@ISA

THE MORNING STAR PACKING COMPANY

724 Main Street, Woodland CA 95695

Staff: GC

Logged in as received: 09.11.14 LC

Date reviewed:

Violations?:

Letter reviewed:

RECEIVED
SACRAMENTO
CVRWQCB
14 SEP -3 PM 2:11

31 August 2014

Mr. Guy Childs
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Re: Monthly Report for The Morning Star Packing Company – Williams, according to Waste Discharge Requirements Order No. R5-2013-0144.

Dear Mr. Childs:

Please find herewith the July Report with items requested in the Monthly Monitoring Reports section of the Monitoring and Reporting Program No. R5-2013-0144.

1. Tabulated pond monitoring data.

The tabulated pond monitoring results for July are included as **Attachment A**.

2. Tabulated daily flow measurements from each wastewater source and supplemental irrigation water to each check in each LAA field.

The July flow measurement logsheet is included as **Attachment B**.

3. The cumulative annual wastewater (Station 1 and Station 2) flow discharged to the LAAs to date, the average daily flow for the month, and comparison to the average daily flow limit.

The cumulative annual washwater from Station 1 and Station 2 are provided below and included in **Attachment B**:

Source	Annual Flow	Flow Limit
Station 1: Settling Pond/Gutters	35,761,504	
Station 2: Cooling Pond	0	
Total Washwater Discharge	35,761,504	422,000,000

4. Tabulated wastewater monitoring data and calculation of the running average for each group of three consecutive sample results for BOD and total nitrogen.

The July washwater monitoring data logsheet is included as **Attachment C**.

5. A current site plan depicting the irrigation checks within each LAA field that will be used during the calendar year, including all water conveyance ditches and internal berms that divide each LAA (where applicable).

An updated 2014 site plan for the facility's LAA and individual field maps are provided in **Attachment D**.

6. Tabulated update cropping information for each LAA field that includes at least:

a. *The crop that will be grown in each field;*
b. *Planned and actual planting dates;*
c. *Planned and actual harvest dates;*
d. *Planned and actual cattle grazing schedule, location of cattle grazing, including the number of head on each field;*
e. *Typical maximum expected and actual yield at harvest in applicable crop units per acre;*
f. *Crop total nitrogen demand; and*
g. *Crop average evapotranspiration rate in inches*

The tabulated cropping information for each LAA is included as **Attachment E**.

7. Tabulated land application area monitoring data for each LAA field, including; calculation of the hydraulic loading, irrigation cycle average BOD loading, and total nitrogen loading to date from all sources. The average of the three most recent monitoring results shall be used to determine irrigation cycle average BOD and total nitrogen loading. Loading rates for Settling Pond solids, residual solids, cattle manure and commercial fertilizers shall be calculated separately using actual load analytical results and application areas.

The tabulated land application area monitoring data for each LAA field are also included as **Attachment E**.

8. A summary of the daily pre-application inspection reports for the month.

The pre-application inspection reports for July are included as **Attachment F**.

9. Calculation of the flow-weighted average FDS concentration to date (representative of the Settling Pond and plant sanitation/clean-up water) as monitored at Station 1.

The calculation of the flow-weighted average FDS concentration is presented at the bottom of **Attachment C**.

10. Residual solids monitoring data and monthly mass of residual solids generated and applied to each LAA field and/or disposed of off-site.

The July residual solids monitoring data is included as **Attachment G**.

11. A comparison of monitoring data to the flow limitations, effluent limitations; mass loading limitations (for each LAA field), and discharge specifications, and an explanation of any violation of those requirements.

The Morning Star Packing Company – Williams is in compliance with the flow limitations, effluent limitations, mass loading limitations and the discharge specifications.

12. If requested by staff, copies of laboratory analytical report(s).

If requested, The Morning Star Packing Company – Williams will mail out the laboratory analytical reports.

13. Copies of current calibration logs for all field test instruments.

The calibration log for July and calibration logs for the flow monitoring devices are included as **Attachment H**.

> *"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

Respectfully yours,

Ross Oliveira

Attachment A

MONTHLY MONITORING REPORT

MONTH: July
YEAR: 2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

POND MONITORING RESULTS

Monitoring Location	Monitoring Week	Monitoring Date	Monitoring Time	Dissolved Oxygen[1] (mg/L)	pH	Freeboard (0.1 feet)	Odors[3]	Monthly Pond Berm/Leeve Condition[4]	Technican's Initials
Settling Pond	Week 1								
	Week 2								
SP	Week 3	7/21	7:00 AM	3.28	5.14	44.5	Slight	good	J.Y.
SP	Week 4	7/28	7:58 AM	2.43	4.90	43	Slight	good	J.Y.
	Week 5								
Coolng Pond	Week 1								
	Week 2								
CP	Week 3	7/21	7:25 AM	1.11	7.50	34.5	none	good	J.Y.
CP	Week 4	7/28	7:40 AM	1.70	7.19	34.5	none	good	J.Y
	Week 5								

Sample frequency shall be weekly during the processing season and monthly during the non-processing season.

[1]Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet.

[2]Freeboard shall be measured to the nearest 0.1 foot from staff gauge.

[3]Odors shall be reported as (none, slight, moderate, strong)

[4]If a pond berm/leeve conditon is not reported as good, a description of the condition of the berm/leeve shall be provided, as well as the maintenance that was completed.

Attachment B

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

FLOW MONITORING RESULTS :

Monitoring Date (Day of Month)	Flow Source					
	Supplemental ~~GCID~~ Irrigation Water (gallons; calculated)	Station 1 - Settling Pond Water (gallons; meter)	Station 2 - Cooling Pond Water (gallons; meter)	Station 3 - Total Discharge to LAAs (gallons; meter)	Names of LAAs Irrigated	Station 3 - Total Discharge to LAAs (inches)
1	4,582,764		0	4,582,764	MS 21 ch 32-38, MS 15 ch8-14, MS 20A ch1-5, MS 18B ch 23-31, MS 16 ch 6-10, MS 20A ch 6-11,MS 21 ch 39-45	0
2	4,512,491		0	4,512,491	MS 15 ch 15-21, MS 18B ch 32-37, MS 15 ch 22-28, MS 16 ch 11-15, MS 20A ch 12-18, MS 21 ch 46-50	0
3	4,879,540		0	4,879,540	MS 6 ch 1-6, MS 5 ch 1-6, MS 18B ch 18-42, MS 20A 19-26, MS 15 ch 29-35	0
4	4,959,621		0	4,959,621	MS 6 ch 17-12, MS 5 ch 7-13, MS 20A ch 26-35, MS 15 ch 36-14, MS 20B ch 1-4, MS 16 ch 16-20	0
5	3,773,965		0	3,773,965	MS 5 ch 14-17, MS 6 ch 13-18, MS 24A ch 1-7, MS 24C ch 1-7, MS 5 18-22, MS 16 ch 21-25, MS 20B ch 5-11, MS 6 ch 19-24, MS 24A ch 8-14, MS 24C ch 8-14	0
6	3,304,199		0	3,304,199	MS 5 ch 23-27, MS 6 ch 25-30, MS 20B ch 12-25, MS 16 ch 26-29, MS 24C ch 15-21, MS 24A ch 15-21	0
7	3,017,391		0	3,017,391	MS 20B ch 26-31, MS 24C ch 22-28, MS 24A ch 22-28, MS 16 ch 30-34, MS 5 ch 28-32, MS 20B ch 32-35	0
8	1,468,345		0	1,468,345	MS 24A ch 29-30, MS 24C ch 29-35, MS 16 ch 35-39, MS 24A ch 36-42, MS 24C ch 36042	0
9	99,615		0	99,615	MS 16 ch 40-43, MS 24A ch 43-44, MS 24C ch 43044, KMS 24B ch 1-53, MS 24D ch 1-5, MS 24B ch 6-12	0
10	198,616		0	198,616	MS 24D ch 6-12, MS 24B ch 13-18, MS 24D ch 13-18	0
11	834,687		0	834,687	MS 24B ch 19-26, MS 24D ch 19-26, MS 24B ch 27-33, MS 24D ch 27-33	0
12	1,519,089		0	1,519,089	MS 24B ch 34-42, MS 24D ch 34-42	0
13	1,349,105		0	1,349,105	-	0
14	1,092,855		0	1,092,855	-	0
15	1,480,780		0	1,480,780	-	0
16	492,453	591,347	0	1,083,799	MS 11 ch 1-7	0
17	118,337	1,647,219	0	1,765,556	MS 11 ch 8-13, MS 21 ch 1-10	0
18		1,801,896	0	1,868,737	MS 11 ch 14-25, MS 21 ch 11-19, MS 18A ch 1-10	0
19		2,462,075	0	2,165,908	MS 21 ch 20-24, MS 18A ch 11-15, MS 15 ch 1-7, MS 11 ch 26-33	0
20		2,627,005	0	2,607,387	MS 16 ch 1-8, MS 15 ch 8-14, MS 21 ch 25-31, MS 5 ch 1-6, MS 14 ch 1-4	0
21		1,912,187	0	2,129,355	MS 14 ch 5-8, MS 21 ch 32	0
22		2,220,091	0	2,466,145	MS 5 ch 7-10, MS 14 ch 5-16, MS 15 ch 15-21, MS 16 ch 9-18, MS 18A ch 16-21	0
23		2,460,726	0	2,599,760	MS 5 ch 7-10, MS 14 ch 13-20, MS 15 ch 15-21, MS 16 ch 15-18, MS 18A ch 16026, MS 21 ch 41-50	0
24		2,473,278	0	2,664,264	MS 14 ch 17-24, MS 18A ch 22-42, MS 21 ch 47-50	0
25		2,525,432	0	2,737,412	MS 14 ch 21-24, MS 15 ch 22-25, MS 16 ch 19-22, MS 18A ch 38-42	0
26		2,440,703	0	2,615,273	MS 5 ch 11-15, MS 15 ch 22-28, MS 16 ch 19-22	0
27		2,480,215	0	2,616,202	MS 5 ch 11-15, MS 15 ch 26-28	0
28		2,533,107	0	2,619,545	MS 5 ch 21-24, MS 6 ch 1-7, MS 11 ch 1-7, MS 15 ch 23-27, MS 16 ch 23-27, MS 18B ch 15-37, MS 21 ch 1-18	0
29		2,484,167	0	2,591,109	MS 5 ch 21-24, MS 6 ch 1-7, MS 11 ch 1-7, MS 15 ch 40-41, MS 16 ch 23-38, MS 18B ch 29-42, MS 21 ch 10-18	0
30		2,602,994	0	2,650,130	MS 5 ch 21-32, MS 6 ch 8-12, MS 11 ch 7-21, MS 16 ch 28-38, MS 18A ch 1-42, MS 18B ch 38-42, MS 21 ch 10-28	0
31		2,499,062	0	2,595,167	MS 6 ch 1-7, MS 5 ch 25-32, MS 11 ch 7-33, MS 14 ch 4-6, MS 16 ch 28-38, MS 18A ch 1-42, MS 18B ch 1-19	0
Total Monthly Flow (MG)	37,683,852	35,761,504	0	74,848,812		0
Average Daily Flow (MGD)	2,216,697	2,235,094	0	2,414,478		0
Cumulative Annual Flow to Date (MG)	151,700,652	35,761,504	0	74,848,812		0

