

Lake St. Croix Total Maximum Daily Load

Are We There Yet?



Monica Zachay
River Protection Steward, SCRA



Lake St. Croix
Total Maximum Daily Load

Goal: *Reduce Phosphorus
Loading to Lake St. Croix by
100 metric tons/year (20%)
by year 2020*

Regulated vs. Non-regulated

Regulated = Point Sources:

- Municipal & industrial wastewater
- Regulated stormwater
- Concentrated animal feeding operations (CAFOs)

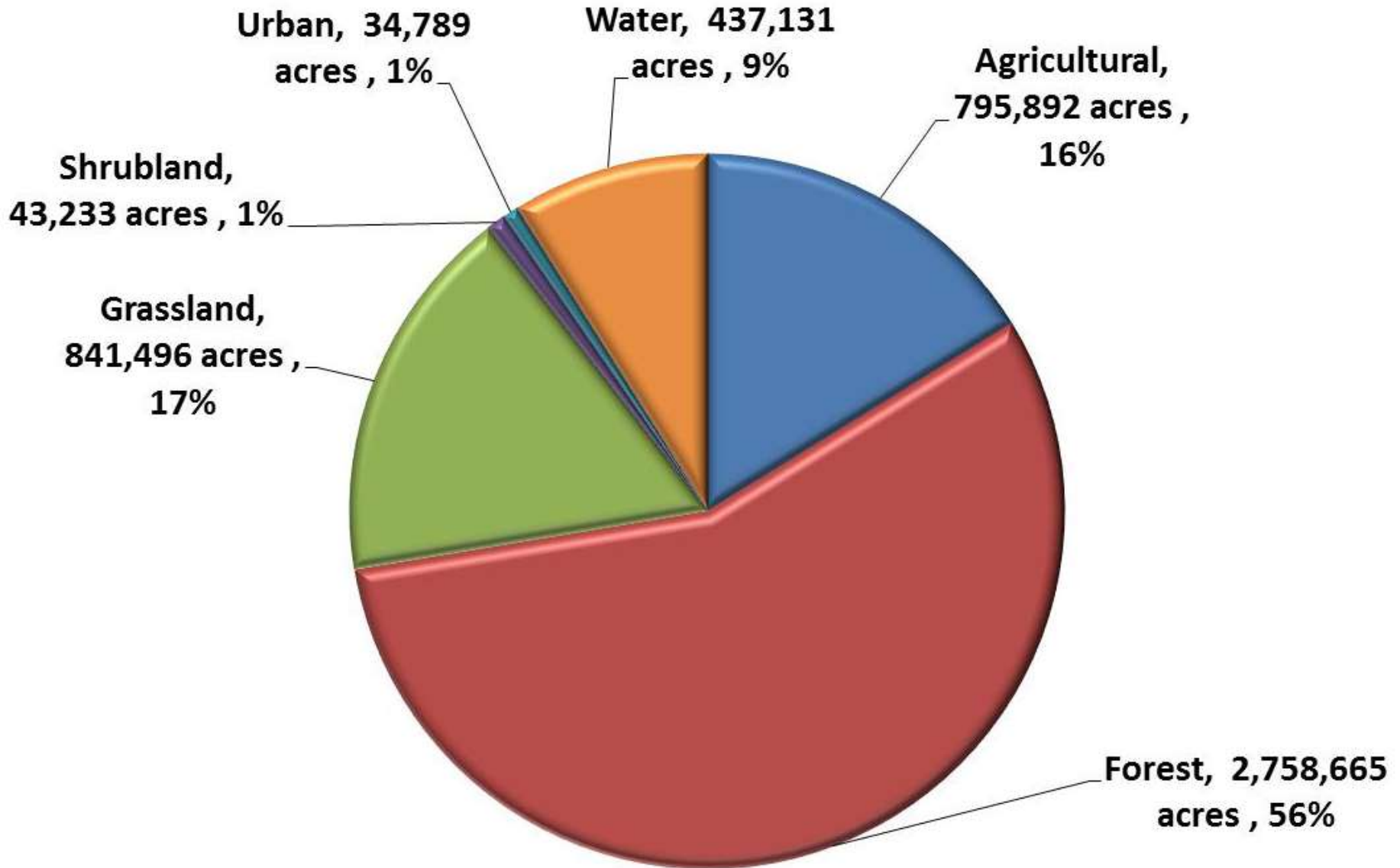
Non-regulated = Non-point source

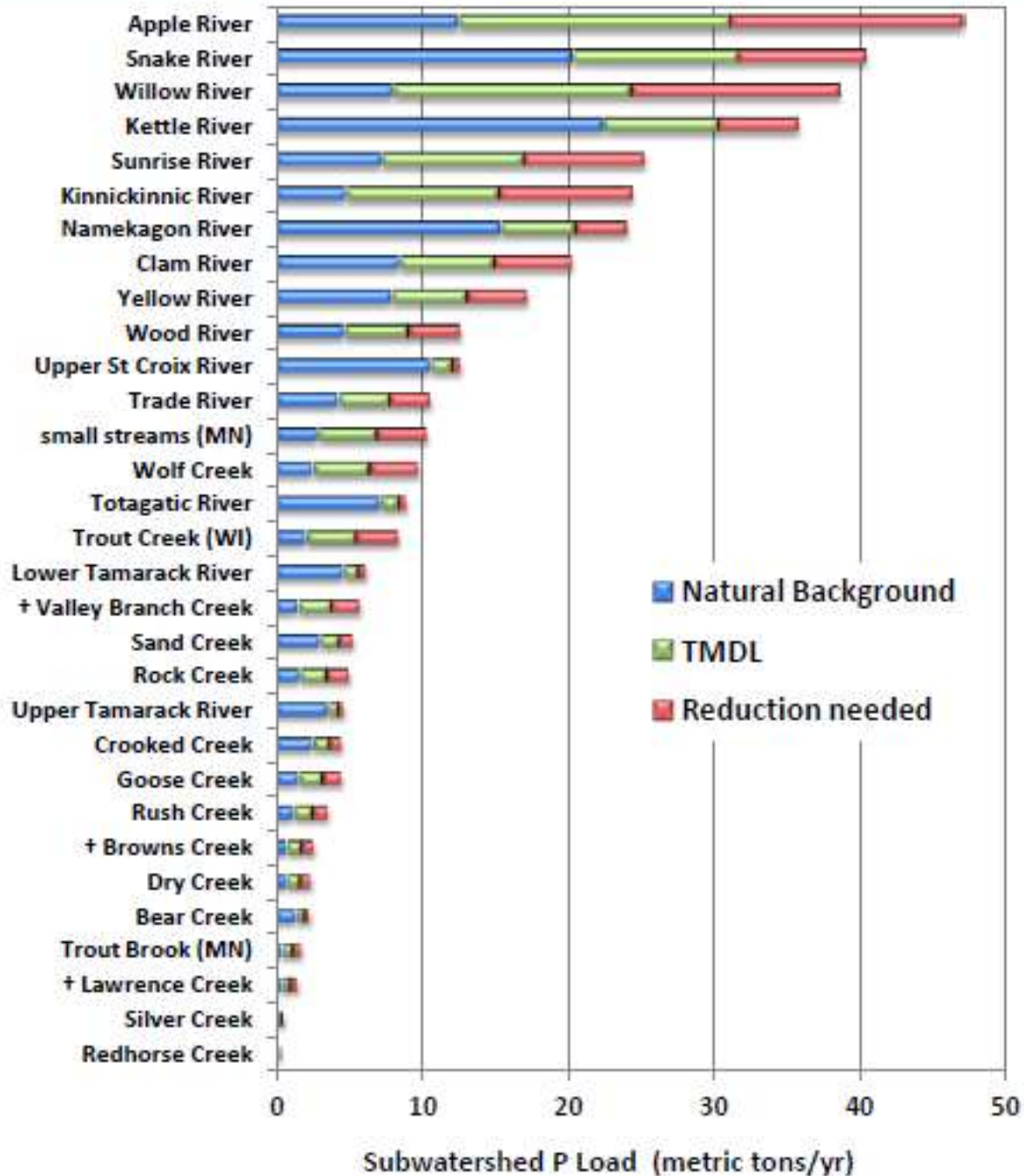
- Runoff from various land uses

Regulated vs. Non-regulated

- Regulated - accounts for ~18% of total reduction needed
- Non-regulated a.k.a. **VOLUNTARY** accounts for ~82% of reduction needed

