

CORN NUTRIENT BMP CHALLENGE®

Net Returns Assessment Worksheet - California

Thank you for participating in the BMP CHALLENGE! Use this form to record and report your yields and net returns. Please follow the procedures outlined in this worksheet to ensure the most accurate results.

GROWER INFORMATION

Your (Grower) Name: _____

Company Name (if any): _____

Address: _____

City: _____ State: _____ ZIP: _____

Office Phone: _____ Mobile Phone: _____

Fax: _____ SSN or Tax ID: _____

Email: _____

YOUR ADVISOR WHO WILL OBSERVE THE HARVEST:

Crop Advisor Name: _____

Company Name: _____

Address: _____

City: _____ State: _____ ZIP: _____

Office Phone: _____ Mobile Phone: _____

Certification (circle if certified): NAICC CCA Certification Number: _____

Email: _____

Getting Started

1. Wait until the crop has reached physiological maturity (black layer), but no later than October 15.
2. Contact the crop advisor or other ag professional who helped prepare your nutrient management plan, set up your check strip and submit your initial BMP CHALLENGE Service Agreement. Make arrangements to have this person present with you when you harvest the BMP CHALLENGE field(s) and perform the yield comparison.

3. Arrange to have:
 - a. a measuring wheel and
 - b. a yield monitor, weigh wagon or portable or stationary scales available to make the yield comparison.
4. Complete and submit this entire worksheet to the BMP CHALLENGE regardless of your 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 submit your results on or before October 31, 2009 to:

Ladi Asgill
Sustainable Conservation
201 Needham Street.
Modesto, CA 95354
Fax (209) 576-7975

As you assess your field(s), please remember: 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 service agreement;
- Due to any other causes, even if the damage may have occurred in conjunction with insufficient nitrogen or phosphorus;
- 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.

Corn Nutrient BMP CHALLENGE® Net Returns Assessment Worksheet (continued)
(Complete this form for each field enrolled.)

Grower Name: _____

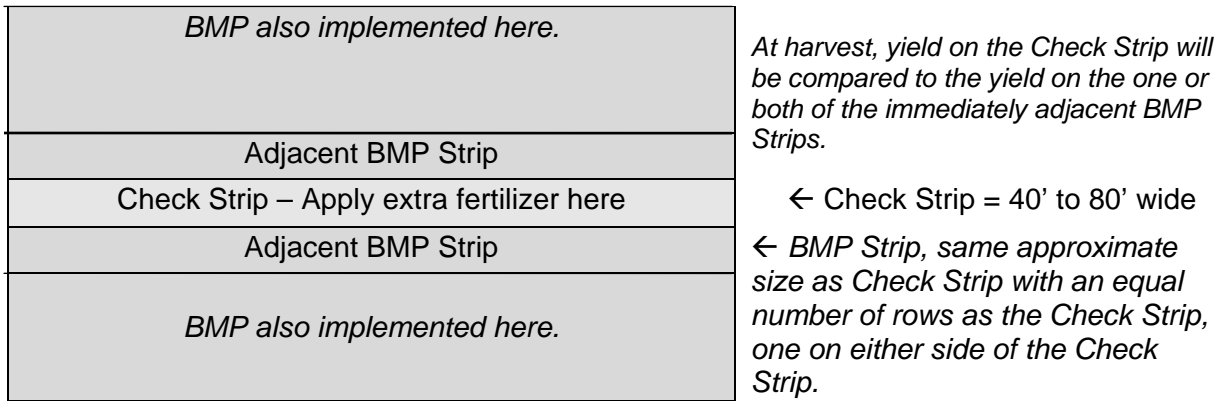
Acres: _____

Field Name: _____

Part 1. Initial Field Assessment

Your Check Strip should be between 40 and 80 feet in width and run the length of the planting row, excluding end rows. Your BMP Strips are those strips immediately adjacent to the check strip, each with the same number of rows as the check strip.

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



<- Strips run length of field (exclude end rows) ->

Please check the field for the following visual indicators of confounding factors and follow the suggestions provided for each.

A. Lodging Assessment - If lodging and broken stalks are evident, is the damage distributed equally across the Check Strip and BMP Strips?
 Yes No

If no, check the box(es) for the area(s) where the lodging or broken stalks are located*.
 Check Strip BMP Strips Remainder of the management unit

If possible, avoid rows that have disproportionate lodging and broken stalks when completing the yield assessment.

B. Weed Pressure Assessment

- Is there heavy weed pressure in the field? Yes No
- If yes, 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 that have disproportionate weed pressure when completing the yield assessment.

C. Plant Population Assessment - Visually assess plant population in the field, and in particular, in the Check and BMP Strips. If the Check Strip and BMP Strips appear to have different plant populations, perform the following assessment. If the Strips appear to have the same plant populations, move to D. Nitrogen Placement 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 comparison if possible.

