

# REDUCED TILLAGE BMP CHALLENGE® 2012 - GROWER AGREEMENT

Thank you for your interest in the BMP CHALLENGE™ program! If you grow corn for grain or silage you may be eligible for a risk-free yield performance guarantee.

## BMP CHALLENGE PARTICIPANT INFORMATION

Grower Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Office Phone: \_\_\_\_\_ Mobile Phone: \_\_\_\_\_

SSN or Tax ID: \_\_\_\_\_ Email: \_\_\_\_\_

*Needed to make net return compensation payment.*

### You agree to:

1. Apply your traditional tillage practice to a Check Strip located by your crop advisor in each field you enroll (**maximum 100 acres total**).
2. Apply reduced tillage practices as recommended by your crop advisor to the balance of the field.
3. Assess yield at harvest with your crop advisor and record all tillage costs.
4. Contribute a third of your net income benefits, up to a maximum of \$6/acre, to the BMP CHALLENGE program if you experience a net income gain. This contribution allows other farmers to participate.
5. Follow the program protocol outlined in the **Instruction Packet**, and complete and submit the following items by the stated due date:
  - Grower Agreement March 30, 2012
  - Field Information June 1, 2012
  - Field map with check strip marked June 1, 2012
  - Yield Assessment Worksheet November 30, 2012

### In return, we will:

Compensate you for any net return loss due to the reduced tillage practice at \$5.68/bu for grain or \$40.25/ton (MN, IA, IL, IN, MI, SD, WI), \$50.00 (DE, PA, VA, MD, VT, NY), \$45.00 (CA, ID) for silage, accounting for any tillage or equipment cost savings. Yield loss will be determined by comparing the check strip yield to the yield(s) immediately adjacent to the check strip.

Field name/number(s) and acres/field: \_\_\_\_\_

### Practices you will compare (see the List of Eligible Practices in the Instruction Packet):

Check Strip (Standard Practice): \_\_\_\_\_

Balance of Field (BMP): \_\_\_\_\_

Grower Signature: \_\_\_\_\_ Date: \_\_\_\_\_

*By signing, you indicate that you have read and accept the terms of this agreement, and that you are EQIP eligible.*

## CERTIFIED CROP ADVISOR INFORMATION

Crop Advisor Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Email: \_\_\_\_\_

Office Phone: \_\_\_\_\_ Mobile Phone: \_\_\_\_\_

**PLEASE RETURN THE COMPLETED GROWER AGREEMENT TO:** BMP CHALLENGE, 4510 Regent St., Madison WI 53705 or fax to 608 232-1440, or scan and send to [rebecca.ressl@bmpchallenge.org](mailto:rebecca.ressl@bmpchallenge.org)

NOTE: The BMP CHALLENGE Grower Agreement is a commercial service agreement provided by Agflex, an Iowa corporation. Agflex is not an insurance company and does not sell insurance or provide insurance advice. More information on Agflex including Agflex's privacy policy is available at [www.agflex.com](http://www.agflex.com) or by request to 608 232-1425. The BMP CHALLENGE is funded in part by the USDA Natural Resources Conservation Service (NRCS). Your name, business name and SSN/EIN will be shared with the NRCS as a condition of this funding.

## REDUCED TILLAGE BMP CHALLENGE Grower Agreement

Questions? Contact Brian Brandt 614 906-4931, Rebecca Ressler 608 232-1425 or visit [www.bmpchallenge.org](http://www.bmpchallenge.org)

**REDUCED TILLAGE BMP CHALLENGE® 2012 – FIELD INFORMATION**  
 If enrolling more than one field, complete a Field Information Form for *each* field.

**Grower Name:** \_\_\_\_\_

**Field Name or Number:** \_\_\_\_\_

**Acres ( $\leq 100$ ):** \_\_\_\_\_

**Field Location: State** \_\_\_\_\_

**County** \_\_\_\_\_

**Township** \_\_\_\_\_

**Practice Implemented\*:** **No Till**

**Strip Till**

**Ridge Till**

**Other** \_\_\_\_\_

\*System must leave at least 30% of surface covered with residue after planting.