Attachment C

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

WASTEWATER MONITORING RESULTS : Washwater Discharge began on July 16th

Samples Collected from Station 1

Monitoring Week	Monitoring Date	BOD (mg/L)	3-Sample Average BOD (mg/L)[1]	Total Nitrogen (mg/L)	3-Sample Average Total Nitrogen (mg/L)[1]	FDS (mg/L)
Second to Last Week of Previous Month			N/A		N/A	N/A
Last Week of Previous Month			N/A		N/A	N/A
Week 1 of Current Month						
Week 2 of Current Month						
Week 3 of Current Month	7/21/14	418.5		62.89		570
Week 4 of Current Month	7/28/14	952.73	686	87.24	75	882
Week 5 of Current Month						

Sampling is not required during periods when no wastewater is discharged to the LAAs.

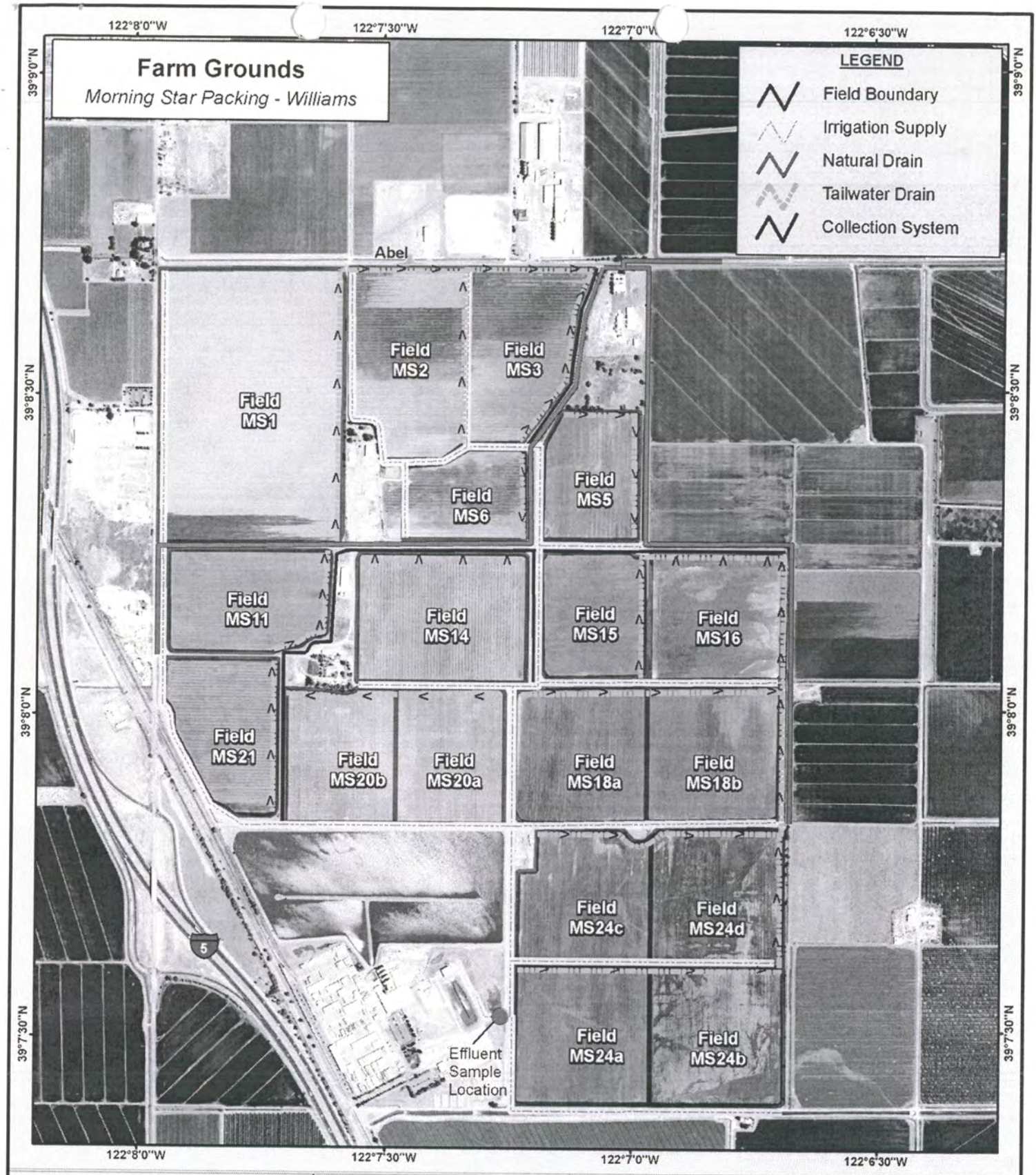
Average BOD Concentration (mg/L)[1]	686
Average Monthly Total Nitrogen Concentration (mg/L)[2]	75
Monthly Average FDS Concentration (mg/L)	726
Flow Weighted Average FDS Concentration to Date (mg/L)[3]	660

[1]See MRP Reporting Section A.4.

[2]Value to be used in annual loading calculation (WDR Section C.2.a).

[3]Calculated per WDR Section C.1.a (Show Calculations).

Attachment D



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

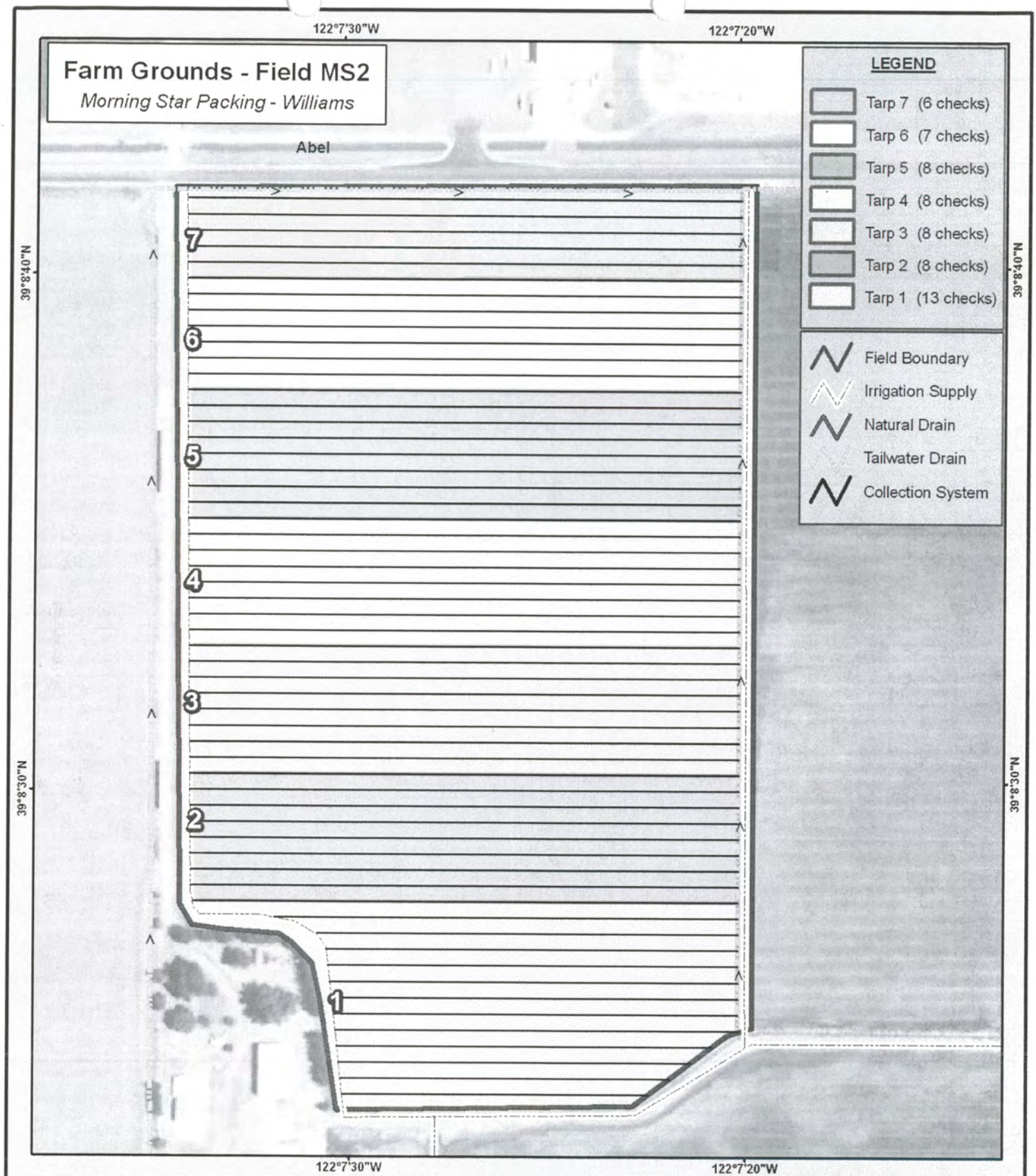
Map Scale 1:14,400 1 Inch = 1,200 Feet

0 300 600 1,200 1,800 2,400 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: February 27, 2014
Map ID: CMS2014-038



