



**AMERICAN
FLOOD
COALITION**

A DUAL DISASTER HANDBOOK: 6 RECOMMENDATIONS FOR LOCAL LEADERS RESPONDING TO FLOODS DURING COVID-19

Executive Summary

In 2020, local leaders across the United States will likely face an unprecedented threat that requires significant collective action: a flood that hits during the COVID-19 pandemic and its economic fallout. This “dual disaster” will likely be widespread: **128 million Americans** are at risk of **flooding this spring**, and the country is likely to see **more hurricanes than normal** this season. Also, since flooding and COVID-19 both compound existing inequalities, populations that disproportionately experience social injustices concerning health, employment, and the environment will likely experience the worst consequences if local, state, and federal leaders do not plan and prepare robust dual disaster responses. This handbook for local leaders provides six recommendations for preparing for a flood during COVID-19. While the specific dual disaster response will look slightly different for each community, proactively planning an equitable response is essential everywhere and is especially important as communities face multiple threats.

Recommendations for local leaders facing a flood event during COVID-19

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DUAL DISASTER CHECKLIST FOR LOCAL LEADERS

1 Examine existing emergency plans

- ☐ Review the Emergency Operations Plan
- ☐ Examine the Continuity of Government plan
- ☐ Revise delegations of authority, if needed

Guide to using this checklist

- ☐ Recommended actions
- ☒ Things to consider

2 Anticipate the risks of a dual disaster—with a focus on vulnerable populations—and identify potential responses

Discuss the implications of your community's compound risks (COVID-19 and flooding risks layered on baseline risks):

- ☒ Inequality in terms of who is most exposed
- ☒ Interruption of social services
- ☒ Burnout for frontline workers (e.g., healthcare workers, city staff)
- ☒ Mental health challenges
- ☒ Lack of resources to evacuate
- ☒ Additional community-specific risks

Prepare a dual disaster response:

- ☐ Discuss tradeoffs between COVID-19 and flood responses
- ☐ Involve community leaders in planning a dual disaster response
- ☐ Combine public health and flooding datasets
- ☐ Make a food provision plan for vulnerable populations
- ☐ Increase access to COVID-19 resources
- ☐ Keep racism out of disaster recovery spaces
- ☐ Support workers on the frontlines

3 Activate necessary legal authorities: emergency declarations, evacuations, and price controls

First steps:

- ☐ Decide which (if any) of the legal authorities are appropriate for your community and situation
- ☐ Determine degree of local autonomy to activate the legal authorities

If applicable:

- ☐ Issue an emergency declaration
- ☐ Issue an evacuation order
- ☐ Institute price controls on basic necessities (e.g., food, tarps, rent)

4 Secure additional volunteers, medical supplies, food, and shelters

Evaluate potential obstacles that may inhibit a dual disaster response:

- ☒ Stress to critical infrastructure
- ☒ Volunteer shortage
- ☒ Equipment shortage
- ☒ Disruptions in supply chain management
- ☒ Reduced sheltering capacity
- ☒ Difficulties with transporting patients
- ☒ Reduced access to healthcare
- ☐ Review and update existing mutual aid agreements
- ☐ Review and update existing pre-event emergency contracts and form new ones
- ☐ Collaborate with the private sector and nonprofit organizations

5 Develop an emergency communications plan and coordinate responses with regional neighbors

- ☐ Collaborate with the local health department
- ☐ Collaborate with community leaders and organizations
- ☐ Prepare communications materials for multiple scenarios and multiple audiences
- ☐ Identify appropriate communication channels
- ☐ Provide frequent, recurring updates to community members
- ☐ Communicate the response in multiple languages
- ☐ Coordinate responses with regional neighbors

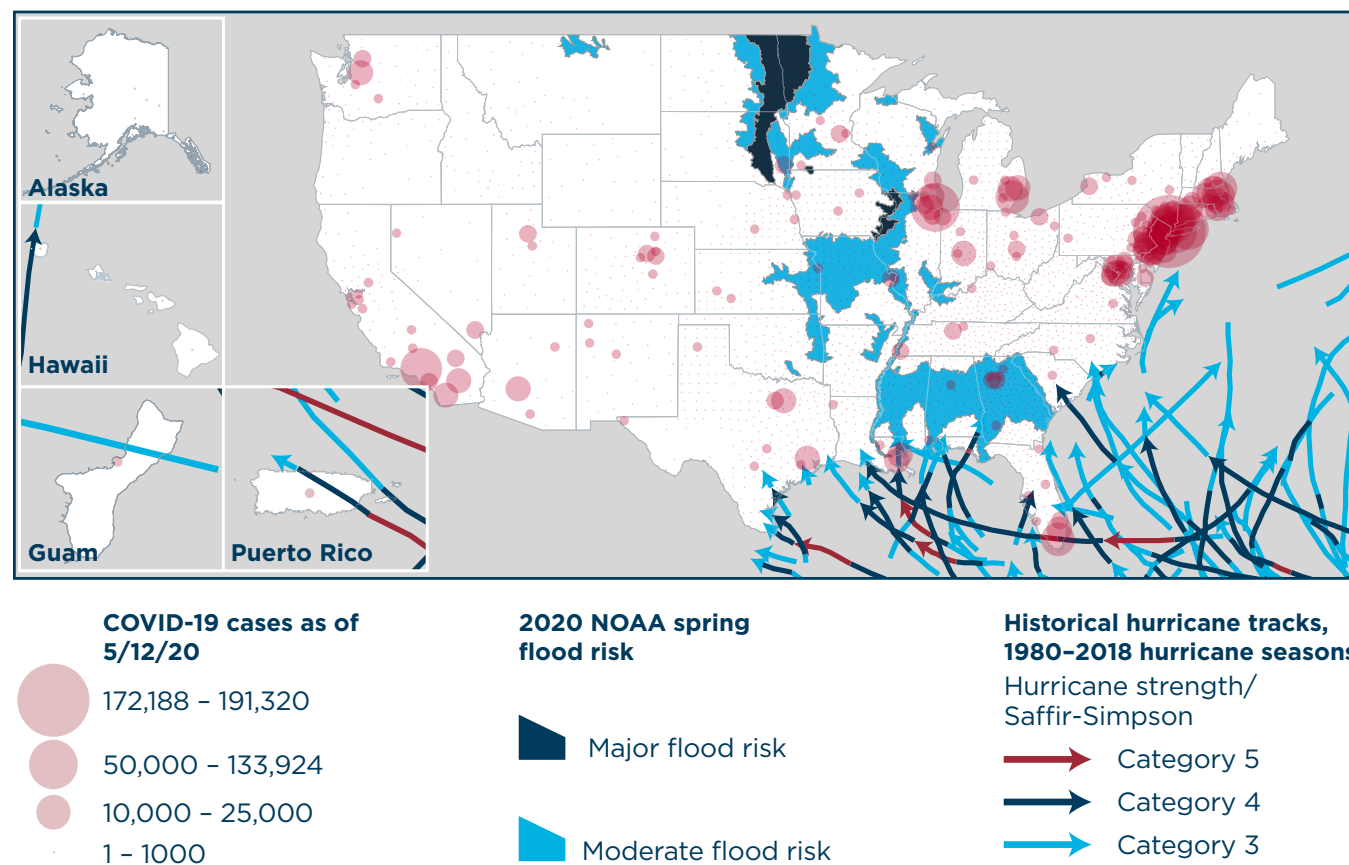
6 Set up a system to thoroughly and accurately document disaster expenses

