

## Excel WEQ Crop Management Templates

The following tables represent Crop Management Templates available for use with the Excel Wind Erosion Equation (WEQ) Spreadsheet in Colorado. The Templates are provided in .pdf format for reference purposes only. The corresponding Excel Templates for use with the Excel WEQ Spreadsheet are available through your Area Office or from the Colorado eFOTG, Section I, Erosion Prediction.

Irrigated and Nonirrigated templates are named by Crop Management Zone and Crop and Tillage Abbreviations.

Refer to the Colorado Crop Management Zone Map, Crop and Tillage Abbreviations Table and Crop Residue Class Tables to determine which Management Template most closely represents the crop management system you are working with.

Contact your Area Office or the State Agronomist if you have questions about the Excel WEQ Management Period Method or need assistance with other crops or rotations.

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**CMZ 05, Irrigated**

<b>CMZ-05, IR [CG,ds] System #1</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
1/2/00	Corn, grain, high yield	Over winter loss N		30%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	20%
12/31/00	Corn, grain, high yield	End Rotation		20%	

<b>CMZ-05, IR [CG,rt] System #2</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
1/2/00	Corn, grain, high yield	Over winter loss N		30%	
3/15/00	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
4/28/00	Corn, grain, high yield	Planter, ridge-till or bedded	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, ridge till, pass 1		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, ridge till, pass 2		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	
12/31/00	Corn, grain, high yield	End Rotation		20%	

## CMZ 05, Irrigated

CMZ-05, IR [BDWWCG,rt,ds,rt]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		100%	
6/1/00	Beans, dry	Planter, ridge-till or bedded		100%	
6/16/00	Bean 15	Grow	1	100%	
7/1/00	Bean 30	Grow		100%	
7/2/00	Bean 30	Cultivator, rowcrop, ridge till, pass 1	1	100%	
7/15/00	Bean 45	Grow		100%	
7/16/00	Bean 45	Cultivator, rowcrop, ridge till, pass 2	1	100%	
7/30/00	Bean 60	Grow	1	100%	
8/15/00	Bean 75	Grow	2	100%	
8/30/00	Beans, dry	Harvest		100%	
10/5/00	Wheat, winter, yield irr	Drill or Air seeder, DD opener N		100%	
10/20/00	Wheat, winter, irr, late 015	Grow	1	100%	
11/4/00	Wheat, winter, irr, late 030	Grow		100%	
11/19/00	Wheat, winter, irr, late 045	Grow		100%	
12/4/00	Wheat, winter, irr, late 060	Grow		100%	
12/19/00	Wheat, winter, irr, late 120	Grow		100%	
1/2/01	Wheat, winter, irr, late 150	Over winter loss F		100%	
1/3/01	Wheat, winter, irr, late 150	Grow		100%	
1/18/01	Wheat, winter, irr, late 165	Grow		100%	
2/2/01	Wheat, winter, irr, late 135	Grow		100%	
2/17/01	Wheat, winter, irr, late 150	Grow		100%	
3/3/01	Wheat, winter, irr, late 165	Grow		100%	
3/18/01	Wheat, winter, irr, late 180	Grow		100%	
4/2/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/17/01	Wheat, winter, irr, late 210	Grow	1	100%	
5/2/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/17/01	Wheat, winter, irr, late 240	Grow	3	100%	
7/15/01	Wheat, winter, yield irr	Harvest		20%	-30%
1/2/02	Wheat, winter, yield irr	Over winter loss F		20%	
3/15/02	Wheat, winter, yield irr	Disk, tandem, finishing F		100%	
4/5/02	Wheat, winter, yield irr	Disk, tandem, finishing F		100%	
4/15/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" F		100%	
4/28/02	Corn, grain, high yield	Planter, ridge-till or bedded		100%	
5/13/02	Corn, grain 15	Grow	1	100%	
5/28/02	Corn, grain 30	Grow	1	100%	
5/29/02	Corn, grain 30	Cultivator, rowcrop, ridge till, pass 1		100%	
6/12/02	Corn, grain 45	Grow	1	100%	
6/27/02	Corn, grain 60	Grow	1	100%	
6/28/02	Corn, grain 60	Cultivator, rowcrop, ridge till, pass 2		100%	
7/12/02	Corn, grain 75	Grow	3	100%	
10/5/02	Corn, grain, high yield	Harvest		20%	40%
11/15/02	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
12/31/02	Corn, grain, high yield	End Rotation		60%	

## CMZ 05, Irrigated

CMZ-05, IR [POBA,chs,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Potato, late	Over winter loss F		100%	
3/30/00	Potato, late	Chisel-disk-harrow -packer (comb) F		100%	
4/1/00	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener F	1	100%	
4/16/00	Spring Grain 15	Grow	2	100%	
5/1/00	Spring Grain 30	Grow	2	100%	
5/16/00	Spring Grain 45	Grow	2	100%	
5/31/00	Spring Grain 60	Grow	2	100%	
6/15/00	Spring Grain 75	Grow	2	100%	
7/15/00	Barley, spring, high yield	Harvest		20%	30%
10/15/00	Barley, spring, high yield	Subsoiler, 30-36 inch spacing		90%	
1/2/01	Barley, spring, high yield	Over winter loss N		100%	
4/15/01	Barley, spring, high yield	Disk, tandem, finishing N	1	100%	
5/1/01	Potato, late	Planter, potato, bedded		100%	
5/16/01	Potato 15	Grow	1	100%	
5/16/01	Potato 15	Cultivator, rowcrop, 3 in ridge		100%	
5/31/01	Potato 30	Grow	1	100%	
6/15/01	Potato 45	Grow	1	100%	
6/15/01	Potato 45	Cultivator, rowcrop, 3 in ridge		100%	
6/30/01	Potato 60	Grow	1	100%	
7/15/01	Potato 75	Grow	1	100%	
9/25/01	Potato, late	Harvest	1	100%	-40%
10/15/01	Potato, late	Subsoiler, 30-36 inch spacing		100%	
12/31/01	Potato, late	End Rotation		100%	

## CMZ 05, Irrigated

CMZ-05, IR [CIWWCG,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		50%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, silage	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/29/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/28/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
9/5/00	Corn, silage	Harvest		20%	0%
10/5/00	Wheat, winter, yield irr	Drill or Air seeder, chisel or hoe opener N		100%	
10/20/00	Wheat, winter, irr, late 015	Grow	1	100%	
11/4/00	Wheat, winter, irr, late 030	Grow		100%	
11/19/00	Wheat, winter, irr, late 045	Grow		100%	
12/4/00	Wheat, winter, irr, late 060	Grow		100%	
12/19/00	Wheat, winter, irr, late 075	Grow		100%	
1/2/01	Wheat, winter, irr, late 105	Over winter loss N		100%	
1/3/01	Wheat, winter, irr, late 105	Grow		100%	
1/18/01	Wheat, winter, irr, late 120	Grow		100%	
2/2/01	Wheat, winter, irr, late 135	Grow		100%	
2/17/01	Wheat, winter, irr, late 150	Grow		100%	
3/4/01	Wheat, winter, irr, late 165	Grow		100%	
3/19/01	Wheat, winter, irr, late 180	Grow		100%	
4/3/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/18/01	Wheat, winter, irr, late 210	Grow	1	100%	
5/3/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/18/01	Wheat, winter, irr, late 240	Grow	3	100%	
7/15/01	Wheat, winter, yield irr	Harvest		20%	-30%
1/2/02	Wheat, winter, yield irr	Over winter loss N		20%	
3/15/02	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
4/5/02	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
4/15/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/02	Corn, grain, high yield	Planter, lister opener, 30 in sp. N	1	100%	
5/13/02	Corn, grain 15	Grow		100%	
5/28/02	Corn, grain 30	Grow	1	100%	
6/12/02	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/27/02	Corn, grain 45	Grow	1	100%	
7/12/02	Corn, grain 60	Grow	1	100%	
7/27/02	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/11/02	Corn, grain 75	Grow	2	100%	
9/15/02	Corn, grain, high yield	Harvest		20%	20%
12/31/02	Corn, grain, high yield	End Rotation		20%	

## CMZ 05, Irrigated

CMZ-05, IR [BAWWCG,sws,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		50%	
3/5/00	Corn, grain, high yield	Sweep plow, wide, w/treader N		90%	
4/1/00	Barley, spring, high yield	Drill, air seeder, sweep/band opener N		100%	
4/16/00	Spring Grain 15	Grow		100%	
5/1/00	Spring Grain 30	Grow	1	100%	
5/16/00	Spring Grain 45	Grow		100%	
5/31/00	Spring Grain 60	Grow	1	100%	
6/15/00	Spring Grain 75	Grow	2	100%	
7/10/00	Barley, spring, high yield	Harvest		20%	-10%
9/10/00	Barley, spring, high yield	Over summer loss N		40%	
9/15/00	Wheat, winter, yield irr	Drill, air seeder, sweep/band opener N		40%	
9/30/00	Wheat, winter, irr, late 015	Grow		40%	
10/15/00	Wheat, winter, irr, late 030	Grow	1	50%	
10/30/00	Wheat, winter, irr, late 045	Grow		50%	
11/14/00	Wheat, winter, irr, late 060	Grow		60%	
11/29/00	Wheat, winter, irr, late 075	Grow		70%	
12/14/00	Wheat, winter, irr, late 105	Grow		80%	
1/2/01	Wheat, winter, irr, late 120	Over winter loss N		90%	
1/13/01	Wheat, winter, irr, late 120	Grow		90%	
1/28/01	Wheat, winter, irr, late 135	Grow		100%	
2/12/01	Wheat, winter, irr, late 150	Grow		100%	
2/27/01	Wheat, winter, irr, late 165	Grow		100%	
3/14/01	Wheat, winter, irr, late 180	Grow		100%	
3/29/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/13/01	Wheat, winter, irr, late 210	Grow		100%	
4/28/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/13/01	Wheat, winter, irr, late 240	Grow	2	100%	
7/10/01	Wheat, winter, yield irr	Harvest		20%	-20%
1/2/02	Wheat, winter, yield irr	Over winter loss N		50%	
4/1/02	Wheat, winter, yield irr	Disk, tandem, finishing N		80%	
4/25/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/02	Corn, grain, high yield	Planter, DD opener, w/fluted coulters N		80%	
5/25/02	Corn, grain 15	Grow		100%	
6/9/02	Corn, grain 30	Grow	1	100%	
6/24/02	Corn, grain 45	Grow		100%	
7/9/02	Corn, grain 60	Grow	1	100%	
7/24/02	Corn, grain 75	Grow	3	100%	
10/15/02	Corn, grain, high yield	Harvest		30%	40%
12/31/02	Corn, grain, high yield	End Rotation		30%	

## CMZ 05, Irrigated

CMZ-05, IR [AL(5)CG(2)BDOS,ps]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Alfalfa, fall	Over winter loss N		100%	
4/15/00	Alfalfa, fall	Plow, moldboard, conventional		100%	
4/25/00	Alfalfa, fall	Chisel-disk-harrow -packer (comb) N		100%	
5/10/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/00	Corn, grain 15	Grow	1	100%	
6/9/00	Corn, grain 30	Grow	1	100%	
6/24/00	Corn, grain 45	Grow	1	100%	
7/9/00	Corn, grain 60	Grow	1	100%	
7/24/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/00	Corn, grain 75	Grow	3	100%	
9/15/00	Corn, grain, high yield	Harvest		20%	30%
1/2/01	Corn, grain, high yield	Over winter loss N		40%	
3/15/01	Corn, grain, high yield	Disk, tandem, finishing N		100%	
5/1/01	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/01	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/01	Corn, grain 15	Grow	1	100%	
6/9/01	Corn, grain 30	Grow	1	100%	
6/24/01	Corn, grain 45	Grow	1	100%	
7/9/01	Corn, grain 60	Grow	1	100%	
7/24/01	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/01	Corn, grain 75	Grow	3	100%	
9/15/01	Corn, grain, high yield	Harvest		20%	30%
1/2/02	Corn, grain, high yield	Over winter loss N		40%	
6/1/02	Beans, dry	Planter, ridge-till or bedded		100%	
6/16/02	Bean 15	Grow	1	100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, ridge till, pass 1	1	100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, ridge till, pass 2	1	100%	
7/31/02	Bean 60	Grow	1	100%	
8/15/02	Bean 75	Grow	2	100%	
8/30/02	Beans, dry	Harvest		100%	
9/15/02	Beans, dry	Chisel, twisted points F		100%	
1/2/03	Beans, dry	Over winter loss F		100%	
3/15/03	Beans, dry	Plow, moldboard, conventional		100%	
3/20/03	Beans, dry	Bedder/Hipper/Lister 5"x30" F		100%	
4/1/03	Onion, fresh	Planter, small seed, row crop		100%	
4/16/03	Onion 15	Grow	1	100%	
5/1/03	Onion 30	Grow	1	100%	
5/16/03	Onion 45	Grow	1	100%	
5/31/03	Onion 45	Cultivator, rowcrop, 3 in ridge	1	100%	
6/15/03	Onion 60	Grow	1	100%	
6/30/03	Onion 75	Grow	2	100%	
7/15/03	Onion 90	Grow	3	100%	
7/31/03	Onion, fresh	Harvest, root crop		100%	0%
8/15/03	Onion, fresh	Plow, moldboard, conventional		100%	
9/15/03	Alfalfa, spring	Drill or Air seeder, DD opener F		100%	
9/30/03	Alfalfa 15	Grow	1	100%	
10/30/03	Alfalfa 30	Grow		100%	

## CMZ 05, Irrigated

CMZ-05, IR [AL(5)CG(2)BDOS,ps] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
11/15/03	Alfalfa 45	Grow	1	100%	
1/2/04	Alfalfa, spring	Over winter loss N		100%	
3/1/04	Alfalfa 60	Grow		100%	
3/16/04	Alfalfa 75	Grow	2	100%	
11/1/04	Alfalfa, spring	Harvest		0%	0%
1/2/05	Alfalfa, spring	Over winter loss N		0%	
3/15/05	Alfalfa 75	Grow	4	0%	
11/1/05	Alfalfa, spring	Harvest		0%	0%
1/2/06	Alfalfa, spring	Over winter loss N		0%	
3/15/06	Alfalfa 75	Grow	4	0%	
11/1/06	Alfalfa, spring	Harvest		0%	
1/2/07	Alfalfa, spring	Over winter loss N		0%	
3/15/07	Alfalfa 75	Grow	4	0%	
11/1/07	Alfalfa, spring	Harvest		0%	0%
1/2/08	Alfalfa, spring	Over winter loss N		0%	
3/15/08	Alfalfa 75	Grow	4	0%	
11/1/08	Alfalfa, spring	Harvest		0%	-20%
12/31/08	Alfalfa, spring	End Rotation		100%	

CMZ-05, IR [BG,ps] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Beets, sugar	Over winter loss F		100%	
4/15/00	Beets, sugar	Plow, moldboard, conventional		100%	
4/20/00	Beets, sugar	Chisel-disk-harrow -packer (comb) F		100%	
4/28/00	Beets, sugar	Planter, small seed, row crop	1	100%	
5/13/00	Beets 15	Grow		100%	
5/28/00	Beets 30	Grow	1	100%	
6/12/00	Beets 45	Cultivator, rowcrop, 3 in ridge		100%	
6/27/00	Beets 60	Grow	1	100%	
7/12/00	Beets 75	Grow	1	100%	
7/25/00	Beets 75	Cultivator, rowcrop, 3 in ridge		100%	
8/12/00	Beets 75	Grow	2	100%	
10/5/00	Beets, sugar	Harvest, root crop		100%	
10/31/00	Beets, sugar	Subsoiler, 16-24 inch spacing		100%	
12/31/00	Beets, sugar	End Rotation		100%	

## CMZ 12, Irrigated

CMZ-12, IR [CG,ds] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	20%
12/31/00	Corn, grain, high yield	End Rotation		20%	

CMZ-12, IR [CG,rt] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
4/28/00	Corn, grain, high yield	Planter, ridge-till or bedded	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	
12/31/00	Corn, grain, high yield	End Rotation		20%	

## CMZ 12, Irrigated

CMZ-12, IR [BDCG,rt]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		70%	
6/1/00	Beans, dry	Planter, ridge-till or bedded		100%	
6/16/00	Bean 15	Grow	1	100%	
7/1/00	Bean 30	Grow		100%	
7/1/00	Bean 30	Cultivator, rowcrop, ridge till, pass 1	1	100%	
7/16/00	Bean 45	Grow		100%	
7/17/00	Bean 45	Cultivator, rowcrop, ridge till, pass 2	1	100%	
7/31/00	Bean 60	Grow	1	100%	
8/15/00	Bean 75	Grow	2	100%	
8/30/00	Beans, dry	Harvest		100%	
12/31/00	Snow Cover	Grow		100%	
1/31/01	Beans, dry	Over winter loss F		100%	
4/28/01	Corn, grain, high yield	Planter, ridge-till or bedded		100%	
5/13/01	Corn, grain 15	Grow	1	100%	
5/28/01	Corn, grain 30	Grow	1	100%	
5/29/01	Corn, grain 30	Cultivator, rowcrop, ridge till, pass 1		100%	
6/12/01	Corn, grain 45	Grow	1	100%	
6/27/01	Corn, grain 60	Grow	1	100%	
6/27/01	Corn, grain 60	Cultivator, rowcrop, ridge till, pass 2		100%	
7/12/01	Corn, grain 75	Grow	3	100%	
10/5/01	Corn, grain, high yield	Harvest		20%	40%
11/15/01	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
12/31/01	Corn, grain, high yield	End Rotation		60%	

## CMZ 12, Irrigated

CMZ-12, IR [POBA,chs,ds,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		100%	
3/1/00	Potato, late	Over winter loss F		100%	
4/1/00	Potato, late	Chisel-disk-harrow -packer (comb) F		100%	
4/15/00	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener F	1	100%	
4/16/00	Spring Grain 15	Grow	2	100%	
5/1/00	Spring Grain 30	Grow	2	100%	
5/16/00	Spring Grain 45	Grow	2	100%	
5/31/00	Spring Grain 60	Grow	2	100%	
6/15/00	Spring Grain 75	Grow	2	100%	
7/15/00	Barley, spring, high yield	Harvest		20%	30%
10/1/00	Barley, spring, high yield	Stubble busting, chopping, shredding		80%	
10/15/00	Barley, spring, high yield	Subsoiler, 30-36 inch spacing		90%	
3/15/01	Barley, spring, high yield	Over winter loss N		100%	
4/15/01	Barley, spring, high yield	Disk, tandem, finishing N	1	100%	
5/1/01	Potato, late	Planter, potato, flat		100%	
5/16/01	Potato 15	Grow	1	100%	
5/16/01	Potato 15	Cultivator, rowcrop, 1 in ridge		100%	
5/31/01	Potato 30	Grow	1	100%	
6/15/01	Potato 45	Grow	1	100%	
6/15/01	Potato 45	Cultivator, rowcrop, ridge till, pass 2		100%	
6/30/01	Potato 60	Grow	1	100%	
7/15/01	Potato 75	Grow	1	100%	
9/25/01	Potato, late	Harvest	1	100%	-40%
10/15/01	Potato, late	Disk, tandem, finishing F	1	100%	
11/1/01	Potato, late	Chisel, twisted points F		100%	
12/1/01	Snow Cover	Grow		100%	
12/31/01	Potato, late	End Rotation		100%	

## CMZ 12, Irrigated

CMZ-12, IR [CIWWCG,ds,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, silage	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
9/20/00	Corn, silage	Harvest		20%	0%
10/5/00	Wheat, winter, yield irr	Drill or Air seeder, DD opener N		100%	
10/20/00	Wheat, winter, irr, late 015	Grow	1	100%	
11/4/00	Wheat, winter, irr, late 030	Grow		100%	
11/19/00	Wheat, winter, irr, late 045	Grow		100%	
12/4/00	Wheat, winter, irr, late 060	Grow		100%	
12/19/00	Wheat, winter, irr, late 075	Grow		100%	
1/3/01	Wheat, winter, irr, late 105	Grow		100%	
1/18/01	Wheat, winter, irr, late 120	Grow		100%	
2/2/01	Wheat, winter, irr, late 135	Grow		100%	
2/17/01	Wheat, winter, irr, late 150	Grow		100%	
3/4/01	Wheat, winter, irr, late 165	Grow		100%	
3/19/01	Wheat, winter, irr, late 180	Grow		100%	
4/3/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/18/01	Wheat, winter, irr, late 210	Grow	1	100%	
5/3/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/18/01	Wheat, winter, irr, late 240	Grow	3	100%	
7/15/01	Wheat, winter, yield irr	Harvest		20%	-30%
9/15/01	Wheat, winter, yield irr	Chisel, straight points N		20%	
1/2/02	Wheat, winter, yield irr	Over winter loss N		20%	
3/15/02	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
4/5/02	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
4/15/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/02	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/13/02	Corn, grain 15	Grow		100%	
5/28/02	Corn, grain 30	Grow	1	100%	
6/12/02	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/27/02	Corn, grain 45	Grow	1	100%	
7/12/02	Corn, grain 60	Grow	1	100%	
7/27/02	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/11/02	Corn, grain 75	Grow	2	100%	
9/15/02	Corn, grain, high yield	Harvest		20%	20%
12/31/02	Corn, grain, high yield	End Rotation		20%	

