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September 12, 2013

Stanislaus County Board of Supervisors
1010 10th Street, Suite 6500
Modesto, CA 95354

The West Stanislaus Resource Conservation District (WSRCD) board is proud to provide you with the 2013 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 and the East Stanislaus Resource Conservation Technicians. 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

Crows Landing Naval Base Easement

Annual Reserve Monitoring Report

East Stanislaus Resource Conservation District
7/19/2013

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

7/19/2013

As scheduled in the Environmental Resource Plan, an annual monitoring event was conducted on the Crows Landing Naval Airstrip (Agricultural Outlease) on July 9, 2013. The most recent prior monitoring event was conducted in August of 2012. In the 2012 report it was noted that there was significant sediment build-up in culverts, drains, and Little Salado Creek, and that wells on the property presented a concern for groundwater contamination. Based on our observations at the time of the monitoring event, we would like to provide an update on the status of the property and corrections that have been made to remedy environmental risks since the last monitoring report. This letter serves as an introduction to the report, but certainly does not contain all the information housed within the report.

The sediment build-up and vegetation density in Little Salado Creek appears to have been improved upon in the last year considerably. Marshall Drain, pickup ditches and culverts on the property do continue to have some congestion occurring from sediment and vegetation. These issues likely will be an annual point of note as sediment typically accrues somewhat quickly in drainages in the area of the property due to the clay soil type on the west side of Stanislaus County. The position of Marshall Drain on the northern end of the property is elevated above adjacent property areas making it so that overflow from Marshall Drain is likely to flow into adjacent production areas, including field 1. One potential concern here is that excess water in field 1 might extend into Marshall Road and create a hazard to driving vehicles. It is suggested that someone with expertise review this drainage if it has not been done already. We understand that the county has been actively working to improve the areas of concern expressed in the 2012 report and so may already be familiar with the water holding capacity of the Marshall Drain.

It was reported in 2012 that the potential for unwanted contaminants to enter groundwater through irrigations wells on the property was high. Although the same potential for groundwater contamination continues to exist at this moment in well 6/8-20C1, it is our understanding that all irrigation wells are under supervision by those with expertise in wells at the Stanislaus County Department of Environmental Resources, and notable actions have been taken or are in process to remedy the risk of groundwater contamination. Again, well 6/8-20C1 continues to provide a direct conduit to groundwater but the tenant has reported to the Stanislaus County Department of Environmental Resources that he would like to rehabilitate the well and convert it to an operational system. The rehabilitation is being scheduled for August of 2013. It is suggested that this well continue to be monitored until it has been fully rehabilitated.

We would like to impress that the problems reported here are based only 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 note. It is recommended that this report be reviewed by a party with expertise in the problem areas identified so as to decide on the appropriate management actions as needed. We would also like to

compliment the actions of the county in working to remedy the environmental risks on the property over the past year and on the thorough removal of all garbage from the property following the 2012 report.

East Stanislaus Resource Conservation District

Monitoring Methods

The Crows Landing Naval Airstrip was toured via a vehicle and on foot. The current operator was contacted prior to the monitoring event, but was not present as an observer. Observers included West Stanislaus Resource Conservation District directors Frank Durao and Ray Murphey, Jamie McFarlin, Resource Conservation Technician with the East Stanislaus Resource Conservation District, and Francisco Rodriguez, Resource Conservation Technician with the East Stanislaus Resource Conservation District. 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

1. Airstrip
   Garbage and debris no longer present on airstrip, and was thoroughly cleaned following the last report
2. Fields
   Operator is responsibly managing fields, with minor weed presence on field margins (see figure 15, figure 17), and apparently active management of irrigation water (see figure 4, figure 5). Crop residue is present in fields not currently in production.
3. Marshall Drain, pickup ditches and culverts, Little Salado Creek.
   Little Salado Creek appears to have been improved following the 2012 report (see figure 10). Some waterways are congested by sediment build-up and vegetation, especially culverts adjacent to production areas, and could present a risk for some flooding into production areas as well as the potential to carry sediment downstream (see figure 11, figure 12). This is likely an ongoing point of note as sediment will continue to be regularly introduced into these waterways during irrigation and storms. The elevation of Marshall Drain (see figure 1, figure 2) on the northern end of the property, and its proximity to Marshall Road, is hypothesized to present the potential that, in high water events, water could flood out of the drain and into adjacent property areas, and could potentially flood into Marshall Road. It is suggested that this hypothesis be assessed by a party with real expertise in drainages if it has not been done so already.
4. Wells
   Wells are under the supervision of Stanislaus County Department of Environmental Resources. At the moment well 6/8-20C1 continues to present an environmental risk, but is scheduled to be rehabilitated in August 2013. It is suggested that the county or property operator consider fencing all wells on the property to protect well areas.

