



**ASSOCIATION OF STATE
FLOODPLAIN MANAGERS**



Flooding Emergency Action Plan:

A Development Guide for Camps,
Campgrounds and RV Parks

Introduction

Few experiences are more American than going to camp. The American Camp Association estimates that between 26-30 million children and adults in the United States attend camps or structured summer programs annually. Of this group, approximately 14 million participate in overnight (sleepaway) camps, while roughly 12 million attend day camps. Beyond those structured programs, up to 82 million Americans camp recreationally each year, with over 52 million households in North America taking at least one camping trip annually. An estimated 85% of U.S. adults have camped at least once in their lifetime — making camping not just a summer tradition, but a defining part of American outdoor life.

Camp owners and managers are attracted to the business largely due to a love of the outdoors, a love of people, and a love of the lifestyle. For many camps and campgrounds, some of the best scenery and favorite features revolve around water. Yet it is those same water features that, while typically tranquil and deeply enjoyable, can quickly turn dangerous and deadly.

This guide is meant to address one significant issue that was tragically highlighted during the July 4, 2025 flood disaster in Texas — the absence of a meaningful Emergency Action Plan. An EAP is a comprehensive document outlining specific procedures and actions to be taken by individuals and organizations during emergencies to protect lives and property. That night, no such plan was in place. In the span of just a few hours, the equivalent of four months' worth of rain fell overnight across the Texas Hill Country region, with the highest rain totals being more than 20 inches. As a result, water levels along the Guadalupe River rose rapidly, rising over 25 feet in 45 minutes in some areas.

At least 139 people were killed, with at least 117 of them in Kerr County. Among the tragedies of that night, the flash flooding at Camp Mystic claimed the lives of 28 individuals. The death toll included 25 young campers (ages 8–10), two camp counselors, and the camp's longtime co-owner and director, who died while attempting to rescue campers.

The purpose of this guide is to prevent tragedies like what occurred at Camp Mystic from happening again. In hearings held after the event, it became clear that Camp Mystic did not have a comprehensive EAP, nor were procedures followed in any consistent way. This guide is meant to be used by camp and campground owners whose camps have even a slight risk of flooding, keeping in mind the mantra "Where it can rain, it can flood." The Association of State Floodplain Managers (ASFPM) encourages the development, maintenance, and exercise of an EAP for **all camps and campgrounds**. The approach outlined in this guide is adaptable to other hazards, too. Campground owners who need assistance developing or updating their EAP are encouraged to reach out to the following professionals:

- Local/county emergency manager
- Local floodplain manager
- State floodplain manager
- Private sector consultant

If this guide prevents even a single tragedy, it will have fulfilled its purpose.

Key Considerations of a Camp and Campground EAP

An EAP is a tool that can help you get through the very worst of days. When you think about what you want your EAP to look like, consider the worst combination of factors that could realistically happen to your camp. That is what you need to write your EAP to handle.

Consider this scenario: Camp Pine Tree has 200 sites, 100 of which are near the Blue River. The river has a history of flash flooding, and the campground has flooded before. A flash flood strikes during a crowded holiday weekend. The rain falls overnight while everyone is asleep, the river rises 10 feet in an hour, and the campground manager is unavailable due to a medical issue. A temporary staff member is left to manage the situation.

What do you need to do to ensure everyone's safety? A good EAP will help you anticipate the unexpected.

Once you understand the risks your camp faces, the next step is making sure your EAP meets any applicable requirements. Are there any state laws, local requirements, or certification standards that need to be met by your EAP? Some states — Wisconsin, Texas, and Iowa, to name a few — have requirements for reducing flooding risks in camps and campgrounds, including for EAPs. Check whether your state has similar requirements.

A good EAP can help reduce your liability as an owner or manager of a camp. Regardless of local, state, or federal liability protections — including protections against “risks inherent to camping” — camp owners have varying degrees of responsibility and liability for camp operations and any related incidents. For example, while liability waivers or recreational use statutes may protect operators from basic inherent risks — like a camper tripping on a tree root — they rarely shield owners from lawsuits involving gross negligence or a complete failure to protect guests from preventable harm, such as ignoring flood warnings, failure to warn campers, or placing campers knowingly in harm's way. A strong EAP can help to limit a camp owner's liability in the field and in the courtroom because it demonstrates the proper diligence and reasonable actions expected under the law.

