

# Water Quality Concerns for Lakefront Communities

### **Sources of Contamination**

Microorganisms may exist naturally or be introduced to surface waterbodies by stormwater runoff or septic systems. These sources of contamination can also feed microorganisms and result in an overgrowth (i.e. harmful algal blooms). Some examples of waterborne microorganisms are:

- E. coli
- Cryptosporidium and Giardia Parasites
- Viruses (Adenovirus)
- Cyanobacteria/Harmful Algal Blooms (HAB) HABs can overgrow in nutrient rich environments. Signs of overgrowth may include a blue-green or green discoloration to the water or a "spilled paint" or "pea soup" like consistency on the surface.



Harmful Algal Bloom

#### NEVER USE UNTREATED SURFACE WATER FROM THESE SOURCES

- Identify your water source.
- **Test** for possible contamination.
- Seek an alternate water source, if needed. <u>HABs</u>: If you suspect a HAB, call 1-877-WARNDEP. Boiling untreated HAB waters will not remove the toxin and may worsen the contamination.

### **Surface Water**

Untreated surface water should never be used for any potable use, showering, handwashing, dishwashing, drinking, or preparing food, especially for infants or children. Even with various types of home treatment some risks remain. While water may often appear to be "clean," one drop of water can contain thousands of microorganisms, some of which could be potentially dangerous or make you ill.

## **Poorly Constructed Wells**

An older shallow or poorly constructed well located near a water body may be at higher risk because it is connected to surface water through the groundwater. Wells with inadequate casing length, or casing and grout deterioration are also at higher risk to contamination from septic tank leaching or other contaminants. **Make sure your well has been properly installed, maintained, and is undergoing routine testing.** You may be at risk if your well:

- Was constructed prior to 1996 (prior to current protective construction standards)
- Is a hand-dug well composed from brick, stone, or concrete rings.
- Has significantly lower water levels or dries up when nearby surface water levels decline.



Hand-dug Well

Information on Harmful Algal Blooms can be found at the website: www.nj.gov/dep/hab. For more information on well construction, permitting or interpreting well record documents, contact the NJDEP Bureau of Water Allocation & Well Permitting at 609-984-6831 or wellpermitting@dep.nj.gov. If you are unsure about the construction of your well, complete an individual well search to obtain records from the NJDEP or contact a licensed well driller to evaluate your well. Follow us on Twitter @NewJerseyDEP