CRSA

Staff: GC

Logged in as received: 04.03.14 LC

Date reviewed:

Violations?:

Logged in as Reviewed:

RECEIVED
SACRAMENTO
CVRWQCB
14 APR -2 PM 1:45

Monitoring Report Submittal Transmittal Form

Attn: Guy Childs (916) 464-4648
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Discharger:	The Morning Star Packing Company, LP and Fred Gobel
Name of Facility:	Williams Facility
WDRs Order Number:	R5-2013-0144
WDID:	5A062005001
County:	Colusa

I am hereby submitting to the Central Valley Water Board the following information:

Check all that apply:

Monthly Monitoring Report for the month of FEBRUARY

1st / 2nd / 3rd / 4th (**circle one**) Quarterly Monitoring Report for the year of_____

1st / 2nd (**circle one**) Semi-annual Monitoring Report for the year _____

Annual Monitoring Report for the year _____

Violation Notification

During the monitoring period, there were / were not (circle one) any violations of the WDRs.

1. The violations were: (*add extra pages as needed*)
2. Have the violations been corrected? Yes / No. If no, what will be done to correct the violations: (*add extra pages as needed*) N/A

Certification Statement

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Signature: _____ Phone: (530)666-6600

Printed Name: ROSS OLIVEIRA Date: 3/31/14

Staff: GC

Logged in as received: 04.03.14 LC

Date reviewed:

Violations?:

Logged in as Reviewed:

THE MORNING STAR PACKING COMPANY
724 Main Street, Woodland CA 95695

31 March 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 February 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 cooling pond monitoring results for February 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.

As The Morning Star Packing Company – Williams is not processing, there are no daily flow measurements from the washwater sources, however, due to the drought conditions, the facility did begin irrigating with supplemental irrigation water. The February logsheets are 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.

As The Morning Star Packing Company – Williams is not processing the February average daily flow is zero and a comparison to the average daily flow limit is not needed. 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	0	
Station 2: Cooling Pond	0	
Total Washwater Discharge	0	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.

As The Morning Star Packing Company – Williams is not processing, there is no washwater monitoring data and calculations to be submitted, however, a February 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**. The number of checks for many of the fields that had been estimated for the December and January monthly report based on aerial imagery has been updated with the current information.

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.

As The Morning Star Packing Company – Williams is not processing, there is no pre-application inspection reports to submit, however, a February logsheet is 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.

As The Morning Star Packing Company – Williams is not processing, there is no calculation of the flow-weighted average FDS concentration to report, however, this information 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.

As The Morning Star Packing Company – Williams is not processing, there is no residual solids monitoring data to report, however, a February logsheet 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.

As The Morning Star Packing Company – Williams is not processing, there is no comparison of monitoring data to the flow limitations, effluent limitations, mass loading limitations or discharge specifications.

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

As The Morning Star Packing Company – Williams is not processing, there are no laboratory analytical reports to be submitted.

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

The calibration log for February is 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	February
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								
	Week 3								
	Week 4								
	Week 5								
Coolng Pond	Week 1	2/4/14	8:46 AM	8.41	7.80	3.25	None	Good	J.I.
	Week 2								
	Week 3								
	Week 4								
	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.

MORNING STAR

"Excellence Through Commitment"

Field Log: CP/SP # Technician: Jon Ikerd

Date: 2-4-14 Weather: 64

COOLING POND

pH 7.8 EC: 680 umhos/cm Temp: °C 68 °F

Freeboard: 39 inches Time: 8:46 (0700-0900 hours)

Sample for dissolved oxygen analysis: Taken with Hach Meter RESULT: 8.41

Levee Condition: Good

Water Color: Grey/Green

Odors: yes / no Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: yes / no Please see attached calibration notes.

SETTLING POND

pH EC: ____ umhos/cm Temp: °C °F

Freeboard: _____ inches Time: _____ (0700-0900 hours)

Sample for dissolved oxygen analysis: RESULT: #1_____ #2_____

Levee Condition: _____

Water Color: _____

Odors: yes / no Strength: _____ Characteristics: _____

Other Observations: _____

Equipment Calibration: yes / no Please see attached calibration notes.

Attachment B

MONTHLY MONITORING REPORT

MONTH	February
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	1,728,000	0	0	0	MS14, MS20b	0
2	1,899,000	0	0	0	MS14, MS20b	0
3	1,827,000	0	0	0	MS14, MS20b, MS2, MS3	0
4	2,178,000	0	0	0	MS20b, MS2, MS3	0
5	1,728,000	0	0	0	MS2, MS3	0
6	576,000	0	0	0	MS2, MS3	0
7	0	0	0	0	-	0
8	0	0	0	0	-	0
9	0	0	0	0	-	0
10	0	0	0	0	-	0
11	0	0	0	0	-	0
12	0	0	0	0	-	0
13	900,000	0	0	0	MS2, MS3	0
14	1,080,000	0	0	0	MS2, MS3	0
15	1,134,000	0	0	0	MS2, MS3	0
16	36,000	0	0	0	MS2	0
17	936,000	0	0	0	MS2, MS3	0
18	828,000	0	0	0	MS2, MS3	0
19	0	0	0	0	-	0
20	0	0	0	0	-	0
21	0	0	0	0	-	0
22	0	0	0	0	-	0
23	0	0	0	0	-	0
24	0	0	0	0	-	0
25	0	0	0	0	-	0
26	0	0	0	0	-	0
27	0	0	0	0	-	0
28	0	0	0	0	-	0
Total Monthly Flow (MG)	14,850,000	0	0	0		0
Average Daily Flow (MGD)	530,357	0	0	0		0
Cumulative Annual Flow to Date (MG)	29,706,000	0	0	0		0

Attachment C

MONTHLY MONITORING REPORT

MONTH	February
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 : No Washwater Monitoring for January 2014

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						
Week 4 of Current Month						
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]	
Average Monthly Total Nitrogen Concentration (mg/L)[2]	
Monthly Average FDS Concentration (mg/L)	
Flow Weighted Average FDS Concentration to Date (mg/L)[3]	

[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.

