

Why do landowners maintain BMPs?

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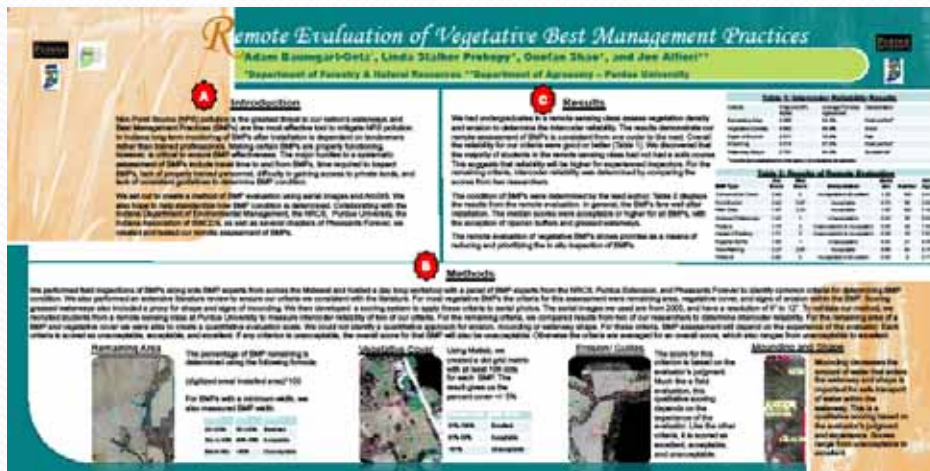
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Project Overview

- Work with SIPES team developed relationship with Indiana's NPS program
- We asked what question they would like social indicators to answer
- What motivates landowners to maintain BMPs?
 - IDEM was happy to help– provided access to their records
 - Focused on condition of vegetative BMP

