Kent Frantz, chapter President, opened the meeting at 7pm and had each of the 17 attendees introduce themselves since there were a few new attendees. Sean Miller, chapter treasurer, reported that there is $1797.54 in our accounts and we have a total of 32 paid members so far this chapter year. Jessica Fieux, chapter secretary, gave a quick overview of the last meeting.

Kent Frantz introduced Dr. Vince Radke from the Centers for Disease Control and Prevention (CDC) who discussed Public Health Issues in Disasters: Environmental Health Hazards of Flooding.

**Drinking Water Issues:** Flood waters can easily contaminate the drinking water. This can happen through various ways including flood waters taking out a water tower, piping becoming inundated with flood water, water treatment plants being knocked off line and private wells being inundated. When this occurs, the public and private drinking water is unusable and this has numerous effects on the community. Businesses are hurt because either they cannot open or they have to bring in outside water to operate. It is expensive for businesses and communities to bring in outside water. Water trucks can be brought in, but this is also time consuming in addition to the expense. Water buffalos are an option but there are sometimes concerns if they have been exposed to flood water. Packaged treatments plants can be brought in when a water treatment plant is knocked off line, but the plumbing system must then be retrofitted. Another challenge after a disaster is to inform the public that they cannot use the water supply. The Public Health Department can send out messages and when the CDC does so, their messages are written at a 4th grade level. The public has to be careful about who they believe when being told the drinking water is safe.

**Wastewater Issues:** Wastewater issues come about during flooding, but it’s a topic that people often do not want to talk about. Flood water is sewage and can cause illness. As the water runs off, it picks up everything that is there, including pesticides, and this then impacts water downstream. The CDC looks at the watershed when a hurricane, storm, etc. is coming. Sewage plants are oftentimes located near a river and in the lowest area. The lowest area is for gravity reasons so that the wastewater will flow in that direction. This puts the sewage treatment plant in a flood prone area and thus it is the first to get flooded out. A pumping station is used to make the sewage go up in elevation, but if the station goes out, then the sewage starts backing up.

**Shelter Issues:** When disasters strike, shelters are opened, but many of the same issues with needs such as food, water and toilets are still faced but now the problem is in a more compact area. Feeding people alone can be a daunting task. Some shelters after Katrina served 5,000 meals per day! Personal hygiene becomes an issue in the shelter and when people become sick they need to be separated from others. In such a small area, sickness can spread quickly. Special needs people also need to be considered. People with medical problems may not have necessarily brought their medication with them. Pets are another challenge when it comes to shelters. To deal with this issue, some shelters have a pet shelter available next to the shelter for people.
**Vector and Pest Control:** Pests become an issue after a flood event. Mosquitoes are the first back and usually come back in one week. To protect yourself from mosquitoes remember the 5 d’s: dusk, dawn, drain, dress and deet. Rats and mice come back next and this takes a couple weeks to months. After an event, people will oftentimes see pets wandering and put out food for them. This however ends up attracting the rats to eat the food instead of the pets.

**Solid Waste and Hazardous Materials:** What do you do with the items inside your house after a flood? People put their household items outside. When the public throws away items after a flood event, communities sometimes need to contract with solid waste companies outside the area as they cannot handle the amount locally. Some household materials must be dealt with as hazardous waste. Refrigerators for example, have to be disposed of specially. This is the case for cars too as they contain oil and gas. In Haiti, only 2 percent of the debris from the earthquake has been removed.

**Building Assessment:** After a disaster, facilities must be inspected. This includes jails, assisted living facilities and other buildings. One of the major issues found in buildings is mold. Sometimes this cannot simply be cleaned, but instead walls have to be torn out.

**Safety Issues:** People must be properly protected to go into an area after a flood. Objects may be looming that can cause harm, such as nails. First responders are the real heroes after an event. They go in and pull people and pets to safety. They are well trained though to do this and protect themselves appropriately. One safety issue, in particular, after a disaster involves generators. People buy a generator and then put it inside their house. They then run the generator and carbon monoxide builds up inside the house.

Recommended websites:
www.cdc.gov/nceh/ehs
www.bt.cdc.gov/disasters/floods

Kent presented Dr. Radke with an AMS mug and concluded the meeting. The next meeting will be January 20, 2011 at Georgia Tech in the Ford Environmental Science and Technology Building. Laura Belanger, General Meteorologist, National Weather Service, Peachtree City, GA will present “Extreme Rainfall Frequency in the Atlanta Metropolitan Area: An Analysis of September 2009”.