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Stanislaus County Board of Supervisors
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The West Stanislaus Resource Conservation District (WSRCD) board is proud to provide you with the 2015 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 was prepared with both West Stanislaus RCD Directors Tom Maring, Ed Perry and Caitie Campodonico with (CURES) Coalition for Urban Rural Environmental Stewardship. 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

Crows Landing Naval Base Easement, Annual Reserve Monitoring Report 2015

West Stanislaus Resource Conservation District

June 30th, 2015

Directors Present: Tom Maring and Ed Perry

Submitted by: Caitie Campodonico

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 June 30, 2015. The most recent prior monitoring event was conducted on October 21, 2014. Previous reports had stated problems with sediment build up, excessive weeds, and an uncapped well that created a potential for groundwater contamination. Observations made at the time of the 2014 monitoring event were used to provide an update on the status of the property.

The agricultural areas are being well maintained but are severely hindered due to this ongoing drought, of which we are experiencing the fourth year. Several of the fields in the production area are fallow. We did observe that two fields were planted with processing tomatoes, with another field in preparation for some upcoming planting of row crops.

The sediment build-up and vegetation density in Little Salado Creek and Marshall Drain continue to be problems. This year with little rain or irrigation runoff, there is no water in any of the drains or creeks on the property. The Marshall Drain is elevated above surrounding fields due to increased sediment build-up. A storm event could potentially flood the drain and fields, eventually reaching Highway 33, causing a major hazard to drivers and other adjacent cropland.

The wells on the property all looked to be properly maintained. The well that was of concern in 2013 (6/8-20C1) was properly capped in 2014 and no longer provides a direct conduit to groundwater. Of the two remaining wells, only one appeared to be in use, as the other did not have an engine to make it an operational well. The 2014 report suggested that the wells be fenced off to protect the wellheads. However, there were no fences as per the date of the current monitoring. The ground around the wellheads was clear of trash, pesticide containers, and did not have any standing water.

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.

Contents

Monitoring Event Summary 1

Table of Contents 2

Monitoring Methods and Summary Results 3

Production Areas Results 4

Sediment Basin/Tailwater Retun System 5

Wetland and Wildlife Habitat 6

Water Wells 7

Restrictive Covenant Area 8

Pickup Ditches 9

General Maintenance Area 10

Navy Base Monitoring Site Map 11

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 clear of debris and garbage. During our monitoring, it was being used by the Sherriff's Department for a driving training course. Overall, the airstrip looked well maintained.

b. Production Area

The agricultural production areas are being properly managed by the operator. Several of the fields were fallowed due to the ongoing drought. Two fields were planted with processing tomatoes and well maintained. Another field was being developed for a crop to be planted. Field borders and fallowed fields did exhibit weeds.

c. Marshall Drain, pickup ditches and culverts, Little Salado Creek

All drains and creeks seemed to be full of sediment, excessive weeds and willows. The elevation of Marshall Drain is an ongoing concern of monitors. In the event of a storm, it could potentially flood adjacent fields and Highway 33/Marshall Road. Due to the lack of rain, none of the ditches, drains, or creeks had any water during the monitoring.

d. Wells

All wells are under the supervision of Stanislaus County Department of Environmental Resources. Only one well is currently in use, one is properly capped and one does not have an engine. The wells are still not fenced off, as suggested in 2014.

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. Fields 4 and 8 are planted currently with processing tomatoes, field 4 is extremely well maintained. Field 8 has several noxious weeds growing throughout the crop. Fields 2 and 3 had recently been tilled and have established beds, most likely for processing tomatoes. Fields 1, 2, 5, 6, 7, 9, and 10 were fallowed at this time, most likely due to the drought. Weeds are present in field borders and in drains. Eventually, all of fields will need to be leveled, borders and drains will need to be cleaned thoroughly and sediment basins will need to be dug out as well. Cumulatively, this will be a huge undertaking both in cost and time. As discussed in the 2014 Report, the elevated position of Marshall Drain on the northern end of the property suggests that, if a large storm were to occur, adjacent fields and roads (Marshall Road and Highway 33) would be flooded.

Figure 1: *Field 2, recently established raised beds, potentially for processing tomatoes.*

Figure 2: *Field 3 production area, recently established raised beds, note the weeds in field border.*

Sediment Basin/Tailwater Return System

Table 2: Sediment Basin/Tailwater Return System

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

Comments and Suggestions from Monitors: The Marshall Drain is elevated around surrounding fields. In the event of a significant storm, adjacent fields and roads (Marshall Road and Highway 33) could flood, depending on severity. The channel contains large quantities of vegetation and sediment, which decreases the capacity of the drain. The monitors suggest that someone with the proper expertise clear the drain.

Figure 3: *Vegetation and will trees obstructing culvert and drain.*

Figure 4: *Marshall Drain with vegetation, looking south.*

Figure 5: *Marshall Drain with heavy vegetation, looking north, and note slope on either side.*

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 has been recently cleared of any obstructions or vegetation.