	Number of corn plants per 17.5 foot row segment					Total	Plant Population (Total x 1000)	
	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5			
Check Strip								
BMP Strip One								
BMP Strip Two								
Difference (check strip population minus BMP Strip population)							<u>Strip 1</u>	<u>Strip 2</u>
Percent Difference (difference divided by BMP Strip plant population)							<u>Strip 1</u>	<u>Strip 2</u>

D. Nitrogen placement assessment

1. Are there areas in the field where plants are noticeably stunted or shorter, and possibly affected by chlorosis (yellow leaves) or firing (dead or dying leaves) during the growing season? Yes No
2. If yes, are the affected plants distributed equally 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, consider completing the yield comparison in rows immediately adjacent to the BMP Strips.

Corn Nutrient BMP CHALLENGE® Net Returns Assessment Worksheet (continued)

(Complete this form for each field enrolled.)

Grower Name: _____

Acres: _____

Field Name: _____

Part 2. Yield Assessment (round all numbers except Moisture Factor to tenths)

Step 1: Indicate your assessment method (circle one):

Yield Monitor Weigh Wagon Portable Scales Stationary Scales

Step 2: Harvest at least three passes down the Check Strip and three passes down one or both of the BMP Strips. Measure each area harvested and make the entries below. If the Check Strip is not wide enough to accommodate three equipment widths, you may harvest only two equipment widths.

	Check Strip	BMP Strip
1. Width of harvested strips	feet	feet
2. Length of harvested strips	feet	feet
3. Total area (item 1, width, multiplied by item 2, length)	sq. feet	sq. feet
4. Total acres (item 3, total area, divided by 43,560)	acres	acres
5. Gross weight of grain harvested	lbs.	lbs.
6. Percent moisture %, if in excess of 15% (15% to 40%)	%	%
7. Moisture Factor (if moisture is above 15%, from attached Corn Moisture Adjustment Table)		
8. Adjusted grain production (divide item 5, grain gross weight, by 56 and multiply the result by item 7, moisture factor)	bu.	bu.
9. Per acre yield (bushels, divide item 8, adjusted grain production, by item 4, total acres)	bu./acre	bu./acre

Corn Moisture Adjustment Factor Table

JULY 1998 - FCIC-25080

Whole Moisture Percent	Tenths of Percent - Moisture									
	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
15	1.0000	0.9988	0.9976	0.9964	0.9952	0.9940	0.9928	0.9916	0.9904	0.9892
16	0.9880	0.9868	0.9856	0.9844	0.9832	0.9820	0.9808	0.9796	0.9784	0.9772
17	0.9760	0.9748	0.9736	0.9724	0.9712	0.9700	0.9688	0.9676	0.9664	0.9652
18	0.9640	0.9628	0.9616	0.9604	0.9592	0.9580	0.9568	0.9556	0.9544	0.9532
19	0.9520	0.9508	0.9496	0.9484	0.9472	0.9460	0.9448	0.9436	0.9424	0.9412
20	0.9400	0.9388	0.9376	0.9364	0.9352	0.9340	0.9328	0.9316	0.9304	0.9292
21	0.9280	0.9268	0.9256	0.9244	0.9232	0.9220	0.9208	0.9196	0.9184	0.9172
22	0.9160	0.9148	0.9136	0.9124	0.9112	0.9100	0.9088	0.9076	0.9064	0.9052
23	0.9040	0.9028	0.9016	0.9004	0.8992	0.8980	0.8968	0.8956	0.8944	0.8932
24	0.8920	0.8908	0.8896	0.8884	0.8872	0.8860	0.8848	0.8836	0.8824	0.8812
25	0.8800	0.8788	0.8776	0.8764	0.8752	0.8740	0.8728	0.8716	0.8704	0.8692
26	0.8680	0.8668	0.8656	0.8644	0.8632	0.8620	0.8608	0.8596	0.8584	0.8572
27	0.8560	0.8548	0.8536	0.8524	0.8512	0.8500	0.8488	0.8476	0.8464	0.8452
28	0.8440	0.8428	0.8416	0.8404	0.8392	0.8380	0.8368	0.8356	0.8344	0.8332
29	0.8320	0.8308	0.8296	0.8284	0.8272	0.8260	0.8248	0.8236	0.8224	0.8212
30	0.8200	0.8180	0.8160	0.8140	0.8120	0.8100	0.8080	0.8060	0.8040	0.8020
31	0.8000	0.7980	0.7960	0.7940	0.7920	0.7900	0.7880	0.7860	0.7840	0.7820
32	0.7800	0.7780	0.7760	0.7740	0.7720	0.7700	0.7680	0.7660	0.7640	0.7620
33	0.7600	0.7580	0.7560	0.7540	0.7520	0.7500	0.7480	0.7460	0.7440	0.7420
34	0.7400	0.7380	0.7360	0.7340	0.7320	0.7300	0.7280	0.7260	0.7240	0.7220
35	0.7200	0.7180	0.7160	0.7140	0.7120	0.7100	0.7080	0.7060	0.7040	0.7020
36	0.7000	0.6980	0.6960	0.6940	0.6920	0.6900	0.6880	0.6860	0.6840	0.6820
37	0.6800	0.6780	0.6760	0.6740	0.6720	0.6700	0.6680	0.6660	0.6640	0.6620
38	0.6600	0.6580	0.6560	0.6540	0.6520	0.6500	0.6480	0.6460	0.6440	0.6420
39	0.6400	0.6380	0.6360	0.6340	0.6320	0.6300	0.6280	0.6260	0.6240	0.6220
40	0.6200	0.6180	0.6160	0.6140	0.6120	0.6100	0.6080	0.6060	0.6040	0.6020

