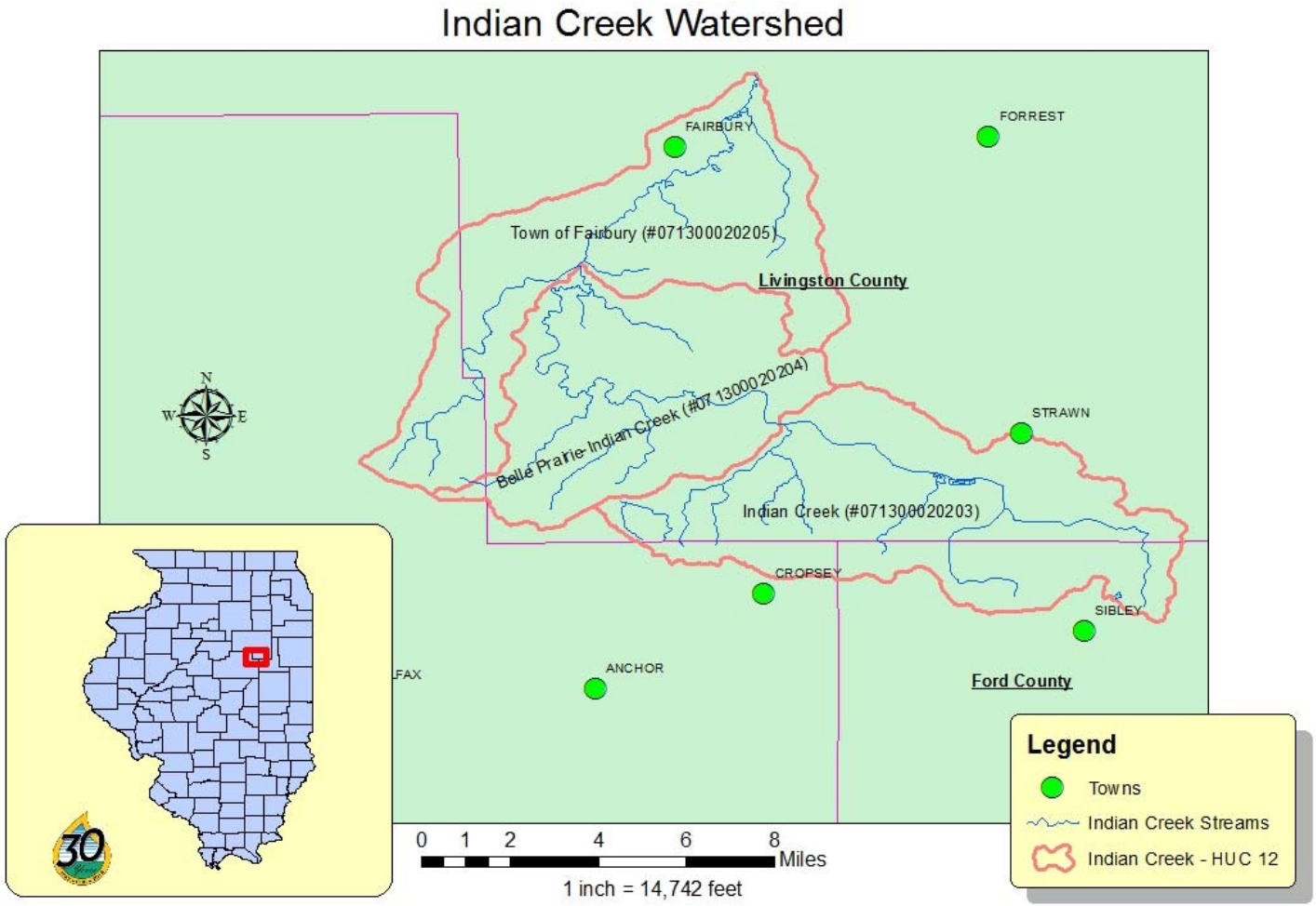
Indian Creek Project

12/4/13

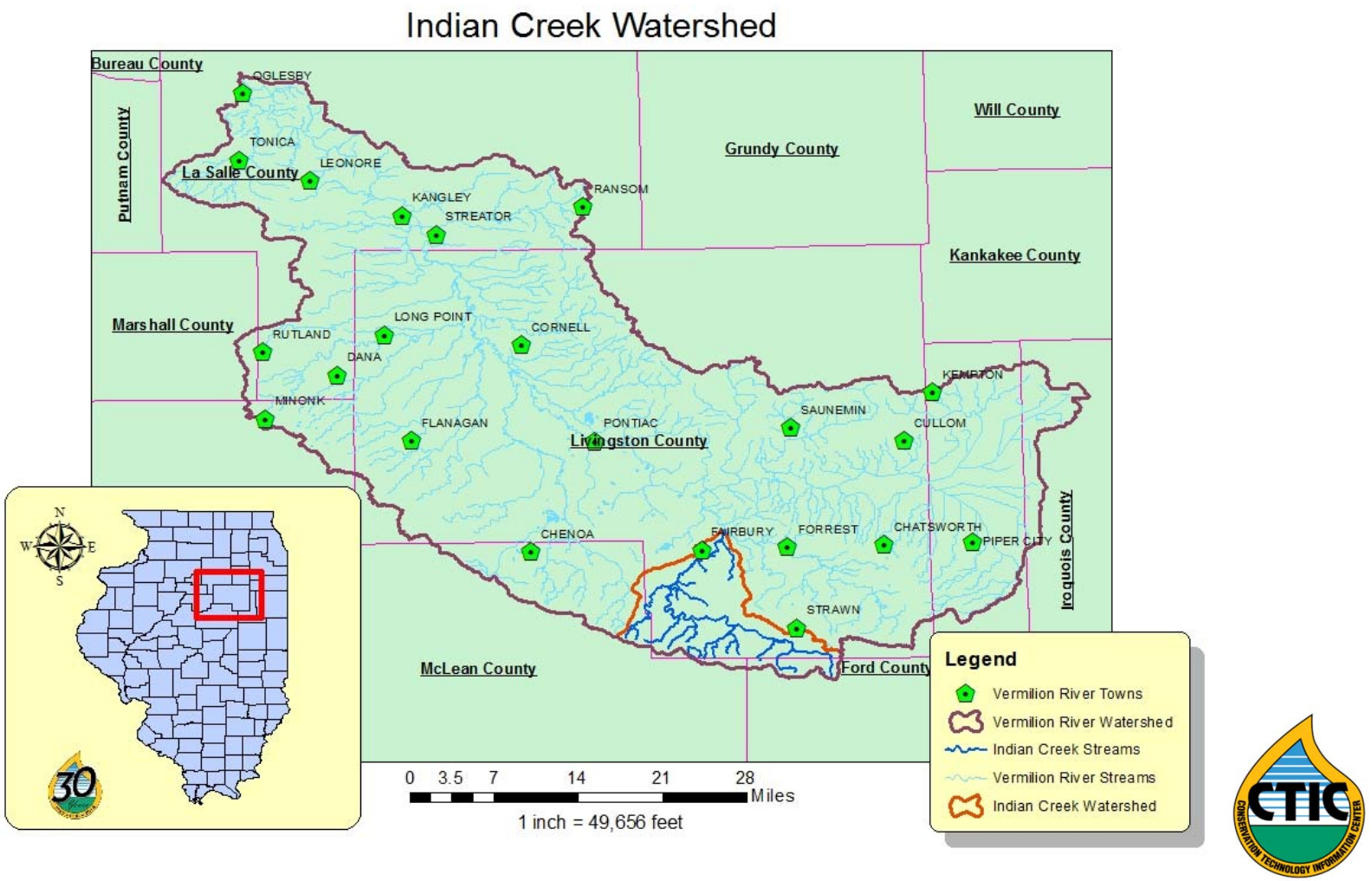
Livingston County, IL

Livingston County
Soil & Water Conservation District

Project Overview



Indian Creek - Overview



INDIAN CREEK WATERSHED

- 51,243 acres (~80 sq. mi) drainage area
- Primarily cropland
- 104 farms in the watershed
- Part of Vermilion River Watershed that flows to Illinois River
  - Aquatic life use and public water supply impairments
  - MRBI target watershed

