

State of California
The California Natural Resources Agency
Department of Water Resources

Division of Integrated Regional Water Management
North Central Region Office

North and South Delta Seepage Well Monitoring Network Update



North Central Region Office

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Memorandum Report
April 2015

Memorandum

Date: April 23, 2015

To: Robert Pedlar
South Delta Branch
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William McLaughlin
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From: Eric Hong, Chief
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Division of Integrated Regional Water Management
Department of Water Resources

Subject: North and South Delta Seepage Monitoring Program Well Status Update

Attached for your information and use is the North and South Delta Seepage Monitoring Program Well Status Update. This update provides a status update for each well in the monitoring network.

If you have any questions, please contact me at (916) 376-9655 or the North Central Region Office's technical lead for this project, Jeremiah Shaffer at (916) 376-9662.

Attachment

Appendices

Executive Summary

The North Central Region Office has been monitoring groundwater levels in the North and South Delta since 1993 and 1998, respectively. This monitoring was the result of mitigation efforts for two proposed programs in the Delta. Due to State Water Project funding reductions for the 2015 calendar year, this monitoring program has been temporarily halted.

There are 129 monitoring wells within the program: 86 wells in the North Delta and 43 wells in the South Delta, of which 84 wells are currently monitored. During the status verification process for the 129 wells, nine non-actively monitored wells were determined to be in good condition and will be reincorporated into the active monitoring network starting in January 2016. Fifteen of the 129 wells are either damaged or inaccessible and should be destroyed.

Based on collected data, groundwater levels in the North and South Delta appear to remain relatively unchanged within the monitoring network.

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Introduction

The North and South Delta monitoring network is the resultant mitigation effort for two different Delta projects where there was concern that channel modifications would result in increased seepage. The North Delta wells were installed, in response to the North Delta Program (NDP, November 1990), for the purpose of monitoring seepage and similar impacts resulting from future levee and channel improvements along the North and South Forks of the Mokelumne River. The South Delta wells were installed, in response to the Interim South Delta Program (ISDP, July 1996), to monitor seepage impacts from the proposed dredging of approximately five miles of Old River between North Victoria Canal and Clifton Court Forebay.

The North Central Region Office produces an annual North and South Delta Seepage Monitoring (NSDSM) program status report for the Bay Delta Office. This report outlines routine maintenance issues, major change events, and overall program status. This comprehensive report analyzes each individual well's current and historical status. Due to budget reductions, program monitoring has been temporarily suspended until January 2016.

Process

This NSDSM status report update required location and status verification of all wells within the program's monitoring network. A document review of old maps and reports was conducted to establish an "originally installed" wells list. During the review process, documentation omissions and other deficiencies were discovered. As a result, a comprehensive well inventory proved difficult to establish. Drill hole logs exist for both the North and South Delta wells; however, only the North Delta wells have Well Completion Reports (WCR). Moreover, these WCRs prove limited as only one WCR was recorded for all the wells on an island. Additionally, these program monitoring wells are void of any original records of their assigned State Well Numbers (SWN).

Well Verification

Staff attempted to locate and visit all NSDSM wells, excluding Canal Ranch tract wells because DWR been denied access to the property. While in the field, staff attempted to:

- locate the well;
- collect/ verify the latitude and longitude using a handheld Garmin global positioning system (GPS);
- assess the condition of the well;
- take pictures;
- measure the distance from the ground surface to the well reference point (RP); and
- record a groundwater level measurement.

Data Quality

Graph generation relied on historical data recorded in Excel spreadsheets from multiple sources. The DWR ID, such as ND-1, rather than the thirteen digit SWN (included) was used to identify a well in these spreadsheets. The other data source referenced, the California Statewide Groundwater Elevation Monitoring (CASGEM) database, uses the SWN and a CASGEM ID rather than the DWR ID to identify the wells. Several occurrences of a SWN correlating to multiple DWR IDs was discovered after all of the data was organized; the resulting graphs proving erroneous. 24,000 entries of raw data from the field books was re-keyed manually to correct these errors.

A master list of SWNs was compiled from sources including: CASGEM, field books, and previous reports. The SWNs were reviewed against maps to identify and resolve any location discrepancies. During this process, it was discovered that there were some discrepancies between the paper maps that were originally used, and the digital township, range, and sections lines that are currently used to assign SWNs.

The re-keyed data was spot checked and errors, such as wrong dates or site name formats, were corrected. A small random sample of approximately 100 entries were compared against known correct field book entries. The remaining erroneous data were cleaned up programmatically before the graphs were generated.

Groundwater levels are measured from a reference point (RP) at the top of the well. Ideally, the groundwater level would be graphed with respect to a datum; however, vertical control had not been established and documented for all wells. To address this issue, staff recorded a ground surface to RP height (Figure 1, ①), so that a depth to groundwater from the ground surface could be calculated (Figure 1, ②). For wells where a ground surface to RP measurement could not be taken, data was reported as a depth from the RP (Figure 1, ③). CASGEM does have RP to ground surface values for many of the wells, but many of them appeared to be unreasonable. However if the CASGEM value was reasonable, generally between 1-3 feet, it was used if a field measurement was not possible.

Of the 24,000 entries, 18,357 of them had depth to groundwater readings. Before graphing the data, each data entry with a high probability of being erroneous was excluded. The first step was removing questionably large values (values greater than 3-times the mean for the well). Some of these values were checked and found to correlate to the actual values in the field books, other values were missing a decimal, while others were typos. There were approximately 200 values removed because they exceeded 3-times the mean. The second step was to identify values that were outside one and two standard deviations. There were 61 readings that exceeded one standard deviation and zero readings that exceeded two standard deviations. The third step was to identify and remove negative values. Incorrect values recorded in the field books, wrongly keyed data, or RP errors when the ground or groundwater level was measured are all factors which could result in negative values. Negative values predominantly occurred within the shallow well of three multi-completion wells, and for all wells measured during a couple of three/four month periods.

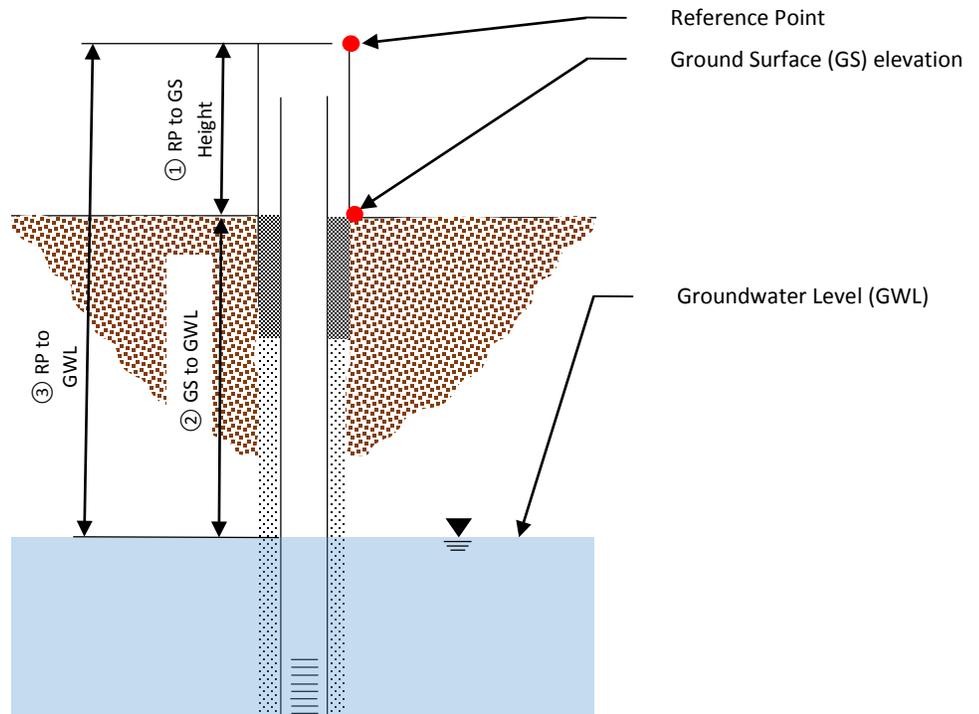


Figure 1: Sample Monitoring Well Diagram

Output/ Results

Maps and data sheets for each well can be found in the Appendix. The Appendix is broken into the North and South Delta, and then organized by island. Wells are labeled as one of the following:

Active Wells (●): Active wells are wells that are currently visited on a monthly basis to measure the groundwater level. Some wells may have limited access because of locked gates or seasonal activities that result in no measurement being taken; however, because of the short term nature of these accessibility issues these wells are still considered active.

Active Wells Beginning Jan. 2016 (▲): These well represent wells that were not being actively monitored, but were 'found' when staff attempted to locate all of the wells for this update. When funding for this program resumes, estimated to be January 2016, these wells will become active.

Damaged Wells (■): These wells have been damaged or have an obstruction preventing an accurate measurement from being taken. Agricultural vehicles appear to be the major cause of well damage.

Inaccessible Wells (◆): Very few wells are permanently inaccessible. Most of the inaccessible wells are located on Canal Ranch Tract where DWR has been denied access to the property.

Wells Unable to be Located (🔍): Many wells were not able to be located. For some wells, the field book provided a reason, such as levee work buried the well or a vehicle ran it over. Some wells have had limited access over time and when access was gained the well was gone. Other wells stopped

being monitored when there were changes in staff and the available coordinates were not sufficiently accurate to find the well – assuming it wasn't damaged or removed.

Macros were used to generate all of the graphs. The depth to groundwater is either reported from the ground surface or from the RP. Graphs referencing the ground surface use a circle marker, whereas graphs referencing the RP use a diamond marker. Additionally, because multi-completion wells are housed within the same bore hole, they are graphed together for comparison. For areas of missing data on a graph, a red box with a description was provided, when possible. All of the graphs have the same time reference, January 1993 through December 2014. However, data for the South Delta did not begin being collected until 1998 resulting in what may appear as a data gap for the first five years. See Figure 2 for an example of the different graph types.

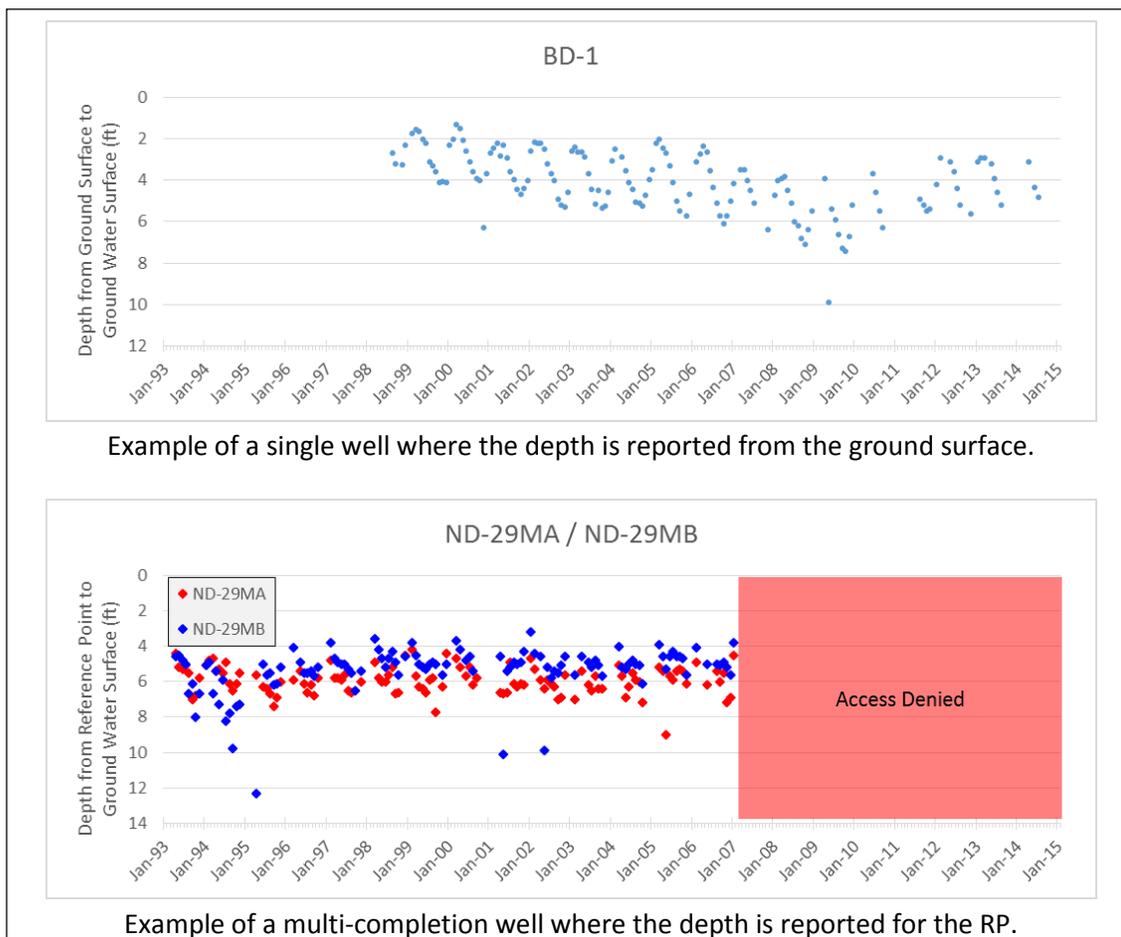
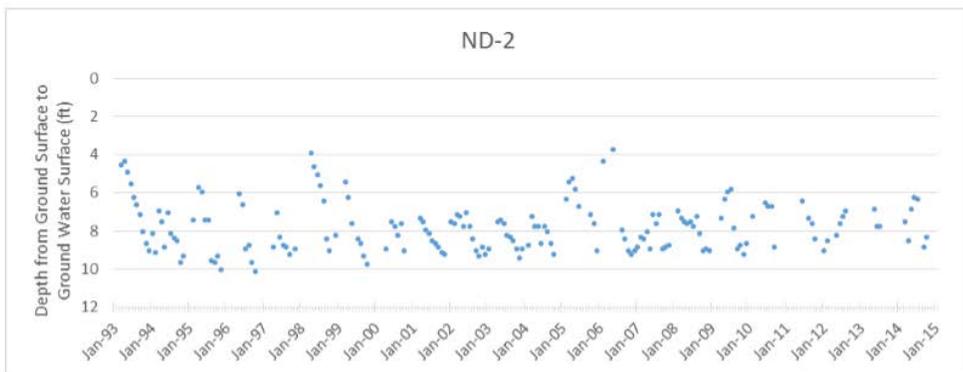
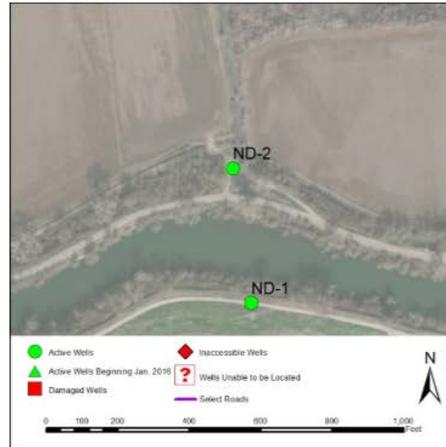


Figure 2: Graph Samples

The well status sheets are organized with the DWR ID on the top, followed by the well status and a map. If pictures were available, they are located mid-page, followed by a graph of the data (see Figure 3 for a sample status sheet). Each status sheet represents a single bore hole. As such, all wells in a multi-completion well are included on the same status sheet. Any well that does not have a signed temporary entry permit (TEP) or where a TEP has not been rejected has the status of 'Pending'.

ND-2

Monitoring Status: Active
Reclamation District: 2110
McCormack-Williamson Tract
Coordinates: N 38°15'37.3" W 121°27'27.5"
State Well Number: 05N05E30A004M
Permit Status: Pending
Construction Depth: 20ft
Comments: Well on levee toe, near oak tree, marked with two red t-posts.



A8

Figure 3: Sample Well Status Sheet

Results and Discussion

Originally, 129 wells were identified as being installed at 114 sites. There was an additional three wells installed on Union Island, but those wells were destroyed by DWR in 2013, at the request of Reclamation District 2, and are not included in this report. Of the original 129 wells, 84 wells are being actively monitored in the North and South Delta. Beginning in January 2016, an additional 9 wells will become active, bringing the total active wells to 93. There are currently 9 damaged wells, 6 inaccessible wells, and 21 wells that cannot be located. Table 1 summarizes the well status by island and tract, and Table 2 summarizes the well status for the North and South Delta.

Table 1: Well Status by Island

	Active Wells	Active Well Beginning Jan. 2016	Damaged Wells	Inaccessible Wells	Wells Unable to be Located	Grand Total
Andrus Island	2				1	3
Bouldin Island	3	1			4	8
Byron Tract	12				5	17
Canal Ranch Tract				5		5
McCormack-Williamson Tract	6				4	10
New Hope Tract	7	4			4	15
Staten Island	18	1	4		2	25
Terminus Island	4	1	2			7
Tyler Island	9		1		1	11
Victoria Island	19	1	2			22
Walnut Grove	1	1				2
Woodward Island	3			1		4
Grand Total	84	9	9	6	21	129

As can be seen on the North Delta map (page A5), along the eastern side of Staten Island between Beaver Slough and Sycamore Slough, there is only one active or “Active in 2016” well on the South Mokelumne River due to damaged wells on Staten Island and Canal Ranch Tract access being denied since 2007. Groundwater Supply Assessment and Special Studies staff are also unable to locate many well in the northern portion of the network on McCormack-Williamson and New Hope Tracts.

There is a data gap on Old River between Byron Tract and Victoria Island, south of Highway 4 and north of Clifton Court Forebay (South Delta map page A96). There is only one well in the South Delta that is inaccessible, WS-3. Earth work was done around WS-3 in 2013 that resulted in the ground level being raised significantly above the well RP. When the work was performed, a PVC pipe was put over the well to protect it, but it is no longer possible to measure that well.

Over the last five years, there appears to be a trend where monitoring during the typically wet winter months did not occur due to the risk of potentially damaging muddy farm roads and levees. Moreover, staff changes, and the possible insufficient training of new staff may have also caused data gaps to appear. Steps have been taken to ensure that wells are monitored appropriately.

Table 2: North and South Delta Well Status

	North Delta	South Delta	Subtotals
Active Wells			
Single	28	34	62
Multi	22		22
Subtotal	50	34	84
Active Wells Beginning Jan. 2016			
Single	8	1	9
Multi			0
Subtotal	8	1	9
Damaged Wells			
Single	7	2	9
Multi			0
Subtotal	7	2	9
Inaccessible Wells			
Single	3	1	4
Multi	2		2
Subtotal	5	1	6
Wells Unable to be Located			
Single	10	5	15
Multi	6		6
Subtotal	16	5	21
Total Wells	86	43	129

Graph Trends

A qualitative review of the graphs was completed. The following criteria were evaluated: graph/data quality, seasonal peaks, trend, and length of data set.

Graph/ Data Quality: The graphs were given a rank of one through four with one being a graph that showed a clean logical pattern; and four being a graph that appeared to have little to no consistency, questionable, or missing data. This was done to identify wells that might be of higher value for long-term analysis and future studies. Only graphs that were ranked one or two were evaluated for seasonal peaks, trend, and length of data sets.

Seasonal Peaks: Some of the wells have seasonal highs, generally between January and May, which then decrease over the rest of the year. Graphs were given one of three values: **Yes**, **No**, or **Maybe**. These patterns could be due to weather cycles, or agricultural practices, or a mix of both. Graphs with obvious patterns were given a value of 'Yes' and for graphs where it appears there were a few seasonal cycles, 'Maybe' was assigned.

Trend: The trend analysis was the most subjective analysis because of the variation in the data sets, but graphs were given one of three values: **Increase**, **Decrease**, or **Level**. The long-term trend was

evaluated, but more weight was applied if there were changes within the last five years. Some wells had multi-year cycles where groundwater levels would increase and then decrease but that pattern remained consistent, so they were labeled as 'Level'.

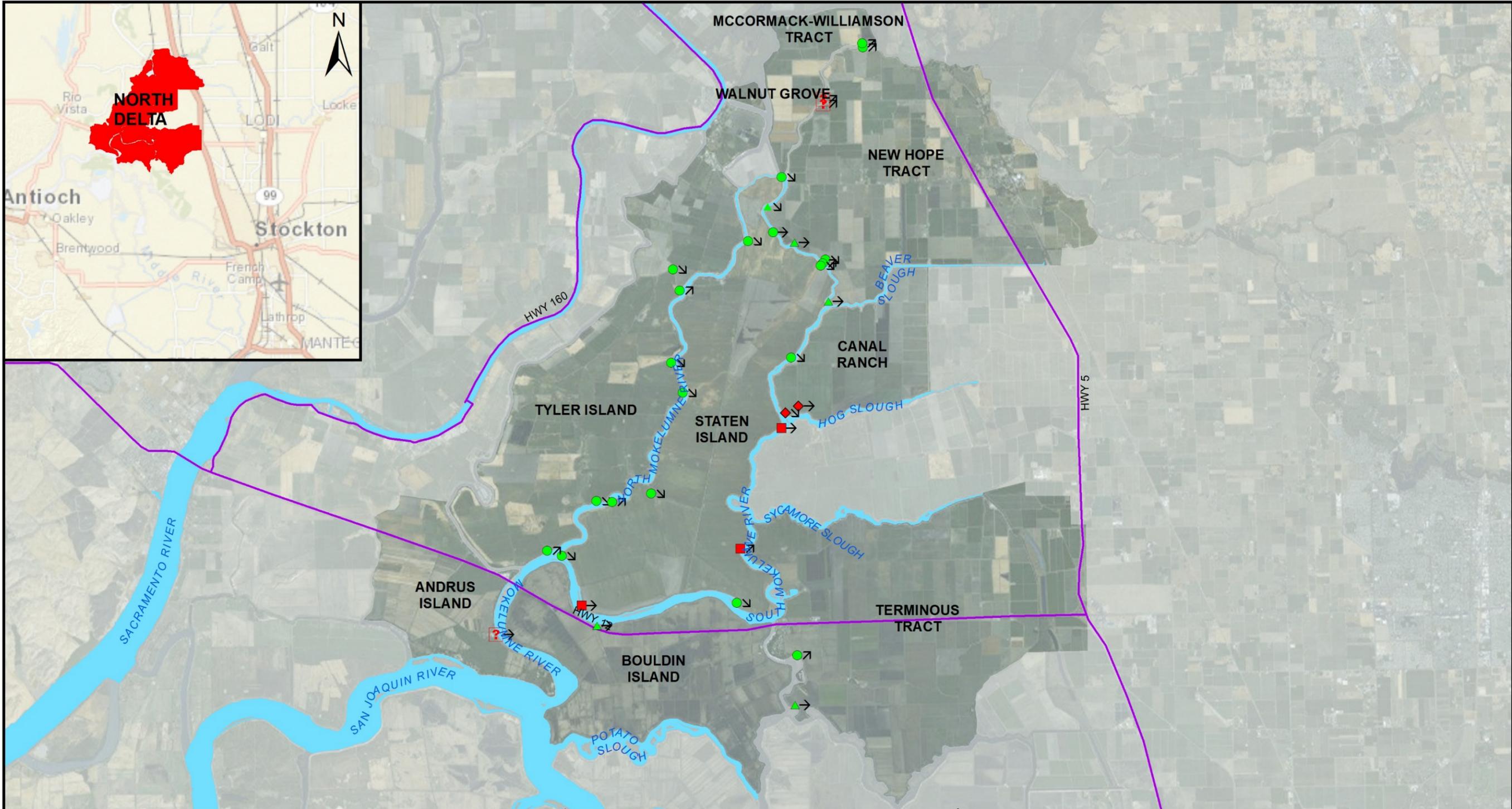
Length of Data Set: Graphs were assigned one of three values: **Full**, **Broken**, or **Ended**. Graphs labeled 'Full' had no significant breaks in data when looking at the graph. If a graph was labeled 'Broken' it could mean a single year's worth of data was missing, or there was a multi-year period without data. Wells that have been damaged, lost, or where data can no longer be collected, were labeled 'Ended'.

