reThink Soil
Rebecca Benner, TNC

Food

Water

Climate
New York’s waters: Nitrogen

Breakdown of watershed nitrogen concentrations

- **EXCESS NITROGEN**
  - >5x
  - >2-5x
  - >1-2x
  - at or below recommendation
  - no data

*EPA ecoregion recommendation for nitrogen = 0.48 mg/L

Data derived from:
USGS Spatially Referenced Regressions on Watershed attributes (SPARROW) models & USGS NY Streamflow Estimation Tool

Nitrogen recommendation from:

Map produced July 2018

**Dominant sources of nitrogen by watershed**
- Agricultural
- Point sources
- Development
- Manure
- Atmospheric
- No data

Sources: USGS SPARROW, USGS Streamflow Estimation Tool
Details: Water Quality Maps

- The maps represent modeled nutrient concentrations using the USGS Sparrow model; two different models to get coverage for the whole state.

- Flows for the model came from the USGS/TNC streamflow estimator tool (we do not have flows for Long Island which is why Long Island is not modeled).

- The standards the modeled concentrations are compared to represent the difference in concentrations from the DEC guidance for phosphorus and the EPA proposed nitrogen standard. New York, at this time, only has descriptive water quality standards so these numeric standards for phosphorus or nitrogen are based on past discussed values.
Soils, Water, and Climate

Carbon Storage

Nutrient Management

Cover Crops
Crop Rotation
Reduced Tillage
Thank you!

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