**Tillage Plan for 2012**

	Tillage Equipment	Equipment Width (ft)	Tillage Depth (in)	Residue Cover After Planting (%)	Tillage Operations (list all)
<b>Reduced Tillage</b>					
<b>Conventional Tillage</b>					

**Check Strip Location (complete A or B):**

A.  GPS coordinates

Corner 1: \_\_\_\_\_ Corner 2: \_\_\_\_\_

Corner 3: \_\_\_\_\_ Corner 4: \_\_\_\_\_

B.  Distance/direction from landmark

Corner 1: \_\_\_\_\_ Landmark: \_\_\_\_\_

Corner 2: \_\_\_\_\_ Landmark: \_\_\_\_\_

Corner 3: \_\_\_\_\_ Landmark: \_\_\_\_\_

Corner 4: \_\_\_\_\_ Landmark: \_\_\_\_\_

**Crop Advisor Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

*By signing, you indicate that you have provided the grower with the Tillage Plan and have located the check strip in this field following the protocol.*

**PLEASE RETURN THE COMPLETED FIELD INFORMATION FORM TO:**

BMP CHALLENGE, 4510 Regent St., Madison WI 53705 or fax to 608 232-1440, or scan and send to [rebecca.ressl@bmpchallenge.org](mailto:rebecca.ressl@bmpchallenge.org)

# REDUCED TILLAGE BMP CHALLENGE<sup>®</sup> 2012 – YIELD ASSESSMENT WORKSHEET

If enrolling more than one field, complete a Yield Assessment Worksheet for *each* field.

Grower Name: \_\_\_\_\_

Field Name: \_\_\_\_\_

Thank you for participating in the BMP CHALLENGE<sup>™</sup> program! Use this Worksheet to record and report your yields and tillage costs. Follow the procedures outlined in the Instruction Packet to ensure the most accurate results. Based on the information submitted in this Worksheet, we will complete a net returns calculation and inform you of the results. Your results are confidential and will not be shared with others except in summary form and will not include any information identifying you or your fields. Please retain a copy of the entire Worksheet for your records.

If a performance guaranty payment is due to you, select from the following:

Mail my payment to the following address:

\_\_\_\_\_  
\_\_\_\_\_

No payment is necessary. Contribute my payment to the BMP CHALLENGE program.

Grower Signature: \_\_\_\_\_

Date: \_\_\_\_\_

*By signing, you certify that this completed Worksheet, Parts 1-3, is correct to the best of your knowledge.*

Crop Advisor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

*By signing, you certify that you reviewed and explained all entries with the grower, and that this completed Worksheet, Parts 1-3, is correct to the best of your knowledge.*

**PLEASE RETURN COMPLETED YIELD ASSESSMENT WORKSHEET BY NOVEMBER 30, 2012 TO:**

BMP CHALLENGE, 4510 Regent St., Madison WI 53705 or fax to 608 232-1440, or scan and send to [rebecca.ressl@bmpchallenge.org](mailto:rebecca.ressl@bmpchallenge.org)

NOTE: The BMP CHALLENGE is not designed to cover reduction in net economic returns

- Due to any failure to provide adequate care for the crop;
- Due to damage to the crop that is caused intentionally;
- Due to non-compliance with the BMP CHALLENGE Grower Agreement;
- Due to any other causes, even if the damage may have occurred in conjunction with reduced tillage;
- Due to damage caused, directly or indirectly, by environmental pollutants including improper usage or application of agricultural chemicals, whether accidental or intended; or
- That is covered by any contract of insurance or recoverable under a manufacturer or seller warranty.

The BMP CHALLENGE is administered by Agflex, a commercial service company. Agflex is not an insurance company, nor an insurance agent. Agflex does not offer nor sell insurance or provide insurance advice. Agflex and BMP CHALLENGE services are not covered under any state insurance guaranty fund. The Agflex BMP CHALLENGE service is only part of a grower's comprehensive crop management program which may also include the purchase of state or federal crop insurance from a licensed and authorized insurance agent. Applicable Law: This is a commercial contract and shall be deemed written in, and governed under, the laws of the state in which the acreage is located. Dispute Settlement: Unless prohibited by law in the state in which this service agreement is issued, all related disputes will be settled by arbitration under rules of the American Arbitration Association.

# REDUCED TILLAGE BMP CHALLENGE® 2012 – YIELD ASSESSMENT WORKSHEET

If enrolling more than one field, complete a Yield Assessment Worksheet for *each* field.

## Part 1. Initial Field Assessment

### A. Lodging Assessment

If lodging is evident, is the damage distributed equally across the field?

Yes  No

If No, check box(es) for all area(s) where the lodging is concentrated.

Check Strip  BMP Strips  Remainder of the field

If possible, avoid rows with disproportionate lodging when completing the yield assessment.

### B. Weed Pressure Assessment

If heavy weed pressure is evident, is the weed pressure distributed equally across the field?

Yes  No

If No, check the box(es) for the area(s) where the heavy weed pressure is concentrated.