Production Areas (Y/N)

Field	Soil Erosion/Excess Runoff Observed	Drains Obstructed	Debris/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 Decisions Supported by Licensed PCA	Proper Crop Rotation Schedules Followed	Irrigation Water Properly Managed
1	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
2	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
3	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
4	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
5	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
6	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
7	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
8	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
9	N	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y
10	N[1]	N	N	Y	Y	Y	Unknown	Unknown	Unknown	Y

Comments/Suggestions: Production areas appear to be under responsible management by the operator. Fields 2, 3, 4, 5, 6, 7, 8, and 10 were observed as being under active production. Crop type varied per field and included corn, beans, and safflower. Field 1 was not under production, but did appear to have some crop residue. Field 9 was not observed during the monitoring tour. Monitors did not speak with the operator regarding weed abatement, crop scheduling, tillage, or pesticide and nutrient application and therefore are unaware of the details regarding those aspects of the operation. Unlike what was reported in the Annual Reserve Monitoring Report, 2012, where ponding water was observed in fields 1 and 2, there was no ponding water actively observed in any field during this monitoring tour. However, the elevated position of Marshall Drain on the northern end of the property suggests that ponding could still be an issue in these fields and others, especially during high water events. Operator was actively irrigating an area of field 2 and field 3 the day of monitoring using well 6/8-8J, although no ponding was observed. Extremely turbid irrigation water was observed draining out of field 10 (see figure 9) and into a drainage pipe located on the perimeter of the airstrip and the field[1]. The turbidity of the water could imply that there is some topsoil erosion occurring during irrigation, but could also be due to recycling of irrigation water. This drain is assumed to flow into the Marshall Drain/Little Salado Creek but this could not be confirmed. Some weeds were present along field perimeters. Irrigation water appears to be channeled out of fields and into pickup ditches and drainages.

Sediment Basin/Tailwater Return System (Y/N)

Bank Erosion	Marshall Rd Drain Obstructed or in Ill-Repair	Debris/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
N	Y	N	Y	Y	Y	Unknown	Unknown	N

Comments/Suggestions: The position of Marshall Drain is elevated above adjacent fields. Some vegetation exists in parts of the channel but appears to have been improved upon considerably since the last monitoring tour. It is not known if the drainage has been dredged or what the actual water holding capacity of the drain is at this time. We understand that the county has been actively working to improve the condition of the Drain and Little Salado Creek since the 2012 report, and so may already be familiar with the capacity of the drain at this time. Observers recommend that the Marshall Drain on the northern end of the property be reviewed by someone with expertise if it has not been done so already. Although there was no flooding at the time of monitoring, all fields adjacent to the Marshall Drain look like they could still be susceptible to ponding during irrigation and especially during storm events. If flooding occurs in field 1, particularly during high water events, it could extend into Marshall Road and has potential to be hazardous to traffic on the road. Trash was not observed in or near the channel of Marshall Drain or Little Salado Creek. Some are present along the banks of Marshall Drain and Little Salado Creek. At this time, irrigation is occurring and observers did witness tailwater being channeled into pickup ditches.

Wetland and Wildlife Habitat (Y/N)

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

Comments/Suggestions: Little Salado Creek appears to be in good condition, and was reported to have received considerable attention since the last monitoring tour. Vegetation in the channel near the Boy Scout Wildlife Area appears to have been thinned considerably since the last monitoring report as well. However, monitors noted that some vegetation in channel near the Boy Scout Wildlife Area (see figure 13, figure 14) might still be causing some obstruction, and the actual sediment build-up in the channel is unknown by monitors. With this in mind, it is suggested that the water-holding capacity of the drainage particularly near the Boy Scout Wildlife Area be reviewed by a party with expertise in this area, if it has not been done so already. Weeds are present in the wildlife habitat area and near the channel.

