contact for information, support, and relief will expedite the mitigation process, reduce stress, and allow the community to move forward toward routine conditions as quickly and as painlessly as possible.

Technological disasters, such as the 1989 Exxon Valdez oil spill, disrupt communities on multiple levels. The most obvious and tangible disruptions occur when the flow of goods, routine services, and jobs are adversely impacted. Usually goods and services can be restored in a fairly reasonable length of time. However, there are other often ignored, poorly defined, poorly understood, intangible adverse impacts such as initial negative mental health impacts and chronic long-term psychological and physical impacts.

Long after the initial response has ended and the local government has returned to routine day-to-day operations, adverse psychological impacts associated with the disaster continue to erode the social fabric of the community. Results of Exxon Valdez oil spill studies indicate that mental health impacts still persisted 25 or more years post-spill. These impacts include disruption of family structure and unity, family violence, depression, alcoholism, drug abuse, and psychological impairment. The extent of chronic mental health patterns appears to be correlated to the extent that a community is dependent on its natural resources for survival. As such, Alaska Native and non-Native fishing and subsistence-based communities are at higher risk for elevated levels of chronic psychological stress associated with technological disasters.

Introduction

The events of March 24, 1989, abruptly changed the lives of many Alaskans, their families, and their communities. The heavily laden oil tanker Exxon Valdez had run aground spilling millions of gallons of North Slope crude oil into Prince William Sound. To make matters worse, an inability to mount an adequate response resulted in oil quickly spreading along 1,500 miles of coastline from Prince William Sound to the Kenai Peninsula, Cook Inlet, Kodiak Island, and the Alaska Peninsula. For perspective, if the spill had happened on the East Coast, oil would have spread from Cape Hatteras to Cape Cod, coating the shorelines of Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, including Chesapeake Bay and North Carolina.

A cascade of human, corporate, and agency error had resulted in the massive oil spill that fouled Alaska marine waters and shoreline. Subsequent massive cleanup activities sometimes added to the damage of coastal habitat. Oil had fouled rocky intertidal zones, beaches, tidal flats, and riverbeds along with hundreds of thousands of mammals, birds, fish, and other marine organisms. Even 25 years post-spill much of the ecosystem and many of the people had yet to recover fully. Oil persisting on beaches and in intertidal sediments continued to contaminate nearshore habitat and biota. Commercial fish stocks, intertidal flora and fauna, sea birds, and marine mammals impacted by the spill had not yet returned to pre-spill population levels.

Losses incurred in 1989 and 1990 by commercial fishermen have been estimated at more than \$225 million. Economic loss continued to mount through subsequent years of poor fisheries and declining markets. While pink salmon runs appear to have fully recovered, to this day herring have not. Shrimp stocks that were depressed after the spill took 17 years to reach harvestable levels again.

For many, the memory of this tragic event has faded. Community leaders, whose political agendas are numerous and administrative plates more than full, have moved away from the spill and on to more timely issues. Left in the wake of the spill are those who have continued to suffer economically, socially, and psychologically. Many of these people have not yet recovered from the disaster that abruptly ended their livelihood, disrupted community functions, destroyed family units, and shattered traditional ways of living. These are the people who have and continue to suffer the effects of chronic psychological stress. Studies suggest that the most adversely impacted sub-populations appear to be subsistence users and renewable resource community fishermen in the spill-affected region.

Chapter One:

What Happens in a Technological Disaster - Defining the Event

Technological disasters are catastrophic events caused by humans which often result in toxic contamination of the environment. Analyzed, expanded, understood, a technological disaster reaches into the very essence of the people it affects.

Natural disasters normally conform to a pattern which includes: warning, threat, impact, rescue, inventory, remedy, recovery, and rehabilitation. Victims of technological disasters have skipped the warning and threat stages and have to deal immediately with the impact stage. Then they become trapped at that stage with few resources for rescue, inventory, remedy, recovery, and rehabilitation. For more detail regarding the differences between natural and technological disasters, see Appendix J: Curated Bibliography on Human Dimensions of Disasters.

In a natural disaster, communities throughout the United States can expect federal, state, and local agencies to lead a coordinated response to rescue and support victims while also allocating massive resources to rebuilding.

In a technological disaster, with its human cause and principal responsible party, no such help can be counted upon from emergency agencies. In the past, rescue organizations such as the Red Cross and government disaster agencies have shown reluctance to assist with technological disasters offering the explanation that responsible parties should incur the costs related to recovery. A volunteer organization that depends on charitable contributions should not be asked to assist when a large corporation with extensive resources is responsible for costs attached to a disaster.

Victims of technological disasters face long-term, recurring impacts that produce a variety of secondary disasters. Secondary disasters are indirect consequences of the original disaster that

“Of all the things that we have lost since non-Natives came to our land, we have never lost our connection with the water. The water is our source of life. So long as the water is alive, the Chugach Natives are alive.

“It was early in the springtime. No fish yet. No snails yet. But the signs were with us. The green was starting. Some birds were flying and singing. The excitement of the season had just begun. And then we heard the news: Oil in the water. Lots of oil. Killing lots of water. It is too shocking to understand. Never in the millennium of our tradition have we thought it possible for the water to die. But it is true.”



Walter Meganack Sr,
Village Chief
Port Graham, Alaska
June 26, 1989

Full speech: www.bit.ly/ChiefMeganack

produces continuing social conflict, disruption, and intensified stress for residents of impacted communities. Secondary disasters can include a flood of media, attorneys, dueling scientists, scarce supplies and housing shortages, conflicts among politicians and government agencies, job and career losses, and subsistence harvest changes. See Figure 1 for data on changes to subsistence harvests after the Exxon Valdez oil spill.

Therapeutic Versus Corrosive Communities

Natural disasters create what can be called a *therapeutic* community where activities are focused, intense, and include governmental mandates for fostering a return of the community to pre-disaster state. As people pull together to place sand bags on dikes against floods and help neighbors with homes destroyed in hurricanes, individuals, families, and communities bond for the good of the whole.

Technological disasters, conversely, tend to produce a *corrosive* community characterized by unusually high levels of tension, conflict, extended litigation, and chronic psychological stress. In a technological disaster there is an entity at fault, often a corporation with no tangible representative. This entity may choose to deny or minimize harmful effects on the environment or to the well-being of the individual and community. Some members of the community may have a clear claim against the responsible party while others may not. For example, if a fishery closes due to the disaster, a fisherman can demonstrate he lost income. However, the supplier who sells the fishermen their nets and gear is not a direct victim and may not be able to recoup losses from the decline in business.

Fear of continued toxicity in the environment, enduring threats to physical health, and long-term threats to traditional food sources and occupations all lead to chronic problems. Such problems are difficult to understand, diagnose, and treat. The futility of cleanup efforts and the helplessness of individuals combined with misunderstanding the personal effects of the disaster make these problems worse. All of these produce a corrosive atmosphere which delays the community's return to pre-disaster conditions. Often those affected by a technological disaster are reluctant to seek mental health services or might not even be aware they need and could use these benefits.

Lack of Closure

Perhaps the most perplexing differences between natural and technological disasters are certain long-term effects of the technological disaster, particularly lack of closure. After the hurricane or flood passes through, residents pick up the pieces, begin rebuilding and soon resume their pre-disaster ways of life. Ecosystem-wide effects of the technological disaster may linger for years causing physical and mental health problems, affecting livelihoods and food sources, and infecting entire communities with undercurrents of loss, sadness, anger, and helplessness.

