NAI How-to Guide for Flood Warning & Response Case Study: Oklahoma's Disaster Response Team

The Oklahoma Floodplain Managers Association formed its Disaster Response Team in 2007 to assist NFIP-member communities during and after a disaster that impacts floodplain properties. The program is managed by OFMA's DRT Standing Committee, which is composed of the DRT coordinator (chair), OFMA executive director, NFIP coordinator (what ASFPM refers to as the state floodplain manager) and a minimum of two other OFMA members.

When a disaster is imminent or has occurred, the affected community contacts the state floodplain manager and DRT coordinator. If the community has pre-signed with the OFMA DRT, the team is deployed. If not, the local government must pass a resolution and sign a letter of agreement requesting the support.

The DRT coordinator alerts the OFMA DRT members, requests volunteers, selects who will go, and prepares a schedule for travel and participation. They do not wait for a state or federal disaster declaration. In fact, the DRT tries to be on-site before federal or state disaster staff arrive to preserve valuable data, such as high water marks, that can quickly disappear.

Upon arrival at the community, the volunteers are under the direction of the local floodplain administrator unless that duty is temporarily transferred to the DRT coordinator. They team up with local firefighters, police and public works staff and perform duties as needed. Typical work includes substantial damage assessments, determination of regulatory flood elevations, permitting, education and temporary housing coordination. Building inspectors can assist in performing mechanical, electrical and plumbing code inspections.

Teams have helped identify temporary housing and utility locations before the arrival of the FEMA temporary housing staff. The DRT now has a Drone Support Team with licensed FAA drone pilots. The drones have cameras for live video feed and LIDAR capability to document high water elevations, assist with rescue operations, and document the extent of damage.

AS of this writing, the DRT has been activated 21 times since its creation, and helped 23 communities manage reconstruction in the floodplain after floods, fire and tornados.





OFMA DRT volunteers respond to all types of disasters that affect flood-prone buildings.

– Photo by W.B. Smith

The team currently has 98 volunteers, which are primarily engineers, floodplain administrators and building code staff. Many are Certified Floodplain Managers and have Substantial Damage Estimator and Incident Command System training. Periodic classroom and field training for volunteers is conducted at OFMA's two annual conferences.

Requesting communities agree to hold OFMA harmless from the actions of DRT volunteers. OFMA does not carry insurance for the DRT and so far there have been no injuries. At the beginning of each deployment, the DRT coordinator reminds members to use the safety gear provided and to not go into any dangerous situation. Recently, they found a house that was "full of black mold." The DRT coordinator made everyone leave.

Finances: DRT volunteers agree when they sign up that they do not require compensation. Many employers agree to continue paying them while on DRT duty. With 5-12 volunteers per disaster, the field work is often completed in one day, minimizing time away from work.

DRT tries to reimburse for travel, lodging, meals and similar expenses. Funding for reimbursement is currently not available through disaster grants or FEMA contract, but has been funded by OFMA, corporate and agency donations. Many community and tribal employers provide vehicles and cover expenses, viewing DRT as a mutual aid arrangement.

In 2008, the DRT program received start-up funding from the state using FEMA's Community Assistance Program funds.

Development and printing of brochures (500 copies)	\$3,000
Handbooks for DRT program (200 copies)	2,400
Mileage for volunteer promotion and signup	3,000
Printing for forms	1,000
Jackets, boots and gloves	6,000
Tags and labels for flooded houses	9,000
Training supplies and three training sessions	3,600
Total	\$28,000

The original budget was for an expected 75 volunteers. In 2015 when there were 95 on board, it received an additional \$5,000 in CAP funding.



Sometimes it is easy to tell if a building was substantially damaged.

– Photo by W.B. Smith



Other cases require a thorough evaluation to determine if there is sufficient structural damage.

– Photo by J. Byington

Supplies and equipment: Each DRT volunteer gets a tote bag with:

- A green "notepad" that holds pencils, pens and preliminary and detailed field forms,
- A three-ring notebook of forms, instructions, sample public release messages, etc.
- A 100-foot tape to measure structure dimensions,
- An 8-foot folding rule to measure high water marks, and
- Two shirts, a jacket and a hat.



Other supplies include rolls of red, yellow and green tape to designate the status of the evaluated structures:

- Red: Substantially damaged
- Yellow: Probable substantial damage, but detailed evaluation needed
- Green: Not substantially damaged, OK to permit

The team has six sets of 35 mm cameras and three video cameras. Equipment tubs with additional items are assigned to each team as needed at the disaster site. They include boots, masks and gloves to protect from mold or injury. The equipment in the tubs is collected at the end of the disaster, returned to the base stations, and cleaned for the next use.

Contact information on the Oklahoma Disaster Response Team can be found at www.okflood.org/committees/drt/





Equipment is kept in good shape in tubs. Standard fare includes clipboards, cameras, tape measures, boots, flashlights, colored tape and face masks.

- Photo by W.B. Smith