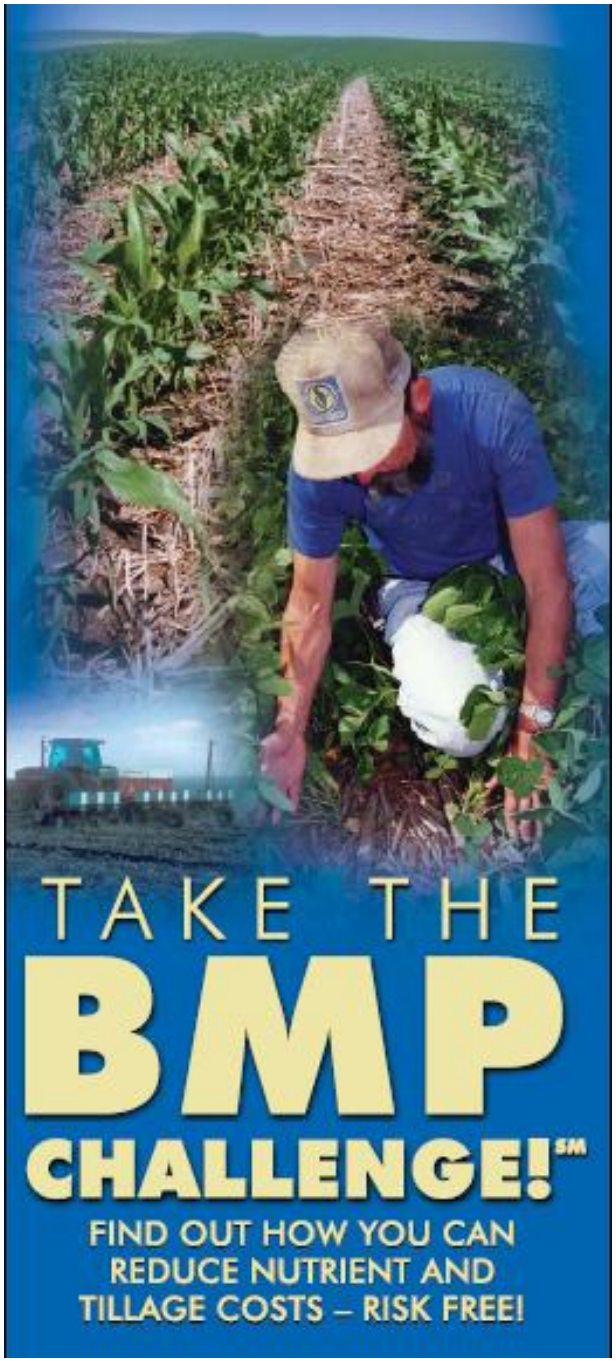


Performance Guarantees for Nitrogen/Residue Management

American Farmland Trust
SAVING THE LAND THAT SUSTAINS US

Agflex

AET
agricultural, environmental & technical consulting

PENNSTATE

USDA NRCS
United States Department of Agriculture

TeamAg
Incorporated

Conservation Innovation Grants

NRCS CEAP STUDY (Mar/11)

The voluntary, incentives-based conservation approach is working.

- Farmers have made good progress in reducing sediment, nutrient, and pesticide losses from farm fields through conservation practice adoption throughout the Bay region.
- Most cropland acres have structural or management practices—or both—in place to control erosion.
- Cropland protected by one or more structural practices = 50%
- Some form of reduced tillage used on 88%.

Opportunities exist to further reduce sediment and nutrient losses from cropland

Progress to date:	Already Reduced	Treat “Hi Need Ac” (most vulnerable w/ least practices = 19%)
Sediment	55%	37% additional
Nitrogen	42% surface 41% sub “	27% additional 20% additional
Phosphorus	41% soil & soluble	25% additional

Bumps in the Road to…..

t

$ to implement BMP?

Knowledge How implement?