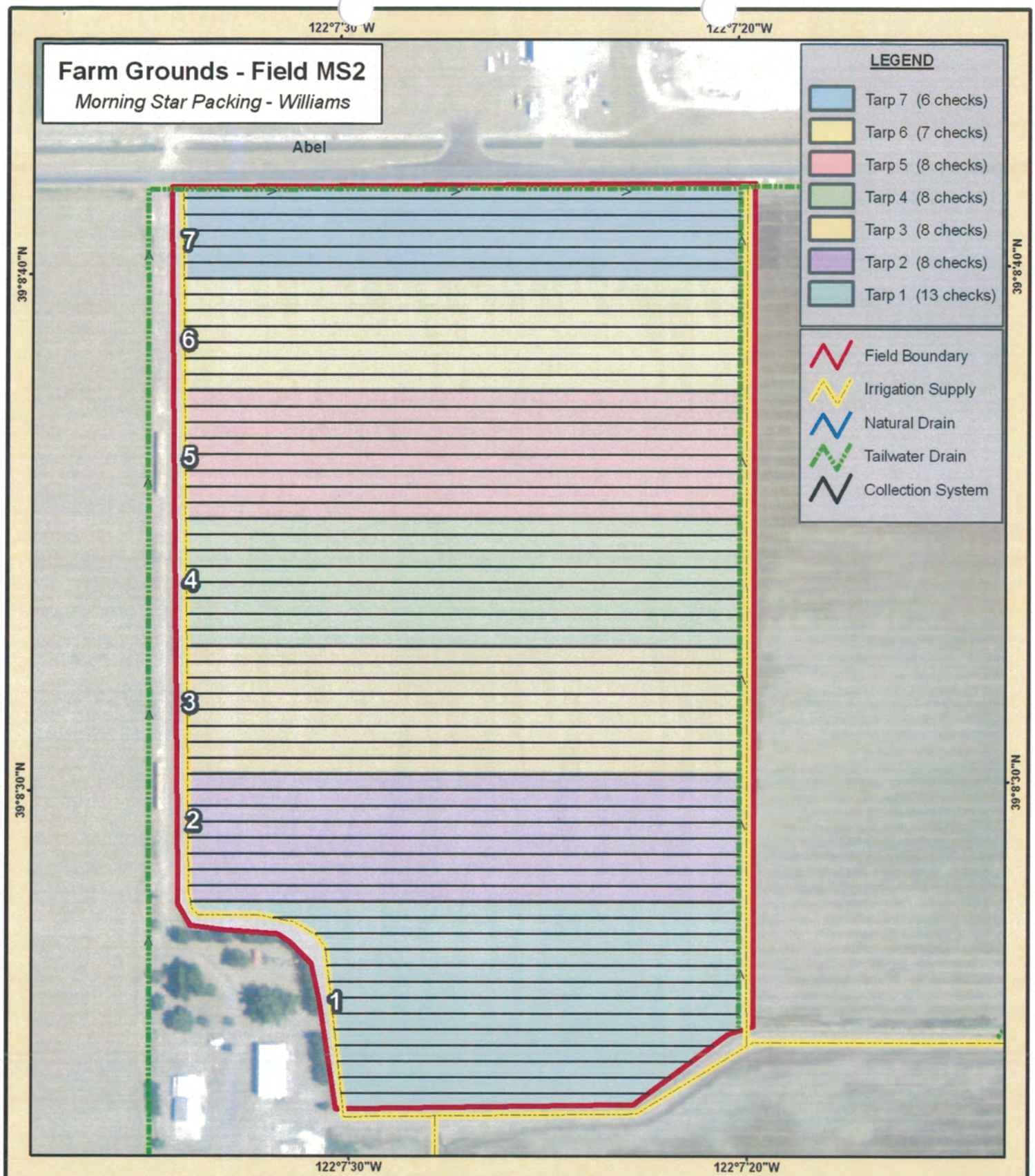
Map Scale 1:14,400 1 Inch = 1,200 Feet

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

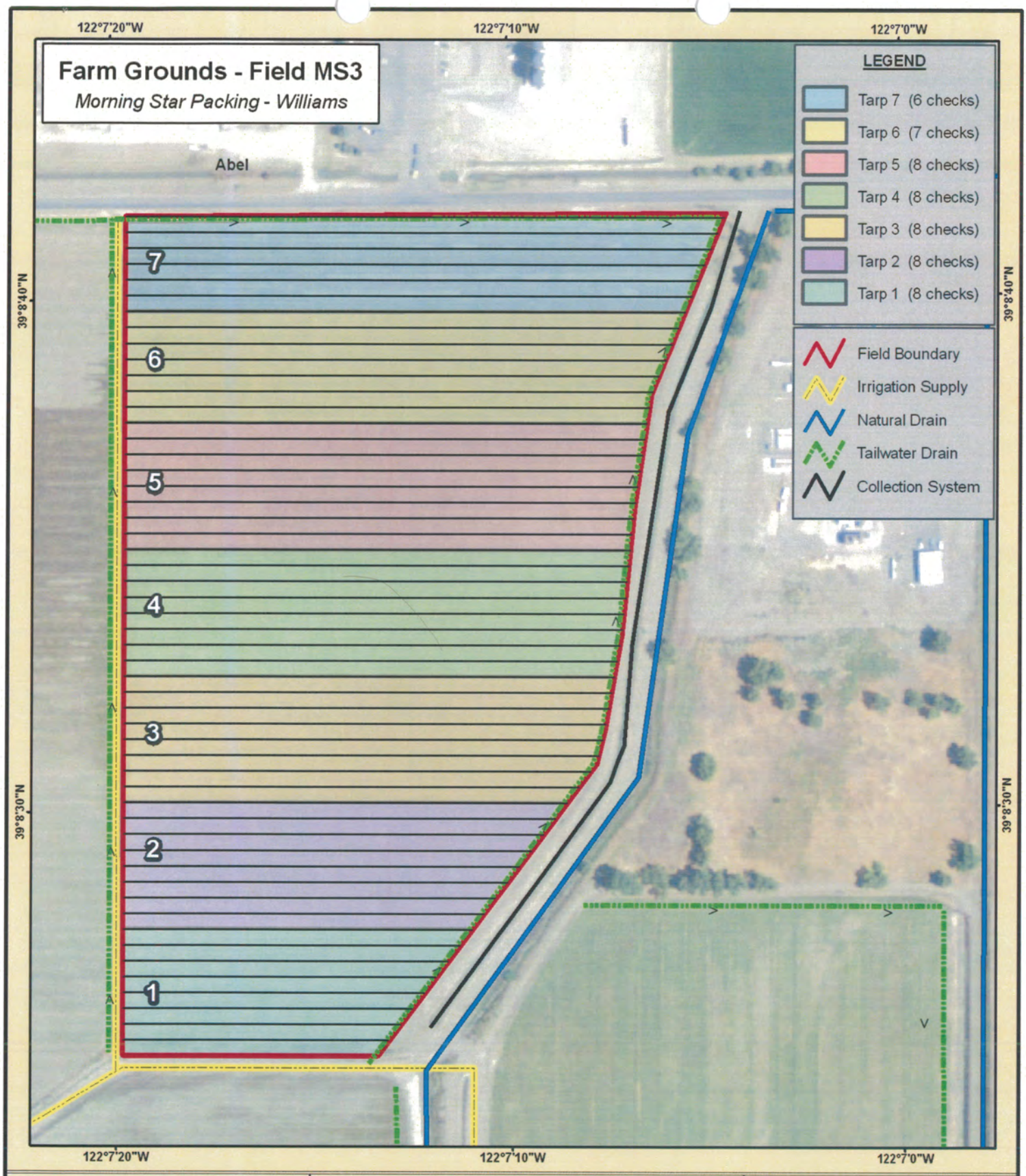
0 125 250 500 Feet

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

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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