## CMZ 12, Irrigated

CMZ-12, IR [BAWWCG,sws,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		50%	
3/5/00	Corn, grain, high yield	Sweep plow, wide, w/treader N		90%	
4/1/00	Barley, spring, high yield	Drill, air seeder, sweep/band opener N		100%	
4/16/00	Spring Grain 15	Grow		100%	
5/1/00	Spring Grain 30	Grow	1	100%	
5/16/00	Spring Grain 45	Grow		100%	
5/31/00	Spring Grain 60	Grow	1	100%	
6/15/00	Spring Grain 75	Grow	2	100%	
7/10/00	Barley, spring, high yield	Harvest		20%	-10%
9/15/00	Wheat, winter, yield irr	Drill, air seeder, sweep/band opener N		40%	
9/30/00	Wheat, winter, irr, late 015	Grow		40%	
10/15/00	Wheat, winter, irr, late 030	Grow	1	50%	
10/30/00	Wheat, winter, irr, late 045	Grow		50%	
11/14/00	Wheat, winter, irr, late 060	Grow		60%	
11/29/00	Wheat, winter, irr, late 075	Grow		70%	
12/14/00	Wheat, winter, irr, late 105	Grow		80%	
1/13/01	Wheat, winter, irr, late 120	Grow		90%	
1/28/01	Wheat, winter, irr, late 135	Grow		100%	
2/12/01	Wheat, winter, irr, late 150	Grow		100%	
2/27/01	Wheat, winter, irr, late 165	Grow		100%	
3/14/01	Wheat, winter, irr, late 180	Grow		100%	
3/29/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/13/01	Wheat, winter, irr, late 210	Grow		100%	
4/28/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/13/01	Wheat, winter, irr, late 240	Grow	2	100%	
7/10/01	Wheat, winter, yield irr	Harvest		20%	-20%
1/2/02	Wheat, winter, yield irr	Over winter loss N		50%	
4/1/02	Wheat, winter, yield irr	Disk, tandem, finishing N		80%	
4/25/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/02	Corn, grain, high yield	Planter, DD opener, w/fluted coulters N		80%	
5/25/02	Corn, grain 15	Grow		100%	
6/9/02	Corn, grain 30	Grow	1	100%	
6/24/02	Corn, grain 45	Grow		100%	
7/9/02	Corn, grain 60	Grow	1	100%	
7/24/02	Corn, grain 75	Grow	3	100%	
10/15/02	Corn, grain, high yield	Harvest		30%	40%
12/31/02	Corn, grain, high yield	End Rotation		30%	

## CMZ 12, Irrigated

CMZ-12, IR [AL(5)CG(2),ds,df,pf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		100%	
3/1/00	Alfalfa, fall	Over winter loss N		100%	
4/10/00	Alfalfa, fall	Disk, tandem, finishing N		100%	
4/20/00	Alfalfa, fall	Mulch treader, forward		100%	
5/10/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/00	Corn, grain 15	Grow	1	100%	
6/9/00	Corn, grain 30	Grow	1	100%	
6/10/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge	1	100%	
6/24/00	Corn, grain 45	Grow	1	100%	
7/9/00	Corn, grain 60	Grow	1	100%	
7/24/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/00	Corn, grain 75	Grow	3	100%	
9/15/00	Corn, grain, high yield	Harvest		20%	30%
1/2/01	Corn, grain, high yield	Over winter loss N		40%	
3/15/01	Corn, grain, high yield	Disk, tandem, finishing N		100%	
5/1/01	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/01	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/01	Corn, grain 15	Grow	1	100%	
6/9/01	Corn, grain 30	Grow	1	100%	
6/10/01	Corn, grain 30	Cultivator, rowcrop, 3 in ridge	1	100%	
6/24/01	Corn, grain 45	Grow	1	100%	
7/9/01	Corn, grain 60	Grow	1	100%	
7/24/01	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/01	Corn, grain 75	Grow	3	100%	
9/15/01	Corn, grain, high yield	Harvest		20%	30%
10/15/02	Corn, grain, high yield	Disk, tandem, finishing N		100%	
11/1/02	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
3/15/02	Alfalfa, spring	Drill or Air seeder, DD opener N		100%	
3/30/02	Alfalfa 15	Grow	1	100%	
4/14/02	Alfalfa 30	Grow		100%	
4/29/02	Alfalfa 45	Grow	1	100%	
5/14/02	Alfalfa 60	Grow		100%	
5/29/02	Alfalfa 75	Grow	2	100%	
11/1/02	Alfalfa, spring	Harvest		0%	0%
1/1/03	Alfalfa, spring	Over winter loss N		0%	
3/15/03	Alfalfa 75	Grow	4	0%	
11/1/03	Alfalfa, spring	Harvest		0%	0%
1/1/04	Alfalfa, spring	Over w inter loss N		0%	
3/15/04	Alfalfa 75	Grow	4	0%	
11/1/04	Alfalfa, spring	Harvest		0%	0%
1/1/05	Alfalfa, spring	Over winter loss N		0%	
3/15/05	Alfalfa 75	Grow	4	0%	
11/1/05	Alfalfa, spring	Harvest		0%	-20%
1/1/06	Alfalfa, spring	Over winter loss N		0%	
3/15/06	Alfalfa 75	Grow	4	0%	
9/1/06	Alfalfa, spring	Harvest		0%	-30%
10/1/06	Alfalfa, spring	Plow, moldboard, conventional		100%	
12/31/06	Alfalfa, spring	End Rotation		100%	

## CMZ 14, Irrigated

CMZ-14, IR [POBA,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		100%	
3/1/00	Potato, late	Over winter loss F	2	100%	
4/15/00	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener F	6	100%	
4/30/00	Spring Grain 15	Grow	6	100%	
5/15/00	Spring Grain 30	Grow	6	100%	
5/30/00	Spring Grain 45	Grow	6	100%	
6/15/00	Spring Grain 60	Grow	6	100%	
6/30/00	Spring Grain 75	Grow	2	100%	
7/15/00	Barley, spring, high yield	Harvest		20%	30%
1/2/01	Potato, late	Over winter loss N		100%	
5/1/01	Potato, late	Planter, potato, bedded	1	100%	
5/15/01	Potato 15	Grow	1	100%	
5/16/01	Potato 15	Cultivator, rowcrop, 3 in ridge	1	100%	
5/30/01	Potato 30	Grow	6	100%	
6/15/01	Potato 45	Grow	6	100%	
6/16/01	Potato 45	Cultivator, rowcrop, 3 in ridge	6	100%	
6/30/01	Potato 60	Grow	6	100%	
7/15/01	Potato 75	Grow	4	100%	
9/25/01	Potato, late	Harvest, root crop	1	100%	-40%
10/1/01	Potato, late	Chisel, straight points F		100%	
10/15/01	Potato, late	Corrugation		100%	
12/1/01	Snow Cover	Grow		100%	
12/31/01	Potato, late	End Rotation		100%	

CMZ-14, IR [BA,chs,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Barley, spring, high yield	Over winter loss N	2	100%	
4/10/00	Barley, spring, high yield	Chisel-disk, twisted points N	1	100%	
4/15/00	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener N	4	100%	
4/30/00	Spring Grain 15	Grow	4	100%	
5/15/00	Spring Grain 30	Grow	4	100%	
5/30/00	Spring Grain 45	Grow	4	100%	
6/15/00	Spring Grain 60	Grow	4	100%	
6/15/00	Spring Grain 75	Grow	4	100%	
8/1/00	Barley, spring, high yield	Harvest		20%	40%
10/15/00	Barley, spring, high yield	Chisel-disk, twisted points N		90%	
12/31/00	Barley, spring, high yield	End Rotation		100%	

## CMZ 14, Irrigated

CMZ-14, IR [PORCBA,chf,sws]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Barley, spring, high yield	Over winter loss F	1	100%	
5/1/00	Potato, late	Planter, potato, bedded		100%	
5/15/00	Potato 15	Grow	1	100%	
5/16/00	Potato 15	Cultivator, rowcrop, 3 in ridge		100%	
5/30/00	Potato 30	Grow	1	100%	
5/31/00	Potato 30	Cultivator, rowcrop, 3 in ridge		100%	
6/15/00	Potato 45	Grow	2	100%	
6/30/00	Potato 60	Grow	4	100%	
7/15/00	Potato 75	Grow	8	100%	
9/25/00	Potato, late	Harvest, root crop	1	100%	-40%
9/30/00	Potato, late	Chisel-disk, straight points F		100%	
10/1/00	Rye Cover, irr, High N, late Oct1	Drill or Air seeder, chisel or hoe opener F	2	100%	
10/15/00	Rye Cover, High N, late 015	Grow	2	100%	
10/30/00	Rye Cover, High N, late 030	Grow		100%	
11/15/00	Rye Cover, High N, late 045	Grow		100%	
12/1/00	Rye Cover, High N, late 060	Grow		100%	
3/1/01	Rye Cover, High N, late 150	Grow		100%	
3/15/01	Rye Cover, irr, High N, late Oct1	Harvest		100%	
3/30/01	Rye Cover, irr, High N, late Oct1	Sweep plow, 20-40 in sp N		100%	
4/7/01	Rye Cover, irr, High N, late Oct1	Sweep plow, 20-40 in sp N		100%	
4/14/01	Barley, spring, high yield	Packer, roller	1	100%	
4/15/01	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener N	1	100%	
4/30/01	Spring Grain 15	Grow	1	100%	
5/15/01	Spring Grain 30	Grow	2	100%	
5/30/01	Spring Grain 45	Grow	3	100%	
6/15/01	Spring Grain 60	Grow	3	100%	
7/1/01	Spring Grain 75	Grow	3	100%	
8/1/01	Barley, spring, high yield	Harvest		20%	40%
9/15/01	Barley, spring, high yield	Chisel-disk, straight points N		100%	
12/31/01	Barley, spring, high yield	End Rotation		100%	

## CMZ 14, Irrigated

CMZ-14, IR [PORCPOBA,chs,chf,sws]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Barley, spring, high yield	Over winter loss N		50%	
4/30/00	Barley, spring, high yield	Chisel, straight points N	1	100%	
5/1/00	Potato, late	Planter, potato, bedded		100%	
5/15/00	Potato 15	Grow	1	100%	
5/16/00	Potato 15	Cultivator, rowcrop, 3 in ridge		100%	
5/30/00	Potato 30	Grow	2	100%	
5/31/00	Potato 30	Cultivator, rowcrop, 3 in ridge		100%	
6/15/00	Potato 45	Grow	4	100%	
6/30/00	Potato 60	Grow	4	100%	
7/15/00	Potato 75	Grow	4	100%	
9/25/00	Potato, late	Harvest, root crop	1	100%	-40%
9/30/00	Potato, late	Chisel-disk, twisted points F		100%	
10/1/00	Rye Cover, irr, High N, late Oct1	Drill or Air seeder, chisel or hoe opener F	2	100%	
10/15/00	Rye Cover, High N, late 015	Grow	2	100%	
10/30/00	Rye Cover, High N, late 030	Grow		100%	
11/15/00	Rye Cover, High N, late 045	Grow		100%	
12/1/00	Rye Cover, High N, late 060	Grow		100%	
3/1/01	Rye Cover, High N, late 150	Grow		100%	
4/1/01	Rye Cover, irr, High N, late Oct1	Harvest		100%	
4/15/01	Rye Cover, irr, High N, late Oct1	Sweep plow, 20-40 in sp N		100%	
4/25/01	Rye Cover, irr, High N, late Oct1	Sweep plow, 20-40 in sp N		100%	
5/1/01	Potato, late	Planter, potato, bedded		100%	
5/15/01	Potato 15	Grow	1	100%	
5/16/01	Potato 15	Cultivator, rowcrop, 3 in ridge		100%	
5/30/01	Potato 30	Grow	2	100%	
6/15/01	Potato 45	Grow		100%	
6/16/01	Potato 45	Cultivator, rowcrop, 3 in ridge	2	100%	
6/30/01	Potato 60	Grow	4	100%	
7/15/01	Potato 75	Grow	4	100%	
9/25/01	Potato, late	Harvest, root crop		100%	-40%
10/15/01	Potato, late	Subsoiler, 16-24 inch spacing		100%	
1/2/02	Potato, late	Over winter loss F		100%	
4/11/02	Potato, late	Chisel-disk-harrow -packer (comb) F	1	100%	
4/15/02	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener F	1	100%	
4/16/02	Spring Grain 15	Grow	6	100%	
5/1/02	Spring Grain 30	Grow	6	100%	
5/16/02	Spring Grain 45	Grow	6	100%	
5/31/02	Spring Grain 60	Grow	6	100%	
6/15/02	Spring Grain 75	Grow	6	100%	
7/15/02	Barley, spring, high yield	Harvest		20%	30%
10/15/02	Barley, spring, high yield	Chisel, straight points N		50%	
12/31/02	Barley, spring, high yield	End Rotation		50%	

## CMZ 14, Irrigated

CMZ-14, IR [POWWPOBA,chs,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Barley, spring, high yield	Over winter loss N		50%	
4/30/00	Barley, spring, high yield	Chisel, straight points N	1	100%	
5/1/00	Potato, late	Planter, potato, bedded		100%	
5/15/00	Potato 15	Grow	1	100%	
5/16/00	Potato 15	Cultivator, rowcrop, 3 in ridge		100%	
5/30/00	Potato 30	Grow	1	100%	
6/15/00	Potato 45	Grow	1	100%	
6/16/00	Potato 45	Cultivator, rowcrop, 3 in ridge		100%	
6/30/00	Potato 60	Grow	1	100%	
7/15/00	Potato 75	Grow	1	100%	
9/10/00	Potato, late	Harvest, root crop	1	100%	-40%
9/20/00	Potato, late	Chisel-disk-harrow -packer (comb) F		100%	
9/30/00	Wheat, winter, yield irr	Drill or Air seeder, chisel or hoe opener F		40%	
10/15/00	Wheat, winter, irr, late 015	Grow		40%	
10/30/00	Wheat, winter, irr, late 030	Grow	1	50%	
11/14/00	Wheat, winter, irr, late 045	Grow		50%	
11/29/00	Wheat, winter, irr, late 060	Grow		60%	
12/14/00	Wheat, winter, irr, late 075	Grow		70%	
12/29/00	Wheat, winter, irr, late 105	Grow		80%	
1/28/01	Wheat, winter, irr, late 120	Grow		90%	
2/12/01	Wheat, winter, irr, late 135	Grow		100%	
2/27/01	Wheat, winter, irr, late 150	Grow		100%	
3/14/01	Wheat, winter, irr, late 165	Grow		100%	
3/29/01	Wheat, winter, irr, late 180	Grow		100%	
4/13/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/28/01	Wheat, winter, irr, late 210	Grow		100%	
5/13/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/28/01	Wheat, winter, irr, late 240	Grow	2	100%	
7/10/01	Wheat, winter, yield irr	Harvest		20%	-20%
1/2/02	Wheat, winter, yield irr	Over winter loss N		50%	
4/30/02	Wheat, winter, yield irr	Chisel, straight points N		100%	
5/1/02	Potato, late	Planter, potato, bedded		100%	
5/15/02	Potato 15	Grow	1	100%	
5/16/02	Potato 15	Cultivator, rowcrop, 3 in ridge		100%	
5/30/02	Potato 30	Grow	1	100%	
6/15/02	Potato 45	Grow	1	100%	
6/16/02	Potato 45	Cultivator, rowcrop, 3 in ridge		100%	
6/30/02	Potato 60	Grow	1	100%	
7/15/02	Potato 75	Grow	1	100%	
9/10/02	Potato, late	Harvest, root crop	1	100%	-40%
10/15/02	Potato, late	Subsoiler, 16-24 inch spacing		100%	
1/2/03	Potato, late	Over winter loss F		100%	
4/10/03	Potato, late	Chisel-disk-harrow -packer (comb) F	1	100%	
4/15/03	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener F	1	100%	
4/30/03	Spring Grain 15	Grow	2	100%	
5/15/03	Spring Grain 30	Grow	2	100%	

## CMZ 14, Irrigated

CMZ-14, IR [PORCPOBA,chs,chf,sws] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
5/30/03	Spring Grain 45	Grow	2	100%	
6/15/03	Spring Grain 60	Grow	2	100%	
6/30/03	Spring Grain 75	Grow	2	100%	
7/15/03	Barley, spring, high yield	Harvest		20%	30%
10/15/03	Barley, spring, high yield	Chisel, twisted points N		50%	
12/31/03	Barley, spring, high yield	End Rotation		50%	

CMZ-14, IR [PO(2)BA,chf] NOT Approved for TUG 1 Soils					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		100%	
3/1/00	Potato, late	Over winter loss F	2	100%	
4/15/00	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener F	6	100%	
4/30/00	Spring Grain 15	Grow	6	100%	
5/15/00	Spring Grain 30	Grow	4	100%	
5/30/00	Spring Grain 45	Grow	4	100%	
6/15/00	Spring Grain 60	Grow	4	100%	
6/30/00	Spring Grain 75	Grow	4	100%	
8/1/00	Barley, spring, high yield	Harvest		20%	40%
12/1/00	Snow Cover	Grow	1	100%	
3/1/01	Barley, spring, high yield	Over winter loss N	1	100%	
5/1/01	Potato, late	Planter, potato, bedded		100%	
5/15/01	Potato 15	Grow	1	100%	
5/16/01	Potato 15	Cultivator, rowcrop, ridge till, pass 2		100%	
5/30/01	Potato 30	Grow	1	100%	
5/31/01	Potato 30	Cultivator, rowcrop, ridge till, pass 2		100%	
6/15/01	Potato 45	Grow	4	100%	
6/30/01	Potato 60	Grow	4	100%	
7/15/01	Potato 75	Grow	4	100%	
9/25/01	Potato, late	Harvest, root crop	1	100%	-40%
10/1/01	Potato, late	Subsoiler, 16-24 inch spacing		100%	
12/1/01	Snow Cover	Grow	2	100%	
3/1/02	Potato, late	Over winter loss F	2	100%	
5/1/02	Potato, late	Planter, potato, bedded		100%	
5/15/02	Potato 15	Grow	1	100%	
5/16/02	Potato 15	Cultivator, rowcrop, ridge till, pass 2		100%	
5/30/02	Potato 30	Grow	1	100%	
5/31/02	Potato 30	Cultivator, rowcrop, ridge till, pass 2	4	100%	
6/15/02	Potato 45	Grow	4	100%	
6/30/02	Potato 60	Grow	4	100%	
7/15/02	Potato 75	Grow	4	100%	
9/25/02	Potato, late	Harvest, root crop	1	100%	-40%
10/15/02	Potato, late	Chisel, straight points F	1	100%	
12/1/02	Snow Cover	Grow		100%	
12/31/02	Potato, late	End Rotation		100%	

## CMZ 14, Irrigated

CMZ-14, IR [AL(5)POBA]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Alfalfa, fall	Over winter loss N		100%	
5/1/00	Potato, late	Planter, potato, bedded	1	100%	
5/16/00	Potato 15	Grow	1	100%	
5/16/00	Potato 15	Cultivator, rowcrop, 3 in ridge	1	100%	
5/31/00	Potato 30	Grow	6	100%	
6/15/00	Potato 45	Grow	1	100%	
6/16/00	Potato 45	Cultivator, rowcrop, 3 in ridge	6	100%	
6/30/00	Potato 60	Grow	6	100%	
7/15/00	Potato 75	Grow	8	100%	
9/25/00	Potato, late	Harvest, root crop	1	100%	-40%
10/1/00	Potato, late	Chisel, straight points F		100%	
10/15/00	Potato, late	Corrugation		100%	
1/2/01	Potato, late	Over winter loss F		100%	
4/15/01	Barley, spring, high yield	Drill or Air seeder, chisel or hoe opener F	1	100%	
4/30/01	Spring Grain 15	Grow	2	100%	
5/15/01	Spring Grain 30	Grow	2	100%	
5/30/01	Spring Grain 45	Grow	2	100%	
6/15/01	Spring Grain 60	Grow	2	100%	
6/30/01	Spring Grain 75	Grow	2	100%	
7/15/01	Barley, spring, high yield	Harvest		20%	30%
10/15/01	Barley, spring, high yield	Chisel, straight points N		90%	
1/2/02	Barley, spring, high yield	Over winter loss N		100%	
4/10/02	Barley, spring, high yield	Chisel, straight points N	1	100%	
4/15/02	Alfalfa, spring	Drill or Air seeder, chisel or hoe opener N		100%	
4/30/02	Alfalfa 15	Grow	1	100%	
5/14/02	Alfalfa 30	Grow		100%	
5/29/02	Alfalfa 45	Grow	1	100%	
6/14/02	Alfalfa 60	Grow		100%	
7/29/02	Alfalfa 75	Grow	2	100%	
9/1/02	Alfalfa, spring	Harvest		0%	0%
1/1/03	Alfalfa, spring	Over winter loss N		0%	
4/15/03	Alfalfa 75	Grow	4	0%	
11/1/03	Alfalfa, spring	Harvest		0%	0%
1/1/04	Alfalfa, spring	Over winter loss N		0%	
4/15/04	Alfalfa 75	Grow	4	0%	
11/1/04	Alfalfa, spring	Harvest		0%	0%
1/1/05	Alfalfa, spring	Over winter loss N		0%	
4/15/05	Alfalfa 75	Grow	4	0%	
11/1/05	Alfalfa, spring	Harvest		0%	-20%
1/1/06	Alfalfa, spring	Over winter loss N		0%	
4/15/06	Alfalfa 75	Grow	4	0%	
9/1/06	Alfalfa, spring	Harvest		0%	-30%
10/1/07	Alfalfa, spring	Plow, moldboard, conventional		100%	
10/15/07	Alfalfa, spring	Bedder/Hipper/Lister 5"x30" N		100%	
12/31/07	Alfalfa, spring	End Rotation		100%	