The Boy Scout Wildlife Area is no longer being maintained as before, according to monitors, however was not visited during this monitoring event. 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 6: *Little Salado Creek looking south, largely clear of all vegetation and sediment obstructions.*

Figure 7: *Little Salado Creek looking north, exhibits more weeds on this northern side.*

Figure 8: *The culverts at Little Salado Creek, clear of obstructions.*

Water Wells

Table 5: 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, Rinsing, 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	No engine/not in use	N	N

Comments and Suggestions from Monitors: One well is currently being used by tenants. All three wells are clear of debris, trash and pesticide containers. In 2013, well 6/8-20C1 was capped and is no longer a potential conduit for groundwater contamination. Well 6/8-8J in field 3 is currently being used to irrigate fields. The diesel engine was being used, and seemed to be in good working condition. Compliance with rule 4702 is unknown to monitors. At the time of monitoring, the wells seemed to be well maintained by tenant. It was suggested in 2014 that wells be fenced off to add a level of protection, as the wells are currently easily accessible to vandalism of the well structures. It is also recommended that vegetation around the wellheads be cleared away.

Figure 9: *Well 6/8-20G is maintained well, but has no engine, thus is not in use.*

Figure 10: *Well 6/8-20C1 has been properly capped and is no longer in use or a conduit for groundwater contamination.*

Figure 11: *Well 6/8-8J is being used to irrigate fields, connected to a diesel engine.*

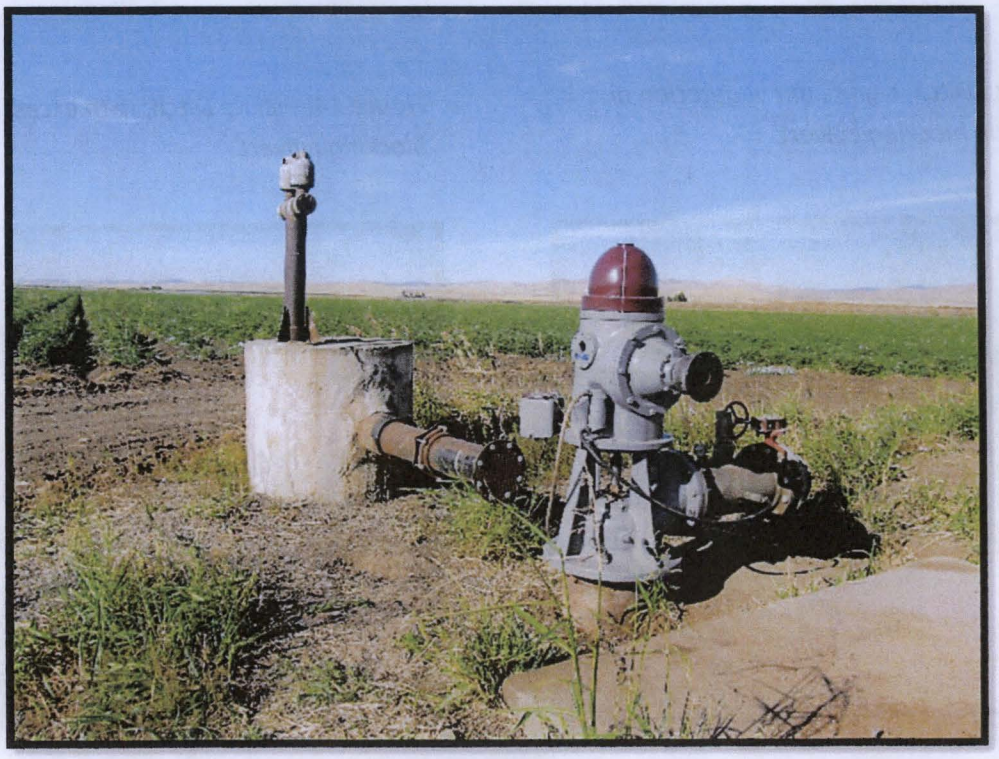
Restrictive Covenant Area

Table 6: 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. No other known wells are currently in use. There are no currently known plans to put in another well. There were no noticeable construction activities that would create groundwater recharge. Well 6/8-20G is currently not operational but has a new pump. If a stationary engine was also attached, the pump could be operational. This well is in good repair and currently does not pose a threat to groundwater.

Figure 12: *Well 6/8-20G has a new pump and could be operational if a diesel engine was attached.*



Pickup Ditches

Table 7: 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 13: *Pickup Ditch, significant vegetation and sediment build up blocking culvert.*

Figure 14: *Pickup Ditch, with excessive vegetation blocking culvert.*

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 15: *The airstrip, looks clean and clear of debris, trash and unused equipment.*

Navy Base Monitoring Site Map

Crows Landing, Stanislaus County, California