Check strip  BMP Strips  Remainder of the field

If possible, avoid rows with disproportionate weed pressure when completing the yield assessment.

### C. Plant Population Assessment

If the Check and BMP Strips appear to have different plant populations, perform the following assessment.

1. Measure 17.5 feet along a planted row selected at random within the Check Strip.
2. Count and record the number of plants present along the measured row.
3. Repeat the process for a total of five 17.5 feet row segments within the Check Strip, and five 17.5 feet row segments within the BMP Strips. Record your results below and complete the calculations.
4. If the plant populations are different, use the BMP Strip with a plant population most similar to the Check Strip for your yield assessment if possible.

	# of corn plants per 17.5 feet row segment					Total # of corn plants	Plant Population (Total x 1000)	
	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5		<u>Strip 1</u>	<u>Strip 2</u>
<b>Check Strip</b>								
<b>BMP Strip One</b>								
<b>BMP Strip Two</b>								
<b>Difference (Check Strip Plant Population minus BMP Strip Plant Population)</b>							<u>Strip 1</u>	<u>Strip 2</u>
<b>Percent Difference (Difference divided by BMP Strip Plant Population)</b>							<u>Strip 1</u>	<u>Strip 2</u>

### D. Nitrogen Placement Assessment

If plants are noticeably stunted or shorter, and possibly affected by chlorosis (yellow leaves) or firing (dead or dying leaves), are the affected plants distributed evenly across the field?

Yes  No

If No, check the box(es) for the area(s) where the affected plants are located.

Check Strip  BMP Strips  Remainder of the field

If affected plants are concentrated in the BMP Strips but not apparent in the remainder of the field, complete your yield assessment in rows immediately adjacent to the BMP Strips if possible.

# REDUCED TILLAGE BMP CHALLENGE® 2012 – YIELD ASSESSMENT WORKSHEET

If enrolling more than one field, complete a Yield Assessment Worksheet for *each* field.

## Part 2. Yield Assessment

A. Harvest Date: \_\_\_\_\_

B. Assessment Method (circle one)

Yield Monitor      Weigh Wagon      Portable Scales      Stationary Scales

C. Harvest Data

Round all numbers to two decimal points.

	Check Strip	BMP Strip
1. Width of harvested strips	feet	feet
2. Length of harvested strips	feet	feet
3. Gross weight of grain/silage harvested	lbs/tons	lbs/tons
4. Percent moisture	%	%

## Part 3. Tillage Cost Calculation

Use the Tillage Cost Table in the Instruction Packet to estimate the cost of each tillage operation, or list your cost estimate if from another source.

CHECK STRIP TILLAGE-RELATED OPERATIONS		
List ALL Tillage Operations (e.g. chisel plow pass, tandem disk pass, field cultivator pass, planting pass)	Cost Source	Cost/Acre
		\$
		\$
		\$
		\$
		\$
BMP ACRES TILLAGE-RELATED OPERATIONS		
List ALL Tillage Operations (e.g. strip till setup pass, planting pass)	Cost Source	Cost/Acre
		\$
		\$
		\$
		\$
		\$

# REDUCED TILLAGE BMP CHALLENGE® 2012 – INSTRUCTION PACKET

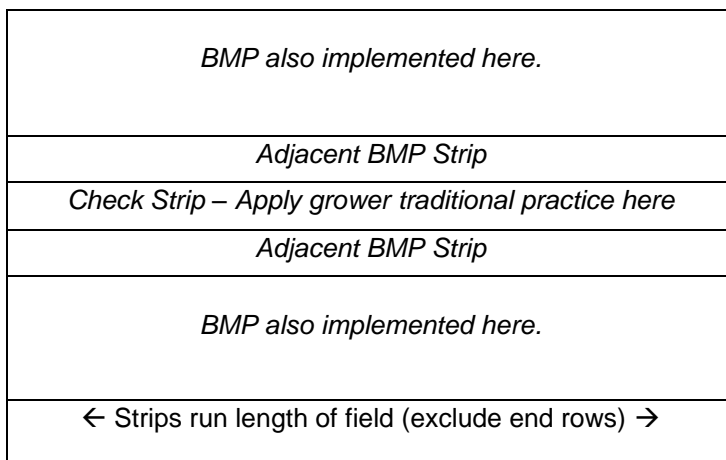
This instruction packet details the protocol requirements for completing the BMP CHALLENGE program. If you have any questions, please contact your crop consultant or Rebecca Ressler, BMP CHALLENGE Project Assistant at (608) 232-1425 or [rebecca.ressl@bmpchallenge.org](mailto:rebecca.ressl@bmpchallenge.org).