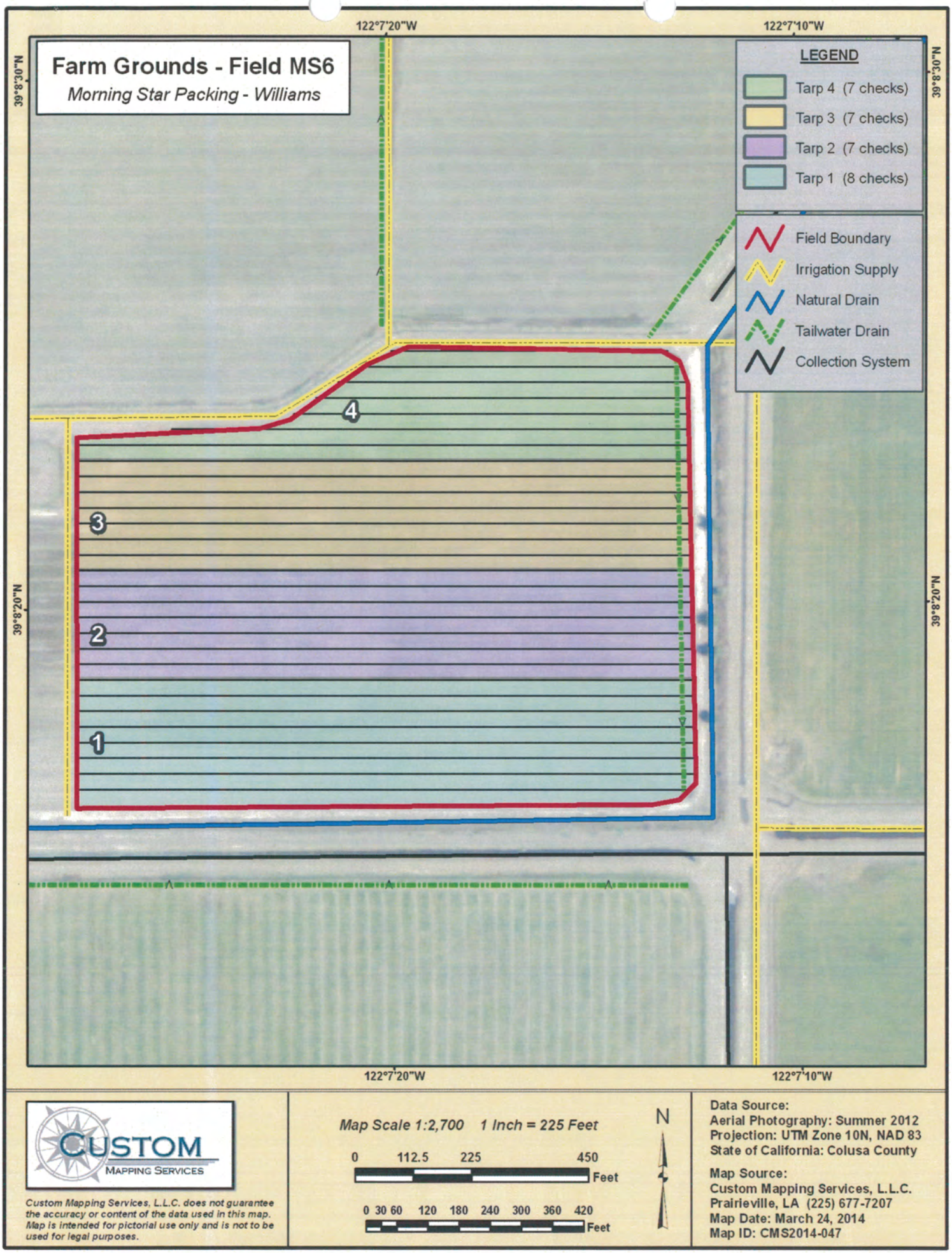
0 112.5 225 450 Feet

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

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

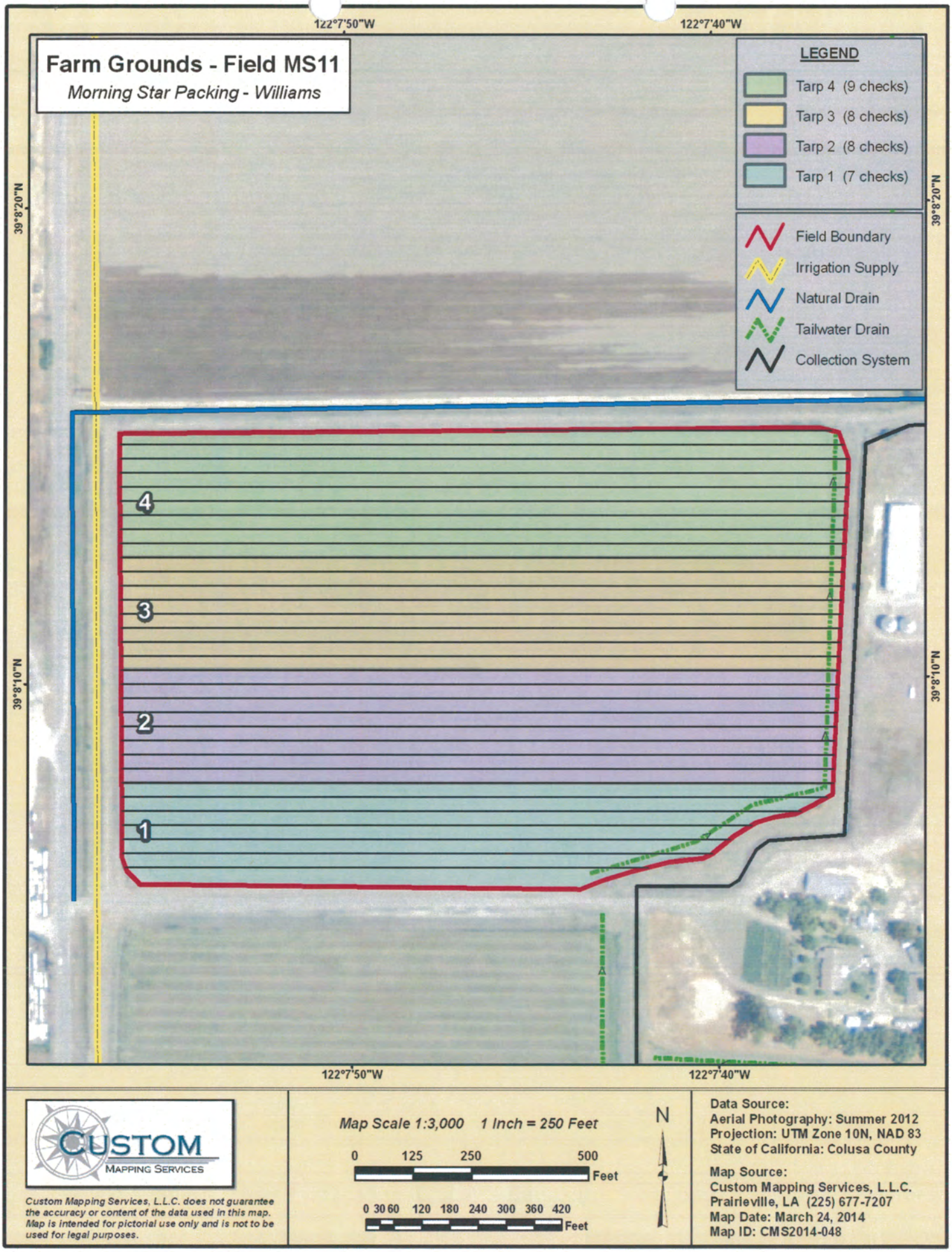
0 112.5 225 450 Feet