Of the 114 graphs, 31 had a quality grade of one, and 33 a quality grade of two. Thirty five of those wells were in the North Delta, and 29 were in the South Delta. The remaining 50 graphs had a quality ranking of three or four, and no further analysis was performed on those graphs. Some of the graphs did show peaks and valleys over time, but the occurrence of those peaks and valleys were not consistent in timing or for a more than a few wells. However, a majority of the wells appears to have a consistent seasonal cycle with 56 wells labeled as either 'Yes' (42 wells) or 'Maybe' (14 wells). See Table 3 for the graph analysis breakdown.

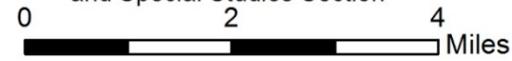
Table 3: Graph Analysis Results

Data Quality (All Wells)				
Criteria	1	2	3	4
Result	31	33	25	25
Well Location (Wells Ranked 1 or 2)				
Criteria	North Delta	South Delta		
Result	35	29		
Seasonal Peaks (Wells Ranked 1 or 2)				
Criteria	Yes	No	Maybe	
Result	42	8	14	
Trend (Wells Ranked 1 or 2)				
Criteria	Increase	Decrease	Level	
Result	19	18	26	
Data Set Length (Wells Ranked 1 or 2)				
Criteria	Full	Broken	Ended	
Result	10	40	14	

With the exception of a couple of wells, most of the increasing or decreasing trends were slight. Twenty six of the wells were labeled as 'Level', and 16 of those 'Level' wells were located in the South Delta. In the North Delta, on the North Mokelumne River, two thirds of the wells showed a decreasing trend; otherwise, there was no consistent pattern in the North Delta. The North and South Delta Seepage Monitoring Wells Groundwater Level Trend maps (Figures 4 and 5) show wells that were ranked one or two and the direction of the groundwater trend.



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and Special Studies Section



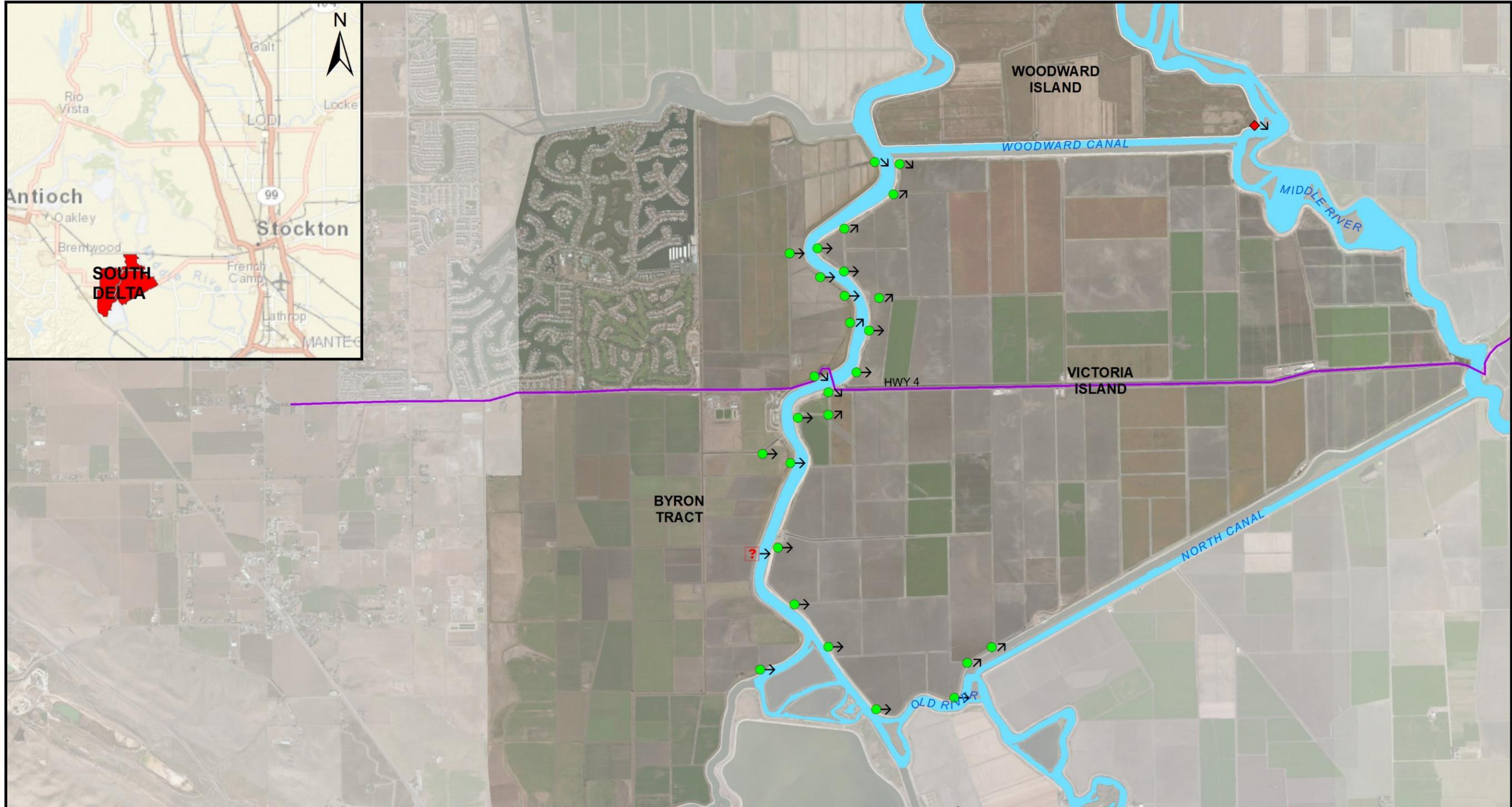
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Checked By: JAS
Date: 04/13/15

Figure 4:
**North Delta Seepage Monitoring
Wells Groundwater Level Trends**

Well Status	Inaccessible Wells	GWL Trend
Active Wells	Wells Unable to be Located	Decrease
Active Wells Beginning Jan. 2016	Select Roads	Increase
Damaged Wells		Level

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 and Special Studies Section

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 Checked By: JAS
 Date: 04/13/15

**Figure 5:
 South Delta Seepage Monitoring
 Wells Groundwater Level Trends**

Well Status	Inaccessible Wells	GWL Trend
Active Wells	Wells Unable to be Located	Decrease
Active Wells Beginning Jan. 2016	Select Roads	Increase
Damaged Wells		Level



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Conclusions

This status update has resulted in adding nine wells back to the monitoring network and provided insight as to the quality of the data being collected. Additionally, areas for program improvement were identified. There are 37 active wells that have reasonable data sets, and four more wells that will be active in January 2016 with reasonable data sets. The data from these wells provide a good bench mark for future delta projects.

There are a significant number of wells with issues that need to be addressed. Several wells should either be rehabilitated or destroyed. There are six wells that are inaccessible, either at the landowners request or due to site work conditions. There are nine wells that are damaged, which have a higher risk of being improperly removed by the landowner, or becoming unable to be located as time passes. Additionally there are 21 wells that were unable to be located, which represent potential hazards.

Recommendations

- Damaged and inaccessible wells should be permanently destroyed.
- Additional effort should be made to locate the wells that could not be found, using metal detectors, talking with locals, and other applicable methods.
- Wells producing poor data should be destroyed.
- Areas where there is insufficient coverage of active wells, damaged wells should be rehabilitated or new wells should be installed.
- Develop complete well monitoring and documentation guidelines so current and future staff can adequately monitor wells throughout the year.

Appendix

Table of Contents

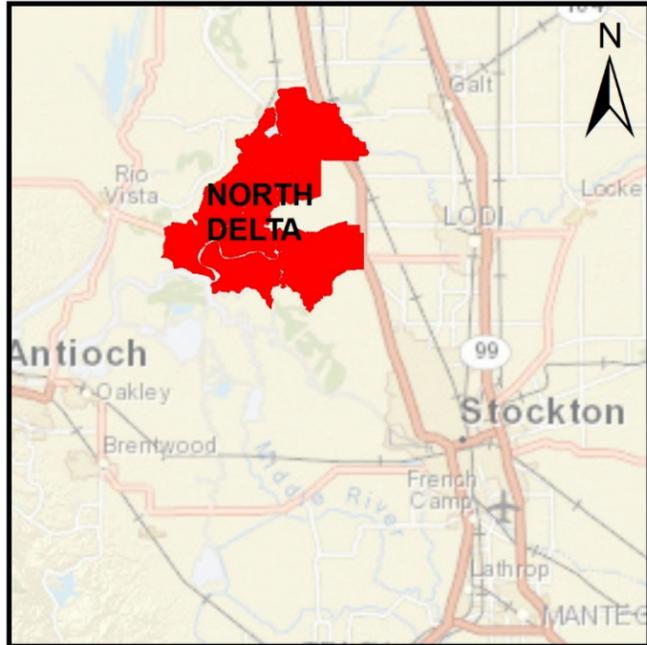
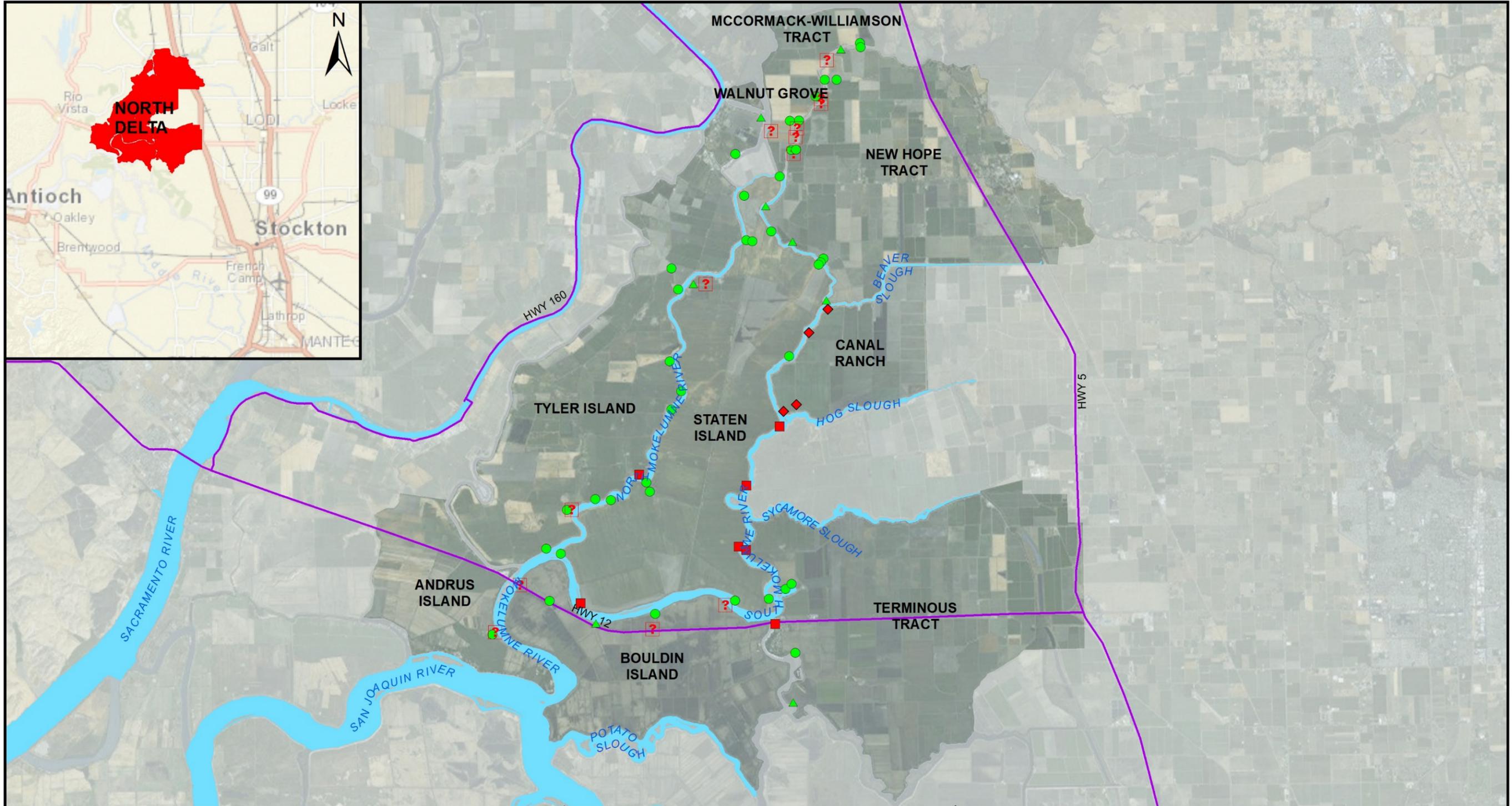
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Staten Island (RD 38).....	A35
Tyler Island (RD 563)	A58
Canal Ranch (RD 2086).....	A69
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Bouldin Island (RD 756).....	A83
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Byron Tract (RD 800).....	A127

North Delta

North Delta Wells in Chronological Order

Wells in the north Delta were not named based on the island name, like in the south Delta. Because this memo organizes wells by island/ reclamation district, the below table is intended to aid the reader in finding what island a specific North Delta well is located on.

ND-1	New Hope Tract	ND-44	Tyler Island
ND-10	McCormack-Williamson Tract	ND-45	Staten Island
ND-11	Walnut Grove	ND-46	Tyler Island
ND-12	McCormack-Williamson-Tract	ND-47	Staten Island
ND-13MA/ND-13MB	McCormack-Williamson Tract	ND-48MA/ND-48MB	Staten Island
ND-14	New Hope Tract	ND-49	Tyler Island
ND-15	McCormack-Williamson-Tract	ND-5	New Hope Tract
ND-16	New Hope Tract	ND-50	Staten Island
ND-18	New Hope Tract	ND-51A	Tyler Island
ND-18MA/ND-18MB	New Hope Tract	ND-51MA/ND-51MB	Tyler Island
ND-2	McCormack-Williamson-Tract	ND-52	Tyler Island
ND-20	Staten Island	ND-53	Staten Island
ND-21	Staten Island	ND-54	Bouldin Island
ND-21A	New Hope Tract	ND-55	Staten Island
ND-21B	New Hope Tract	ND-58	Staten Island
ND-22	New Hope Tract	ND-59	Terminus Island
ND-23A	Staten Island	ND-61MA/ND-61MB	Bouldin Island
ND-23MA/ND-23MB	Staten Island	ND-62	Andrus Island
ND-25	New Hope Tract	ND-63MA/ND-63MB	Andrus Island
ND-26	Canal Ranch Tract	ND-64	Staten Island
ND-26A	Canal Ranch Tract	ND-65	Bouldin Island
ND-27	Staten Island	ND-67	Bouldin Island
ND-29MA/ND-29MB	Canal Ranch Tract	ND-68MA/ND-68MB	Bouldin Island
ND-3	New Hope Tract	ND-69	Staten Island
ND-30	Canal Ranch Tract	ND-6MA/ND-6MB	New Hope Tract
ND-31	Staten Island	ND-70	Bouldin Island
ND-34	Walnut Grove	ND-71	Terminus Island
ND-35	Staten Island	ND-72MA/ND-72MB	Terminus Island
ND-37	Staten Island	ND-73	Staten Island
ND-38MA/ND-38MB	Staten Island	ND-74	Terminus Island
ND-39MA/ND-39MB	Tyler Island	ND-75	Terminus Island
ND-4	McCormack-Williamson-Tract	ND-76	Terminus Island
ND-40	Tyler Island	ND-7MA/ND-7MB	McCormack-Williamson-Tract
ND-41MA/ND-41MB	Staten Island	ND-8	McCormack-Williamson-Tract
ND-42	Staten Island	ND-9	New Hope Tract
ND-43	Tyler Island		



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 Date: 04/06/15

North Delta Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- ◆ Inaccessible Wells
- ◻ Wells Unable to be Located
- Damaged Wells
- Select Roads



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McCormack-Williamson Tract (RD 2110)

ND-2A8
ND-4A9
ND-8A10
ND-7MA/ ND-7MBA11
ND-10A12
ND-13MA/ ND-13MBA13
ND-12A14
ND-15A15



ND-2

Monitoring Status: Active

Reclamation District: 2110

McCormack-Williamson Tract

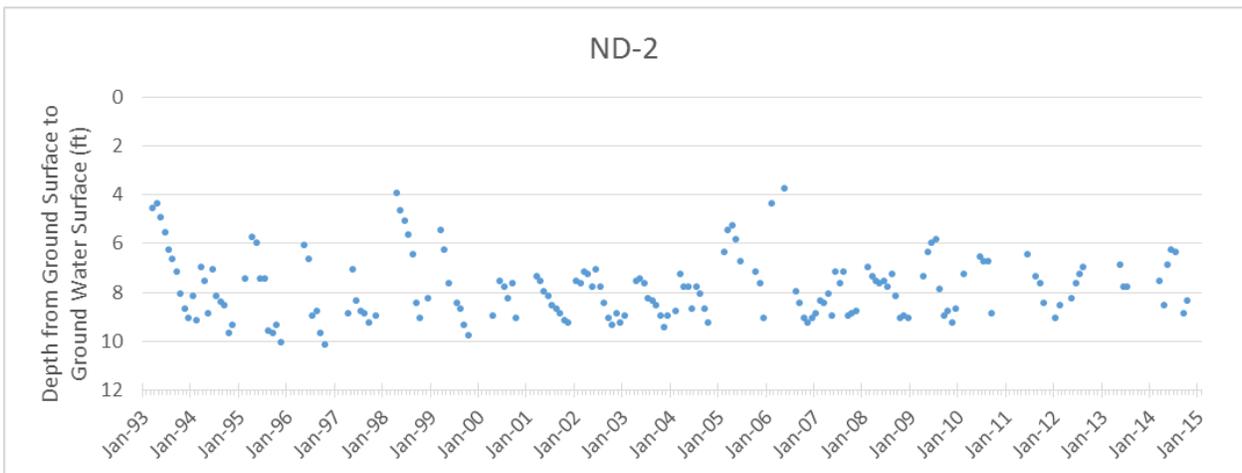
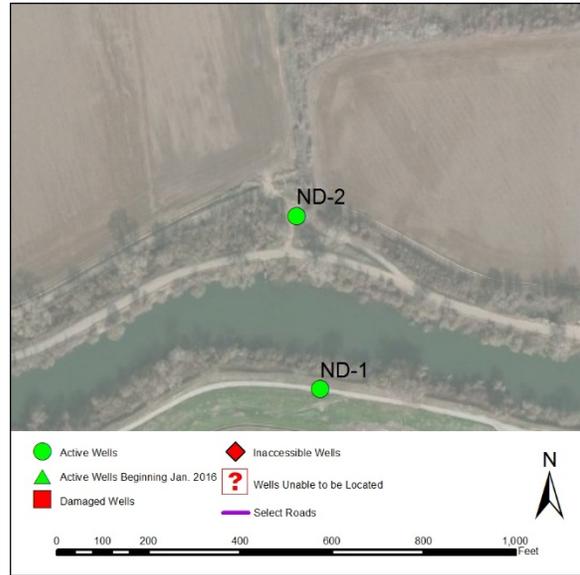
Coordinates: N 38°15'37.3" W 121°27'27.5"

State Well Number: 05N05E30A004M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well on levee toe, near oak tree, marked with two red t-posts.