## A. List of Eligible Practices (for the Grower Agreement)

- **Reduced Tillage:** Includes any variation that retains at least 30 percent residue, including no-till, strip-till or ridge-till
- **Nutrient Management Basic:** Plan implementation (manage the amount, source, placement, form and timing of the application of plant nutrients and soil amendments); includes full crediting of available manure N
- **Pre Side-dress Nitrate Testing (PSNT):** Base final N application on an in-season soil test; second application is greater than the first
- **Corn Stalk Nitrate Test (CSNT):** Base N application on a post-season stalk test
- **Minimum Disturbance Incorporation:** Manure or commercial fertilizer (e.g., Turbo Till, Aerway); lower N rate on BMP Portion
- **Manure Injection:** (e.g., sub surfer, knife injector); lower N rate on BMP portion
- **Nitrogen Inhibitor/Enhanced N Products:** Slow release commercial with manure or no manure
- **Sensor-based Variable Rate Application:** (e.g., Crop Circle, Green Seeker)
- **Phosphorus Reduction:** To BMP level; testing needed for “pop-up” P application on corn
- **Others?** Additional input is welcome

## B. Field Set Up (for the Crop Advisor)

1. Confirm with the grower what field(s) will be enrolled.
2. Follow your state’s Extension-recommended procedures for selecting a reduced tillage system for the participating grower. Although recommended procedures may vary by state, soil type and other conditions, the reduced tillage system must result in at least 30% of the production area covered with residue from the previous crop after planting.
3. For each enrolled field, determine the approximate location for one Check Strip and adjacent BMP Strips on a map. The Check Strip must be 40 to 80 feet wide and run the length of the field, excluding any end rows. The Check Strip width should allow for immediately adjacent BMP Strips on either side of the Check Strip equal in length and width to the Check Strip, and should allow the grower to harvest at least three passes. For example, if the grower has an eight-head harvester and plants in 30-inch rows, the Check Strip must be at least 60 feet wide. This will allow three passes (8 rows each) of the Check Strip to be harvested for the yield comparison.



*At harvest, yield on the Check Strip will be compared to the yield on one or both of the immediately adjacent BMP Strips.*

← Check Strip = 40' to 80' wide

← BMP Strip= same size as Check Strip with an equal number of rows as the Check Strip

## REDUCED TILLAGE BMP CHALLENGE® 2012 – INSTRUCTION PACKET

The Check Strip and adjacent BMP Strips must be located in a uniform portion of the field. If possible, avoid areas that have variable soil types, slopes, irregular boundaries, variable fertility and/or tile lines running parallel to the row.

If it is not possible to avoid non-uniform areas, take the following steps when possible:

- (i) If a slope, rocky area or any other feature breaks up the field uniformity, place the strips so they run across the non-uniformity affecting the Check Strip and adjacent BMP Strips equally.
  - (ii) If the field has a small outcropping or a depression, place the strips on one or the other side of these features.
  - (iii) If the field has two or more soil types, place the strips so they cross the different soil types at right angles, affecting the Check Strip and adjacent BMP Strips equally.
  - (iv) If the enrolled acres are in contour strips that are not wide enough to contain both a Check Strip and two adjacent BMP Strips, select one strip that best represents the productive capabilities of the covered acres and that is appropriate for use as a Check Strip. Split the contour strip in half and have the grower apply the BMP rate of fertilizer on one half of the contour Strip. The other half will serve as the Check Strip. Alternatively, the crop advisor may place the Check Strip in one contour strip, and the BMP Strips in immediately adjacent contour strips, provided the three contour strips are reasonably uniform and representative of the balance of the field.
4. Travel to the mapped out location of the strips and adjust if needed to make the strips uniform. Identify the actual location of the Check Strip with Global Positioning System (GPS) coordinates and/or a measurement from an identifiable landmark (e.g. field corner, boundary marker). Document location on the Field Information form and submit a copy of an aerial photo with the field marked and the check strip drawn in.
  5. Mark the strip locations for the grower with flags or other appropriate markers.
  6. Assist the farmer in locating, selecting and setting up the appropriate tillage equipment. Be present when the field is tilled for both reduced and conventional tillage areas. Verify that the equipment is working properly and at the depth and width specified on the Field Information form.
  7. Revisit the farmer and assess production on the field at least two additional times during the growing season:
    - (i) Within two weeks of emergence – assess stand and check for any other issues.
    - (ii) At V5-V6 stage – assess weed management and nutrition, and check for any other issues.