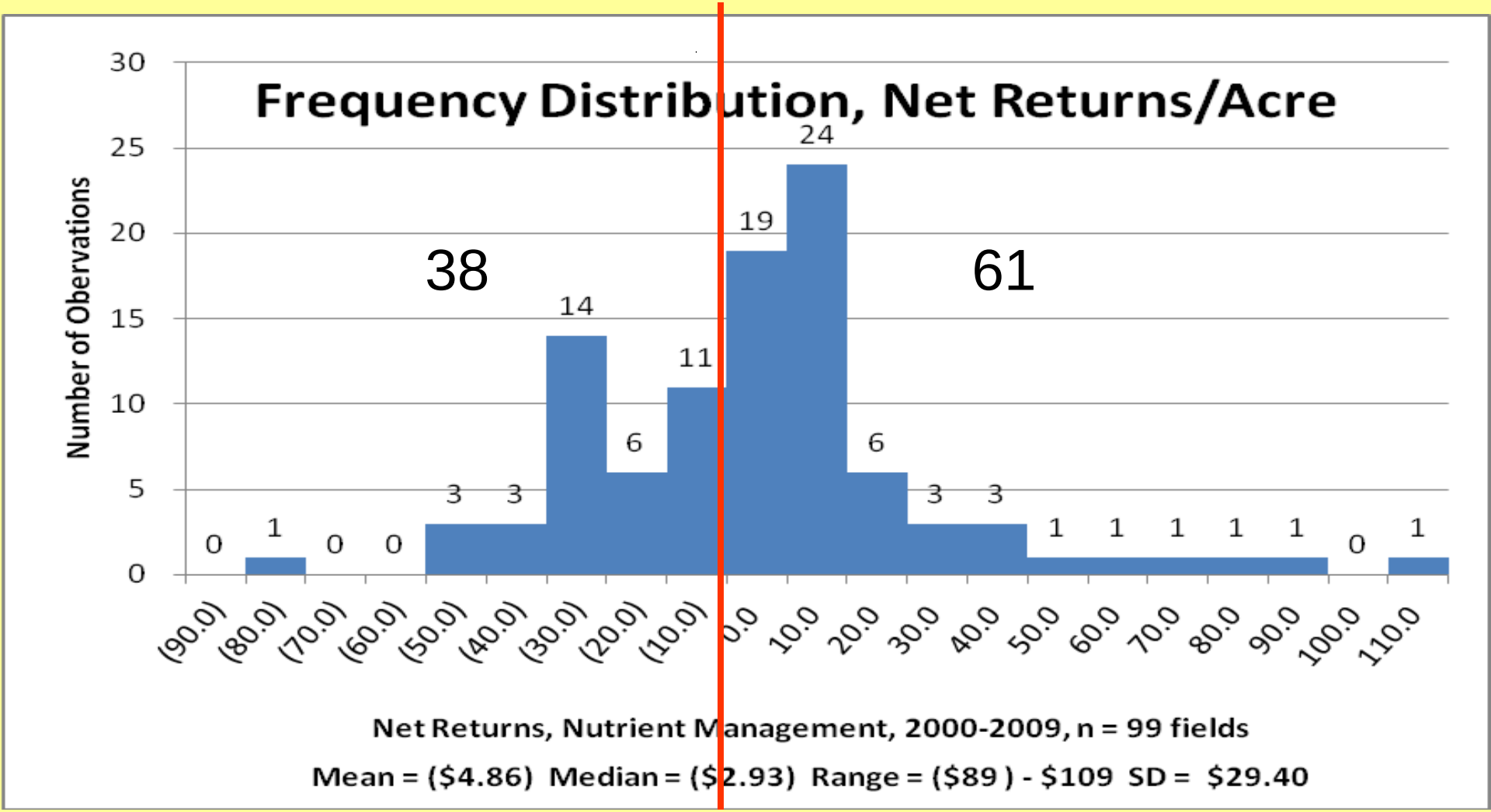
Risk of lost profit?