- ☐ Establish a system for documenting disaster expenses
- ☐ Identify opportunities to leverage [federal grant funding](#)
- ☐ Track volunteer hours and donated resources to apply toward local cost share requirements
- ☐ Avoid the top five procurement mistakes that may lead to a loss of or failure to secure federal funding

Local leaders across the United States are managing outbreaks of COVID-19 in their communities. Some communities—from **Helena, Arkansas** to **Oslo, Minnesota**—are already navigating the “dual disaster” of a flood during COVID-19. For communities still waiting for federal assistance following the devastating flooding in 2019, this year’s dual disaster threat will be particularly taxing. NOAA estimates that **128 million people** face a heightened risk of spring flooding through the end of May—the Eastern Pacific hurricane season, which started on May 15, and the Atlantic hurricane season, which starts on June 1, threaten even more people with flooding. With hurricane activity expected to be **140% of the average season**, major hurricanes making landfall are more likely this year than in the past.

In 2020, countless cities, towns, and counties will have to respond to both COVID-19 and flooding. When this happens, these communities will draw on more emergency resources than usual, as they provide public goods and services while containing COVID-19 outbreaks. As spring flooding threatens municipalities across the Midwest and as hurricane season approaches, **more and more local leaders** on the frontlines of COVID-19 will need to prepare for a dual disaster response. For the purposes of this resource, we refer to disaster response at the community or municipal level, but many of the recommendations can be applied in other contexts or supported by cities and states. Also, while disaster recovery is important in a robust disaster plan, this resource focuses solely on disaster preparation and immediate disaster response.

The map below shows confirmed and probable (based on specific criteria for symptoms and exposure but without an official test) COVID-19 cases alongside, and often overlapping, areas at risk of major or moderate spring flooding or the paths of hurricanes when they were Category 3 or stronger, based on maximum wind speed, from 1980 through the 2018 hurricane season.



Roles within a local government

In every community, local leaders (e.g., elected officials and department heads) and emergency management professionals work together to prepare and respond to disasters. Their roles, however, differ:

Local leaders manage the disaster response and guide the community

- ▶ Local leaders **make important decisions** that can include declaring emergencies, issuing large-scale evacuations, distributing emergency funding, waiving local ordinances and regulations, and procuring scarce resources
- ▶ Local leaders guide the community, conveying purpose to and instilling confidence in their constituents

Emergency management professionals carry out the disaster response

- ▶ Emergency Operations Center staff manage the disaster response
- ▶ Emergency responders (e.g., police and firefighters) carry out the response in the field

Potential authorities that fall within a local leader's role during a disaster

As part of a coordinated disaster response, local leaders can draw on certain authorities. Though these authorities vary by community, the below list covers some of the most common legal authorities and ordinances that local leaders can employ before, during, and after a disaster:

- | | |
|---|---|
| ▶ Emergency declarations/states of emergency | ▶ Use of roadways |
| ▶ Evacuation orders | ▶ Changes to taxing and other local revenue collection |
| ▶ Price controls | ▶ Changes to building permits |
| ▶ Size and location of public gatherings | ▶ Lines of succession and continuity of government plan activation |
| ▶ Purchase of fuel, firearms, alcohol, or other items | ▶ Mutual aid agreements |
| ▶ Curfews | ▶ Compliance with state and federal laws and regulations through local policy, directives, and mandates |

1

EXAMINE EXISTING EMERGENCY PLANS

To prepare for a dual disaster today, local leaders can review existing emergency planning documents and adjust them for a dual disaster scenario. To assess whether existing plans meet the needs of the current situation, communities should convene a meeting of local officials, the emergency management team, the health department, and representatives from vulnerable populations. The following sections outline the fundamental principles of planning disaster responses that address dual disasters.

The realities of the COVID-19 pandemic—physical distancing requirements, demand surges for emergency response personnel, temporary closures of government facilities—force municipalities to modify normal operations and prioritize critical functions. Local leaders should bring together all parties involved in maintaining essential government functions (i.e., representatives from vulnerable populations, public health officials, emergency management staff, and local department heads) to review existing continuity plans and determine how to maintain essential governmental functions should a second disaster strike. Commonly, flooding and severe weather events affect the following sectors:

- ▶ Electrical power and telecommunications
- ▶ Emergency service routes
- ▶ Healthcare accessibility, including access to prescriptions, essential medications, and substance use disorder treatment
- ▶ Public works
- ▶ Child protective services
- ▶ Financial management, including payroll
- ▶ Fire/EMS
- ▶ Resource and services procurement
- ▶ Law enforcement
- ▶ Public health operations

Communities may differ in their approaches to emergency plans. Some frequently used approaches—described below—include Emergency Operations Plans, Continuity of Government plans, and the concept of delegations of authority. For communities without a plan, working proactively to implement these planning principles wherever possible can save lives, time, and resources.