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:3,000 1 Inch = 250 Feet

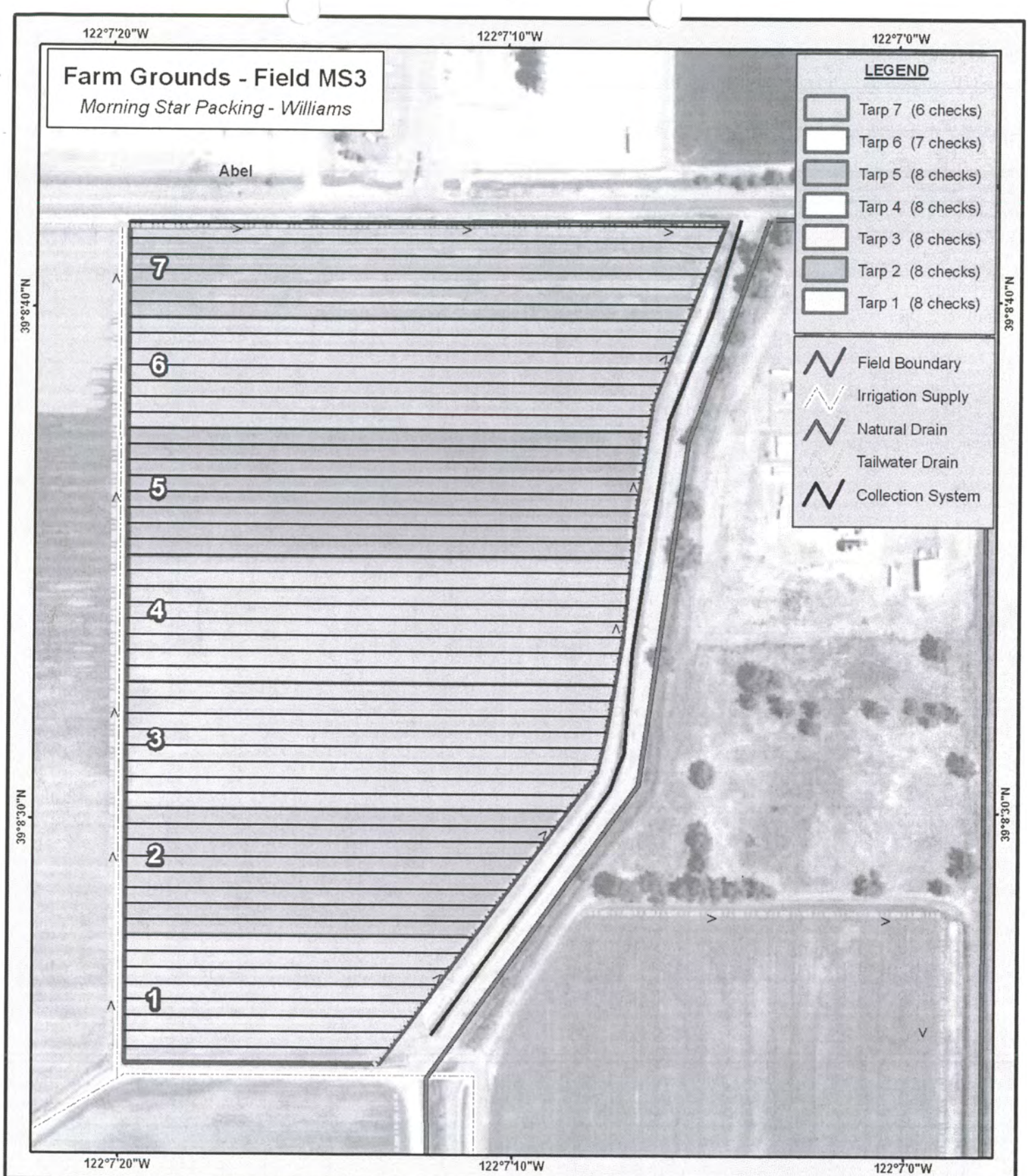
0 125 250 500 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 18, 2014
Map ID: CMS2014-043



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:3,000 1 Inch = 250 Feet

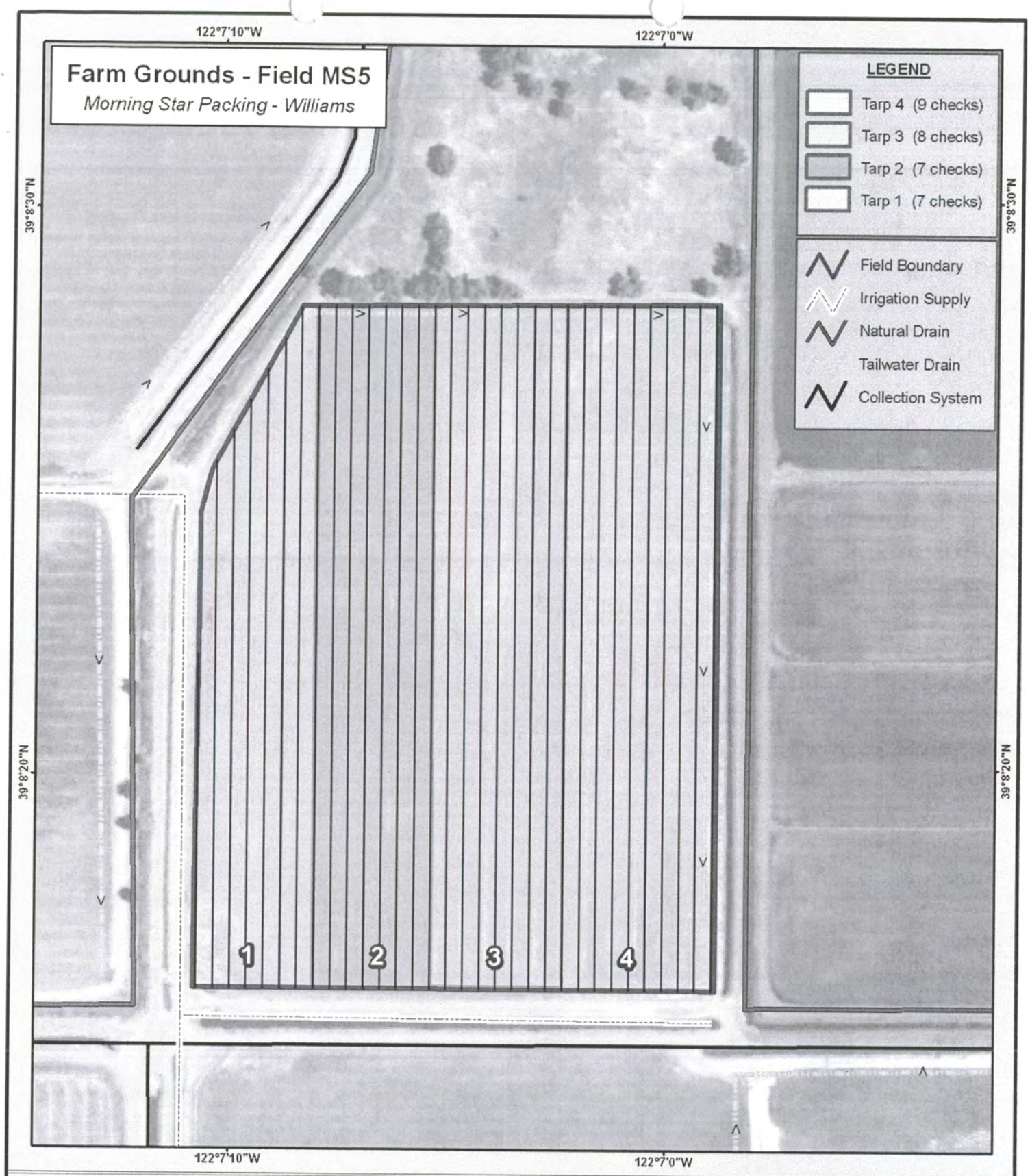
0 125 250 500 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-044