ND-4

Monitoring Status: Not Active

Reclamation District: 2110

McCormack-Williamson Tract

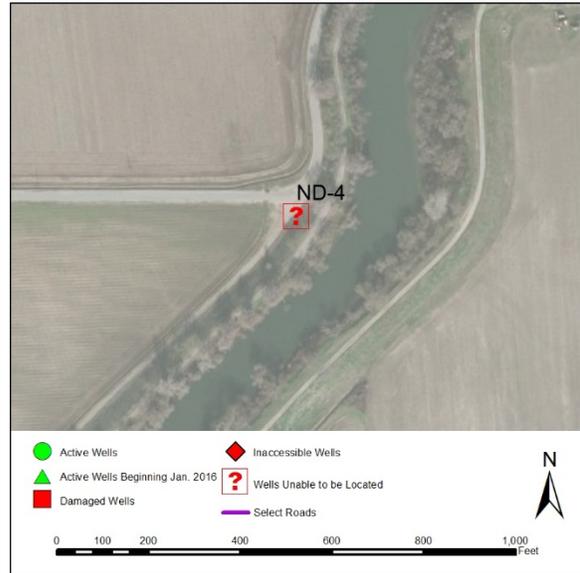
Coordinates: N 38°15'22.5" W 121°28'37.5"

State Well Number: 05N05E30F001M

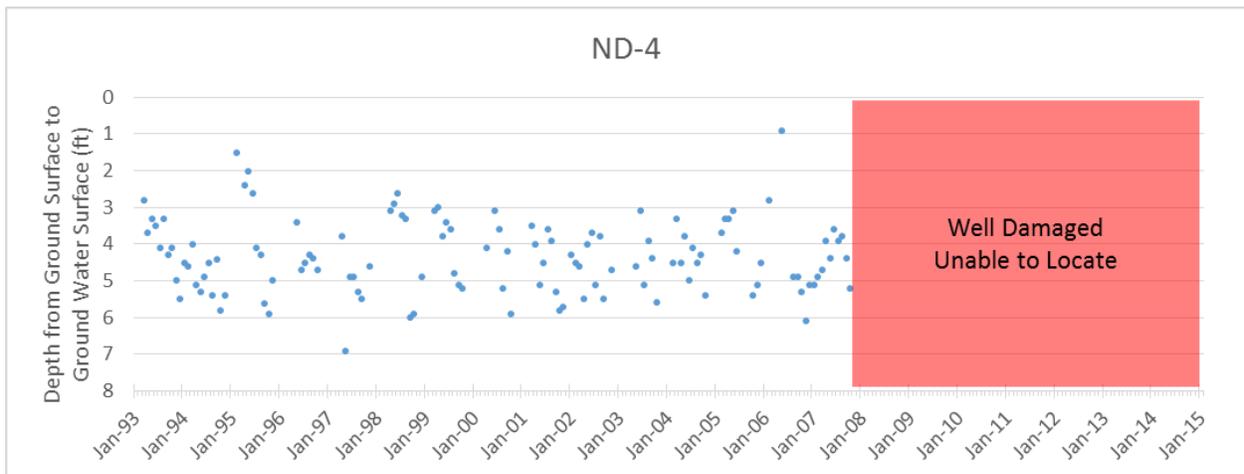
Permit Status: Current

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



ND-8

Monitoring Status: Not Active

Reclamation District: 2110

McCormack-Williamson Tract

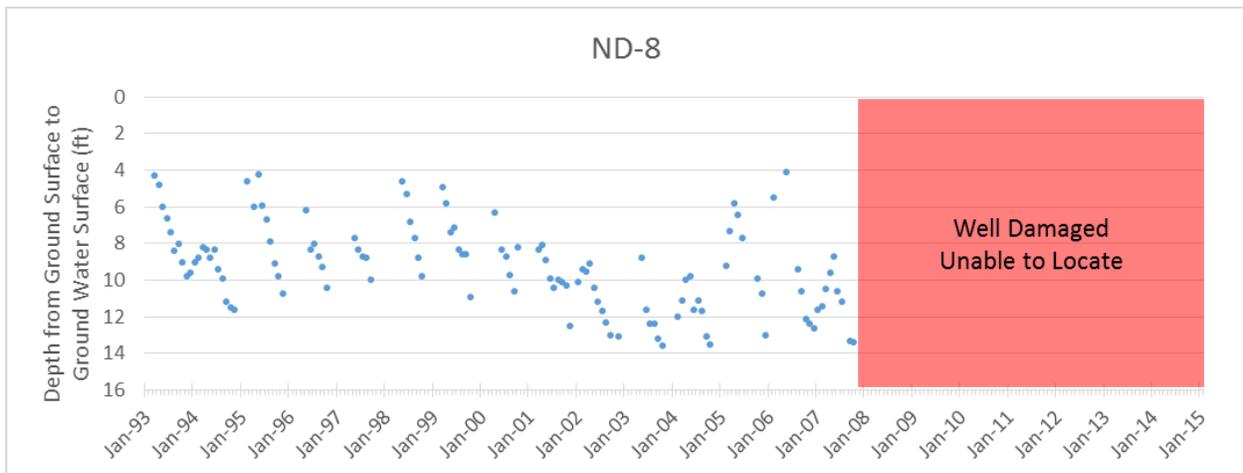
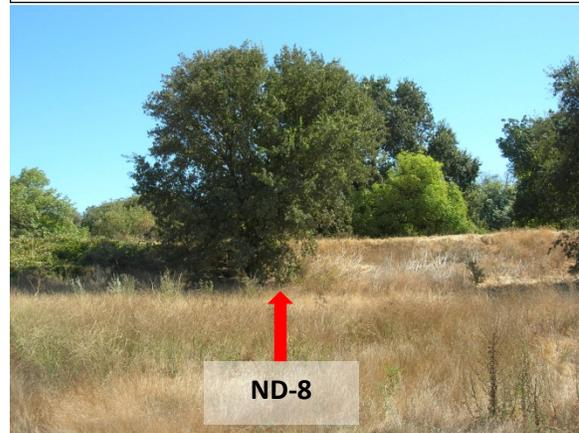
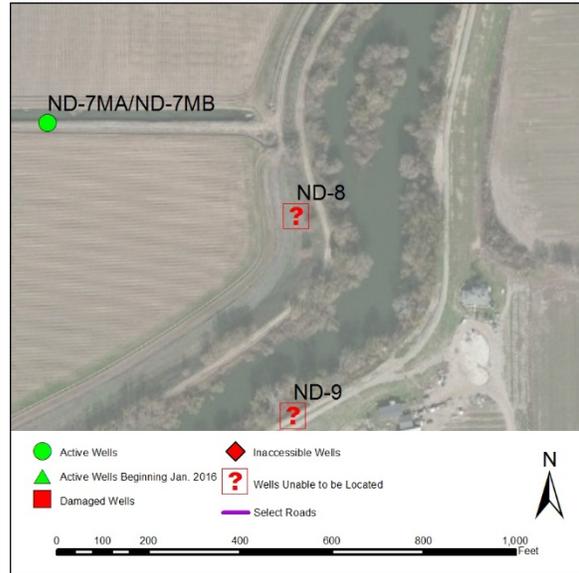
Coordinates: N 38°14'47.3" W 121°27'45.1"

State Well Number: 05N05E31D003M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located. The field book said the well was buried. Using the GPS coordinates a buried object was found, most likely rebar.



ND-7MA/ ND-7MB

Monitoring Status: Active

Reclamation District: 2110

McCormack-Williamson Tract

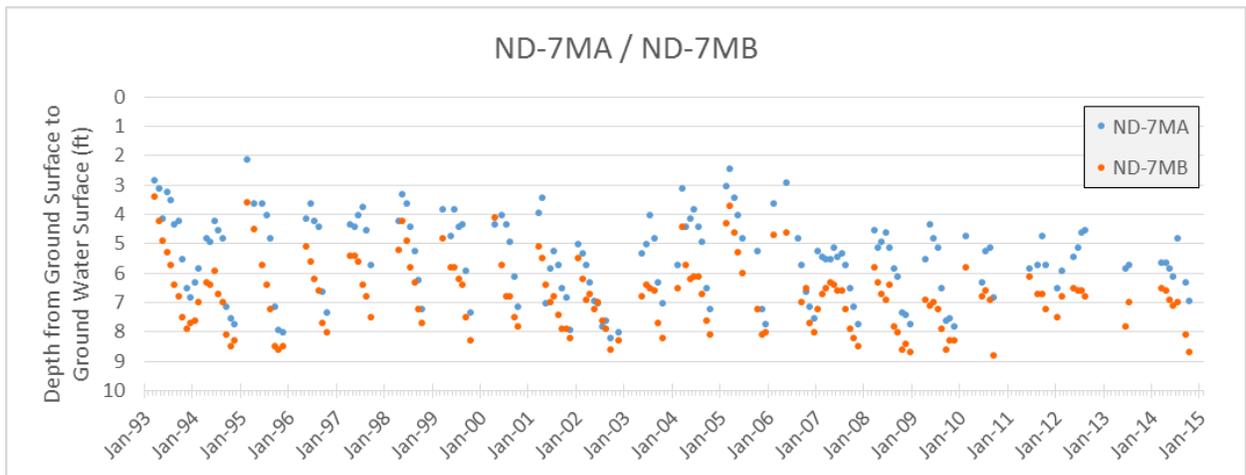
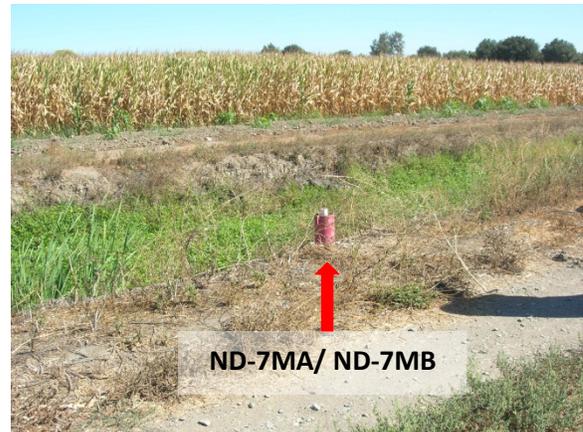
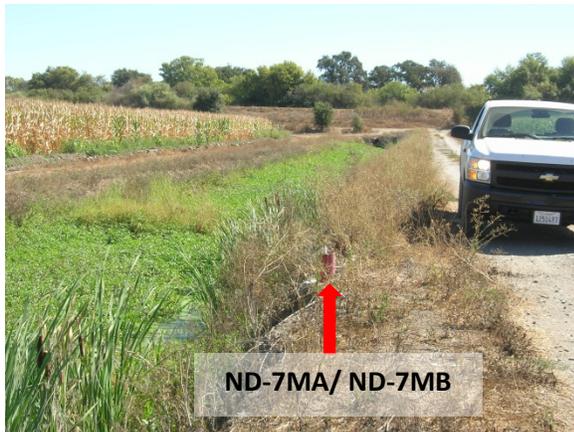
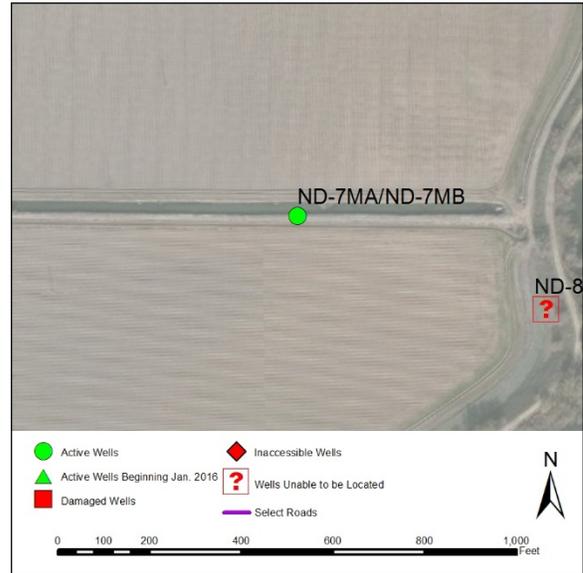
Coordinates: N 38°14'49.5" W 121°27'51.8"

State Well Number: 05N05E31D002M/
05N05E31D004M

Permit Status: Current

Construction Depth: 20ft /100ft

Comments: Well located 500ft inland adjacent to drainage ditch, on southern side of ditch, marked with a red pipe sticking up approximately 1ft out of the ground. This is an uncapped well.



ND-10

Monitoring Status: Active

Reclamation District: 2110

McCormack-Williamson Tract

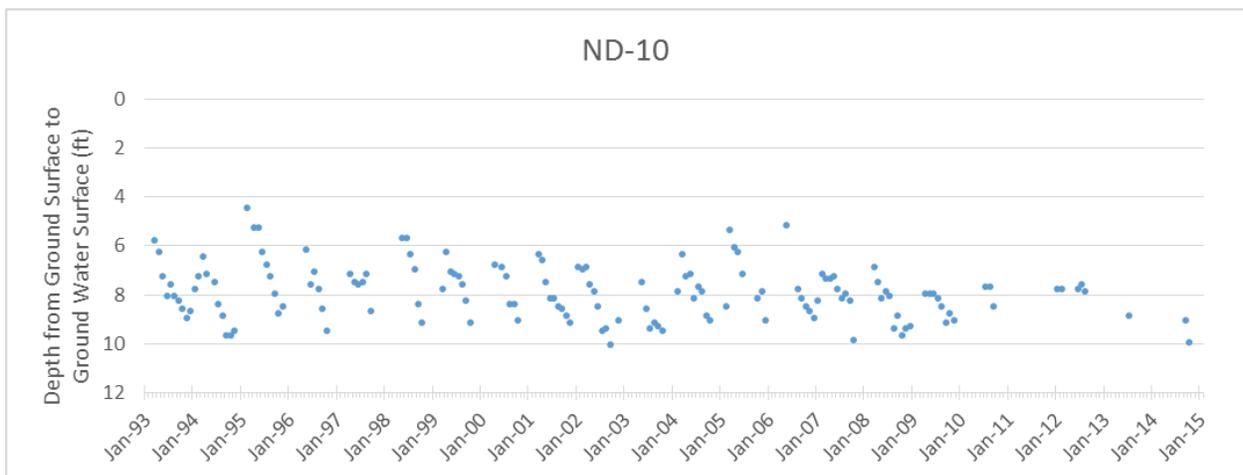
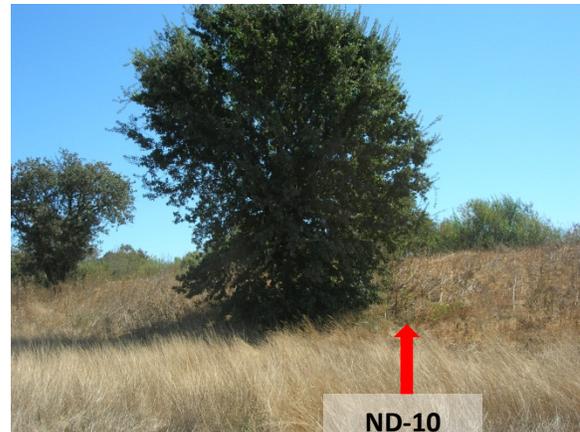
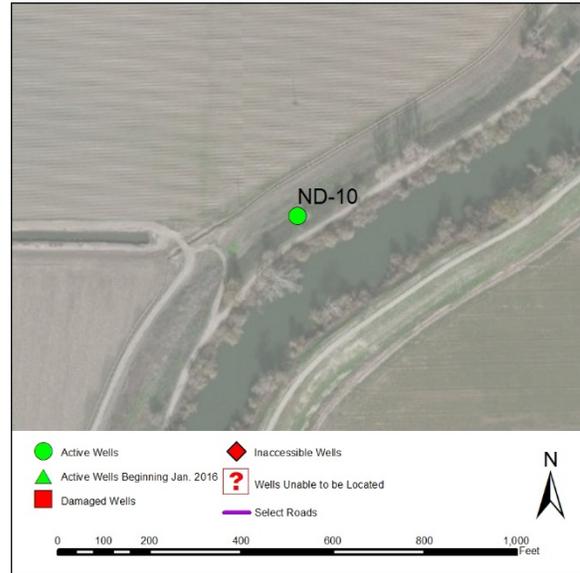
Coordinates: N 38°14'28.0" W 121°29'11"

State Well Number: 05N04E36H001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located on levee, near oak tree, marked with two red t-posts. The casing is below the ground surface.



ND-13MA/ ND-13MB

Monitoring Status: Active

Reclamation District: 2110

McCormack-Williamson Tract

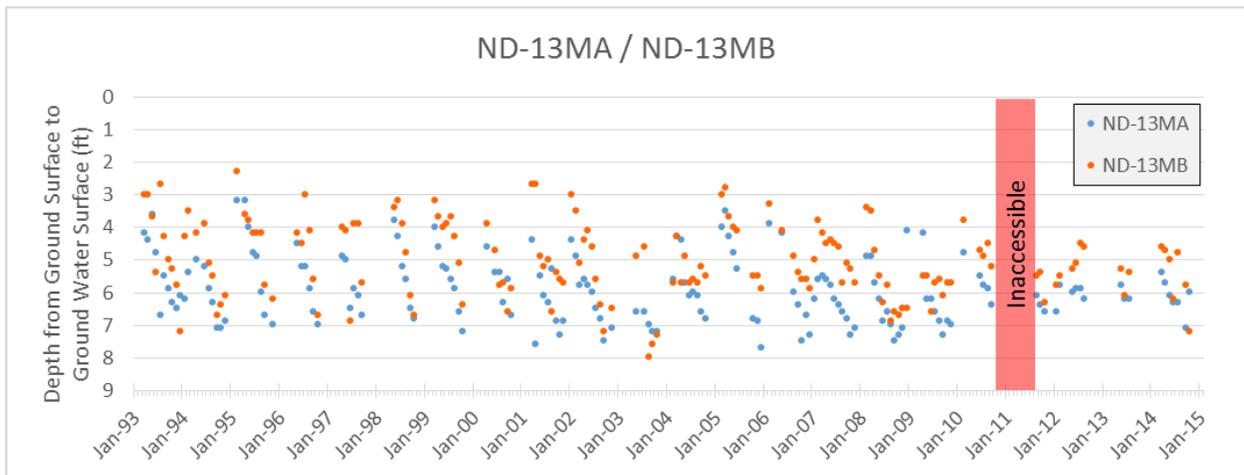
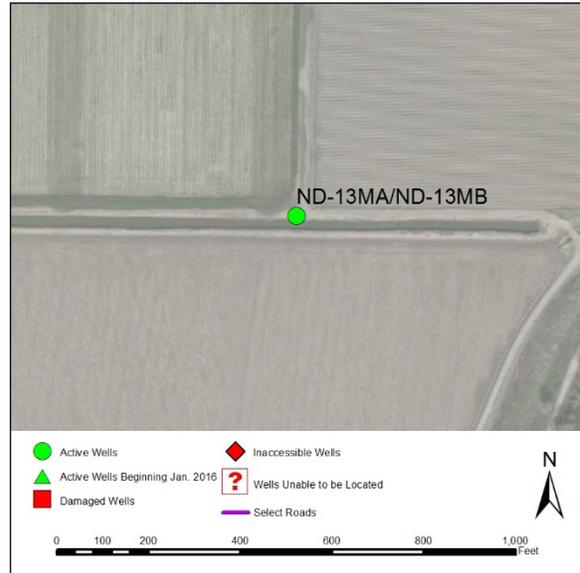
Coordinates: N 38°14'27.9" W 121°29'21.8"

State Well Number: 05N04E36G001M /
05N04E36G002M

Permit Status: Current

Construction Depth: 20ft / 100ft

Comments: Well located approximately 500ft inland on the north side of the ditch, where two farm roads intersect. Marked by red casing approximately 1.5ft out of the ground.