Review the Emergency Operations Plan

Emergency Operations Plans describe how officials should manage disasters. FEMA's **Comprehensive Preparedness Guide** provides guidance on the fundamentals of planning and developing Emergency Operations Plans. These plans succeed when all actors and organizations know their roles and understand their fit in the overall plan. Specifically, FEMA's Comprehensive Preparedness Guide offers guidance for local leaders on the following:

- ▶ Engaging the whole community in a planning process that accurately represents the community's populations and involves community leaders and the private sector
- ▶ Ensuring plans account for the broad spectrum of risks created by threats and hazards
- ▶ Identifying which tasks are required throughout a disaster response, who is responsible for major tasks, and how many resources are needed
- ▶ Developing plans that are widely applicable for a response to any threat or hazard
- ▶ Integrating and synchronizing responses across all levels of government to limit duplicated effort

Examine the Continuity of Government plan

Continuity planning is essential to a local government's preparedness and response to a disaster. While Emergency Operations Plans detail how local leaders should respond to a disaster, Continuity of Government plans define the essential government functions (e.g., water treatment or trash collection) that must continue despite the disaster. Continuity of Government plans also outline the personnel, systems, facilities, vital records, and equipment needed to perform those essential functions. Elements of viable Continuity of Government plans include the following:

- ▶ Identification and prioritization of essential functions
- ▶ Orders of succession
- ▶ Delegations of authority
- ▶ Alternative facilities and other work relocation options
- ▶ Vital records management
- ▶ Tests, training, and exercises
- ▶ Devolution of control and direction
- ▶ Reconstitution

Delegations of authority

In a dual disaster response, local leaders may need to revise roles for the particular situation. In emergency planning, different roles are defined by delegations of authority—or, rules written before a disaster that allow leaders to make important decisions during an emergency. These rules are typically set out in a municipality's Emergency Operations Plan and Continuity of Government plan.

Faced with COVID-19 and potential flooding, leaders should proactively revisit the delegations of authority and, if needed, revise them to reflect individuals' availability and responsibilities during a dual disaster scenario. Below are common authorities addressed in a delegation of authority:

- ☐ Issuing and ending shelter-in-place orders
- ☐ Activating evacuation orders
- ☐ Hiring or firing municipal staff
- ☐ Setting cost parameters for items purchased by local government
- ☐ Activating emergency ordinances (e.g., classify some businesses as essential and close others for public safety)
- ☐ Activating pre-established emergency contracts for critical resources
- ☐ Activating specialized emergency management plans or procedures

When revising roles under delegations of authority, local leaders and emergency management staff can ask the following guiding questions:

- ☐ During the ongoing COVID-19 emergency, who has authority over each of the above authorities?
- ☐ If a second disaster struck, how might those authorities change, and who should have decision-making responsibility over each of the above authorities?

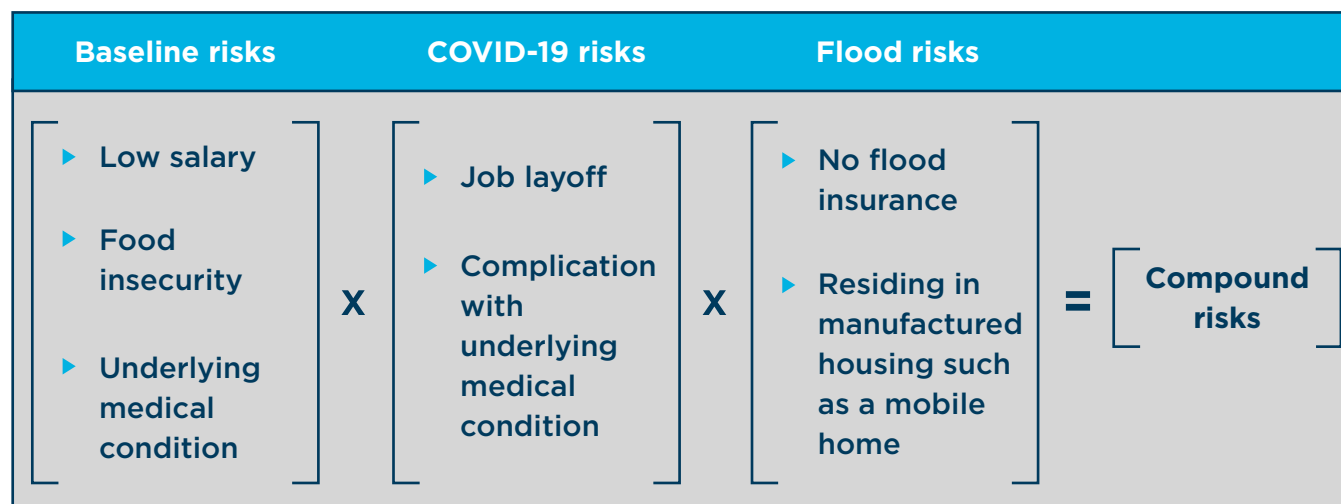
For additional resources and guidance, see [FEMA's Continuity Resource Toolkit](#) (for COVID-related and all-hazards preparedness) and [FEMA's Continuity Guidance Circular](#).

2 ANTICIPATE THE RISKS OF A DUAL DISASTER—WITH A FOCUS ON VULNERABLE POPULATIONS—AND IDENTIFY POTENTIAL RESPONSES

The first step in preparing for a dual disaster is to assess the risks from flooding and COVID-19 and map out potential responses. By focusing on the needs of vulnerable populations, the following two sub-recommendations are intended to help local elected officials, staff, and emergency management personnel build a holistic approach to flooding during COVID-19.