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:2,700 1 Inch = 225 Feet

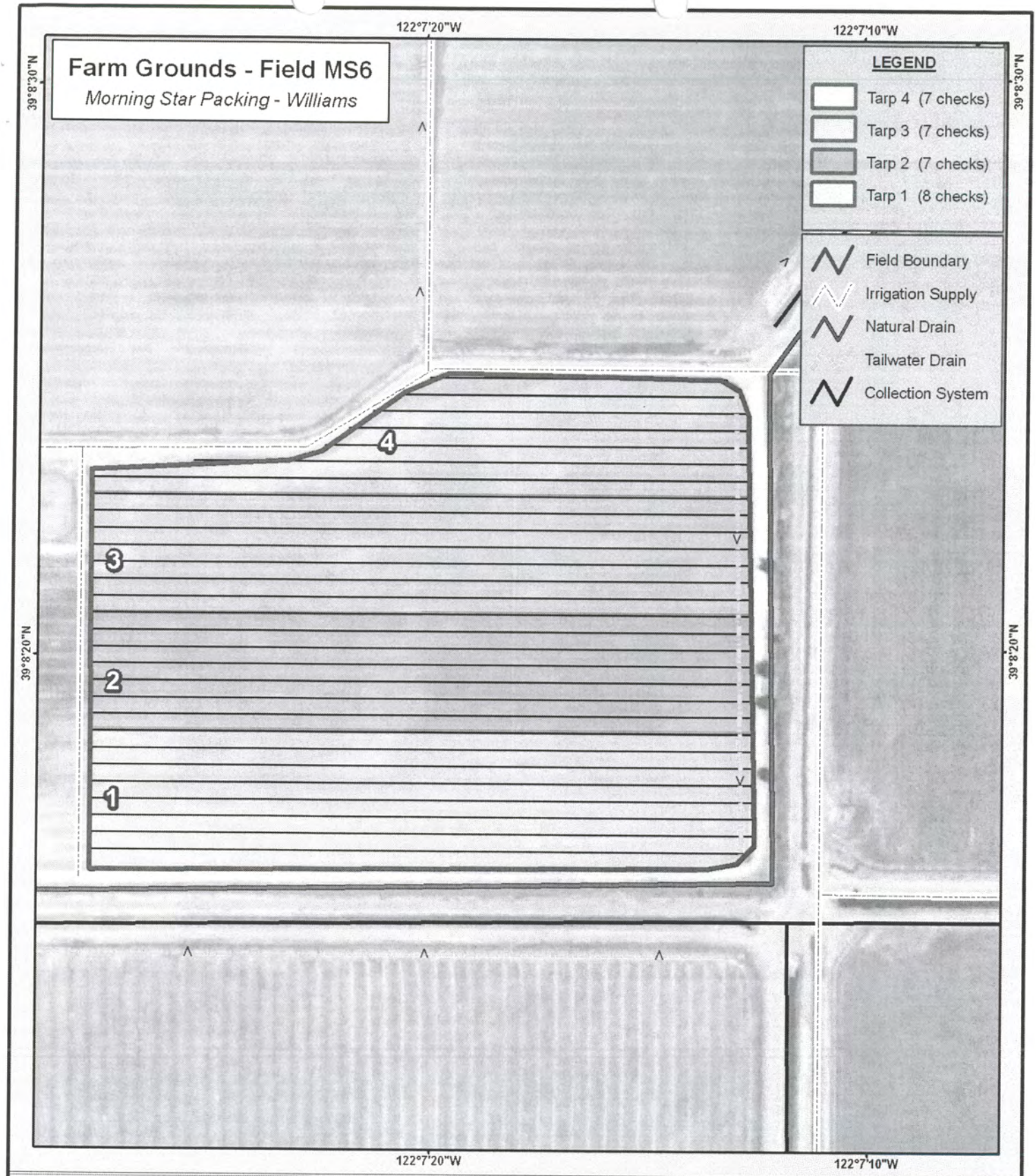
0 112.5 225 450 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-049



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:2,700 1 Inch = 225 Feet

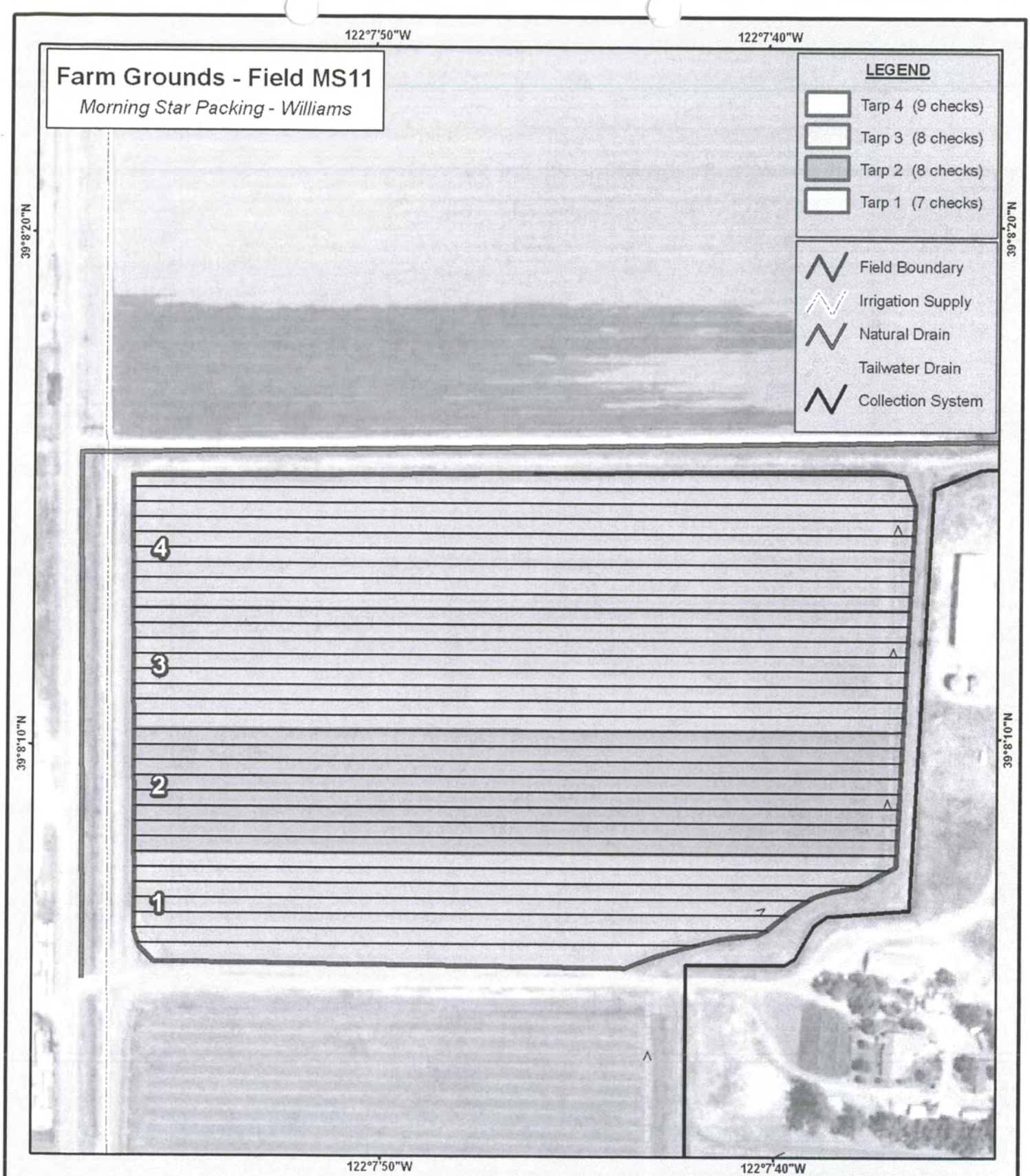
0 112.5 225 450 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-047



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:3,000 1 Inch = 250 Feet

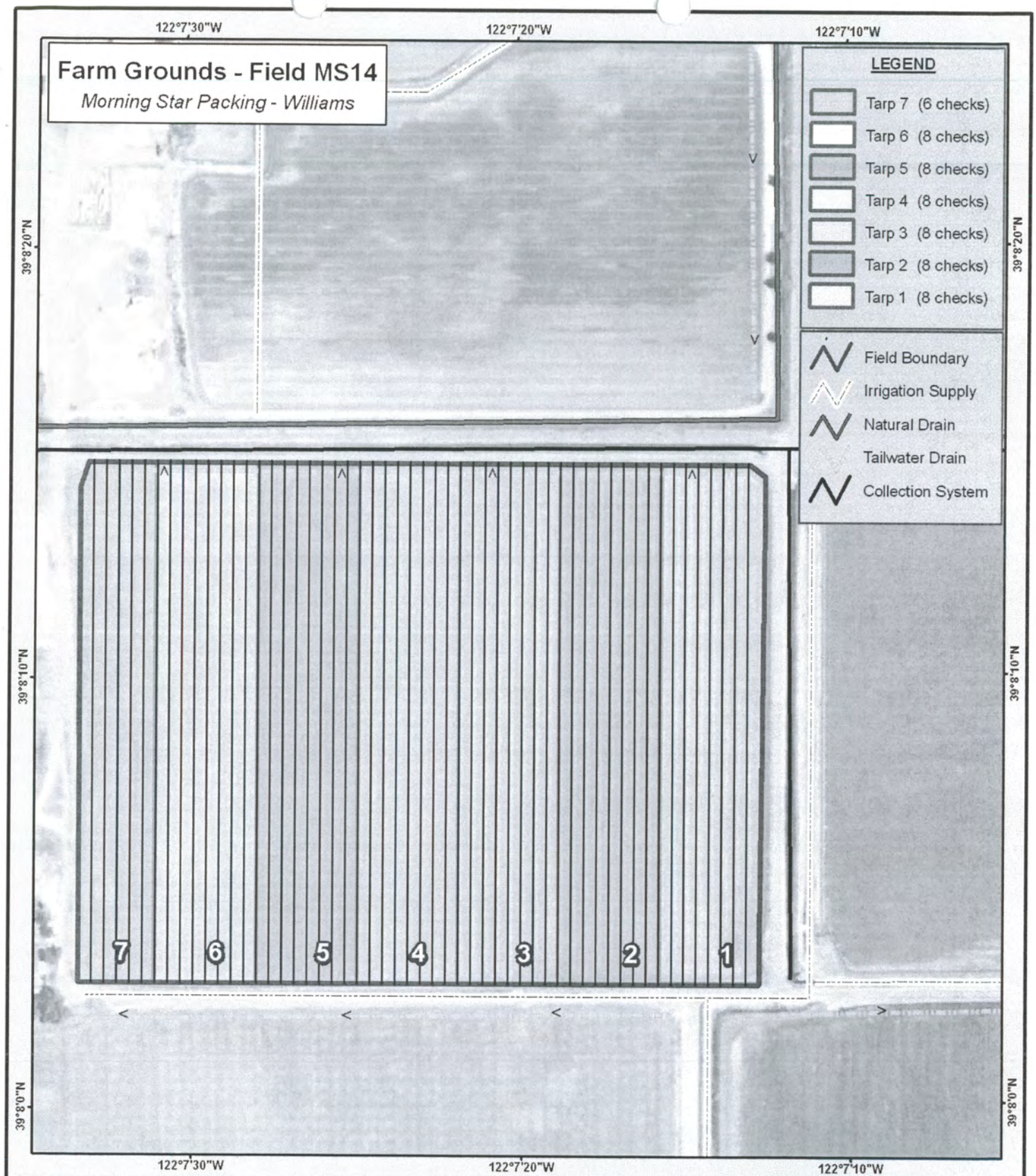
0 125 250 500 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-048