Water Wells (Y/N)

Well Number & Field Location	Stationary Internal Combustion Engine(s) Comply with Rule 4702, Diesel Emissions	Surface Water Runoff Able to Reach Wellhead?	Mixing, Loading, Rinsing, or Storage of Pesticides Occurring Adjacent to Wellhead
6/8-8J, Field 3	Unknown	N	Unknown
6/8-20C1, Field 8	N	Y	Unknown
6/8-20G, Field 10	Unknown	N	Unknown

Comments/Suggestions: Tw o wells are currently being utilized by tenant: well 6/8-8J in field 3, and well 6/8-20G in field 10. Both active wells are being operated using a stationary diesel engine. Compliance with rule 4702 is unknown by monitors. At the time of monitoring, the tenant was conducting both clean-up and maintenance of the area occupied by the wells and well pumps, including brush cutting around the pump platform of well 6/8-8J, and appeared to have recently power washed the pump platform of well 6/8-20G . As reported in the Annual Reserve Monitoring Report, 2012, well 6/8 – 20C1 in field 8 is not in use and continues to give reason to believe that surface water surrounding the wellhead is able to drain directly into the well in areas where the pipe has been exposed and has corroded (see figure 8). The well also continues to be insufficiently capped by two disc blades. However, Stanislaus County Department of Environmental Resources is both aware of and monitoring the status of well 6/8-20C1.The tenant has been in communication with Stanislaus County Department of Environmental Resources and is actively planning to rehabilitate well 6/8 – 20C1. The anticipated well rehabilitation is scheduled for August 2013, and is expected to resolve environmental risk. Stanislaus County Department of Environmental Resources also reported that well 6/8-20G was found to have a small air vent that provided surface exposure to groundwater in an area of the pump that would be easy for contaminants on the ground to drain into the well. This was not discovered by the observers on the monitoring tour in 2012 and so was not discussed in the Annual Reserve Monitoring Report, 2012. It was reported to the monitors by the Department of Environmental Resources that this vent was capped so as to remedy the problem in early 2013, and observers confirmed at the time of monitoring that the air vent was indeed capped. The tenant has also cleaned the platform, as noted above, to reduce further risk of contaminants entering the groundwater. Well 6/8-8J was found to have a small air vent that likely is open to the groundwater as well, but this was discussed with an expert in wells at the Stanislaus County Department of Environmental Resources and found to pose little risk as the air vent is covered by the dome of the turbine pump. It is suggested that all wells have a fence constructed around the well pump and stationary engine to provide a level of protection, as most wells are currently easily accessible to vandalism of the well structures.

Restrictive Covenant Area (Y/N)

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

Comments/Suggestions: Well 6/8 – 20G in field 10 and well 6/8-8J are reported to be in use at this time. No other known wells are currently in use. However, tenant has expressed to Stanislaus County Department of Environmental Resources that Well 6/8-20C1 will be rehabilitated and put into operation this fall. The rehabilitation process may create some construction activities that affect groundwater.

Pickup Ditches (Y/N)

Bank Erosion	Culverts Obstructed (sediment/plant material)	Debris/Trash Present	Noxious Weeds Present	Water Flow Obstructed (sediment/plant material)
N	Y	Y	N	Y

Comments/Suggestions: Irrigation water pickup ditches in and around culverts look to be in need of maintenance. Culverts viewed at the time of monitoring on the property appeared moderately congested by sediment build-up, woody debris, and weeds (see figure 11, figure 12). It is hypothesized that these obstructions of flow could result in stream diversion through adjacent property areas during heavy irrigation events and especially during large storm events. It was verbally reported to monitors that there is plan for improvement in these areas by the tenant in cooperation with the county. However, monitors are unaware of the details regarding this matter and did not consult the tenant on the issue, and so cannot comment further than acknowledging the current presence of sediment and weeds in the culvert.

General Maintenance Areas (Y/N)

Airstrips 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/A	N

Comments/Suggestions: All trash on the airstrip noted during the Annual Reserve Monitoring Report, 2012, has been removed and the property has been thoroughly cleaned. No significant trash or unused equipment was seen on the airstrip or in production areas during this monitoring tour. Weeds are present along the perimeter of the airstrip, but do not appear to be presenting a notable problem for the integrity of the airstrip.