The risks of flooding and COVID-19 are not shared equally, with some communities—such as **rural towns in the Midwest**—facing increased economic and health effects from both threats. The social inequities around flood and COVID-19 exposure mirror the systemic inequities caused by racial and class discrimination: **Low-income people are more likely to live in a floodplain, Latinx and black people contract COVID-19 at higher rates**, and roughly **half of lower-income Americans report a lost job or wages from COVID-19**. Beyond exposure, these inequities play out in the flood recovery and COVID-19 care processes, with black and Hispanic households **losing an average of \$27,000 and \$29,000 in wealth**, respectively, after disasters, and **doctors referring black patients who experience COVID-19 symptoms for testing at a lower rate** compared to people of other races.

Understanding systemic inequalities highlights the links among **high baseline social vulnerability**, high risk for contracting COVID-19, and high risk of an incomplete flood recovery. These inequalities also highlight how disenfranchised communities may have reduced capacity to recover from a dual disaster. A dual disaster response must account for how long-term baseline risks and short-term emergency risks compound. The following diagram provides a simple way of looking at these risks:



The considerations below provide a starting point for considering compound risks and developing frameworks to address these risks ahead of a flood during the COVID-19 pandemic:

- ▶ **Differential exposure.** Community members have differential exposures to both COVID-19 and flooding (e.g., **grandparents providing childcare are at higher risk for contracting COVID-19** than elderly community members without that responsibility; elderly people are also more likely to be physically restricted, making it more difficult to evacuate before a flood).
- ▶ **Interruption of social services.** Due to government and nonprofit service cutbacks related to COVID-19, recipients of certain public services (e.g., free food distribution, accessible transportation) may not receive those services and may not afford private sector alternatives.
- ▶ **Burnout for frontline workers.** Frontline workers (e.g., bus drivers, nurses) who are **exposed to the virus but expected to continue working** may **experience severe burnout** from stressful work conditions. Similarly, compared to two-parent households and households in which adults can work remotely, single-parent households and households in which a member of the family is an essential worker may experience burnout from new challenges—for example, homeschooling and caring for children who are usually out of the house during the day.
- ▶ **Mental health challenges.** **Nearly half of Americans report COVID-19 harms their mental health.** People are seeking assistance at astounding rates: In April 2020, people used a federal mental health hot-line **1,000% more often** than a year before.
- ▶ **Lack of resources needed to evacuate.** Households that face heightened economic insecurity from COVID-19 may lack the financial resources to seek safety from a storm by driving to another community or renting a hotel room.
- ▶ **Additional risks based on community history and demographics.** Every community experiences different risks. A community with many elderly people will experience COVID-19 and flooding differently than a community with many undocumented essential workers.

Put it in practice: Food provision. Chelsea, Massachusetts is a predominantly Hispanic community with a large population of essential workers. But 20% of Chelsea's residents also have an income below the federal poverty line. Before COVID-19, the City struggled with food insecurity—now, with layoffs and reduced hours from COVID-19, the problem is exacerbated.

A local nonprofit alongside residents created a food distribution program, which additional nonprofits and the city council joined. The program, which recently received \$2.1 million from the city council, **delivers 800 30-pound boxes of food per day**. The partnership's goal is to deliver 1,500 boxes per day, which would feed 40%

of the population. Floods often worsen existing food insecurity, so establishing food distribution programs is even more important when a community anticipates a dual disaster scenario.

Preparing a dual disaster response

Local leaders must often make difficult decisions during a disaster. With COVID-19, elected leaders around the country activated “stay at home” or “shelter in place” orders as a protective measure for public health. If faced with a flood during COVID-19, elected officials must decide whether to lift or maintain physical distancing rules. Below are recommendations to prepare for a flood during COVID-19:

- ▶ **Discuss tradeoffs between COVID-19 and flood responses.** Municipalities can plan a meeting with local leaders, emergency management staff, and the health department to discuss priorities across the flood and public health disasters. Discussing these priorities is especially important if responses to both crises are conflicting. For example, when displaced from flooding, people often shelter together; physical distancing guidelines, however, recommend limiting the number of people in a shelter, resulting in a shortage of shelter space.
- ▶ **Retool datasets for the dual disaster.** If one department or municipal partner tracks the COVID-19 outbreak and another forecasts flooding, municipalities should consider combining the COVID-19 and flood risk datasets to assess the threats in one place. For a detailed example, see how the [Iowa Flood Center](#) put this in practice below.
- ▶ **Make a food provision plan for vulnerable populations.** Local leaders should anticipate that some households in vulnerable neighborhoods may face food insecurity from the loss of a job or wages during COVID-19. These households may lack the weeks worth of food recommended for sheltering in place during COVID-19 or before a flood. The local government should plan to proactively distribute food.
- ▶ **Open up access to COVID-19 resources.** Given the contagious nature of COVID-19, widespread resource access is essential. Municipalities should plan for and publicize universal emergency sheltering, universal emergency COVID-19 testing, and mobile services that deliver basic needs to residents unable to leave home.
- ▶ **Keep racism out of disaster recovery spaces.** Municipalities should proactively set a zero-tolerance policy for racist behavior, which is especially important in mass shelters and other disaster recovery spaces. Reporting during COVID-19 indicates a [recent increase in racist behavior](#), particularly toward Asians and Asian Americans.
- ▶ **Support workers on the frontlines of COVID-19 and flooding.** Personnel involved in critical flood and COVID-19 response jobs (e.g., healthcare workers, emergency responders, emergency management staff) as well as other essential roles may have reduced capacity due to exposure to COVID-19 or increased caregiver responsibilities.

Municipalities should support frontline workers and their families in the short term by providing food, personal protective equipment (PPE), and childcare services. Since many of these workers may have to respond to two disasters simultaneously, leaders should consider local actions to systematically reduce the burden of work or better compensate workers.