Indian Creek

- Drinking Water Source Protection
  - Reduce nitrogen amounts in the Vermilion River
    - N amounts in Vermilion River exceed the drinking water standard of 10 mg/l
    - Cities of Pontiac and Streator use the Vermilion River as a drinking water source
- Nutrient Use Efficiency
  - Efficiently using applied nutrients to feed the crop and minimize losses to the environment

Evolution of the Project

- CTIC – 319 Grant - Vision
- Partner Meeting – Picking a Watershed
  - IL EPA, NRCS, IL Dept. of Ag., IL Assoc. of SWCDs
  - Input from others
- Why Indian Creek?
  - Strong local partner
  - Community interested and engaged
  - Impairments addressed by nutrient strategies

Indian Creek Project – 319 Grant

CTIC
319
Efforts

- Partners:
  - CTIC
  - Illinois EPA
  - Livingston County SWCD
  - Illinois NRCS
  - Industry Partners / Sponsors

Livingston County
Soil & Water Conservation District

- Goal:
  - Determine water quality impacts that result when 50% of farms and acres in watershed adopt conservation systems

Indian Creek Project - MRBI

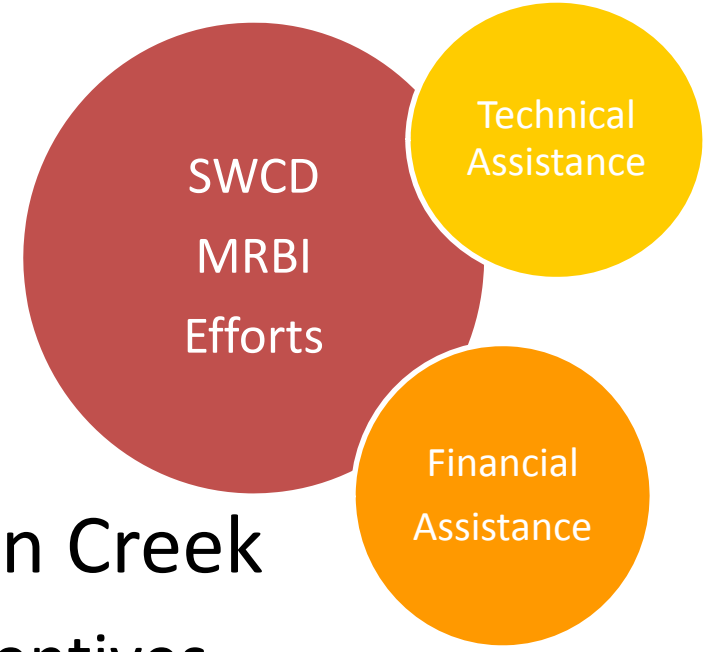
- Partners:
  - Livingston County SWCD
  - Illinois NRCS
  - CTIC
  - Illinois EPA