## CMZ 15, Irrigated

CMZ-15, IR [CG,ds] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	20%
12/31/00	Corn, grain, high yield	End Rotation		20%	

CMZ-15, IR [CG,rt] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
4/28/00	Corn, grain, high yield	Planter, ridge-till or bedded	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	
12/31/00	Corn, grain, high yield	End Rotation		20%	

CMZ-15, IR [CG,ds] System #3					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/28/00	Corn, grain, high yield	Disk, tandem, finishing N	1	100%	
4/28/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge	1	100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	40%
12/31/00	Corn, grain, high yield	End Rotation		20%	

## CMZ 15, Irrigated

CMZ-15, IR [BDCG,rt]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/02	Corn, grain, high yield	Over winter loss N		70%	
6/1/02	Beans, dry	Planter, ridge-till or bedded		100%	
6/16/02	Bean 15	Grow	1	100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, ridge till, pass 1	1	100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, ridge till, pass 2	1	100%	
7/31/02	Bean 60	Grow	1	100%	
8/15/02	Bean 75	Grow	2	100%	
8/30/02	Beans, dry	Harvest		100%	
3/15/03	Beans, dry	Over winter loss F		100%	
4/28/03	Corn, grain, high yield	Planter, ridge-till or bedded		100%	
5/13/03	Corn, grain 15	Grow	1	100%	
5/28/03	Corn, grain 30	Grow	1	100%	
5/28/03	Corn, grain 30	Cultivator, rowcrop, ridge till, pass 1		100%	
6/12/03	Corn, grain 45	Grow	1	100%	
6/27/03	Corn, grain 60	Grow	1	100%	
6/27/03	Corn, grain 60	Cultivator, rowcrop, ridge till, pass 2		100%	
7/12/03	Corn, grain 75	Grow	3	100%	
10/5/03	Corn, grain, high yield	Harvest		20%	40%
11/15/03	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
12/31/03	Corn, grain, high yield	End Rotation		60%	

## CMZ 15, Irrigated

CMZ-15, IR [POBA,chf,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/00	Potato, late	Over winter loss F		100%	
4/1/00	Potato, late	Packer, roller		100%	
4/1/00	Barley, spring, high yield	Drill or Air seeder, DD opener F	1	100%	
4/16/00	Sring Grain 15	Grow	2	100%	
5/1/00	Sring Grain 30	Grow	2	100%	
5/16/00	Sring Grain 45	Grow	2	100%	
5/31/00	Sring Grain 60	Grow	2	100%	
6/15/00	Sring Grain 75	Grow	2	100%	
7/15/00	Barley, spring, high yield	Harvest		20%	30%
10/1/00	Barley, spring, high yield	Stubble busting, chopping, shredding		80%	
10/15/00	Barley, spring, high yield	Subsoiler, 30-36 inch spacing		90%	
3/15/01	Barley, spring, high yield	Over winter loss N		100%	
4/15/01	Barley, spring, high yield	Disk, tandem, finishing N	1	100%	
5/1/01	Potato, late	Planter, potato, flat		100%	
5/16/01	Potato 15	Grow	1	100%	
5/16/01	Potato 15	Cultivator, rowcrop, 1 in ridge		100%	
5/31/01	Potato 30	Grow	1	100%	
6/15/01	Potato 45	Grow	1	100%	
6/15/01	Potato 45	Cultivator, rowcrop, ridge till, pass 2		100%	
6/30/01	Potato 60	Grow	1	100%	
7/15/01	Potato 75	Grow	1	100%	
9/25/01	Potato, late	Harvest	1	100%	-40%
10/15/01	Potato, late	Disk, tandem, finishing F	1	100%	
11/1/01	Potato, late	Chisel, twisted points F		100%	
12/31/01	Potato, late	End Rotation		100%	

## CMZ 15, Irrigated

CMZ-15, IR [CIWWCG,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, silage	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
9/20/00	Corn, silage	Harvest		20%	0%
10/5/00	Wheat, winter, yield irr	Drill or Air seeder, DD opener N		100%	
10/20/00	Wheat, winter, irr, late 015	Grow	1	100%	
11/4/00	Wheat, winter, irr, late 030	Grow		100%	
11/19/00	Wheat, winter, irr, late 045	Grow		100%	
12/4/00	Wheat, winter, irr, late 060	Grow		100%	
12/19/00	Wheat, winter, irr, late 075	Grow		100%	
1/3/01	Wheat, winter, irr, late 105	Grow		100%	
1/18/01	Wheat, winter, irr, late 120	Grow		100%	
2/2/01	Wheat, winter, irr, late 135	Grow		100%	
2/17/01	Wheat, winter, irr, late 150	Grow		100%	
3/4/01	Wheat, winter, irr, late 165	Grow		100%	
3/19/01	Wheat, winter, irr, late 180	Grow		100%	
4/3/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/18/01	Wheat, winter, irr, late 210	Grow	1	100%	
5/3/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/18/01	Wheat, winter, irr, late 240	Grow	3	100%	
7/15/01	Wheat, winter, yield irr	Harvest		20%	-30%
10/30/01	Wheat, winter, yield irr	Over summer loss F		20%	
3/1/02	Wheat, winter, yield irr	Over winter loss F		20%	
3/15/02	Wheat, winter, yield irr	Disk, tandem, finishing F		100%	
4/5/02	Wheat, winter, yield irr	Disk, tandem, finishing F		100%	
4/15/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" F		100%	
4/28/02	Corn, grain, high yield	Planter, DD opener, 30 in sp F	1	100%	
5/13/02	Corn, grain 15	Grow		100%	
5/28/02	Corn, grain 30	Grow	1	100%	
6/12/02	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/27/02	Corn, grain 45	Grow	1	100%	
7/12/02	Corn, grain 60	Grow	1	100%	
7/27/02	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/11/02	Corn, grain 75	Grow	2	100%	
9/15/02	Corn, grain, high yield	Harvest		20%	20%
12/31/02	Corn, grain, high yield	End Rotation		20%	

## CMZ 15, Irrigated

CMZ-15, IR [BAWWCG,sws,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Corn, grain, high yield	Over winter loss N		50%	
3/5/00	Corn, grain, high yield	Sweep plow, wide, w/treader N		90%	
4/1/00	Barley, spring, high yield	Drill, air seeder, sweep/band opener N		100%	
4/16/00	Spring Grain 15	Grow		100%	
5/1/00	Spring Grain 30	Grow	1	100%	
5/16/00	Spring Grain 45	Grow		100%	
5/31/00	Spring Grain 60	Grow	1	100%	
6/15/00	Spring Grain 75	Grow	2	100%	
7/10/00	Barley, spring, high yield	Harvest		20%	-10%
9/10/00	Barley, spring, high yield	Over summer loss F		40%	
9/15/00	Wheat, winter, yield irr	Drill, air seeder, sweep/band opener F		40%	
9/30/00	Wheat, winter, irr, late 015	Grow		40%	
10/15/00	Wheat, winter, irr, late 030	Grow	1	50%	
10/30/00	Wheat, winter, irr, late 045	Grow		50%	
11/14/00	Wheat, winter, irr, late 060	Grow		60%	
11/29/00	Wheat, winter, irr, late 075	Grow		70%	
12/14/00	Wheat, winter, irr, late 105	Grow		80%	
1/13/01	Wheat, winter, irr, late 120	Grow		90%	
1/28/01	Wheat, winter, irr, late 135	Grow		100%	
2/12/01	Wheat, winter, irr, late 150	Grow		100%	
2/27/01	Wheat, winter, irr, late 165	Grow		100%	
3/14/01	Wheat, winter, irr, late 180	Grow		100%	
3/29/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/13/01	Wheat, winter, irr, late 210	Grow		100%	
4/28/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/13/01	Wheat, winter, irr, late 240	Grow	2	100%	
7/10/01	Wheat, winter, yield irr	Harvest		20%	-20%
10/1/01	Wheat, winter, yield irr	Over summer loss F		35%	
3/15/02	Wheat, winter, yield irr	Over winter loss F		50%	
4/1/02	Wheat, winter, yield irr	Disk, tandem, finishing F		80%	
4/25/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" F		100%	
5/10/02	Corn, grain, high yield	Planter, DD opener, w/fluted coulters F		80%	
5/25/02	Corn, grain 15	Grow		100%	
6/9/02	Corn, grain 30	Grow	1	100%	
6/24/02	Corn, grain 45	Grow		100%	
7/9/02	Corn, grain 60	Grow	1	100%	
7/24/02	Corn, grain 75	Grow	3	100%	
10/15/02	Corn, grain, high yield	Harvest		30%	40%
12/31/02	Corn, grain, high yield	End Rotation		30%	

## CMZ 15, Irrigated

CMZ-15, IR [AL(5)CG(2)BDOSLP,pf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Alfalfa, spring	Over winter loss F		100%	
3/1/00	Alfalfa, spring	Disk, tandem, finishing F		100%	
3/5/00	Alfalfa, spring	Cultivator, field, sweeps, 9"-16" F		100%	
5/10/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/00	Corn, grain 15	Grow	1	100%	
6/9/00	Corn, grain 30	Grow	1	100%	
6/24/00	Corn, grain 45	Grow	1	100%	
7/9/00	Corn, grain 60	Grow	1	100%	
7/24/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/00	Corn, grain 75	Grow	3	100%	
9/15/00	Corn, grain, high yield	Harvest		20%	30%
1/2/01	Corn, grain, high yield	Over winter loss F		40%	
3/15/01	Corn, grain, high yield	Disk, tandem, finishing F		100%	
5/1/01	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/01	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/01	Corn, grain 15	Grow	1	100%	
6/9/01	Corn, grain 30	Grow	1	100%	
6/24/01	Corn, grain 45	Grow	1	100%	
7/9/01	Corn, grain 60	Grow	1	100%	
7/24/01	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/01	Corn, grain 75	Grow	3	100%	
9/15/01	Corn, grain, high yield	Harvest		20%	30%
1/2/02	Beans, dry	Over winter loss N		40%	
6/1/02	Beans, dry	Planter, ridge-till or bedded		100%	
6/16/02	Bean 15	Grow	1	100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, ridge till, pass 1	1	100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, ridge till, pass 2	1	100%	
7/31/02	Bean 60	Grow	1	100%	
8/15/02	Bean 75	Grow	2	100%	
8/30/02	Beans, dry	Harvest		100%	
10/1/02	Beans, dry	Plow, moldboard, conventional		100%	
11/15/02	Beans, dry	Disk, tandem, finishing F		100%	
2/15/03	Beans, dry	Chisel-disk-harrow -packer (comb) F		100%	
3/1/03	Beans, dry	Bedder/Hipper/Lister 5"x30" F		100%	
4/1/03	Onion, fresh	Planter, small seed, row crop		100%	
4/16/03	Onion 15	Grow	1	100%	
5/1/03	Onion 30	Grow	1	100%	
5/16/03	Onion 45	Grow	1	100%	
5/31/03	Onion 45	Cultivator, rowcrop, 3 in ridge	1	100%	
6/15/03	Onion 60	Grow	1	100%	
6/30/03	Onion 75	Grow	2	100%	
7/15/03	Onion 90	Grow	3	100%	
8/20/03	Onion, fresh	Harvest		100%	0%
9/1/03	Onion, fresh	Chisel, straight points F		100%	
10/1/03	Onion, fresh	Plow, moldboard, conventional		100%	
3/15/04	Onion, fresh	Over winter loss F		100%	
4/1/04	Onion, fresh	Chisel-disk-harrow -packer (comb) F		100%	

## CMZ 15, Irrigated

CMZ-15, IR [AL(5)CG(2)BDOSLP,pf] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
4/15/04	Onion, fresh	Bedder/Hipper/Lister 5"x30" F		100%	
5/15/04	Onion, fresh	Plastic mulch, apply, 50% cover		100%	
6/5/04	Pepper, hot	Transplanter		100%	
6/20/04	Pepper 15	Grow	1	100%	
7/5/04	Pepper 30	Grow	1	100%	
7/20/04	Pepper 45	Grow	1	100%	
8/4/04	Pepper 60	Grow	3	100%	
9/5/04	Pepper, hot	Harvest		30%	0%
9/10/04	Pepper, hot	Plastic mulch, remove		100%	
9/15/04	Pepper, hot	Plow, moldboard, conventional		100%	
10/1/04	Pepper, hot	Chisel-disk-harrow -packer (comb) F		100%	
3/1/05	Pepper, hot	Over winter loss F		100%	
3/15/05	Alfalfa, spring	Drill or Air seeder, DD opener F		100%	
3/30/05	Alfalfa 15	Grow	1	100%	
4/14/05	Alfalfa 30	Grow		100%	
4/29/05	Alfalfa 45	Grow	1	100%	
5/14/05	Alfalfa 60	Grow		100%	
5/29/05	Alfalfa 75	Grow	2	100%	
11/1/05	Alfalfa, spring	Harvest		0%	0%
1/1/06	Alfalfa, spring	Over winter loss N		0%	
3/15/06	Alfalfa 75	Grow	4	0%	
11/1/06	Alfalfa, spring	Harvest		0%	0%
1/1/07	Alfalfa, spring	Over winter loss N		0%	
3/15/07	Alfalfa 75	Grow	4	0%	
11/1/07	Alfalfa, spring	Harvest		0%	0%
1/1/08	Alfalfa, spring	Over winter loss N		0%	
3/15/08	Alfalfa 75	Grow	4	0%	
11/1/08	Alfalfa, spring	Harvest		0%	-20%
1/1/09	Alfalfa, spring	Over winter loss N		0%	
3/15/09	Alfalfa 75	Grow	4	0%	
9/1/09	Alfalfa, spring	Harvest		0%	-30%
10/1/09	Alfalfa, spring	Plow, moldboard, conventional		100%	
12/31/09	Alfalfa, spring	End Rotation		100%	

## CMZ 28, Irrigated

CMZ-28, IR [CG,ds] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	20%
12/31/00	Corn, grain, high yield	End Rotation		20%	

CMZ-28, IR [CG,rt] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
4/28/00	Corn, grain, high yield	Planter, ridge-till or bedded	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
10/5/00	Corn, grain, high yield	Harvest		20%	
12/31/00	Corn, grain, high yield	End Rotation		20%	

## CMZ 28, Irrigated

CMZ-28, IR [BDCG,rt]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/02	Corn, grain, high yield	Over winter loss N		70%	
6/1/02	Beans, dry	Planter, ridge-till or bedded		100%	
6/16/02	Bean 15	Grow	1	100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, ridge till, pass 1	1	100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, ridge till, pass 2	1	100%	
7/31/02	Bean 60	Grow	1	100%	
8/15/02	Bean 75	Grow	2	100%	
8/30/02	Beans, dry	Harvest		100%	
3/15/03	Beans, dry	Over winter loss F		100%	
4/28/03	Corn, grain, high yield	Planter, ridge-till or bedded		100%	
5/13/03	Corn, grain 15	Grow	1	100%	
5/28/03	Corn, grain 30	Grow	1	100%	
5/28/03	Corn, grain 30	Cultivator, rowcrop, ridge till, pass 1		100%	
6/12/03	Corn, grain 45	Grow	1	100%	
6/27/03	Corn, grain 60	Grow	1	100%	
6/27/03	Corn, grain 60	Cultivator, rowcrop, ridge till, pass 2		100%	
7/12/03	Corn, grain 75	Grow	3	100%	
10/5/03	Corn, grain, high yield	Harvest		20%	40%
11/15/03	Corn, grain, high yield	Stubble busting, chopping, shredding		50%	
12/31/03	Corn, grain, high yield	End Rotation		60%	

## CMZ 28, Irrigated

CMZ-28, IR [POBA,ds,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Potato, late	Over winter loss F		100%	
4/1/00	Potato, late	Packer, roller		100%	
4/1/00	Barley, spring, high yield	Drill or Air seeder, DD opener F	1	100%	
4/16/00	Sring Grain 15	Grow	2	100%	
5/1/00	Sring Grain 30	Grow	2	100%	
5/16/00	Sring Grain 45	Grow	2	100%	
5/31/00	Sring Grain 60	Grow	2	100%	
6/15/00	Sring Grain 75	Grow	2	100%	
7/15/00	Barley, spring, high yield	Harvest		20%	30%
10/1/00	Barley, spring, high yield	Stubble busting, chopping, shredding		80%	
10/15/00	Barley, spring, high yield	Subsoiler, 30-36 inch spacing		90%	
1/2/01	Barley, spring, high yield	Over winter loss F		100%	
4/15/01	Barley, spring, high yield	Disk, tandem, finishing N	1	100%	
5/1/01	Potato, late	Planter, potato, flat		100%	
5/16/01	Potato 15	Grow	1	100%	
5/16/01	Potato 15	Cultivator, rowcrop, 1 in ridge		100%	
5/31/01	Potato 30	Grow	1	100%	
6/15/01	Potato 45	Grow	1	100%	
6/15/01	Potato 45	Cultivator, rowcrop, ridge till, pass 2		100%	
6/30/01	Potato 60	Grow	1	100%	
7/15/01	Potato 75	Grow	1	100%	
9/25/01	Potato, late	Harvest	1	100%	-40%
10/15/01	Potato, late	Disk, tandem, finishing F	1	100%	
11/1/01	Potato, late	Chisel, twisted points F		100%	
12/31/01	Potato, late	End Rotation		100%	

## CMZ 28, Irrigated

CMZ-28, IR [CIWWCG,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		20%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/5/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/00	Corn, silage	Planter, DD opener, 30 in sp N	1	100%	
5/13/00	Corn, grain 15	Grow		100%	
5/28/00	Corn, grain 30	Grow	1	100%	
5/28/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/12/00	Corn, grain 45	Grow	1	100%	
6/27/00	Corn, grain 60	Grow	1	100%	
6/27/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/12/00	Corn, grain 75	Grow	2	100%	
9/20/00	Corn, silage	Harvest		20%	0%
9/25/00	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
10/5/00	Wheat, winter, yield irr	Drill or Air seeder, DD opener N		100%	
10/20/00	Wheat, winter, irr, late 015	Grow	1	100%	
11/4/00	Wheat, winter, irr, late 030	Grow		100%	
11/19/00	Wheat, winter, irr, late 045	Grow		100%	
12/4/00	Wheat, winter, irr, late 060	Grow		100%	
12/19/00	Wheat, winter, irr, late 075	Grow		100%	
1/3/01	Wheat, winter, irr, late 105	Grow		100%	
1/18/01	Wheat, winter, irr, late 120	Grow		100%	
2/2/01	Wheat, winter, irr, late 135	Grow		100%	
2/17/01	Wheat, winter, irr, late 150	Grow		100%	
3/4/01	Wheat, winter, irr, late 165	Grow		100%	
3/19/01	Wheat, winter, irr, late 180	Grow		100%	
4/3/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/18/01	Wheat, winter, irr, late 210	Grow	1	100%	
5/3/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/18/01	Wheat, winter, irr, late 240	Grow	3	100%	
7/15/01	Wheat, winter, yield irr	Harvest		20%	-30%
1/2/02	Wheat, winter, yield irr	Over winter loss N		20%	
3/15/02	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
4/5/02	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
4/15/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" N		100%	
4/28/02	Corn, grain, high yield	Planter, DD opener, 30 in sp F	1	100%	
5/13/02	Corn, grain 15	Grow		100%	
5/28/02	Corn, grain 30	Grow	1	100%	
6/12/02	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/27/02	Corn, grain 45	Grow	1	100%	
7/12/02	Corn, grain 60	Grow	1	100%	
7/27/02	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/11/02	Corn, grain 75	Grow	2	100%	
9/15/02	Corn, grain, high yield	Harvest		20%	20%
12/31/02	Corn, grain, high yield	End Rotation		20%	