- ▶ **Involve community leaders in planning a dual disaster response.** Including non-governmental and non-technical community leaders in planning a disaster response can strengthen and multiply efforts. For instance, Miami-Dade County **involves leaders from faith-based communities, businesses, and nonprofits when refining its Comprehensive Emergency Management Plan**. These leaders contribute as members of advisory committees that guide the plan's development. These partnerships let the County leverage additional resources and reach more residents when communicating the response plan.

Put it in practice: Actionable data. The [Iowa Flood Center](#) added public health information to their [Iowa Flood Information System](#) online platform, which allows the state's local leaders to access real-time data on COVID-19 cases, as well as flood alerts and forecasts. Among other applications, this tool helps leaders site temporary COVID facilities in areas with low flood risk and high caseloads of COVID-19.

3 ACTIVATE NECESSARY LEGAL AUTHORITIES: EMERGENCY DECLARATIONS, EVACUATIONS, AND PRICE CONTROLS

Necessary legal authorities can enhance or streamline local responses to COVID-19 and flooding: Emergency declarations give communities access to state funding; evacuation orders move residents out of harm's way, and price controls allow residents to better prepare their homes for dual disasters.

Local legal authority and ordinance rules vary by state and disaster. To understand the parameters of local authority, different levels of government must communicate clearly. For simplicity's sake, this resource focuses on three standard, though not universal, authorities to activate in a dual disaster response.

Emergency declarations

States, tribes, and territories are already under a **national emergency declaration** for COVID-19, which has helped municipalities access resources to respond to the public health crisis.



The Town of Weaverville, North Carolina, could use COVID-19 funds to purchase additional laptops for City staff working from home. This preparation is especially helpful in communities where flooding frequently closes roads.

Despite national emergency declarations, municipalities that anticipate floods during COVID-19 can still issue local emergency declarations related to flooding. These local emergency declarations give municipalities access to state funding to purchase additional supplies for a dual disaster. When local and state resources are not enough, states can also issue emergency declarations, which allow them to request federal assistance.

Evacuation orders

Sometimes, flooding is severe enough that staying in place until road flooding subsides is not sufficient. In this case, local leaders may activate an evacuation order to move people out of harm's way. Leaders should note several key considerations when planning an evacuation order:

- **Communicate a clear evacuation plan and assist residents in following it.** Evacuations are stressful, so an evacuation plan must clearly indicate who should evacuate, when they should evacuate, and to where they should evacuate. Local governments should publish this information, and news outlets should circulate a list of answers to frequently asked questions about evacuation plans.



Before Hurricane Michael, the Panama City News Herald **posted an FAQ article** with recommendations on what to stock up on and a link to sign up for the emergency alert system.

- ▶ **Clarify the consequences of not evacuating.** As is unfortunately common in disasters, some residents will not comply with evacuation orders, as happened in New Orleans during Hurricane Katrina, when upwards of **100,000 residents** did not evacuate. Given residents' fear of contracting COVID-19, they may be less willing than usual to evacuate for a flood. To better inform residents' decisions, local leaders should communicate the typical consequences of not evacuating (e.g., reduced availability of emergency responders in the area, fines), as well as those unique to the current COVID-19 situation (e.g., the dangers of experiencing complications from COVID-19 while trapped at home during a flood). Local leaders must also support residents who need additional resources to relocate.
- ▶ **Communicate changes in information.** Because guidance under a dual disaster may change rapidly, **local leaders must clearly communicate to constituents**. Failing to clearly communicate may make matters worse, especially under a dual disaster scenario. For example, during a dual disaster, local leaders must ensure that flood evacuees with COVID-19 know to shelter separately from healthy flood evacuees so that the spread of infection is controlled.
- ▶ **Set up physically distant, durable shelters.** For sheltering during a dual disaster, local governments should consider hotels instead of temporary facilities or gymnasiums. With backup generators and in-unit kitchens, **hotels are often more durable and self-sufficient** than other facilities. Plus, they have more bathrooms per unit space, which allows for greater physical distancing and limits the spread of COVID-19. If traditional shelters must be used, the Red Cross recommends setting up **fewer, larger shelters**—as opposed to many, smaller ones—to maximize medical resources and avoid understaffing.

Put it in practice: Evacuations. As Bethel, Alaska **prepares for a flood evacuation during COVID-19**, the community provides a road-map for others with the same dual disaster challenge. Some of the Town's action steps include the following:

- ▶ **Advise residents to shelter with local friends and family.** Bethel will ask residents whether they can shelter with relatives or friends in town before considering them for communal evacuation facilities.
- ▶ **Reserve hotel rooms for quarantined patients.** Bethel is preemptively setting aside 80 hotel rooms: half for COVID-19 patients and half for flood evacuees.
- ▶ **Set up evacuation facilities for physical distancing.** Bethel plans to place cots

10 feet apart in its larger evacuation facilities—school buildings, fitness centers, community centers—to allow physical distancing.

Price controls

As people rush to the store to stock up on goods, the dramatic increase in demand prices out some consumers from basic necessities. In response to these price increases, local leaders can issue price controls.

 In New York City, an **emergency rule** prohibits price increases of over 10% for cleaning products and other COVID-19 essentials.

Since many of the items needed for sheltering during COVID-19 are consistent with items needed during a flood, price controls have added benefits if flooding occurs during COVID-19. Note that local ability to activate price controls varies by state and product.

Put it in practice: Price controls. The City of El Paso, Texas, **instituted local price controls** on groceries, toiletries, apartment rentals, and other items to reduce price gouging during COVID-19. The City's effort helps residents afford essential items for sheltering in place during COVID-19, but this control also keeps residents safe should a flash flood occur (as happened in the summers of 2006 and 2019). See below for some items to consider placing price controls on:

- ▶ **Food.** Ensuring community access to safe, healthy food is an essential part of the local fight against COVID-19.
- ▶ **Tarps.** Tarps and other water-resistant materials can help prepare homes for flood events.
- ▶ **Rent.** Sheltering in place is the first order of defense against COVID-19, so the threat of eviction should be minimized to the extent possible. On March 17, El Paso instituted **price controls on apartment rentals**.

