



**PARTNERSHIP** *for*  
**AG RESOURCE MANAGEMENT**  
*sustainability | profitability | science*

# Ag Retailer Leadership to Improve Environmental and Economic Outcomes in the Great Lakes Basin

**Jill Carlson, Project Coordinator**

*Rock River TMDL October Networking Forum  
Wednesday, October 28, 2015  
9 am - Noon*

[www.partnershipfarm.org](http://www.partnershipfarm.org)

# Leveraging the marketplace

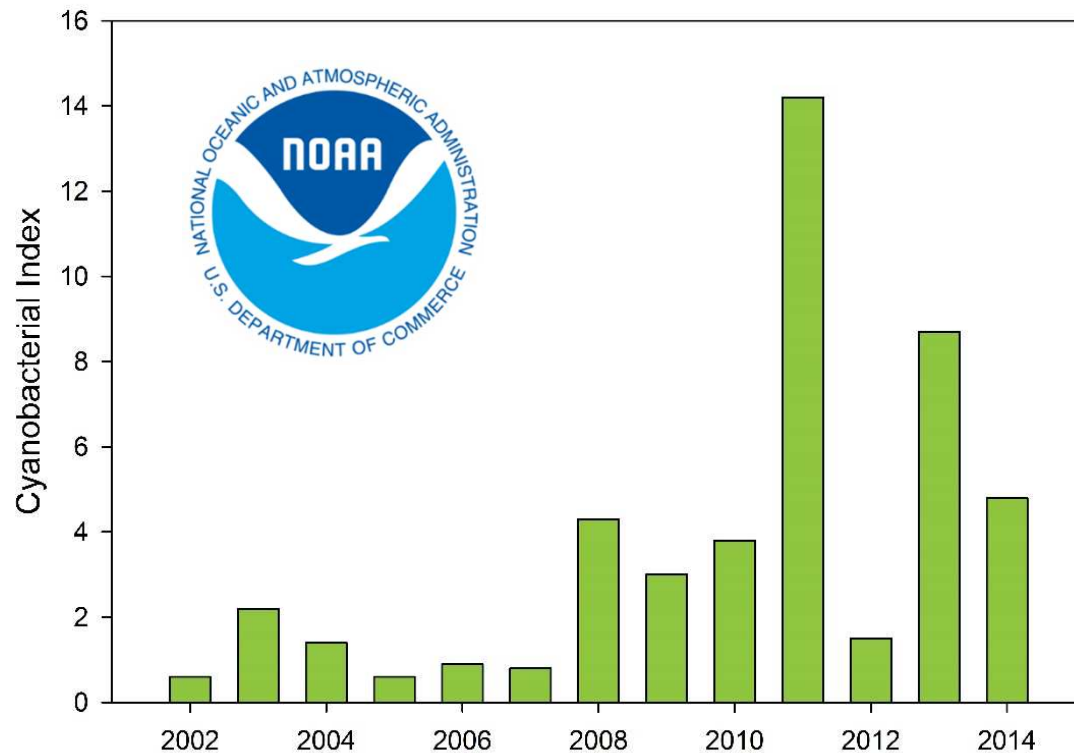


- PARM is one of many projects of the IPM Institute that works to leverage the marketplace to *better environmental, social, and economic good*
- A sampling of our other projects:



# Phosphorus Trends

- Algal blooms in Lake Erie are increasing



*Courtesy: Heidelberg University*

6 largest algal blooms since mid-1990s have occurred over the past 7 years

# Phosphorus Trends

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- Dissolved reactive phosphorus is driving nutrient pollution and has increased 2.5 fold in agricultural watersheds (*Ohio data*)
  - These amounts though are agronomically very small
- Our project works with **ag retailers to identify, promote, track and report** the beneficial **products and services** that they can offer to their grower clients to **benefit water quality and soil health**
  - Worked in the **Sandusky River Watershed** and have since **expanded to the Western Lake Erie Basin** and now the **Great Lakes Basin**

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# Why work with ag retailers?



- Unlikely, but valuable allies
- Motivated to drive improvements to improve natural resources they enjoy for drinking water, hunting, fishing, boating and swimming
- Primary influence on farmer decisions
- Visit nearly each acre at least once per season to provide products and services, thus gaining unique perspective
- Ag retailers can offer products and services to grower clients that greatly benefit water quality
- **Need way to engage *all* cropland acres in beneficial practices**  
→ **Ag retailers!**

# Our Project



1. **Identify, promote, track, report** acres of beneficial ag retail products and services.
2. Estimate impacts of product and service uptake on P loss reductions.
3. *Set goals, meet targets.*

# Sandusky River Watershed Pilot



- Ag retailers driving adoption of products and services projected to achieve water quality goals
- Successfully developed tools and training to increase their awareness of the P problem and improve their ability to identify most-at-risk acres (informed by listening sessions in SRW)
- Documented increases in sales of cover crops, precision soil sampling and fertilizer application, and other beneficial products and services