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

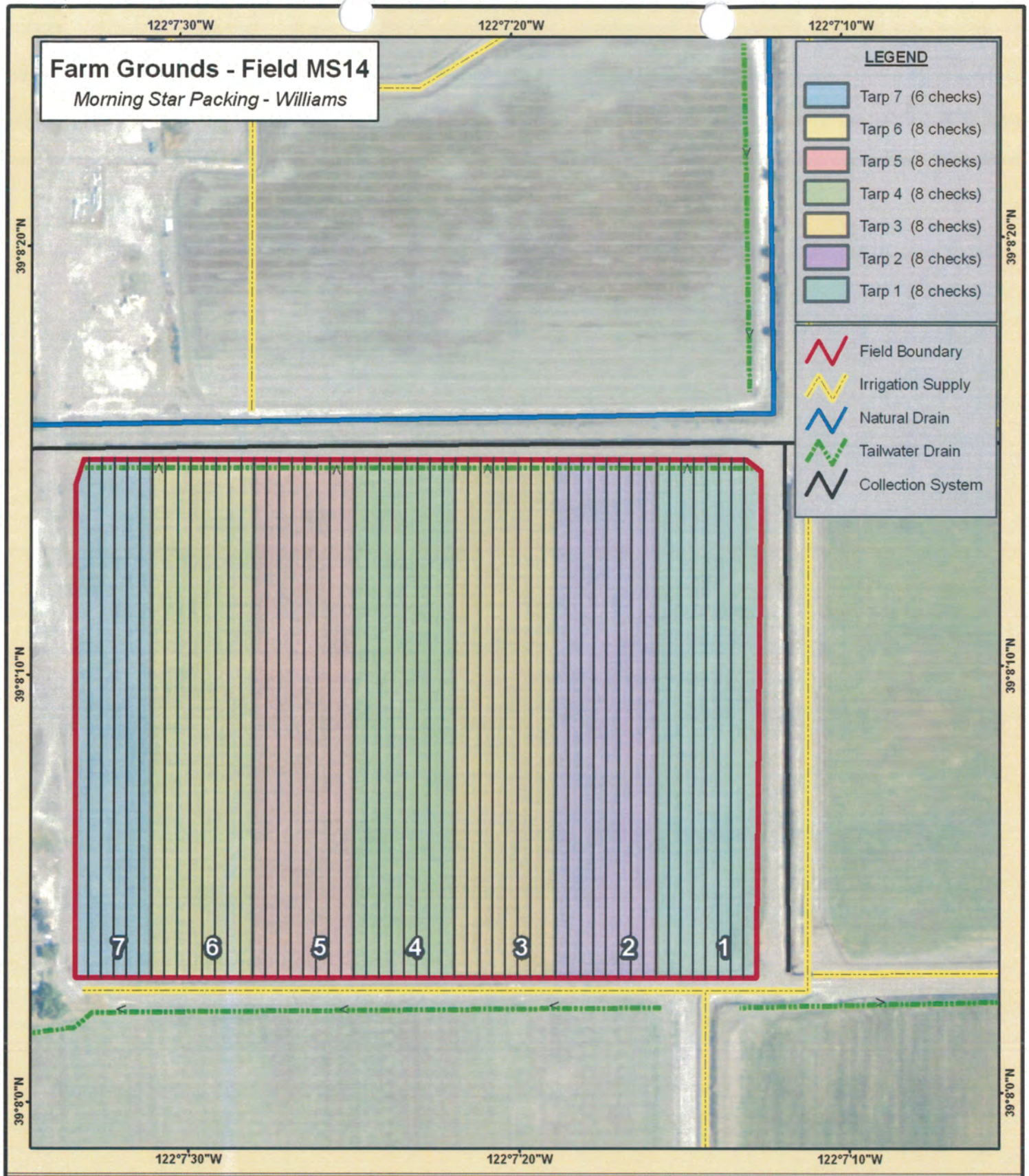
0 125 250 500 Feet

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

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