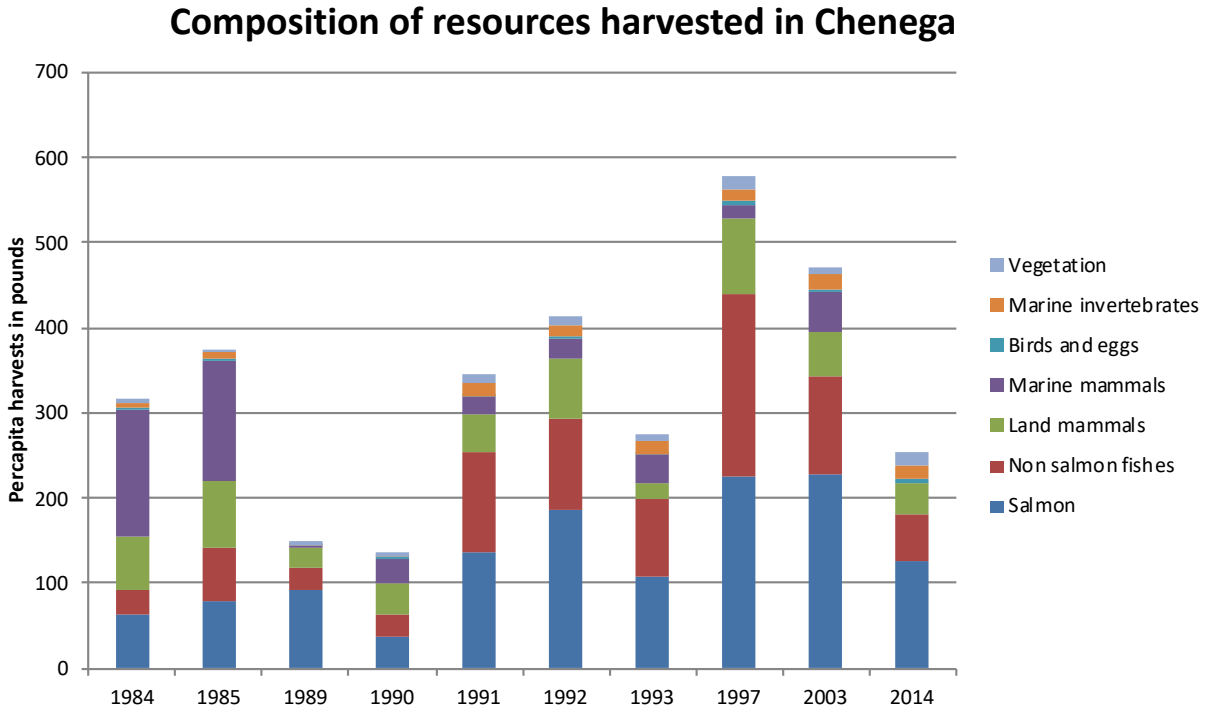
Those involved in mitigation efforts must understand they may never reach every one of the victims, nor for those they reach can their efforts be expected to bring about full recovery. Experience with the 1989 oil spill in Prince William Sound and through the subsequent years

indicates the region and its people have changed forever, if not demonstrably provable, at the very least in perceptions.

After all, if, as so poignantly pointed out above by Port Graham Chief Walter Meganack in 1989, “the water has died,” who can bring it back?

Figure 1. *Composition of resources harvested in Chenega.*

Source: Alaska Department of Fish and Game, Division of Subsistence, Community Subsistence Information System, 2015.



The Exxon Valdez oil spill caused a disruption in subsistence activities in Prince William Sound. After the spill, there was a distinct change in harvesting activities that could be a combination of focus on other species due to the event as well as a shift in cultural practices. As shown in Figure 1, in Chenega, a small community in western Prince William Sound, the composition of harvest changed from one based largely on hunting marine mammals and large land mammals supplemented by salmon and other fish, such as halibut and rockfish, to a diet dependent mainly on salmon and other fish. Interestingly, marine invertebrates played a larger role post spill, as there was a resurgence of interest in these species.

Subsistence – A way of life that includes the harvest and use of wild resources for food, raw materials, and other traditional uses have been a central part of the customs and traditions of many cultural groups in Alaska for centuries, including Athabascan, Cup’ik, Alutiiq (Sugpiaq), Euro-American, Eyak, Haida, Inupiaq, Tlingit, Tsimshian, Unangax, and Yup’ik.

Chapter Two:

Community Groups and Counselors

How Community Groups and Counselors Can Help

Community groups and counselors within the community can be a vital asset in mitigating the psychological effects of a technological disaster. As described in the Forward and Chapter One, these effects can include immediate and long-term high levels of chronic stress, fear, tension, conflict, and depression. Major environmental disasters can be akin to death or loss of a close loved one or friend – they can be psychologically challenging. Most government and private relief agencies are not set up to address mental health needs especially the chronic elements that linger long after the immediate response effort has ended.

The responsible party most likely will not even acknowledge this element of the disaster.

This chapter outlines outreach activities that can encourage resilience and mitigate the immediate and long-term psychological effects. These activities can help residents understand the nature and kinds of stress reactions they are experiencing and provide information and resources to assist them in coping with the effects of the disaster.



“There’s no question that people are frustrated, angry, depressed, and anxious...What will the long-term effects be? What do the people need? If I could answer these questions, I’d deserve a gold star.”

- Prince William Sound, Alaska,
mental health professional, 1989

In the community, information and resources need to be available for the entire population. Education programs should involve local organizations and attempt to bring residents together to address and respond to problems at the broader-based community level. The programs can include community-wide resources distributed through local media, public meetings, booths at public gatherings, and social media. Any opportunity to reach the broader audience should be used.

Social and Civic Organizations

Established social and civic organizations already have their group dynamics in place. With some training and guidance, they can reach broad segments of the population. They may also make physical space available such as lodges and club houses for meetings and counseling. Some organizations that may be able to help include:

- Churches
- Professional groups like commercial fishing organizations

- Moose, Elks, Eagles
- Girl Scouts, Boy Scouts
- Parent Teachers Association
- Alaska Native, Tribal, or other Native American associations
- Rotary and Kiwanis
- Trade unions
- Other non-governmental organizations

Cultural Groups

Alaska Native, Native American, and other ethnic groups within the community may have special cultural needs and may prove to be a unique resource and useful in cross cultural communications. Outreach materials may have to be tailored to meet the cultural needs of specific ethnic groups. Within the cultural groups, any social organizations, tribal councils, or corporations can be consulted to review and administer the programs.

Why is Outreach Important?

Chronic patterns of severe stress require the use of outreach strategies that connect with individual residents throughout the impacted community. Outreach efforts should address both the immediate and the long-term effects for the collective community and the individual.

The following includes effects on communities as a whole that have been observed in technological disasters:

- Watching outsiders descend on the community and take over
- Feelings of frustration by the sheer magnitude of the circumstances
- A lack of trust about the responders and their long-term goals
- Threats to public health
- Threats to significant local resources (a village may rely on a single resource)
- Increased demand for communication and information: people want to know what's going on and how they can help
- Suspended or overwhelmed normal business functions
- Employment disruption, service workers and others leaving to work on the response
- Excess demands on public services
- Need for outlets and opportunities for volunteers, including training
- Concerns for the future financial stability of the community
- Feelings of loss of power and control
- Feelings of collective anger, hopelessness, and depression
- Varying viewpoints in the community may cause divisiveness

Communities and groups within them can't be expected to have everything in place at the beginning of a disaster and materials may need to be developed to fit local needs. Materials later in this chapter and in the appendices can be used as a starting point to begin the healing process.