*Courtesy: Ohio EPA*

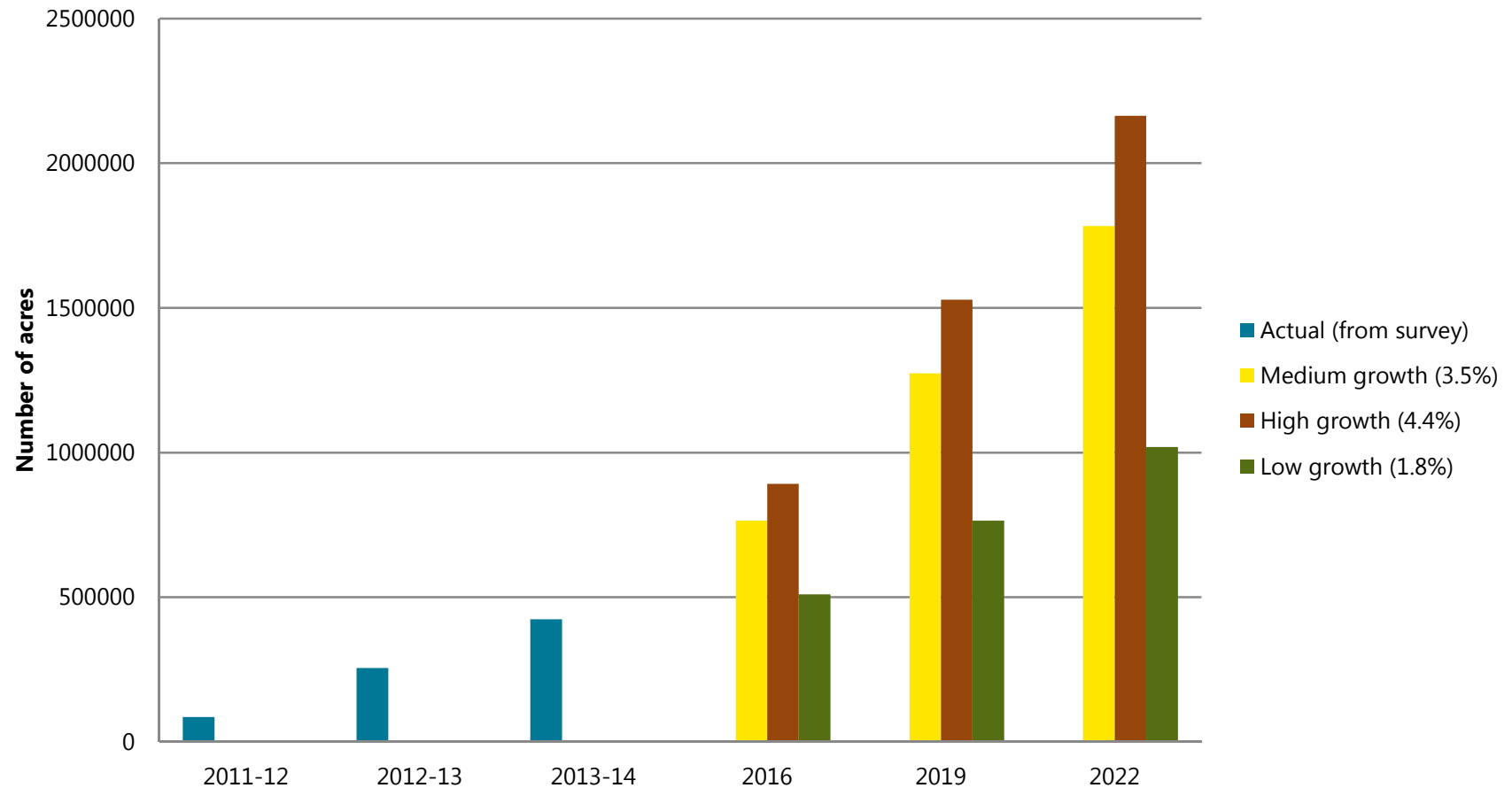
*Ag Retailers Driving Stewardship and Sustainability*



# Cover Crop Survey Responses & Projections in the Sandusky



## Acres Using Cover Crops



*Ag Retailers Driving Stewardship and Sustainability*

# Key Takeaways



- Ag retailers are key to creating change on a large scale because they are primary influencers of input decisions.
- Ag retailers are most receptive to new materials and information at off-peak times during the season, especially July, December-February.
- It is important to balance the needs of local partners with desired outcomes. (It is important to identify and collaborate with local partners, national partners.)
- Ag retailers are interested in participating but need support to identify, evaluate and promote new or less familiar products and services.
- Geographic information and data management systems provide opportunities to efficiently collect practice data and translate into outcomes including nutrient, pesticide and sediment load reductions.

