Living in a wildfire: the relationship between crisis management and community resilience in a tourism-based destination
www.nrfirescience.org/resource/21086
This study contributes to the understanding of the relationship between crisis management procedures and local resilience responses. Utilizing the context of the 416 wildfire in southwest Colorado during the summer of 2018, this study proposes that community resilience is a process that is impacted by the decision-making surrounding...
Author(s): Elizabeth A. Cartier, Lorraine L. Taylor
Year Published: 2020
Type: Document
Book or Chapter or Journal Article

Wildland fire radio communication - common myths and best practices
www.nrfirescience.org/resource/18958
This Research Brief summarizes findings of a Joint Fire Science Program project focused on understanding radio communications as part of risk communication and sensemaking in wildland fire operations. Through observation of live and simulated radio conversations, analysis of training materials, and interviews with a variety of...
Author(s): Anne E. Black, Rebekah L. Fox, Elena Gabor, David Thomas, Jennifer Ziegler
Year Published: 2018
Type: Document
Research Brief or Fact Sheet

Should I stay or should I go now? Or should I wait and see? Influences on wildfire evacuation decisions
www.nrfirescience.org/resource/16390
As climate change has contributed to longer fire seasons and populations living in fire-prone ecosystems increase, wildfires have begun to affect a growing number of people. As a result, interest in understanding the wildfire evacuation decision process has increased. Of particular interest is understanding why some people leave...
Author(s): Sarah M. McCaffrey, Robyn S. Wilson, Avishek Konar
Year Published: 2017
Type: Document
Book or Chapter or Journal Article

Effectiveness of public health messaging and communication channels during smoke events: a rapid systematic review
www.nrfirescience.org/resource/15062
Exposure to smoke emitted from wildfire and planned burns (i.e., smoke events) has been associated with numerous negative health outcomes, including respiratory symptoms and conditions. This rapid review investigates recent evidence (post-2009) regarding the effectiveness of public health messaging during smoke events. The...
Author(s): Jennifer A. Fish, Micah D. J. Peters, Imogen Ramsey, Greg Sharplin, Nadia Corsini, Marion Eckert
Year Published: 2017
Type: Document
Book or Chapter or Journal Article, Synthesis

Social media approaches to modeling wildfire smoke dispersion: spatiotemporal and social scientific investigations
www.nrfirescience.org/resource/15552
Wildfires have significant effects on human populations, economically, environmentally, and in terms of their general well-being. Smoke pollution, in particular, from either prescribed burns or uncontrolled wildfires, can have significant health impacts. Some estimates suggest that smoke dispersion from fire events may affect the...

Author(s): Sonya Sachdeva, Sarah M. McCaffrey, Dexter Locke
Year Published: 2017
Type: Document
Book or Chapter or Journal Article

**Relational risk assessment and management: investigating capacity in wildfire response networks - Final Report to the Joint Fire Science Program**

[www.nrfirescience.org/resource/14925](www.nrfirescience.org/resource/14925)

Relational Risk Assessment and Management (RRAM) is about developing a new set of concepts and rapid assessment tools for assessing risk for problems that occur in inter-agency communication and coordination on complex fire events. Failures in effective communication and coordination within the network of responding organizations...

Author(s): Branda Nowell, Sarah M. McCaffrey, Toddi A. Steelman
Year Published: 2017
Type: Document
Technical Report or White Paper

**Communication under fire: communication efficacy during wildfire incidents**

[www.nrfirescience.org/resource/14170](www.nrfirescience.org/resource/14170)

In this study, researchers analyzed the influence of pre-incident familiarity, stakeholder affiliation, and primary wildfire response/functional role on communication frequency and efficacy during three western U.S. wildfires ignited on U.S. Forest Service land. All fires occurred in wildland/urban interface areas, and involved a...

Author(s): Northwest Fire Science Consortium
Year Published: 2016
Type: Document
Technical Report or White Paper

**What information do people use, trust, and find useful during a disaster? Evidence from five large wildfires**

[www.nrfirescience.org/resource/13211](www.nrfirescience.org/resource/13211)

The communication system through which information flows during a disaster can be conceived of as a set of relationships among sources and recipients who are concerned about key information characteristics. The recipient perspective is often neglected within this system. In this article, we explore recipient perspectives related to...