Surveying the Community

Before outreach activities begin to help communities cope with the social and economic impacts related to technological disasters, data on how a community is affected should be collected. To accomplish this task, community leaders and mental health professionals can collect benchmark information through community surveys. Generally, a professional should be designated to design and administer a community survey. This could include local university social science faculty, private mental health professionals, or a state agency. For example, NOAA, other social science groups, or experts from the state (the Office of Epidemiology for example). More information about designing and conducting surveys can be found in Appendix A: Conducting a Community Survey.

Goals of Outreach

The impacts of community-wide effects of the disaster will be felt at the individual level as well (for a more detailed discussion regarding the individual, see Chapter Three). Outreach workers can apply materials in the appendices and other resources using the following list of goals as a guideline.

At the individual level, major goals include:

- Identify and make contact with victims
- Assist in identifying problems and needs
- Provide support services for victims
- Provide education and training for problem-solving and coping
- Provide tangible information and resources to assist other individuals in the recovery process
- Monitor and/or refer for professional services

The individual often may not understand the personal level of stress, or realize the necessity for or seek intervention. The most difficult item on the above list may be identifying the problems and victims at the individual level. Most likely he or she will not know where to find relief.

While mitigation efforts may relieve some of the psychological suffering and stress, the vivid image of the technological disaster and its ecological damage remains.

Developing Outreach Activities

Growing Together, A Community Education Program

The Growing Together community education program was organized after careful study of technological disasters and the increased demands they place on mental health services.

Program materials, developed in 1995, resulted from a 1994 study conducted in Cordova, Alaska, five years after the Exxon Valdez oil spill in Prince William Sound. Researchers interviewed representatives from Alaska Native organizations, commercial fishing groups, city government (particularly health and safety agencies: police, fire, emergency medical technicians), business and scientific organizations, the clergy, and local mental health professionals. Results indicated that community and individual impacts still existed five years after the spill and there were few or no intervention programs readily available.

By helping develop and implement such a program, Cordova residents became more aware of the chronic social impacts and improved their skills for coping with those impacts. Although the program was developed five years after the Exxon spill, it was designed to be implemented immediately following a disaster and sustained as long as needed.

The initial activity used to develop the Growing Together community education program is called a Needs Assessment. This tool used data from the Cordova study to identify and define the nature and types of chronic symptoms experienced by residents. The assessment identified high risk groups, diagnosed predominant psychological symptoms, and provided a general profile of community impacts.

The components of the program, including a generic community survey format, a protocol for conducting focus group interviews, radio and television message formats, community brochures, and other materials are located in various guidebook appendices.

The Growing Together community education program made use of the Community Participation Model outlined in Table 1.

Table 1. *Community Participation Model for Developing Outreach Activities*

<p>I. Needs Assessment</p> <ul style="list-style-type: none"> • Community Survey • Focus Groups • Mental Health Service Data
<p>II. Data Presentation and Evaluation</p> <ul style="list-style-type: none"> • Feedback • Verification • Clarification
<p>III. Program Materials Review</p> <ul style="list-style-type: none"> • Feedback • Acceptability • Effectiveness
<p>IV. Program Implementation</p> <ul style="list-style-type: none"> • Volunteer Participation • Feedback • Evaluation

Additional actions or considerations should include:

- Local mental health professionals and volunteers conduct a Needs Assessment for the local area and specific disaster.
- Develop focus groups with representatives from various segments of the population to address specific problems.
- Develop resources for copying, retrieving, and analyzing survey information.
- Identify, recruit, and train intervention volunteers.

Outreach Activities

The activities from the Growing Together program in Table 2 are described in more detail in the following pages.

Table 2. Outreach Activities from the original 1995 Growing Together Community Education Program

Outreach Activity	Description	Strategy	Impact or Target Population
Community Education Media Series (newspaper, social media, etc.)	Eight articles on technological disasters, their impacts, and coping skills.	Run series and links in local newspaper, local pages on social media	Community
Community Education Radio Series	Program on coping skills	Five-part program broadcast on local radio, post to the web as applicable	Community
Community Education Leaflet Distribution	Coping skills information contained in eight leaflets	Distributed at locations throughout community, post to the web as applicable	Individual Level
In-service Training Program	Mental health workers, teachers, clergy, law enforcement personnel – provided training in appropriate intervention strategies	Identify organizations, develop schedule, implement, post to the web as applicable	Individual Level
Peer Listener Training Program	Volunteers trained and provided materials for support counseling	Solicit volunteers, develop schedule, train, implement, monitor	Individual Level
Talking Circle	Alaska Native, Native American, and other community members participate in talking circle	Organize through traditional facilitators and invitation to larger community	Alaska Native/Native American Community and other community members
Town Hall Meeting	An informal public meeting between public figures and citizens so that they can receive feedback from a larger proportion of constituents	Gather public input and identify issues from the larger community and share accurate information	Community

Community Education Media Series

Initial outreach activities from the Growing Together program identified topics and experts who could provide the necessary information. Titles for the articles are:

- Technological Disasters: Why Are They Different?
- Understanding Anger
- Letting Go of Chronic Depression
- Chronic Stress and Alcohol Consumption
- Talking to Children in Stressful Situations
- The Mood-Food Connection: Understanding Stress
- Chronic Stress and Cancer: Is There a Link?
- Coping With Technological Disasters

A ninth article could be developed locally to address physical properties, specific chemistry and dangers of the immediate technological disaster. The articles developed for the Cordova Growing Together programs (original 1995, updated 2004) are included in Appendix B as the core content is still relevant.

Also note that a book, “The Spill: Personal Stories from the Exxon Valdez Disaster,” and an online oral history from the 1989 spill, Project Jukebox - <http://jukebox.uaf.edu/site7/exxonvaldez>, are other available sources of information about the Exxon Valdez oil spill.

Table 3. Media as Outreach

<p>Outreach Strategy</p> <p>Use local newspaper, cable ad/notice scanner channels, and online platforms (local website, blogs, social media sites or groups) for publication of education materials for community residents</p>	<p>Resource – Appendix B</p> <p>Articles on technological disasters, impacts, personal stories, coping skills, and recovery</p>
<p>Procedures for Implementation</p>	
<ul style="list-style-type: none"> • Contact newspaper editor(s) and online platform managers and arrange meeting • Make arrangements to run articles and post links as public service contributions or purchase space if necessary • Notify community organizations to announce forthcoming series and other information • Bind articles and other information and distribute to members of high-risk groups 	

Community Education Radio Series

Radio broadcasts provide an important outreach vehicle. The Growing Together effort resulted in five 30-minute programs involving experts in technological disasters and psychological stress informally discussing these topics, including symptoms and coping skills. The titles of these radio programs are:

- What are Technological Disasters
- Community Recovery
- Depression
- Anxiety and Post Traumatic Stress Disorder
- Substance Abuse and Anger

Transcripts of these broadcast programs (original 1995, updated 2004) are included in Appendix C as the core content is still relevant. Links to the original audio files can be found here:

www.bit.ly/RadioEdRecordings.