## CMZ 28, Irrigated

CMZ-28, IR [BAWWCG,sws,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		50%	
3/5/00	Corn, grain, high yield	Sweep plow, wide, w/treader N		90%	
4/1/00	Barley, spring, high yield	Drill, air seeder, sweep/band opener N		100%	
4/16/00	Spring Grain 15	Grow		100%	
5/1/00	Spring Grain 30	Grow	1	100%	
5/16/00	Spring Grain 45	Grow		100%	
5/31/00	Spring Grain 60	Grow	1	100%	
6/15/00	Spring Grain 75	Grow	2	100%	
7/10/00	Barley, spring, high yield	Harvest		20%	-10%
9/15/00	Wheat, winter, yield irr	Drill, air seeder, sweep/band opener F		40%	
9/30/00	Wheat, winter, irr, late 015	Grow		40%	
10/15/00	Wheat, winter, irr, late 030	Grow	1	50%	
10/30/00	Wheat, winter, irr, late 045	Grow		50%	
11/14/00	Wheat, winter, irr, late 060	Grow		60%	
11/29/00	Wheat, winter, irr, late 075	Grow		70%	
12/14/00	Wheat, winter, irr, late 105	Grow		80%	
1/2/01	Wheat, winter, irr, late 120	Over winter loss N		90%	
1/13/01	Wheat, winter, irr, late 120	Grow		90%	
1/28/01	Wheat, winter, irr, late 135	Grow		100%	
2/12/01	Wheat, winter, irr, late 150	Grow		100%	
2/27/01	Wheat, winter, irr, late 165	Grow		100%	
3/14/01	Wheat, winter, irr, late 180	Grow		100%	
3/29/01	Wheat, winter, irr, late 195	Grow	1	100%	
4/13/01	Wheat, winter, irr, late 210	Grow		100%	
4/28/01	Wheat, winter, irr, late 225	Grow	1	100%	
5/13/01	Wheat, winter, irr, late 240	Grow	2	100%	
7/10/01	Wheat, winter, yield irr	Harvest		20%	-20%
1/2/02	Wheat, winter, yield irr	Over winter loss N		50%	
4/1/02	Wheat, winter, yield irr	Disk, tandem, finishing F		80%	
4/25/02	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" F		100%	
5/10/02	Corn, grain, high yield	Planter, DD opener, w/fluted coulters F		80%	
5/25/02	Corn, grain 15	Grow		100%	
6/9/02	Corn, grain 30	Grow	1	100%	
6/24/02	Corn, grain 45	Grow		100%	
7/9/02	Corn, grain 60	Grow	1	100%	
7/24/02	Corn, grain 75	Grow	3	100%	
10/15/02	Corn, grain, high yield	Harvest		30%	40%
12/31/02	Corn, grain, high yield	End Rotation		30%	

## CMZ 28, Irrigated

CMZ-28, IR [AL(5)CG(2)BDOSLP,pf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Alfalfa, fall	Over winter loss N		100%	
3/1/00	Alfalfa, fall	Disk, tandem, finishing N		100%	
3/5/00	Alfalfa, fall	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/00	Corn, grain 15	Grow	1	100%	
6/9/00	Corn, grain 30	Grow	1	100%	
6/24/00	Corn, grain 45	Grow	1	100%	
7/9/00	Corn, grain 60	Grow	1	100%	
7/24/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/00	Corn, grain 75	Grow	3	100%	
9/15/00	Corn, grain, high yield	Harvest		20%	30%
1/2/01	Corn, grain, high yield	Over winter loss N		40%	
3/15/01	Corn, grain, high yield	Disk, tandem, finishing N		100%	
5/1/01	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/01	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/25/01	Corn, grain 15	Grow	1	100%	
6/9/01	Corn, grain 30	Grow	1	100%	
6/24/01	Corn, grain 45	Grow	1	100%	
7/9/01	Corn, grain 60	Grow	1	100%	
7/24/01	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/8/01	Corn, grain 75	Grow	3	100%	
9/15/01	Corn, grain, high yield	Harvest		20%	30%
1/2/02	Beans, dry	Over winter loss N		40%	
6/1/02	Beans, dry	Planter, ridge-till or bedded		100%	
6/16/02	Bean 15	Grow	1	100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, ridge till, pass 1	1	100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, ridge till, pass 2	1	100%	
7/31/02	Bean 60	Grow	1	100%	
8/15/02	Bean 75	Grow	2	100%	
8/30/02	Beans, dry	Harvest		100%	
10/1/02	Beans, dry	Plow, moldboard, conventional		100%	
11/15/02	Beans, dry	Disk, tandem, finishing F		100%	
2/15/03	Beans, dry	Chisel-disk-harrow -packer (comb) F		100%	
3/1/03	Beans, dry	Bedder/Hipper/Lister 5"x30" F		100%	
4/1/03	Onion, fresh	Planter, small seed, row crop		100%	
4/16/03	Onion 15	Grow	1	100%	
5/1/03	Onion 30	Grow	1	100%	
5/16/03	Onion 45	Grow	1	100%	
5/31/03	Onion 45	Cultivator, rowcrop, 3 in ridge	1	100%	
6/15/03	Onion 60	Grow	1	100%	
6/30/03	Onion 75	Grow	2	100%	
7/15/03	Onion 90	Grow	3	100%	
8/20/03	Onion, fresh	Harvest		100%	0%
9/1/03	Onion, fresh	Chisel, straight points F		100%	
10/1/03	Onion, fresh	Plow, moldboard, conventional		100%	
1/2/04	Onion, fresh	Over winter loss F		100%	
4/1/04	Onion, fresh	Chisel-disk-harrow -packer (comb) F		100%	

## CMZ 28, Irrigated

CMZ-28, IR [AL(5)CG(2)BDOSLP,pf] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
4/15/04	Onion, fresh	Bedder/Hipper/Lister 5"x30" F		100%	
5/15/04	Onion, fresh	Plastic mulch, apply, 50% cover		100%	
6/5/04	Pepper, hot	Transplanter		100%	
6/20/04	Pepper 15	Grow	1	100%	
7/5/04	Pepper 30	Grow	1	100%	
7/20/04	Pepper 45	Grow	1	100%	
8/4/04	Pepper 60	Grow	3	100%	
9/5/04	Pepper, hot	Harvest		30%	0%
9/10/04	Pepper, hot	Plastic mulch, remove		100%	
9/15/04	Pepper, hot	Plow, moldboard, conventional		100%	
10/1/04	Pepper, hot	Chisel-disk-harrow -packer (comb) F		100%	
1/2/05	Alfalfa, spring	Over winter loss F		100%	
3/15/05	Alfalfa, spring	Drill or Air seeder, DD opener F		100%	
3/30/05	Alfalfa 15	Grow	1	100%	
4/14/05	Alfalfa 30	Grow		100%	
4/29/05	Alfalfa 45	Grow	1	100%	
5/14/05	Alfalfa 60	Grow		100%	
5/29/05	Alfalfa 75	Grow	2	100%	
11/1/05	Alfalfa, spring	Harvest		0%	0%
1/2/06	Alfalfa, spring	Over winter loss N		0%	
3/15/06	Alfalfa 75	Grow	4	0%	
11/1/06	Alfalfa, spring	Harvest		0%	0%
1/2/07	Alfalfa, spring	Over winter loss N		0%	
3/15/07	Alfalfa 75	Grow	4	0%	
11/1/07	Alfalfa, spring	Harvest		0%	0%
1/2/08	Alfalfa, spring	Over winter loss N		0%	
3/15/08	Alfalfa 75	Grow	4	0%	
11/1/08	Alfalfa, spring	Harvest		0%	-20%
1/2/09	Alfalfa, spring	Over winter loss N		0%	
3/15/09	Alfalfa 75	Grow	4	0%	
9/1/09	Alfalfa, spring	Harvest		0%	-30%
10/1/09	Alfalfa, spring	Plow, moldboard, conventional		100%	
12/31/09	Alfalfa, spring	End Rotation		100%	

## CMZ 28, Irrigated

CMZ-28, IR [CG(2)BDWW,ds,pf,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, high yield	Over winter loss N		30%	
3/15/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/1/00	Corn, grain, high yield	Disk, tandem, finishing N		100%	
4/15/00	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
5/1/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/16/00	Corn, grain 15	Grow	1	100%	
5/31/00	Corn, grain 30	Grow	1	100%	
6/1/00	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/15/00	Corn, grain 45	Grow	1	100%	
6/30/00	Corn, grain 60	Grow	1	100%	
7/1/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/15/00	Corn, grain 75	Grow	3	100%	
10/15/00	Corn, grain, high yield	Harvest		20%	40%
11/1/00	Corn, grain, high yield	Plow, moldboard, conventional		100%	
1/2/01	Corn, grain, high yield	Over winter loss N		100%	
4/1/01	Corn, grain, high yield	Disk, tandem, secondary op. N		100%	
5/1/01	Corn, grain, high yield	Chisel, sweeps, 9-16" sp N		100%	
5/15/01	Corn, grain, high yield	Packer, roller		100%	
6/1/01	Beans, dry	Planter, DD opener, 30 in sp N	1	100%	
6/16/01	Bean 15	Grow	1	100%	
7/1/01	Bean 30	Grow		100%	
7/1/01	Bean 30	Cultivator, rowcrop, 3 in ridge	1	100%	
7/16/01	Bean 45	Grow		100%	
7/16/01	Bean 45	Cultivator, rowcrop, 3 in ridge	1	100%	
7/31/01	Bean 60	Grow	1	100%	
8/15/01	Bean 75	Grow	2	100%	
9/1/01	Beans, dry	Harvest		100%	
9/5/01	Beans, dry	Chisel-disk, straight points F		100%	
9/10/01	Wheat, winter, yield irr	Planting, broadcast		100%	
9/20/01	Wheat, winter, yield irr	Packer, roller		100%	
9/25/01	Wheat, winter, irr, late 015	Grow	1	100%	
10/10/01	Wheat, winter, irr, late 030	Grow		100%	
10/25/01	Wheat, winter, irr, late 045	Grow		100%	
11/9/01	Wheat, winter, irr, late 060	Grow		100%	
11/24/01	Wheat, winter, irr, late 075	Grow		100%	
12/9/01	Wheat, winter, irr, late 105	Grow		100%	
12/24/01	Wheat, winter, irr, late 120	Grow		100%	
1/2/02	Wheat, winter, irr, late 135	Over winter loss F		100%	
1/8/02	Wheat, winter, irr, late 135	Grow		100%	
1/23/02	Wheat, winter, irr, late 150	Grow		100%	
2/7/02	Wheat, winter, irr, late 165	Grow		100%	
2/22/02	Wheat, winter, irr, late 180	Grow		100%	
3/9/02	Wheat, winter, irr, late 195	Grow		100%	
3/24/02	Wheat, winter, irr, late 210	Grow		100%	
4/8/02	Wheat, winter, irr, late 225	Grow	1	100%	
4/23/02	Wheat, winter, irr, late 240	Grow	3	100%	
7/15/02	Wheat, winter, yield irr	Harvest		20%	-10%
1/2/03	Wheat, winter, yield irr	Over winter loss N		20%	
3/15/03	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	

## CMZ 28, Irrigated

CMZ-28, IR [CG(2)BDWW,ds,pf,chf] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
4/5/03	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
4/15/03	Wheat, winter, yield irr	Cultivator, field, sweeps, 9"-16" N		100%	
5/1/03	Corn, grain, high yield	Planter, DD opener, 30 in sp N	1	100%	
5/16/03	Corn, grain 15	Grow	1	100%	
5/31/03	Corn, grain 30	Grow	1	100%	
6/15/03	Corn, grain 30	Cultivator, rowcrop, 3 in ridge		100%	
6/30/03	Corn, grain 45	Grow	1	100%	
7/15/03	Corn, grain 60	Grow	1	100%	
7/30/03	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
8/14/03	Corn, grain 75	Grow	2	100%	
10/15/03	Corn, grain, high yield	Harvest		20%	40%
12/31/03	Corn, grain, high yield	End Rotation		20%	

## CMZ 28, Irrigated

CMZ-28, I [CGBAAL(4),ds,pf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Alfalfa, fall	Over winter loss F		100%	
3/15/00	Alfalfa, fall	Disk, tandem, finishing F		100%	
4/15/00	Alfalfa, fall	Cultivator, field, sweeps, 9"-16" N		100%	
5/1/00	Corn, grain, high yield	Planter, DD opener, 30 in sp N		100%	
5/16/00	Corn, grain 15	Grow	1	100%	
5/31/00	Corn, grain 30	Grow	1	100%	
6/15/00	Corn, grain 45	Grow	1	100%	
6/30/00	Corn, grain 60	Grow	1	100%	
7/15/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/30/00	Corn, grain 75	Grow	3	100%	
10/15/00	Corn, grain, high yield	Harvest		20%	40%
1/2/01	Corn, grain, high yield	Over winter loss N		40%	
3/15/01	Corn, grain, high yield	Disk, tandem, heavy, primary op. N		100%	
4/1/01	Corn, grain, high yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/15/01	Barley, spring, high yield	Planting, broadcast		100%	
4/30/01	Spring Grain 15	Grow	1	100%	
5/15/01	Spring Grain 30	Grow	1	100%	
5/30/01	Spring Grain 45	Grow	1	100%	
6/14/01	Spring Grain 60	Grow	1	100%	
6/29/01	Spring Grain 75	Grow	2	100%	
8/15/01	Barley, spring, high yield	Harvest		20%	
8/30/01	Barley, spring, high yield	Plow, moldboard, conventional		100%	
9/2/01	Barley, spring, high yield	Disk, tandem, finishing N		100%	
9/5/01	Barley, spring, high yield	Packer, roller		100%	
9/15/01	Alfalfa, fall	Drill or Air seeder, DD opener N	1	100%	
9/30/01	Alfalfa 15	Grow	1	100%	
10/15/01	Alfalfa 30	Grow		100%	
10/30/01	Alfalfa 45	Grow		100%	
4/1/02	Alfalfa 60	Grow		100%	
4/16/02	Alfalfa 75	Grow	4	100%	
10/15/02	Alfalfa, fall	Harvest		0%	10%
1/1/03	Alfalfa, fall	Over winter loss N		0%	
3/15/03	Alfalfa 75	Grow	5	0%	
10/15/03	Alfalfa, fall	Harvest		0%	10%
1/1/04	Alfalfa, fall	Over winter loss N		0%	
3/15/04	Alfalfa 75	Grow	5	0%	
10/15/04	Alfalfa, fall	Harvest		0%	10%
1/1/05	Alfalfa, fall	Over winter loss N		0%	
3/15/05	Alfalfa 75	Grow	5	0%	
10/1/05	Alfalfa, fall	Harvest		0%	10%
10/15/05	Alfalfa, fall	Plow, moldboard, conventional		100%	
12/31/05	Alfalfa, fall	End Rotation		100%	

## CMZ 28, Irrigated

CMZ-28, I [CI(2)WWAL(4),ds,pf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Alfalfa, fall	Over winter loss N		100%	
3/15/00	Alfalfa, fall	Disk, tandem, finishing F		100%	
4/15/00	Alfalfa, fall	Chisel, sweeps, 9-16" sp N		100%	
5/1/00	Corn, silage	Planter, DD opener, 30 in sp N		100%	
5/16/00	Corn, grain 15	Grow	1	100%	
5/31/00	Corn, grain 30	Grow	1	100%	
6/15/00	Corn, grain 45	Grow	1	100%	
6/30/00	Corn, grain 60	Grow	1	100%	
7/15/00	Corn, grain 60	Cultivator, rowcrop, 3 in ridge		100%	
7/30/00	Corn, grain 75	Grow	3	100%	
10/15/00	Corn, silage	Harvest		30%	
1/2/01	Corn, silage	Over winter loss N		40%	
3/15/01	Corn, silage	Disk, tandem, heavy, primary op. N		100%	
4/1/01	Corn, silage	Cultivator, field, sweeps, 9"-16" N		100%	
5/1/01	Corn, silage	Planter, DD opener, 30 in sp N		100%	
5/16/01	Corn, grain 15	Grow	1	100%	
5/31/01	Corn, grain 30	Grow	1	100%	
6/15/01	Corn, grain 45	Grow	1	100%	
6/30/01	Corn, grain 45	Cultivator, rowcrop, 3 in ridge		100%	
7/15/01	Corn, grain 60	Grow	1	100%	
7/30/01	Corn, grain 75	Grow	3	100%	
9/1/01	Corn, silage	Harvest		30%	
9/5/01	Corn, silage	Disk, tandem, heavy, primary op. N		100%	
9/10/01	Corn, silage	Packer, roller		100%	
9/15/01	Wheat, winter, yield irr	Drill or Air seeder, DD opener N	1	100%	
9/30/01	Wheat, winter, irr, late 015	Grow	1	100%	
10/15/01	Wheat, winter, irr, late 030	Grow		100%	
10/30/01	Wheat, winter, irr, late 045	Grow		100%	
11/14/01	Wheat, winter, irr, late 060	Grow		100%	
11/29/01	Wheat, winter, irr, late 075	Grow		100%	
12/29/01	Wheat, winter, irr, late 105	Grow		100%	
1/13/02	Wheat, winter, irr, late 120	Grow		100%	
1/28/02	Wheat, winter, irr, late 135	Grow		100%	
2/12/02	Wheat, winter, irr, late 150	Grow		100%	
2/27/02	Wheat, winter, irr, late 165	Grow		100%	
3/14/02	Wheat, winter, irr, late 180	Grow		100%	
3/29/02	Wheat, winter, irr, late 195	Grow		100%	
4/13/02	Wheat, winter, irr, late 210	Grow		100%	
4/28/02	Wheat, winter, irr, late 225	Grow	1	100%	
5/13/02	Wheat, winter, irr, late 240	Grow	4	100%	
7/15/02	Wheat, winter, yield irr	Harvest		30%	-10%
8/1/02	Wheat, winter, yield irr	Plow, moldboard, conventional		100%	
8/15/02	Wheat, winter, yield irr	Disk, tandem, finishing N		100%	
8/20/02	Wheat, winter, yield irr	Harrow, spring tooth N		100%	
9/1/02	Alfalfa, fall	Drill or Air seeder, DD opener N	1	100%	
9/16/02	Alfalfa 15	Grow	1	100%	
10/1/02	Alfalfa 30	Grow		100%	
10/16/02	Alfalfa 45	Grow	1	100%	
3/1/03	Alfalfa 45	Grow		100%	

## CMZ 28, Irrigated

CMZ-28, I [CI(2)WWAL(4),ds,pf] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/16/03	Alfalfa 60	Grow		100%	
3/31/03	Alfalfa 75	Grow	7	100%	
10/1/03	Alfalfa, fall	Harvest		0%	10%
1/5/04	Alfalfa, fall	Over winter loss N		0%	
3/15/04	Alfalfa 75	Grow	7	0%	
10/1/04	Alfalfa, fall	Harvest		0%	10%
1/5/05	Alfalfa, fall	Over winter loss N		0%	
3/15/05	Alfalfa 75	Grow	7	0%	
10/1/05	Alfalfa, fall	Harvest		0%	10%
1/5/06	Alfalfa, fall	Over winter loss N		0%	
3/15/06	Alfalfa 75	Grow	7	0%	
10/1/06	Alfalfa, fall	Harvest		0%	10%
10/15/06	Alfalfa, fall	Plow, moldboard, conventional		100%	
12/31/06	Alfalfa, fall	End Rotation		100%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWFA,swsu] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		100%	
6/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
8/30/00	Wheat, winter, yield low	Rodweeder, plain, early N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	20%
9/15/01	Wheat, winter, yield low	Sweep plow, wide, w/treader N		90%	
12/31/01	Wheat, winter, yield low	End Rotation		100%	