Author(s): Toddi A. Steelman, Sarah M. McCaffrey, Anne-Lise Knox Velez, Jason Alexander Briefel
Year Published: 2015
Type: Document
Book or Chapter or Journal Article

**Re-envisioning community-wildfire relations in the U.S. West as adaptive governance**

[www.nrfirescience.org/resource/13725](www.nrfirescience.org/resource/13725)

Prompted by a series of increasingly destructive, expensive, and highly visible wildfire crises in human communities across the globe, a robust body of scholarship has emerged to theorize, conceptualize, and measure community-level resilience to wildfires. To date, however, insufficient consideration has been given to wildfire...

Author(s): Jesse Abrams, Melanie Knapp, Travis B. Paveglio, Autumn Ellison, Cassandra Moseley,
Communicating about smoke from wildland fire: challenges and opportunities for managers
www.nrfirescience.org/resource/12982
Wildland fire and associated management efforts are dominant topics in natural resource fields. Smoke from fires can be a nuisance and pose serious health risks and aggravate pre-existing health conditions. When it results in reduced visibility near roadways, smoke can also pose hazardous driving conditions and reduce the scenic...
Author(s): Christine Olsen, Danielle K. Mazzotta, Eric Toman, A. Paige Fischer
Year Published: 2014
Type: Document
Book or Chapter or Journal Article

Best practices in risk and crisis communication: implications for natural hazards management
www.nrfirescience.org/resource/8359
As societies evolve, often the most appropriate response to the hazard must also evolve. However, such shifts in appropriate response to a hazard, whether at the individual or at the societal level, are rarely straightforward: Closing the gap between desired practice and current practice requires effective communication. Although...
Author(s): Toddi A. Steelman, Sarah M. McCaffrey
Year Published: 2013
Type: Document
Book or Chapter or Journal Article

Alternatives to evacuation during wildland fire: exploring adaptive capacity in one Idaho community
www.nrfirescience.org/resource/11993
The use of alternatives to evacuation during wildfire events continues to be an intensely debated strategy in the professional and policy circles of numerous fire-prone countries. The most recent chapter comes in response to the Black Saturday Fires in Australia, which has led to policy changes concerning alternatives to evacuation...
Author(s): Travis B. Paveglio, Matthew S. Carroll, Pamela J. Jakes
Year Published: 2010
Type: Document
Book or Chapter or Journal Article

The next catastrophe: reducing our vulnerabilities to natural, industrial, and terrorist disasters
www.nrfirescience.org/resource/15885
Perrow, developer of normal accident theory, argues here that we must reduce the size of targets that are vulnerable to disasters because organizations, including political ones, cannot completely prevent all the risks associated with the potential disasters that a society might face. A basic tenant of Perrow's argument is that...
Author(s): Charles Perrow
Year Published: 2007
Type: Document
Book or Chapter or Journal Article
Managing the unexpected: resilient performance in an age of uncertainty
www.nrfirescience.org/resource/15972
Thousands of firefighters across the United States have been influenced by the first edition of "Managing the Unexpected". In this second edition, the authors continue their analysis of high reliability organizations (HRO's), which are organizations that routinely operate in high risk environments (where the consequences of...
Author(s): Karl E. Weick, Kathleen Sutcliffe
Year Published: 2007
Type: Document
Book or Chapter or Journal Article

Shared mindfulness in cockpit crisis situations
www.nrfirescience.org/resource/15912
Research reveals that human error contributes 60 to 80 percent of error in aviation accidents and disasters. Thus, despite innovations in technology and safety materials, individuals must be able to make speedy yet intelligent decisions and be able to communicate those decisions in an efficient manner. Krieger explores the...
Author(s): Janice L. Krieger
Year Published: 2005
Type: Document
Book or Chapter or Journal Article

Inviting disaster: lessons from the edge of technology
www.nrfirescience.org/resource/15873
While technology has provided the means for achieving unprecedented control over land, air, and sea, it has also become increasingly complex. As a result of this complexity, disasters are difficult to predict, and they are even more difficult to prevent. This book exposes many common mistakes that have culminated in unnecessary...
Author(s): James R. Chiles
Year Published: 2002
Type: Document
Book or Chapter or Journal Article

Risk management for ecological stewardship
www.nrfirescience.org/resource/15896
This comprehensive chapter documents, from a management perspective, the knowledge base on risk assessments and risk management. The previous chapter in the book is a companion article that provides the scientific foundation for the concepts and terminology used by Cleaves and Haynes. In this chapter, Cleaves and Haynes provide a...
Author(s): D.A. Cleaves, R. W. Haynes
Year Published: 1999
Type: Document
Book or Chapter or Journal Article