Table 4. *Radio Programs as Outreach*

<p>Outreach Strategy</p> <p>Use local radio station, podcasts, and/or live streams to air education programs on technological disasters</p>	<p>Resource – Appendix C</p> <p>Radio series produced on technological disasters, impacts, coping skills, and community recovery, online/social media options</p>
<p>Procedures for Implementation</p>	
<ul style="list-style-type: none"> • Contact manager of local radio station or online platform • Make arrangements to air/stream programs as a public service contribution or purchase air time if necessary, post to web as podcasts, or other social media options • Review and determine appropriate times for maximum audience reception • Advertise radio programs through promotional leads, local newspaper, and scanner announcements • Organize call-in opportunities with local experts following the airing of the program 	

Community Education Leaflet Distribution

To increase circulation of information regarding the chronic effects of technological disaster, a series of leaflets on various subjects can be developed and tailored to the needs of the community and the nature of the disaster. In Cordova, intervention workers designed and distributed eight leaflets with the following titles:

- Growing Together: A Community Education Program
- Plain Talk about Domestic Violence and Abuse
- Plain Talk About Managing Anger
- Plain Talk About Depression
- Plain Talk About Post Traumatic Stress Disorder
- All About Alcohol: Just for Kids
- Plain Talk About Alcohol
- Plain Talk About Helping Children Cope With Disaster

Leaflets can be mailed to a general list of individuals or made available at public offices such as hospitals, government buildings, occupational organizations, and any kind of fairs, celebrations, meetings, or community social gatherings.

The original leaflets provided in earlier versions of the Coping with Technological Disasters Guidebook have become outdated and there are more contemporary and relevant resources available to address current situations. Appendix E provides several sources for relevant community and mental health leaflets.

Table 5. Leaflet Distribution as Outreach

Outreach Strategy	Resource – Appendix E
Distribution of leaflets, including online and in print	References for leaflets with educational information on technological disasters
Procedures for Implementation	
<ul style="list-style-type: none"> • Review leaflets available for style and content, revise or modify if necessary • Distribute leaflets via local mental centers, community organizations, local hospitals, etc. • Distribute leaflets at community festivals, fairs, and other events • Obtain mailing lists and mail leaflets to community residents • Post/distribute leaflets through online platforms 	

In-Service Training Program

Certain occupational groups within the community offer particular skills to reach and support various segments of the population. For the original Growing Together program in Cordova, Alaska, professionals in occupations dealing with the public, that could provide specific support to the community, were identified, trained by mental health professionals, assigned subject matter, and given their target audiences.

Table 6. *Growing Together In-Service Training Assignments*

Occupation	Target Audience	Subject Matter
Teachers	Children	Identifying and supporting children experiencing chronic family stress situations
Law enforcement	Adults	Alcohol and substance abuse, domestic violence
Clergy	Adults	Positive response for coping with prolonged economic hardships, family and marital stress
Mental Health Providers	Adults and children	In-service, refresher, disaster specific training
Medical Providers	Adults and children	In-service, refresher, disaster specific training

For the Growing Together program, in-service trainings for those identified were designed as two-hour presentations on the following subjects:

- What Are Technological Disasters?
- Symptoms of Chronic Stress
- Responding to Depression
- Alcohol Abuse

Mental health professionals with specific experience in technological disasters also should be brought in to support and supplement the efforts of local workers.

Table 7. In-Service Training as Outreach

<p>Outreach Strategy</p> <p>Provide in-service training programs to targeted occupational groups (teachers, clergy, law enforcement, medical/mental health)</p>	<p>Resource – Appendix D</p> <p>In-service training suggested content and additional resources and reference lists</p>
<p>Procedures for Implementation</p>	
<ul style="list-style-type: none"> • Review in-service training materials and ensure adequate time for delivery is scheduled • Contact school official, police chief, church, and appropriate representatives to arrange times for training sessions • Identify community professionals and/or recruit outside expertise for delivery of program • Provide learning aids for participants • Solicit feedback on in-service programs 	

Peer Listener Program

Many people affected by technological disasters are reluctant to use traditional mental health services. Often those affected might not even be aware they could use such services. Research has shown traditional mental health services may not be effective in dealing with the long-term effects of disasters. One method for addressing these difficulties is the use of informal social support networks with trained peer listeners.

Properly trained peer listeners can provide a number of services to the community, from serving as an available ear to assisting in problem solving to providing referrals to professionals.

Peer listeners drawn from the community are more likely to be trusted than outsiders because they possess an understanding of the community and its relationship to the disaster. They may work with local church and community groups, directly with mental health organizations, or individually with family and friends.

The original Growing Together program drew volunteers from several high-risk groups for training. After recruiting and screening by local mental health professionals, selected listeners participated in a two-day training session. Supervision and support continued through the program with a follow up contact about seven months after the initial training. The training was conducted by a sociologist specializing in technological disasters and a clinical psychologist specializing in traumatic stress, with the intent that future trainings could be provided by any properly trained mental health professional.

Developers found the program, while intended to deal with the effects of the oil spill, became an ongoing resource for mental health intervention. In recognition of the value of the Growing Together program, it was continued and developed further as a peer listener training program.

Previous versions of Appendix F included a Peer Listener Training session outline as well as materials for distribution during the training. Those materials are now outdated, given how far the fields of peer-to-peer support and community resilience have evolved since this training was originally created in the mid-1990s. The Prince William Sound Regional Citizens' Advisory Council is currently working to update this material. Appendix F still provides an introduction and background information on the original program, as well as resource links for those looking for additional information.

The Council's Peer Listener Training Manual was previously used by the Mississippi-Alabama Sea Grant Consortium, which then updated and customized it to help residents deal with BP's 2010 Deepwater Horizon disaster in the Gulf of Mexico. For those interested in implementing a similar program in their own community, information can be found on the consortium's website: [Peer Listener Training \(masgc.org/peerlistening\)](http://masgc.org/peerlistening).

The consortium may also be contacted directly at:

Mississippi-Alabama Sea Grant Consortium
Coastal Storms Outreach Coordinator
Phone: 228-818-8829

Table 8. *Peer Listener Training as Outreach*

<p>Outreach Strategy</p> <p>Peer listener and support skills training program</p>	<p>Resource – Appendix F & Mississippi-Alabama Sea Grant Consortium</p> <p>Peer listener training resources</p>
<p>Procedures for Implementation</p>	
<ul style="list-style-type: none"> • Identify volunteers who represent various community groups • Identify local or external professional expertise to conduct training sessions • Conduct training sessions • Organize monthly meetings of peer listeners • Monitor peer listener activities and encourage retention of volunteers • Gather feedback and information on program effectiveness 	

The Talking Circle

Culturally distinct groups within a community may require special intervention based on unique needs of tradition, language, and religion. To address this in Cordova following the Exxon spill, the Growing Together program worked closely with the Alaska Native community through representatives of the Native Village of Eyak, a local Alaska Native organization. Together they developed a program of Talking Circles based on traditional Native custom. The circle was organized by the Native group and involved a number of spiritual leaders and facilitators (trained facilitators should be used). While the three-day meeting covered many subjects listed in previous sections, it also was designed to fit the Native community through activities such as traditional healing ceremonies on the shores of Prince William Sound at the beginning and end of the session.