SWCD
MRBI
Efforts

Livingston County
Soil & Water Conservation District

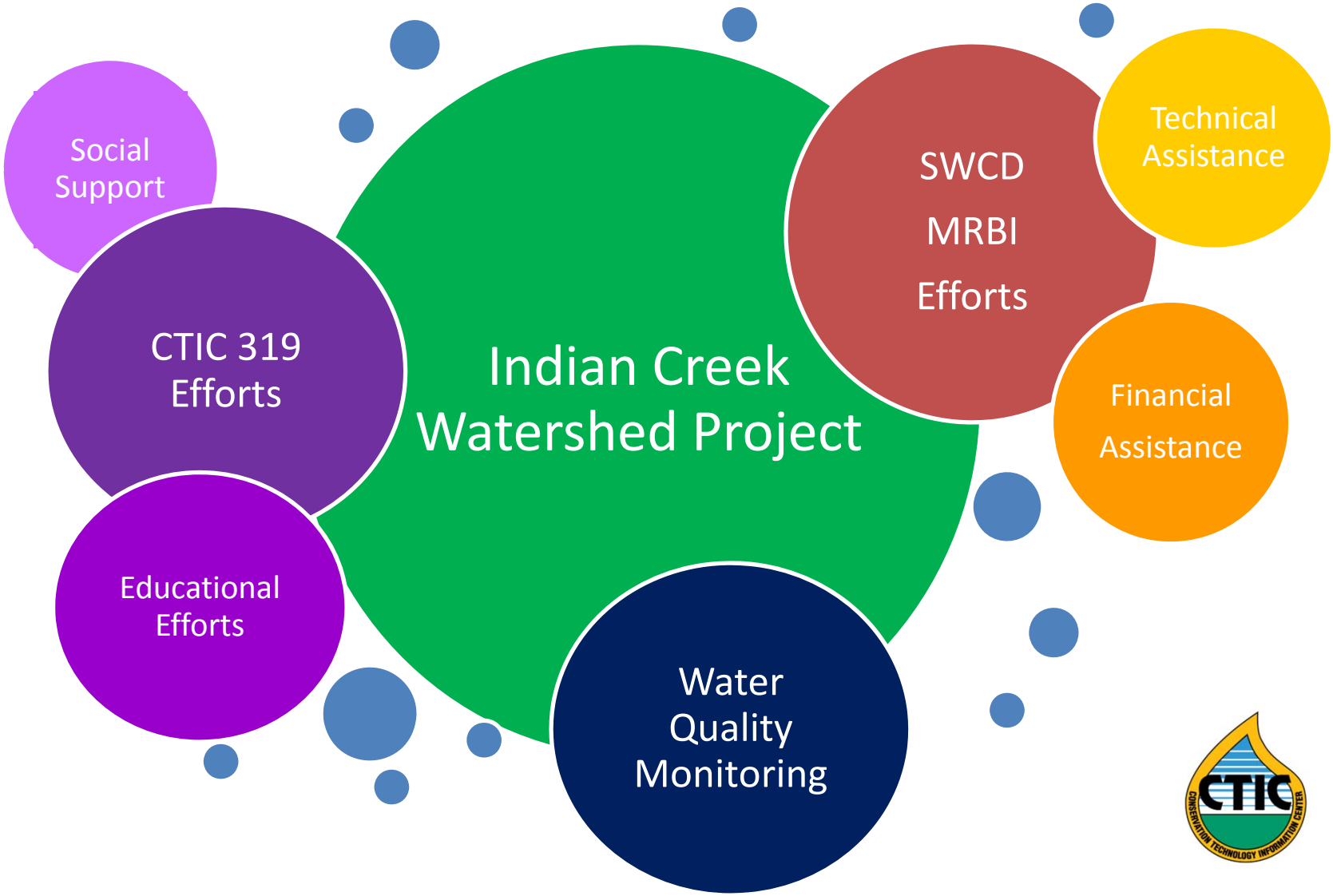
- Goals:
  - Improve water quality throughout watershed
  - Decrease soil erosion and sediment
  - Maintain and enhance wildlife
  - Maintain small- to medium-size farming operations

MRBI Funding



- Funding targeted to Indian Creek
  - Environmental Quality Incentives Program (EQIP)
    - $50,000 Annually
  - Conservation Stewardship Program (CSP)
    - $200,000 Years 1 and 2
    - $100,000 Years 3 and 4
    - $50,000 Year 5

Fitting it all together



Steering Committee

- Participants Identified
  - Past cooperator
  - Interest in conservation
  - Various walks of life
- Personal Invitations
- Seek and act on their input
- Keep members engaged

