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**Board of Directors**  
*Norman Crow, Chairman*  
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**Associate Directors**

2016 SEP 19 A 11:39

**August 11, 2016**

Stanislaus County Board of Supervisors  
1010 10<sup>th</sup> Street, Suite 6500  
Modesto, CA 95354

The West Stanislaus Resource Conservation District (WSRCD) board is proud to provide you with the 2016 Annual Monitoring Report of Natural Resources of the Crows Landing Naval Out lease Property. A copy of the report was sent to Supervisor Jim DeMartini, and Keith Boggs, Assistant Executive Officer Economic Development.

The West Stanislaus Resource Conservation District has a contractual agreement to Stanislaus County to provide monitoring of all the natural resources on the Crows Landing Naval Out lease Agricultural Properties. This report was prepared with both West Stanislaus RCD Directors Tom Maring, Ed Perry and Employee Caitie Campodonico. Thank you for your cooperation on the importance of the Natural Resources of the Westside of Stanislaus County. If you have any questions or comments about the Annual Report, please direct those to the WSRCD office at P.O. Box 193, Patterson, California 95363 or by calling the office at (209) 892-3026.

Sincerely,  
West Stanislaus Resource Conservation District Board

West Stanislaus  
Resource Conservation District  
P.O. Box 193  
Patterson, CA 95363

August 11, 2016

Stanislaus County Board of Supervisors  
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INVOICE: # 9

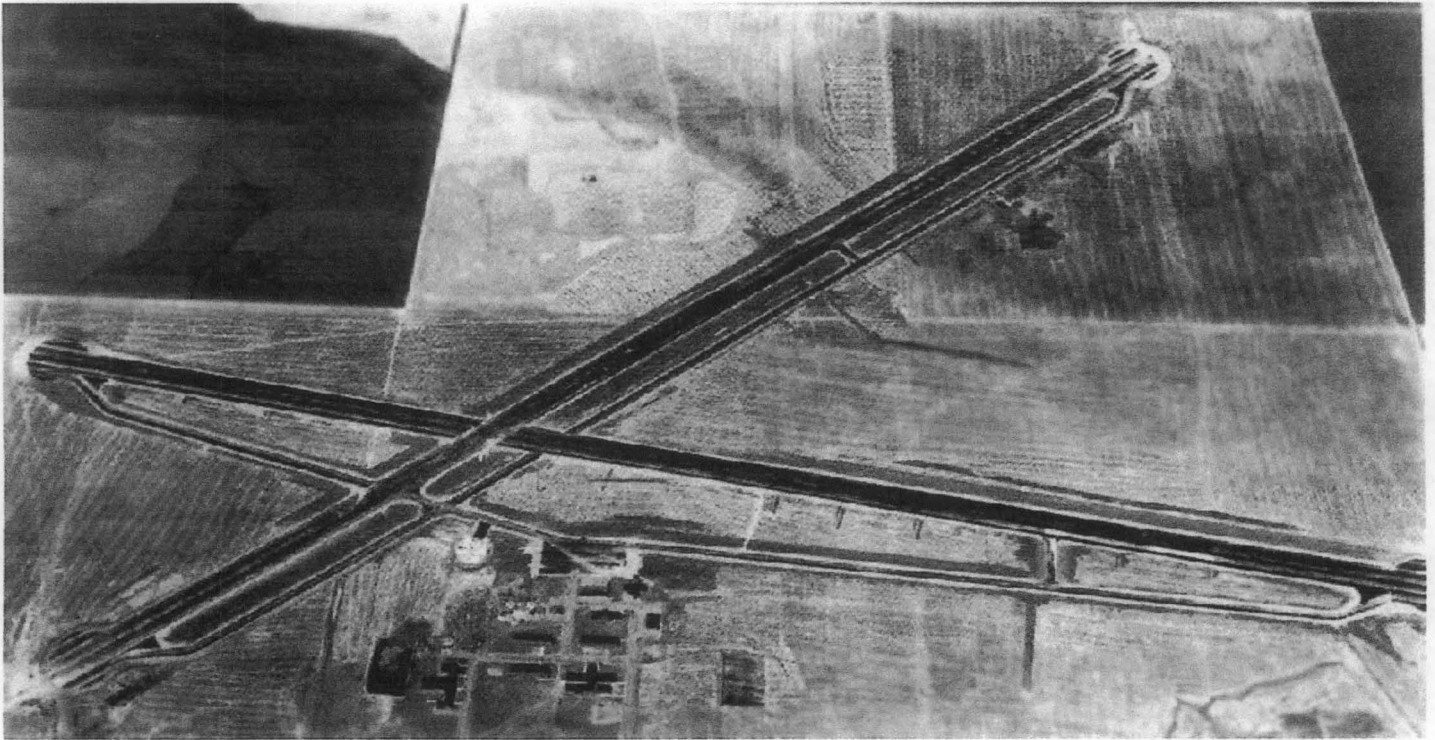
Completion of the Crows Landing Naval Base Easement, Annual Reserve Monitoring Report 2016. This includes the visual observations of the airstrip, production areas, Marshall Drain, pickup ditches, culverts, Little Salado Creek, and wells.