Measuring BMP Condition



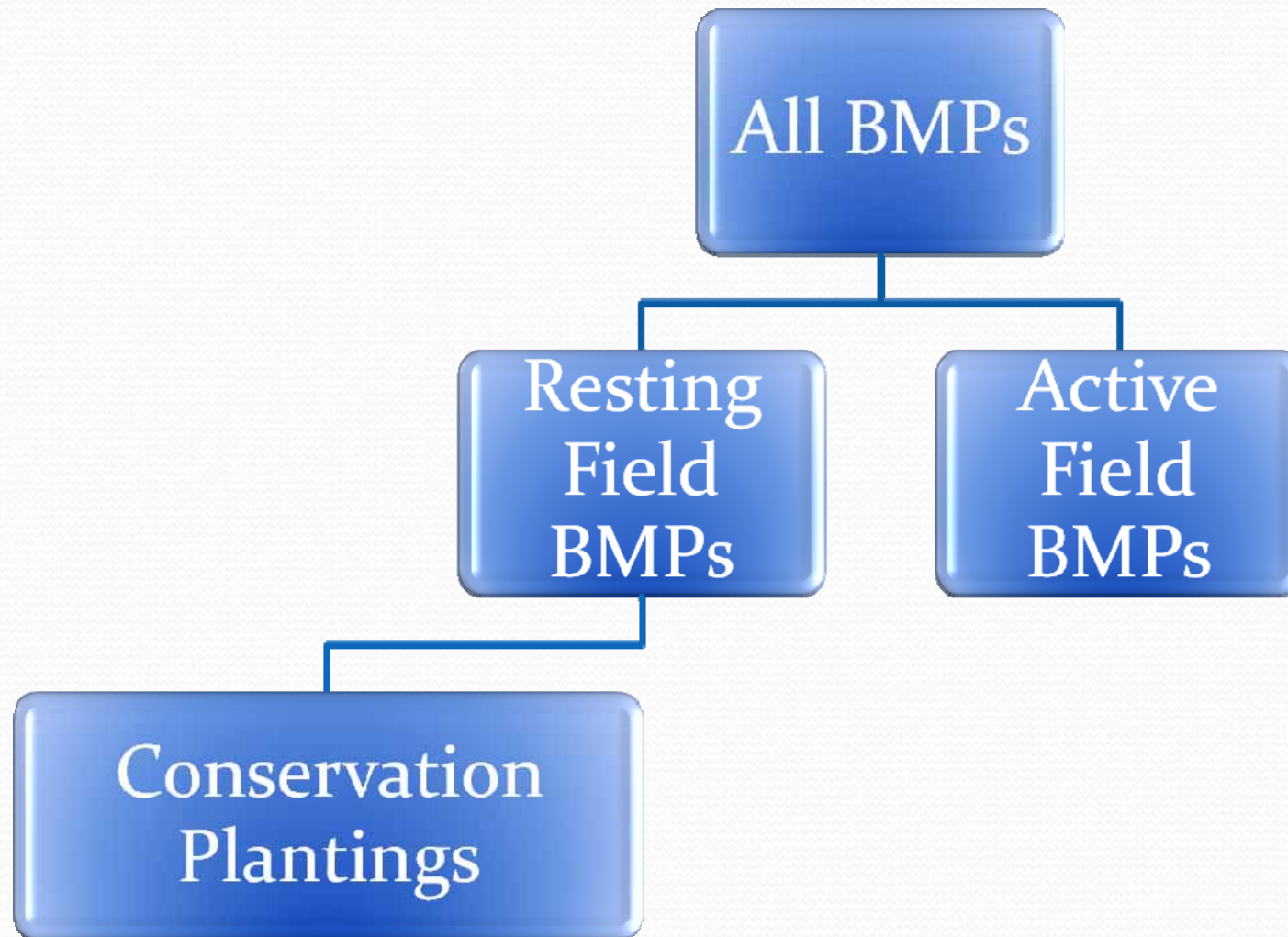
Poster A2

- Developed a method to remotely evaluate vegetative BMP condition
- Worked with BMP experts across the Midwest
- Used aerial images & ArcGIS

Collecting Social Indicators

- Based on SIPES team SI survey
- Modified for BMP maintenance
 - What maintenance activities are performed?
 - Is BMP perceived as effectiveness?
 - Is BMP a source of weeds?
- Added statements for secondary benefits
 - Hunting
 - Other recreational activities
- Includes measures of networking

Modeling Framework



Modeling approach

- Ordinal logit regression
- Dependent variable is BMP condition
 - BMP is no longer present
 - Unacceptable condition
 - Acceptable condition
 - Excellent condition
- Independent variables based on SI survey

Results

Variable	Overall Model	Active Field	Resting Field	Conservation Planting
<u>Perceived Benefits</u>				
Hunting	+*	-**	+**	+**
Other Rec	+*	insig	+**	insig
NPS Effective	+*	+**	insig	insig

* Significant at $\alpha = 0.05$

** Significant at $\alpha = 0.01$

Results

Variable	Overall Model	Active Field	Resting Field	Conservation Planting
<u>Attitudes & Awareness</u>				
Water Quality	insig	+**	Insig	-**
Aware	+*	-**	+**	+**
Env Attitude	+*	-**	+*	+*

Results

Variable	Overall Model	Active Field	Resting Field	Conservation Planting
<u>Networking</u>				
Local Meetings	+**	+**	+*	+*
Local Services	-**	+**	-**	-**
Gov services	+**	insig	+*	insig

Conclusions (1 of 3)

- Resting land BMPs
 - Motivated by recreational activities
 - Awareness & attitudes reflect a concern about human impact of environment
 - More degraded environments seem to encourage BMP maintenance
- Active land BMPs
 - Reducing NPS pollution appears more important than attitudes and awareness
 - More pristine environments seem to encourage BMP maintenance

Conclusions (2 of 3)

- Local networks connect to landowner in a way that agencies and universities cannot
 - Provides information
 - Perhaps provides a social norm oriented towards BMP maintenance

Conclusions (3 of 3)

- Building the technical capacity of organizations may be the best way to facilitate BMP maintenance
 - Local networks are effective at providing services for active land BMPs
 - Local networks need assistance with resting field BMPs

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