Images of Monitoring Areas

Figure 1. Marshall Drain, bordered by field 1

Figure 2. Fields 1 and 2, slope demonstrating elevated position of Marshall Drain in bottom left corner of image

Figure 3. Field 3, being prepared to be irrigated by well 6/8-8J

Figure 4. Production area with corn, irrigation drainage (pickup ditch)

Figure 5. Irrigation drain, weeds

Figure 6. Well 6/8-8J

Figure 7. Well 6/8-20G

Figure 8. Well 6/8-20C1

Figure 9. Irrigation drain, adjacent to field 10

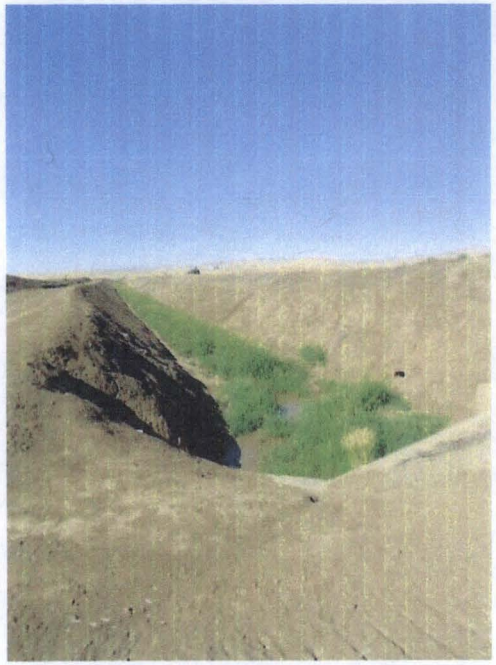


Figure 10. Little Salado Creek

Figure 11. Drainage culvert, moderately congested (near Airstrip)

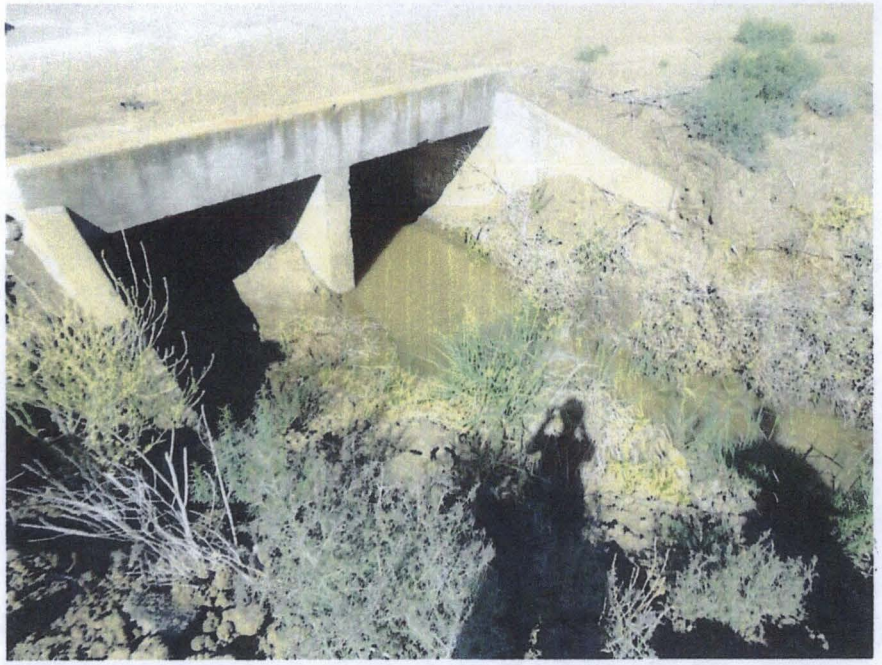


Figure 12. Pickup ditch culvert, sediment build-up (near Airstrip)

Figure 13. Marshall Drain, viewed from habitat area looking towards Marshall Road