This contract is based on a \$2.50 per acre annual fee that includes all the agricultural land. This is approximately 1160 acres for a total of \$2,900 per year.

Total Due: \$2,900.00

Please remit to: West Stanislaus Resource Conservation District.

Enclosures: 2 pages



# CROWS LANDING NAVAL BASE EASEMENT, ANNUAL RESERVE MONITORING REPORT 2016

JULY 12<sup>TH</sup>, 2016

*Annual monitoring event conducted at the Crows Landing Naval Airstrip on the agricultural outlease by West Stanislaus Resource Conservation District Directors, Tom Maring and Ed Perry. Report prepared by Caitie Campodonico.*

## TABLE OF CONTENTS

### Contents

Monitoring Event Summary _____	1
Monitoring Methods and Summary _____	2
Agricultural Production Areas _____	3
Sediment Basin/Tailwater Return System _____	4
Wetland and Wildlife Habitat _____	5
Water Wells _____	6
Restrictive Covenant Area _____	7
Pickup Ditches _____	8
General Maintenance Area _____	9
Navy Base Monitoring Site Map _____	10



## MONITORING EVENT SUMMARY

### Monitoring Event Summary

As required in the Environmental Resource Plan, an annual monitoring event was conducted on the Crows Landing Naval Airstrip (Agricultural Outlease) on July 12<sup>th</sup>, 2016. The most recent prior monitoring event was conducted on June 30<sup>th</sup>, 2016. Previous reports had stated problems with sediment build up, excessive weeds, and wells that were not properly fenced to prevent tampering with. Observations made at the time of the monitoring event will be used to provide an update on the status of the property.

The airstrip appeared to be clean, no visible garbage or debris on the runway itself. It was lined with traffic cones for driving courses that are held by the Sheriff's Department.

The agricultural areas were well maintained and there seemed to be more fields in production than the previous year. It was obvious that they dry farmed the land over the winter and spring months and were putting in processing tomatoes and looked about ready to harvest safflower. There were fields that were still fallow due to the lack of water.

The sediment build up and vegetation continue to be problems in both Little Salado Creek and Marshall Drain. With little irrigation and rain water, there was no water in either drain but in the event of heavy storms, the elevated Marshall Drain could potentially flood the drain, surrounding fields, and Highway 33, which would be a negative impact on both the farmer and travelers on Hwy 33.

The wells on the property were all properly maintained. The abandoned well that was concerning was properly capped two years ago and the other wells on the property have been fenced off to protect the wellheads. Both wells are now functional, as this year a new motor was added to the well head that did not have one last year. The ground around the wellheads was clear of trash, pesticide containers and did not have any standing water near the wellhead slab.

We would like to impress that the problems reported here are based only on the observations of monitors at the time of monitoring, or conversations around the time of monitoring with appropriate officials, and that monitors do not have specific expertise in the areas of concern. It is recommended that this report be reviewed by a party with expertise in the problem areas identified to determine the appropriate management actions.



## MONITORING EVENT SUMMARY

### Monitoring Methods:

The Crows Landing Naval Airstrip was toured via vehicle and on foot. Observers included West Stanislaus Resource Conservation District Directors, Tom Maring and Ed Perry, as well as Caitie Campodonico, who took photos and reported the findings. Monitoring consisted of:

1. Visual Observations made on:
  - a. Airstrip
  - b. Production areas
  - c. Marshall Drain, pickup ditches and culverts, Little Salado Creek
  - d. Wells
2. Photo documentation

### Brief Summary of Findings:

- a. Airstrip  
The airstrip was clean and was not littered with garbage or debris. The airstrip is being used by the Sheriff's Department for driving training courses. They had several traffic cones set up to direct the course. The airstrip appeared to be well maintained.
- b. Production Areas  
The agricultural production areas were properly maintained by the operator. They were utilizing both dry farming and irrigating practices. Due to the lack of water, some fields were fallow again this year.
- c. Marshall Drain, pickup ditches and culverts, Little Salado Creek  
All drains, creeks, and ditches were full of sediment, excessive weeds and willows that would not allow water proper passage through the culverts and out of the fields in the case of runoff. Due to the lack of water, there was no water in any of the creeks, drains, or ditches during monitoring. Marshall Drain still poses the biggest concern in that if it were to fill up with water, it would flood surrounding fields, potentially ruining crops planted there and eventually would flood Highway 33.
- d. Wells  
All wells are under the supervision of Stanislaus County Department of Environmental Resources. With a new motor added to a well, two wells are in use this year, while the third is properly capped. The wells were fenced off in the past year, which will help to eliminate any vandalism that could occur.