CMZ-05, NI [WWFA,swsu,swf] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		100%	
6/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
8/30/00	Wheat, winter, yield low	Rodweeder, plain, early N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	20%
9/15/01	Wheat, winter, yield low	Sweep plow, wide, w/treader N		90%	
12/31/01	Wheat, winter, yield low	End Rotation		100%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWSOFA,swsu]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Sorghum, grain	Over winter loss N		30%	
6/1/00	Sorghum, grain	Sweep plow, wide, w/treader N		100%	
8/30/00	Sorghum, grain	Rodweeder, plain, early N		100%	
9/14/00	Sorghum, grain	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	20%
1/2/02	Wheat, winter, yield low	Over winter loss N		40%	
5/25/02	Sorghum, grain, high	Planter, DD opener, 30 in sp N		50%	
6/9/02	Sorghum 15	Grow		60%	
6/24/02	Sorghum 30	Grow		60%	
7/9/02	Sorghum 45	Grow		60%	
7/24/02	Sorghum 60	Grow		65%	
8/9/02	Sorghum 75	Grow		65%	
8/24/02	Sorghum 90	Grow		65%	
9/30/02	Sorghum, grain, high	Harvest		10%	-20%
12/31/02	Sorghum, grain, high	End Rotation		20%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWCGFA,swsu] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, low yield	Over winter loss N		20%	
5/1/00	Corn, grain, low yield	Sweep plow, wide, w/treader N		90%	
7/15/00	Corn, grain, low yield	Sweep plow, wide, w/treader N		100%	
8/30/00	Corn, grain, low yield	Rodweeder, plain, early N		100%	
9/13/00	Corn, grain, low yield	Rodweeder, plain, late N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	-50%
1/2/02	Wheat, winter, yield low	Over winter loss N		40%	
5/10/02	Corn, grain, low yield	Drill or Air seeder, DD opener N		50%	
5/25/02	Corn, grain 15	Grow		60%	
6/9/02	Corn, grain 30	Grow		60%	
6/9/02	Corn, grain 45	Grow		60%	
6/24/02	Corn, grain 60	Grow		65%	
7/9/02	Corn, grain 75	Grow		65%	
10/15/02	Corn, grain, low yield	Harvest		10%	50%
12/31/02	Corn, grain, low yield	End Rotation		20%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWCGFA,swsu,sws] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Corn, grain, low yield	Over winter loss N		30%	
6/15/00	Corn, grain, low yield	Sweep plow, wide, w/treader N		100%	
8/15/00	Corn, grain, low yield	Rodweeder, plain, early N		100%	
9/13/00	Corn, grain, low yield	Chisel-disk-harrow -packer (comb) N		100%	
9/14/00	Corn, grain, low yield	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	0%
1/2/02	Wheat, winter, yield low	Over winter loss N		40%	
4/1/02	Wheat, winter, yield low	Sweep plow, wide, >40 in sp N		100%	
4/20/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		100%	
5/10/02	Corn, grain, low yield	Planter, DD opener, 30 in sp N		100%	
5/25/02	Corn, grain 15	Grow		100%	
6/9/02	Corn, grain 30	Grow		100%	
6/9/02	Corn, grain 45	Grow		100%	
6/24/02	Corn, grain 60	Grow		100%	
7/9/02	Corn, grain 75	Grow		100%	
10/15/02	Corn, grain, low yield	Harvest		10%	10%
12/31/02	Corn, grain, low yield	End Rotation		20%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWSFFAWWFA,swsu]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		50%	
5/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		90%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
8/30/00	Wheat, winter, yield low	Rodw eeder, plain, early N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	20%
1/2/02	Wheat, winter, yield low	Over winter loss N		45%	
6/10/02	Sunflower	Drill or Air seeder, chisel or hoe opener N		50%	
6/25/02	Sunflower 15	Grow		60%	
7/9/02	Sunflower 30	Grow		60%	
7/24/02	Sunflower 45	Grow		60%	
8/9/02	Sunflower 60	Grow		65%	
8/24/02	Sunflower 75	Grow		65%	
9/15/02	Sunflower 90	Grow		65%	
10/15/02	Sunflower	Harvest		10%	-20%
1/2/03	Sunflower	Over winter loss F		30%	
6/15/03	Sunflower	Sweep plow, wide, w/treader F		100%	
8/30/03	Sunflower	Rodweeder, plain, early F		100%	
9/14/03	Sunflower	Over summer loss F		100%	
9/15/03	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/03	Wheat, winter, early 015	Grow		100%	
10/15/03	Wheat, winter, early 030	Grow		100%	
10/30/03	Wheat, winter, early 045	Grow		100%	
11/15/03	Wheat, winter, early 060	Grow		100%	
1/2/04	Wheat, winter, early 060	Over winter loss F		100%	
3/2/04	Wheat, winter, early 165	Grow		100%	
3/17/04	Wheat, winter, early 180	Grow		100%	
4/1/04	Wheat, winter, early 195	Grow		100%	
4/16/04	Wheat, winter, early 210	Grow		100%	
5/1/04	Wheat, winter, early 225	Grow		100%	
5/16/04	Wheat, winter, early 240	Grow		100%	
7/15/04	Wheat, winter, yield low	Harvest		30%	20%
12/31/04	Wheat, winter, yield low	End Rotation		40%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWBDWWFA,dsu,chs,CHF]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		40%	
6/1/00	Wheat, winter, yield low	Disk, tandem, finishing N		90%	
7/15/00	Wheat, winter, yield low	Chisel, straight points N		100%	
8/30/00	Wheat, winter, yield low	Chisel, straight points N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, w inter, yield low	Harvest		50%	-20%
1/2/02	Wheat, winter, yield low	Over winter loss N		40%	
5/15/02	Wheat, winter, yield low	Chisel-disk-harrow -packer (comb) N		100%	
6/1/02	Beans, dry, marginal yields	Planter, DD opener, 30 in sp N		100%	
6/16/02	Bean 15	Grow		100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, 3 in ridge		100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, 3 in ridge		100%	
7/31/02	Bean 60	Grow		100%	
8/15/02	Bean 75	Grow		100%	
8/30/02	Beans, dry, marginal yields	Harvest		100%	-30%
9/1/02	Beans, dry, marginal yields	Chisel, straight points F		40%	
9/15/02	Wheat, winter, yield low	Drill, air seeder, sweep/band opener F		40%	
9/30/02	Wheat, winter, early 015	Grow		40%	
10/15/02	Wheat, winter, early 030	Grow		50%	
10/30/02	Wheat, winter, early 045	Grow		50%	
11/15/02	Wheat, winter, early 060	Grow		60%	
1/2/03	Wheat, winter, early 060	Over winter loss F		60%	
3/2/03	Wheat, winter, early 165	Grow		90%	
3/17/03	Wheat, winter, early 180	Grow		100%	
4/1/03	Wheat, winter, early 195	Grow		100%	
4/16/03	Wheat, winter, early 210	Grow		100%	
5/1/03	Wheat, winter, early 225	Grow		100%	
5/16/03	Wheat, winter, early 240	Grow		100%	
7/15/03	Wheat, winter, yield low	Harvest		30%	-20%
12/31/03	Wheat, winter, yield low	End Rotation		40%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWSFFA,chs]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Sunflower	Over winter loss F		10%	
9/14/00	Sunflower	Over summer loss F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
1/2/01	Wheat, winter, early 075	Over winter loss F		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	50%
1/2/02	Wheat, winter, yield low	Over winter loss N		60%	
5/15/02	Wheat, winter, yield low	Chisel-disk-harrow -packer (comb) N		100%	
6/15/02	Sunflower	Planter, DD opener, w/fluted coulter N		100%	
6/30/02	Sunflower 15	Grow		100%	
7/15/02	Sunflower 30	Grow		100%	
7/15/02	Sunflower 30	Cultivator, rowcrop, 3 in ridge		100%	
7/31/02	Sunflower 45	Grow		100%	
8/15/02	Sunflower 60	Grow		100%	
8/30/02	Sunflower 75	Grow		100%	
10/15/02	Sunflower	Harvest		0%	30%
12/31/02	Sunflower	End Rotation		10%	

**CMZ 05, Nonirrigated**

<b>CMZ-05, NI [SO,ds] System #1</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
1/2/00	Sorghum, grain	Over winter loss N		40%	
5/1/00	Sorghum, grain	Disk, tandem, finishing N		100%	
5/20/00	Sorghum, grain	Planter, lister opener, 30 in sp. N		100%	
6/4/00	Sorghum 15	Grow		100%	
6/19/00	Sorghum 30	Grow		100%	
6/19/00	Sorghum 30	Cultivator, rowcrop, 3 in ridge		100%	
7/4/00	Sorghum 45	Grow		100%	
7/19/00	Sorghum 60	Grow		100%	
7/19/00	Sorghum 60	Cultivator, rowcrop, 1 in ridge		100%	
8/3/00	Sorghum 75	Grow		100%	
8/18/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain, low	Harvest		20%	30%
12/31/00	Sorghum, grain	End Rotation		30%	

<b>CMZ-05, NI [SO,swls] System #2</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
1/2/00	Sorghum, grain	Over winter loss N		40%	
5/5/00	Sorghum, grain	Sweep plow, wide, w/treader N		100%	
5/10/00	Sorghum, grain	Sweep plow, wide, w/treader N		100%	
6/5/00	Sorghum, grain	Planter, strip-till, fluted coulters		100%	
6/20/00	Sorghum 15	Grow		100%	
7/5/00	Sorghum 30	Grow		100%	
7/5/00	Sorghum 30	Cultivator, rowcrop, 1 in ridge		100%	
7/20/00	Sorghum 45	Grow		100%	
8/4/00	Sorghum 60	Grow		100%	
8/8/00	Sorghum 75	Grow		100%	
8/23/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain, high	Harvest		20%	-10%
12/31/00	Sorghum, grain	End Rotation		30%	

## CMZ 05, Nonirrigated

CMZ-05, NI [WWMOFA,swsu,sws]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Millet	Over winter loss N		60%	
8/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
9/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
1/2/01	Wheat, winter, early 060	Over winter loss N		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	40%
1/2/02	Wheat, winter, yield low	Over winter loss N		50%	
4/1/02	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
5/1/02	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
6/1/02	Millet	Drill or Air seeder, chisel or hoe opener N		100%	
6/16/02	Millet 15	Grow		100%	
7/1/02	Millet 30	Grow		100%	
7/16/02	Millet 45	Grow		100%	
7/31/02	Millet 60	Grow		100%	
8/15/02	Millet 75	Grow		100%	
8/30/02	Millet 90	Grow		100%	
9/1/02	Millet	Harvest		15%	10%
12/31/02	Millet	End Rotation		40%	

## CMZ 12, Nonirrigated

CMZ-12, NI [WWFA,ds] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		60%	
5/1/00	Wheat, winter, yield low	Disk, tandem, secondary op. N		90%	
7/1/00	Wheat, winter, yield low	Cultivator, field, sweeps, 9" - 16" N		100%	
8/15/00	Wheat, winter, yield low	Rodweeder, plain, early N		100%	
9/29/00	Wheat, winter, yield low	Over summer loss N		100%	
9/30/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
10/15/00	Wheat, winter, nw, late 015	Grow		100%	
10/30/00	Wheat, winter, nw, late 030	Grow		100%	
11/14/00	Wheat, winter, nw, late 045	Grow		100%	
11/29/00	Wheat, winter, nw, late 060	Grow		100%	
12/14/00	Wheat, winter, nw, late 075	Grow		100%	
12/29/00	Wheat, winter, nw, late 090	Grow		100%	
1/2/01	Wheat, winter, nw, late 090	Grow		100%	
1/13/01	Wheat, winter, nw, late 105	Over winter loss N		100%	
1/28/01	Wheat, winter, nw, late 120	Grow		100%	
2/12/01	Wheat, winter, nw, late 135	Grow		100%	
2/27/01	Wheat, winter, nw, late 150	Grow		100%	
3/14/01	Wheat, winter, nw, late 165	Grow		100%	
3/29/01	Wheat, winter, nw, late 180	Grow		100%	
4/13/01	Wheat, winter, nw, late 195	Grow		100%	
4/28/01	Wheat, winter, nw, late 210	Grow		100%	
5/13/01	Wheat, winter, nw, late 225	Grow		100%	
5/28/01	Wheat, winter, nw, late 240	Grow		100%	
8/20/01	Wheat, winter, yield low	Harvest		30%	-30%
12/31/01	Wheat, winter, yield low	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12, NI [WWFA,fcs,chf] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		60%	
5/1/00	Wheat, winter, yield low	Cultivator, field, sweeps, 9" -16" N		90%	
7/1/00	Wheat, winter, yield low	Cultivator, field, sweeps, 9" -16" N		100%	
8/15/00	Wheat, winter, yield low	Rodweeder, plain, early N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Harrow, spring tooth N		100%	
9/30/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
10/15/00	Wheat, winter, nw, late 015	Grow		100%	
10/30/00	Wheat, winter, nw, late 030	Grow		100%	
11/14/00	Wheat, winter, nw, late 045	Grow		100%	
11/29/00	Wheat, winter, nw, late 060	Grow		100%	
12/14/00	Wheat, winter, nw, late 075	Grow		100%	
12/29/00	Wheat, winter, nw, late 090	Grow		100%	
1/2/01	Wheat, winter, nw, late 090	Over winter loss N		100%	
1/13/01	Wheat, winter, nw, late 105	Grow		100%	
1/28/01	Wheat, winter, nw, late 120	Grow		100%	
2/12/01	Wheat, winter, nw, late 135	Grow		100%	
2/27/01	Wheat, winter, nw, late 150	Grow		100%	
3/14/01	Wheat, winter, nw, late 165	Grow		100%	
3/29/01	Wheat, winter, nw, late 180	Grow		100%	
4/13/01	Wheat, winter, nw, late 195	Grow		100%	
4/28/01	Wheat, winter, nw, late 210	Grow		100%	
5/13/01	Wheat, winter, nw, late 225	Grow		100%	
5/28/01	Wheat, winter, nw, late 240	Grow		100%	
8/20/01	Wheat, winter, yield low	Harvest		30%	-30%
10/1/01	Wheat, winter, yield low	Chisel, straight points N		50%	
12/31/01	Wheat, winter, yield low	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12, NI [WWFA,ps,chf] System #3					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		60%	
5/15/00	Wheat, winter, yield low	Disk, tandem, secondary op. N		90%	
6/15/00	Wheat, winter, yield low	Plow, moldboard, conventional		90%	
7/1/00	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		100%	
9/15/00	Wheat, winter, yield low	Rodweeder, plain, early N		100%	
9/29/00	Wheat, winter, yield low	Over summer loss N		100%	
9/30/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
10/15/00	Wheat, winter, nw, late 015	Grow		100%	
10/30/00	Wheat, winter, nw, late 030	Grow		100%	
11/14/00	Wheat, winter, nw, late 045	Grow		100%	
11/29/00	Wheat, winter, nw, late 060	Grow		100%	
12/14/00	Wheat, winter, nw, late 075	Grow		100%	
12/29/00	Wheat, winter, nw, late 090	Grow		100%	
1/2/01	Wheat, winter, nw, late 090	Over winter loss N		100%	
1/13/01	Wheat, winter, nw, late 105	Grow		100%	
1/28/01	Wheat, winter, nw, late 120	Grow		100%	
2/12/01	Wheat, winter, nw, late 135	Grow		100%	
2/27/01	Wheat, winter, nw, late 150	Grow		100%	
3/14/01	Wheat, winter, nw, late 165	Grow		100%	
3/29/01	Wheat, winter, nw, late 180	Grow		100%	
4/13/01	Wheat, winter, nw, late 195	Grow		100%	
4/28/01	Wheat, winter, nw, late 210	Grow		100%	
5/13/01	Wheat, winter, nw, late 225	Grow		100%	
5/28/01	Wheat, winter, nw, late 240	Grow		100%	
8/20/01	Wheat, winter, yield low	Harvest		30%	-20%
9/15/01	Wheat, winter, yield low	Chisel, straight points N		50%	
12/31/01	Wheat, winter, yield low	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12, NI [WWWSFA,ps,chf,fcs] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, spring	Over winter loss N		60%	
5/1/00	Wheat, spring	Disk, tandem, secondary op. N		90%	
6/15/00	Wheat, spring	Plow, moldboard, conventional		100%	
7/15/00	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Wheat, spring	Rodweeder, plain, early N		100%	
9/29/00	Wheat, spring	Over summer loss N		100%	
9/30/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
10/15/00	Wheat, w inter, nw, late 015	Grow		100%	
10/30/00	Wheat, winter, nw, late 030	Grow		100%	
11/14/00	Wheat, winter, nw, late 045	Grow		100%	
11/29/00	Wheat, winter, nw, late 060	Grow		100%	
12/14/00	Wheat, winter, nw, late 075	Grow		100%	
12/29/00	Wheat, winter, nw, late 090	Grow		100%	
1/2/01	Wheat, winter, nw, late 090	Over winter loss N		100%	
1/13/01	Wheat, winter, nw, late 105	Grow		100%	
1/28/01	Wheat, winter, nw, late 120	Grow		100%	
2/12/01	Wheat, winter, nw, late 135	Grow		100%	
2/27/01	Wheat, winter, nw, late 150	Grow		100%	
3/14/01	Wheat, winter, nw, late 165	Grow		100%	
3/29/01	Wheat, winter, nw, late 180	Grow		100%	
4/13/01	Wheat, winter, nw, late 195	Grow		100%	
4/28/01	Wheat, winter, nw, late 210	Grow		100%	
5/13/01	Wheat, winter, nw, late 225	Grow		100%	
5/28/01	Wheat, winter, nw, late 240	Grow		100%	
8/20/01	Wheat, winter, yield low	Harvest		30%	-30%
10/1/01	Wheat, winter, yield low	Chisel, straight points N		50%	
1/1/02	Wheat, winter, yield low	Over winter loss N		60%	
4/1/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		70%	
4/15/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		90%	
5/1/02	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
5/16/02	Spring Grain 15	Grow		100%	
5/31/02	Spring Grain 30	Grow		100%	
6/15/02	Spring Grain 45	Grow		100%	
6/30/02	Spring Grain 60	Grow		100%	
7/15/02	Spring Grain 75	Grow		100%	
9/1/02	Wheat, spring	Harvest		30%	-50%
10/1/02	Wheat, spring	Chisel, straight points N		40%	
12/31/02	Wheat, spring	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12, NI [WWWSFA, chls, chf] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, spring	Over winter loss N		60%	
5/1/00	Wheat, spring	Chisel, straight points N		90%	
7/1/00	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Wheat, spring	Rodweeder, plain, early N		100%	
9/14/00	Wheat, spring	Harrow, spring tooth N		100%	
9/29/00	Wheat, spring	Over summer loss N		100%	
9/30/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
10/15/00	Wheat, winter, nw, late 015	Grow		100%	
10/30/00	Wheat, winter, nw, late 030	Grow		100%	
11/14/00	Wheat, winter, nw, late 045	Grow		100%	
11/29/00	Wheat, winter, nw, late 060	Grow		100%	
12/14/00	Wheat, winter, nw, late 075	Grow		100%	
12/29/00	Wheat, winter, nw, late 090	Grow		100%	
1/2/01	Wheat, winter, nw, late 090	Over winter loss N		100%	
1/13/01	Wheat, winter, nw, late 105	Grow		100%	
1/28/01	Wheat, winter, nw, late 120	Grow		100%	
2/12/01	Wheat, winter, nw, late 135	Grow		100%	
2/27/01	Wheat, winter, nw, late 150	Grow		100%	
3/14/01	Wheat, winter, nw, late 165	Grow		100%	
3/29/01	Wheat, winter, nw, late 180	Grow		100%	
4/13/01	Wheat, winter, nw, late 195	Grow		100%	
4/28/01	Wheat, winter, nw, late 210	Grow		100%	
5/13/01	Wheat, winter, nw, late 225	Grow		100%	
5/28/01	Wheat, winter, nw, late 240	Grow		100%	
8/20/01	Wheat, winter, yield low	Harvest		30%	-20%
10/1/01	Wheat, winter, yield low	Chisel, straight points N		50%	
1/2/02	Wheat, winter, yield low	Over winter loss N		60%	
4/1/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		70%	
4/15/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		90%	
5/1/02	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
5/16/02	Spring Grain 15	Grow		100%	
5/31/02	Spring Grain 30	Grow		100%	
6/15/02	Spring Grain 45	Grow		100%	
6/30/02	Spring Grain 60	Grow		100%	
7/15/02	Spring Grain 75	Grow		100%	
9/1/02	Wheat, spring	Harvest		30%	-50%
10/1/02	Wheat, spring	Chisel, straight points N		40%	
12/31/02	Wheat, spring	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12, NI [WWWSFA, chls, chf] System #3					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, spring	Over winter loss N		60%	
5/1/00	Wheat, spring	Chisel, sweeps, 9-16" sp N		90%	
7/1/00	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Wheat, spring	Rodweeder, plain, early N		100%	
9/14/00	Wheat, spring	Harrow, spring tooth N		100%	
9/29/00	Wheat, spring	Over summer loss N		100%	
9/30/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
10/15/00	Wheat, winter, nw, late 015	Grow		100%	
10/30/00	Wheat, winter, nw, late 030	Grow		100%	
11/14/00	Wheat, winter, nw, late 045	Grow		100%	
11/29/00	Wheat, winter, nw, late 060	Grow		100%	
12/14/00	Wheat, winter, nw, late 075	Grow		100%	
12/29/00	Wheat, winter, nw, late 090	Grow		100%	
1/2/01	Wheat, winter, nw, late 090	Over winter loss N		100%	
1/13/01	Wheat, winter, nw, late 105	Grow		100%	
1/28/01	Wheat, winter, nw, late 120	Grow		100%	
2/12/01	Wheat, winter, nw, late 135	Grow		100%	
2/27/01	Wheat, winter, nw, late 150	Grow		100%	
3/14/01	Wheat, winter, nw, late 165	Grow		100%	
3/29/01	Wheat, winter, nw, late 180	Grow		100%	
4/13/01	Wheat, winter, nw, late 195	Grow		100%	
4/28/01	Wheat, winter, nw, late 210	Grow		100%	
5/13/01	Wheat, winter, nw, late 225	Grow		100%	
5/28/01	Wheat, winter, nw, late 240	Grow		100%	
8/20/01	Wheat, winter, yield low	Harvest		30%	-30%
10/1/01	Wheat, winter, yield low	Chisel, straight points N		50%	
1/2/02	Wheat, winter, yield low	Over winter loss N		60%	
4/1/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		70%	
4/15/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		90%	
5/1/02	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
5/16/02	Spring Grain 15	Grow		100%	
5/31/02	Spring Grain 30	Grow		100%	
6/15/02	Spring Grain 45	Grow		100%	
6/30/02	Spring Grain 60	Grow		100%	
7/15/02	Spring Grain 75	Grow		100%	
9/1/02	Wheat, spring	Harvest		30%	-50%
10/1/02	Wheat, spring	Chisel, straight points N		40%	
12/31/02	Wheat, spring	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12 NI [WSFA,chs,CHF] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, spring	Over winter loss N		60%	
6/1/00	Wheat, spring	Chisel, sweeps, 9-16" sp N		90%	
8/1/00	Wheat, spring	Chisel, sweeps, 9-16" sp N		100%	
9/14/00	Wheat, spring	Over summer loss N		100%	
1/2/01	Wheat, spring	Over winter loss N		100%	
5/1/01	Wheat, spring	Harrow, spring tooth N		100%	
5/2/01	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
5/16/01	Spring Grain 15	Grow		100%	
5/31/01	Spring Grain 30	Grow		100%	
6/15/01	Spring Grain 45	Grow		100%	
6/30/01	Spring Grain 60	Grow		100%	
7/15/01	Spring Grain 75	Grow		100%	
9/1/01	Wheat, spring	Harvest		30%	-20%
10/1/01	Wheat, spring	Chisel, straight points N		40%	
12/31/01	Wheat, spring	End Rotation		50%	

