

## FINANCIAL ASSISTANCE

The Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance (HMA) grant programs provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages. For example, a HMA grant was used in a Kentucky community to add stream gauges and identify response actions that would be followed to remove the contents of homes and businesses to safe places prior to a flood.

Grants to enhance community flood warning capabilities must meet the requirements of the National Flood Insurance Program's Community Rating System. In addition, the proposal must match the kinds of eligible projects listed in their state and local government approved mitigation plan. A listing of State Hazard Mitigation Officers is available at: [www.fema.gov/about/contact/shmo.shtm](http://www.fema.gov/about/contact/shmo.shtm)

For more information on the HMA grant program, go to: [www.fema.gov/government/grant/hma/index.shtm](http://www.fema.gov/government/grant/hma/index.shtm)



*Automated Local Flood Warning System.  
Photo Courtesy of Distinctive AFWs Designs, Inc*

The NWS and NHWC are prepared to assist you in learning how a LFWS can help provide protection in your community.

To contact your nearest National Weather Service Hydrologist visit: [www.weather.gov/organization.php](http://www.weather.gov/organization.php)

To learn more about the NHWC visit: [www.hydrologicwarning.org](http://www.hydrologicwarning.org)



**On average  
5,000 floods  
impact the  
U.S. every  
year. Will your  
community be  
ready the next  
time it floods?**

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Weather Service  
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## BE PREPARED BEFORE A FLOOD

Are you prepared if too much water falls on or flows into your community? What flood protection options are available to your community?

It floods nearly every day somewhere in America. Community leaders need to be aware of flood risk that can be caused by excessive rain, tropical storms, dam breaks, rapid snow melt, or ice jams. One way **emergency** officials can take positive steps to save lives and property is by implementing a Local Flood Warning System.

## BENEFITS OF FLOOD WARNING SYSTEMS

Hydrologic data from a Local Flood Warning System (LFWS) provides real-time information to help make many important decisions including repositioning of resources, **relocating** expensive property, evacuating or sheltering-in-place residents at risk, and closing flood-prone roads before a disaster happens.

Increasingly, federal, state, and local agencies are investing in cost-effective hydrologic monitoring equipment that helps provide early warning for floods. These systems have additional benefits providing useful data for fire and water management and other environmental applications.

A well-designed LFWS includes:

- Instruments and communications technologies that monitor and report changes in the environment in **real-time**. (Modern systems may even include automated signs and barriers.)

Analysis and forecasting components for rapid decision-making.

- **Effective** tools for warning coordination and communication with local, state, and federal **emergency** managers and citizens.

Routine training and professional development to keep action plans current and systems well maintained. Operations and maintenance is where most systems fail. A skilled technician or competent contractor is a system's best friend.

## GETTING STARTED

While structural measures (e.g., flood control reservoirs) offer needed flood risk reductions, local officials and residents can reduce their risks with real-time information from a LFWS with or without structural measures in place. A LFWS is a low-cost alternative for communities of all sizes with small or large basin flood problems.

## NATIONAL WEATHER SERVICE

The hydrologist at your local National Weather Service (NWS) office can provide expert help in setting up a LFWS, including assisting in establishing rainfall and river stage alarm thresholds and enhancing warning plans. Besides providing community leaders with helpful information, the data from a LFWS can also support the issuance of NWS flood and flash flood warnings.

The NWS **StormReady**® program helps arm America's communities with the safety skills and communication needed to save lives and property – before, during, and after a flood event. To be recognized as StormReady, a community must commit to specific levels of emergency preparedness, including 24/7

communications and an active outreach education program. StormReady, combined with a LFWS, is a **sure** way community leaders can be better prepared to save lives and property.

The NWS offers useful references for planning, implementing, and operating a LFWS including:

NWS AFWS Handbook  
[www.weather.gov/oh/docs/alfws-handbook](http://www.weather.gov/oh/docs/alfws-handbook)

NWS Flood Warning Systems  
[www.weather.gov/directives/sym/pd-01009041curr.pdf](http://www.weather.gov/directives/sym/pd-01009041curr.pdf)

NWS Flood Warning Systems Manual  
[www.weather.gov/directives/sym/pd-01009042curr.pdf](http://www.weather.gov/directives/sym/pd-01009042curr.pdf)

## NATIONAL HYDROLOGIC WARNING COUNCIL

The National Hydrologic Warning Council (NHWC) is a non-profit organization dedicated to helping community officials become aware of ways to improve their operations through the use of real-time flood warning systems.

As a trusted leader in the hydrologic warning community, the NHWC provides guidance, training, and professional development in the design, **implementation**, maintenance, and use of LFWS. In addition, the NHWC **offers** **net-working opportunities** for community leaders, public **safety** officials, and environmental resource managers where they can meet and learn from one-another while attending national conferences, or regional workshops.