ND-12

Monitoring Status: Not Active

Reclamation District: 2110

McCormack-Williamson Tract

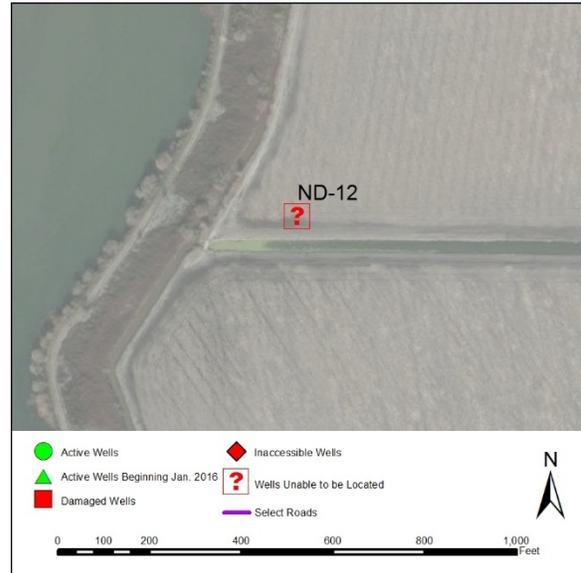
Coordinates: No Coordinates Available

State Well Number: 05N04E36F001M

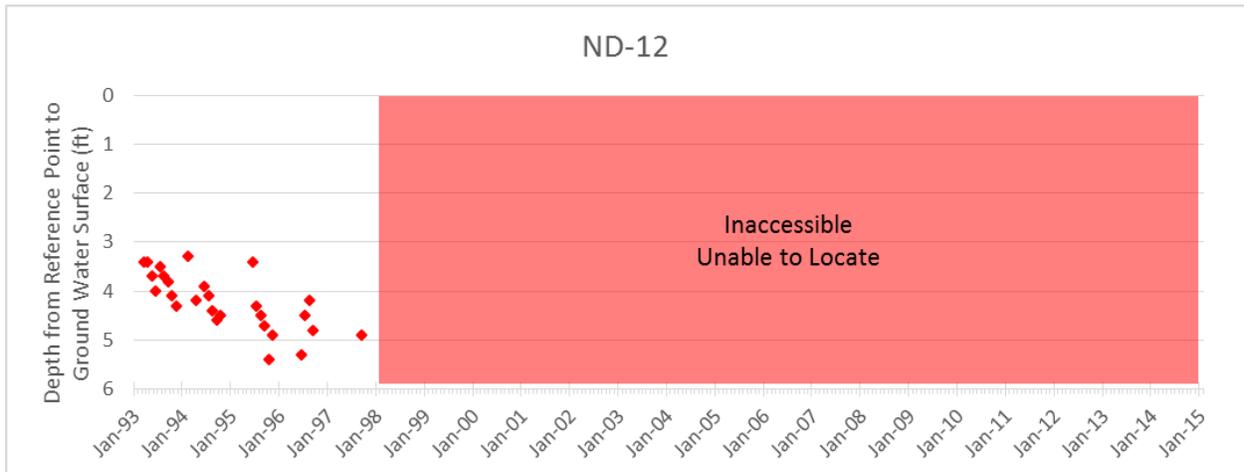
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



ND-15

Monitoring Status: Not Active

Reclamation District: 2110

McCormack-Williamson Tract

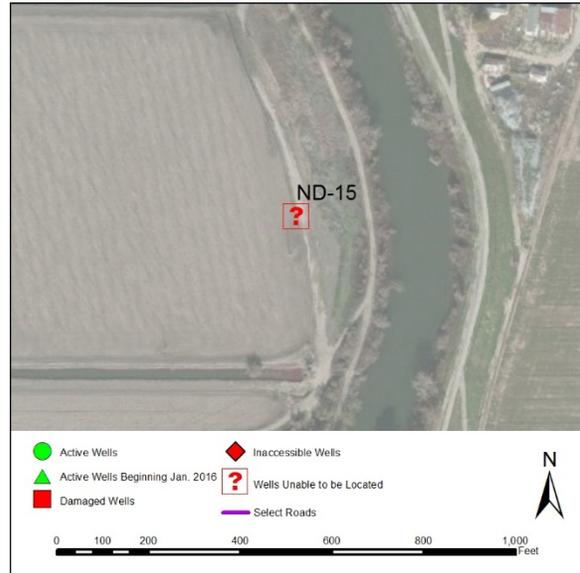
Coordinates: No Coordinates Available

State Well Number: 05N04E36R001M

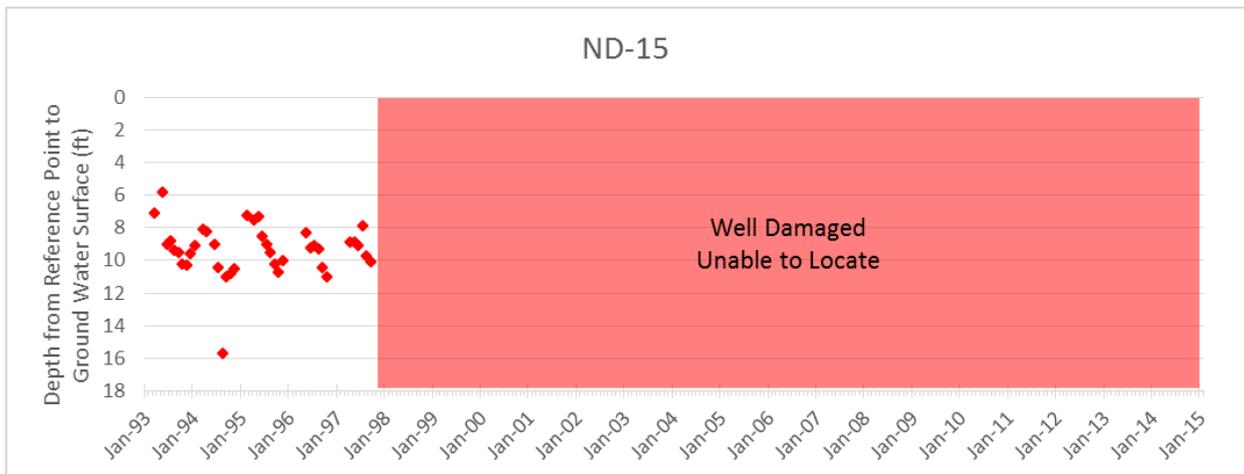
Permit Status: Pending

Construction Depth: 20ft

Comments: Well unable to be located.

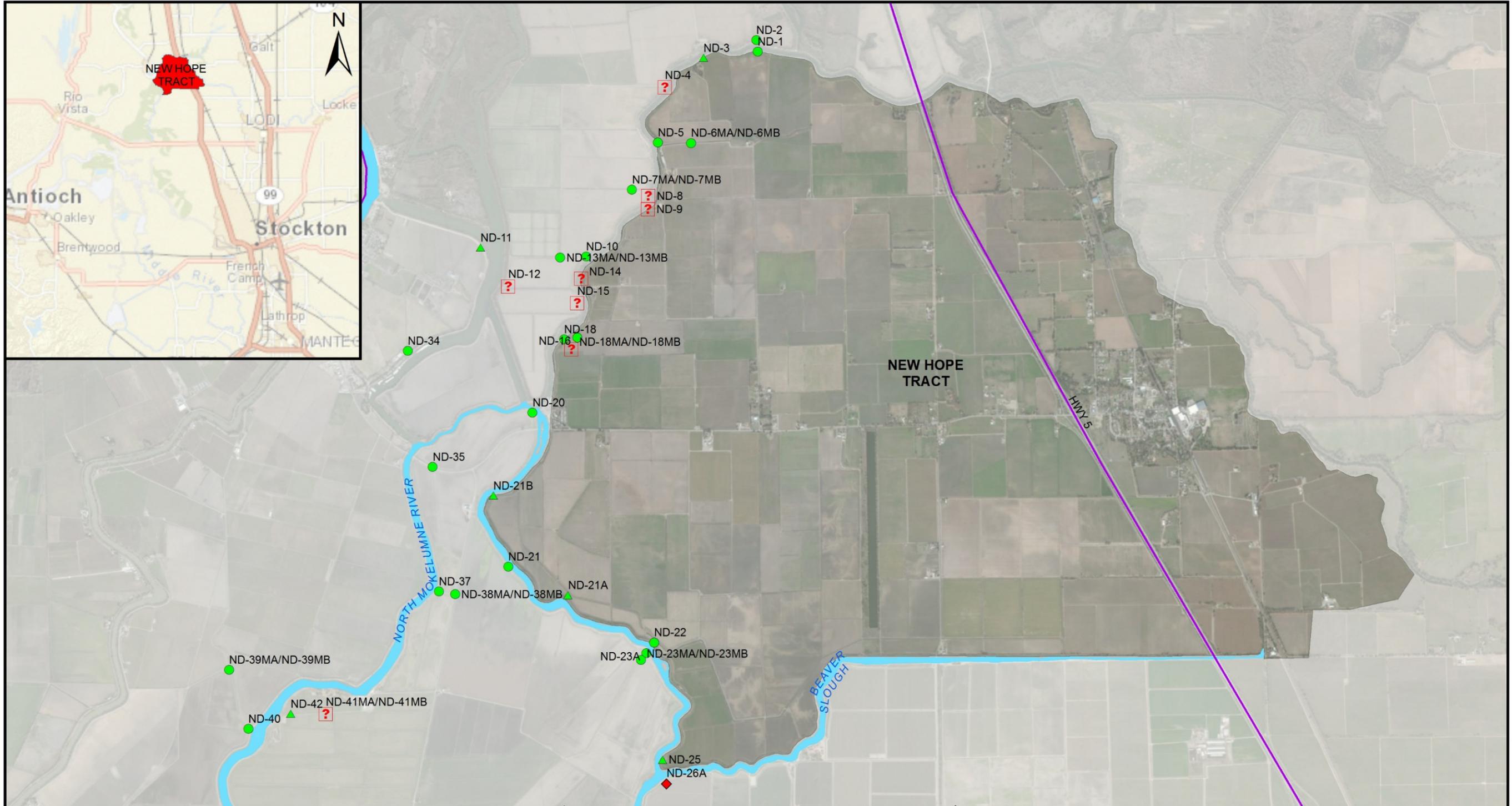


No Images



New Hope Tract (RD 348)

ND-1A18
ND-3A19
ND-5A20
ND-6MA/ ND-6MBA21
ND-9A22
ND-14A23
ND-16A24
ND-18A25
ND-18MA/ ND18-MBA26
ND-21BA27
ND-21AA28
ND-22A29
ND-25A30



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.5 1
 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

New Hope Tract Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-1

Monitoring Status: Active

Reclamation District: 348

New Hope Tract

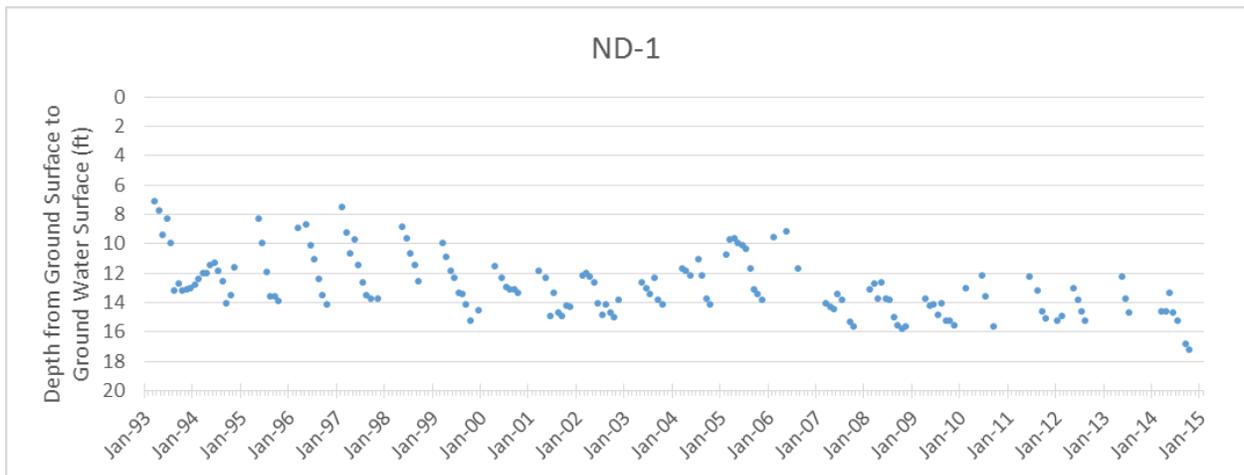
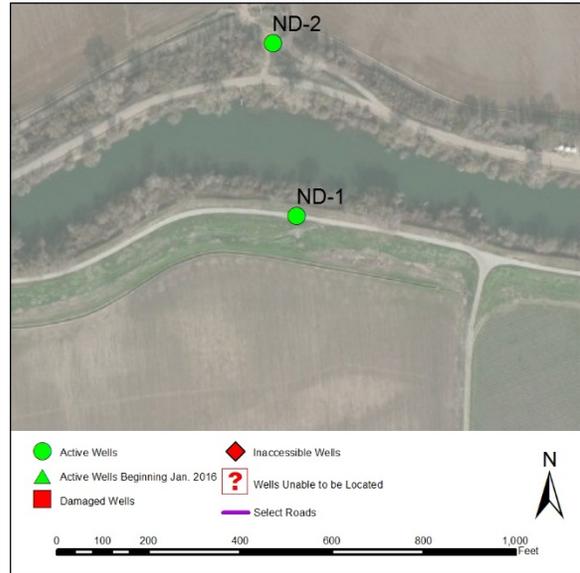
Coordinates: N 38°15'33.3" W 121°27'58.9"

State Well Number: 05N05E29D003M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located next to levee access ramp, mid-way down, marked with red t-post. The t-posts frequently removed by farmers and replaced by field technician.



ND-3

Monitoring Status: Active (Not Active 1/2016)

Reclamation District: 348

New Hope Tract

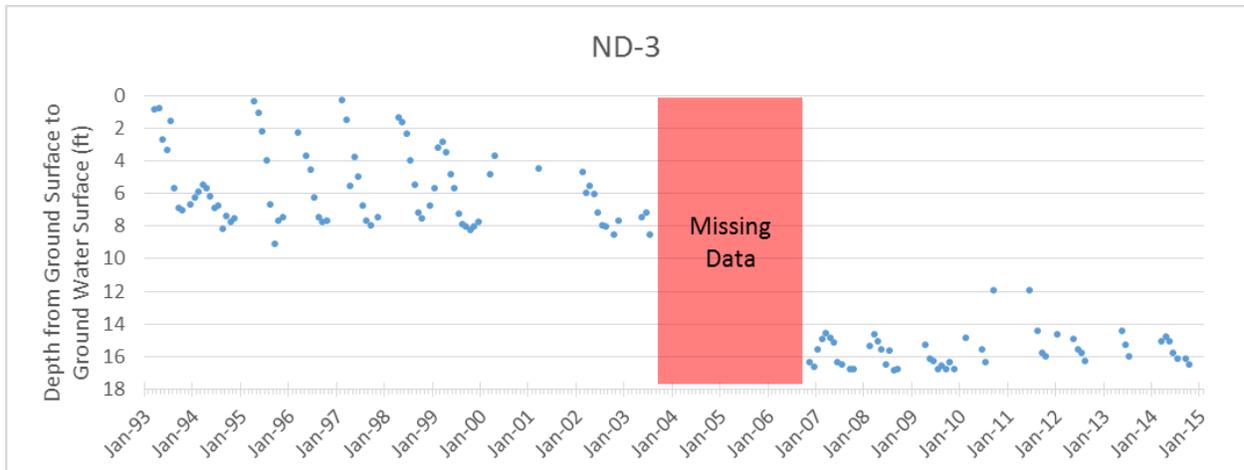
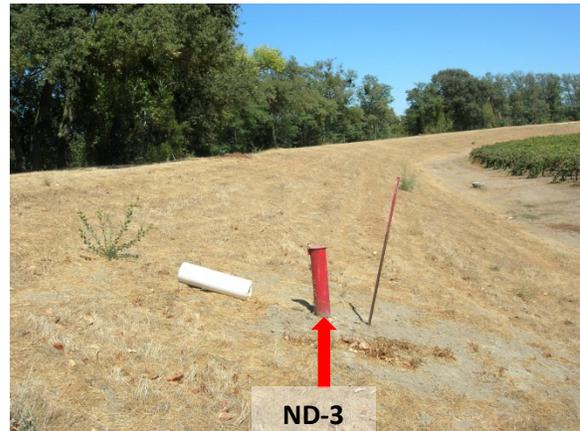
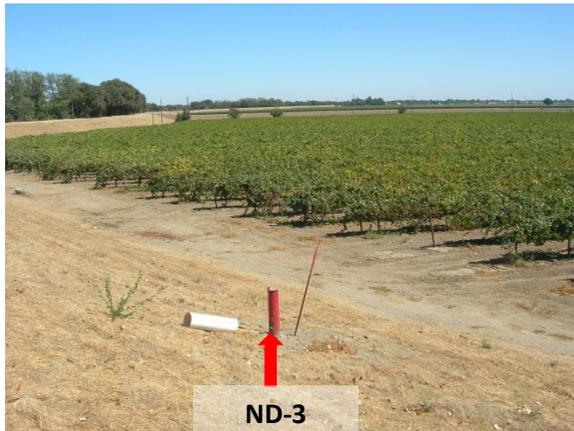
Coordinates: N 38°15'31.9" W 121°28'21.4"

State Well Number: 05N05E30G001M

Permit Status: No Access

Construction Depth: 20ft

Comments: Well is located mid-slope, marked with single red t-post. The PVC cover is not attached. The property owners have refused to sign the TEP. Beginning January 2016 this well will no longer be monitored until access is granted by owner.



ND-5

Monitoring Status: Active

Reclamation District: 348

New Hope Tract

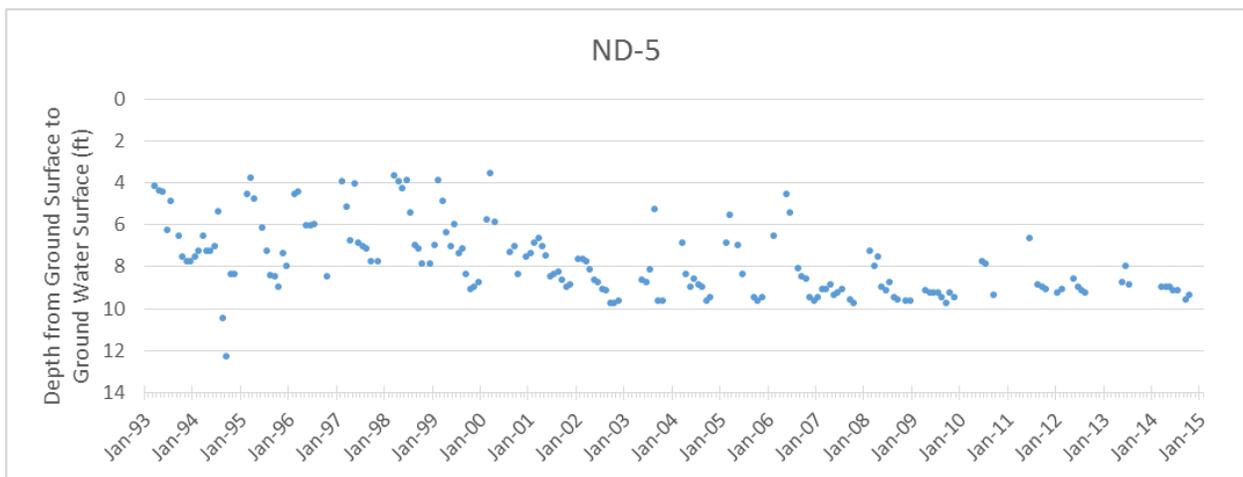
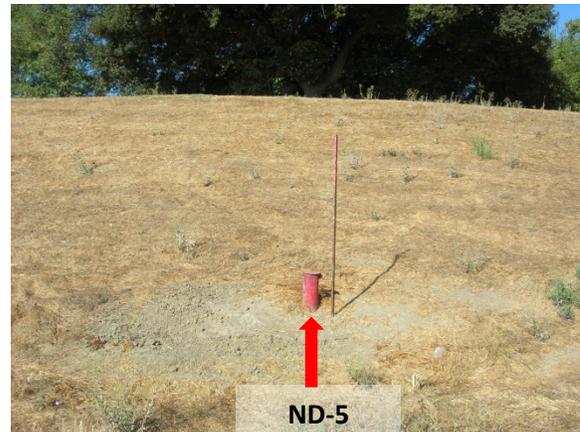
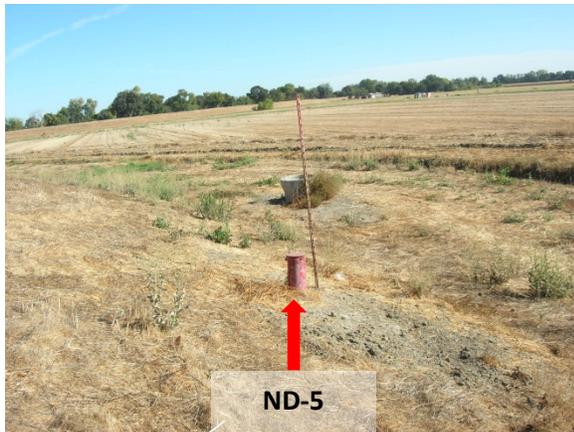
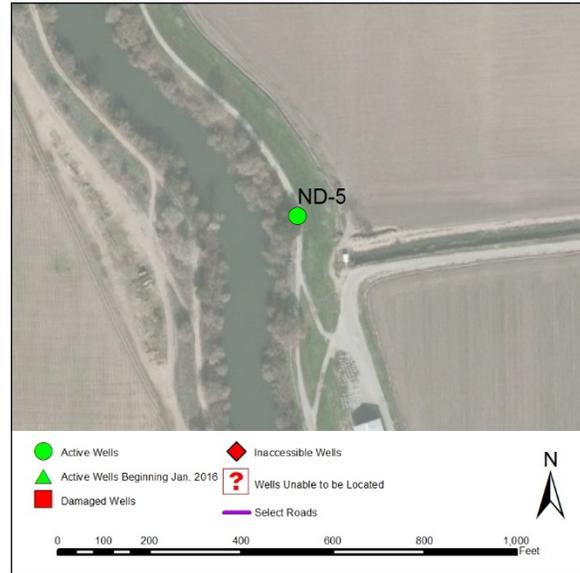
Coordinates: N 38°15'4.6" W 121°28'40.8"

State Well Number: 05N05E30L001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is located at the levee toe, near a shed (not pictured), and marked by a red t-post.



ND-6MA/ ND-6MB

Monitoring Status: Active

Reclamation District: 348

New Hope Tract

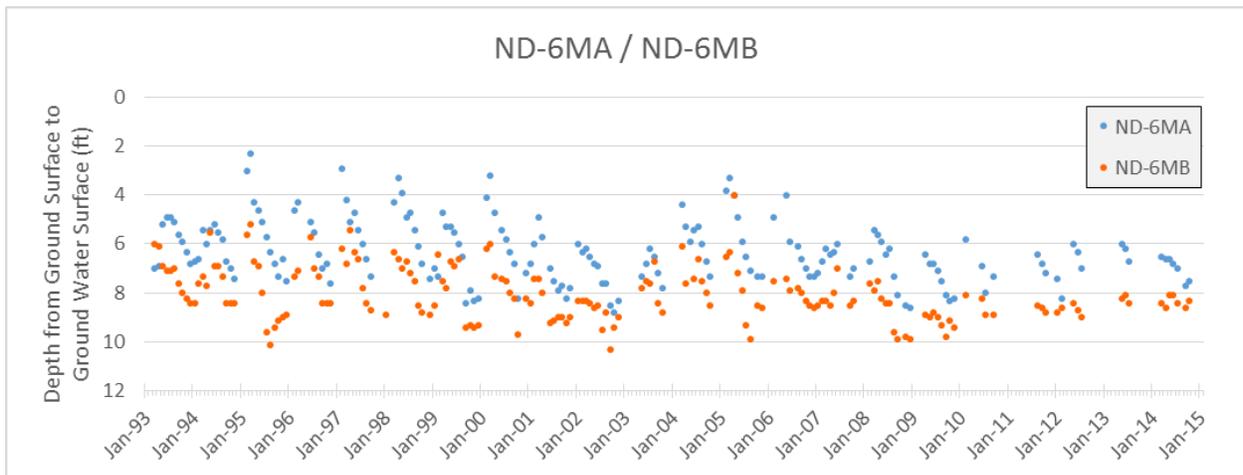
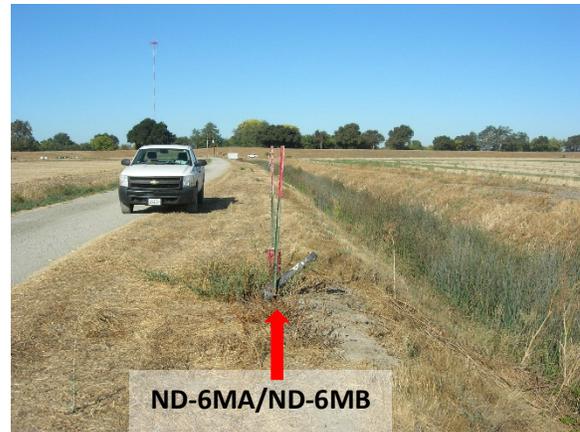
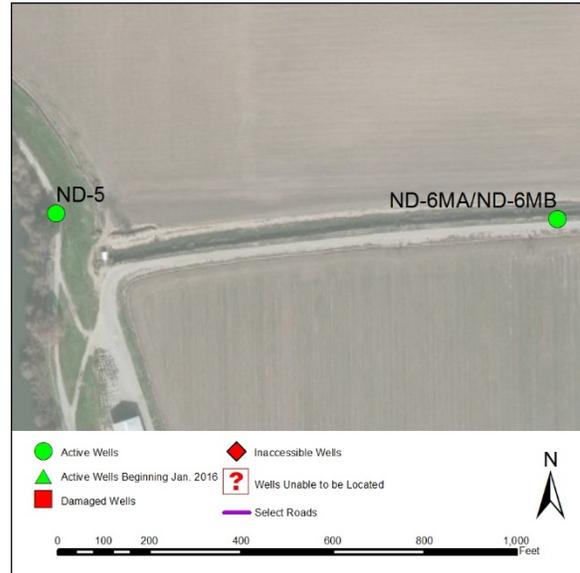
Coordinates: N 38°15'4.3" W 121°28'27.1"

State Well Number: 05N05E30K001M /
05N05E30K002M

Permit status: Pending

Construction depth: 20ft / 100ft

Comments: Well located approximately 1000ft from levee toe on the south side of the ditch, and marked by two red t-posts.