Component #1: Emergency Action Plan Overview

In the overview section of your plan, you should describe the purpose of the document; identify the name of the organization that follows this plan; identify the nature and size of the organization (e.g., we are a summertime residential camp for kids ages 8 to 14, and can host up to 1,200 guests for up to two weeks at a time); talk about your location, and identify where maps for your organization's facilities may be found. We recommend putting them in an Appendix.

Roles and Responsibilities

1. *Start by identifying all the positions with responsibilities in helping to execute the plan.* Describe your organization's management structure; identify the positions that will have active roles if there is a flood emergency; don't use names here — just identify the positions. You can list the position and corresponding employee names into an easily changeable Appendix. For overnight children's camps, this might be a very extensive list of staff members. For an RV park, it will be much smaller.
- *Tell who does what for each position that fills a role in an EAP.* For a flood EAP, here are some of the key roles that are required:

- Who will lead the exercise of the plan when new camp counselors or new staff are brought in?
- Who ensures weather/flood monitoring equipment is working properly?
- Who is responsible for monitoring weather alerts and warnings?
- Who is responsible for deciding and/or communicating the required “action” based on a given plan “trigger?”
- Who leads evacuations? Who gives the “all clear?”
- Who educates campers on flood risks and EAP procedures?

For example, the Camp Director’s role may be to continuously monitor the National Weather Service radio (or assign an overnight “duty officer” to monitor weather service announcements during a flash flood watch), determining when to activate the plan based on established triggers, directing evacuation operations, and coordinating with local emergency officials. Camp Counselors or staff assigned to campers or cabins may be responsible for accounting for the people in their care, ensuring equipment in their assigned areas is maintained and available, educating campers about EAP procedures, and communicating updates or concerns to supervisors, especially when severe weather is expected.

It is important to remember to have somebody onsite designated for each role identified in the EAP at all times, day or night, particularly if bad weather is expected or flooding conditions are present. Also, it is a good idea to assign a role to everyone who may be present in parts of the camp subject to flooding — even if their role is to check with their supervisors and follow directions without delay. Note that the duties of each role may expand in bad weather or a natural disaster, especially if evacuation is necessary. Lastly, don’t forget employees and volunteers – include them in emergency planning. Every life is the focus.

Essential Equipment

Describe the equipment and systems needed to handle flood emergencies. Some of the more common, include CB radios, safety vests, flashlights, NOAA National Weather Service (NWS) radios, reliable Internet access, signage, lighting, PA system (or other established communications method), and stream gauge warning systems. Create a checklist of the items and establish a procedure to check them regularly (e.g. test NWS radios, flashlights, and other handheld devices to ensure they have functioning batteries).

An important consideration regarding essential equipment is redundancy. For example, if your EAP requires a NOAA weather radio in each cabin and there are 7 cabins, does your plan call for maintaining exactly 7 radios — or does it call for 8 or 9 so there is a backup in the event one or two are working? Redundancy and proper operation are as important as identifying the essential equipment you need in the EAP.

A note on technology: Keep in mind that many products and services in the flood warning and flood alert marketplace rely on newer digital technology. Conversely, many camps, campgrounds, and RV parks operate in low-tech environments. In situations where emergency warnings and communication networks are limited or are unavailable, older technologies such as radios, bullhorns, and air horns may be your safest bet for communication. For instance, three short blasts on an air horn, repeated, may be a good signal for “all clear,” depending on the size of your camp, or calmer weather conditions.

Component #2: Flood Hazard and Risk Profile

The first step for managing flood risk is to understand the areas that are most vulnerable to flood waters and the dangers they pose. Ensure that your camp staff understand the flood risk in the area. It should be a goal that campers also have some understanding of the risk, so that in the event of an emergency, they will understand what they need to do to be safe. You need to identify what the risk is, where it may occur, and how bad it could be.