4

SECURE ADDITIONAL VOLUNTEERS, MEDICAL SUPPLIES, FOOD, AND SHELTERS

Local leaders and emergency management staff must secure enough resources to support a dual disaster response. Available resources vary depending on the disaster and can change daily, hourly, or even by the minute. Local officials must identify the necessary resources to respond to each disaster and prepare to fill gaps as they arise.

Local leaders should collaborate with emergency management staff, community partners, and trusted community messengers (e.g., educators, religious leaders) to assess how COVID-19 could create obstacles that hinder prevention, protection, and response activities during a flood. Below is a list of several obstacles for communities to consider:

- ▶ **Stress to critical infrastructure.** Critical facilities and routes (e.g., hospitals, energy utilities, roads) may already be at or over capacity during COVID-19 and may become difficult to reach or repair during a flood. Recent reporting found that **12 temporary hospitals in the U.S. were erected** in floodplains.
- ▶ **Volunteer shortage.** Whether helping sandbag, staffing shelters or food banks, or clearing debris, volunteers are critical to a community's disaster recovery. Physical distancing guidelines and general anxieties about COVID-19, however, may reduce the number of people willing to volunteer after a disaster.
- ▶ **Equipment shortage.** Volunteers who help with recovery after floods often require special equipment, such as N95 masks, to protect themselves from mold and mildew in damaged homes. Due to COVID-19, equipment is in short supply, and medical professionals contending with the pandemic may be prioritized over flood volunteers.
- ▶ **Disruptions in supply chain management.** As the transportation and logistics sectors experience a surge in demand, local leaders should anticipate and plan for delivery delays. Local officials might consider procuring as many resources as possible from local sources to reduce logistical challenges.
- ▶ **Reduced sheltering capacity.** Additional evacuation shelters will be needed for evacuees to physically distance and for those with COVID-19 to have a safe space to reside.
- ▶ **Difficulties with transporting patients.** Should patients need to be evacuated from a hospital, officials must ensure that vital equipment, such as ventilators, are also evacuated.
- ▶ **Reduced access to healthcare.** Flooding and hurricanes can make roads, bridges, and other infrastructure impassable—and if an ambulance cannot cross a flooded road, people will be unable to receive urgent care.

Mutual aid agreements

Local leaders can anticipate and address future resources by reviewing and updating mutual aid agreements.



A mutual aid agreement is a written agreement among agencies, organizations, and jurisdictions that lends assistance—personnel, equipment, and other resources or services—should disaster strike.

Local leaders can work with emergency managers to collect information on intrastate and regional mutual aid resources for a dual disaster response. Considering the time that may lapse before state or federal assistance arrives to an affected community, preemptively entering a mutual aid agreement is important to address immediate needs that arise before and during a disaster.

Due to the substantial resource demands of the COVID-19 response, resources related to healthcare and mass care—sheltering, feeding, and related services—are likely already stretched to capacity and may be unavailable for mutual aid requests to other jurisdictions. However, other disaster response equipment, such as construction equipment to remove debris, may still be available.

Put it in practice: Mutual aid agreements. The Town Council of Paradise Valley, Arizona voted unanimously on April 9 to join the Arizona Mutual Aid Compact. Through the Compact, participating members can call on each other for assistance in an emergency when all other options are exhausted. Member municipalities can use the Compact to maintain staff levels should these staff levels suddenly fluctuate during the COVID-19 pandemic. Further, if Arizona declares a state of emergency after a disaster, members that need resources can prepare an itemized voucher of eligible costs to a state agency, which would be paid by the state of Arizona.

Prior to a flood, local governments should review their mutual aid agreements to determine how much COVID-19 has already depleted resources and what resources would still be available during a flood emergency. Potential mutual aid resources and services could include the following:

- ▶ Electrical power restoration assistance
- ▶ Preliminary damage assessments
- ▶ Public information coordination and management
- ▶ Disaster financial management and resource tracking

- ▶ Primary and alternative shelter facilities
- ▶ Emergency food distribution

Some resources naturally lend themselves to a mutual aid agreement, such as emergency management staff, law enforcement, or water engineering staff. For services that require additional expertise, communities can consider forming pre-event emergency contracts with local recovery firms.

Pre-event emergency contracts

To ensure community access to critically needed resources during a disaster, leaders can adopt a pre-event emergency contract, also known as a pre-disaster contract. By contracting for disaster recovery services before a disaster, communities can rapidly launch a response and know that all work will be completed in compliance with federal reimbursement requirements. Local leaders should review these agreements and contact their vendors early to ensure they will be available in the event of a flood emergency.

Local governments may also want to change the terms—such as prices or scope of work—of existing contracts. Completing these changes before a disaster allows time to ensure the contracts will remain in compliance with local, state, and federal procurement requirements. Also, reviewing these contracts “pre-event” helps expedite the receipt of state and federal disaster reimbursement funding while also ensuring the contracted services meet the community’s needs.

Put it in practice: Disaster training exercises. Officials for the City of New Orleans completed a two-day hurricane training exercise in May 2019 with the Louisiana Governor’s Office of Homeland Security and Emergency Preparedness. The training provided local leaders an opportunity to assess their government’s capabilities before the Atlantic hurricane season. Communities should work with local, regional, and state partners to conduct their own flood and hurricane training exercises and to assess how pre-event emergency contracts can fill potential resource needs.

Collaborating with the private sector and nonprofit organizations

COVID-19, physical distancing guidelines, and movement restrictions limit how local businesses and nonprofits support emergency responses. For example, while organizing large groups of volunteers to fill sandbags may not be viable, volunteers can still support call-centers, such as those managed by **United Way**, that field residents’ requests for assistance and information.