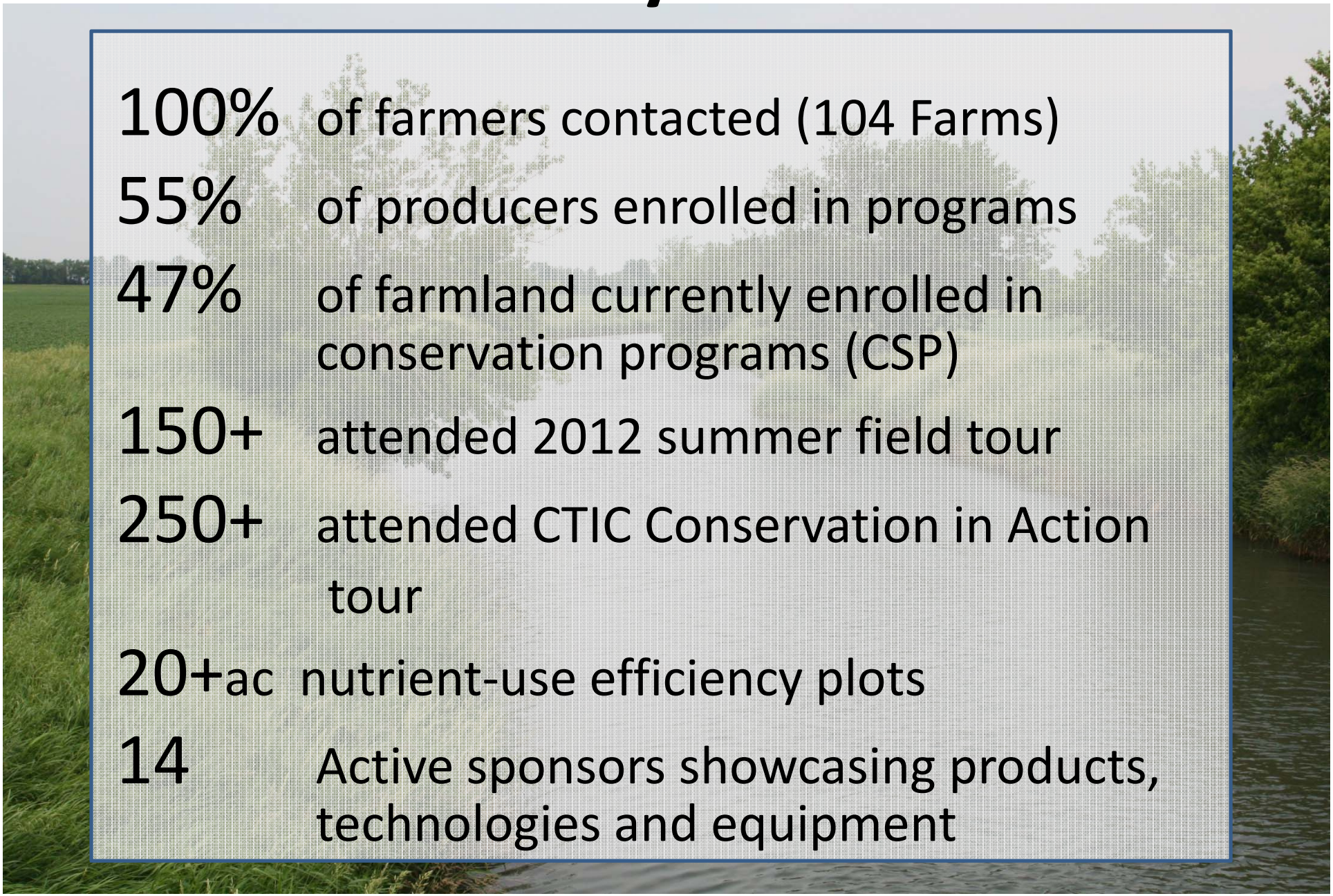
Personal Contacts

- One-on-one visits with all 104 producers
  - Discuss conservation systems
  - Offer financial assistance
- Conduct perception survey
  - Water quality, pollutants and attitudes

Winter Meetings

- Promote to watershed and beyond
- Attendance
  - 100+ per meeting
- Timely topics including:
  - Soil health / Cover crops
  - Financial assistance programs
  - Producer panel discussions
- Outcomes
  - Increased awareness