There are several different types of flood hazards that a camp may be subject to. These include:

- **Riverine flooding** – The most familiar type of flood risk where a river or stream rises due to excessive rainfall. In many areas of riverine flooding, there could also be a flash flood risk, where water levels rise dangerously fast due to extreme amounts of rainfall.
- **Lake flooding** – Many lakes can experience rapidly rising lake levels, which can be compounded in storm events by high winds, crashing waves, and bank erosion.
- **Coastal flooding** – Camps located on saltwater coasts may be subject to high tides, storm surge, hurricanes, and inland situations like seiche — high water due to the lake/reservoir holding back water for flood storage — could happen. Unique to some saltwater coastal areas, especially on the west coast, Alaska, Hawaii, and the US Territories is the risk of a tsunami or an ocean wave triggered by large earthquakes that occur near or under the ocean, volcanic eruptions, submarine landslides, or by onshore landslides in which large volumes of debris fall into the water.
- **Dam operations/dam failure flooding** – If there is a dam upstream of the camp, its normal operations, such as releasing water when it gets too high in the reservoir or emergency releases, may result in flooding downstream. In the most extreme events, dams can overtop and fail, resulting in a very dangerous flood situation downstream. Many dam operators have mapped the inundation area in case of catastrophic failure, which could be useful in identifying under what conditions your camp could be vulnerable or safe.
- **Levees** – It is possible for a camp to be located in an area protected by a levee. Levees are designed to protect against a calculated flood event. The problem is that levees can fail unexpectedly or overtop due to a larger flood. It is important to be aware of how the levee operates and have your EAP activated long before the levee is close to overtopping.

Steps for creating the flood risk profile for your camp:

1. **Consult available FEMA flood maps.** FEMA flood maps show the 1% chance and 0.2% annual chance floodplain as well as the floodway — a uniquely high-hazard area where water will be flowing the deepest and fastest. Always factor in the less common flood frequency. It is estimated that the Guadalupe River flood mentioned earlier well-exceeded the 1% chance (sometimes called the 100-year flood) event levels.
2. **Check national datasets.** Even if a FEMA flood map doesn't show your camp as flood-prone, consult a national level dataset like those available from companies like [First Street](#) or [Fathom](#). These datasets are especially useful at identifying areas of potential flood risk in more rural locations where FEMA flood mapping data may be outdated or incomplete.
3. **Talk to your community's floodplain manager, local emergency manager, and neighboring property owners.** Your local floodplain manager can help you interpret the data you might have found in the first two steps above and might be aware of flood studies that exist for the area, including those that aren't published. If you have a more detailed map of your camp, the floodplain manager can help you zoom in on the flood risk on your

property. Your local emergency manager can help you identify if there are any dam hazards upstream of your camp and discuss more generally the evacuation plans that may exist for the area in the case of a threat or event. Your local emergency manager also may be able to review your camp's EAP and give you feedback. Ask both local officials about the flood history of the site. If you are a new camp owner, DO NOT depend solely on the past owner's recollection of flood history. If there seems to be a history of flooding in the area, talk to neighboring property owners. Pay attention to the local geography and possible natural hazards in the location (flood prone, fire danger, earthquakes, etc.). In many parts of the country, there may be a concentration of camps in a particularly scenic or recreational area. Also, if you need information local officials are unable to provide, each state has a state floodplain management office and state hazard mitigation office. ASFPM maintains an updated contact list of each of them [here](#). ASFPM also has resources to help educate anyone on the risks and hazards of flooding as well.

4. **Write up a narrative flood risk profile for the camp.** In the EAP narrative, it is best to have a general description and then put any important data like maps, charts, etc. in the Appendices.

Remember, while we do the best we can in identifying and mapping flood risks, Mother Nature doesn't respect lines on a map. Be especially vigilant in low-lying areas, but remember it can flood almost anywhere.

Component #3: Plan Activation

This section is the true heart of the plan. Now — before a disaster occurs — is the perfect time to sit down and plan out how your camp will deal with an impending flood disaster. To write this section, there are several sub-components that interact to create a strong plan. Let's get started.