Based on your assessments, make any recommendations necessary to respond to tillage-related conditions in the participating field. Note the date of your visits, any pertinent observations and resulting recommendations. You will need to include these notes when you submit your Yield Assessment Worksheet after harvest.

# REDUCED TILLAGE BMP CHALLENGE<sup>®</sup> 2012 – INSTRUCTION PACKET

## **C. Yield Assessment Preparation (For the BMP CHALLENGE Participant)**

1. Wait until the crop has reached physiological maturity (black layer), but no later than October 15.
2. Contact the crop advisor that helped you submit your BMP CHALLENGE Grower Agreement, prepare your tillage plan and set up your Check Strip. Make arrangements to have this person present with you when you harvest the BMP CHALLENGE field(s) and perform the yield assessment.
3. Arrange to have the following available to make your yield comparison:
  - a. a measuring wheel, and
  - b. a yield monitor, weigh wagon or portable or stationary scales.
4. Complete the Initial Field Assessment.
5. Harvest at least three passes down the Check Strip and three passes down one or both of the adjacent BMP Strips. If the Check Strip is not wide enough to accommodate three equipment widths, you may harvest only two equipment widths. Measure the area harvested and record the yield weight and percent moisture.

IMPORTANT: Even though you implemented the BMP across the entire field except for on the Check Strip, you will perform the yield comparison only on the adjacent BMP Strips to reduce the influence of within-field variability on your results.

6. Record the rates and costs for all tillage operations used on the enrolled field.



# REDUCED TILLAGE BMP CHALLENGE® 2012 – INSTRUCTION PACKET

## D. Tillage Cost Table (for the BMP CHALLENGE participant)

1. List all tillage operations for both the check-strip and the BMP acres.
2. List the cost source (local custom rates, equipment rental cost, Purdue Win Max, etc.).
3. Record the cost/acre. The following custom rate tables are intended to supply you and the crop adviser with an estimate that you may use if it represents your field operations and region.

### Iowa Farm Custom Rate

<u>Tillage</u>	<u>Cost</u>
Chisel	\$ 13.70
Chopping cornstalks	\$ 9.50
Field cultivator	\$ 10.10
Moldboard plow	\$ 13.60
No-till planter	\$ 15.30
Planter with attachments	\$ 14.60
Planter without attachments	\$ 13.20
Row cultivator	\$ 8.60
Tandem disk	\$ 10.20
V-ripper (deep tillage)	\$ 16.30

### Ohio Farm Custom Rate

<u>Tillage</u>	<u>Cost</u>
Chisel plow	\$ 14.05
Conventional tillage for planting	\$14.80-16.90
Disk chisel	\$ 14.80
Disk-tandem	\$ 12.60
Disk-offset	\$ 14.75
Field cultivator	\$ 11.10
Land leveling	\$ 11.70
Moldboard plot	\$ 17.30
No-till for planting	\$14.85-\$18.10
Soil finishing	\$ 11.40
Stalk chopper	\$ 10.10
Strip tillage	\$ 17.30
V-ripping	\$ 18.30

### Penn State University

<u>Tillage</u>	<u>Cost</u>
Chisel	\$ 10.60
Conventional planting	\$ 11.50
Disk	\$ 9.20
Field cultivating	\$ 8.20
Moldboard plowing	\$ 11.40
No-till planting	\$ 13.60
Row cultivating	\$ 8.20
Springtooth harrowing	\$ 7.40

### Purdue Win Max

<u>Tillage</u>	<u>Cost</u>
Chisel	\$ 13.21
Cultivate (field)	\$ 10.03
Cultivate (ridge-till)	\$ 10.01
Cultivate (rows)	\$ 6.95
Disk (offset)	\$ 10.54
Disk harrow (tandem)	\$ 9.45
Knife dry fertilizer (fall or spring)	\$ 5.97
Knife liquid manure (fall or spring)	\$ 8.16
Plant corn (conventional)	\$ 14.69
Plant corn (no-till)	\$ 14.39
Plant corn (ridge-till)	\$ 14.39
Plant corn (strip-till)	\$ 14.39
Plow	\$ 10.79
Soil aerator (Aerway)	\$ 10.51
Strip-till (pre)	\$ 6.28
Strip-till with deep-placed fertilizer	\$ 10.21
Subsoiler	\$ 13.23
Trans-till	\$ 7.71
Undercutter	\$ 5.06
V-Ripper	\$ 10.47

### University of Minnesota Extension

<u>Tillage</u>	<u>Cost</u>
Minimum till planter	\$ 9.08
One pass disk/chisel	\$ 8.93
One pass disk/finish	\$ 6.70
Plant	\$ 7.01