Figure 14. Marshall Drain and habitat area

Figure 15. Weeds along production area

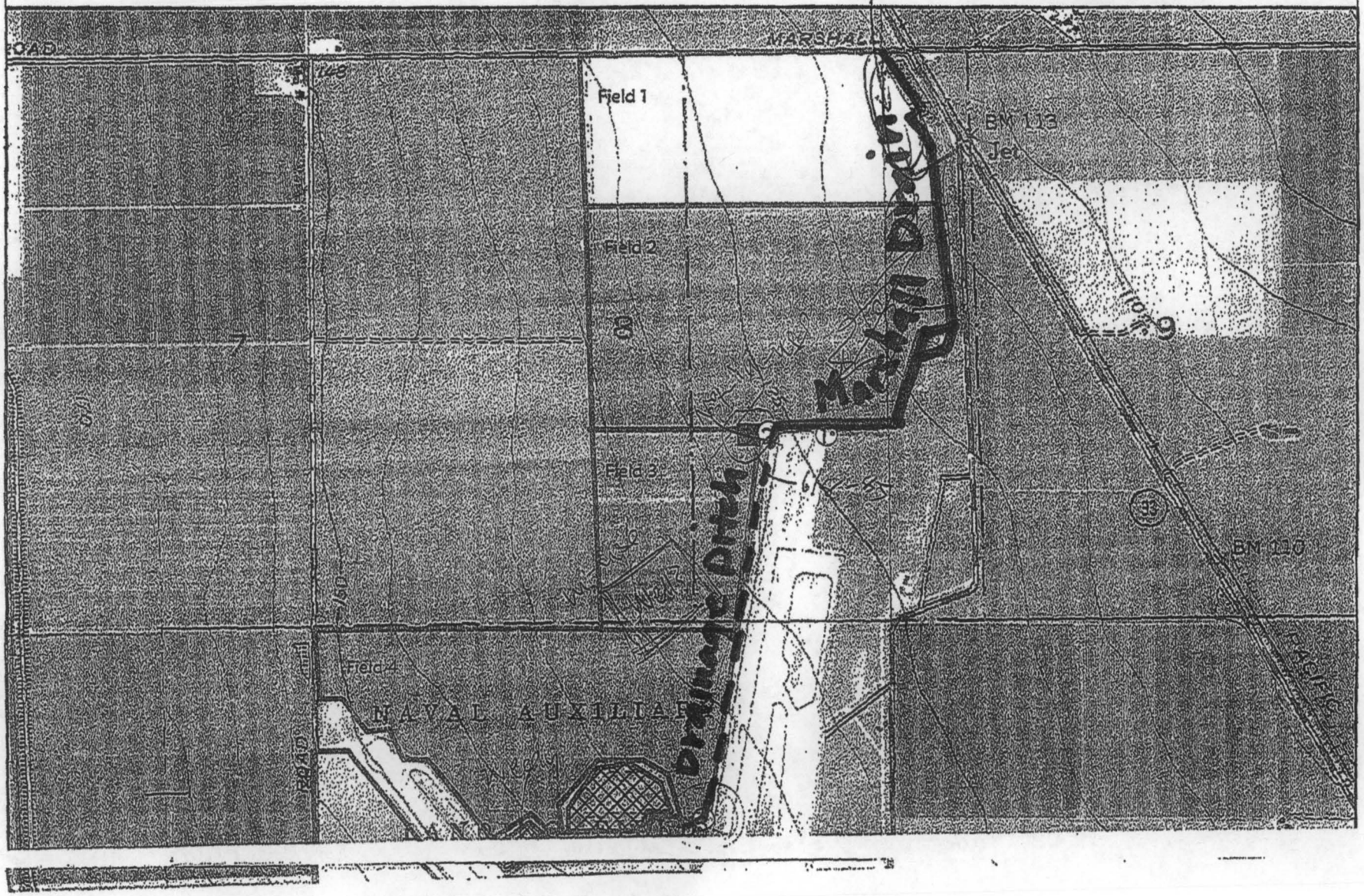
Figure 16. Irrigation line between fields 2 and 3