The Talking Circle Program in Cordova proved a success and led to on-going social programs sponsored by local Alaska Native organizations addressing chronic social issues in the community. Surveys and analysis of the Talking Circle Program in Cordova are included in Appendix G.

Appendix G provides information on Alaska Native cultural organizations, but on a broader scale, to address specific needs of culturally distinct groups, a community in disaster would need to assess what groups are present and locate appropriate representatives to design a program specific to those groups.

Table 9. Cultural Activities as Outreach

Outreach Strategy	Resource – Appendix G
Culturally-appropriate activity	Information on Talking Circles and Alaska Native/Native American organizations and consultants, online training options
Procedures for Implementation	
<ul style="list-style-type: none"> • Contact representatives of local cultural group(s) • Develop consensus for culturally-appropriate activity • Identify spiritual leaders for ceremonies • Distribute information to local community regarding participation 	

Town Hall Meetings

Town hall meetings where citizens can express their concerns and ask questions of government, responsible parties, agencies, and other members of the community offer individuals the opportunity to receive accurate information and let others know their difficulties and perhaps even solutions to problems. In separate forums, experts in the fields of both the chemistry and physical properties specific to the disaster and response, and in the delivery of understanding and care should be recruited for town meetings. They should attempt to resolve as many issues as possible right there in the community forum. Town hall meetings offer an opportunity to disperse accurate information to the community as well as allowing community members to vent and speak directly to representatives of the responsible party and government. Consider streaming and working with local radio station and media outlets to increase outreach. Consider use of a trained mediator to assist community leaders.

It will be important to determine if there are state laws or regulations about public meetings in different localities. For example, the Alaska Open Meetings Act (see Appendix I) provides structure which can help local government in preparing and responding, as well as highlighting the importance, even in the midst of an incident response, for governing bodies to abide by such laws. Failure to do so has led to court cases and community disruption in the past.

Chapter Three:

The Individual and Family - What About Us?

Unlike government or other organizations, the individual most likely has no formal structure with which to face a technological disaster such as the BP Deepwater Horizon oil spill. Yet, the individual level is where much long-term damage can be expected. Major environmental disasters like this can be akin to death or loss of a close loved one or friend – they can be psychologically challenging.

Events in a major technological disaster can become overwhelming almost immediately. So much happens in such a short period of time that often the individual is overlooked in the crush of activity in the response. Alone, many victims have to deal with a confusing situation that threatens to affect all aspects of their lives. Problems, questions, and what seem to be overwhelming feelings begin almost immediately and become so numerous and intense as to seem insurmountable. These questions are summarized in Table 10.

From the beginning, it needs to be understood that all these feelings and concerns are normal. People in other disasters have felt the same things. Neighbors, friends, and business associates are all feeling the same things right now. This has been documented in previous disasters. Appendix J provides an overview of literature on a number of related topics, including mental health and disaster.

Following an initial period of intense public attention, concern for individual victims of technological disasters tends to disappear into the greater concerns of cleanup and litigation. Individual concerns may even be ignored purposely by the responsible

“As a victim, I can tell you that after they have hurt you, you are on your own...As a wife, I hope the fighting and the sacrifices my husband has had to experience will become like other injuries, leaving only a faint scar. And as a person, I hope that all the suffering and hardships we have faced as a family because of the oil industry will not have been for nothing.”

- Homer, Alaska, resident, 1989

From *Dispatches from the Gulf*,
www.dispatchesfromthegulf.com
and www.bit.ly/GOMdispatch:

“After the oil spill we got very angry cause we were losing our livelihood and our food...”



- Theresa Dardar,
Pointe-au-Chien Tribe
Louisiana, 2016

“A lot of our community members fell into depression. Some people don’t like to admit that they suffer from depression and they suffer in silence and that makes things worse.”

- Bette Billiot, United Houma Nation, 2016

party (or at least it may seem so). Yet the individual may suffer significantly long after the disaster.

Years after the Exxon Valdez oil spill in Prince William Sound, fishermen and their families still spoke of the disaster in muted tones of sadness, anger, and terms of loss, not just economic loss but, in a sense, almost spiritual. Something intangible was taken away besides the decline of fisheries and the oil on the beaches. In terms of both immediate and long-term effects, the individual often is the least likely to seek help. In addition to questions and overwhelming feelings post-disaster, effects on individual victims of technological disasters are also summarized in Table 10. Keep in mind that all of these effects and feelings about them are normal. Someone experiencing this is not the exception, but the rule.

Table 10. Questions and overwhelming feelings post-disaster, and effects on individual victims of technological disasters

Problems, questions, & over-whelming feelings post-disaster:	Effects on emotions of individual victims of technological disasters include:
What is really happening here?	Sense of fear, worry
Why am I so angry?	Sense of helplessness in terms of working to attack the effects of the disaster
Who is going to help me?	Disruption of home routine
When is it going to end?	Feeling one's lifestyle threatened
Is this threatening my health or that of my family?	Loss of financial stability
How will I ever be able to live here now?	Witnessing death, injuries, pain, and human induced ecosystem degradation and resource loss
Media stampede, how do I deal with it? Is it safe to talk to the press?	Feeling out of control of something threatening to life's basics: food, shelter, clothing
Food and shelter, if threatened where do I go?	Feeling cut off from services
What about my children? What are the effects on them? Where can I find day care?	Becoming separated from loved ones
What about my job, my spouse, my business?	Concern for children and their new roles in the family that may result
Who is going to pay? Will I be compensated?	Feeling "survivor guilt"
What about lawsuits? How long will they take?	Long-term unresolved litigation
My financial stability and where has it gone	Distinct fear about the future
Profiteering. Do I envy or resent those making money from the disaster?	Fear of loss of lifestyle for the children based on the loss of a traditional livelihood
Should I work for the responsible party or not (moral choices, guilt)?	The elderly: Retirement can be affected. For example, unable to fish, a fisherman may lose his boat and his permit, meaning sizable amounts of money that would have been available for retirement.
Who's got the power here? (intimidation, harassment) Who's in charge?	Acceleration of an already occurring negative trend may prevent economic recovery. For example, with the curtailment of salmon fishing for two years in Prince William Sound, farmed fish from other sources filled market vacuums.
What can I do in the face of overwhelming circumstances?	Anniversaries: Five and ten years later, memories and traumas return to the surface with increased attention on the disaster.

The Path to Healing: What Can I Do as an Individual?

Where can I seek help and what can I do to help myself?

Most important is to acknowledge and understand your feelings.

Activities that individuals can engage in to help themselves include:

- Seek to understand why a technological disaster may be different from a natural disaster (see Chapter One).
- Let go of all-consuming anger by acknowledging you have no control over those who caused the disaster.
- Share your fears, experiences, and pains with others. Don't isolate yourself.
- Establish a regular routine of sleeping and exercising.
- Eat regular, healthy meals.
- Monitor negative thinking, focus on solutions not problems.
- Avoid alcohol and caffeine.
- Learn how to talk about the event with your children.
- Learn to recognize the signs of depression and seek help if you need it.
- Consider seeing a professional counselor or talk with your spiritual advisor.

"First, accept parts of the disaster will stay with you. Second, recognize you have reason to be angry about it and your feelings are valid. Third, you don't have to forgive or forget, you can decide not to let it preoccupy you. You lost control over some things, but you can exercise control over other areas of your life."