Local leaders can even leverage their relationships with these businesses and organizations to assist with disaster recovery. To facilitate cooperation between local leaders and businesses, some local governments establish a private sector coordination support function in the local Emergency Operations Center. Some potential sources of private and nonprofit sector support could include, but are not limited to, the following:

- ▶ **Colleges and universities for sheltering, health and medical services, and food distribution.** For example, the University of Wisconsin at Madison **converted residence hall rooms** to temporary housing for medical workers who need a place to stay without going home.
- ▶ **Construction companies.** These companies could provide labor and equipment to assist with reinforcing levees, building flood barriers, and protecting homes and critical infrastructure from flood damage.
- ▶ **Real estate, property, and hotel management companies.** These companies could re-purpose vacant space for either additional hospital space or sheltering. For example, Chicago **re-purposed five area hotels** to house patients with minor illnesses so that hospitals could focus on their most critical patients.

5

DEVELOP AN EMERGENCY COMMUNICATIONS PLAN AND COORDINATE RESPONSES WITH REGIONAL NEIGHBORS

Local leaders should develop a plan to communicate their dual disaster response to residents. This plan will help in coordinating responses with neighboring communities.

Develop an emergency communications plan

Clearly communicating a plan can reassure residents during a potential dual disaster scenario. Rather than reacting to problems as they emerge, communities with plans can prepare residents practically and psychologically for life during and after a dual disaster. If community members must prepare themselves for a dual disaster, then officials should speak candidly and outline concrete actions for increasing safety. Below are some tips for developing an emergency communications plan:

- ▶ **Collaborate with the health department.** Since COVID-19 is a public health emergency, municipalities should consider the local health commissioner an essential member of the dual disaster communications team. Local leaders should build the communications plan alongside those departments and people charged with public health in the community.
- ▶ **Collaborate with community leaders and organizations.** Local leaders can send their communications plans to community organizations, such as churches, so that leaders within the community can amplify the municipalities' response messages. Local leaders should also conduct targeted outreach to vulnerable populations within the community.
- ▶ **Prepare communications materials for multiple scenarios and multiple audiences.** Leaders can prepare materials and tools for the myriad scenarios that communities might encounter as the dual disaster evolves. Additionally, leaders can develop tailored messages for diverse audiences to address specific needs (e.g., business leaders want to know how their businesses will be affected and at-risk individuals want to know where to find social services or support).
- ▶ **Identify appropriate communication channels.** An emergency communications plan is most effective when it reaches as many residents as possible. To achieve this, information must be shared across a range of formats (e.g., city 311 line, local TV news channels, social media, SMS messages). **Nearly one third of people in rural communities lack Internet access** at home, so relying on digital communications alone may exclude much of a community. Low-tech options such as fliers, bulletin boards, and posted signs can help spread messages.
- ▶ **Provide frequent, recurring updates to community members.** During a dual disaster scenario, residents may feel especially anxious. Local leaders should provide regular

updates on the constantly changing scenario. It may maintain consistency for residents if leaders relay this information in similar ways or at similar times.

- **Communicate the response in multiple languages.** To reach more residents and reduce harm from COVID-19 and flooding, local governments must communicate their response to the dual disaster **using all languages spoken locally**. Identify spokespeople and organizations that serve non-English speaking communities and allow them to share and translate the emergency communications plan.

Put it in practice: Appropriate communication channels. Leon County, Florida [set an example for risk communication](#) during Hurricane Irma. Before Irma, the County released a disaster survival guide and phone app, set up a communications partnership with the local National Public Radio station, and conducted proactive outreach on digital platforms (e.g., Facebook and Twitter), as well as physical platforms (e.g., bulletin boards and fliers). As the hurricane moved through the area, the County was well-equipped to share daily email briefs, 11 press releases, and 70 social media updates, as well as host three press conferences. Thanks to its [multi-pronged communication strategy](#), the County provided hourly updates and reached 770,000 residents on social media. A robust communications plan, similar to Leon County's, is even more vital during a dual disaster scenario.

Coordinate responses with regional neighbors

Once the dual disaster response is established within a particular municipality, elected officials should coordinate with other regional leaders. Communities can minimize risk and maximize response efficiency by working together.

Floods are not isolated events. If one community faces COVID-19 and flooding simultaneously, neighboring communities most likely experience a similar challenge. By complementing efforts of neighboring municipalities, local elected officials can improve outcomes for communities without increasing spending.

Put it in practice: Regional collaboration. The Mississippi River Cities and Towns Initiative sets an example for collaboration for dual disasters. In March, the Initiative organized a virtual meeting of Mississippi River mayors with guests from federal agencies and the Red Cross to exchange ideas and develop a coordinated response to the pandemic. Read more about the Initiative's COVID-19 response activities in [our article](#) on the dual challenge of COVID-19 and spring flooding in the Midwest.

6 SET UP A SYSTEM TO ACCURATELY AND THOROUGHLY DOCUMENT DISASTER EXPENSES

Establishing a system for documenting disaster expenses upfront can help communities receive federal funding immediately after a disaster.

As COVID-19 has slowed the economy and decreased communities' tax revenues, more than 2,100 municipalities across the country **anticipate major budget shortfalls in 2020**. Communities should, therefore, proactively set up systems to secure additional funding for supplies and other resources to support a COVID-19 and flooding dual disaster response. FEMA, the Department of Housing and Urban Development, and the Small Business Administration, among other federal agencies, provide funding to assist communities recovering from disasters.

To avoid unnecessary delays in receiving federal reimbursement for disaster-related expenses, local leaders should ensure that correct accounting systems and documentation procedures are in place before a disaster. FEMA documentation requires much attention to detail, and small errors can significantly delay a request for federal assistance.



On March 13, 2020, President Donald Trump declared a nationwide emergency under the Stafford Disaster Relief and Emergency Assistance Act. All 50 states, the District of Columbia, and four territories **were approved for major disaster declarations**, which opened a wave of additional federal resources for communities to address their local needs during COVID-19.

A national disaster declaration unlocks a suite of federal grants that assist local governments with disaster recovery, which we cover extensively in another resource: **Federal Funding Opportunities for Flood Resilience: A Guide for Small Cities**.