Corn Nutrient BMP CHALLENGE[®] Net Returns Assessment Worksheet (continued)

(Complete this form for each field enrolled.)

Grower Name: _____

Acres: _____

Field Name: _____

Part 3. Fertilizer Cost Calculation. Obtain exact fertilizer costs from farmer receipts for each type of fertilizer applied to the field. Please retain your receipts for verification on request.

FERTILIZER APPLIED TO CHECK STRIP				
List all types of commercial fertilizer (e.g., 10-20-10, urea, potash, phosphate) applied to Check Strip	Unit (pounds, gallons, etc.)	Cost per unit	Number of units applied per acre	Cost per unit x Number of units per acre = Cost per acre
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
Total fertilizer cost per acre, Check Strip				
FERTILIZER APPLIED TO BMP ACRES				
List all types of commercial fertilizer (e.g., 10-20-10, urea, potash, phosphate) applied to BMP acres	Unit (pounds, gallons, etc.)	Cost per unit	Number of units applied per acre	Cost per unit x Number of units per acre = Cost per acre
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
Total fertilizer cost per acre, BMP acres				

Corn Nutrient BMP CHALLENGE® Net Returns Assessment Worksheet (continued)
(Complete this form for each field enrolled.)

Grower Name: _____

Field Name: _____

Acres: _____

Part 4. Net Returns Calculation

Fertilizer Savings Calculation	
1. Fertilizer cost per acre, Check Strip (from Part 3. Fertilizer Costs)	\$ _____ per acre
2. Fertilizer cost per acre, BMP acres (from Part 3. Fertilizer Costs)	\$ _____ per acre
3. Net fertilizer savings (item 1 minus item 2)	\$ _____ per acre
Net Economic Return Calculation	
4. BMP Strip yield per acre (from Part 2. Yield Assessment)	_____ bu. per acre
5. Check Strip yield per acre (from Part 2. Yield Assessment)	_____ bu. per acre
6. Value of BMP Strip yield (Line 4 times \$4.00/bu)	\$ _____ per acre
7. Value of Check Strip yield (Line 5 times \$4.00/bu)	\$ _____ per acre
8. Value differential (Line 6 minus item 7)	\$ _____ per acre
9. Net economic return (Line 3 plus item 8)	\$ _____ per acre
If Line 9 is greater than zero, no performance guarantee payment is needed. Go to farmer contribution.	
Performance Guaranty Payment Calculation (Use only if Line 9 is less than zero)	
10. Performance guaranty payment (Enter the absolute value of Line 9)	\$ _____ per acre
Total performance guarantee payment (Line 10 times number of acres)	\$ _____
Farmer Contribution Calculation (Use only if Line 9 is greater than zero)	
11. Farmer contribution (Enter Line 9 x 0.33)	\$ _____ per acre
12. Maximum farmer contribution	\$ 6.00 per acre
Total farmer contribution (Enter lesser of Lines 11 and 12, times the number of acres)	\$ _____

If you owe a farmer contribution, please forward payment with your entire completed Worksheet (see next page). Your contribution allows other farmers to participate in the BMP CHALLENGE.

Corn Nutrient BMP CHALLENGE® Net Returns Assessment Worksheet (continued)
(Complete this form for each field enrolled.)

Part 5. Grower and Advisor Certification

Step 1: Grower and advisor signatures.

Advisor: Before obtaining grower's signature, review all entries on this worksheet with the grower, explain procedures and calculations.

We, the undersigned, certify that this completed Worksheet, Parts 1-5, is complete and correct to the best of our knowledge.

Grower Signature: _____

Date: _____

Advisor Signature: _____

Date: _____

Step 2: Submit the completed form by mail or fax to:

Ladi Asgill
Sustainable Conservation
201 Needham Street.
Modesto, CA 95354
Fax (209) 576-7975

Step 3: If you owe a contribution (from Part 4. Net Returns Calculation), please forward a check made out to Agflex with your completed worksheet.

Step 4: If a performance guaranty payment is due to you, please select from the following:

Please mail my payment to the address on the first page of the worksheet.

Please mail my payment to the following address:

No payment is necessary. Please contribute my payment to the BMP CHALLENGE program.

Please retain a copy of the entire Worksheet for your records.

THANK YOU FOR PARTICIPATING IN THE BMP CHALLENGE!