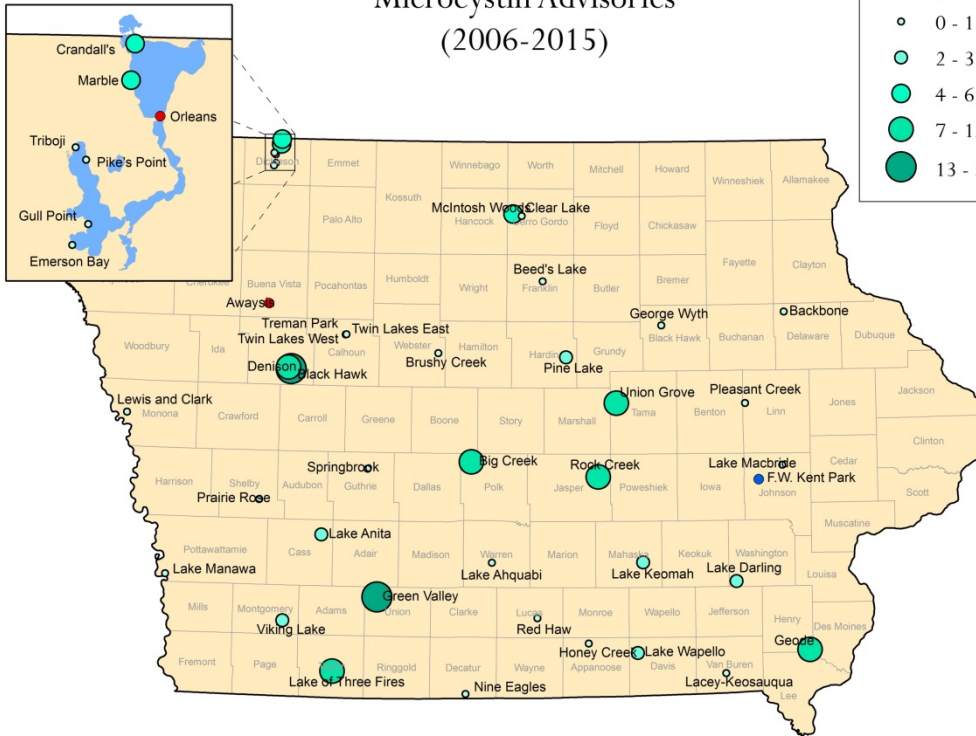
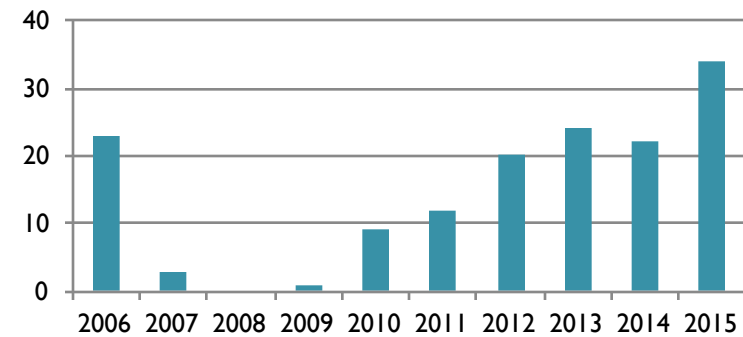


## Microcystin Advisories (2006-2015)



## Number of Advisories at Iowa Beaches



### Background

1. Monitor 40 State Owned Beaches
2. Sampling on Monday/Tuesday for reporting on Friday
3. Sampling Memorial Day through Labor Day

# Drinking Water Impacts

## Microcystin 10-day HAL

- 0.3 ug/L for children under 5
- 1.6 ug/L for children over 6 and adults

## Cylindrospermopsin 10-day HAL

- 0.7 ug/L for children under 5
- 3.0 ug/L for children over 6 and adults

DNR beginning voluntary surveillance of toxins in drinking water July –Sept 2016



**Black Hawk Lake, Iowa, IDNR photo**



## Challenges Associated with Algal Toxins in Source Water

- Transient nature of algal blooms
  - Occurrences unpredictable
  - Can appear, disappear, and reappear rapidly
  - Not all blooms are “toxic”
- Toxins derived from natural products
  - Unique analytical issues
- Emerging science
  - How far can toxins travel in water? Are they localized or are they mobile?