- *Dr. Kai Erikson, a Yale University sociologist who studied technological disasters*

Additional information on some of these activities and coping with feelings can be found in the appendices.

One way to begin the healing process is to reach out to others. Even the smallest act of kindness can be the first step to collective healing.

Examples include:

- Engage in community service.
- Encourage community groups of which you are a member to initiate programs as outlined in the previous chapter.
- Volunteer your time to these programs once initiated. You can distribute leaflets or become a peer listener for example.
- Become a volunteer with other established programs in your community.
- Visit shut-in elders.
- Spend time with a child.

Chapter Four:

Local Government - Preparing and Responding

Preparedness Before the Disaster

Local planning and preparation for both natural and technological disasters is important, but one key aspect of technological disasters to understand is that they are unpredictable. Events like tornadoes, tsunamis, or hurricanes allow weather forecasters a chance to warn residents of potential disaster. A technological disaster, however, is an accident caused by human behavior and cannot be predicted. In addition,

"Coming in at 8:00 a.m. when Exxon demanded a meeting...I'll never forget it...I was already frustrated because the council hadn't had a quorum and hadn't adopted the budget and all this work I was trying to do in the middle of the whole mess, basic city work wasn't being taken care of and that's what I mean: the whole city operation came to a standstill..."

- Kodiak, Alaska, city official, 1989

technological events are far more conflict-laden, since there is somebody or something to point fingers at. These events can potentially divide a community and be emotionally taxing in a different way than a large-scale flood or other natural disasters. Remember that the disaster will disrupt normal government functions and personnel can be overwhelmed very quickly.

Regardless of the event or cause, a community that has prepared for disasters in general will be better poised to survive and manage should one occur. Proper planning can provide local authorities and citizens a structure to understand and deal with these events.

The first step is to develop an overall community emergency response plan. This guidebook is meant, among other goals, to provide insight into developing that plan, especially as it relates to technological disasters. Additional information on many of the components in this chapter, including the Incident Command System, Unified Command, communications planning and aspects of responding can be found in Appendix H.

As the exact circumstances of a technological disaster cannot be predicted, planning for a specific type may not provide a full picture, however a survey can determine what potential disasters exist in the area. More important is

Helpful vocabulary terms related to emergency response:

Responsible Party: The person or company who is directly responsible for the disaster. Example: Exxon was the *responsible party* for the 1989 spill.

Unified Command: The group of people in charge of the disaster response. In an Alaska oil spill, this includes a representative from the responsible party; the state government; and the federal government, such as the U.S. Coast Guard or Environmental Protection Agency.

Contingency Plan: A previously developed document that outlines steps to be taken before, during, and after an emergency.

establishing a community structure to respond to the needs of government and citizens should a disaster occur. Structure and protocols should include but not be limited to the following:

1. Establish a Command Structure

Establish a chain of command. It is vital that the head of the local government (mayor, city manager, village administrator) have a command structure in place. The command structure may differ from normal operations, depending on the situation. Officials such as police or fire chief, village public safety officer, and public works director should be assigned specific tasks relating to a community response.

In a federal response, the power structure is different for an oil spill versus a natural disaster. During an oil spill, a Unified Command is established.

If a responsible party is involved with the disaster response, establishing a relationship with them will be an important step in dealing with compensation for services or volunteer coordination. These issues may proceed according to the responsible party's approved contingency plan and local officials may not have the control and authority they would in a natural disaster event.

2. Effective Communications Planning

A critical part of emergency response planning and operations is communications. The importance of having a communications plan cannot be overstated. This plan enables community leaders to communicate effectively before, during, and after an event. Communicating accurate incident information is an important public service and it should be a multimedia effort. Include social media platforms and other online tools, as well as more traditional news releases and phone calls, to ensure that the broadest array of the public is reached.

3. The Incident Command System

A local government might consider studying and applying an Incident Command System, or ICS. This system, originally developed to manage responses to large wild fires, has since been adopted by many industry and government agencies to manage any kind of emergency such as a technological disaster.

The Federal Emergency Management Agency, or FEMA, takes an active role with local emergency disaster planning. FEMA provides resources, training, and help with disaster planning, including a course on the ICS structure. Their training primarily addresses natural disasters but is applicable to technological disasters.

More information can be obtained from:

<https://www.ready.gov/business/implementation/incident>

How to Respond

Steps should be taken to prevent confusion, establish an organizational system to meet the demands of the disaster, and allow officials not only to function in the emergency mode but allow the local government to perform its normal obligations as well. Some key response actions for local government to consider include:

- Assigning a liaison to speak for the city government and communicate with the response management team. Ideally, this individual will need to understand city emergency policy, oil spill response, and the incident command structure. The liaison will need to listen and actively gather information, but they also need to be an advocate for local needs and resources.
- Prepare the city attorney. Most technological disasters involve lengthy litigation.
- Prepare and train social service agencies for the types of impacts expected in a technological disaster.
- Predetermine physical office requirements for an archive program. A technological disaster can be expected to generate an enormous amount of paperwork. Because of the continued potential for financial accountability and legal action, all records should be kept and archived. Also, it will serve the government better to coordinate the disaster response from a separate office and leave existing office space for the normal functions of the government.
- If your community is near the event, it may see a significant amount of equipment and vessels, a large influx of temporary workers, and a general disruption of day-to-day business, especially during early stages. These concerns will be best managed by working with Unified Command and the responsible party.
- Responses to technological disasters have two main phases: Immediate emergency response, then a long-term operation. Meeting the demands of the first phase effectively prepares the community for the long-term recovery.

Despite all the precautions and prevention measures in place, and the assurances of industry and regulatory agencies, technological disasters occur and the local organization that prepares and functions efficiently during the disaster is the one that can help the community endure and survive the experience. Steps need to be taken immediately upon notification of a disaster. If the community response starts in chaos, it most likely will function with chaos throughout.

Additional Resources for Local Governments

Every community is different and every disaster is different. There are several tactics that have worked in other communities. You may find you need to tailor your own unique response. You can find additional information on the following topics in Appendix H: Supporting Information Local Government – Preparing and Responding:

- ICS Overview
- How to Structure Local Government Response
- Public Relations
- Meetings
- Record Keeping
- Other Considerations
- Regional Stakeholder Committees in Alaska

It will be important to determine if there are state laws or regulations about public meetings in different localities. For example, Appendix I: Supporting Local Government – Alaska Open Meetings Act includes the full text of the Act, the structure of which can help local government in preparing and responding (also see the introductory discussion under the Town Hall Meetings section in Chapter Two).

How Alaskans Work Together to Coordinate Spill Response

In Alaska, the Alaska Department of Environmental Conservation (ADEC) stretches resources throughout the state by enlisting local support in cleanup activities. Equipment is staged in specific communities where local city government have signed “community spill response agreements” with ADEC. This program allows for a quick, locally driven, and cooperative responses to oil and hazardous substance spills.

These agreements allow ADEC to reimburse a city for its costs if the city assists in a spill at the state's request. Responses to oil and hazardous spills are more effective if the state can draw upon local community and government resources and the experience and knowledge that residents bring to spill incidents.

Use of this response equipment comes with certain caveats. The equipment is not necessarily available to anyone at any time as prior training and permission is needed.