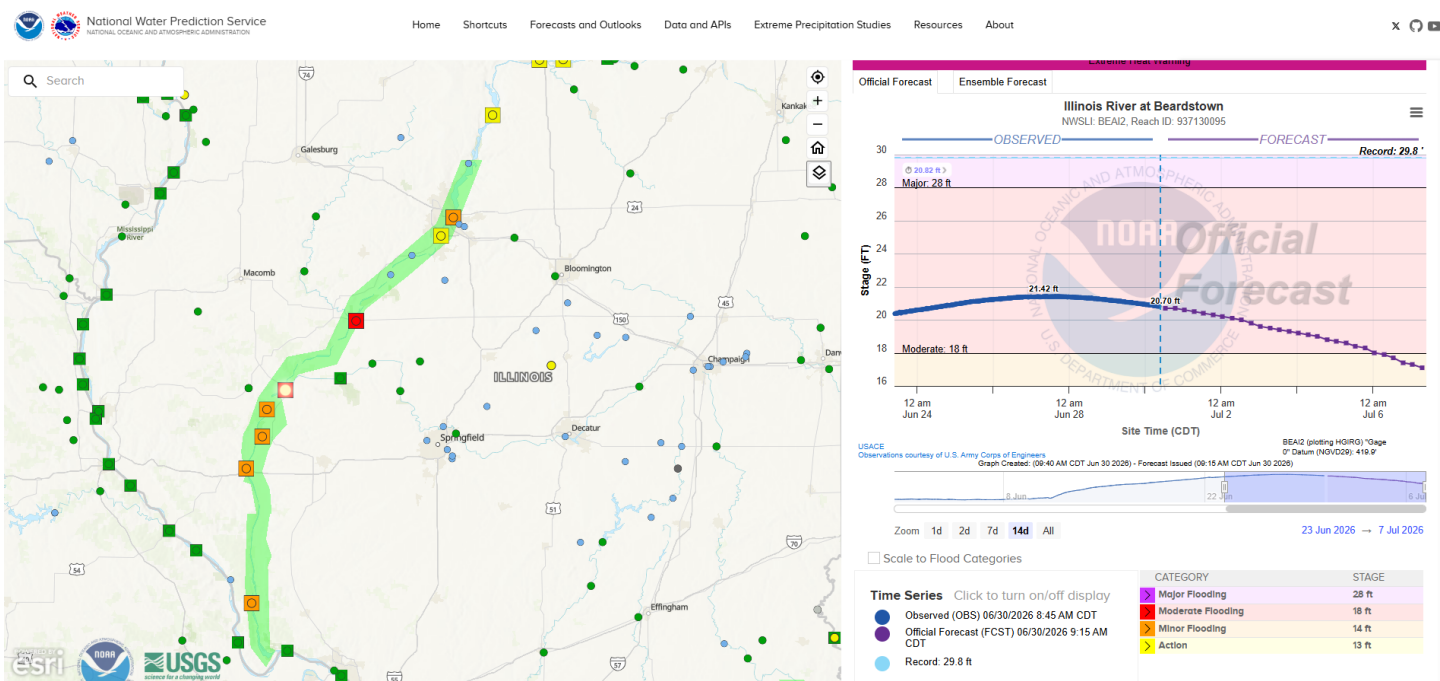
Event Detection

How will you know it is likely to flood at the camp and how bad will it get? With flooding, the rainfall event may be further upstream while it is not raining at a camp, or a hurricane or tropical storm may be far away at sea when conditions can rapidly deteriorate. Here are a few options:

1. **NOAA Weather Radio** – Perhaps the easiest and most low-cost way to do this is through National Weather Service alerts issued by NOAA.
2. **Federal Stream Gauges** – The National Streamflow Network maintains roughly 8,500 stream gauges that provide continuous flow information across the nation. If there is a stream gauge in the vicinity of the camp (preferably it is on the same watercourse and upstream of the camp) monitoring that gauge may provide early warning of rising water levels and help determine when action is needed. Both the [United States Geological Survey](#) and NOAA provide nationwide dashboards that can be used to locate gauges. For the purposes of the EAP the [NOAA dashboard](#) (National Water Prediction Service) gives more pertinent information, such as flood forecasts, and NOAA is working to develop flood inundation maps as part of this service as well. *(See sample screenshot on page 7)*
3. **Camp-specific sensor and alert system** – Over the past 10 years, much progress has been made on the development and commercialization of high-tech, low-cost flood sensor and monitoring systems, such as those available from vendors like [Hyfi](#), or similar systems that can be found online. These products can cost as little as \$2,000 annually for a sensor and monitoring system at the campground site and will produce very precise data for a camp to use. A lower-tech alternative is a staff gauge — essentially a large, ruler-like measuring stick

mounted in the water (on a post, piling, or bridge support) that lets staff read the current water level at a glance, similar to reading a thermometer. If you go this route, your EAP should include a clear procedure for monitoring the gauge during times of potential flooding. This [fact sheet](#) from the US Army Corps of Engineers – Omaha District provides instructions to help you get started.

4. **Local warning systems** – Local warning systems vary from sirens to local stream gauging networks to mass emergency notification systems through your cell phone (e911 and ALERT systems) and can range from flood specific to all hazards. If event detection is reliant on these systems, it is important to understand how the system works, and how to determine what the warning is about (is there a different siren tone for a tornado versus a flash flood?). A conversation with your local emergency manager is key to understanding these systems better.



NWPS gage location icons have both observed and forecast (where available) status shown in relation to flood category.

[View NWPS User's Guide](#)

Depending on the level of potential flooding a camp may have to deal with, it may be important to consider a multi-layered detection system. For example, the EAP may call for the use of both NOAA Weather Radios and a camp specific gauge and alert system.

The next three subcomponents work together and are some of the most critical parts of the EAP. The assigned person (see component #1) should have clear options identified and those options shouldn't be overly complex — complexity in an emergency situation can lead to failure. Remember: Time is of the essence, lives are at risk, and clear direction and swift action are the top priority.

For every emergency level determination, there should be at least one accompanying expected action and notification/communication process — there may be more than one.

Emergency Level Determination

The first step is to determine at what stage action is triggered. Do you have one set of actions for a flash flood watch, a different set for a flash flood warning, and another for a flash flood emergency? Or are your actions based on alerts from a camp-specific sensor and alert system — for example, triggered once the water rises a certain number of feet? A key consideration here is understanding how fast water can rise in your area. By the time a flash flood warning is issued, there may be very little time left to take the actions identified in your EAP.

Will one trigger be the issuance of an NWS Flash Flood Watch? For example, when a flash flood watch is issued, you might initiate preliminary actions — such as notifying staff and pulling canoes back from the water's edge so they don't wash downstream. These initial steps should do exactly that: begin the alert process and prepare for further action. If you invest in a camp-specific sensor and alert system, you'll likely be able to customize alerts and route them to the right people, as identified in your plan.

If you are unfamiliar with NWS alert types, a helpful resource is the [NWS's explanation of its most commonly issued alerts](#).

Expected Actions

Options here should be clear and detailed and tied to an emergency level determination. Here are a few examples:

Weak example: *"When a flood watch is issued, staff will monitor the weather radio."*

Strong example: *"When an issued flood watch includes overnight hours, there will be an overnight duty officer whose responsibility it is to be awake and continuously monitor the weather radio for further alerts. The duty officer will also check the river level every 15 minutes to monitor its rise. During a flood watch, the daytime maintenance staff shall begin to pull all watercraft and water toys away from the river bank."*

Weak example: *"When a flash flood warning has been issued, campsites and cabins in the floodplain will be evacuated."*

Strong example: *"When a flash flood warning has been issued for an area that includes the camp, the duty officer shall notify each cabin counselor (for overnight cabins) to evacuate immediately and congregate at the dining hall outside of the floodplain. The duty officer will then go to each independent campsite to alert campers to evacuate to the mess hall."*

Why the specificity? Remember this plan is for the unexpected. What happens when the camp owner, who might be identified as the overnight duty officer, is sick the night a flash flood happens? Whoever the person is that has been assigned in their stead must be able to read and understand exactly what to do during such an emergency. Checking with the person who normally would do it can cost time and that can cost lives. Also, things can escalate rapidly in an emergency. If an event escalates quickly, assignments to protect property — such as putting away water craft or outdoor equipment — should be immediately stopped and the complete focus should be saving lives.