CMZ-12 NI [WSFA,chs,fcsu] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		60%	
3/1/00	Wheat, spring	Over winter loss N		60%	
5/1/00	Wheat, spring	Chisel, sweeps, 9-16" sp N		90%	
7/1/00	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
9/14/00	Wheat, spring	Over summer loss N		100%	
12/1/00	Snow Cover	Grow		100%	
3/1/01	Wheat, spring	Over winter loss N		100%	
4/1/01	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
4/15/01	Wheat, spring	Harrow, spring tooth N		100%	
5/1/01	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
5/16/01	Spring Grain 15	Grow		100%	
5/31/01	Spring Grain 30	Grow		100%	
6/15/01	Spring Grain 45	Grow		100%	
6/30/01	Spring Grain 60	Grow		100%	
7/15/01	Spring Grain 75	Grow		100%	
9/1/01	Wheat, spring	Harvest		30%	-50%
12/1/01	Snow Cover	Grow		50%	
12/31/01	Wheat, spring	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12 NI [WSFA,chs,fcsu] System #3					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		60%	
3/1/00	Wheat, spring	Over winter loss N		60%	
5/1/00	Wheat, spring	Chisel, straight points N		90%	
7/1/00	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Wheat, spring	Rodweeder, plain, early N		100%	
9/14/00	Wheat, spring	Over summer loss N		100%	
12/1/00	Snow Cover	Grow		100%	
3/1/01	Wheat, spring	Over winter loss N		100%	
4/1/01	Wheat, spring	Cultivator, field, sweeps, 9"-16" N		100%	
4/15/01	Wheat, spring	Harrow, spring tooth N		100%	
5/1/01	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
5/16/01	Spring Grain 15	Grow		100%	
5/31/01	Spring Grain 30	Grow		100%	
6/15/01	Spring Grain 45	Grow		100%	
6/30/01	Spring Grain 60	Grow		100%	
7/15/01	Spring Grain 75	Grow		100%	
9/1/01	Wheat, spring	Harvest		30%	-20%
12/1/01	Snow Cover	Grow		50%	
12/31/01	Wheat, spring	End Rotation		50%	

CMZ-12, NI [BAFA,chs,fcsu]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		60%	
3/1/00	Barley, spring, low yield	Over winter loss N		60%	
5/1/00	Barley, spring, low yield	Chisel, sweeps, 9-16" sp N		90%	
7/1/00	Barley, spring, low yield	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Barley, spring, low yield	Rodweeder, plain, early N		100%	
9/14/00	Barley, spring, low yield	Over summer loss N		100%	
12/1/00	Snow Cover	Grow		100%	
3/1/01	Barley, spring, low yield	Over winter loss N		100%	
4/1/01	Barley, spring, low yield	Cultivator, field, sweeps, 9"-16" N		100%	
4/15/01	Barley, spring, low yield	Harrow, spring tooth N		100%	
5/1/01	Barley, spring, low yield	Drill or Air seeder, chisel or hoe opener N		100%	
5/16/01	Spring Grain 15	Grow		100%	
5/31/01	Spring Grain 30	Grow		100%	
6/15/01	Spring Grain 45	Grow		100%	
6/30/01	Spring Grain 60	Grow		100%	
7/15/01	Spring Grain 75	Grow		100%	
9/1/01	Barley, spring, low yield	Harvest		30%	-10%
12/1/01	Snow Cover	Grow		50%	
12/31/01	Barley, spring, low yield	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12, NI [PC,pls] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Bromegrass	Over winter loss N		60%	
5/1/00	Bromegrass	Plow, moldboard, conventional		100%	
7/1/00	Bromegrass	Disk, tandem, secondary op. N		100%	
9/1/00	Bromegrass	Harrow, spring tooth N		100%	
10/1/00	Bromegrass	Drill or Air seeder, DD opener N		100%	
10/16/00	Bromegrass 15	Grow		100%	
10/31/00	Bromegrass 30	Grow		100%	
12/1/00	Snow Cover	Grow		100%	
3/15/01	Bromegrass 30	Over winter loss N		100%	
3/30/01	Bromegrass 45	Grow		100%	
4/14/01	Bromegrass 60	Grow		100%	
4/29/01	Bromegrass 75	Grow		100%	
8/15/01	Bromegrass	Harvest		100%	
4/1/02	Bromegrass	Grow		100%	
8/15/02	Bromegrass	Harvest		100%	
4/1/03	Bromegrass	Grow		100%	
8/15/03	Bromegrass	Harvest		100%	
4/1/04	Bromegrass	Grow		100%	
8/15/04	Bromegrass	Harvest		100%	
4/1/05	Bromegrass	Grow		100%	
8/15/05	Bromegrass	Harvest		100%	
4/1/06	Bromegrass	Grow		100%	
8/15/06	Bromegrass	Harvest		100%	
12/31/06	Bromegrass	End Rotation		100%	

## CMZ 12, Nonirrigated

CMZ-12, NI [PC,chs] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Bromegrass	Over winter loss N		60%	
5/1/00	Bromegrass	Chisel, straight points N		100%	
7/1/00	Bromegrass	Disk, tandem, secondary op. N		100%	
8/15/00	Bromegrass	Cultivator, field, sweeps, 9"-16" N		100%	
9/1/00	Bromegrass	Harrow, spring tooth N		100%	
10/1/00	Bromegrass	Drill or Air seeder, DD opener N		100%	
10/16/00	Bromegrass 15	Grow		100%	
10/31/00	Bromegrass 30	Grow		100%	
12/1/00	Snow Cover	Grow		100%	
3/1/01	Bromegrass 30	Over winter loss N		100%	
3/30/01	Bromegrass 45	Grow		100%	
4/14/01	Bromegrass 60	Grow		100%	
4/29/01	Bromegrass 75	Grow		100%	
8/15/01	Bromegrass	Harvest		100%	
4/1/02	Bromegrass	Grow		100%	
8/15/02	Bromegrass	Harvest		100%	
4/1/03	Bromegrass	Grow		100%	
8/15/03	Bromegrass	Harvest		100%	
4/1/04	Bromegrass	Grow		100%	
8/15/04	Bromegrass	Harvest		100%	
4/1/05	Bromegrass	Grow		100%	
8/15/05	Bromegrass	Harvest		100%	
4/1/06	Bromegrass	Grow		100%	
8/15/06	Bromegrass	Harvest		100%	
12/31/06	Bromegrass	End Rotation		100%	

## CMZ 12, Nonirrigated

CMZ-12, NI [PC(8)WW,chs,dsu]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		60%	
5/1/00	Wheat, winter, yield low	Chisel, straight points N		100%	
7/1/00	Wheat, winter, yield low	Disk, tandem, secondary op. N		100%	
8/15/00	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		100%	
9/1/00	Wheat, winter, yield low	Harrow, spring tooth N		100%	
10/1/00	Bromegrass	Drill or Air seeder, DD opener N		100%	
10/16/00	Bromegrass 15	Grow		100%	
10/31/00	Bromegrass 30	Grow		100%	
12/1/00	Snow Cover	Grow		100%	
3/1/01	Bromegrass 30	Over winter loss N		100%	
3/30/01	Bromegrass 45	Grow		100%	
4/14/01	Bromegrass 60	Grow		100%	
4/29/01	Bromegrass 75	Grow		100%	
8/15/01	Bromegrass	Harvest		100%	
4/1/02	Bromegrass 75	Grow		100%	
8/15/02	Bromegrass	Harvest		100%	
4/1/03	Bromegrass 75	Grow		100%	
8/15/03	Bromegrass	Harvest		100%	
4/1/04	Bromegrass 75	Grow		100%	
8/15/04	Bromegrass	Harvest		100%	
4/1/05	Bromegrass 75	Grow		100%	
8/15/05	Bromegrass	Harvest		100%	
4/1/06	Bromegrass 75	Grow		100%	
8/15/06	Bromegrass	Harvest		100%	
10/1/06	Bromegrass	Chisel, straight points N		100%	
6/1/07	Bromegrass	Cultivator, field, sweeps, 9"-16" N		100%	
8/1/07	Bromegrass	Harrow, spring tooth N		100%	
9/30/07	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
10/15/07	Wheat, winter, nw, late 015	Grow		100%	
10/30/07	Wheat, winter, nw, late 030	Grow		100%	
11/14/07	Wheat, winter, nw, late 045	Grow		100%	
11/29/07	Wheat, winter, nw, late 060	Grow		100%	
12/14/07	Wheat, winter, nw, late 075	Grow		100%	
12/29/07	Wheat, winter, nw, late 090	Grow		100%	
1/13/08	Wheat, winter, nw, late 105	Grow		100%	
1/28/08	Wheat, winter, nw, late 120	Grow		100%	
2/12/08	Wheat, winter, nw, late 135	Grow		100%	
2/27/08	Wheat, winter, nw, late 150	Grow		100%	
3/13/08	Wheat, winter, nw, late 165	Grow		100%	
3/28/08	Wheat, winter, nw, late 180	Grow		100%	
4/12/08	Wheat, winter, nw, late 195	Grow		100%	
4/27/08	Wheat, winter, nw, late 210	Grow		100%	
5/12/08	Wheat, winter, nw, late 225	Grow		100%	
5/27/08	Wheat, winter, nw, late 240	Grow		100%	
8/20/08	Wheat, winter, yield low	Harvest		30%	-20%
10/1/08	Wheat, winter, yield low	Chisel, straight points N		50%	
12/31/08	Wheat, winter, yield low	End Rotation		50%	

## CMZ 12, Nonirrigated

CMZ-12, NI [AL,ps] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		100%	
3/1/00	Alfalfa, spring	Over winter loss N		100%	
4/15/00	Alfalfa, spring	Plow, moldboard, conventional		100%	
4/20/00	Alfalfa, spring	Disk, tandem, finishing N		100%	
5/1/00	Alfalfa, spring	Drill or Air seeder, DD opener N		100%	
5/16/00	Alfalfa 15	Grow		100%	
5/31/00	Alfalfa 30	Grow		100%	
6/15/00	Alfalfa 45	Grow		100%	
6/30/00	Alfalfa 60	Grow		100%	
7/15/00	Alfalfa 75	Grow		100%	
7/30/00	Alfalfa 75	Grow		100%	
8/14/00	Alfalfa 75	Grow		100%	
9/1/00	Alfalfa, spring	Harvest		100%	-50%
12/1/00	Snow Cover	Grow		100%	
3/1/01	Alfalfa, spring	Over winter loss N		100%	
4/15/01	Alfalfa 75	Grow		100%	
9/1/01	Alfalfa, spring	Harvest		100%	-50%
12/1/01	Snow Cover	Grow		100%	
3/1/02	Alfalfa, spring	Over winter loss N		100%	
4/15/02	Alfalfa 75	Grow		100%	
9/1/02	Alfalfa, spring	Harvest		100%	-50%
12/1/02	Snow Cover	Grow		100%	
3/1/03	Alfalfa, spring	Over winter loss N		100%	
4/15/03	Alfalfa 75	Grow		100%	
9/1/03	Alfalfa, spring	Harvest		100%	-50%
12/1/03	Snow Cover	Grow		100%	
12/31/03	Alfalfa, spring	End Rotation		100%	

## CMZ 12, Nonirrigated

CMZ-12, NI [AL,ps] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		100%	
3/1/00	Alfalfa, spring	Over winter loss N		100%	
4/1/00	Alfalfa, spring	Plow, moldboard, conventional		100%	
4/15/00	Alfalfa, spring	Disk, tandem, finishing N		100%	
5/1/00	Alfalfa, spring	Drill or Air seeder, DD opener N		100%	
5/16/00	Alfalfa 15	Grow		100%	
5/31/00	Alfalfa 30	Grow		100%	
6/15/00	Alfalfa 45	Grow		100%	
6/30/00	Alfalfa 60	Grow		100%	
7/15/00	Alfalfa 75	Grow		100%	
7/30/00	Alfalfa 75	Grow		100%	
8/14/00	Alfalfa 75	Grow		100%	
9/1/00	Alfalfa, spring	Harvest		0%	-50%
12/1/00	Snow Cover	Grow		0%	
3/1/01	Alfalfa, spring	Over winter loss N		0%	
4/15/01	Alfalfa 75	Grow		0%	
9/1/01	Alfalfa, spring	Harvest		0%	-50%
12/1/01	Snow Cover	Grow		0%	
3/1/02	Alfalfa, spring	Over winter loss N		0%	-50%
4/15/02	Alfalfa 75	Grow		0%	
9/1/02	Alfalfa, spring	Harvest		0%	-50%
12/1/02	Snow Cover	Grow		0%	
3/1/03	Alfalfa, spring	Over winter loss N		0%	-50%
4/15/03	Alfalfa 75	Grow		0%	
9/1/03	Alfalfa, spring	Harvest		0%	-50%
12/1/03	Snow Cover	Grow		0%	
3/1/04	Alfalfa, spring	Over winter loss N		0%	-50%
4/15/04	Alfalfa 75	Grow		0%	
9/1/04	Alfalfa, spring	Harvest		0%	-50%
12/1/04	Snow Cover	Grow		0%	
3/1/05	Alfalfa, spring	Over winter loss N		0%	-50%
4/15/05	Alfalfa 75	Grow		0%	
9/1/05	Alfalfa, spring	Harvest		0%	-50%
12/1/05	Snow Cover	Grow		0%	
12/31/05	Alfalfa, spring	End Rotation		0%	

## CMZ 12, Nonirrigated

CMZ-12, NI [SO,ds] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Sorghum, grain, marginal yields	Over winter loss N		40%	
5/15/00	Sorghum, grain, marginal yields	Disk, tandem, finishing N		100%	
5/20/00	Sorghum, grain, marginal yields	Planter, strip-till, fluted coulters		100%	
6/4/00	Sorghum 15	Grow		100%	
6/19/00	Sorghum 30	Grow		100%	
6/19/00	Sorghum 30	Cultivator, rowcrop, 3 in ridge		100%	
7/4/00	Sorghum 45	Grow		100%	
7/19/00	Sorghum 60	Grow		100%	
7/19/00	Sorghum 60	Cultivator, rowcrop, 3 in ridge		100%	
8/3/00	Sorghum 75	Grow		100%	
8/18/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain, marginal yields	Harvest		20%	20%
12/31/00	Sorghum, grain, marginal yields	End Rotation		30%	

CMZ-12, NI [SO,sws] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Sorghum, grain, marginal yields	Over winter loss N		40%	
5/20/00	Sorghum, grain, marginal yields	Sweep plow, wide, w/reader N		100%	
6/5/00	Sorghum, grain, marginal yields	Planter, strip-till, fluted coulters		100%	
6/20/00	Sorghum 15	Grow		100%	
7/5/00	Sorghum 30	Grow		100%	
7/5/00	Sorghum 30	Cultivator, rowcrop, 3 in ridge		100%	
7/20/00	Sorghum 45	Grow		100%	
8/4/00	Sorghum 60	Grow		100%	
8/8/00	Sorghum 75	Grow		100%	
8/23/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain, marginal yields	Harvest		20%	20%
12/31/00	Sorghum, grain, marginal yields	End Rotation		30%	

## CMZ 13, Nonirrigated

CMZ 13, NI [WWFA,swsu] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		20%	
6/1/00	Wheat, winter, yield low	Sweep plow, 20-40 in sp N		50%	
9/14/00	Wheat, winter, yield low	Over summer loss N		50%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, DD opener N		70%	
9/30/00	Wheat, winter, NW, late 015	Grow		70%	
10/15/00	Wheat, winter, NW, late 030	Grow		70%	
10/30/00	Wheat, winter, NW, late 045	Grow		70%	
11/15/00	Wheat, winter, NW, late 060	Grow		70%	
11/30/00	Wheat, winter, NW, late 075	Grow		70%	
12/15/00	Wheat, winter, NW, late 090	Grow		70%	
12/30/00	Wheat, winter, NW, late 105	Grow		70%	
1/2/01	Wheat, winter, NW, late 105	Over winter loss N		70%	
1/15/01	Wheat, winter, NW, late 120	Grow		70%	
1/30/01	Wheat, winter, NW, late 135	Grow		70%	
2/15/01	Wheat, winter, NW, late 150	Grow		70%	
3/2/01	Wheat, winter, NW, late 165	Grow		70%	
3/17/01	Wheat, winter, NW, late 180	Grow		70%	
4/1/01	Wheat, winter, NW, late 195	Grow		70%	
4/16/01	Wheat, winter, NW, late 210	Grow		70%	
5/1/01	Wheat, winter, NW, late 225	Grow		70%	
5/16/01	Wheat, winter, NW, late 240	Grow		70%	
7/15/01	Wheat, winter, yield low	Harvest		20%	-10%
12/31/01	Wheat, winter, yield low	End Rotation		20%	

## CMZ 13, Nonirrigated

CMZ 13, NI [WWFA,sws,swsu,swf] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		40%	
5/1/00	Wheat, winter, yield low	Sweep plow, wide, >40 in sp N		50%	
7/1/00	Wheat, winter, yield low	Sweep plow, wide, >40 in sp N		70%	
9/1/03	Wheat, winter, yield low	Sweep plow, wide, >40 in sp N		70%	
9/14/00	Wheat, winter, yield low	Over summer loss N		70%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, DD opener N		70%	
9/30/00	Wheat, winter, NW, late 015	Grow		70%	
10/15/00	Wheat, winter, NW, late 030	Grow		70%	
10/30/00	Wheat, winter, NW, late 045	Grow		70%	
11/15/00	Wheat, winter, NW, late 060	Grow		70%	
11/30/00	Wheat, winter, NW, late 075	Grow		70%	
12/15/00	Wheat, winter, NW, late 090	Grow		70%	
12/30/00	Wheat, winter, NW, late 105	Grow		70%	
1/2/01	Wheat, winter, NW, late 105	Over winter loss N		70%	
1/15/01	Wheat, winter, NW, late 120	Grow		70%	
1/30/01	Wheat, winter, NW, late 135	Grow		70%	
2/15/01	Wheat, w inter, NW, late 150	Grow		70%	
3/2/01	Wheat, winter, NW, late 165	Grow		70%	
3/17/01	Wheat, winter, NW, late 180	Grow		70%	
4/1/01	Wheat, winter, NW, late 195	Grow		70%	
4/16/01	Wheat, winter, NW, late 210	Grow		70%	
5/1/01	Wheat, winter, NW, late 225	Grow		70%	
5/16/01	Wheat, winter, NW, late 240	Grow		70%	
7/15/01	Wheat, winter, yield low	Harvest		20%	-20%
9/15/01	Wheat, winter, yield low	Sweep plow, wide, >40 in sp N		40%	
12/31/01	Wheat, winter, yield low	End Rotation		40%	

## CMZ 13, Nonirrigated

CMZ 13, NI [WWFAWWAL(7),ps,df]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Alfalfa, spring	Over winter loss N		40%	
5/15/00	Alfalfa, spring	Plow, moldboard, conventional		100%	
6/15/00	Alfalfa, spring	Disk, tandem, finishing N		100%	
7/15/00	Alfalfa, spring	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Alfalfa, spring	Cultivator, field, sweeps, 9"-16" N		100%	
9/14/00	Alfalfa, spring	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, DD opener N		100%	
9/30/00	Wheat, winter, NW, late 015	Grow		100%	
10/15/00	Wheat, winter, NW, late 030	Grow		100%	
10/30/00	Wheat, winter, NW, late 045	Grow		100%	
11/15/00	Wheat, winter, NW, late 060	Grow		100%	
11/30/00	Wheat, winter, NW, late 075	Grow		100%	
12/15/00	Wheat, winter, NW, late 090	Grow		100%	
12/30/00	Wheat, winter, NW, late 105	Grow		100%	
1/2/01	Wheat, winter, NW, late 105	Over winter loss N		100%	
1/15/01	Wheat, winter, NW, late 120	Grow		100%	
1/30/01	Wheat, winter, NW, late 135	Grow		100%	
2/15/01	Wheat, winter, NW, late 150	Grow		100%	
3/2/01	Wheat, winter, NW, late 165	Grow		100%	
3/17/01	Wheat, winter, NW, late 180	Grow		100%	
4/1/01	Wheat, winter, NW, late 195	Grow		100%	
4/16/01	Wheat, winter, NW, late 210	Grow		100%	
5/1/01	Wheat, winter, NW, late 225	Grow		100%	
5/16/01	Wheat, winter, NW, late 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		20%	-20%
9/15/01	Wheat, winter, yield low	Disk, tandem, secondary op. N		100%	
1/2/02	Wheat, winter, yield low	Over winter loss N		100%	
5/15/02	Wheat, winter, yield low	Disk, tandem, secondary op. N		100%	
6/15/02	Wheat, winter, yield low	Sweep plow, wide, >40 in sp N		100%	
8/15/02	Wheat, winter, yield low	Sweep plow, wide, >40 in sp N		100%	
9/14/02	Wheat, winter, yield low	Over summer loss N		100%	
9/15/02	Wheat, winter, yield low	Drill or Air seeder, DD opener N		100%	
10/1/02	Wheat, winter, NW, late 015	Grow		70%	
10/15/02	Wheat, winter, NW, late 030	Grow		70%	
11/1/02	Wheat, winter, NW, late 045	Grow		70%	
11/15/02	Wheat, winter, NW, late 060	Grow		70%	
12/1/02	Wheat, winter, NW, late 075	Grow		70%	
12/15/02	Wheat, winter, NW, late 090	Grow		70%	
12/30/02	Wheat, winter, NW, late 105	Grow		70%	
1/2/03	Wheat, winter, NW, late 105	Over winter loss N		70%	
1/15/03	Wheat, winter, NW, late 120	Grow		70%	
1/30/03	Wheat, winter, NW, late 135	Grow		70%	
2/15/03	Wheat, winter, NW, late 150	Grow		70%	
3/1/03	Wheat, winter, NW, late 165	Grow		70%	
3/15/03	Wheat, winter, NW, late 180	Grow		70%	
4/1/03	Wheat, winter, NW, late 195	Grow		70%	