# MONITORING EVENT SUMMARY

## Agricultural Production Areas

Table 1: Production Areas (Y/N)

	Soil Erosion/ Excess Runoff Observed	Drains Obstructed	Debris or Trash Present	Crop Residue Properly Managed	In Compliance with Air and Water Quality Regulations	Noxious Weeds Present	Minimum Tillage Being Practiced	Pesticide and Nutrient Application Supported by PCA	Proper Crop Rotation Schedules Followed	Irrigation Water Properly Managed
Field 1	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 2	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 3	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 4	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 5	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 6	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 7	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 8	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 9	N	N	N	Y	Y	N	Y	Y	Y	Y
Field 10	N	N	N	Y	Y	N	Y	Y	Y	Y

**Comments and Suggestions from Monitors:** Overall, the agricultural production land (roughly 1400 acres) is maintained responsibly by the grower. Several of the fields were dry farmed early in the year, with hay bales stacked at the ends of their field. There are multiple fields that are currently planted in tomatoes and some that look to be planted in melons. There was a field planted in safflower that was ready to be harvested. Weeds are present in field borders and in drains.

Eventually, as reported previously, all fields should be leveled. Field borders and drains should be thoroughly cleaned and sediment basins dug out. Cumulatively, this will be a large and expensive undertaking. The elevated position of the Marshall Drain continues to be a concern as it could flood all of the fields and surrounding fields in the event of a large storm.

Figure 1: Production area being prepared for crop planting.



Figure 2: Field 3 being irrigated with sprinklers.





# MONITORING EVENT SUMMARY

## Sediment Basin/Tailwater Return System

Table 2: Sediment Basin/Tailwater Return System

SB/TRS	Bank Erosion	Marshall Drain Obstructed or in Ill-Repair	Debris or Trash Present	Noxious Weeds Present	General Weeds and Plant Material Obstructing	Sediment Levels Inhibiting Water Holding Capabilities	Tailwater Return Pump in Working Condition	Buried Pipelines in Useable Condition	Excessive Tailwater Leaving the Property
	N	Y	N	Y	Y	Y	Unknown	Unknown	N

**Comments and Suggestions from Monitors:** The Marshall Drain is still significantly higher than the surrounding fields. If there were to be a significant storm, the surrounding fields and adjacent road (Marshall Road and Highway 33) could flood, depending on severity. The channel contains excessive vegetation and sediment, which does not allow the drain to work to full capability. The monitors suggest that someone with the proper expertise come inspect and clear the drain to ensure that it is functional again.

Figure 3: Elevated position of Marshall Drain taken from road.



Figure 4: Looking down the center of Marshall Drain, fields on either side are lower and center is filled with vegetation.





# MONITORING EVENT SUMMARY

## Wetland and Wildlife Habitat

Table 3: Wetland and Wildlife Habitat (Y/N)

	Bank Erosion	Culverts Obstructed (sediment/ plant Material)	Debris or Trash Present	Noxious Weeds Present	Waterways Obstructed (sediment/ plant material)	Damage to Native Vegetation
Little Salado Creek	N	N	N	N	N	N
Boy Scout Wildlife Area	N	Y	Y	Y	Y	N

**Comments and Suggestions from Monitors:** Little Salado Creek is largely clear of vegetation, obstructions, sediment and trash. Little Salado Creek looking north has more vegetation and is less clear than looking south. The culvert was cleaned out in the last two years and is free from any obstructions and vegetation.

The Boy Scout Wildlife Area is no longer being maintained as before, according to monitors, however was not visited in 2015 or 2016. As reported in 2014, it is unknown if the vegetation in channel near the Boy Scout Wildlife Area might still be causing some obstruction. Having not been monitored, previous to a future storm event the drainage near the Boy Scout Wildlife Area should be reviewed by a party with proper expertise to assess the actual sediment and vegetation build up in the channel.

Figure 5 (below): Little Salado Creek is cleared of vegetation.



Figure 6 (above): Little Salado Creek, looking north, still has some vegetation but does not cause an issue. Little Salado Creek has no water running through it.