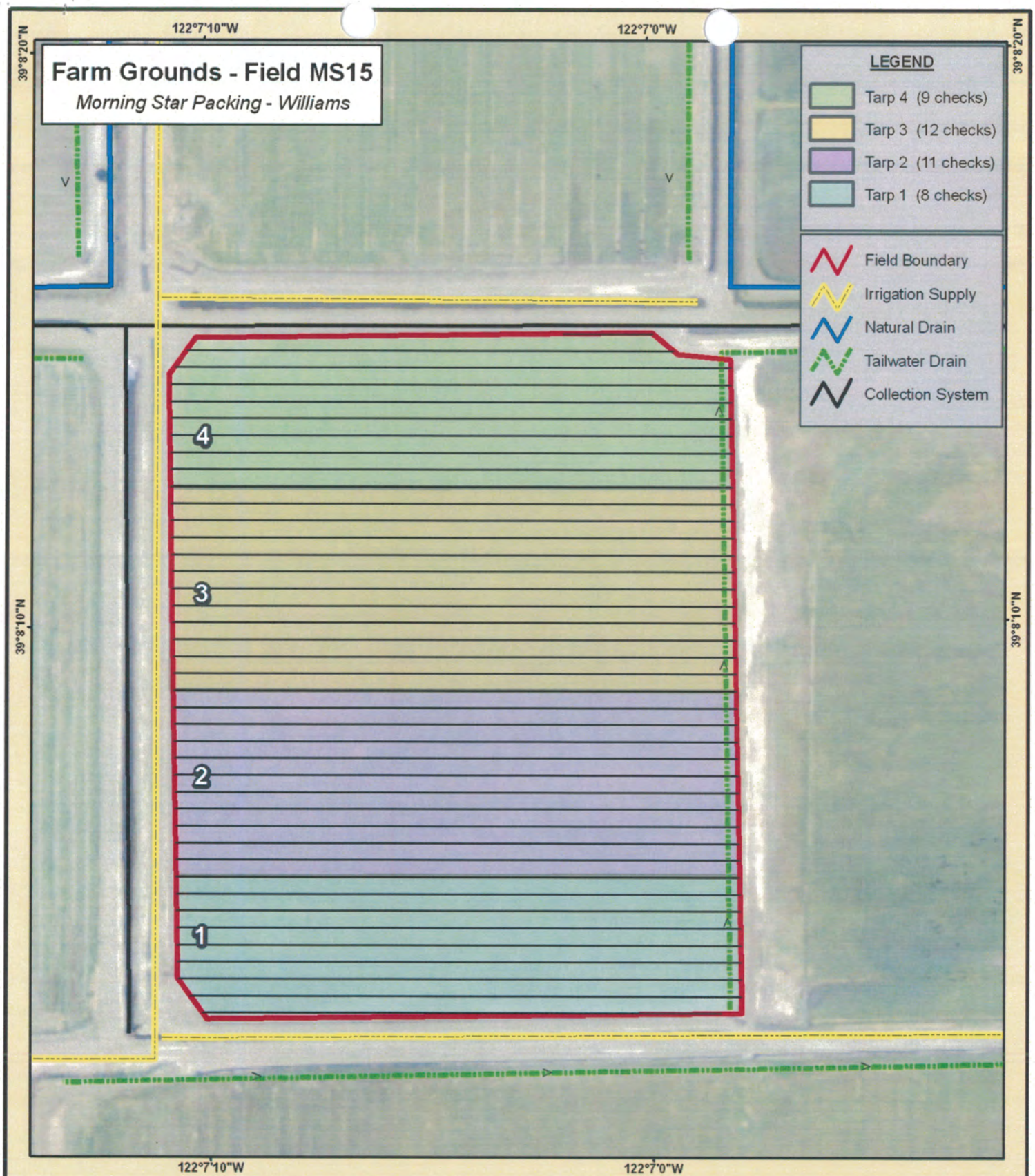
0 150 300 600 Feet

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

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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