ND-9

Monitoring Status: Not Active

Reclamation District: 348

New Hope Tract

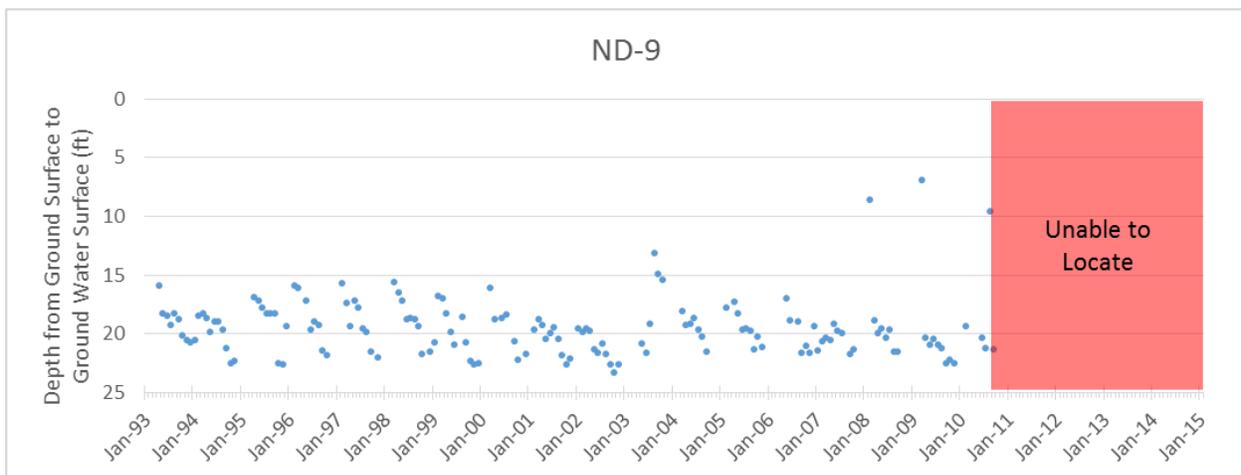
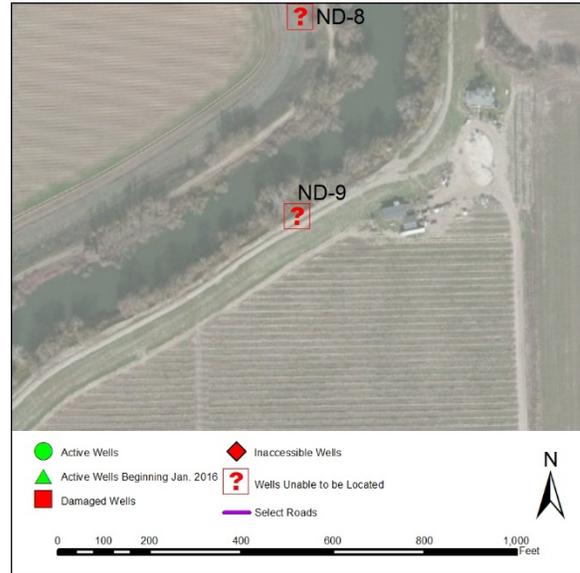
Coordinates: N 38°14'43.1" W 121°28'45.2"

State Well number: 05N05E31C002M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.
The well was located on the top of the levee, near house in background.



ND-14

Monitoring Status: Not Active

Reclamation District: 348

New Hope Tract

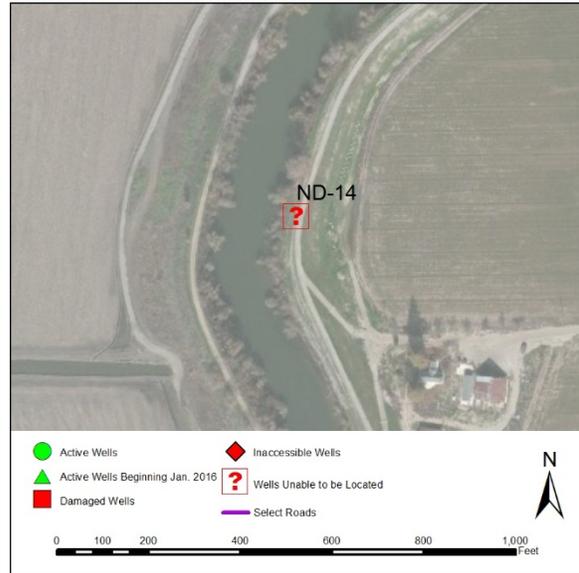
Coordinates: N 38°14'31" W 121°28'59.1"

State Well Number: 05N04E36J002M

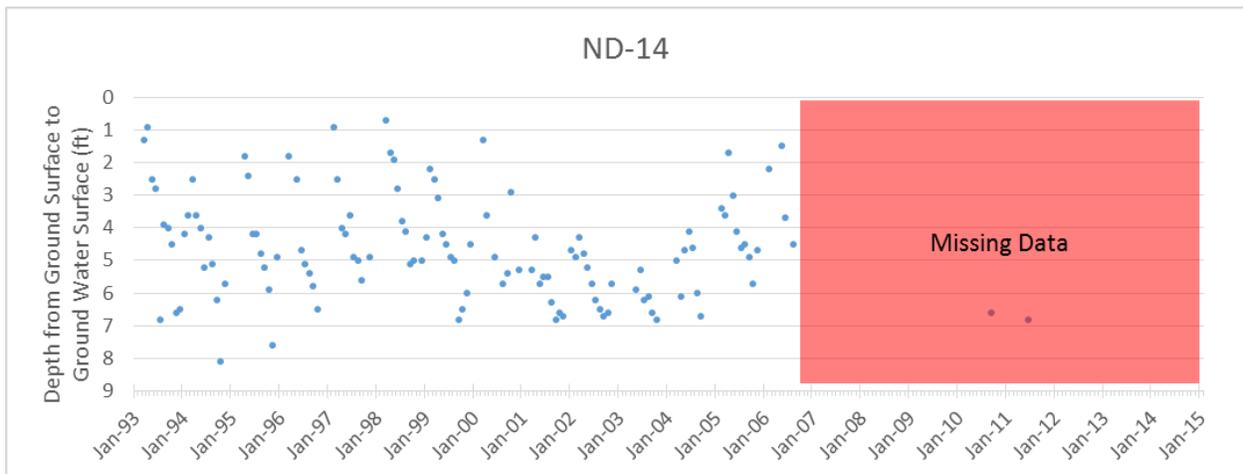
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



ND-16

Monitoring Status: Active

Reclamation District: 348

New Hope Tract

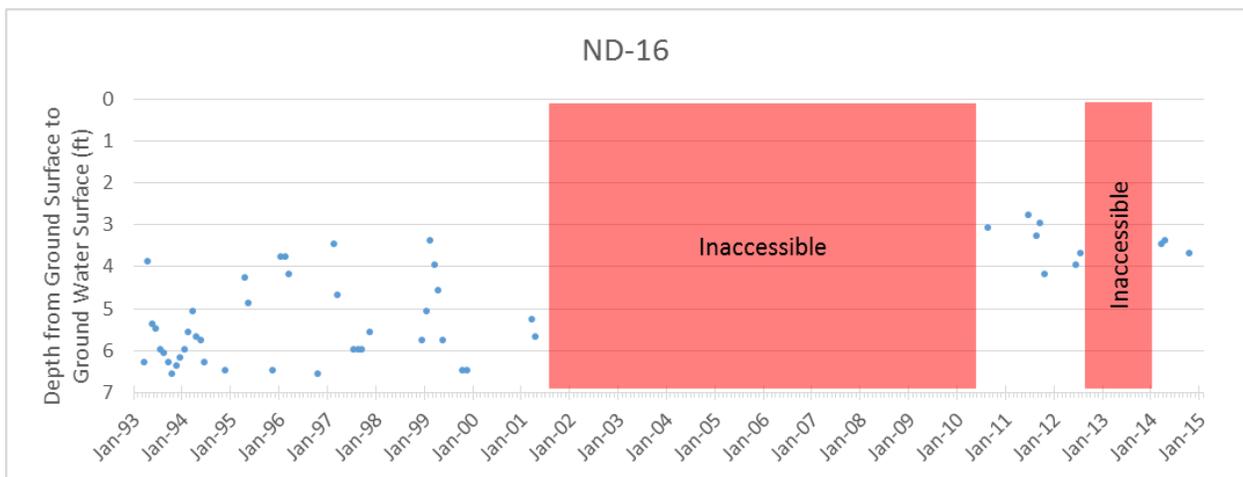
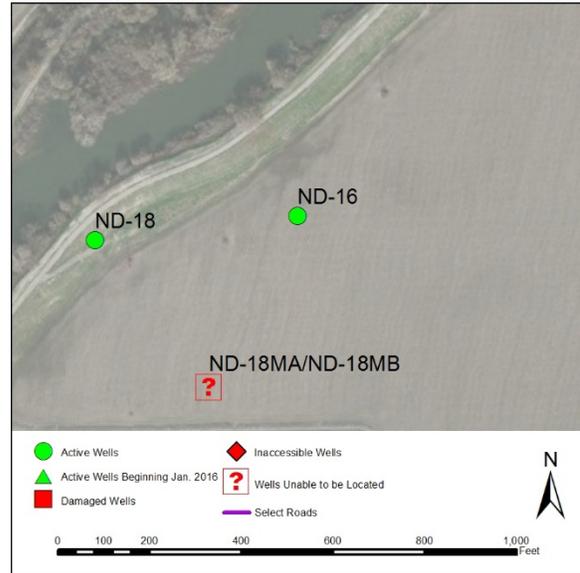
Coordinates: N 38°14'21.0" W 121°29'13.1"

State Well Number: 04N04E01B001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Bee boxes frequently placed near well. Not monitored when bee boxes are present



ND-18

Monitoring Status: Active

Reclamation District: 348

New Hope Tract

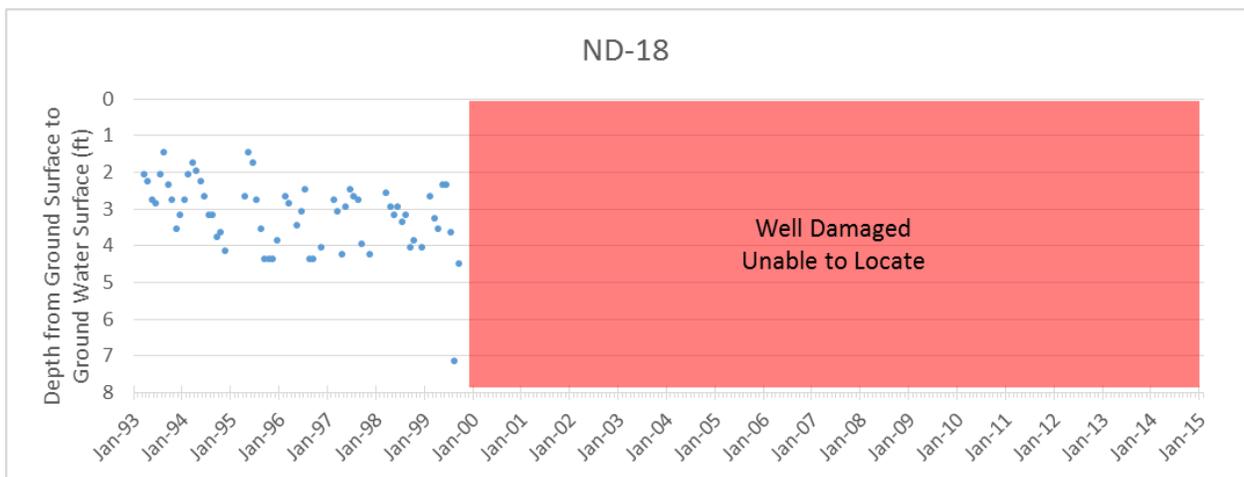
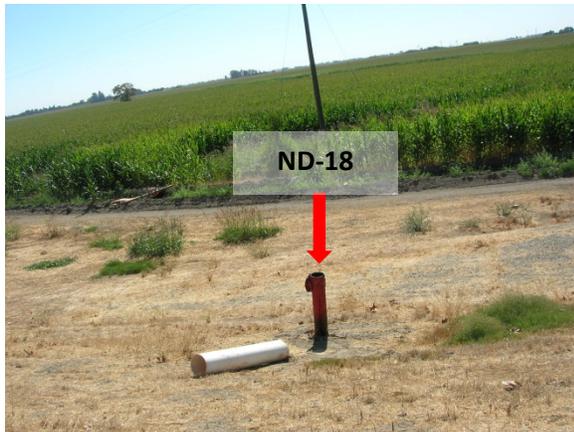
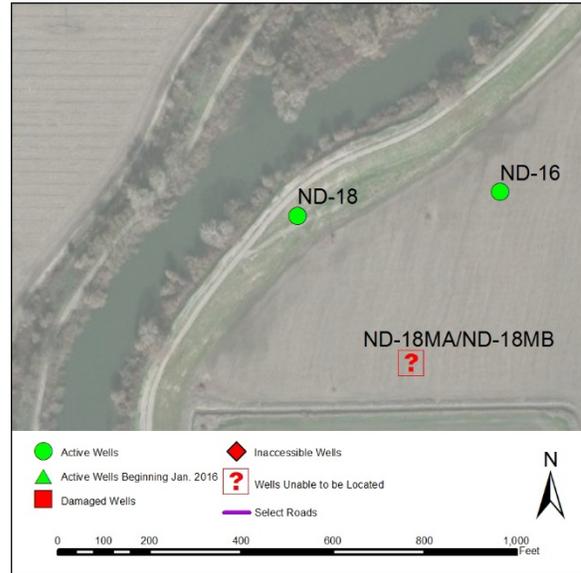
Coordinates: N 38°14'1.0" W 121°29'20"

State Well Number: 04N04E01G004M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located at mid-slope, near gate on levee access ramp. Protective PVC pipe not attached.



ND-18MA/ ND18-MB

Monitoring Status: Not Active

Reclamation District: 348

New Hope Tract

Coordinates: No Coordinates Available

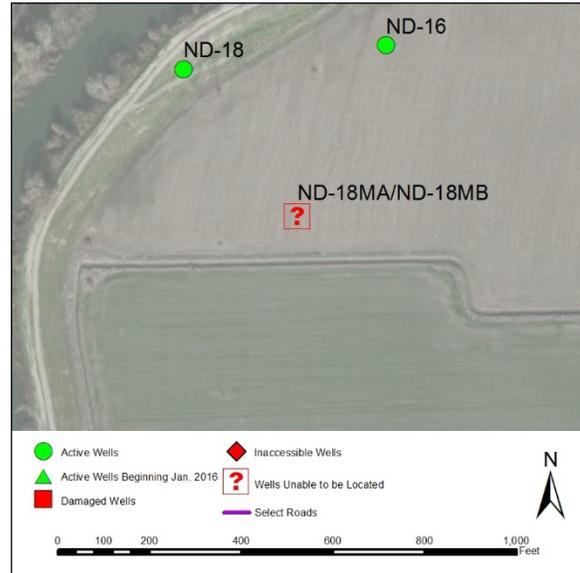
State Well Number: 04N04E01G005M /
04N04E01G006M

Permit Status: Pending

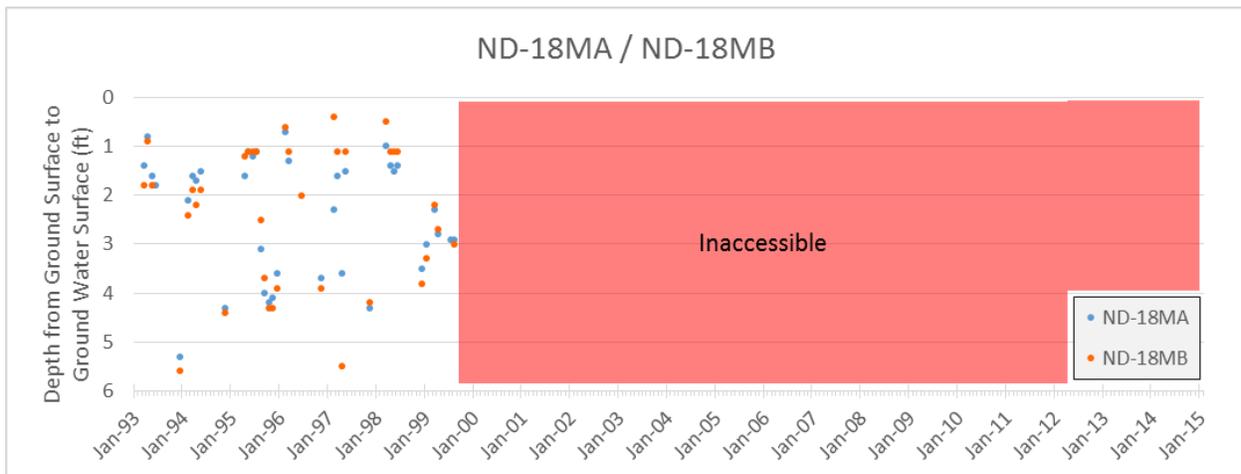
Construction Depth: 20ft / 100ft

Comments: The well was unable to be located.

Map location based on a 1993 paper map.



No Images



ND-21B

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 348

New Hope Tract

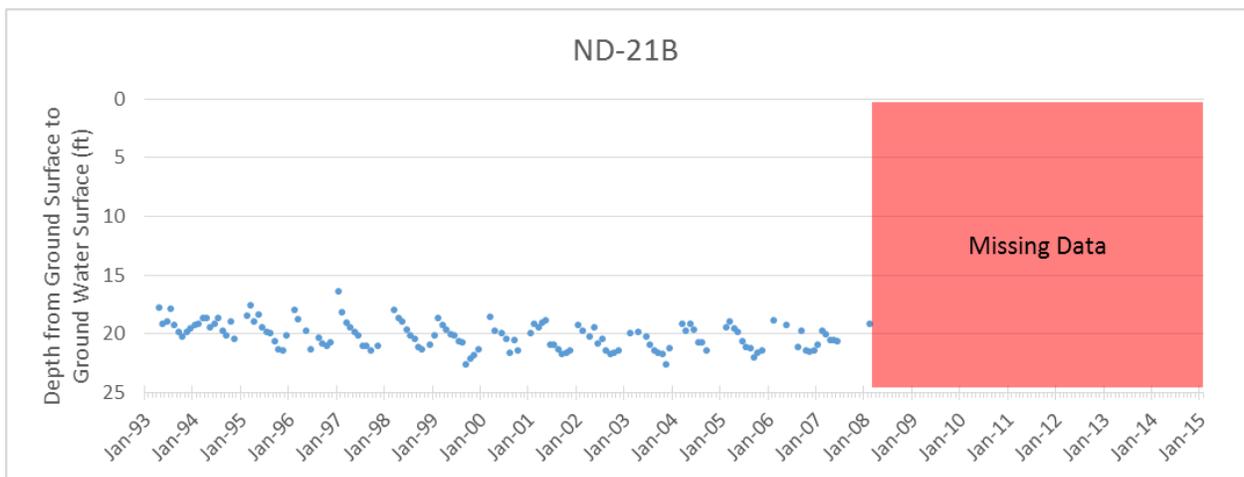
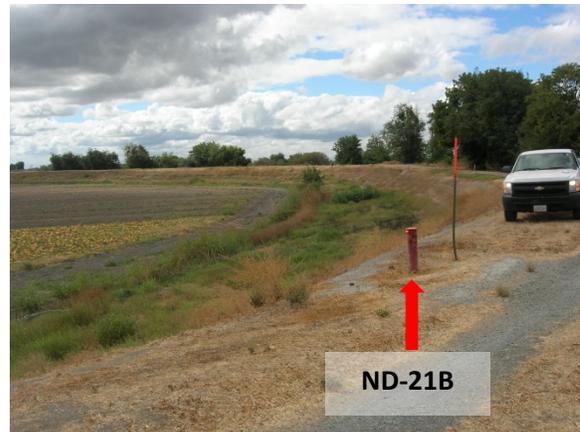
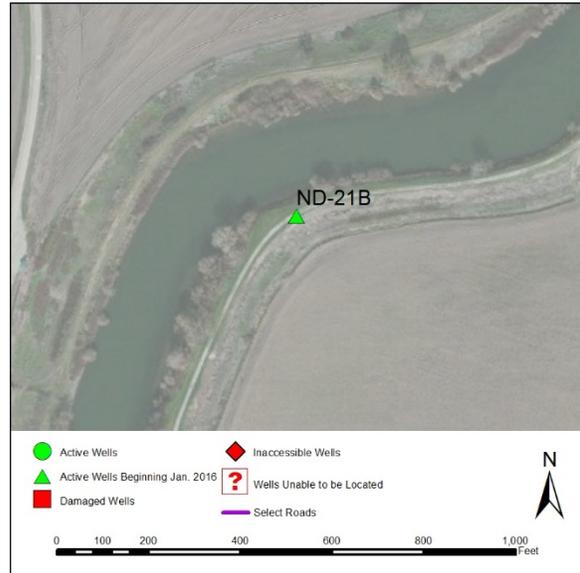
Coordinates: N 38°13'11.1" W 121°29'51"

State Well Number: 04N04E01N001M

Permit Status: Pending

Construction Depth: 35ft

Comments: This well will begin being actively monitored in January 2016 when monitoring of the network resumes. Well located on the top of the levee marked with a red t-post.