# MONITORING EVENT SUMMARY

## Water Wells

Table 4: Water Wells (Y/N)

Well Number and Field Location	Stationary Internal Combustion Engine, Comply with Rule 4702, Diesel Engines	Surface Water Runoff Able to Reach Wellhead?	Mixing, Loading, or Storage of Pesticides Occurring Adjacent to Wellhead
6/8-8J, Field 3	N*	N	N
6/8-20C1, Field 8	Capped wellhead/no engine	N	N
6/8-20G, Field 10	N*	N	N

**Comments and Suggestions from Monitors:** Two wells are in working order in 2016. Well 6/8-8J has been operational for the past several years. This year the motor was running and they were irrigating with sprinklers on a field of tomatoes. A new stationary engine was added to well 6/8-20G which made it operational. Well 6/8-20C1 was capped and is no longer a potential conduit for groundwater contamination. The two diesel engines on the operational wells seem to be in good working condition. Compliance with rule 4702 is unknown to monitors. At the time of monitoring, all wells seemed to be well maintained by the tenant. As suggested in 2014, the wells were all fenced off in 2016. This helped to protect the wells from vandalism of the well structures. The wells were in good condition and followed the Best Management Practices outline in water quality guides.

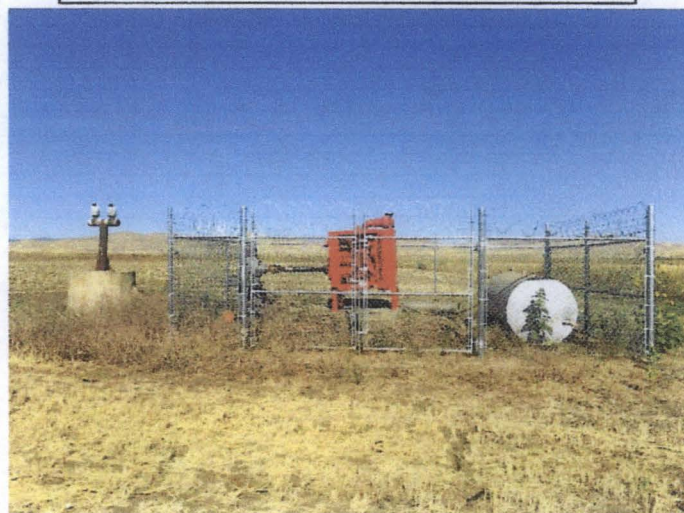


Figure 7 (right): Well 6/8-20C1 is capped and no threat to groundwater.

Figure 8 (below): Newly fenced in well 6/8-8J, well maintained.



Figure 9 (below): Well 6/8-20G is newly fenced and has a new motor connected.





# MONITORING EVENT SUMMARY

## Restrictive Covenant Area

Table 5: Restrictive Covenant Area (Y/N)

New Well Construction	Groundwater From Existing Wells Being Utilized	Construction Activities Creating Groundwater Recharge
N	Y	N

**Comments and Suggestions from Monitors:** Well 6/8-8J is in use at this time. Well 6/8-20G had a new pump in 2015 and has a new motor that is enclosed in a fence in 2016, making it an operational well. There are no currently known plans to put in another well. There were no noticeable construction activities that would create groundwater recharge. None of the wells currently pose a threat to contaminating groundwater.

Figure 10 (right): Existing well with new fencing around it, irrigating (sprinkler) agricultural production field.



Figure 11 (left); New motor placed on existing well to make it operational. This well was also fenced in this year to cut down on vandalism.



# MONITORING EVENT SUMMARY

## Pickup Ditches

Table 6: Pickup Ditches (Y/N)

Bank Erosion	Culverts Obstructed (sediment/ plant Material)	Debris or Trash Present	Noxious Weeds Present	Waterways Obstructed (sediment/ plant material)
N	Y	N	Y	Y

**Comments and Suggestions from Monitors:** Due to the drought, none of the ditches, drains, or creeks on the property had any water running through them, however it was obvious to monitors that irrigation water pickup ditches and culverts were in need of maintenance. Culverts were congested with plant material and sediment build up, which could result in stream diversion through adjacent property areas during heavy irrigation events and especially during large storm events. These drainages should be reviewed and cleared by someone with expertise in this area.



Figure 12 (left): Pickup drain looking over fields that is full of vegetation.



Figure 13: Large willow tree that is obstructing the culvert. No water present in the ditch.



## MONITORING EVENT SUMMARY

### General Maintenance Area

Table 7: General Maintenance Area (Y/N)

Airstrip Damaged from Track-Laying Equipment	Paved Roads Damaged from Track-Laying Equipment	Weed Infestations Along Roadsides and Storage Areas	Existing Fences in Disrepair	Trash and Debris Present on Property
N	N	Y	N	N

**Comments and Suggestions from Monitors:** The airstrip and maintenance area were in great condition. Clear of trash, debris and unused equipment, it looked like the airstrip was being well maintained. There were weeds alongside the airstrip, but the weeds should not pose a problem to the airstrip. Fences in the area seemed to be in standard condition. During the monitoring, the airstrip was being used by the Sherriff's Department for driving training. Overall, the airstrip was in good condition.



Figure 14: The runway is clear. Cones in the back of the photo are being used to designate a course for driving training done by Sheriff's Department.



## MONITORING EVENT SUMMARY

### Navy Base Monitoring Site Map

Crows Landing, Stanislaus County, California