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:3,600 1 Inch = 300 Feet

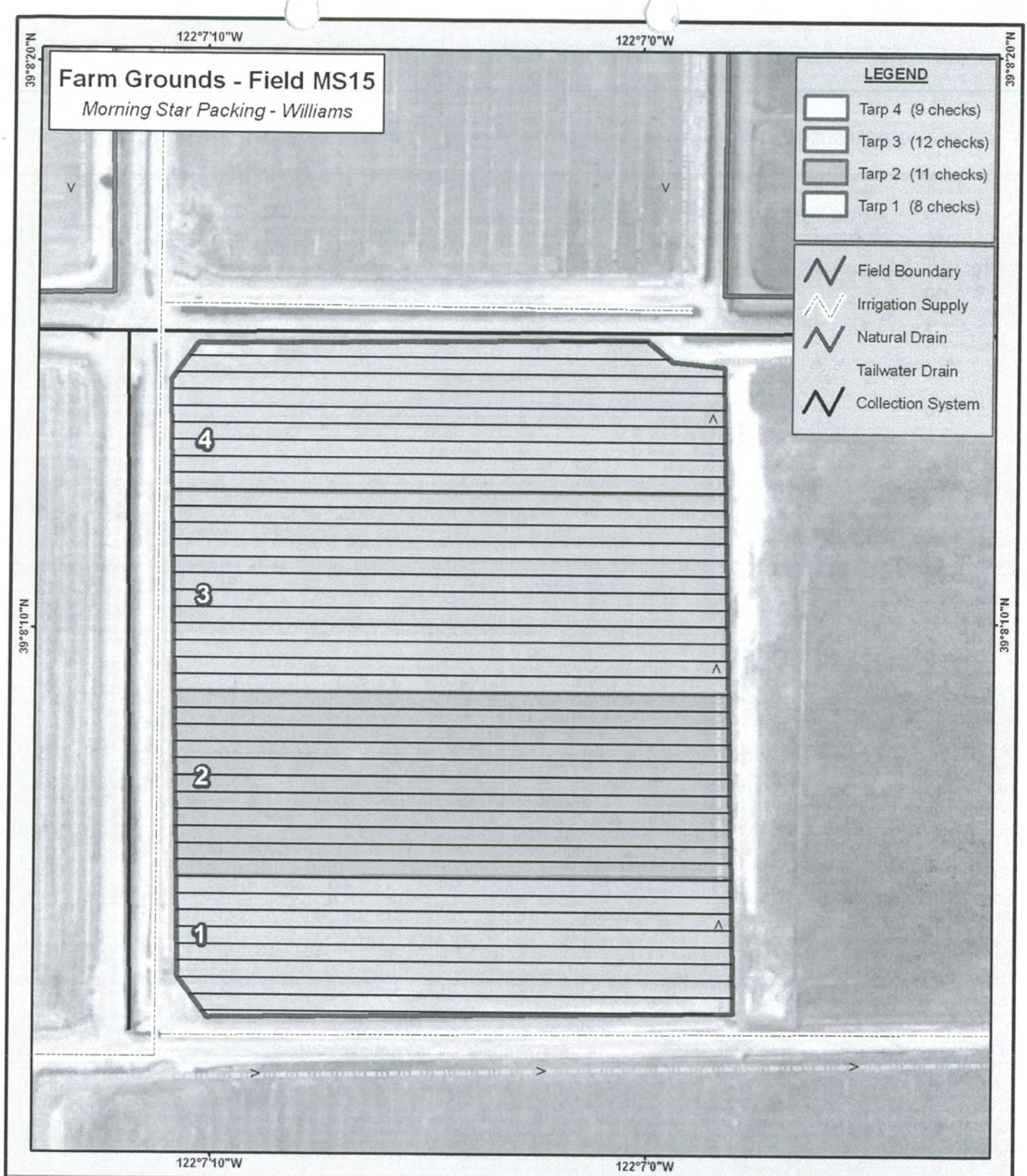
0 150 300 600 Feet

0 60 120 240 360 480 600 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-050



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:2,700 1 Inch = 225 Feet

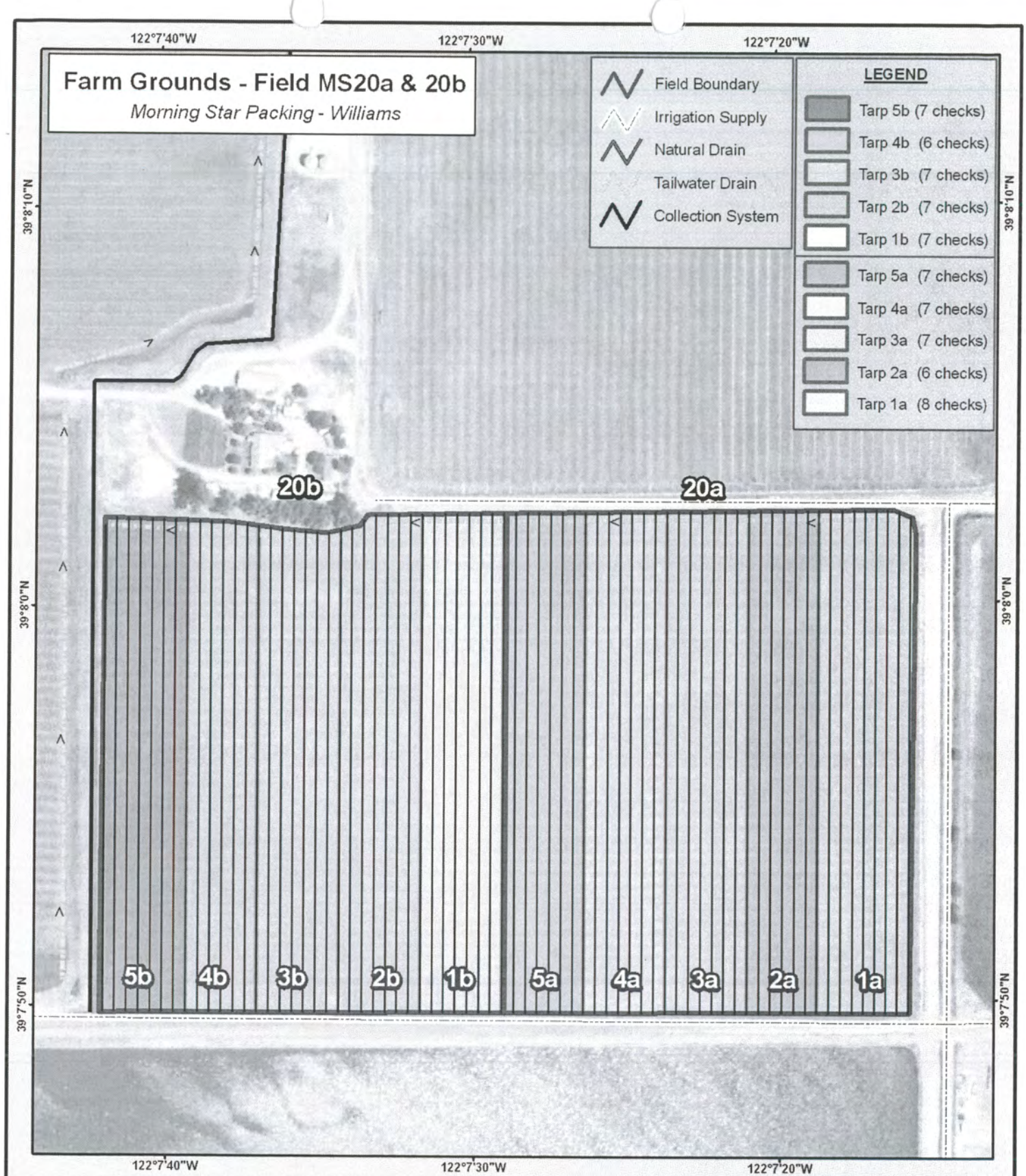
0 112.5 225 450 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-045