A special note for RV parks: RV owners' natural instinct is to move their rig out of harm's way during an evacuation. As an owner or manager, you need to plan for this instinct and be specific in your EAP. If your area is prone to significant flash-flooding — where water can rise several feet in just minutes — your evacuation procedures should require people to evacuate on foot to a predesignated gathering point, leaving RVs behind. Floodwaters can carry away an RV of any size. In the rush to leave, owners

may also forget to disconnect their RV from utilities, causing further damage to park infrastructure — or their RV could become stuck, leading them to focus on freeing it rather than on their own safety. Protecting lives must always come before protecting property.

Notification and Communication

The plan should identify who is told what and who is making which decisions. A common and costly mistake is when a plan is vague or unfamiliar — leaving staff waiting on somebody to decide what to do. A strong EAP has a clear chain of command (for example, the overnight duty officer notifying cabin counselors that a flood warning has been issued and cabins must evacuate). But it should also empower staff to act independently when conditions clearly call for it — for instance, if a cabin's NOAA weather radio sounds an alert, the counselor should know to evacuate without waiting to be told. Redundancy and specificity are what make this work. Without them, staff may wait on someone who isn't even on-site to make the call — and that lost time can be catastrophic.

In this part of the plan, you might describe things like:

- How the lead manager communicates decisions to designated points of contact (POCs).
- Reminding POCs of the plan and what their next action is. Remind them to act quickly and calmly.
- Instructions for the evacuation site: how groups should assemble, how to take a headcount, who receives that headcount, what to do if someone is missing, and expected evacuee behavior (staying with the group rather than wandering off to see what's happening).
- Instructions for signaling that the event is over and the camp is clear for people to return.
- Instructions on how to coordinate with local first responders and emergency managers — who is the point of contact?

Component #4: EAP Maintenance

An EAP is only good if the people responsible for implementing it — including campers — are knowledgeable of the plan's details. EAPs must be exercised and updated to be effective.

Plan Review & Exercise

The schedule of plan reviews and exercises is going to depend significantly on the rhythm of the camp itself. For example, if a camp closes for the season, it would make sense to exercise the plan with all staff at the beginning of each season. If a camp has staff rotating in (e.g., new counselors each week), the plan should be reviewed and exercised with them, especially if they have a role in the EAP. An EAP review should be part of the orientation of every new camp staffer.

Conducting an EAP exercise involves up to three phases: a tabletop walkthrough, a functional simulation, and a full-scale drill. The scale at which you decide to exercise your plan may depend on the level/complexity of staffing, number of campers, and risk to the camp from flooding. At minimum, a tabletop walkthrough is recommended seasonally.

- **The Tabletop Walkthrough (Discussion).** This is a relaxed, seminar-style discussion where your staff gathers in a room to walk through the written plan.
 - **Set Objectives:** Define exactly what you are testing (e.g., assessing evacuation routes or communication protocols).
 - **Review Scenarios:** Present a hypothetical emergency (such as a severe weather event or a medical emergency).

- **Define Roles:** Ask staff members to state exactly what they are supposed to do according to the EAP.
- **Functional Simulation (Role-Play).** Once the staff is familiar with the basics, run a more intense simulation.
 - **Inject Complications:** Introduce specific wrinkles to the scenario, such as a blocked primary exit route or a "missing" employee.
 - **Simulate Communications:** Practice notifying first responders or sending out mass employee alerts.
 - **Test the Assembly:** Physically locate your primary and secondary outside assembly points to ensure staff know how to get there and where to gather.
- **Full-Scale Drill (Live Action).** For particularly high-risk environments (such as when the entire camp is in a highly flash-flood prone area), schedule unannounced or announced live-action drills.
 - **Execute Live:** Trigger the actual alarm systems and physically evacuate the building.
 - **Practice First Aid & Accountability:** Designate team members to sweep the building, perform "rescue duties," and practice employee headcounts at the assembly point.