# Project Expansion into the Great Lakes Basin

# Promotion – P loss Wallet Card



- Designed to be used anywhere P and water quality are concerns.
- 4R conversation starter between ag retailers and growers.
- Popular with SWCDs, watershed organizations and ag retailers.

**Phosphorus (P) loss from any field is possible. Fields with any of the following conditions may be at higher risk.**

**Your special attention can help prevent P losses.**

- ▶ Soil test levels are above maintenance.
- ▶ Areas with high surface runoff potential:
  - Poorly or imperfectly drained soils.
  - Sloping fields.
  - Fields with less than 30% crop residue cover on soil surface.



## 4R Nutrient Stewardship for Green Crops and Blue Lakes

<b>Do</b>	<ul style="list-style-type: none"><li>▶ Inject or band phosphorus (P).</li><li>▶ Lightly incorporate (2-3") P applications; ag retailers can notify customer when applications are made.</li><li>▶ Follow recommendations for setbacks.</li><li>▶ Broadcast P for one crop year at a time only.</li><li>▶ Soil test at least every three years.</li><li>▶ Apply at University recommendations.</li><li>▶ Plant cover crops.</li><li>▶ Consider variable rate application.</li><li>▶ Consider reduced tillage: no till, strip till.</li></ul>
<b>Don't</b>	<ul style="list-style-type: none"><li>▶ Broadcast without light incorporation.</li><li>▶ Broadcast application before heavy rain.</li></ul>



*Ag retailers driving stewardship and sustainability*

# Promotion – 2015 Webinars



## **“INCREASING COVER CROP SALES FOR AG RETAILERS”**

- Aired July 24, 2015
- Dean Baas, Midwest Cover Crops Council
- Steve Groff, Cover Crop Solutions

150+ folks watched live or on-demand

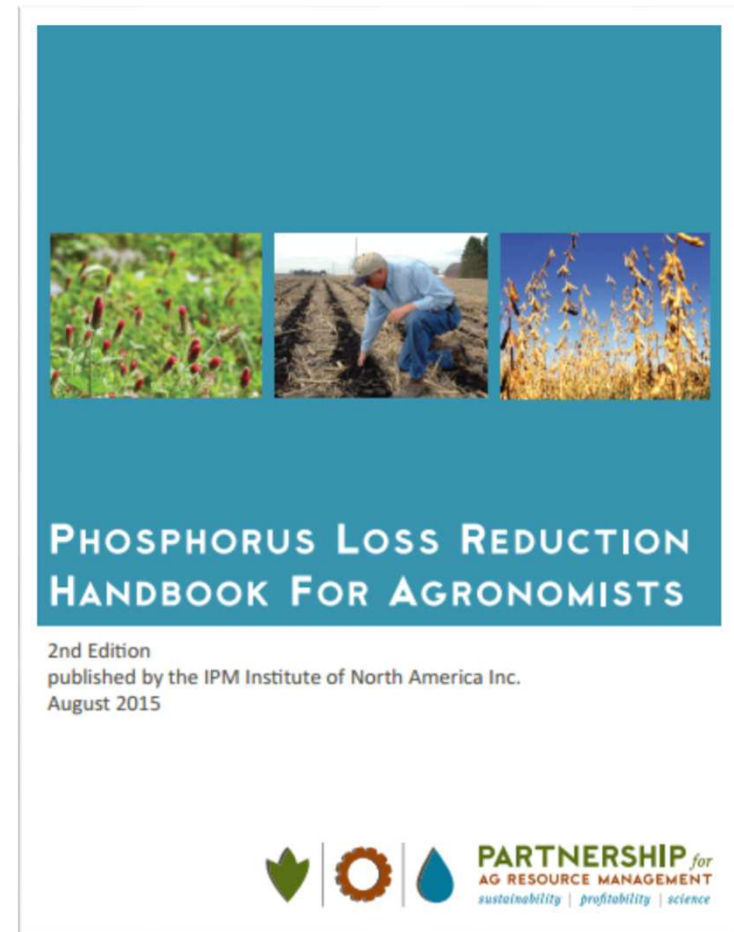
## **“GROWING SOIL TESTING, VARIABLE RATE APPLICATION AND OTHER SERVICE OPPORTUNITIES”**

- Aired September 3, 2015
- Dr. Laura Johnson, National Center for Water Quality Research
- Joe Nester, Nester Ag, LLC

160+ folks watched live or on-demand

## Promotion – Agronomist P Handbook

- P- Loss Handbook
- Articles, press releases
- One-on-one meetings, phone calls
- Building Great Lakes Basin ag retailer contact list
- PARM e-newsletter to 5400 Great Lakes state contacts, >5000 are CCAs, TSPs, ag retail.



# Short-Term Activities

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- Continue to collect and aggregate ag retailer product and service data (but now in GLB)
- Finalize mobile app for identifying high-risk fields for P loss
- Host and facilitate more 'state of the science' webinars for ag retailers
- Establish working group with NRCS

# Thank you for your attention!



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## Thanks to our funders!



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