

# Nitrates: A Growing Threat to Public Health in Illinois

## Nitrate levels are rising in Illinois Public Water Systems

The federal Safe Drinking Water Standard requires public water systems to keep their water below 10 ppm of nitrate to prevent Blue Baby Syndrome.

However, new research is finding increased health problems for people drinking water with only 5 ppm of nitrate, half the drinking water standard.

Even short periods of nitrate exposure at 5 ppm can cause:



**Methemoglobinemia in Babies\***  
causing them to get less oxygen.

Populations with chronic exposure have been found to have:



**Increased Birth Defects\***  
1.8x risk of Limb Deficiencies  
2x risk of Spina Bifida  
1.9x risk of Cleft Palate



**Increased Rates of Cancer\***  
2.5x risk of Thyroid Cancer  
1.6x risk of Bladder Cancer  
2x risk of Ovarian Cancer

## Illinois Public Water Since 2010



Building treatment facilities to remove nitrates from our drinking water costs hundreds of thousands to millions of dollars for Illinois communities. The costs don't stop there. Every year tens to hundreds of thousands of dollars are spent to operate these plants.

## Prevention Costs 1/4 of Removal

\$3/lb Nitrate to prevent through conservation agriculture  
(Illinois Nutrient Loss Reduction Strategy)

\$13 /lb Nitrate to remove through water treatment

## Agriculture is Both the Source and the Solution to our Nitrates Problem



Not enough farmers are using conservation practices to meet our water quality needs while we under fund our local Soil and Water Conservation Districts (SWCDs) that help them accomplish this.

Help change this by:

- Reinstating SWCD insurance to help re-build staff capacity
- Replenish SWCD state cost-share funding to get more projects on the ground

- Come to SWCD event this summer to learn about ways to reduce nutrient pollution
- Let IDOA and IEPA know about your interest in seeing progress on the Nutrient Loss Reduction Strategy

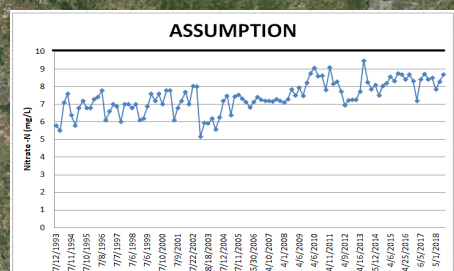
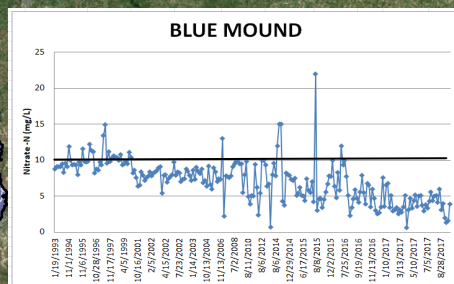
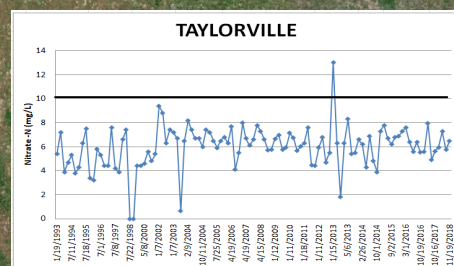
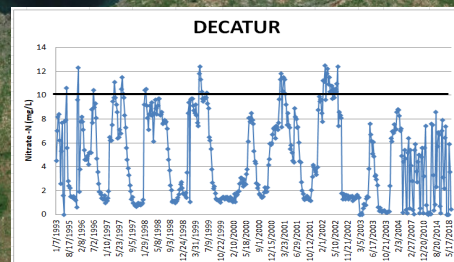


\* For more information and a list of citations visit <https://prairierivers.org/uncategorized/2018/03/nitrates-one-pager-works-cited/>



# High Nitrate Levels in Illinois Drinking Water (2010- 2018)

Rising Nitrate Levels Forces  
Municipalities to Buy Treatment  
Facilities



## Nitrate level

- Max > 5 mg/L
- Avg > 5 mg/L
- Max > 10 mg/L
- Population size

## Non-point N Yield

- (lb/ac/yr)
- < 5
- 5-99.9
- 10-14.99
- 15-19.99
- 20-24.99

0 25 50 100 Miles