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

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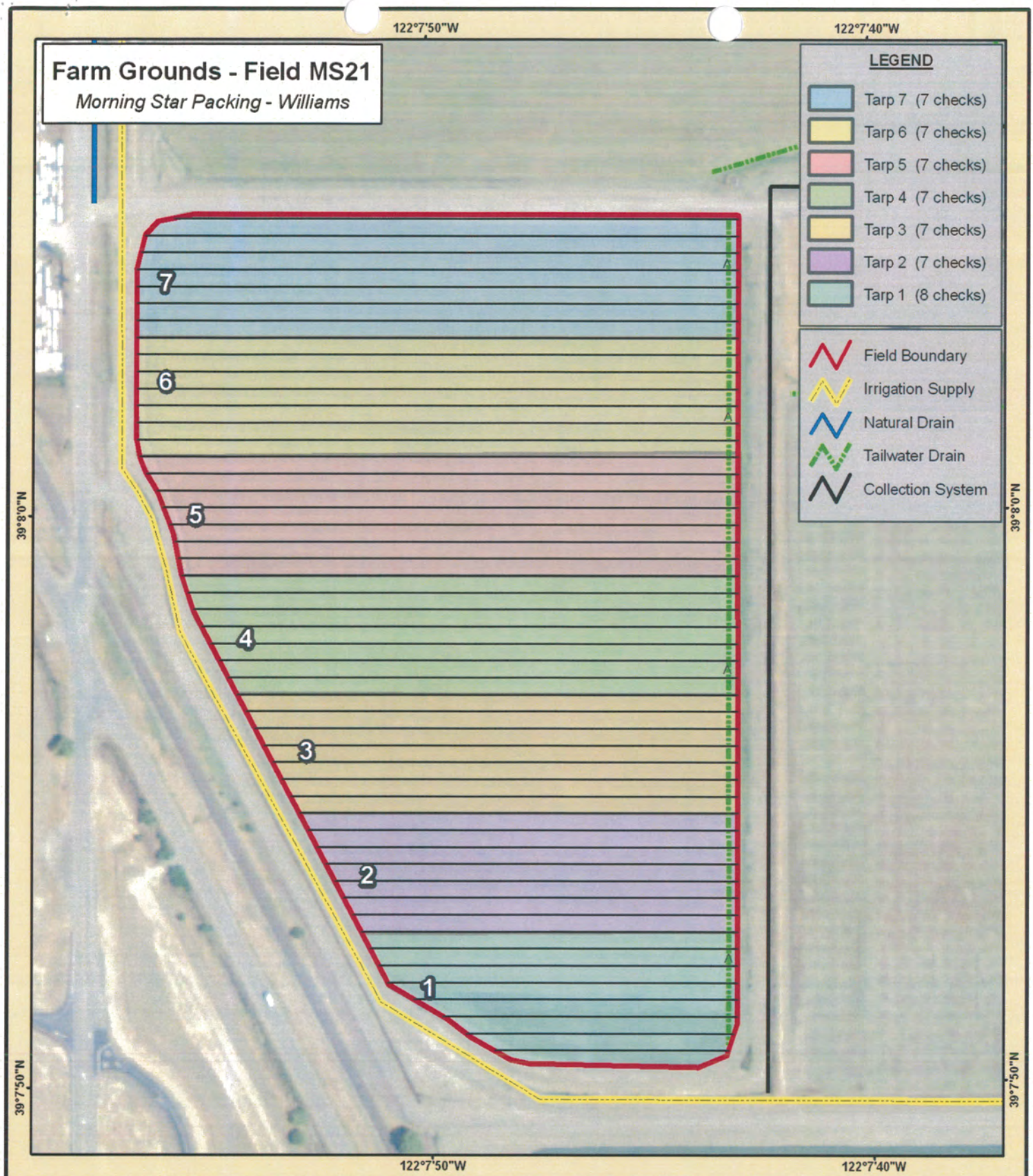
0 60 120 240 360 480 600 Feet

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	February
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	Oats
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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	9:30 PM		0.00	Checks 1-13	Supp. Irrig.	600	2.5	0.34	
4			0.00	Checks 1-13	Supp. Irrig.	600	24	3.23	
5		9:30 AM	0.00	Checks 1-13	Supp. Irrig.	600	9.5	1.28	
	9:30 AM		0.00	Checks 14-21	Supp. Irrig.	600	14.5	3.17	
6		8:00 AM	0.60	Checks 14-21	Supp. Irrig.	600	8	1.75	
7			0.10						
8			1.50						
9			0.30						
10			0.00						
11			0.00						
12			0.00						
13	9:00 AM	9:00 PM	0.00	Checks 22-30	Supp. Irrig.	600	12	2.63	
14	8:30 AM	11:30 PM	0.00	Checks 31-38	Supp. Irrig.	600	15	3.28	
15	8:30 AM		0.00	Checks 39-46	Supp. Irrig.	600	15.5	3.39	
16		1:00 AM	0.00	Checks 39-46	Supp. Irrig.	600	1	0.22	
17	8:30 AM	10:00 PM	0.00	Checks 47-54	Supp. Irrig.	600	13.5	2.95	
	10:00 PM	11:00 PM	0.00	Checks 55-62	Supp. Irrig.	600	1	0.22	
18	7:00 AM	9:00 PM	0.00	Checks 55-62	Supp. Irrig.	600	14	3.06	
19			0.00						
20			0.00						
21			0.00						
22			0.00						
23			0.00						
24			0.00						
25			0.00						
26			1.00						
27			0.00						
28			2.25						
Total			5.75						

