



FLOODED ROADWAY HAZARD MITIGATION STRATEGIES

Floods are a common weather hazard in the United States, creating an enhanced risk to law enforcement officers. Floods can increase the risk of drowning deaths of officers and can also result in extensive damage to police vehicles. Tragically, between the years 2012-2022, twenty-five officers died as a result of drowning, and in some instances, these deaths were the result of an officer being in a vehicle that was swept away by floodwaters. ¹⁻³

Such risks can be mitigated through officer training, field training program modifications, collaboration with local engineers, planners, emergency managers, and other first responders, and further enhanced through community education.

Considerations for the Chief of Police

Initial Action:

- Determine if the agency has ever had a police vehicle damaged due to driving on a flooded roadway or parked in an area impacted by a flood.
- Identify known locations where civilian vehicles have suffered flood damage, including parked vehicles.
- Review the [Safety Director Bulletin, Flash Flood Preparedness Best Practices](#).
- Collaborate with local first responders to determine what locations they have responded to assist stranded motorists due to flooding.
- Determine known locations where officers had to place or request barricades to keep vehicles from entering flooded roadways.
- Discuss flooding risks, current mitigation strategies, training, and other actions with the local Emergency Management Coordinator.
- Consult with local and county emergency management coordinators, professional planners, and engineers to learn about local roadways prone to flooding. Discuss with these officials:
 - The appropriateness of installing permanent highway signage indicating an enhanced risk of roadway flooding.
 - Consider developing a community-wide strategy based on the National Weather Service campaign, [Turn Around Don't Drown](#), which includes specific signage and community information initiatives.

Develop Agency-Specific Training:

- Utilize the driving safety tips for water-covered roadways from the [National Weather Service](#), so officers know when it is likely unsafe to travel on flooded areas. Ensure the program entails safety messaging for both driving and walking, as many flood-related deaths occur while on foot or after exiting a vehicle caught in flood waters.
- Ensure officers are aware of roadways and areas prone to flooding, especially when police vehicles have been damaged in the past by flooding.

- Include in the program the importance of reducing driver distractions when travelling on water-covered roadways, including the use of mobile computers, cell phones, other devices, and unnecessary conversation if there are passengers.
- Pre-determine alternate routes to access specific areas that might be blocked by flooded roadways, and ensure all officers and emergency dispatch staff are aware of these routes.
- Ensure officers know that flood waters often cause the highway shoulders to wash away or create deep pits that can cause a vehicle to become disabled.
- Include specific guidance for when officers should request public works assistance or deploy pre-supplied barricades at pre-determined locations.
- Encourage officers to subscribe to local news weather notices, [National Weather Service Alerts](#), and explore other cell phone-based weather applications to stay abreast of dangerous flooding and other weather conditions.
- Utilize the [training videos](#) available from the National Weather Service Turn Around Don't Drown resource page and the resource, [Flood Response Orientation, Protecting Yourself While Helping Others](#).
- Modify the agency Field Training Program to include:
 - A list of areas prone to flooding.
 - The alternate routes of travel for when roads are flooded.
 - Procedures to alert other officers and first responders when it's learned that a road is flooded.
 - All materials utilized or developed for the initial agency training program, including the use of any training videos.

Additional Considerations:

- Coordinate with local elected officials and community leaders to establish a community safety awareness campaign concerning the risks of parking, driving, or walking on or near flooded roadways. Enhancing the safety of the community may likely have a positive contagion effect on first responders.
- Discuss the locations of high-frequency flooded locations with local public works officials and request enhanced storm drain cleaning and inspections as appropriate.
- Discuss with local elected leaders any short or long-term planning initiatives to mitigate poor drainage areas that impact roadways.
- Review agency policies governing vehicle operations, including call response procedures, vehicle operator training, technology considerations, and more. Call Response Guidelines and Police Vehicle Usage Policies are available in the [Law Enforcement Accreditation Plus Sample Policy Portal](#).

¹Hydeck, M., & Grant, K. (2021, September 2). State Trooper Dies After Cruiser Was Swept Away in Flooding in Woodbury. CT.

²KY3 News. (2018, September). Green County, MO. Deputy Dies After Patrol Car Swept Away by High Water.

³National Law Enforcement Officers Memorial. (2023, August). *NLEOM*. Retrieved from Causes of Law Enforcement Deaths.