ND-21A

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 348

New Hope Tract

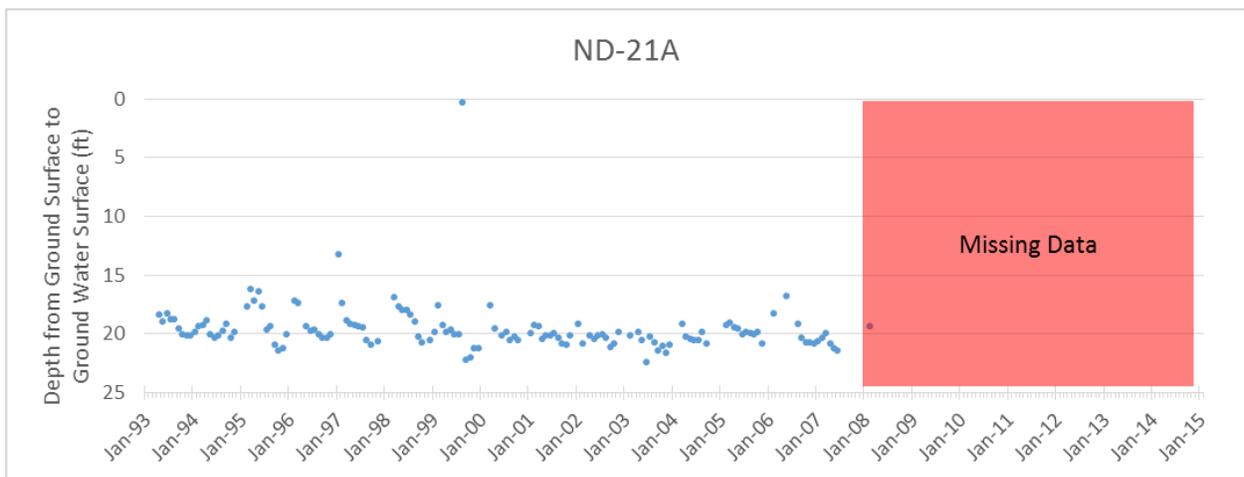
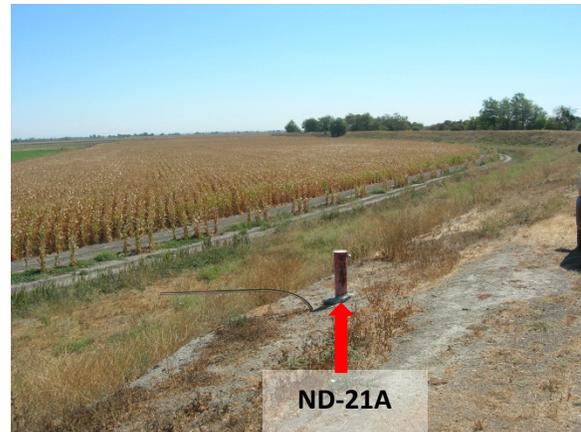
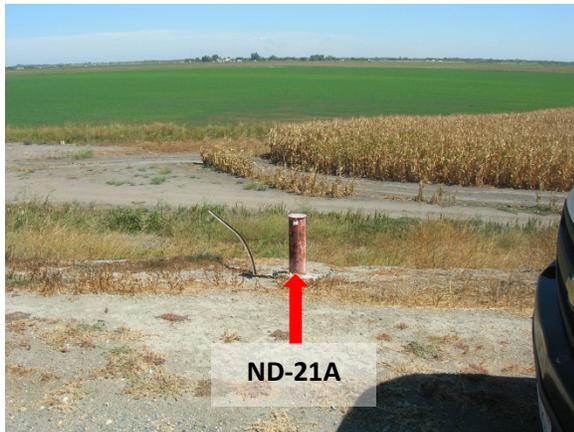
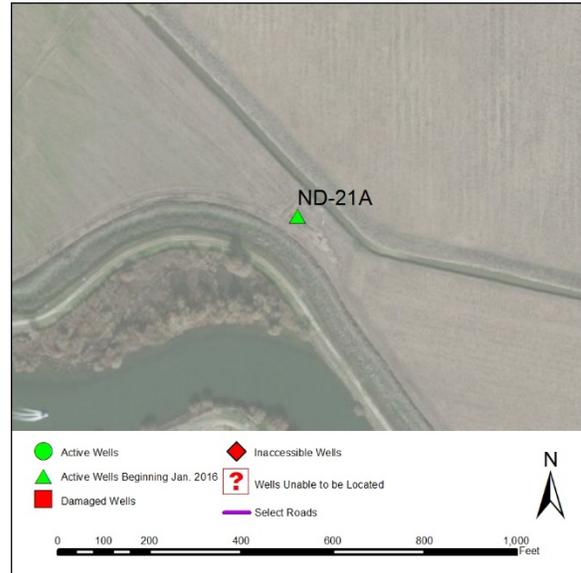
Coordinates: N 38°12'36.6" W 121°29'20.9"

State Well Number: 04N04E12K001M

Permit Status: Pending

Construction Depth: 20ft

Comments: This well will begin being actively monitored in January 2016 when monitoring of the network resumes. Well located on the top of the levee marked with a bent t-post.



ND-22

Monitoring Status: Active

Reclamation District: 348

New Hope Tract

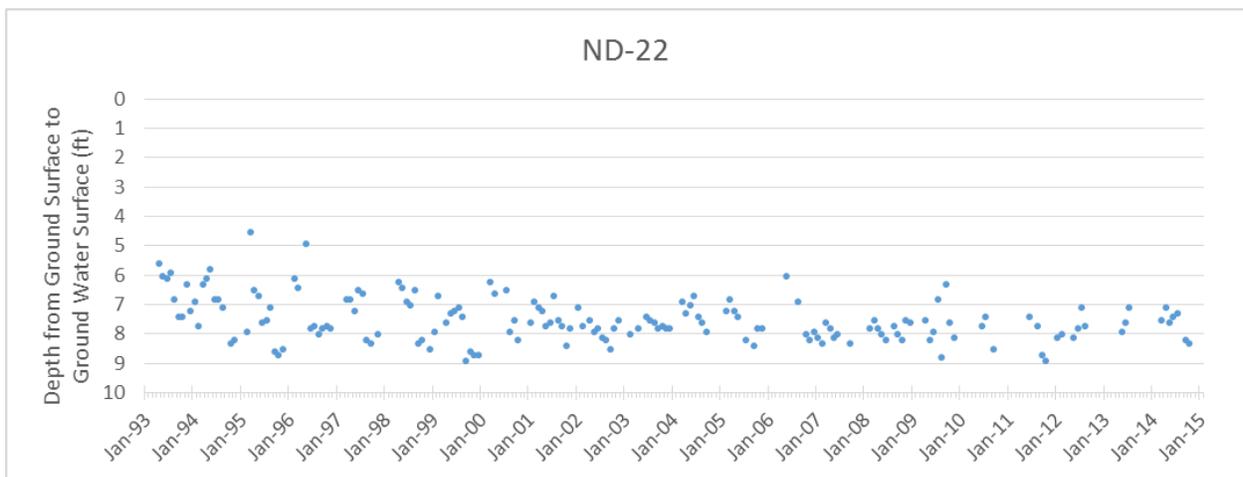
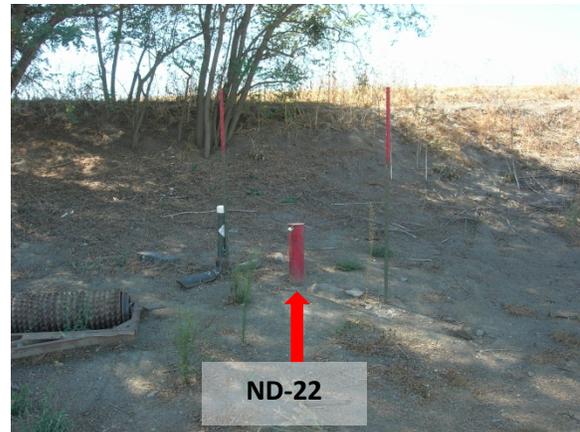
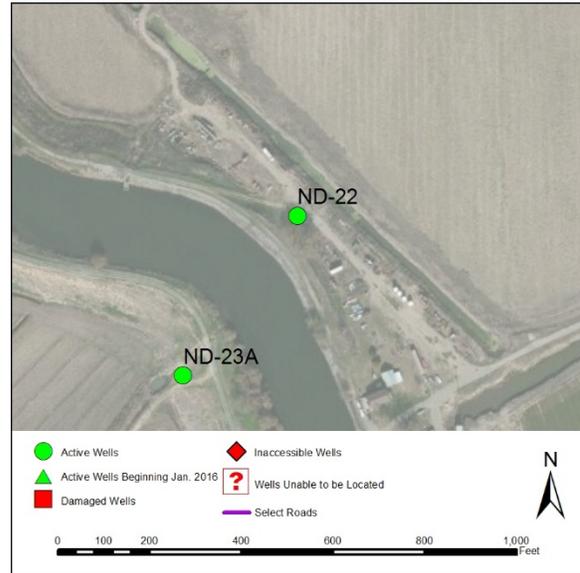
Coordinates: N 38°12'22.5" W 121°28'45.7"

State Well Number: 04N05E07N002M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located on levee toe, marked by two red t-posts.



ND-25

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 348

New Hope Tract

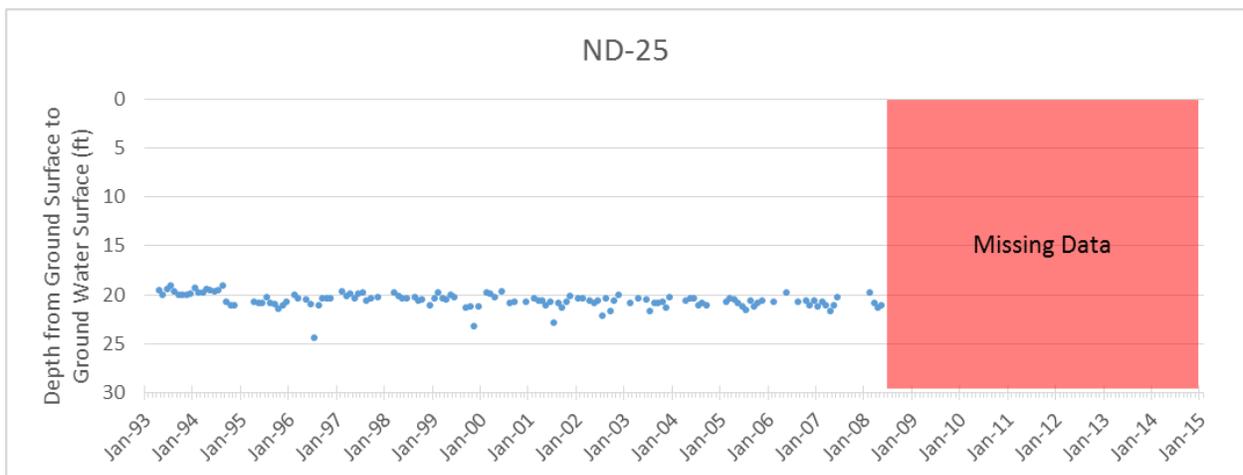
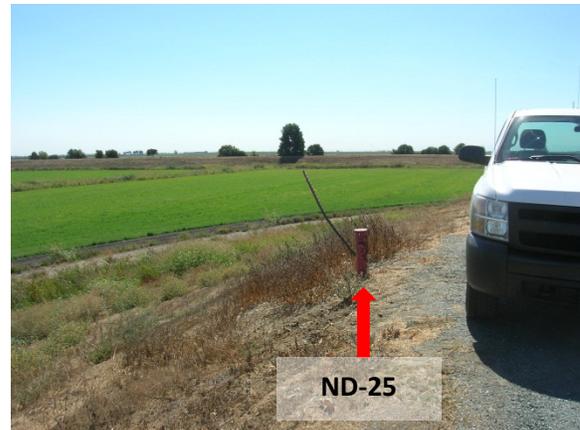
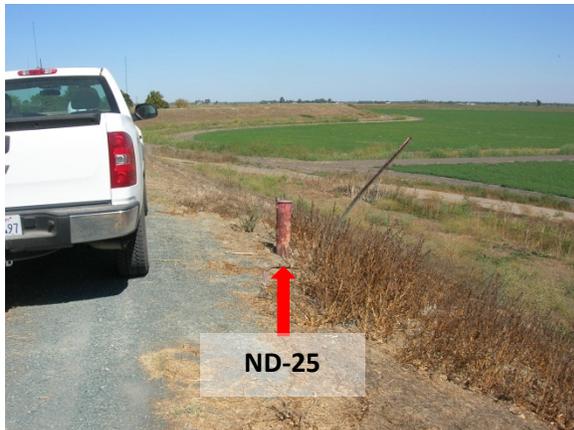
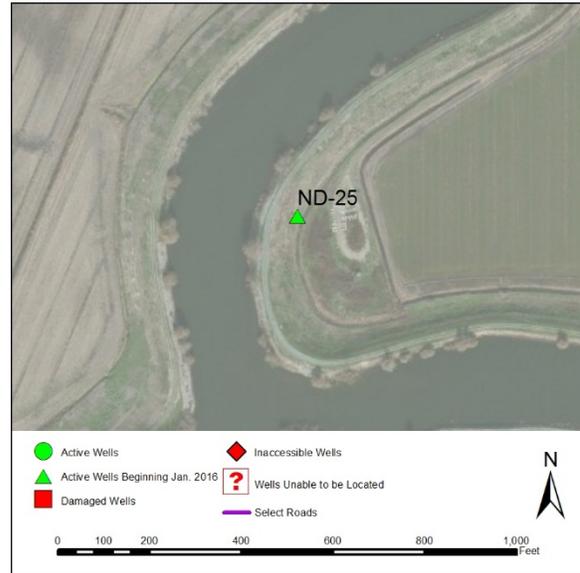
Coordinates: N 38°11'52.0" W 121°28'35.0"

State Well Number: 04N05E18F001M

Permit Status: Pending

Construction Depth: 35ft

Comments: This well will begin being actively monitored in January 2016 when monitoring of the network resumes. The well located on the top of the levee marked by a bent t-post.



Walnut Grove (RD 554)

ND-11A33

ND-34A34



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.25 0.5
 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Walnut Grove Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-11

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 554

Walnut Grove

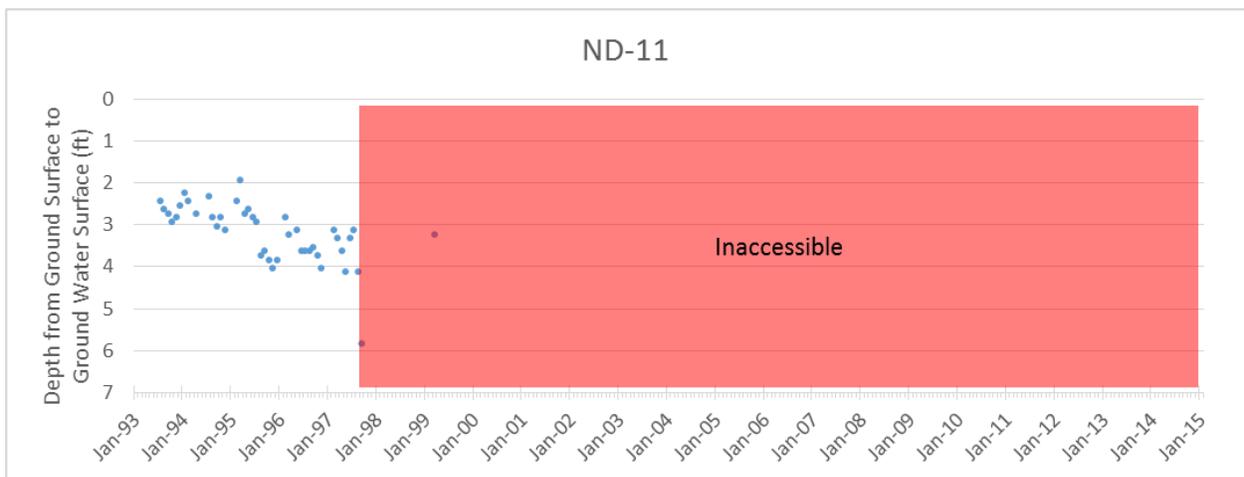
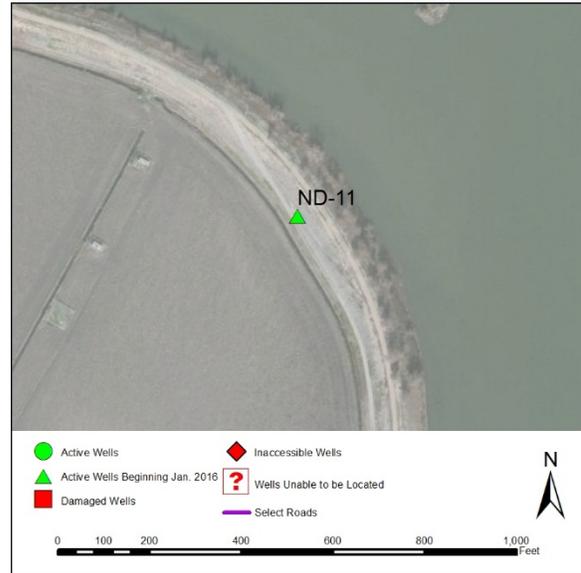
Coordinates: N 38°14'32.9" W 121°29'56.2"

State Well Number: 05N04E36E001M

Permit Status: Pending

Construction Depth: 20ft

Comments: This well will begin being actively monitored in January 2016 when monitoring of the network resumes. Well located on levee toe, marked by two t-posts. Follow dirt access road to get to well and continue back onto the levee.



ND-34

Monitoring Status: Active

Reclamation District: 554

Walnut Grove

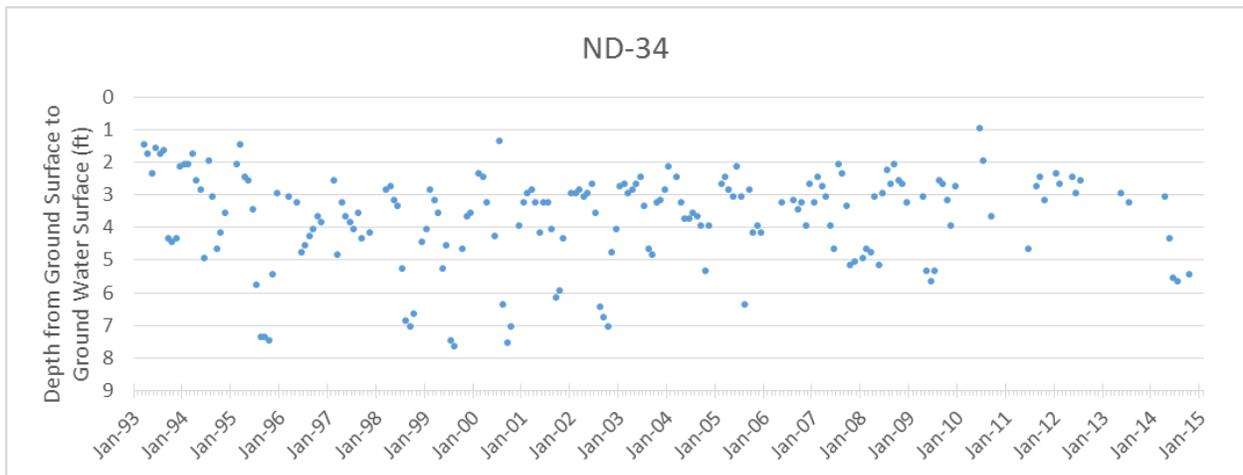
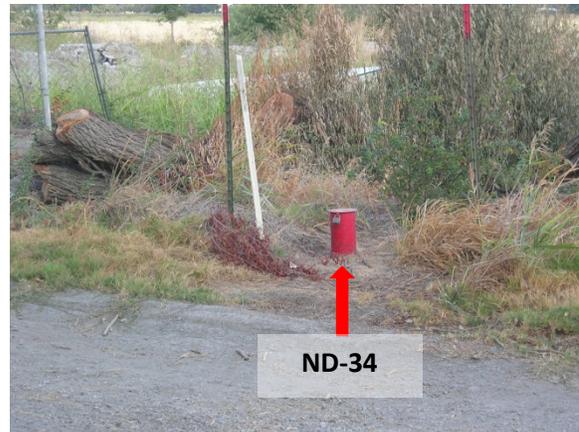
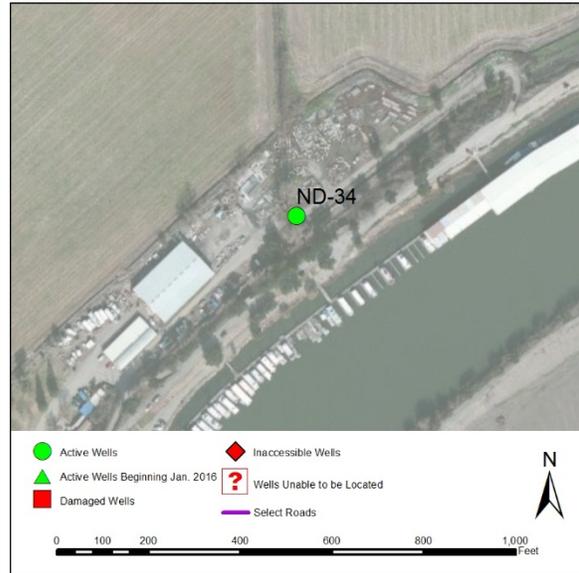
Coordinates: N 38°13'58.4" W 121°30'25.3"

State Well Number: 04N04E02B001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located on levee toe, marked by two t-posts. Accessed from southern side of warehouse.