To learn more about these community response agreements, go to ADEC’s website, <https://dec.alaska.gov/spar/ppr/response->

Chapter Five:

Local Businesses – Preparing and Responding

Expectations and Preparations for Small Businesses

Local small businesses can expect large impacts from a technological disaster. One way a responsible party may attempt to assuage local feelings is through purchasing locally as many supplies as possible. A large influx of response workers also can strain local supplies. This leaves shortages on the shelves and a lack of supplies for those community members who depend on local merchants. Employees may go to earn more money working on the response, abandoning their jobs and leaving the store owner without adequate help. Meeting the new demands of the responsible party, maintaining adequate supplies for the community, and finding enough help to deliver the supplies can become overwhelming very quickly. On the other hand, some businesses may experience a loss of customers due to response activities, resulting in inventory surpluses. Some planning can help identify and address problems.

Questions and Difficulties

- My shelves are empty. Where do I find more supplies?
- How do I keep adequate supplies in stock?
- How am I going to supply necessities to my regular customers?
- Where am I going to find employees?



"[The fishing season of 1989 was projected to be the opportunity of a lifetime: big volume, big prices. Then the oil spill hit...no herring season, no fishing season. Everybody left to work the oil spill; your employees left to work the spill. Then the people who made big money working the spill left the following winter after the spill. So, businesses were all inventoried up, all dressed up for the party which didn't come..."

- Cordova, Alaska, business owner, 1989

"A lot of businesses tell us, 'We know how to prepare and recover from storms, but this is worse than any hurricane we have ever had.' People cannot really estimate the long-term losses or the long-term impact because they cannot define 'long term.' Does it mean this season, a few years, a lifetime? To think that this will affect more than this season is unthinkable, and for many this was the season. Yet they are all aware that the damages being done is going to change their lives immeasurably. The uncertainty is probably the most devastating part of it."

- Carmen Sunda, Louisiana, Small Business Group, 2010

"We used to have about 60 to 70 boats fishing here. Now it's about 10 or 12 shrimping boats."

- Pointe à la Hache, Louisiana, supply shop owner, 2015

- Profiteering. Can/should I raise prices?
- Where will all these people sleep and eat?
- Who is going to help me?
- When is it going to end?
- What about the wage earner/spouse/small business?
- Who is going to pay?
- Financial stability and where has it gone?
- Should I supply the responsible party or not? (moral choices, guilt)
- Who's got the power here? (intimidation, harassment)
- How will I get rid of my inventory?
- I can't afford to get rid of my inventory.

Groceries, hardware stores, hotels, bed and breakfasts, heavy equipment suppliers, storage yard operators, transportation suppliers, small telephone, power and other utility companies, clothing stores, drug stores, restaurants, even taverns and gift shops can all expect overwhelming business and resulting shortages during a technological disaster. A responsible party with large resources may even place demands on normal wholesale suppliers and they, too, may encounter shortages. Until the suppliers can refill warehouses, shortages may go well beyond the resources of local businesses. In addition, transportation for incoming supplies itself may be in short supply; and while necessities exist, the means for bringing them into the community may be unavailable.

One lesson learned during the 1989 Exxon spill was that the resourceful person could find supplies, though the costs might be higher, particularly for transportation. One example: A vessel lost its outdrive and a caller to the local supplier was told there were no such drives on the whole West Coast. Three calls later one was located in New Jersey. It was placed on an airplane and delivered to a remote village in Prince William Sound within 24 hours. A database of phone numbers of alternate suppliers at greater distances or a web search can help locate shortage items quickly during emergencies. Most items are only a phone call and an airplane flight away, if one is willing to pay the price. Below is a list of some measures a local business can take toward preparation for a technological disaster.

Preparation Measures

- List items, particularly necessities, that might be in short supply.
- Develop a list with current websites for alternate commodities suppliers and alternate transportation providers, no matter how far away.
- If possible, stockpile non-perishables.
- Enlist alternate workers, including relatives, friends, or anyone who might step in.
- Establish communications with the local and state employment services to import workers if necessary.
- Establish a line of credit for increased "up front" expenses.
- Be prepared to negotiate contracts with the responsible party.
- Document all extra costs as incurred dealing with the responsible party.
- Accurate records will help keep track of any issues that could end up in litigation.

Dealing With Supply Fluctuations and Employee Shortages

Expectations and Actions

- Prices will rise with increased transportation costs.
- Ways to work with or compete with the responsible party for supplies.
- Deliveries can take longer because of competition for transportation.
- Create a list of alternate suppliers.
- Research alternate transportation options.
- It may be difficult to find workers.
- Freeing cash for increased up-front expenses.
- Listen carefully to customers and watch stocks to learn what necessities are in demand.
- Suppliers to industries closed by the technological disaster may end up with excessive inventories. A responsible party may not honor these as direct expenses of the disaster and refuse to compensate for the loss of business.
- Business may experience a loss of regular patrons because they have been called away to respond to the disaster. This, in turn, can result in supply surpluses rather than shortages.

"They didn't pay for my inventory because I still had it. But I couldn't sell it and couldn't pay for it. I lost my line of credit and now I can't order in advance in time to get merchandise when I need it, because it takes so long to ship goods in."

Cordova, Alaska, business owner, 1989

Chapter Six:

Volunteers – A Part of the Response

One basic tenet of response in a disaster is to give people something to do, no matter how small. Another is that volunteers will show up en masse wanting to help. An occupied person feels a contribution is being made and the job itself helps take the mind away from feelings of helplessness and ineffectiveness. During the 1989 Exxon spill in Prince William Sound, many people who attempted to volunteer were used at first, then turned away. Some were refused at the outset; others could not find a place or organization that could use their services. This led to even greater frustration than the spill itself. A well-developed plan for employing volunteers effectively can go a long way toward neutralizing those feelings and having a positive influence on both volunteer and response effort.

There are perhaps hundreds of jobs volunteers could fill quite well if given the opportunity, attention, administration, and training. To do this requires a coordinated effort on the part of local authorities and it takes the cooperation of the responsible party, at least in those areas directly related to the technological disaster. One frustration in 1989 was the responsible party let it be known volunteers were not welcome and that all workers were hired through contractors. Those people who maintained their regular occupations but had a few hours a day to volunteer were not allowed to participate in the cleanup.

Remember, there may also be a place for volunteers (sometimes called a Volunteer Referral Center) within the community to give service. Local citizens can be useful volunteering in non-response areas, such as within their own churches or other civic organizations. There may even be a volunteer referral agency within your community.

BE WARNED: While at first glance a volunteer program could seem to be a positive necessity, it can have its downside. Organizers must understand what a volunteer program can do but also must be fully aware of the pitfalls and dangers inherent in dealing with one. A successful program requires a certain amount of responsibility and financial support to make it work.

- The next section, “Volunteer Coordination Program,” provides detailed discussion of Volunteer Referral Centers.
- Each at-risk community must have a volunteer coordinator who has intimate knowledge of the community, threats, services, needs, and logistic challenges.



"I cleaned otters for a day...just ran a hair dryer to warm them after they were cleaned. Then they came in and told us they didn't want volunteers any more. What can we do? This was my Eden."