## CMZ 13, Nonirrigated

CMZ 13, NI [WWFAWWAL(7),ps,df] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
4/15/03	Wheat, winter, NW, late 210	Grow		70%	
5/1/03	Wheat, winter, NW, late 225	Grow		70%	
5/15/03	Wheat, winter, NW, late 240	Grow		70%	
7/15/03	Wheat, winter, yield low	Harvest		20%	-20%
9/15/03	Wheat, winter, yield low	Disk, tandem, finishing N		40%	
1/2/04	Wheat, winter, yield low	Over winter loss F		100%	
4/1/04	Wheat, winter, yield low	Disk, tandem, finishing N		100%	
4/10/04	Wheat, winter, yield low	Chisel-disk-harrow -packer (comb) N		100%	
4/15/04	Alfalfa, spring	Drill or Air seeder, DD opener F		100%	
4/30/04	Alfalfa 15	Grow		100%	
5/15/04	Alfalfa 30	Grow		100%	
5/30/04	Alfalfa 45	Grow		100%	
6/15/04	Alfalfa 60	Grow		100%	
7/1/04	Alfalfa 75	Grow		100%	
9/15/04	Alfalfa, spring	Harvest		0%	-50%
1/2/05	Alfalfa, spring	Over winter loss N		0%	
4/15/05	Alfalfa 75	Grow		0%	
9/15/05	Alfalfa, spring	Harvest		0%	-50%
1/2/06	Alfalfa, spring	Over winter loss N		0%	
4/15/06	Alfalfa 75	Grow		0%	
9/15/06	Alfalfa, spring	Harvest		0%	-50%
1/2/07	Alfalfa, spring	Over winter loss N		0%	
4/15/07	Alfalfa 75	Grow		0%	
9/15/07	Alfalfa, spring	Harvest		0%	-50%
1/2/08	Alfalfa, spring	Over winter loss N		0%	
4/15/08	Alfalfa 75	Grow		0%	
9/15/08	Alfalfa, spring	Harvest		0%	-50%
1/2/09	Alfalfa, spring	Over winter loss N		0%	
4/15/09	Alfalfa 75	Grow		0%	
9/15/09	Alfalfa, spring	Harvest		0%	-50%
1/2/10	Alfalfa, spring	Over winter loss N		0%	
4/15/10	Alfalfa 75	Grow		0%	
9/15/10	Alfalfa, spring	Harvest		0%	-50%
12/31/10	Alfalfa, spring	End Rotation			

## CMZ 13, Nonirrigated

CMZ 13, NI [WWBDAL(8),ps,CHF]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Alfalfa, spring	Over winter loss N		40%	
5/15/00	Alfalfa, spring	Plow, moldboard, conventional		100%	
6/15/00	Alfalfa, spring	Disk, tandem, finishing N		100%	
7/15/00	Alfalfa, spring	Cultivator, field, sweeps, 9"-16" N		100%	
8/15/00	Alfalfa, spring	Cultivator, field, sweeps, 9"-16" N		100%	
9/14/00	Alfalfa, spring	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, DD opener N		100%	
9/30/00	Wheat, winter, NW, late 015	Grow		100%	
10/15/00	Wheat, winter, NW, late 030	Grow		100%	
10/30/00	Wheat, winter, NW, late 045	Grow		100%	
11/15/00	Wheat, winter, NW, late 060	Grow		100%	
11/30/00	Wheat, winter, NW, late 075	Grow		100%	
12/15/00	Wheat, winter, NW, late 090	Grow		100%	
12/30/00	Wheat, winter, NW, late 105	Grow		100%	
1/2/01	Wheat, winter, NW, late 105	Over winter loss N		100%	
1/15/01	Wheat, winter, NW, late 120	Grow		100%	
1/30/01	Wheat, winter, NW, late 135	Grow		100%	
2/15/01	Wheat, winter, NW, late 150	Grow		100%	
3/2/01	Wheat, winter, NW, late 165	Grow		100%	
3/17/01	Wheat, winter, NW, late 180	Grow		100%	
4/1/01	Wheat, winter, NW, late 195	Grow		100%	
4/16/01	Wheat, winter, NW, late 210	Grow		100%	
5/1/01	Wheat, winter, NW, late 225	Grow		100%	
5/16/01	Wheat, winter, NW, late 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		20%	-20%
9/15/01	Wheat, winter, yield low	Chisel, straight points N		50%	
1/2/02	Wheat, winter, yield low	Over winter loss N		50%	
5/15/02	Wheat, winter, yield low	Disk, tandem, finishing N		80%	
6/1/02	Beans, dry, marginal yields	Planter, DD opener, 30 in sp N		100%	
6/15/02	Bean 15	Grow		100%	
7/1/02	Bean 30	Grow		100%	
7/15/02	Bean 45	Grow		100%	
8/1/02	Bean 60	Grow		100%	
8/15/02	Bean 75	Grow		100%	
9/1/02	Beans, dry, marginal yields	Harvest		100%	-50%
9/15/02	Beans, dry, marginal yields	Chisel, straight points F		100%	
1/2/03	Beans, dry, marginal yields	Over winter loss F		100%	
4/1/03	Beans, dry, marginal yields	Disk, tandem, finishing F		100%	
4/15/03	Beans, dry, marginal yields	Harrow, spring tooth F		100%	
5/1/03	Alfalfa, spring	Drill or Air seeder, DD opener F		100%	
5/15/03	Alfalfa 15	Grow		100%	
6/1/03	Alfalfa 30	Grow		100%	
6/15/03	Alfalfa 45	Grow		100%	
7/1/03	Alfalfa 60	Grow		100%	
7/15/03	Alfalfa 75	Grow		100%	
9/15/03	Alfalfa, spring	Harvest		0%	-50%

## CMZ 13, Nonirrigated

CMZ 13, NI [WWBDAL(8),ps,chf] (continued)					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/04	Alfalfa, spring	Over winter loss N		0%	
3/15/04	Alfalfa 75	Grow		0%	
9/15/04	Alfalfa, spring	Harvest		0%	-50%
1/2/05	Alfalfa, spring	Over winter loss N		0%	
3/15/05	Alfalfa 75	Grow		0%	
9/15/05	Alfalfa, spring	Harvest		0%	-50%
1/2/06	Alfalfa, spring	Over winter loss N		0%	
3/15/06	Alfalfa 75	Grow		0%	
9/15/06	Alfalfa, spring	Harvest		0%	-50%
1/2/07	Alfalfa, spring	Over winter loss N		0%	
3/15/07	Alfalfa 75	Grow		0%	
9/15/07	Alfalfa, spring	Harvest		0%	-50%
1/2/08	Alfalfa, spring	Over winter loss N		0%	
3/15/08	Alfalfa 75	Grow		0%	
9/15/08	Alfalfa, spring	Harvest		0%	-50%
1/2/09	Alfalfa, spring	Over winter loss N		0%	
3/15/09	Alfalfa 75	Grow		0%	
9/15/09	Alfalfa, spring	Harvest		0%	-50%
1/2/10	Alfalfa, spring	Over winter loss N		0%	
3/15/10	Alfalfa 75	Grow		0%	
9/15/10	Alfalfa, spring	Harvest		0%	-50%
12/31/10	Alfalfa, spring	End Rotation		0%	

## CMZ 13, Nonirrigated

CMZ 13, NI [WWBD,chf,fcs]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		60%	
4/15/00	Wheat, winter, yield low	Cultivator, field, sweeps, 9"-16" N		80%	
5/1/00	Beans, dry, marginal yields	Planter, DD opener, 30 in sp N		100%	
5/16/00	Bean 15	Grow		100%	
5/31/00	Bean 30	Grow		100%	
6/1/00	Bean 30	Cultivator, rowcrop, 3 in ridge		100%	
6/15/00	Bean 45	Grow		100%	
6/30/00	Bean 60	Grow		100%	
7/15/00	Bean 75	Grow		100%	
9/1/00	Beans, dry, marginal yields	Harvest		100%	-50%
9/10/00	Wheat, winter, yield low	Disk, tandem, finishing F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, NW, late 015	Grow		100%	
10/15/00	Wheat, winter, NW, late 030	Grow		100%	
10/30/00	Wheat, winter, NW, late 045	Grow		100%	
11/14/00	Wheat, winter, NW, late 060	Grow		100%	
11/29/00	Wheat, winter, NW, late 075	Grow		100%	
12/14/00	Wheat, winter, NW, late 090	Grow		100%	
12/29/00	Wheat, winter, NW, late 105	Grow		100%	
1/2/01	Wheat, winter, NW, late 105	Over winter loss F		100%	
1/13/01	Wheat, winter, NW, late 120	Grow		100%	
1/28/01	Wheat, winter, NW, late 135	Grow		100%	
2/12/01	Wheat, winter, NW, late 150	Grow		100%	
2/27/01	Wheat, winter, NW, late 165	Grow		100%	
3/14/01	Wheat, winter, NW, late 180	Grow		100%	
3/29/01	Wheat, winter, NW, late 195	Grow		100%	
4/13/01	Wheat, winter, NW, late 210	Grow		100%	
4/28/01	Wheat, winter, NW, late 225	Grow		100%	
5/13/01	Wheat, winter, NW, late 240	Grow		100%	
7/10/01	Wheat, winter, yield low	Harvest		20%	-40%
8/15/01	Wheat, winter, yield low	Chisel, straight points N		50%	
12/31/01	Wheat, winter, yield low	End Rotation		50%	

## CMZ 13, Nonirrigated

CMZ 13, NI [WWBDBD,chs,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		60%	
5/15/00	Wheat, winter, yield low	Chisel, straight points N		80%	
6/1/00	Beans, dry, marginal yields	Planter, DD opener, 30 in sp N		100%	
6/16/00	Bean 15	Grow		100%	
7/1/00	Bean 30	Grow		100%	
7/2/00	Bean 30	Cultivator, rowcrop, 1 in ridge		100%	
7/16/00	Bean 45	Grow		100%	
7/17/00	Bean 45	Cultivator, rowcrop, 1 in ridge		100%	
7/31/00	Bean 60	Grow		100%	
8/15/00	Bean 75	Grow		100%	
9/1/00	Beans, dry, marginal yields	Harvest		100%	-50%
10/1/00	Beans, dry, marginal yields	Subsoiler, 16-24 inch spacing		100%	
12/1/00	Snow Cover	Grow		100%	
3/1/01	Beans, dry, marginal yields	Over winter loss F		100%	
5/15/01	Beans, dry, marginal yields	Chisel-disk-harrow -packer (comb) F		100%	
6/1/01	Beans, dry, marginal yields	Planter, DD opener, 30 in sp F		100%	
6/16/01	Bean 15	Grow		100%	
7/1/01	Bean 30	Grow		100%	
7/2/01	Bean 30	Cultivator, rowcrop, 1 in ridge		100%	
7/16/01	Bean 45	Grow		100%	
7/17/01	Bean 45	Cultivator, rowcrop, 1 in ridge		100%	
7/31/01	Bean 60	Grow		100%	
8/15/01	Bean 75	Grow		100%	
9/1/01	Beans, dry, marginal yields	Harvest		100%	-50%
9/15/01	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/01	Wheat, winter, early 015	Grow		100%	
10/15/01	Wheat, winter, early 030	Grow		100%	
10/30/01	Wheat, winter, early 045	Grow		100%	
11/15/01	Wheat, winter, early 060	Grow		100%	
12/1/01	Wheat, winter, early 075	Grow		100%	
1/2/02	Wheat, winter, early 075	Grow		100%	
3/2/02	Wheat, winter, early 075	Over winter loss F		100%	
3/17/02	Wheat, winter, early 180	Grow		100%	
4/1/02	Wheat, winter, early 195	Grow		100%	
4/16/02	Wheat, winter, early 210	Grow		100%	
5/1/02	Wheat, winter, early 225	Grow		100%	
5/16/02	Wheat, winter, early 240	Grow		100%	
7/15/02	Wheat, winter, yield low	Harvest		30%	-30%
10/1/02	Wheat, winter, yield low	Chisel, straight points N		50%	
12/31/02	Wheat, winter, yield low	End Rotation		50%	

## CMZ 13, Nonirrigated

CMZ 13, NI [WWSAFA,swsu,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Snow Cover	Grow		50%	
3/1/00	Safflower	Over winter loss F		60%	
7/15/00	Safflower	Sweep plow, 20-40 in sp F		80%	
8/15/00	Safflower	Cultivator, field, sweeps, 9"-16" F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
12/1/00	Wheat, winter, early 075	Grow		100%	
1/2/01	Wheat, winter, early 075	Grow		100%	
3/2/01	Wheat, winter, early 075	Over winter loss F		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	-30%
10/1/01	Wheat, winter, yield low	Chisel, straight points N		50%	
1/2/02	Wheat, winter, yield low	Over winter loss N		60%	
4/15/02	Wheat, winter, yield low	Chisel-disk-harrow -packer (comb) N		80%	
5/1/02	Safflower	Planter, DD opener, 30 in sp N		100%	
6/1/02	Safflower 15	Grow		100%	
6/15/02	Safflower 30	Grow		100%	
6/16/02	Safflower 30	Cultivator, rowcrop, 1 in ridge		100%	
7/1/02	Safflower 45	Grow		100%	
7/15/02	Safflower 60	Grow		100%	
7/16/02	Safflower 60	Cultivator, rowcrop, 1 in ridge		100%	
8/1/02	Safflower 75	Grow		100%	
8/15/02	Safflower 90	Grow		100%	
9/15/02	Safflower	Harvest		30%	-30%
10/1/02	Safflower	Chisel, twisted points F		50%	
12/1/02	Snow Cover	Grow		50%	
12/31/02	Safflower	End Rotation		50%	

## CMZ 15, Nonirrigated

CMZ-15, NI [WWFA,swsu] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Wheat, winter, yield low	Over winter loss F		55%	
6/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader F		90%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader F		100%	
8/30/00	Wheat, winter, yield low	Rodweeder, plain, early F		100%	
9/14/00	Wheat, winter, yield low	Over summer loss F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		20%	20%
9/15/01	Wheat, winter, yield low	Over summer loss F		35%	
12/15/01	Wheat, winter, yield low	Over winter loss F		40%	
12/31/01	Wheat, winter, yield low	End Rotation		50%	

CMZ-15, NI [WWFA,swsu,swf] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Wheat, winter, yield low	Over winter loss F		50%	
6/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader F		90%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader F		100%	
8/30/00	Wheat, winter, yield low	Rodweeder, plain, early F		100%	
9/14/00	Wheat, winter, yield low	Over summer loss F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	20%
9/15/01	Wheat, winter, yield low	Sweep plow, wide, w/treader F		90%	
12/15/01	Wheat, winter, yield low	Over winter loss F		100%	
12/31/01	Wheat, winter, yield low	End Rotation		100%	

## CMZ 15, Nonirrigated

CMZ-15, NI [WWSOFA,swsu]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/00	Sorghum, grain	Over winter loss N		30%	
5/1/00	Sorghum, grain	Sweep plow, wide, w/treader N		90%	
7/15/00	Sorghum, grain	Sweep plow, wide, w/treader N		100%	
8/30/00	Sorghum, grain	Rodweeder, plain, early N		100%	
9/14/00	Sorghum, grain	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	20%
9/15/01	Wheat, winter, yield low	Over summer loss F		35%	
3/15/02	Wheat, winter, yield low	Over winter loss F		40%	
5/10/02	Sorghum, grain	Planter, DD opener, 30 in sp F		50%	
5/25/02	Sorghum 15	Grow		60%	
6/9/02	Sorghum 30	Grow		60%	
6/9/02	Sorghum 45	Grow		60%	
6/24/02	Sorghum 60	Grow		65%	
7/9/02	Sorghum 75	Grow		65%	
7/24/02	Sorghum 90	Grow		65%	
9/15/02	Sorghum, grain	Harvest		10%	-20%
12/31/02	Sorghum, grain	End Rotation		20%	

## CMZ 15, Nonirrigated

CMZ-15, NI [WWCGFA,swsu] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/00	Corn, grain, low yield	Over winter loss N		30%	
5/1/00	Corn, grain, low yield	Sweep plow, wide, w/treader N		90%	
7/15/00	Corn, grain, low yield	Sweep plow, wide, w/treader N		100%	
8/30/00	Corn, grain, low yield	Rodweeder, plain, early N		100%	
9/14/00	Corn, grain, low yield	Rodweeder, plain, late N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	-50%
9/15/01	Wheat, winter, yield low	Over summer loss F		35%	
3/15/02	Wheat, winter, yield low	Over winter loss F		40%	
5/10/02	Corn, grain, low y ield	Planter, DD opener, 30 in sp F		50%	
5/25/02	Corn, grain 15	Grow		60%	
6/9/02	Corn, grain 30	Grow		60%	
6/9/02	Corn, grain 45	Grow		60%	
6/24/02	Corn, grain 60	Grow		65%	
7/9/02	Corn, grain 75	Grow		65%	
9/15/02	Corn, grain, low yield	Harvest		10%	-50%
12/31/02	Corn, grain, low yield	End Rotation		20%	

## CMZ 15, Nonirrigated

CMZ-15, NI [WWCGFA,swsu,sws] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/00	Corn, grain, low yield	Over winter loss N		30%	
5/1/00	Corn, grain, low yield	Sweep plow, wide, w/treader N		90%	
7/15/00	Corn, grain, low yield	Sweep plow, wide, w/treader N		100%	
8/30/00	Corn, grain, low yield	Rodweeder, plain, early N		100%	
9/14/00	Corn, grain, low yield	Rodweeder, plain, late N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	-50%
9/15/01	Wheat, winter, yield low	Over summer loss F		35%	
3/1/02	Wheat, winter, yield low	Over winter loss F		40%	
4/1/02	Wheat, winter, yield low	Sweep plow, wide, >40 in sp F		100%	
4/20/02	Wheat, winter, yield low	Cultivator, field, sweeps, 9" - 16" F		100%	
5/10/02	Corn, grain, low yield	Planter, DD opener, 30 in sp F		100%	
5/25/02	Corn, grain 15	Grow		100%	
6/9/02	Corn, grain 30	Grow		100%	
6/9/02	Corn, grain 45	Grow		100%	
6/24/02	Corn, grain 60	Grow		100%	
7/9/02	Corn, grain 75	Grow		100%	
9/15/02	Corn, grain, low yield	Harvest		10%	-50%
12/31/02	Corn, grain, low yield	End Rotation		20%	

## CMZ 15, Nonirrigated

CMZ-15, NI [WWSFFAWWFA,swsu]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/00	Wheat, winter, yield low	Over winter loss F		30%	
5/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader F		90%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader F		100%	
8/30/00	Wheat, winter, yield low	Rodweeder, plain, early F		100%	
9/14/00	Wheat, winter, yield low	Over summer loss F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	20%
9/15/01	Wheat, winter, yield low	Over summer loss F		40%	
3/15/02	Wheat, winter, yield low	Over winter loss F		45%	
5/10/02	Sunflower	Planter, DD opener, 30 in sp F		50%	
5/25/02	Sunflower 15	Grow		60%	
6/9/02	Sunflower 30	Grow		60%	
6/9/02	Sunflower 45	Grow		60%	
6/24/02	Sunflower 60	Grow		65%	
7/9/02	Sunflower 75	Grow		65%	
7/24/02	Sunflower 90	Grow		65%	
9/15/02	Sunflower	Harvest		10%	-20%
3/15/03	Sunflower	Over winter loss N		30%	
5/1/03	Sunflower	Sweep plow, wide, w/treader F		90%	
7/15/03	Sunflower	Sweep plow, wide, w/treader F		100%	
8/30/03	Sunflower	Rodweeder, plain, early F		100%	
9/14/03	Sunflower	Over summer loss F		100%	
9/15/03	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/03	Wheat, winter, early 015	Grow		100%	
10/15/03	Wheat, winter, early 030	Grow		100%	
10/30/03	Wheat, winter, early 045	Grow		100%	
11/15/03	Wheat, winter, early 060	Grow		100%	
11/30/03	Wheat, winter, early 075	Grow		100%	
2/15/04	Wheat, winter, early 150	Grow		100%	
3/2/04	Wheat, winter, early 165	Grow		100%	
3/17/04	Wheat, winter, early 180	Grow		100%	
4/1/04	Wheat, winter, early 195	Grow		100%	
4/16/04	Wheat, winter, early 210	Grow		100%	
5/1/04	Wheat, winter, early 225	Grow		100%	
5/16/04	Wheat, winter, early 240	Grow		100%	
7/15/04	Wheat, winter, yield low	Harvest		30%	20%
9/15/04	Wheat, winter, yield low	Over summer loss F		35%	
12/31/04	Wheat, winter, yield low	End Rotation		40%	