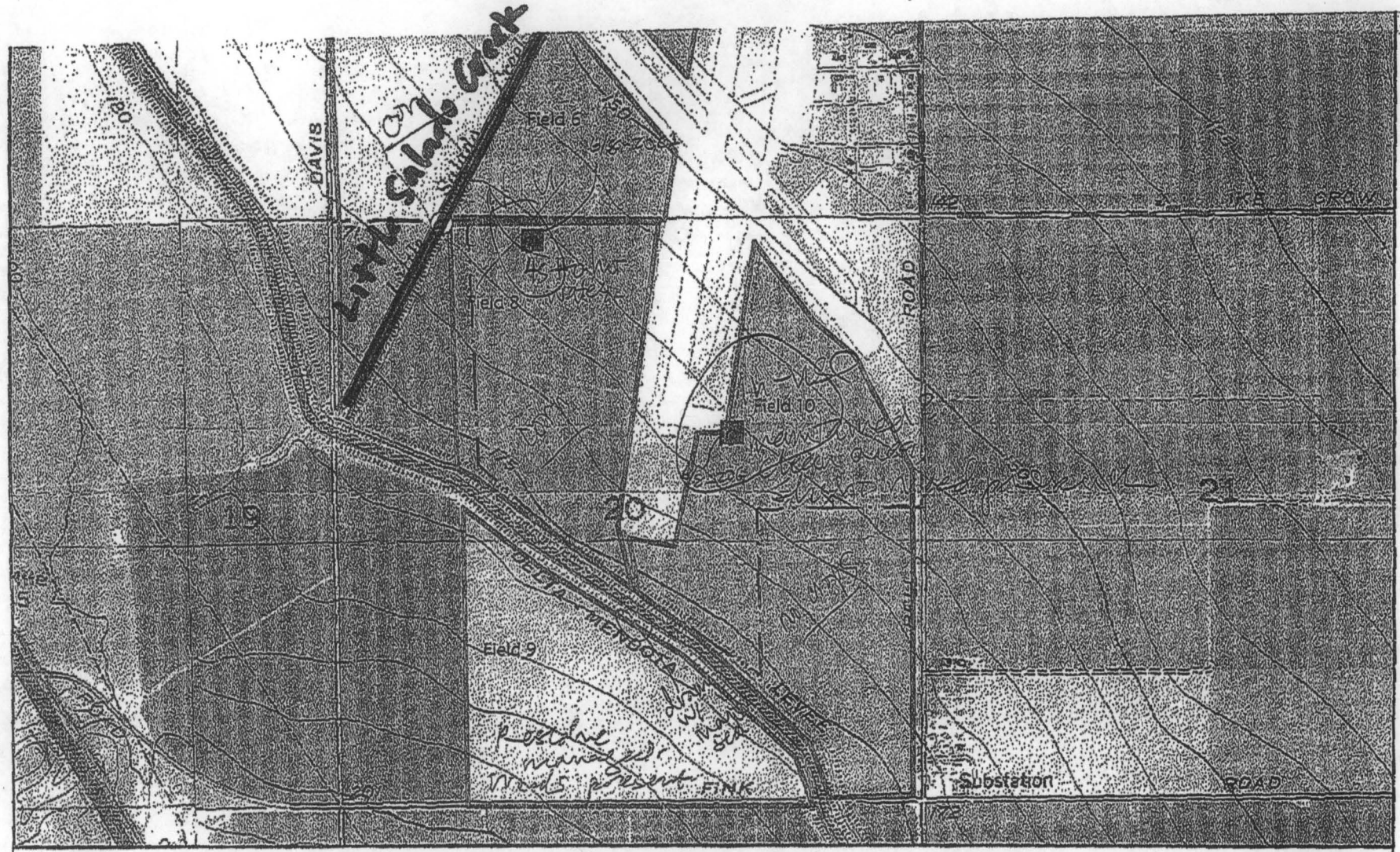
Figure 17. Field 6 safflower, bordered by weeds

There are more images available from the date of monitoring if needed to further understand this report, as well as images taken during the 2012 monitoring tour. Please contact the West Stanislaus Resource Conservation District if access to these images is necessary.

Naval Base Monitoring Site

Crows Landing, CA
Stanislaus County




Little Salado Creek
DAVIS
Field 6
Field 8
Field 10
Field 9
ROAD
19
20
21
Substation
ROAD
N
Legend
Marshall Drain
Drainage Ditch
Little Salado Creek
Culvert
Wells
Field Boundaries
Fenced Area
Wildlife Area
1 inch equals 1,500 feet
Feet
0 7501,500 3,000