Cost Share

TA

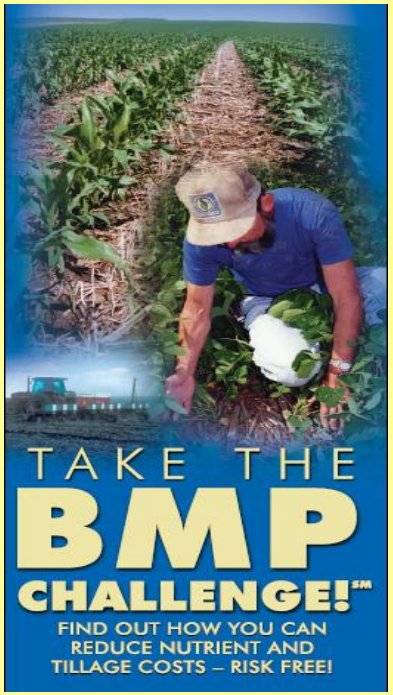
Net Returns Guarantee

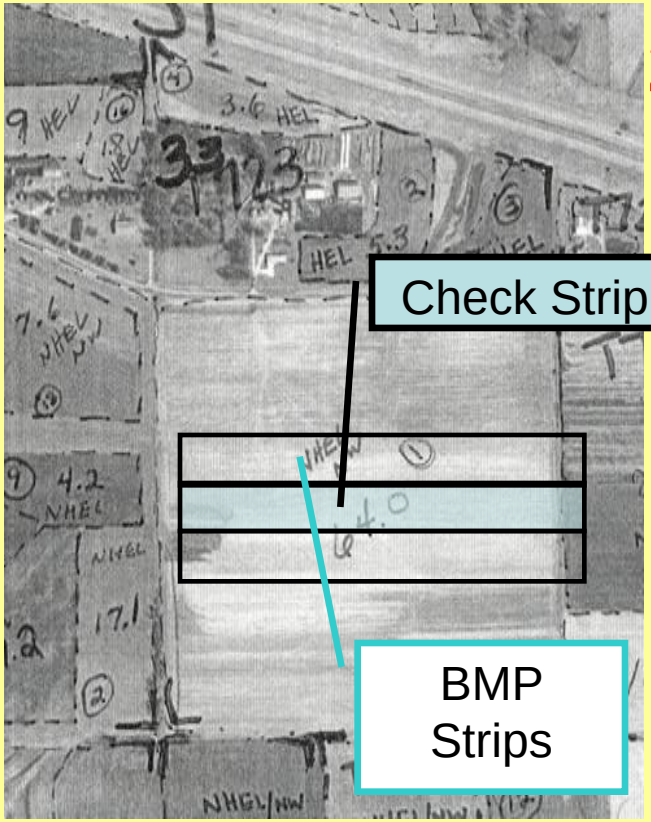
Risk is Real


Frequency Distribution, Net Returns/Acre
Number of Obervations
30
25
20
15
10
5
0
38
61
0
1
0
0
3
3
14
6
11
19
24
6
3
3
1
1
1
1
1
0
1
(90.0)
(80.0)
(70.0)
(60.0)
(50.0)
(40.0)
(30.0)
(20.0)
(10.0)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
100.0
110.0
Net Returns, Nutrient Management, 2000-2009, n = 99 fields
Mean = ($4.86) Median = ($2.93) Range = ($89) - $109 SD = $29.40