## CMZ 15, Nonirrigated

CMZ-15, NI [WWBDWWFA,ds,chs,uf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/1/00	Wheat, winter, yield low	Over winter loss F		50%	
6/1/00	Wheat, w inter, yield low	Disk, tandem, finishing F		90%	
7/15/00	Wheat, winter, yield low	Chisel, straight points F		100%	
8/30/00	Wheat, winter, yield low	Chisel, straight points F		100%	
9/14/00	Wheat, winter, yield low	Over summer loss F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	-40%
9/15/01	Wheat, winter, yield low	Over summer loss F		40%	
12/15/01	Wheat, winter, yield low	Over winter loss F		40%	
3/15/02	Wheat, winter, yield low	Over winter loss F		40%	
4/15/02	Wheat, winter, yield low	Disk, tandem, finishing F		100%	
5/5/02	Wheat, winter, yield low	Chisel, straight points F		100%	
6/1/02	Beans, dry, marginal yields	Planter, lister opener, 30 in sp. N		100%	
6/16/02	Bean 15	Grow		100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, 1 in ridge		100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, 1 in ridge		100%	
7/31/02	Bean 60	Grow		100%	
8/15/02	Bean 75	Grow		100%	
8/30/02	Beans, dry, marginal yields	Harvest		100%	-50%
9/1/02	Beans, dry, marginal yields	Chisel, straight points F		40%	
9/15/00	Wheat, winter, yield low	Drill, air seeder, sweep/band opener F		40%	
9/30/00	Wheat, winter, early 015	Grow		40%	
10/15/00	Wheat, winter, early 030	Grow		50%	
10/30/00	Wheat, winter, early 045	Grow		50%	
11/15/00	Wheat, winter, early 060	Grow		60%	
11/30/00	Wheat, winter, early 075	Grow		70%	
2/15/03	Wheat, winter, early 150	Grow		80%	
3/2/03	Wheat, winter, early 165	Grow		90%	
3/17/03	Wheat, winter, early 180	Grow		100%	
4/1/03	Wheat, winter, early 195	Grow		100%	
4/16/03	Wheat, winter, early 210	Grow		100%	
5/1/03	Wheat, winter, early 225	Grow		100%	
5/16/03	Wheat, winter, early 240	Grow		100%	
7/15/03	Wheat, winter, yield low	Harvest		30%	-50%
10/15/03	Wheat, winter, yield low	Over summer loss F		40%	
12/31/03	Wheat, winter, yield low	End Rotation		40%	

## CMZ 15, Nonirrigated

CMZ-15, NI [WWCGSFFA,swsu,sws]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/00	Sunflower	Over winter loss F		20%	
5/15/00	Sunflower	Sweep plow, wide, w/treader F		70%	
7/15/00	Sunflower	Sweep plow, wide, w/treader F		100%	
8/30/00	Sunflower	Rodweeder, plain, late F		100%	
9/14/00	Sunflower	Over summer loss F		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	50%
10/15/01	Wheat, winter, yield low	Over summer loss F		50%	
3/15/02	Wheat, winter, yield low	Over winter loss F		60%	
5/10/02	Corn, grain, low yield	Planter, DD opener, w/fluted coulters F		60%	
5/25/02	Corn, grain 15	Grow		60%	
6/9/02	Corn, grain 30	Grow		60%	
6/24/02	Corn, grain 45	Grow		65%	
7/9/02	Corn, grain 60	Grow		65%	
7/24/02	Corn, grain 75	Grow		65%	
10/15/02	Corn, grain, low yield	Harvest		0%	30%
3/15/03	Corn, grain, low yield	Over winter loss N		50%	
4/15/03	Corn, grain, low yield	Sweep plow, wide, w/treader N		80%	
5/20/03	Corn, grain, low yield	Sweep plow, wide, w/treader N		100%	
6/1/03	Sunflower	Planter, DD opener, 30 in sp N		100%	
6/16/03	Sunflower 15	Grow		100%	
7/1/03	Sunflower 30	Grow		100%	
7/1/03	Sunflower 30	Cultivator, rowcrop, 3 in ridge		100%	
7/16/03	Sunflower 45	Grow		100%	
7/31/03	Sunflower 60	Grow		100%	
8/15/03	Sunflower 75	Grow		100%	
8/30/03	Sunflower	Harvest		0%	30%
12/31/03	Sunflower	End Rotation		10%	

**CMZ 15, Nonirrigated**

<b>CMZ-15, NI [SO,ds] System #1</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
3/15/00	Sorghum, grain	Over winter loss N		40%	
4/15/00	Sorghum, grain	Disk, tandem, finishing N		100%	
5/20/00	Sorghum, grain	Planter, lister opener, 30 in sp. N		100%	
6/4/00	Sorghum 15	Grow		100%	
6/19/00	Sorghum 30	Grow		100%	
6/19/00	Sorghum 30	Cultivator, rowcrop, 3 in ridge		100%	
7/4/00	Sorghum 45	Grow		100%	
7/19/00	Sorghum 60	Grow		100%	
7/19/00	Sorghum 60	Cultivator, rowcrop, 1 in ridge		100%	
8/3/00	Sorghum 75	Grow		100%	
8/18/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain	Harvest		20%	-30%
12/31/00	Sorghum, grain	End Rotation		30%	

<b>CMZ-15, NI [SO,sws] System #2</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
3/15/00	Sorghum, grain	Over winter loss N		40%	
5/5/00	Sorghum, grain	Sweep plow, wide, w/treader N		100%	
5/10/00	Sorghum, grain	Sweep plow, wide, w/treader N		100%	
6/5/00	Sorghum, grain	Planter, strip-till, fluted coulters		100%	
6/20/00	Sorghum 15	Grow		100%	
7/5/00	Sorghum 30	Grow		100%	
7/5/00	Sorghum 30	Cultivator, rowcrop, 1 in ridge		100%	
7/20/00	Sorghum 45	Grow		100%	
8/4/00	Sorghum 60	Grow		100%	
8/8/00	Sorghum 75	Grow		100%	
8/23/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain	Harvest		20%	0%
12/31/00	Sorghum, grain	End Rotation		30%	

## CMZ 15, Nonirrigated

CMZ-15, NI [SOBD,ds]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/02	Sorghum, grain, marginal yields	Over winter loss N		80%	
4/25/02	Sorghum, grain, marginal yields	Disk, tandem, finishing N		100%	
6/1/02	Beans, dry, marginal yields	Planter, lister opener, 30 in sp. N		100%	
6/16/02	Bean 15	Grow		100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, 1 in ridge		100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, 1 in ridge		100%	
7/31/02	Bean 60	Grow		100%	
8/15/02	Bean 75	Grow		100%	
8/30/02	Beans, dry, marginal yields	Harvest		100%	-50%
10/1/02	Beans, dry, marginal yields	Bedder/Hipper/Lister 5"x30" F		100%	
3/15/03	Beans, dry, marginal yields	Over winter loss F		100%	
4/15/03	Beans, dry, marginal yields	Disk, tandem, finishing F		100%	
5/20/03	Sorghum, grain, marginal yields	Planter, lister opener, 30 in sp. F		100%	
6/4/03	Sorghum 15	Grow		100%	
6/19/03	Sorghum 30	Grow		100%	
6/19/03	Sorghum 30	Cultivator, rowcrop, 3 in ridge		100%	
7/4/03	Sorghum 45	Grow		100%	
7/19/03	Sorghum 60	Grow		100%	
7/19/03	Sorghum 60	Cultivator, rowcrop, 1 in ridge		100%	
8/3/03	Sorghum 75	Grow		100%	
8/18/03	Sorghum 90	Grow		100%	
10/15/03	Sorghum, grain, marginal yields	Harvest		20%	-50%
12/31/03	Sorghum, grain, marginal yields	End Rotation		30%	

## CMZ 15, Nonirrigated

CMZ-15, NI [SWWMO,sws]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
3/15/00	Millet	Over winter loss N		60%	
4/1/00	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
4/16/00	Spring Grain 15	Grow		100%	
5/1/00	Spring Grain 30	Grow		100%	
5/16/00	Spring Grain 45	Grow		100%	
5/31/00	Spring Grain 60	Grow		100%	
6/15/00	Spring Grain 75	Grow		100%	
7/10/00	Wheat, spring	Harvest		10%	-20%
9/1/00	Wheat, spring	Over summer loss F		30%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener F		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	40%
10/15/01	Wheat, winter, yield low	Over summer loss F		40%	
3/15/02	Wheat, winter, yield low	Over winter loss F		50%	
4/1/02	Wheat, winter, yield low	Sweep plow, wide, w/treader F		100%	
5/1/02	Wheat, winter, yield low	Sweep plow, wide, w/treader F		100%	
6/1/02	Millet	Drill or Air seeder, chisel or hoe opener F		100%	
6/16/02	Millet 15	Grow		100%	
7/1/02	Millet 30	Grow		100%	
7/16/02	Millet 45	Grow		100%	
7/31/02	Millet 60	Grow		100%	
8/15/02	Millet 75	Grow		100%	
8/30/02	Millet 90	Grow		100%	
9/15/02	Millet	Harvest		15%	10%
12/31/02	Millet	End Rotation		40%	

## CMZ 28, Nonirrigated

CMZ-28, NI [WWFA,swsu,chf] System #1					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		70%	
6/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		90%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
8/30/00	Wheat, winter, yield low	Rodweeder, plain, early N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
1/2/01	Wheat, winter, early 075	Over winter loss N		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		40%	-50%
9/15/01	Wheat, winter, yield low	Chisel, straight points N		60%	
12/31/01	Wheat, winter, yield low	End Rotation		60%	

CMZ-28, NI [WWFA,swsu,swf] System #2					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		50%	
6/1/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		90%	
7/15/00	Wheat, winter, yield low	Sweep plow, wide, w/treader N		100%	
8/30/00	Wheat, winter, yield low	Rodweeder, plain, early N		100%	
9/14/00	Wheat, winter, yield low	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
1/2/01	Wheat, winter, early 075	Over winter loss N		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	-50%
9/15/01	Wheat, winter, yield low	Sweep plow, wide, w/treader N		90%	
12/31/01	Wheat, winter, yield low	End Rotation		100%	

## CMZ 28, Nonirrigated

CMZ-28, NI [WWSOFA,swsu]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Sorghum, grain, marginal yields	Over winter loss N		30%	
5/1/00	Sorghum, grain, marginal yields	Sweep plow, wide, w/treader N		80%	
7/15/00	Sorghum, grain, marginal yields	Sweep plow, wide, w/treader N		100%	
8/30/00	Sorghum, grain, marginal yields	Rodweeder, plain, early N		100%	
9/14/00	Sorghum, grain, marginal yields	Over summer loss N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
1/2/01	Wheat, winter, early 075	Over winter loss N		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	-50%
1/2/02	Wheat, winter, yield low	Over winter loss N		40%	
5/10/02	Sorghum, grain, marginal yields	Planter, DD opener, 30 in sp N		50%	
5/25/02	Sorghum 15	Grow		60%	
6/9/02	Sorghum 30	Grow		60%	
6/9/02	Sorghum 45	Grow		60%	
6/24/02	Sorghum 60	Grow		65%	
7/9/02	Sorghum 75	Grow		65%	
7/24/02	Sorghum 90	Grow		65%	
9/15/02	Sorghum, grain, marginal yields	Harvest		10%	-50%
12/31/02	Sorghum, grain, marginal yields	End Rotation		20%	

## CMZ 28, Nonirrigated

CMZ-28, NI [WWBDWWFA,swsu,chs,CHF]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Wheat, winter, yield low	Over winter loss N		50%	
8/1/00	Wheat, winter, yield low	Sweep plow, 20-40 in sp N		60%	
8/30/00	Wheat, winter, yield low	Sweep plow, 20-40 in sp N		70%	
9/14/00	Wheat, winter, yield low	Over summer loss N		90%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
1/2/01	Wheat, winter, early 075	Over winter loss N		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		50%	-40%
1/2/02	Wheat, winter, yield low	Over winter loss N		60%	
5/20/02	Wheat, winter, yield low	Chisel-disk, straight points F		80%	
5/25/02	Wheat, winter, yield low	Disk, tandem, finishing N		100%	
6/1/02	Beans, dry, marginal yields	Planter, lister opener, 30 in sp. N		100%	
6/16/02	Bean 15	Grow		100%	
7/1/02	Bean 30	Grow		100%	
7/1/02	Bean 30	Cultivator, rowcrop, 1 in ridge		100%	
7/16/02	Bean 45	Grow		100%	
7/16/02	Bean 45	Cultivator, rowcrop, 1 in ridge		100%	
7/31/02	Bean 60	Grow		100%	
8/15/02	Bean 75	Grow		100%	
8/30/02	Beans, dry, marginal yields	Harvest		100%	-50%
9/1/02	Beans, dry, marginal yields	Chisel, straight points F		100%	
9/10/02	Wheat, winter, yield low	Disk, tandem, finishing F		100%	
9/15/02	Wheat, winter, yield low	Drill, air seeder, sweep/band opener F		100%	
9/30/02	Wheat, winter, early 015	Grow		100%	
10/15/02	Wheat, winter, early 030	Grow		100%	
10/30/02	Wheat, winter, early 045	Grow		100%	
11/15/02	Wheat, winter, early 060	Grow		100%	
11/30/02	Wheat, winter, early 075	Grow		100%	
1/2/03	Wheat, winter, early 075	Over winter loss F		100%	
2/15/03	Wheat, winter, early 150	Grow		100%	
3/2/03	Wheat, winter, early 165	Grow		100%	
3/17/03	Wheat, winter, early 180	Grow		100%	
4/1/03	Wheat, winter, early 195	Grow		100%	
4/16/03	Wheat, winter, early 210	Grow		100%	
5/1/03	Wheat, winter, early 225	Grow		100%	
5/16/03	Wheat, winter, early 240	Grow		100%	
7/15/03	Wheat, winter, yield low	Harvest		30%	-50%
12/31/03	Wheat, winter, yield low	End Rotation		40%	

**CMZ 28, Nonirrigated**

<b>CMZ-28, NI [SO,ds] System #1</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
1/2/00	Sorghum, grain	Over winter loss N		40%	
5/10/00	Sorghum, grain, marginal yields	Disk, tandem, finishing N		100%	
5/25/00	Sorghum, grain, marginal yields	Planter, DD opener, 30 in sp N		100%	
6/4/00	Sorghum 15	Grow		100%	
6/19/00	Sorghum 30	Grow		100%	
6/19/00	Sorghum 30	Cultivator, rowcrop, 3 in ridge		100%	
7/4/00	Sorghum 45	Grow		100%	
7/19/00	Sorghum 60	Grow		100%	
7/19/00	Sorghum 60	Cultivator, rowcrop, 3 in ridge		100%	
8/3/00	Sorghum 75	Grow		100%	
8/18/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain, marginal yields	Harvest		20%	-40%
12/31/00	Sorghum, grain, marginal yields	End Rotation		30%	

<b>CMZ-28, NI [SO,sws,st] System #2</b>					
<b>Date</b>	<b>Crop</b>	<b>Operation</b>	<b>Irrigations</b>	<b>Flat Residue</b>	<b>Yield Adjustment</b>
1/2/00	Sorghum, grain, marginal yields	Over winter loss N		40%	
5/5/00	Sorghum, grain, marginal yields	Sweep plow, wide, w/treader N		100%	
5/10/00	Sorghum, grain, marginal yields	Sweep plow, wide, w/treader N		100%	
6/5/00	Sorghum, grain, marginal yields	Planter, strip-till, fluted coulters		100%	
6/20/00	Sorghum 15	Grow		100%	
7/5/00	Sorghum 30	Grow		100%	
7/5/00	Sorghum 30	Cultivator, rowcrop, 1 in ridge		100%	
7/20/00	Sorghum 45	Grow		100%	
8/4/00	Sorghum 60	Grow		100%	
8/8/00	Sorghum 75	Grow		100%	
8/23/00	Sorghum 90	Grow		100%	
10/15/00	Sorghum, grain, marginal yields	Harvest		20%	-10%
12/31/00	Sorghum, grain, marginal yields	End Rotation		30%	

## CMZ 28, Nonirrigated

CMZ-28, NI [BDSOFA,swsu,CHF]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Sorghum, grain, marginal yields	Over winter loss N		80%	
5/20/00	Sorghum, grain, marginal yields	Sweep plow, 20-40 in sp N		100%	
6/1/00	Beans, dry, marginal yields	Planter, DD opener, w/fluted coulters N		100%	
6/16/00	Bean 15	Grow		100%	
7/1/00	Bean 30	Grow		100%	
7/2/00	Bean 30	Cultivator, rowcrop, 3 in ridge		100%	
7/15/00	Bean 45	Grow		100%	
7/16/00	Bean 45	Cultivator, rowcrop, 3 in ridge		100%	
7/31/00	Bean 60	Grow		100%	
8/15/00	Bean 75	Grow		100%	
8/30/00	Beans, dry, marginal yields	Harvest		100%	-50%
9/15/00	Beans, dry, marginal yields	Chisel, straight points F		100%	
1/2/01	Beans, dry, marginal yields	Over winter loss F		100%	
4/15/01	Beans, dry, marginal yields	Disk, tandem, finishing F		100%	
5/20/01	Sorghum, grain, marginal yields	Planter, DD opener, 30 in sp F		100%	
6/4/01	Sorghum 15	Grow		100%	
6/19/01	Sorghum 30	Grow		100%	
6/20/01	Sorghum 30	Cultivator, rowcrop, 3 in ridge		100%	
7/4/01	Sorghum 45	Grow		100%	
7/19/01	Sorghum 60	Grow		100%	
7/20/01	Sorghum 60	Cultivator, rowcrop, 3 in ridge		100%	
8/3/01	Sorghum 75	Grow		100%	
8/18/01	Sorghum 90	Grow		100%	
10/15/01	Sorghum, grain, marginal yields	Harvest		20%	0%
1/2/02	Sorghum, grain, marginal yields	Over winter loss N		30%	
7/1/02	Sorghum, grain, marginal yields	Sweep plow, 20-40 in sp N		30%	
8/1/02	Sorghum, grain, marginal yields	Sweep plow, 20-40 in sp N		40%	
12/31/02	Sorghum, grain, marginal yields	End Rotation		50%	

## CMZ 28, Nonirrigated

CMZ-28, NI [SWWWMO,swsu,chf]					
Date	Crop	Operation	Irrigations	Flat Residue	Yield Adjustment
1/2/00	Millet	Over winter loss N		60%	
4/1/00	Wheat, spring	Drill or Air seeder, chisel or hoe opener N		100%	
4/16/00	Spring Grain 15	Grow		100%	
5/1/00	Spring Grain 30	Grow		100%	
5/16/00	Spring Grain 45	Grow		100%	
5/31/00	Spring Grain 60	Grow		100%	
6/15/00	Spring Grain 75	Grow		100%	
7/10/00	Wheat, spring	Harvest		10%	-50%
8/15/00	Wheat, spring	Chisel, straight points N		30%	
9/1/00	Wheat, spring	Disk, tandem, secondary op. N		100%	
9/15/00	Wheat, winter, yield low	Drill or Air seeder, chisel or hoe opener N		100%	
9/30/00	Wheat, winter, early 015	Grow		100%	
10/15/00	Wheat, winter, early 030	Grow		100%	
10/30/00	Wheat, winter, early 045	Grow		100%	
11/15/00	Wheat, winter, early 060	Grow		100%	
11/30/00	Wheat, winter, early 075	Grow		100%	
1/2/01	Wheat, winter, early 075	Over winter loss N		100%	
2/15/01	Wheat, winter, early 150	Grow		100%	
3/2/01	Wheat, winter, early 165	Grow		100%	
3/17/01	Wheat, winter, early 180	Grow		100%	
4/1/01	Wheat, winter, early 195	Grow		100%	
4/16/01	Wheat, winter, early 210	Grow		100%	
5/1/01	Wheat, winter, early 225	Grow		100%	
5/16/01	Wheat, winter, early 240	Grow		100%	
7/15/01	Wheat, winter, yield low	Harvest		30%	-30%
9/15/01	Wheat, winter, yield low	Chisel, straight points N		50%	
1/2/02	Wheat, winter, yield low	Over winter loss F		60%	
4/1/02	Wheat, winter, yield low	Sweep plow, wide, w/treader F		80%	
5/1/02	Wheat, winter, yield low	Sweep plow, wide, w/treader F		100%	
6/1/02	Millet	Drill or Air seeder, chisel or hoe opener F		100%	
6/16/02	Millet 15	Grow		100%	
7/1/02	Millet 30	Grow		100%	
7/16/02	Millet 45	Grow		100%	
7/31/02	Millet 60	Grow		100%	
8/15/02	Millet 75	Grow		100%	
8/30/02	Millet 90	Grow		100%	
9/15/02	Millet	Harvest		15%	10%
10/1/02	Millet	Chisel, straight points N		40%	
12/31/02	Millet	End Rotation		40%	