Federal funding opportunities for flood resilience: A guide for small cities

COVID-19 poses a considerable challenge to government budgets. New costs created by the pandemic, alongside a **sharp decline in collected tax revenues**, inhibit a community's ability to respond effectively to disasters. Federal grant programs can alleviate some of the financial burden of carrying out resilience measures at the local level, but navigating

the sea of funding opportunities from multiple federal agencies can be time-consuming and difficult, especially for small communities. To navigate this dense and complicated landscape, the American Flood Coalition developed a guide on the top-24 federal programs for flood mitigation projects. The guide is specifically designed for municipalities with populations under 50,000; however, any local leader may find it useful.

- ▶ To view **FEDERAL FUNDING OPPORTUNITIES FOR FLOOD RESILIENCE: A GUIDE FOR SMALL CITIES**, click the image to the right.



After floods, communities frequently use the FEMA Public Assistance Program, which reimburses state and local governments, as well as certain private nonprofits, for the cost of removing disaster-related debris, protecting life and property, and repairing damaged or destroyed infrastructure. Local governments are responsible for covering ~12.5% of the costs for eligible activities under the Public Assistance Program.

FEMA allows communities to apply the value of donated resources used in eligible activities toward the ~12.5% cost share requirement of their Public Assistance projects, but recipients must meet certain conditions. For example, local governments cannot use donated resources for ineligible emergency work or for any permanent work (eligible or ineligible) to offset their local cost share. Additionally, local governments cannot apply the value of resources donated or funded by a federal agency to their local cost share.

Below are some eligible categories that can offset the local cost share requirement:

- ▶ Volunteer labor
- ▶ Donated equipment, based on **FEMA equipment rates**
- ▶ Donated supplies or materials, based on current commercial rates
- ▶ Logistical support, such as storing donations

Local leaders should also consider how tracking volunteer labor may look different in a dual disaster scenario (e.g. reporting call center time remotely). Refer to the **FEMA Public Assistance Program and Policy Guide** for more information concerning terms, rules, and requirements.

A successful Public Assistance application requires a system to thoroughly and accurately account for disaster expenses. Local governments with systems for organizing documentation and expenses are less likely to encounter denials, appeals, and delays with their FEMA reimbursement applications. To more quickly receive reimbursement from FEMA, local governments should use database or accounting tools to log and track disaster response and recovery costs.

Without a centralized system for tracking expenses, local governments may lose valuable time by retroactively assembling documentation that meets federal requirements. Further, by providing accurate information that meets FEMA specifications, officials can better avoid errors, delays, and federal audits. For example, using an ambulance during a disaster for a medical emergency requires a different billing code than transporting a person in a non-emergency context. While this mistake may appear minor, small errors and oversights in categorization can delay reimbursement by months or years. For the COVID-19 national declaration, local governments may **seek reimbursement** from FEMA for the following expenses:

- ▶ Emergency operations center costs
- ▶ Disaster specific training
- ▶ Disinfection of public facilities
- ▶ Emergency medical care, including medical sheltering
- ▶ Household pet sheltering
- ▶ Purchase and distribution of food, water, ice, medicine, and other consumable supplies
- ▶ Security and law enforcement
- ▶ Public information communications regarding general health and safety
- ▶ Search and rescue
- ▶ Certain labor costs, such as overtime pay

During a disaster, local governments may see a need to procure contracted supplies and services through an uncompetitive process. Local officials should **follow federal guidance** on emergency procurement exceptions and requirements to ensure emergency contracts can be reimbursed.

Top five procurement mistakes that may lead to an audit or failure to secure grant funding

After the President declares a disaster, the federal government provides grant funding to local governments and other non-state entities. Communities seeking financial assistance, however, must comply with federal procurement standards.

The following FEMA resource can help communities navigate these standards: **Key Points for Non-State Entities on How to Avoid the Top 10 Procurement Under Grant Mistakes**. Although prepared by FEMA, the recommendations in this resource also apply to grant funding from other federal agencies, such as the Department of Housing and Urban Development and the Small Business Administration.

Below are the five most common procurement mistakes by communities:

1. Restricting full and open competition
2. Not performing a detailed price or cost analysis for procurements above \$250,000
3. Improperly engaging in sole-sourcing (non-competitive) procurement
4. Continuing work under a sole-source contract after the urgent need has ended
5. Not making and documenting efforts to solicit small and minority businesses, women's business enterprises, and labor surplus area firms

Additional resources and guidance:

- ▶ **FEMA Key Points for Non-State Entities on How to Avoid the Top 10 Procurement Under Grant Mistakes**
- ▶ **FEMA Financial Management Guide**
- ▶ **FEMA Public Assistance: Coronavirus (COVID-19) Pandemic: Eligible Emergency Protective Measures**
- ▶ **FEMA Procurement Under Grants: Exigent and Emergency Procurement Fact Sheet**

Conclusion

As communities navigate the unprecedented demands created by the dual disaster of flooding and COVID-19, local leaders must coordinate a proactive, inclusive, and thoughtful response. While we hope our six recommendations will inform local leaders preparing for and responding to a dual disaster, we know that plenty of work remains when the floodwaters recede.

In the immediate aftermath of a flood, communities must assist disaster victims, clear mold and mildew from homes, and preserve the structural integrity of buildings. In the long term, communities must address the structural damage to homes and infrastructure and support residents facing mental health challenges. With the compounding effects of COVID-19, these efforts will be increasingly complicated, but with the proper preparation, still manageable. During the recovery process, local leaders will continue to play an important role in planning, communicating, and—ultimately—creating a new, more adaptive and resilient community.

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AMERICAN FLOOD COALITION

The American Flood Coalition is a nonpartisan group of cities, elected officials, military leaders, businesses, and civic groups that have come together to drive adaptation to the reality of higher seas, stronger storms, and more frequent flooding through national solutions that support flood-affected communities and protect our nation's residents, economy, and military installations.