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:3,840 1 inch = 320 Feet

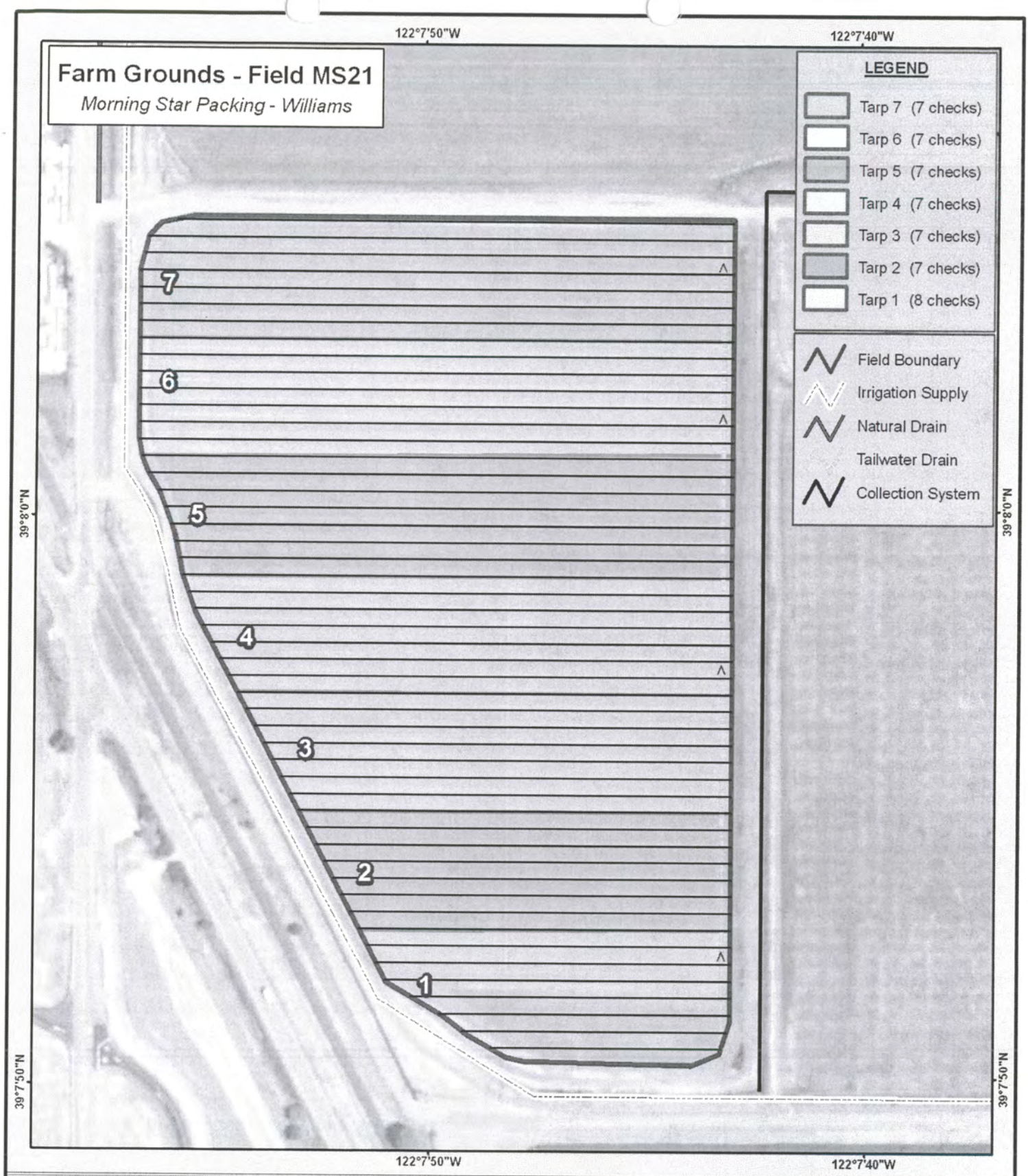
0 160 320 640 Feet

0 60 120 240 360 480 600 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-051



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:2,700 1 Inch = 225 Feet

0 112.5 225 450 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-046

Attachment E

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS2

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	41.05
Number of Checks	58
Check Width (feet)	30
Check Length (feet)**	1,100
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	4-Jun
Actual Planting Date	6/4/14
Anticipated Harvest Date	August 13, October 17
Actual Harvest Date	N/A
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Flow Rate to Each Check (gpm)	Total Irrigation Hours for Each Check	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00						
2			0.00						
3			0.00						
4			0.00						
5			0.00						
6			0.00						
7			0.00						
8			0.00						
9			0.00						
10			0.00						
11			0.00						
12			0.00						
13			0.00						
14			0.00						
15			0.00						
16			0.00						
17			0.00						
18			0.00						
19			0.00						
20			0.00						
21			0.00						
22			0.00						
23			0.00						
24			0.00						
25			0.00						
26			0.00						
27			0.00						
28			0.00						
29			0.00						
30			0.00						
31			0.00						
Total			0.00						

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS3

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	41.05
Number of Checks	53
Check Width (feet)	30
Check Length (feet)**	1,000
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	5-Jun
Actual Planting Date	5-Jun
Anticipated Harvest Date	August 14, October 18
Actual Harvest Date	N/A
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Flow Rate to Each Check (gpm)	Total Irrigation Hours for Each Check	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00						
2			0.00						
3			0.00						
4			0.00						
5			0.00						
6			0.00						
7			0.00						
8			0.00						
9			0.00						
10			0.00						
11			0.00						
12			0.00						
13			0.00						
14			0.00						
15			0.00						
16			0.00						
17			0.00						
18			0.00						
19			0.00						
20			0.00						
21			0.00						
22			0.00						
23			0.00						
24			0.00						
25			0.00						
26			0.00						
27			0.00						
28			0.00						
29			0.00						
30			0.00						
31			0.00						
Total			0.00						

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant

MONTH	July
YEAR	2014

COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS5

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	24.6
Number of Checks	34
Check Width (feet)	30
Check Length (feet)**	1,200
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	3-Jul
Actual Planting Date	N/A
Anticipated Harvest Date	Sept 11, November 15
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3	10:30		0.00	1-6	SI	483,088	13.5	5.0	3.6	NA
4		6:00	0.00	1-6	SI	220,746	6	5.0	1.6	NA
	6:00			7-13	SI	772,609	18	5.8	4.9	NA
5		3:00	0.00	7-13	SI	71,143	3	3.3	0.8	NA
	3:00	19:00		14-17	SI	233,141	16	4.1	2.1	NA
	14:30			18-22	SI	173,034	9.5	4.1	1.5	NA
6		14:00	0.00	18-22	SI	178,785	14	4.1	1.6	NA
	14:00			23-27	SI	127,703	10	4.1	1.1	NA
7		15:00	0.00	23-27	SI	190,200	15	4.1	1.7	NA
	15:00			28-32	SI	114,120	9	4.1	1.0	NA
8		11:00	0.00	28-32	SI	82,239	11	4.1	0.7	NA
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20	11:00		0.00	1-6	WW	298,295	13	5.0	2.2	NA
21		7:00	0.00		WW	253,850	7	5.0	1.9	NA
22	8:00		0.00	7-10	WW	317,487	16	3.3	3.5	NA
23		6:00	0.00		WW	144,651	6	3.3	1.6	NA
24			0.00							
25			0.00							
26	8:00		0.00	11-15	WW	1,096,534	16	4.1	9.8	NA
27		12:00	0.00	11-15	WW	1,860,162	12	4.1	16.6	NA
28	21:00		0.00	21-24	WW	41,030	3	3.3	0.5	NA
29			0.00	21-24	WW	186,721	24	3.3	2.1	NA
30		7:00	0.00	21-24	WW	37,217	7	3.3	0.4	NA
	7:00			25-32	WW	180,767	17	6.6	1.0	NA
31		0:00	0.00	25-32	WW	285,729	24	6.6	1.6	NA
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	120

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS6

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	21.4
Number of Checks	29
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	3-Jul
Actual Planting Date	
Anticipated Harvest Date	Sept 11, November 15
Actual Harvest Date	N/A
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3	10:30		0.00	1-6	SI	523,346	13.5	5.4	3.6	NA
4		2:00	0.00	1-6	SI	79,714	2	5.4	0.5	NA
	2:00			7-12	SI	876,850	22	5.4	6.0	NA
5		12:00	0.00	7-12	SI	264,245	12	5.4	1.8	NA
	12:00	17:00		13-18	SI	44,041	2	5.4	0.3	NA
	17:00			19-24	SI	154,143	7	5.4	1.1	NA
6		13:00	0.00	19-24	SI	215,819	13	5.4	1.5	NA
	13:00			25-30	SI	182,616	11	5.4	1.3	NA
7		12:30	0.00	25-30	SI	206,050	12.5	5.4	1.4	NA
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28	14:00		0.00	1-7	WW	259,286	10	6.3	1.5	NA
29			0.00	1-7	WW	353,992	24	6.3	2.1	NA
30		5:00	0.00	1-7	WW	50,398	5	6.3	0.3	NA
	5:00	19:00		8-12	WW	136,794	14	4.5	1.1	NA
31			0.00							
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	23

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS11

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	35.6
Number of Checks	32
Check Width (feet)	30
Check Length (feet)**	1,500
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	24-Jun
Actual Planting Date	24-Jun
Anticipated Harvest Date	Sept 2, Nov 6
Actual Harvest Date	N/A
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16	10:00		0.00	1-7	WW	591,347	14	7.2	3.0	NA
17		11:00	0.00	1-7	WW	678,266	11	7.2	3.5	NA
	11:00			8-13	WW	572,563	15	5.2	4.1	NA
18		3:00	0.00	8-13	WW	102,575	3	5.2	0.7	NA
	3:00	19:00		14-18	WW	547,065	16	5.2	3.9	NA
	19:00			19-25	WW	239,341	5	7.2	1.2	NA
19		22:00	0.00	19-25	WW	1,067,053	22	7.2	5.4	NA
	22:00			26-33	WW	166,450	2	8.3	0.7	NA
20			0.00	26-33	WW	917,831	24	8.3	4.1	NA
21		6:00	0.00	26-33	WW	362,643	6	8.3	1.6	NA
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28	6:00		0.00	1-7	WW	538,516	18	7.2	2.7	44
29		7:00	0.00	1-7	WW	119,132	7	7.2	0.6	44
	7:00			7-21	WW	619,972	17	15.5	1.5	33
30			0.00	7-21	WW	598,127	24	15.5	1.4	33
31		11:00	0.00	7-21	WW	366,201	11	15.5	0.9	33
	11:00	0:00		18-33	WW	546,247	13	16.5	1.2	64
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	141