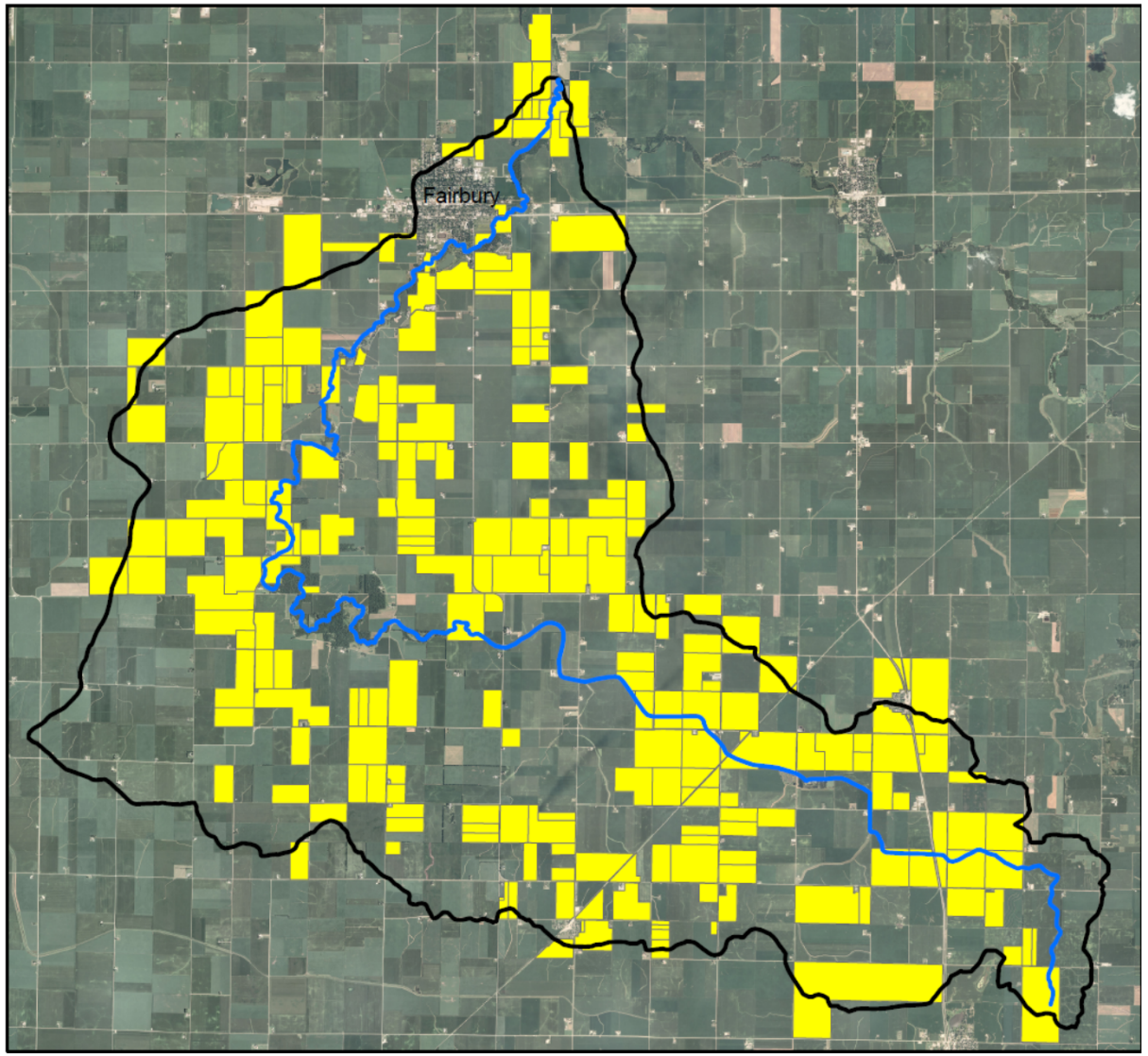
Indian Creek by the numbers…



100%	of farmers contacted (104 Farms)
55%	of producers enrolled in programs
47%	of farmland currently enrolled in conservation programs (CSP)
150+	attended 2012 summer field tour
250+	attended CTIC Conservation in Action tour
20+ac	nutrient-use efficiency plots
14	Active sponsors showcasing products, technologies and equipment

Indian Creek Conservation Stewardship Program (CSP) Coverage

47% of the watershed area is enrolled in CSP



Demonstrations and Nutrient Use Efficiency Plots

- 2011 Demonstrations - 3
- 2012 Demonstrations – 7
- 2013 Demonstrations – 13
  - Nitrogen use
    - Field trials evaluating 4-Rs of nutrient stewardship
      - Right time, right source, right place, right rate
  - Cover Crops
  - Controlled Drainage

