## **Post-Storm Fish Kills**

Most post-storm fish kills are the result of too little dissolved oxygen in the water, caused by decomposing vegetation and/or rapid algae growth spawned by nutrient-rich floodwaters.

Other causes of fish kills include:

- **Toxic spills** Storm-related damage to sewage plants, pipelines and other infrastructure can release hazardous materials into water bodies that may affect local fish populations.
- **Hydrogen sulfide** High winds can bring bottom sediments to the surface and release hydrogen sulfide, which can be lethal to fish at high concentrations. Hydrogen sulfide can easily be recognized by its distinct "rotten egg" odor.
- **Salinity changes** Salinity levels can rapidly change as tidal storm surge enters freshwater systems or fresh floodwaters enter marine systems.
- **Toxic algae blooms** In addition to contributing to low dissolved oxygen levels, some types of blue-green algae, also known as "cyanobacteria," produce toxins. However, most algae-related freshwater fish kills are a result of low dissolved oxygen levels as opposed to algal toxicity.

## **Health Concerns:**

Health risks associated with a fish kill are difficult to determine without knowing the underlying cause. Therefore, it is best to use common sense and follow these general guidelines:

- Do not eat, collect, or use fish or crabs that were found dead or dying, or from areas where distressed or dead fish are present.
- Do not harvest or eat shellfish from waters that have been closed by a government agency or from areas where there are large numbers of distressed or dead fish.
- Do not harvest fish or crabs that are acting erratically or that have sores or ulcers.
- Do not swim or play in areas where distressed or dead fish are present.
- Do not let pets swim in or drink from water in the vicinity of a fish kill. If your pets come in contact with water, immediately wash their fur thoroughly with soap and clean water.
- Items that have come in contact with affected waters should be thoroughly washed with soap and clean water or disinfected with a bleach solution (mix 1/4 cup of household bleach per gallon of water and immerse items for 15 minutes) prior to continuing their use.
- Contact your physician if you believe you have become ill as a result of consuming or being exposed to fish or affected waters during a fish kill.

If you have other health questions or concerns about fish kills, please call your local county health department.