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS14

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	44.5
Number of Checks	54
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Grass Hay
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	June 19th
Actual Planting Date	2008
Anticipated Harvest Date	August 28, Nov 1
Actual Harvest Date	10-Jul
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20	14:00		0.00	1-4		159,346	10	3.4	1.7	NA
21		13:30	0.00	1-4		339,978	13.5	3.4	3.6	NA
	13:30			5-8		264,427	10.5	3.4	2.8	NA
22		7:00	0.00	5-8		144,688	7	3.4	1.5	NA
	7:00	23:00		9-12		330,715	16	3.4	3.5	NA
	23:00			13-16		20,670	1	3.4	0.2	NA
23		15:00	0.00	13-16		376,696	15	3.4	4.0	NA
23	15:00		0.00	17-20		226,017	9	3.4	2.4	NA
24		9:00	0.00	17-20		273,997	9	3.4	2.9	NA
	9:00			21-24		456,661	15	3.4	4.9	NA
25		2:00	0.00	24-24		177,423	2	3.4	1.9	NA
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31	19:00	0:00	0.00	4-6		32,827	5	2.6	0.5	36
Total			0.00					15.5		

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	39

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant

MONTH	July
YEAR	2014

COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS15

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	26.7
Number of Checks	40
Check Width (feet)	30
Check Length (feet)**	1,000
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	30-Jun
Actual Planting Date	30-Jun
Anticipated Harvest Date	Sept 8, Nov 12
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	8:00		0.00	8-14	SI	889,718	16	4.82	6.8	NA
2		1:00	0.00	8-14	SI	54,755	1	4.82	0.4	NA
	1:00	15:45		15-21	SI	807,632	14.75	4.82	6.2	NA
	15:45			22-28	SI	387,194	8.25	4.13	3.5	NA
3		14:00	0.00	22-28	SI	417,484	14	4.13	3.7	NA
	14:00			29-35	SI	347,903	10	4.82	2.7	NA
4		10:00	0.00	29-35	SI	357,690	10	4.82	2.7	NA
	10:00	18:30		36-41	SI	260,602	8.5	4.13	2.3	NA
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19	16:00		0.00	1-7	WW	258,680	8	4.8	2.0	NA
20		7:00	0.00	1-7	WW	156,159	7	4.8	1.2	NA
	7:00	20:00		8-14	WW	290,009	13	4.8	2.2	NA
21			0.00							
22	10:00		0.00	15-21	WW	405,126	14	4.8	3.1	NA
23		5:00	0.00	15-21	WW	175,791	5	4.8	1.3	NA
24			0.00							
25	17:00		0.00	22-25	WW	496,783	7	2.8	6.6	NA
26		6:00	0.00	22-25	WW	274,134	6	2.8	3.7	NA
	6:00			26-28	WW	616,801	18	2.1	11.0	NA
27		8:00	0.00	26-28	WW	620,054	8	2.1	11.1	NA
28	10:00		0.00	40-41	WW	79,780	14	1.4	2.1	NA
29		11:00	0.00	40-41	WW	35,659	11	1.4	1.0	NA
30			0.00							
31	20:00	0:00	0.00	1-10	WW	70,032	4	6.9	0.4	21
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	82	

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS16

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	36.7
Number of Checks	*42
Check Width (feet)	30
Check Length (feet)**	1,240
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	1-Jul
Actual Planting Date	
Anticipated Harvest Date	Sept 9, Nov 13
Actual Harvest Date	N/A
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	13:00		0.00	10-16	SI	541,775	11	4.3	4.7	NA
2		17:00	0.00	10-16	SI	824,449	17	4.3	7.1	NA
	17:00			11-15	SI	339,479	7	4.3	2.9	NA
3			0.00	11-15	SI	739,543	24	4.3	6.4	NA
4		15:00	0.00	11-15	SI	475,216	15	4.3	4.1	NA
	15:00			16-20	SI	285,130	9	4.3	2.5	NA
5		16:00	0.00	16-20	SI	280,055	16	4.3	2.4	NA
	16:00			21-25	SI	140,027	8	4.3	1.2	NA
6		15:00	0.00	21-25	SI	197,940	15	4.3	1.7	NA
	15:00			26-29	SI	95,011	9	3.4	1.0	NA
7		14:00	0.00	26-29	SI	146,750	14	3.4	1.6	NA
	14:00			30-34	SI	131,026	10	4.3	1.1	NA
8		13:30	0.00	30-34	SI	104,294	13.5	4.3	0.9	NA
	13:30			35-39	SI	81,118	10.5	4.3	0.7	NA
9		8:00	0.00	35-39	SI	4,978	8	4.3	0.0	NA
	8:00	22:00		40-43	SI	6,969	14	3.4	0.1	NA
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20	6:00	19:00	0.00	1-8	WW	410,984	13	6.8	2.2	NA
21			0.00							
22	9:00	22:00	0.00	9-14	WW	399,835	13	5.1	2.9	NA
	22:00			15-18	WW	41,009	2	3.4	0.4	NA
23		13:00	0.00	15-18	WW	323,858	13	3.4	3.5	NA
24			0.00							
25	20:00		0.00	19-22	WW	352,006	4	3.4	3.8	NA
26		8:00	0.00	19-22	WW	453,234	8	3.4	4.9	NA
27			0.00							
28	11:00		0.00	23-27	WW	229,653	13	4.3	2.0	NA
29		8:00	0.00	23-27	WW	80,394	8	4.3	0.7	NA
	8:00			28-38	WW	353,733	16	9.4	1.4	NA
30			0.00	28-38	WW	362,598	24	9.4	1.4	NA
31		13:00	0.00	28-38	WW	262,363	13	9.4	1.0	NA
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	56

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS18a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.1
Number of Checks*	42
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	23-Jun
Actual Planting Date	23-Jun
Anticipated Harvest Date	Sept 1, Nov 5
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18	6:00	17:00	0.00	1-5	WW	325,960	11	4.5	2.7	NA
	17:00			6-10	WW	207,429	7	4.5	1.7	NA
19		7:00	0.00	6-10	WW	210,177	7	4.5	1.7	NA
	7:00	18:00		11-15	WW	420,354	11	4.5	3.4	NA
20			0.00							
21			0.00							
22	12:00		0.00	16-21	WW	386,937	12	5.4	2.7	NA
		3:00		16-21	WW	117,529	3	5.4	0.8	NA
23	3:00		0.00	22-26	WW	685,586	21	4.5	5.6	NA
24		8:00	0.00	22-26	WW	316,618	8	4.5	2.6	NA
	8:00	22:00		27-37	WW	1,218,981	14	9.8	4.6	NA
	22:00			38-42	WW	79,155	2	4.5	0.7	NA
25		13:00	0.00	38-42	WW	1,499,220	13	4.5	12.3	NA
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30	15:00		0.00	1-42	WW	544,296	9	37.6	0.5	81
31		8:00	0.00	1-42	WW	764,746	8	37.6	0.7	81
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	108

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS18b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.1
Number of Checks*	43
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	23-Jun
Actual Planting Date	23-Jun
Anticipated Harvest Date	Sept 1, Nov 5
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	11:00		0.00	23-31	SI	1,691,577	13	11.3	5.5	NA
2		11:30	0.00	23-31	SI	1,473,449	11.5	11.3	4.8	NA
	11:30			32-37	SI	1,067,717	12.5	7.5	5.2	NA
3		12:00	0.00	32-37	SI	651,275	12	7.5	3.2	NA
	12:00			38-42	SI	542,729	12	6.3	3.2	NA
4		12:00	0.00	38-42	SI	557,996	12	6.3	3.3	NA
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28	8:00	20:00	0.00	15-28	WW	871,200	12	17.5	1.8	NA
	20:00			29-37	WW	186,686	4	11.3	0.6	NA
29		10:00	0.00	29-37	WW	265,494	10	11.3	0.9	NA
	10:00			38-42	WW	206,495	14	6.3	1.2	NA
30		15:00	0.00	38-42	WW	151,193	15	6.3	0.9	NA
	15:00			1-19	WW	344,721	9	23.8	0.5	NA
31		8:00	0.00	1-19	WW	484,339	8	23.8	0.7	NA
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	40

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant

MONTH	July
YEAR	2014

COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS20a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	32.3
Number of Checks	34
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10-Jun
Actual Planting Date	10-Jun
Anticipated Harvest Date	Aug 19, Oct 23
Actual Harvest Date	N/A
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	9:00	18:00	0.00	1-5	SI	297,897	9	4.3	2.5	
	18:00			6-11	SI	357,476	6	5.2	2.5	
2		18:00	0.00	6-11	SI	1,055,983	18	5.2	7.5	
	18:00			12-18	SI	410,660	6	6.0	2.5	
3		13:00	0.00	12-18	SI	565,343	13	6.0	3.5	
	13:00			19-25	SI	478,367	11	6.0	2.9	
4		9:00	0.00	19-25	SI	402,401	9	6.0	2.5	
	9:00	22:00		26-32	SI	581,246	13	6.0	3.6	
	22:00			33-35	SI	38,324	2	2.6	0.5	
5		16:30	0.00	33-35	SI	174,681	16.5	2.6	2.5	
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS20b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	32.3
Number of Checks	35
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10-Jun
Actual Planting Date	10-Jun
Anticipated Harvest Date	Aug 19, Oct 23
Actual Harvest Date	N/A
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4	22:00		0.00	1-4	SI	51,099	2	3.4	0.5	
5		16:30	0.00	1-4	SI	232,909	16.5	3.4	2.5	
	16:30			5-11	SI	185,268	7.5	6.0	1.1	
6		5:00	0.00	5-11	SI	93,117	5	6.0	0.6	
	5:00	16:00		12-18	SI	204,858	11	6.0	1.3	
	16:00			19-25	SI	148,987	8	6.0	0.9	
7		7:00	0.00	19-25	SI	129,441	7	6.0	0.8	
	7:00	21:00		26-31	SI	221,900	14	5.2	1.6	
	21:00			32-35	SI	31,700	3	3.4	0.3	
8		18:00	0.00	32-35	SI	112,144	18	3.4	1.2	
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS21