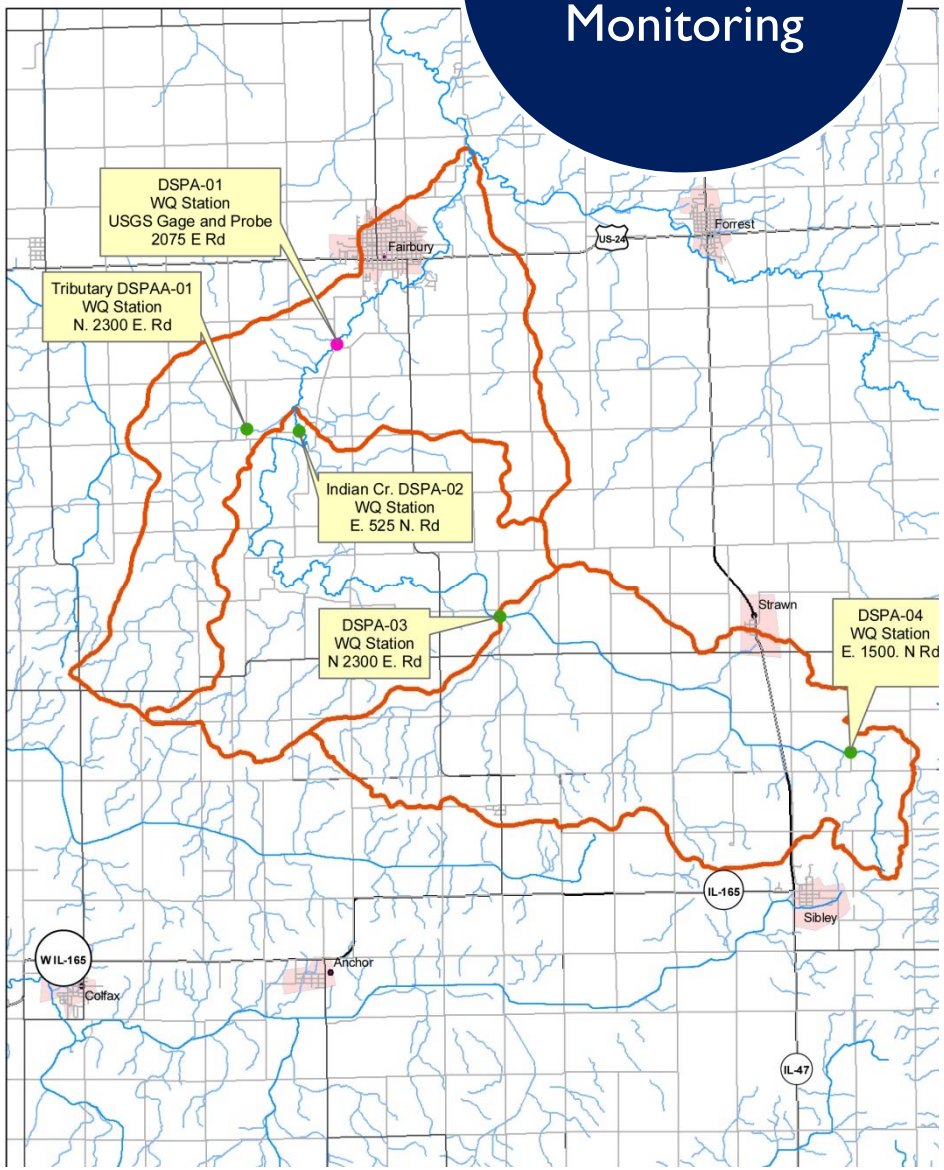
2013 CIA Tour

- National Tour held in Indian Creek
- 285 Attendees
- Representation from 20 States and Wash. DC
- 32 Speakers
- 30+ volunteers
- Tour stops
  - Soil Health
  - Nutrient Mgmt.
  - Drainage Water Mgmt.

Water Quality Monitoring

- USGS stream gage installed July 2011 at watershed outflow to collect
  - Stage levels
  - Discharge