[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]	

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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

Crop Information

Crop Name	Oats
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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	9:00 PM		0.00	Checks 1-8	Supp. Irrig.	600	3	0.72	
4		1:00 PM	0.00	Checks 1-8	Supp. Irrig.	600	13	3.13	
	1:00 PM		0.00	Checks 9-16	Supp. Irrig.	600	11	2.65	
5		11:00 AM	0.00	Checks 9-16	Supp. Irrig.	600	11	2.65	
	11:00 AM		0.00	Checks 17-24	Supp. Irrig.	600	13	3.13	
6		8:00 AM	0.60	Checks 17-24	Supp. Irrig.	600	8	1.93	
7			0.10						
8			1.50						
9			0.30						
10			0.00						
11			0.00						
12			0.00						
13	8:00 AM	9:00 PM	0.00	Checks 25-32	Supp. Irrig.	600	13	3.13	
14	8:00 AM	11:00 PM	0.00	Checks 33-40	Supp. Irrig.	600	15	3.61	
15	8:00 AM	12:00 AM	0.00	Check 41-48	Supp. Irrig.	600	16	3.85	
16			0.00						
17	8:30 AM	6:00 PM	0.00	Check 41-48	Supp. Irrig.	600	9.5	2.29	
	6:00 PM	11:00 PM	0.00	Check 49-56	Supp. Irrig.	600	5	1.20	
18	7:00 AM	4:00 PM	0.00	Check 49-56	Supp. Irrig.	600	9	2.17	
19			0.00						
20			0.00						
21			0.00						
22			0.00						
23			0.00						
24			0.00						
25			0.00						
26			1.00						
27			0.00						
28			2.25						
Total			5.75						

[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]	

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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 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

Crop Information

Crop Name	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle	37
Type of Cattle	Cow/Calf Pairs
AU per Cow	1.2
Number of ~~Cattle~~ AU on Field	44.4
Cattle Grazing Start Date	11/4/13
Cattle Grazing End Date	2/14/14
BOD Mass/~~Head~~ AU (lb/day/~~head~~ AU)	3
Nitrogen Mass/~~Head~~ AU(lb/day/~~head~~ AU)	0.33

**Est based on Google Earth

Day of Month	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						5.41
2	0.00						5.41
3	0.00						5.41
4	0.00						5.41
5	0.00						5.41
6	0.60						5.41
7	0.10						5.41
8	1.50						5.41
9	0.30						5.41
10	0.00						5.41
11	0.00						5.41
12	0.00						5.41
13	0.00						5.41
14	0.00						5.41
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	8

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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

Crop Information

Crop Name	Oats
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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	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	0.60						
7	0.10						
8	1.50						
9	0.30						
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	

[3] **See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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

Crop Information

Crop Name	Wheat Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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

**Est based on Google Earth

Day of Month	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	0.60						
7	0.10						
8	1.50						
9	0.30						
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	

[3] **See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
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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

Crop Information

Crop Name	Rye Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	2008
Anticipated Harvest Date	Mid May
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

**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		4:00 PM	0.00	Checks 33-40	Supp. Irrig.	600	16	3.08	0
	4:00 PM			Checks 41-48	Supp. Irrig.	600	8	1.54	
2		4:00 PM	0.00	Checks 41-48	Supp. Irrig.	600	16	3.08	
	4:00 PM			Checks 49-54	Supp. Irrig.	750	8	2.57	
3		5:00 PM	0.00	Checks 49-54	Supp. Irrig.	750	17	5.45	
4			0.00						
5			0.00						
6			0.60						
7			0.10						
8			1.50						
9			0.30						
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			1.00						
27			0.00						
28			2.25						
Total			5.75						

[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]	

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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 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

Crop Information

Crop Name	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle	33
Type of Cattle	Cow/Calf Pairs
AU per Cow	1.2
Number of ~~Cattle~~ AU on Field	39.6
Cattle Grazing Start Date	11/4/13
Cattle Grazing End Date	2/17/14
BOD Mass/~~Head~~ AU (lb/day/~~head~~ AU)	3
Nitrogen Mass/~~Head~~ AU(lb/day/~~head~~ AU)	0.33

**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						4.45
2			0.00						4.45
3			0.00						4.45
4			0.00						4.45
5			0.00						4.45
6			0.60						4.45
7			0.10						4.45
8			1.50						4.45
9			0.30						4.45
10			0.00						4.45
11			0.00						4.45
12			0.00						4.45
13			0.00						4.45
14			0.00						4.45
15			0.00						4.45
16			0.00						4.45
17			0.00						4.45
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			1.00						
27			0.00						
28			2.25						
Total			5.75						

[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]	8

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	February
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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	Oats
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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	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	0.60						
7	0.10						
8	1.50						
9	0.30						
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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COUNTY: Colusa
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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	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
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	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	0.60						
7	0.10						
8	1.50						
9	0.30						
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

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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	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
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	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	0.60						
7	0.10						
8	1.50						
9	0.30						
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	February
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COUNTY: Colusa
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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

Crop Information

Crop Name	Oats
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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			0.60						
7			0.10						
8			1.50						
9			0.30						
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			1.00						
27			0.00						
28			2.25						
Total			5.75						

[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]	

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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

Crop Information

Crop Name	Oats
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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		2:00 PM	0.00	Checks 49-55	Supp. Irrig.	600	14	3.08	
	2:00 PM			Checks 56-62	Supp. Irrig.	600	10	2.20	
2		1:00 PM	0.00	Checks 56-62	Supp. Irrig.	600	13	2.86	
	1:00 PM			Checks 63-75	Supp. Irrig.	750	11	1.63	
3			0.00	Checks 63-68	Supp. Irrig.	300	24	3.08	
				Checks 69-75	Supp. Irrig.	300	24	2.64	
4		9:00 AM	0.00	Checks 63-68	Supp. Irrig.	300	9	1.16	
		4:00 PM		Checks 69-75	Supp. Irrig.	300	16	2.05	
5			0.00						
6			0.60						
7			0.10						
8			1.50						
9			0.30						
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			1.00						
27			0.00						
28			2.25						
Total			5.75						