Staten Island (RD 38)

ND-20A37
ND-35A38
ND-37A39
ND-38MA/ ND-38MBA40
ND-41MA/ ND-41MBA41
ND-42A42
ND-45A43
ND-47A44
ND-48MA/ ND-48MBA45
ND-50A46
ND-53A47
ND-64A48
ND-21A49
ND-23AA50
ND-23MA/ MD-23MBA51
ND-27A52
ND-31A53
ND-55A54
ND-58A55
ND-73A56
ND-69A57



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Staten Island Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-20

Monitoring Status: Active

Reclamation District: 38

Staten Island

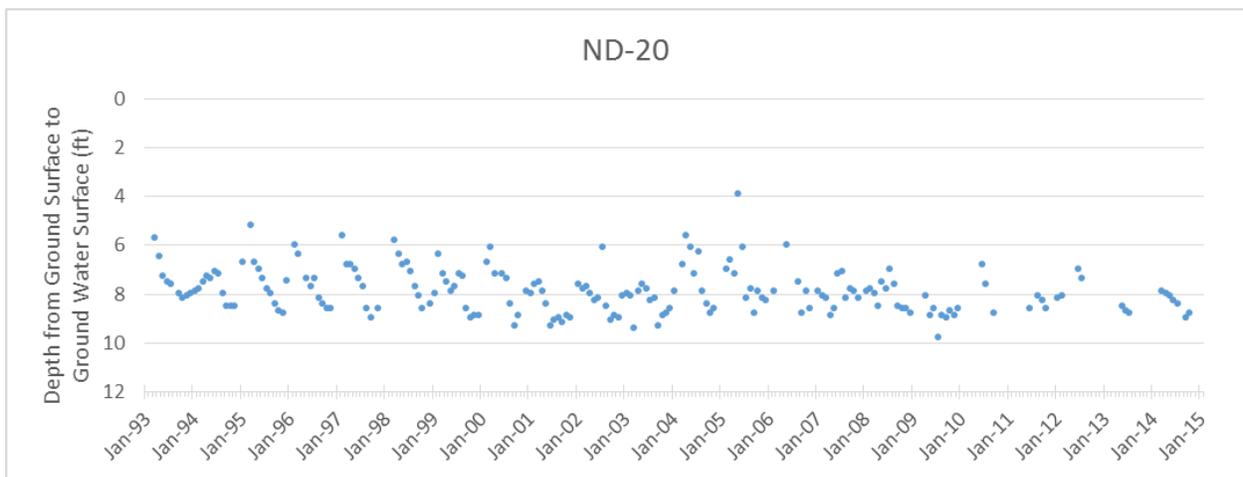
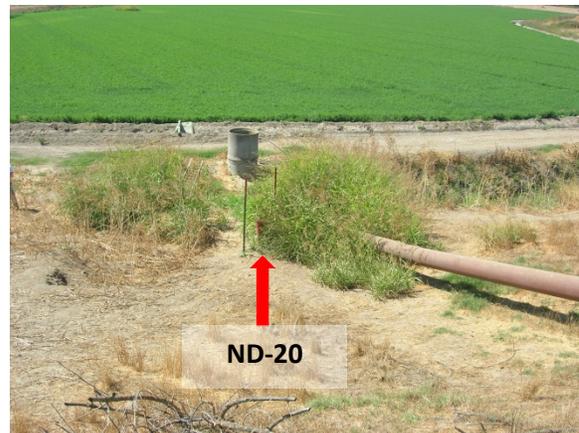
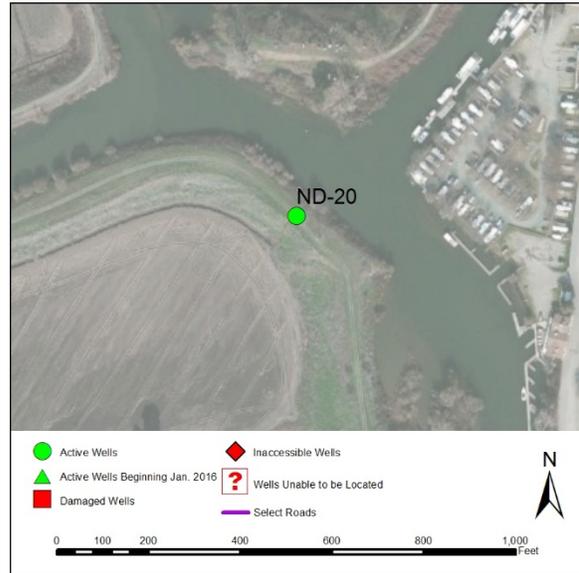
Coordinates: N 38°13'37.7" W 121°29'34.3"

State Well Number: 04N04E01F001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located on levee toe, marked by two red t-posts, and next to a siphon pipe.



ND-35

Monitoring Status: Active

Reclamation District: 38

Staten Island

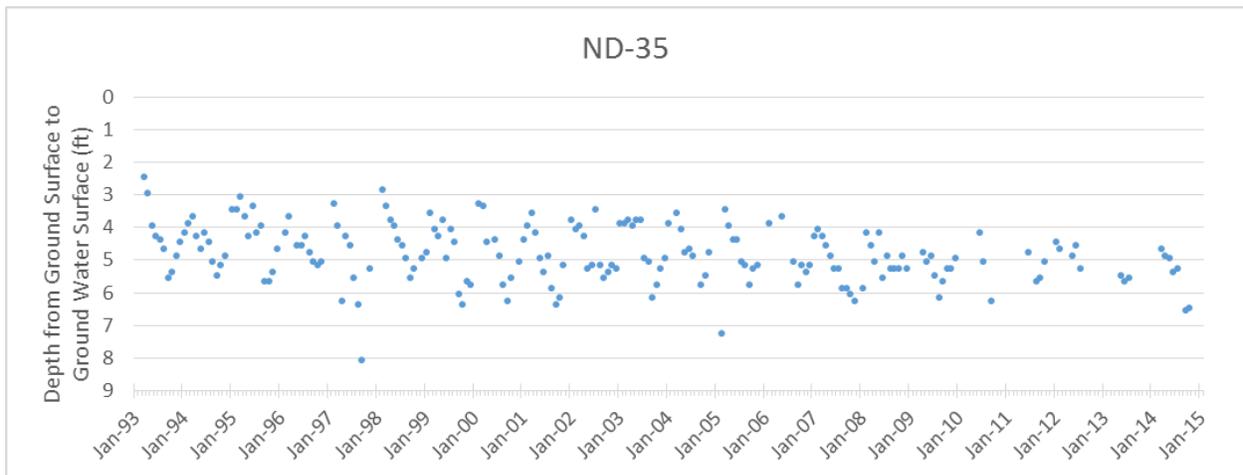
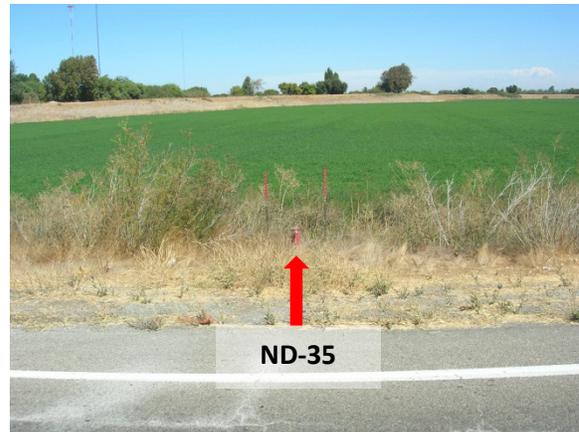
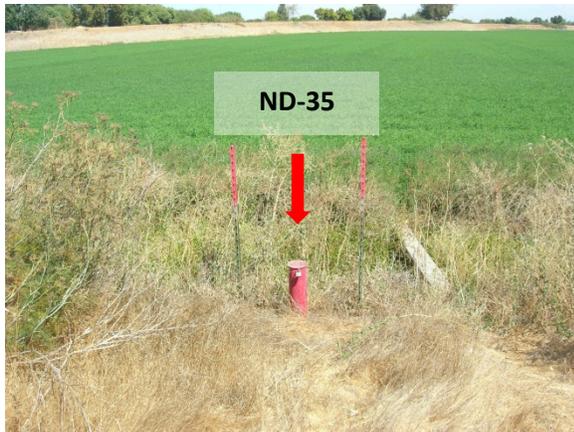
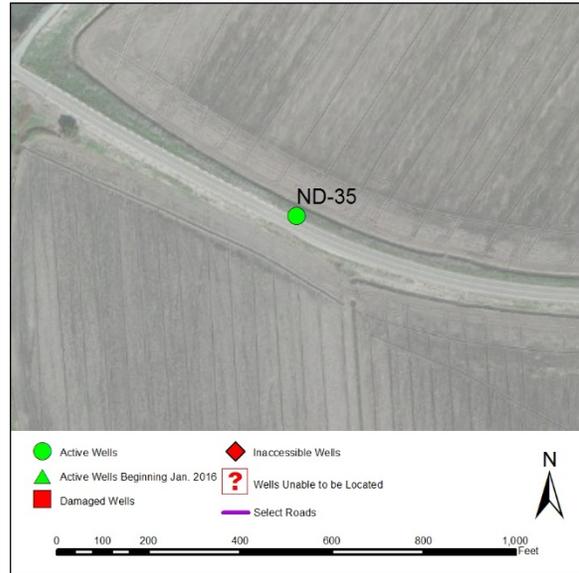
Coordinates: N 38°13'20.6" W 121°30'15.8"

State Well Number: 04N04E02J001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located approximately 750ft from the levee, on the north side of road, marked by two red t-posts.



ND-37

Monitoring Status: Active

Reclamation District: 38

Staten Island

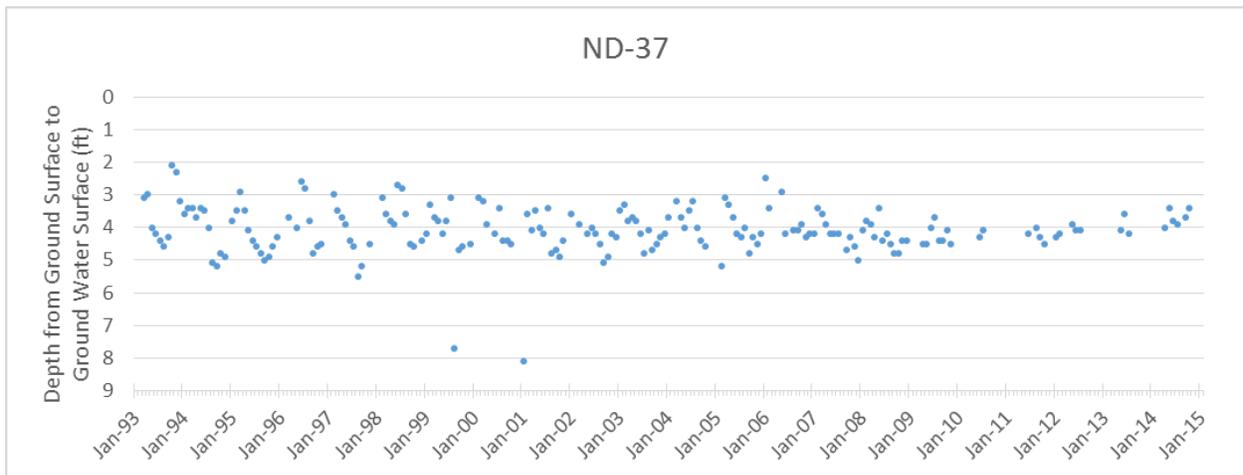
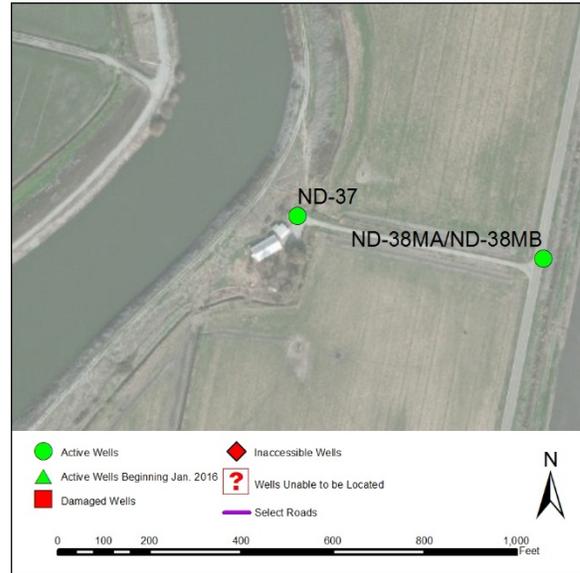
Coordinates: N 38°12'40.2" W 121°30'14.1"

State Well Number: 04N04E11H001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located on levee toe, under tree, and adjacent to siphon.



ND-38MA/ ND-38MB

Monitoring Status: Active

Reclamation District: 38

Staten Island

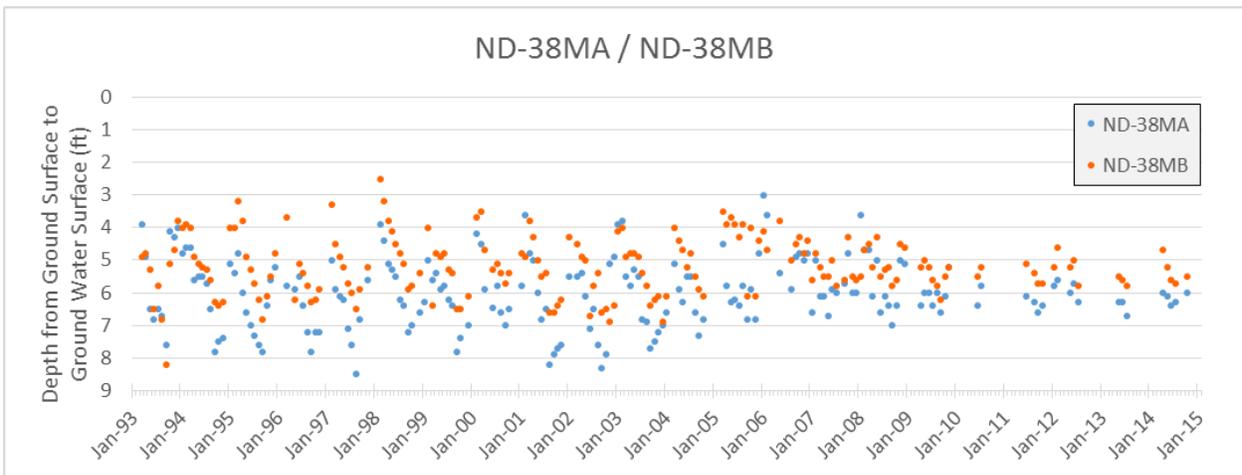
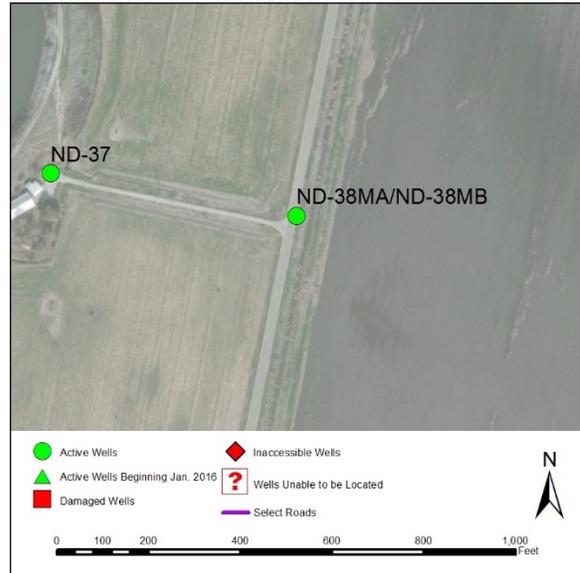
Coordinates: N 38°12'39.2" W 121°30'7.4"

State Well Number: 04N04E12M001M /
04N04E12M002M

Permit Status: Current

Construction Depth: 20ft / 100ft

Comments: Well located at the intersection of the road going to ND-37, just in front of the speed limit sign, and marked by two red t-posts.



ND-41MA/ ND-41MB

Monitoring Status: Not Active

Reclamation District: 38

Staten Island

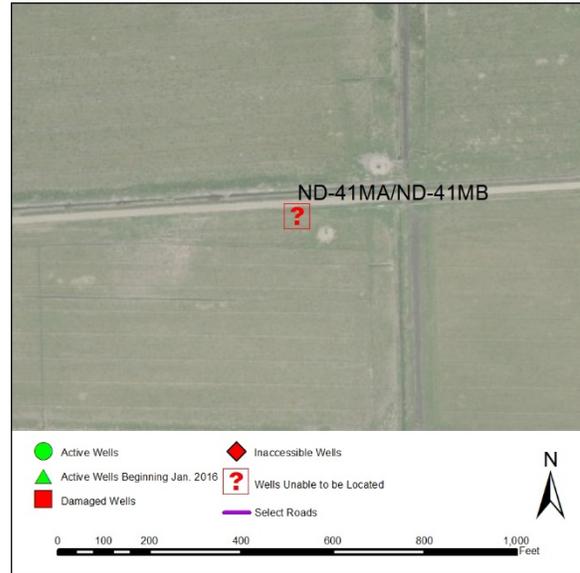
Coordinates: No Coordinates Available

State Well Number: 04N04E14E001M /
04N04E14002M

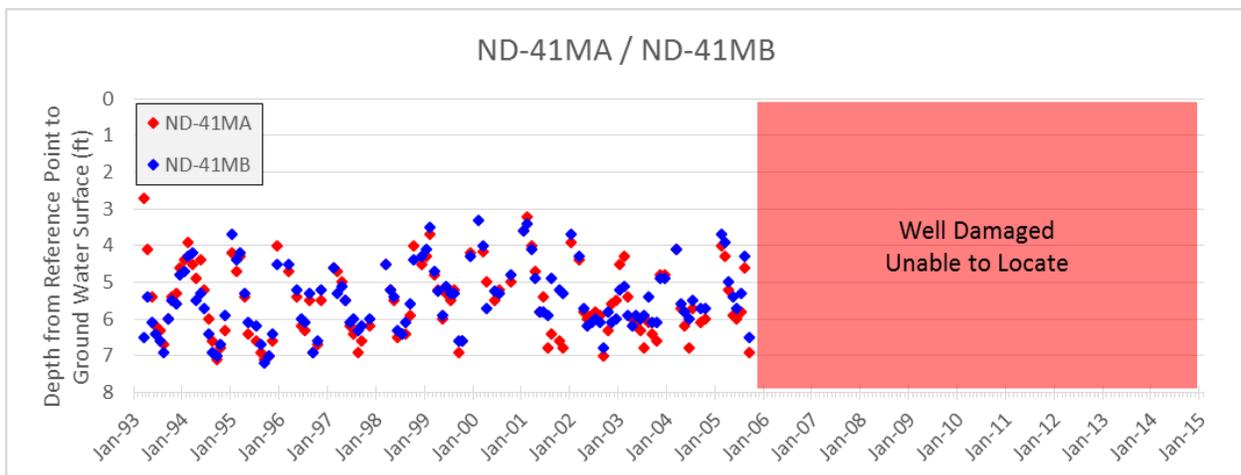
Permit Status: Current

Construction Depth: 20ft

Comments: The well was unable to be located



No Images



ND-42

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 38

Staten Island

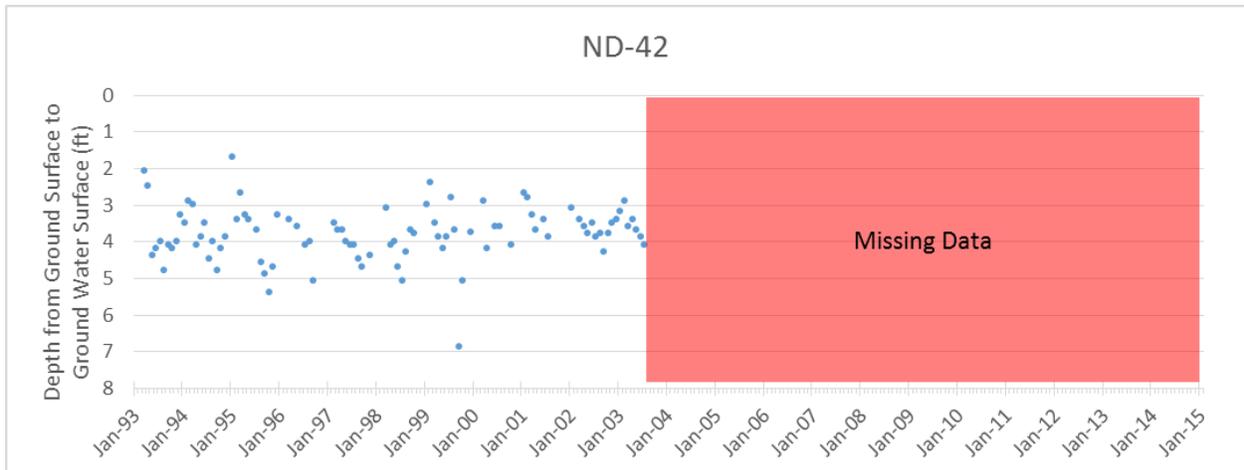
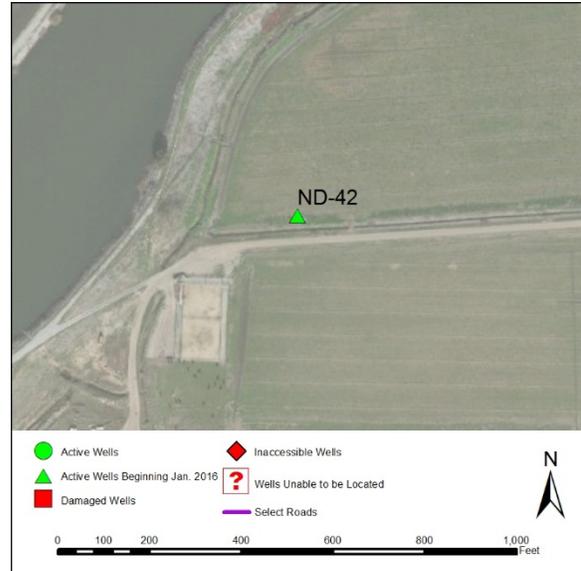
Coordinates: N 38°11'5.4" W 121°31'25.4"

State Well Number: 04N04E15H001M

Permit Status: Current

Construction Depth: 20ft

Comments: This well will begin being actively monitored in January 2016 when monitoring of the network resumes. Well located on levee toe, marked by two t-posts.