Dialogue and the art of thinking together
www.nrfirescience.org/resource/16219
In this book, Isaacs argues that we should learn to kindle and sustain a new conversational spirit in our relationships, organizations, and communities. A conversational spirit will help us in times of frustration and conflict and help us work together to a more promising future. Isaacs discusses what encourages and discourages such...
Author(s): William Isaacs
Managing environmental uncertainty with legitimate authority: a comparative analysis of the Mann Gulch and Storm King Mountain Fires
www.nrfirescience.org/resource/15893
Alder recognizes two decisions common to both the Mann Gulch and Storm King Mountain fires that influenced the behavior of firefighters during critical moments: 1) failing to question authority and 2) failing to obey authority. He argues that these failures are based on individual perceptions of legitimate authority. There are four...
Author(s): G. Stoney Alder
Year Published: 1997
Type: Document
Book or Chapter or Journal Article

Man-made disasters
www.nrfirescience.org/resource/15889
To understand and avoid future calamities, decision makers must have a more accurate way of understanding past calamities. Most of what we know about calamities comes from eye witness accounts that favor relief efforts and damage reports rather than the specific events that come together initially to form a disaster. This suggests...
Author(s): Barry A. Turner, Nick F. Pidgeon
Year Published: 1997
Type: Document
Book or Chapter or Journal Article

Causes of disaster: sloppy management
www.nrfirescience.org/resource/15891
Turner argues that while the best way to avoid disasters is primarily “for managers to establish, to strengthen, and then to assert control,” management control only addresses part of the problem, and there are limitations that affect management in disaster situations. Turner advocates examining three interrelated factors in a...
Author(s): Barry Turner
Year Published: 1994
Type: Document
Book or Chapter or Journal Article

Preventing chaos in a crisis: strategies for prevention, control and damage limitation
www.nrfirescience.org/resource/15914
This early work of Lagadec’s, though it is nearly a decade and half old, continues to provide a helpful summary of guidelines managers can use during a crisis. The book, targeted specifically for decision makers, is organized into three parts that answer three main questions: What is a crisis? How do you manage a crisis? How do you...
Author(s): Patrick Lagadec
Year Published: 1993
Type: Document
Book or Chapter or Journal Article

The textual approach: risk and blame in disaster sensemaking
This article investigates responses to a gas pipeline explosion as a means of uncovering the methods that organizations and other participants use to make sense during disaster and to change situations. Sensemaking deals with how organizations and individuals explain or “make sense of” what goes on around them. Gephart is...

Author(s): Robert P. Gephart Jr.
Year Published: 1993
Type: Document
Book or Chapter or Journal Article

Organizational communication imperatives: lessons of the space program
www.nrfirescience.org/resource/15970
Drawing upon experience working for NASA during the Apollo Missions and his studies of organizational communication, Tompkins illustrates that taking a communication perspective can help with understanding organizational problems. This book takes a narrative approach in which Tompkins discusses his visits to the Marshall Space...

Author(s): Phillip K. Tompkins
Year Published: 1993
Type: Document
Book or Chapter or Journal Article

On risk communication as interorganizational control: the case of the aviation safety reporting system
www.nrfirescience.org/resource/15969
Focusing on the 1974 Trans World Airlines (TWA) Flight 514 crash, Tompkins discusses the National Transportation Safety Board’s (NTSB) investigation of the crash and points to communication between the pilot and controllers and communication between airline organizations as principle contributors to the tragedy. Using this...

Author(s): Phillip K. Tompkins
Year Published: 1990
Type: Document
Book or Chapter or Journal Article

Military misfortunes: the anatomy of failure in war
www.nrfirescience.org/resource/15876
Military misfortunes are complex and involve not only individual failures in judgment or action, but also organizational failures rooted in the values each military organization upholds. This book uses examples from several military battles to highlight the need for military operations and organizations that: 1) learn from past...

Author(s): Eliot A. Cohen, John Gooch
Year Published: 1990
Type: Document
Book or Chapter or Journal Article

Victims of groupthink: a psychological study of foreign-policy decisions and fiascoes
www.nrfirescience.org/resource/16221
According to Janis, groupthink occurs when “members of any small cohesive group tend to maintain esprit de corps by unconsciously developing a number of shared illusions and related norms that interfere with critical thinking and reality testing”. Groupthink can lead to group members making faulty decisions together because they...

Author(s): Irving L. Janis