- Continuous nitrate+nitrite sensor installed Sept. 2011

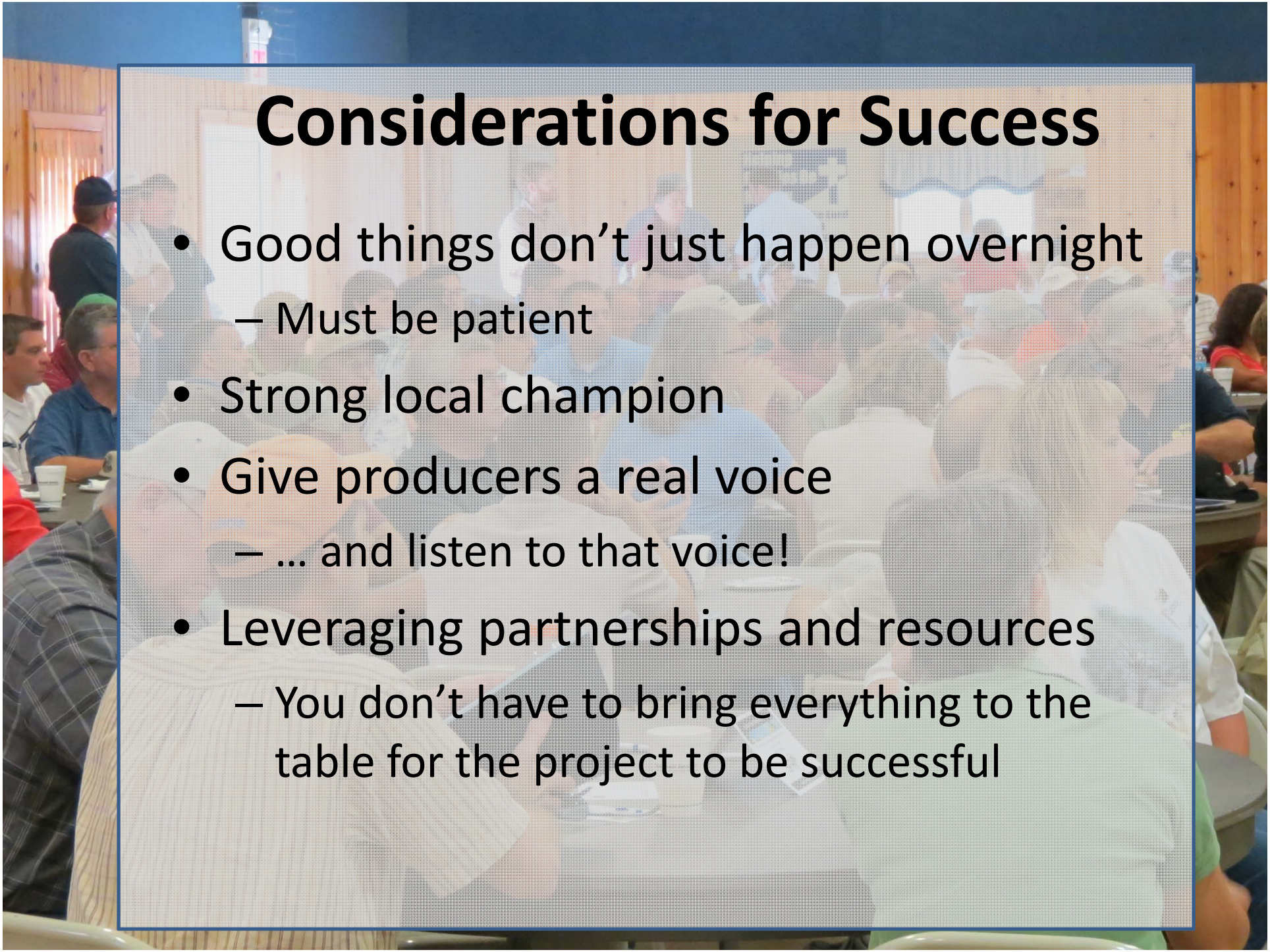


Water Monitoring

Water Quality Monitoring

- March - June
  - Weekly "grab" samples
    - Nitrate
  - Monthly Samples
    - Total phosphorous
    - Total suspended solids
- July – February
  - Monthly "grab" samples
  - Total phosphorous
  - Total suspended solids
  - Nitrate – nitrite

Physical water quality information is also being collected via a water probe – Temperature, Dissolved Oxygen, pH, etc.



Considerations for Success

- Good things don't just happen overnight
  - Must be patient
- Strong local champion
- Give producers a real voice
  - … and listen to that voice!
- Leveraging partnerships and resources
  - You don't have to bring everything to the table for the project to be successful

More Considerations

- Be inclusive
- Be up-front with your motives
  - No hidden agendas
- Recognize people's desire to protect things in their own back yards
- Respect and engage the community

Community

- The more “community” you create around your watershed effort, the more local buy-in, more impact, more success

Contact information

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