What you get

1. **TA from Crop Advisor (CCA, District, Extension)**





2. **Compare crop responsive-ness & <u>your</u> NMP**

3. **Peace of Mind**

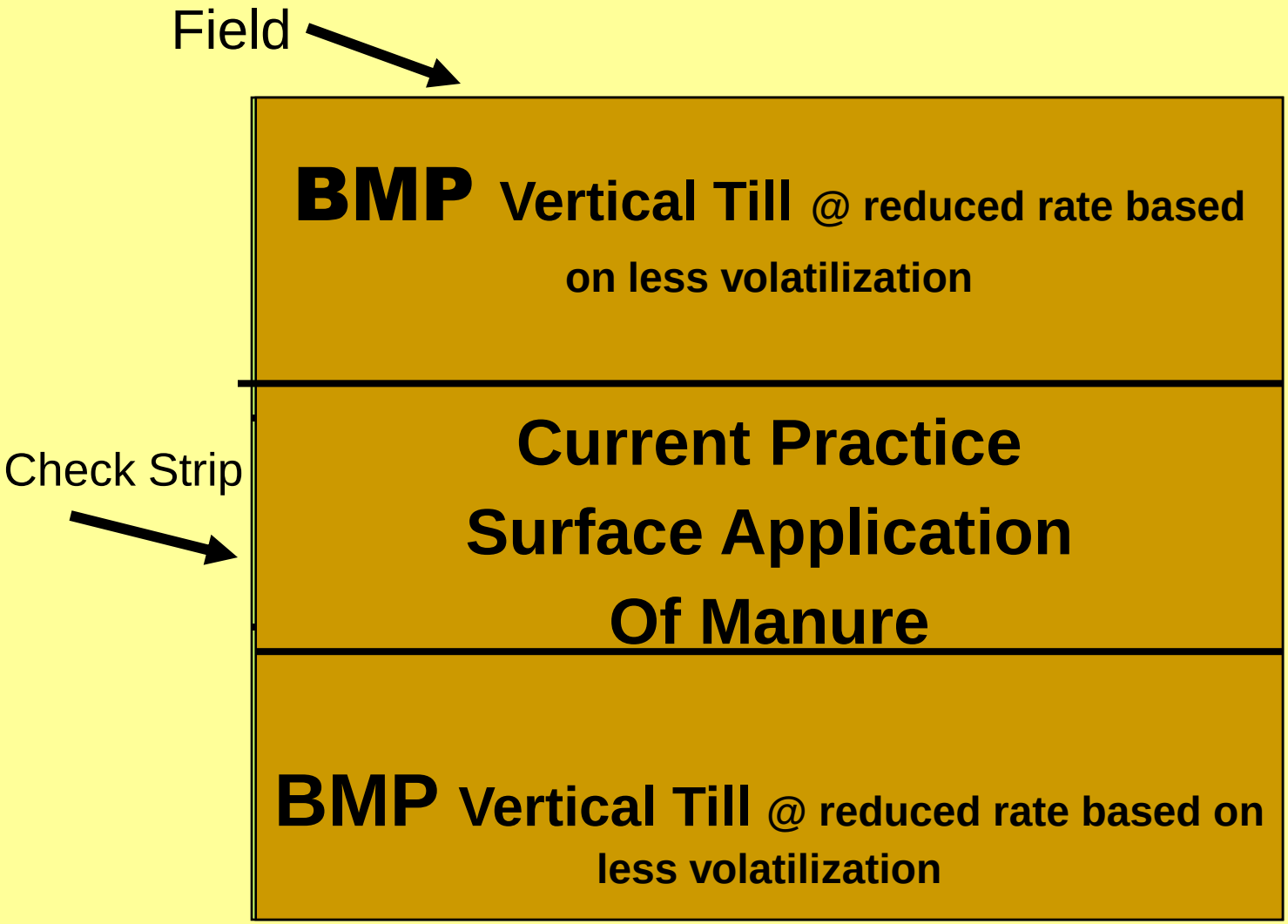
Conservation Adoption

Difference in

= <u>Yield X crop price</u>

- any savings

Compare Practices

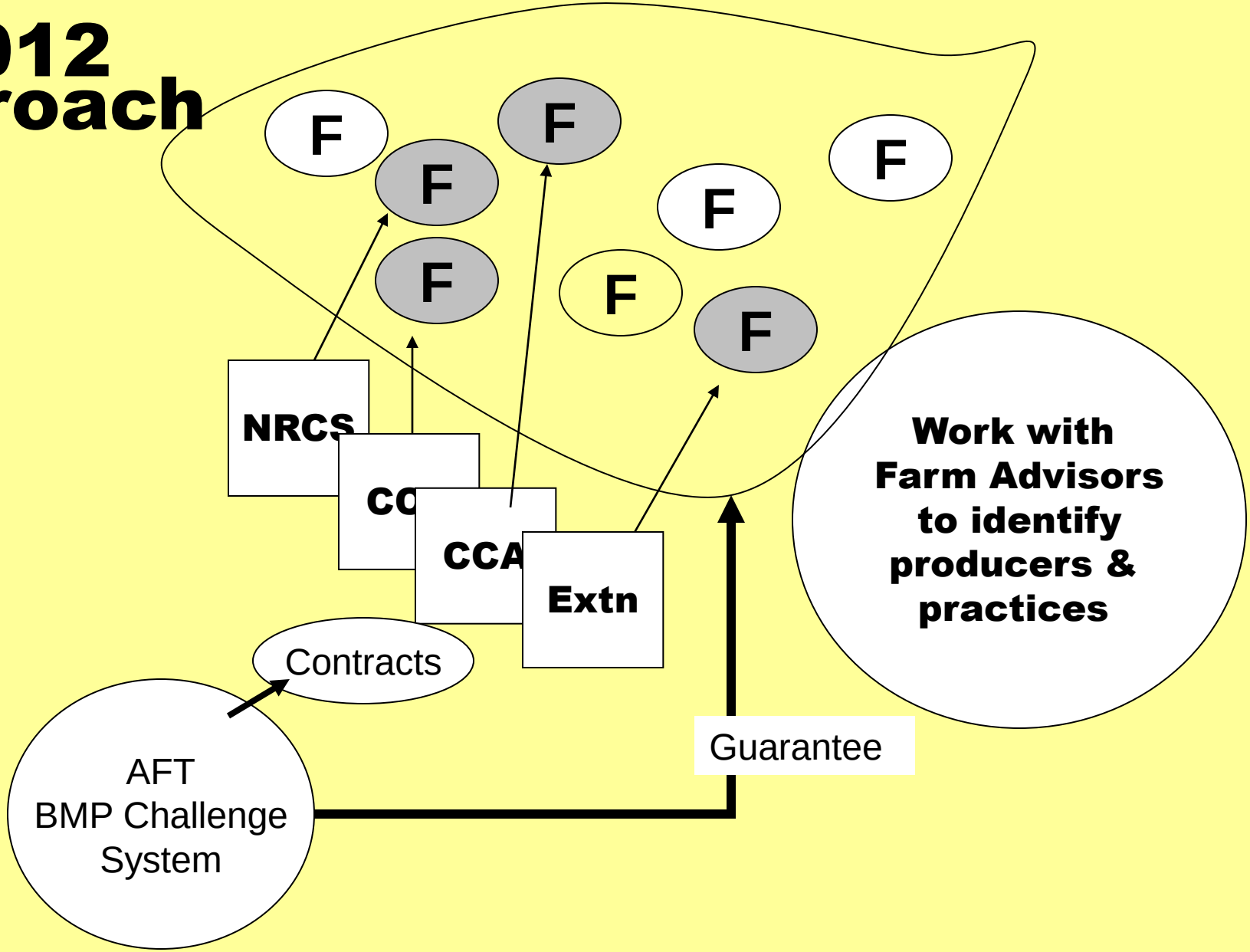


BMP Challenge 2011 Results ($6.01 per bushel grain price)

Grower ID #	Acres	Practice Implemented	Check Strip Yield (bu/acre)	BMP Yield (bu/acre)	Check Strip N Credit (lb/ac)	BMP Strip N Credit (lb/ac)	Total N Reduction (lbs.)	Net Fertilizer Savings (lbs/acre
174	12.5	PSNT vs Flat Rate	115.5	113.0	215.0	155.0	1800.0	42.0
20	16.7	Vert til vs surface applic	169.7	166	270	270	0	0
Total	25.0						1800	

Grower ID #	Check strip value = Yield x price ($/acre)	BMP strip value ($/ac)	Value Difference	Net Return ($/ac)	Pay out Amt
174	$694.0	$679.3	-$14.8	$27.3	$0.0
20	$1,120	$1,145.1	$998	$(28)	$471

2012 Approach



Timing & Tasks

NOW!	• AFT & Advisors discuss prospective participants, practices, agreement details • Advisor enrolls producers sign agreements • Producer and Advisor plan the BMP implementation & fill out Field Info Form • Check strip plots identified and plotted using protocol
April –June	• Planting • Check strip forms completed • Final fertilizer applied and verified
August – October	• Farmer notifies advisor of intended harvest • Producer and advisor present for the harvest and fill out Net Returns Assessment Form
November – January	• Tabulate results • Attend winter meetings

What does it take?

Clean Water

Viable Farms

If real reductions take place

Public (Farm & Non) Perception and Support

If solutions respect farm profitability