[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]	

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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

Crop Information

Crop Name	Wheat Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10/13 to 11/13
Actual Planting Date	Nov 10-20, 2013
Anticipated Harvest Date	Mid May
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

**Est based on Google Earth

Day of Month	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	0.60						
7	0.10						
8	1.50						
9	0.30						
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	February
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	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle	21.75
Type of Cattle	Cow/Calf Pairs
AU per Cow	1.2
Number of ~~Cattle~~ AU on Field	26.1
Cattle Grazing Start Date	11/4/13
Cattle Grazing End Date	2/17/14
BOD Mass/~~Head~~ AU (lb/day/~~head~~ AU)	3
Nitrogen Mass/~~Head~~ AU(lb/day/~~head~~ AU)	0.33

Day of Month	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						1.96
2	0.00						1.96
3	0.00						1.96
4	0.00						1.96
5	0.00						1.96
6	0.60						1.96
7	0.10						1.96
8	1.50						1.96
9	0.30						1.96
10	0.00						1.96
11	0.00						1.96
12	0.00						1.96
13	0.00						1.96
14	0.00						1.96
15	0.00						1.96
16	0.00						1.96
17	0.00						1.96
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	4

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	February
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	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle	21.75
Type of Cattle	Cow/Calf Pairs
AU per Cow	1.2
Number of ~~Cattle~~ AU on Field	26.1
Cattle Grazing Start Date	11/4/13
Cattle Grazing End Date	2/17/14
BOD Mass/~~Head~~ AU (lb/day/~~head~~ AU)	3
Nitrogen Mass/~~Head~~ AU(lb/day/~~head~~ AU)	0.33

Day of Month	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						**1.96**
2	0.00						**1.96**
3	0.00						**1.96**
4	0.00						**1.96**
5	0.00						**1.96**
6	0.60						**1.96**
7	0.10						**1.96**
8	1.50						**1.96**
9	0.30						**1.96**
10	0.00						**1.96**
11	0.00						**1.96**
12	0.00						**1.96**
13	0.00						**1.96**
14	0.00						**1.96**
15	0.00						**1.96**
16	0.00						**1.96**
17	0.00						**1.96**
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	4

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	February
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	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle	21.75
Type of Cattle	Cow/Calf Pairs
AU per Cow	1.2
Number of ~~Cattle~~ AU on Field	26.1
Cattle Grazing Start Date	11/4/13
Cattle Grazing End Date	2/17/14
BOD Mass/~~Head~~ AU (lb/day/~~head~~ AU)	3
Nitrogen Mass/~~Head~~ AU(lb/day/~~head~~ AU)	0.33

Day of Month	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						1.96
2	0.00						1.96
3	0.00						1.96
4	0.00						1.96
5	0.00						1.96
6	0.60						1.96
7	0.10						1.96
8	1.50						1.96
9	0.30						1.96
10	0.00						1.96
11	0.00						1.96
12	0.00						1.96
13	0.00						1.96
14	0.00						1.96
15	0.00						1.96
16	0.00						1.96
17	0.00						1.96
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	4

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

MONTH	February
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	Pasture
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	N/A
Anticipated Harvest Date	N/A
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle	21.75
Type of Cattle	Cow/Calf Pairs
AU per Cow	1.2
Number of ~~Cattle~~ AU on Field	26.1
Cattle Grazing Start Date	11/4/13
Cattle Grazing End Date	2/17/14
BOD Mass/~~Head~~ AU (lb/day/~~head~~ AU)	3
Nitrogen Mass/~~Head~~ AU(lb/day/~~head~~ AU)	0.33

Day of Month	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						1.96
2	0.00						1.96
3	0.00						1.96
4	0.00						1.96
5	0.00						1.96
6	0.60						1.96
7	0.10						1.96
8	1.50						1.96
9	0.30						1.96
10	0.00						1.96
11	0.00						1.96
12	0.00						1.96
13	0.00						1.96
14	0.00						1.96
15	0.00						1.96
16	0.00						1.96
17	0.00						1.96
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	1.00						
27	0.00						
28	2.25						
Total	5.75						

[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]	4

[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 February
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)																			
Total Nitrogen Loading Rate from Settling Pond Solids (lbs/ac/month)																			
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)					8				8							4	4	4	4
Total Nitrogen Loading Rate from Commercial Fertilizers (lbs/ac/month)																			
Cumulative Annual Total Nitrogen Value (lbs/ac/year)					26				23							11	11	11	11
Annual Crop Demand (lbs/ac/year)																			

Attachment F

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 : Facility Not Processing, Land Application Monitoring N/A

MONTH	February
YEAR	2014

LAND APPLICATION AREA WASTEWATER INSPECTION MONITORING

Field No.		**Technician**	
Date		**Weather**	

1. Any evidence of erosion: yes/no_____

2. Berm Condition:_____

3. Standpipe and flow control valve condition_____

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 offsite 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_____

14. Other observations_____

At least once per week when wastewater is being applied to the land application areas, the application areas in use shall be inspected to identify any equipment malfunction or other circumstance that might allow wastewater or irrigation runoff to leave each LAA and/or create conditions that violate the Waste Discharge Requirements. A log of these inspections shall be kept at the facility and summarized for submittal with the monthly monitoring reports.

In accordance with Section A.5 of the Monitoring Report, please attach 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).

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	February
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]

[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: Feb
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	2-4-14	8:46	4	4.1	4.1	10	9.86	9.86	8.41	N/A	N/A	JF
Week 2												
Week 3												
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.