Plan Update

There are three usual triggers where a plan update may be needed:

- **Periodically** (as determined by you). For example, if the camp closes for the season, it might make sense to review and update the plan annually when you are doing other similar tasks during the "slow season."
- **After an exercise.** An exercise is only as good as the lessons learned. Collect feedback by distributing forms to your staff to identify what worked well and what caused confusion.
- **After a flood event.** This is also called an after-action review. It is always a good idea to gather staff who have responsibilities in the EAP to discuss the plan and procedures, and to identify what was unclear, and where gaps remain.

Component #5: Appendices

The final part of the EAP should contain detailed supporting information referenced elsewhere in the plan, such as:

- Site maps showing key information, such as evacuation routes
- Floodplain maps
- Printouts of some of the references in this guide, such as the alert types issued by the National Weather Service
- Equipment inspection checklist for NOAA radios, CB radios, PA systems, and other essential gear
- Plan exercise and update log
- Local and state professional contact list — floodplain managers, emergency managers, and state offices

Additional Consideration: Flood Risk Awareness for Campers

Most campers enjoy being in nature and are naturally curious about their surroundings. For many camps, the water features (be it a lake, river, or coast) are where people want to congregate and explore. This is an opportunity to leverage that interest and provide meaningful information about flooding and flood risk at the camp.

Here are some things to consider:

- Highlight key elements of your EAP to campers. What is it that you want campers to know? It would be a good idea to have signage or information on evacuation routes, or if part of the camp is in a higher flood risk area to point out where that high risk is located. Develop a list of key elements from the EAP that campers need to be aware of and provide that to them when they register (campgrounds/RV parks) or during an orientation (day camps).
- Is there interesting information on the flood history of the camp or area? Creating an educational display on past flood events is a good way to connect with campers and give them some history of the campground and area.
- What about highlighting the unique habitats of floodplains and riparian areas? If the campground has an activity area or building for kids, perhaps some coloring sheets, books, etc. might be of interest. ASFPM has previously gathered fun and interesting K-12 educational resources on flooding and hazards from across the nation, many of them free of charge and are cataloged [here](#).

Developing a flooding emergency action plan needn't be an overly complicated task. We hope that this guide will give camp owners a resource to develop a comprehensive camp emergency action plan to protect against flooding so when the unexpected happens, people know what to do. For camp owners needing assistance in either completing the plan or reviewing it, the first stop should be the local emergency manager. If they are not available or don't have the bandwidth to help you, the community's floodplain manager may be able to assist. If these local resources are unavailable, try your local law enforcement, state floodplain management office, or the state emergency management agency. There are also qualified consultants across the country that could be a resource, too. If you are completely stuck, reach out to ASFPM and we will do our best to provide assistance. Good luck, be prepared, and happy camping!

Cover photo: The campground next to the South Fork of the American River in 2017. Photo by jmoor17 Getty Images Signature via Canva.

About ASFPM

The Association of State Floodplain Managers (ASFPM) is a scientific and educational nonprofit organization dedicated to reducing flood losses and advancing sound floodplain management and mitigation practices and policies nationwide. As the leading voice for flood risk reduction, ASFPM works to promote approaches that protect communities, improve resilience, and reduce the impacts of flooding.

ASFPM published this report as part of its mission to advance education, policies, and practices that mitigate current and future flood losses, cost, and human suffering.

Together with its 38 single-state and multi-state chapters, ASFPM represents more than 22,000 professionals working across all aspects of floodplain management and flood hazard mitigation. Members include those involved in local floodplain ordinances, flood risk mapping, engineering, planning, community development, hydrology, forecasting, emergency response, water resources management, research, and flood insurance.

Founded in 1976, ASFPM is based in Madison, Wisconsin. Learn more at www.floods.org.



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