- Valdez, Alaska, volunteer during the Exxon Valdez oil spill clean up

- It must be determined who is responsible for hiring a volunteer coordinator for each at-risk community. This may be billable to the responsible party, but it should be verified, and only for costs incurred during the disaster.
- Insurance and liability are serious issues that need to be reviewed on a local basis.
- Enthusiastic, off-the-street volunteers need guidance about the chain of command and protocol during a crisis. Their enthusiasm will not make up for their lack of expertise and lack of understanding.
- Existing organizations such as the Red Cross, the International Bird Rescue Research Center, and Alaska SeaLife Center have systems in place for signing up and managing volunteers.
- Depending upon local regulations and laws, people may or may not be able to clean up oil or help with animals, so check with local organizations such as those in the above bullet for information.
- Consider setting up a volunteer hotline and methods for volunteers to contact existing organizations (or use those of the existing organizations) – include a what you can and can't do list.
- Care has to be taken in identifying and placing volunteers in responsible positions. Protocols established for hiring in certain occupations need to be followed. For example, daycare volunteers need to be screened, hired, and placed according to industry and governmental regulatory guidelines for persons caring for children.
- The chronic nature of a technological disaster creates a long-term necessity for workers. Volunteers may grow weary or lose interest after a time.
- Creating and regularly updating a volunteer database is critical.

For those localities that might be unable or unwilling to take on a volunteer coordination program, organizations such as village or tribal councils or even the state may be able fill that capacity.

Keeping the above reservations in mind, a coordinated, well-managed volunteer program can help in many ways to alleviate the effects of a disaster, from the basic task of simply filling necessary positions to giving people some sense of contribution and thus fulfillment that they did their part.

Information on volunteer programs can be found in the States BC Task Force document – “Planning Guidelines for Convergent Volunteer Management - June, 2008” at http://oilspilltaskforce.org/docs/planning_for_volunteer_management.pdf.

Volunteer Coordination Program

Volunteer Coordination

Local volunteers can play an important role in a technological disaster. This is especially true in remote areas, where there is a wealth of local knowledge pertaining to wildlife populations, currents, tides, and other environmental phenomena. During an emergency, it is likely that large numbers of local community members will arrive on scene, eager to participate in response activities.

A volunteer coordination plan is necessary to effectively manage and direct volunteer activities such as recruitment, training, communications, and referral. This plan addresses such issues for all unaffiliated volunteers, or volunteers who are not already affiliated with a response organization. Affiliated volunteers should work through their respective agencies.

Providing adequate management in the form of timely training and professional supervision, as well as ensuring their safety, maintaining records, and following up with recognition are challenges best met with prior planning. Indeed, successfully meeting such challenges sends a positive message to the public.

What follows is a volunteer coordination plan developed for the Kodiak area of Alaska.

Organization and Activation within the ICS System

Within the Incident Command System (ICS), discussed in Chapter Four, a Volunteer Manager may be appointed by the Incident Commander to manage all aspects of the volunteer program, including communications, recruitment, training, and referral. The Volunteer Manager (VM) will report directly to the Logistics Section Chief.

The VM will operate a Volunteer Referral Center (VRC) which will refer volunteers to appropriate ICS units or activities where they can apply their skills and interests. The VRC will provide initial screening, skill and training identification, and orientation. Additional screening, training, and supervision will be provided by the ICS unit to which the volunteer is referred.

The facility selected to serve as the VRC may be co-located with the Incident Command Center or may be located nearby in a school, church, recreation center, community building, or other such facility. The facility should provide easy public access, enough room for reception and training areas, and some communication capabilities. The VRC should have basic office equipment, such as computers, telephones, fax machines, copiers, and office supplies.

Insurance and Liability

While laws in Alaska provide some immunity for volunteers who are sued for their actions while assisting local or state governments in an emergency, the extent of that immunity depends upon the type of action involved and should not be simply assumed. Similarly, the extent to which volunteers are protected for injuries under Worker's Compensation depends upon the particular coverage in effect at the time the volunteers do their work. Local

communities should seek advisory opinions in advance of an emergency as to liability and Worker’s Compensation coverage so as to be able to adequately advise volunteers.

The VRC will act only as a referral agency and will not directly supervise the volunteers, with the exception of those volunteers working in the Referral Center. Effective screening, training, and supervision will help to limit what liability may exist from the assigning of volunteers.

Training, Screening, and Skill Identification

As potential volunteers contact the referral center, they will be screened and referred to Incident Command System units based on their skills, training and certification, and availability. During response and recovery activities, response agencies or the responsible party may contact the VRC and submit requests for volunteers.

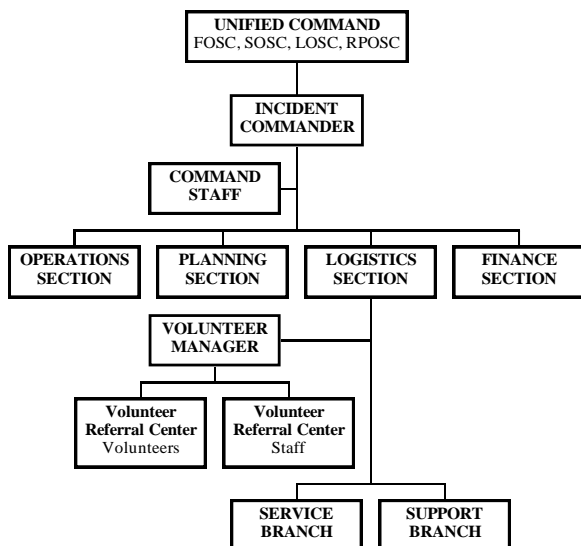
Training, screening, and skill identification will be accomplished by using the following:

- A training module which covers basic orientation to the applicable contingency plan, ICS organizations and functions (both general section divisions and specific unit tasks), and basic safety and communications procedures.
- A database which identifies which volunteers have completed training, additional skills and certifications (HAZWOPER, wildlife hazing, etc.), and individual preferences and availability.

Volunteer Manager Responsibilities and Duties

The Volunteer Manager is responsible for the implementation and management of the Volunteer Coordination Plan. It is the Volunteer Manager's responsibility to recognize and anticipate the potential role of volunteers in a disaster response, to coordinate needs and available resources, and to manage the VRC in recruitment, identification, training, and placement of volunteers during a response.

The Volunteer Manager will report to the Logistics Section Chief. All VRC staff and volunteers will report to the Volunteer Manager (see diagram).



The Volunteer Manager's duties may include the following:

- Serve as a liaison with the IC and Unified Command via the Logistics Section Chief to coordinate volunteer needs.
- Serve as the principal contact for all volunteers and all units/agencies needing volunteers.
- Establish and manage the VRC to include registration, orientation, placement, recruitment, training, and referrals.
- Establish a communication system, including a toll-free phone number, fax lines and fax machines, phones, possibly computers with email capability and web access if available, and a link to the Command Center.
- Coordinate with the Public Information Officer (or Joint Information Center) to provide notification to the media regarding types of volunteer jobs available and procedures for volunteering.
- Provide safety training as necessary for all volunteers to ensure they are properly trained and equipped and in compliance with federal, state, and local safety regulations.
- Coordinate with response agencies and the Responsible Party to provide additional volunteers as needed and to coordinate referrals.
- Maintain records of volunteers, training and certification, hours worked, and their assigned activities.
- Provide volunteer recognition.

Additional Volunteer Coordination Information

You can find additional information on volunteer coordination in Appendix K, including context on non-ICS volunteer programs:

- Considerations of a Volunteer Program
- Sample Volunteer Request and Registration Forms