Non-Regulated Sources - Land Use



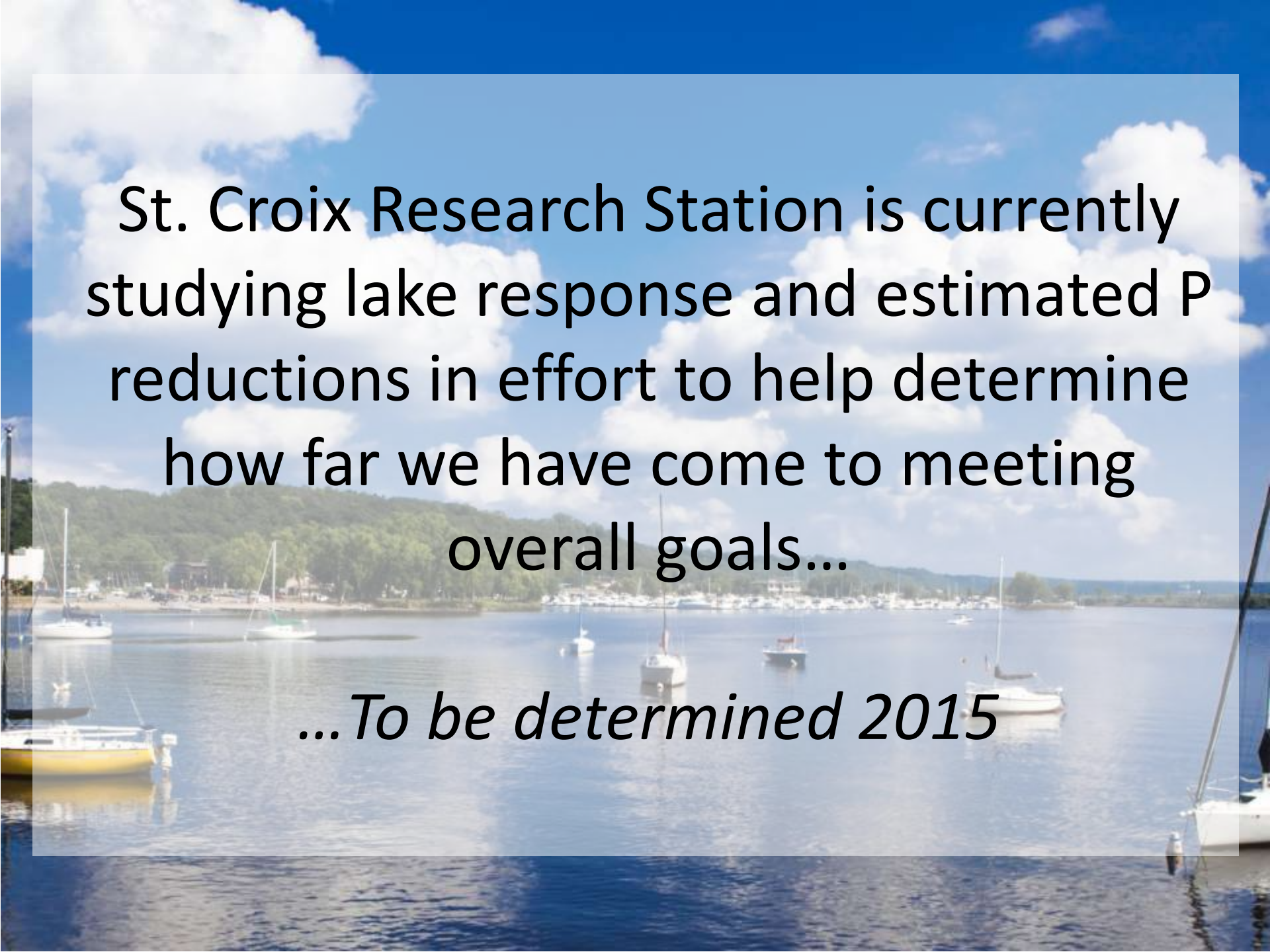


Implementation Strategy

- Phosphorus reductions are divided by county, each county has a plan for implementation
- Overall basin strategy:
Civic Engagement

Where are we?

- Regulated sources - 45% reduction since 2009
- Non-Regulated –
 - Minimal P reduction tracking, infrastructure does not presently exist basin wide
- Many projects on the ground
 - Ag and urban BMPs



St. Croix Research Station is currently studying lake response and estimated P reductions in effort to help determine how far we have come to meeting overall goals...

...To be determined 2015

Questions:

How do we increase voluntary phosphorus reduction practices?

Is it possible to obtain enough voluntary practices to account for 82% of the phosphorus reduction needed from voluntary measures?

Should we be relying on voluntary practices to achieve TMDL goals?