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	25.9
Number of Checks	50
Check Width (feet)	30
Check Length (feet)**	750
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	28-Jun
Actual Planting Date	28-Jun
Anticipated Harvest Date	Sept 6, Nov 10
Actual Harvest Date	N/A
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	7:00	23:00	0.00	32-38	SI	762,616	16	4.1	6.8	NA
	23:00			39-45	SI	41,706	1	3.6	0.4	NA
2		19:00	0.00	39-45	SI	780,254	19	3.6	7.9	NA
	19:00			46-50	SI	146,664	5	2.6	2.1	NA
3		7:00	0.00	46-50	SI	130,464	7	2.6	1.9	NA
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17	6:00	16:30	0.00	1-5	WW	231,227	10.5	2.6	3.3	NA
	16:30			6-10	WW	165,162	13.5	2.6	2.4	NA
18		4:00	0.00	6-10	WW	68,383	4	2.6	1.0	NA
	4:00	15:00		11-15	WW	188,054	11	2.6	2.7	NA
	15:00			16-19	WW	123,090	9	2.1	2.2	NA
19		6:00	0.00	16-19	WW	83,147	6	2.1	1.5	NA
	6:00			20-24	WW	311,801	18	2.6	4.4	NA
20		9:00	0.00	20-24	WW	107,558	9	2.6	1.5	NA
	9:00			25-33	WW	286,822	15	4.1	2.6	NA
21		15:00	0.00	25-33	WW	453,304	15	4.1	4.0	NA
	15:00			34-40	WW	237,985	9	3.6	2.4	NA
22		8:00	0.00	34-40	WW	173,625	8	3.6	1.8	NA
23	8:00	23:00	0.00	41-46	WW	395,530	15	3.6	4.0	NA
	23:00			47-50	WW	15,068	1	2.1	0.3	NA
24		7:00	0.00	47-50	WW	127,865	7	2.1	2.3	NA
25			0.00							
26			0.00							
27			0.00							
28	7:00	21:30	0.00	1-9	WW	278,875	14.5	4.6	2.2	41
	21:30			10-18	WW	48,082	3.5	4.6	0.4	41
29			0.00	10-18	WW	262,576	24	4.6	2.1	41
30		3:00	0.00	10-18	WW	22,430	3	4.6	0.2	41
	3:00			19-28	WW	174,454	21	5.2	1.2	63
31		0:00	0.00	19-28	WW	315,142	24	5.2	2.2	63
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	98

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS24a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	2,600
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5	6:00	19:00	0.00	1-7	SI	667,953	13	12.5	2.0	NA
	19:00			8-14	SI	256,905	5	12.5	0.8	NA
6		9:00	0.00	8-14	SI	348,630	9	12.5	1.0	NA
	9:00			15-21	SI	581,051	15	12.5	1.7	NA
7		11:00	0.00	15-21	SI	423,089	11	12.5	1.2	NA
	11:00			22-28	SI	500,014	13	12.5	1.5	NA
8		0:30	0.00	22-28	SI	11,339	0.5	12.5	0.0	NA
	0:30	15:30		29-35	SI	340,172	15	12.5	1.0	NA
	15:30			36-42	SI	192,764	8.5	12.5	0.6	NA
9		9:00	0.00	36-42	SI	16,438	9	12.5	0.0	NA
	9:00	23:00		43-44	SI	7,306	14	3.6	0.1	NA
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS24b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	2,600
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9	9:00	23:00	0.00	1-5	SI	18,264	14	9.0	0.1	NA
	23:00			6-12	SI	1,826	1	12.5	0.0	NA
10		16:00	0.00	6-12	SI	67,614	16	12.5	0.2	NA
	16:00			13-18	SI	28,977	8	10.7	0.1	NA
11		4:00	0.00	13-18	SI	57,236	4	10.7	0.2	NA
	4:00	16:00		19-26	SI	228,943	12	14.3	0.6	NA
	16:00			27-33	SI	133,550	8	12.5	0.4	NA
12		5:00	0.00	27-33	SI	172,624	5	12.5	0.5	NA
	5:00	19:00		34-42	SI	552,396	14	14.3	1.4	NA
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER:	Morning Star Packing Company, LP and Fred Gobel
FACILITY:	Morning Star Tomato Packing Plant
COUNTY:	Colusa
WDRs Order:	R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS24c

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	2,600
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5	6:00	19:00	0.00	1-7	SI	667,953	13	12.5	2.0	NA
	19:00			8-14	SI	256,905	5	12.5	0.8	NA
6		9:00	0.00	8-14	SI	348,630	9	12.5	1.0	NA
	9:00			15-21	SI	581,051	15	12.5	1.7	NA
7		8:00	0.00	15-21	SI	307,701	8	12.5	0.9	NA
	8:00			22-28	SI	615,402	16	12.5	1.8	NA
8		5:00	0.00	22-28	SI	113,391	5	12.5	0.3	NA
	5:00	19:00		29-35	SI	317,493	14	12.5	0.9	NA
	19:00			36-42	SI	113,391	5	12.5	0.3	NA
9		13:00	0.00	36-42	SI	23,744	13	12.5	0.1	NA
	13:00			43-44	SI	5,740	11	3.6	0.1	NA
10		3:00	0.00	43-44	SI	3,622	3	3.6	0.0	NA
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS24d

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	2,600
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9	13:00		0.00	1-5	SI	14,351	11	9.0	0.1	NA
10		3:00	0.00	1-5	SI	9,055	3	9.0	0.0	NA
	3:00	18:00		6-12	SI	67,614	16	12.5	0.2	NA
	18:00			13-18	SI	21,733	6	10.7	0.1	NA
11		6:00	0.00	13-18	SI	85,853	6	10.7	0.3	NA
	6:00	18:00		19-26	SI	228,943	12	14.3	0.6	NA
	18:00			27-33	SI	100,162	6	12.5	0.3	NA
12		7:00	0.00	27-33	SI	241,673	7	12.5	0.7	NA
	7:00	21:00		34-42	SI	552,396	14	14.3	1.4	NA
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.00							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morming Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order R5-2013-0144

MONTH	July
YEAR	2014

LAND APPLICATION AREA MONITORING TOTAL NITROGEN LOADING RESULTS

LAA Field	~~Gobel~~	MS 1	MS 2	MS 3	MS 5	MS 6	MS 11	MS 14	MS 15	MS 16	MS 18a	MS 18b	MS 20a	MS 20b	MS 21	MS 24a	MS 24b	MS 24c	MS 24d
Acres of LAA Irrigated																			
Total Nitrogen Loading from Wastewater (lbs/ac/month)					120	23	141	39	82	56	108	40			98				
Total Nitrogen Loading Rate from Settling Pond Solids (lbs/ac/month)					123	123			123	123					123				
Total Nitrogen Loading Rate from Cooling Pond Solids (lbs/ac/month)																			
Total Nitrogen Loading Rate from Residual Solids (lbs/ac/month)																			
Total Nitrogen Loading Rate from Cattle/ Manure (lbs/ac/month)																			
Total Nitrogen Loading Rate from Commercial Fertilizers (lbs/ac/month)			56	14		63	14	63	0	0	82	82	119	119	0	82	82	82	82
Cumulative Annual Total Nitrogen Value (lbs/ac/year)			56	14	243	209	155	102	205	179	190	122	119	119	221	82	82	82	82
Annual Crop Demand (lbs/ac/year)																			

Attachment F

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 7-21-14 Weather: Partly Cloudy

1. Any evidence of erosion: yes / (no)
2. Berm Condition Good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: 76° Wind-S@9MPH
14. Other observations: Crops are growing Good

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 7-28-14 Weather: Sunny

1. Any evidence of erosion: yes / (no)
2. Berm Condition Good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: 77° East @ 3 mph
14. Other observations: Crops are growing good.

Attachment G

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order R5-2013-0144

MONTHLY MONITORING REPORT

MONTH	July
YEAR	2014

RESIDUAL SOLIDS MONITORING : Facility Not Processing, Solids Monitoring N/A

Date	Type of Solids Generated	Volume of Solids Generated (tons)[1]	Volume of Solids Disposed of Offsite (tons)	Offsite Solids Disposal Location[2]	Volume of Solids Disposed of Onsite (tons)	Onsite Solids Disposal Location[3]
31-Jul	Pomace, Wet Waste	5,886	5,886	Animal Feed, Gilton Resource Recover/Transfer Station	0	

[1]Volume of Solids Generated. Solids may include pomace, seeds, stems, diatomaceous earth, screenings, pond solids, and sump solids, or other material.

[2]Volume Disposed of Off-site. Describe the disposal method (e.g. animal feed, land application, off-site composting, landfill, etc.) and the name of the hauling company.

[3]Volume Disposed of On-site; location of on-site disposal (e.g. land application area field); method of application, spreading, and incorporation; application rate (tons/acre), and results from weekly grab sample analysis for total nitrogen.

Attachment H

DISCHARG Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Orde R5-2013-0144

MONTHLY MONITORING REPORT

MONTH July
YEAR 2014

FIELD INSTRUMENT CALIBRATION LOG

Monitoring Week	Date	Time	Lower Standard pH Buffer	Lower Standard Stabilized pH	Lower pH Standard Calibrated pH	Upper Standard pH Buffer	Upper Standard Stabilized pH	Upper Standard Calibrated pH	DO Initial Reading	Electrolyte Solution Added	DO Reading after Calibration	Technican's Initials
Week 1												
Week 2												
Week 3	7/21	7:20	4	3.9	NA	10	9.75	10	3.28	NA	NA	JP
Week 4												
Week 5												

If either calibrated pH value is more than 0.2 higher or lower than its corresponding pH buffer value, recalibrate the meter before using it in the field.