ND-45

Monitoring Status: Active

Reclamation District: 38

Staten Island

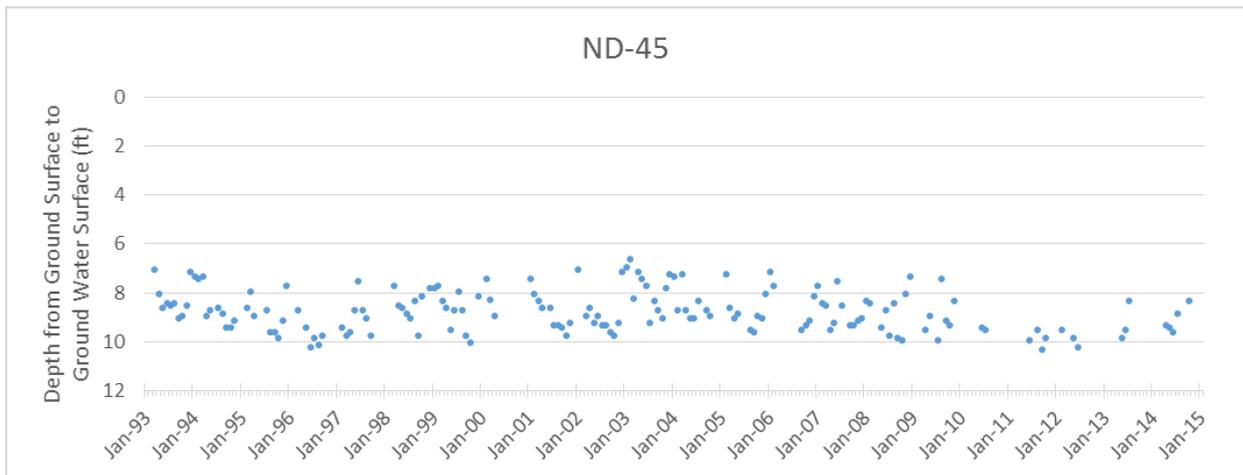
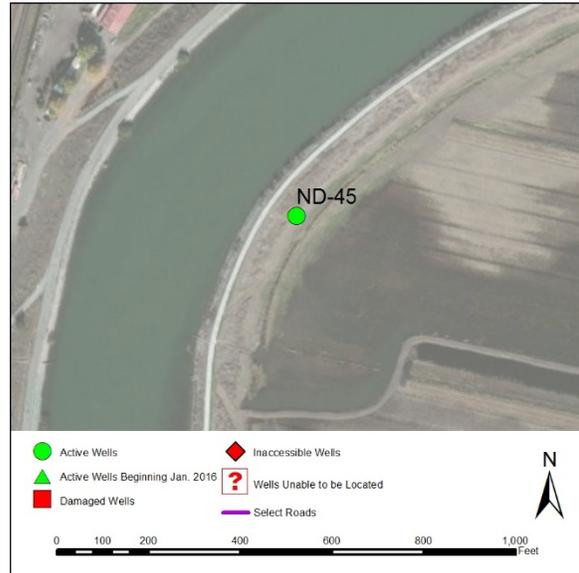
Coordinates: N 38°10'8.0" W 121°31'44.0"

State Well Number: 04N04E27F001M

Permit Status: Current

Construction Depth: 25ft

Comments: Well located on levee slope, marked by my single red t-posts.



ND-47

Monitoring Status: Active

Reclamation District: 38

Staten Island

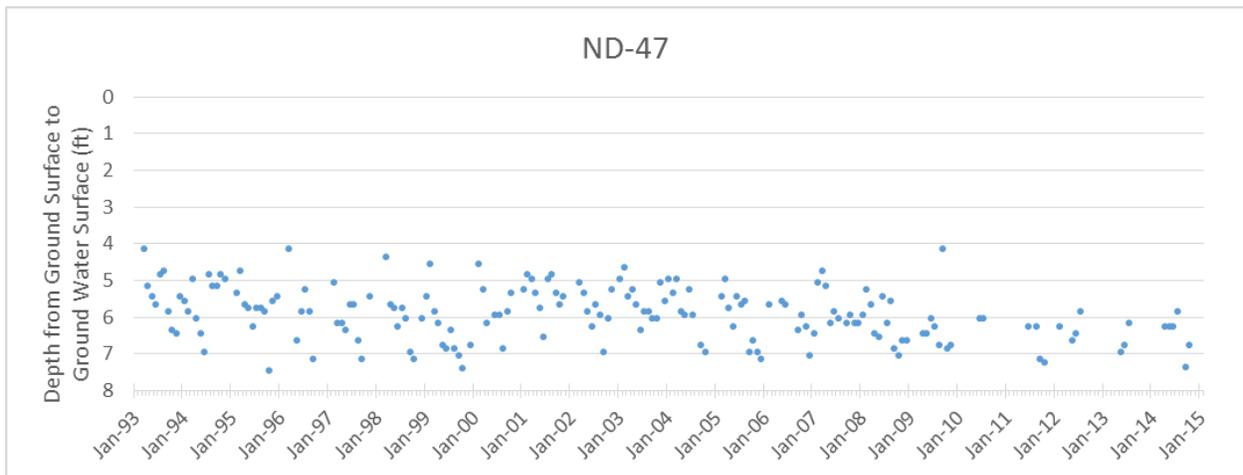
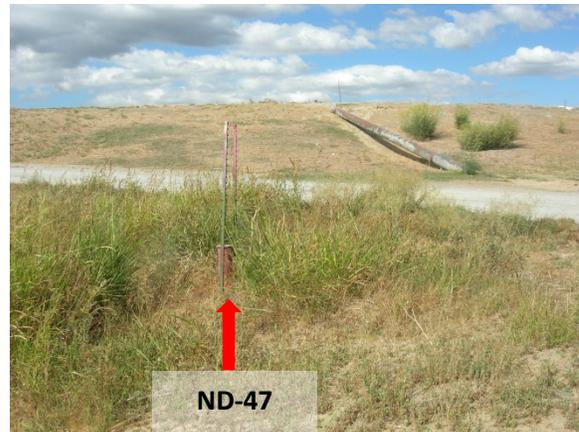
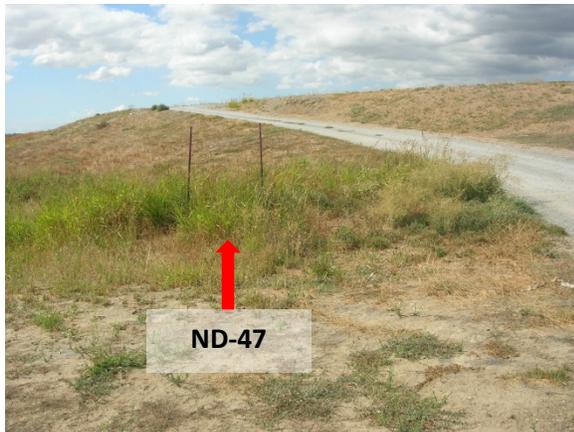
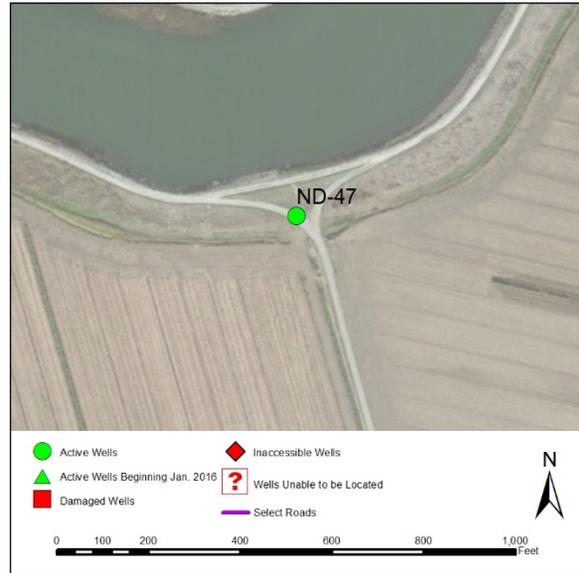
Coordinates: N 38°09'2.1" W 121°32'13.6"

State Well Number: 04N04E33J002M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located on levee toe, approximately 10ft off the access road. Marked by two red t-posts.



ND-48MA/ ND-48MB

Monitoring Status: Active

Reclamation District: 38

Staten Island

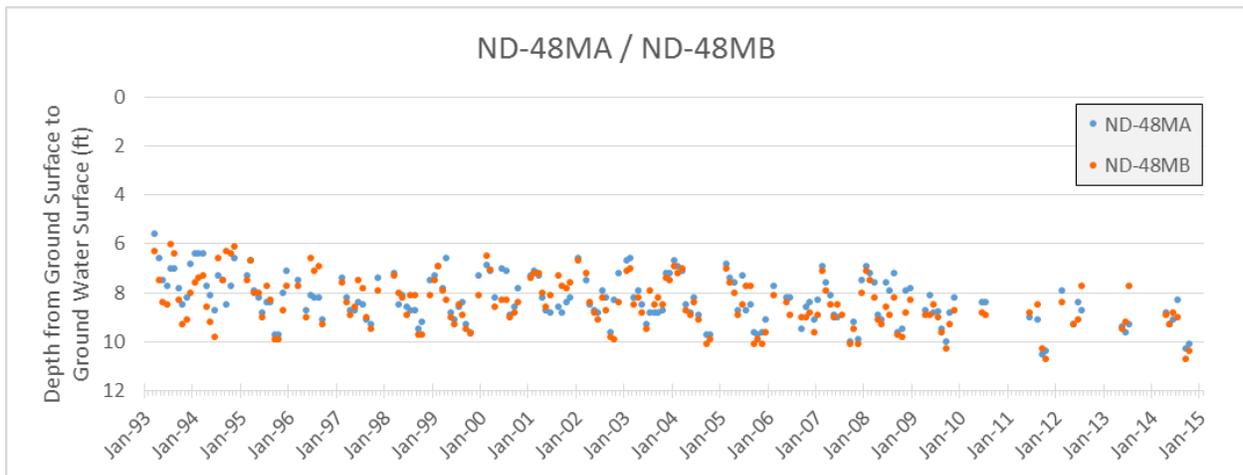
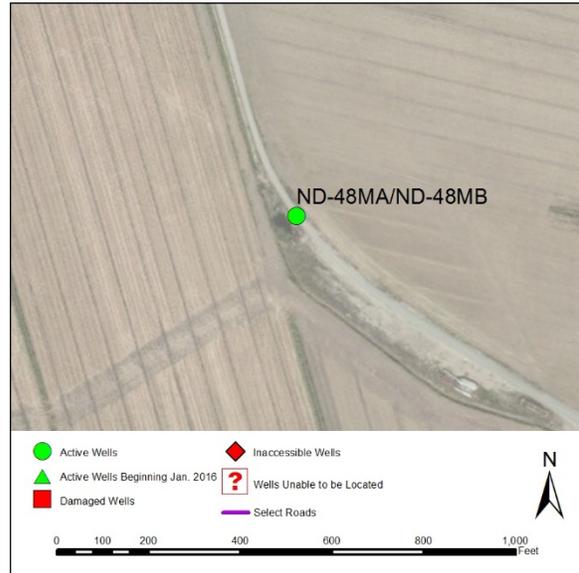
Coordinates: N 38°08'53.7" W 121°32'9.9"

State Well Number: 04N04E34N001M /
04N04E34N002M

Permit Status: Current

Construction Depth: 20ft/100ft

Comments: Well located near a willow tree and marked by two red t-posts.



ND-50

Monitoring Status: Active

Reclamation District: 38

Staten Island

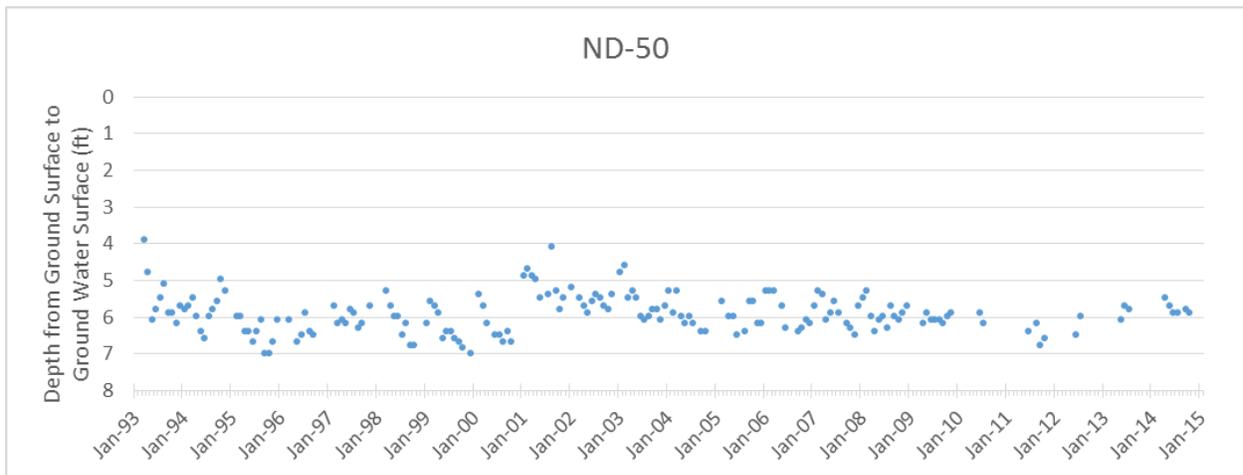
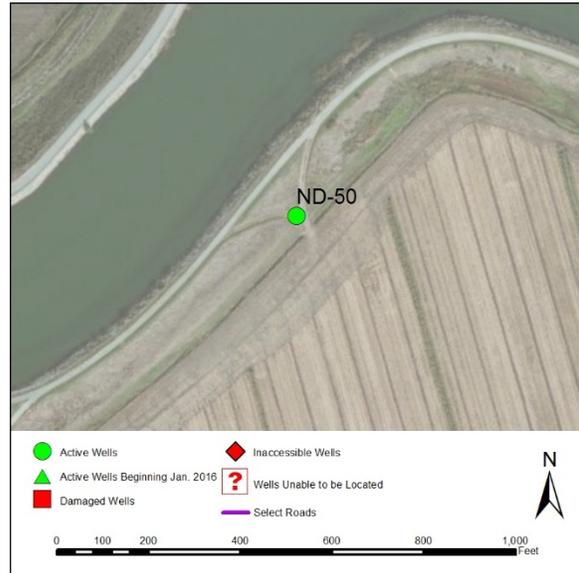
Coordinates: N 38°08'46.5" W 121°32'55.0"

State Well Number: 03N04E04D001M

Permit Status: Current

Construction Depth: 25ft

Comments: Located near levee toe next to access ramp, and marked by two red t-posts.



ND-53

Monitoring Status: Active

Reclamation District: 38

Staten Island

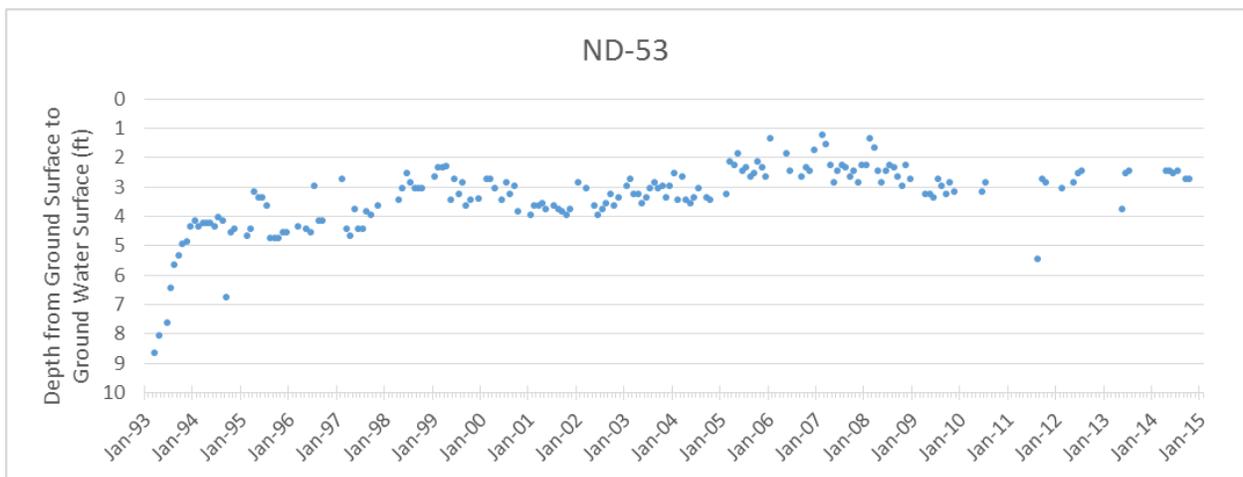
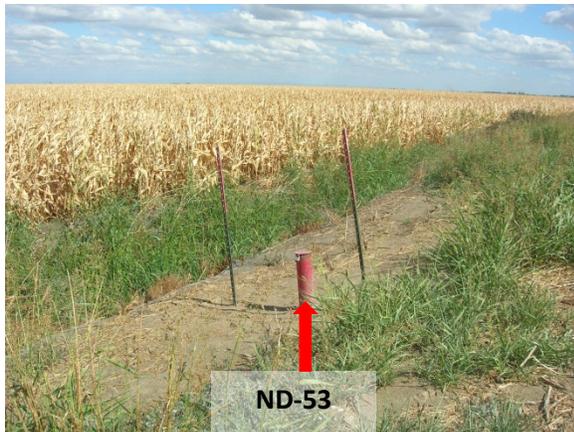
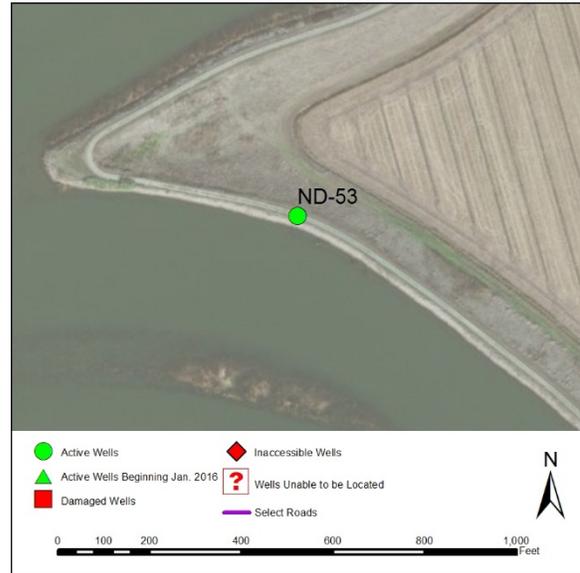
Coordinates: N 38°07'58.8" W121°30'18.4"

State Well Number: 03N04E05P001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located on levee toe, next to ditch, marked by two red t-posts. No easy truck access to well.



ND-64

Monitoring Status: Not Active

Reclamation District: 38

Staten Island

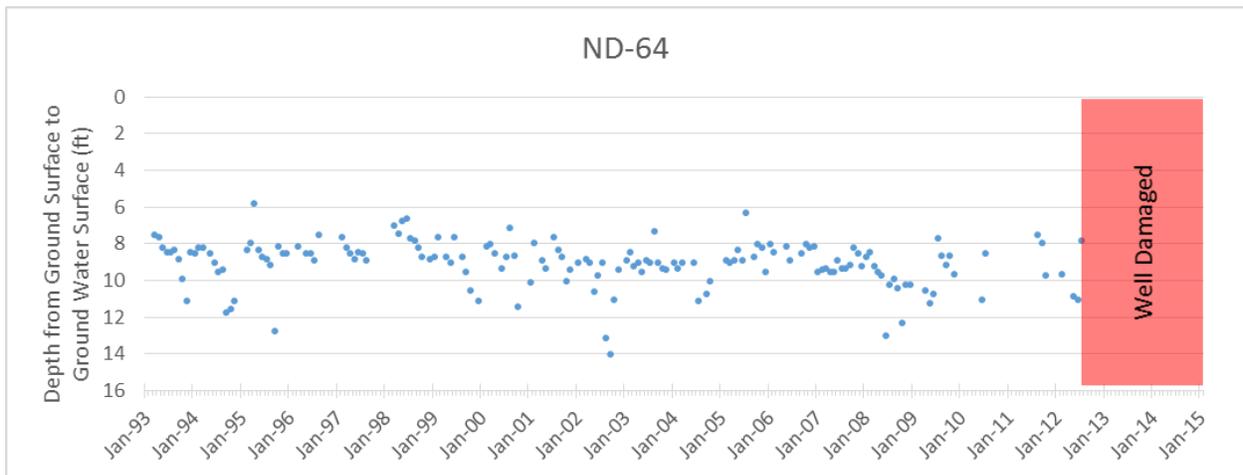
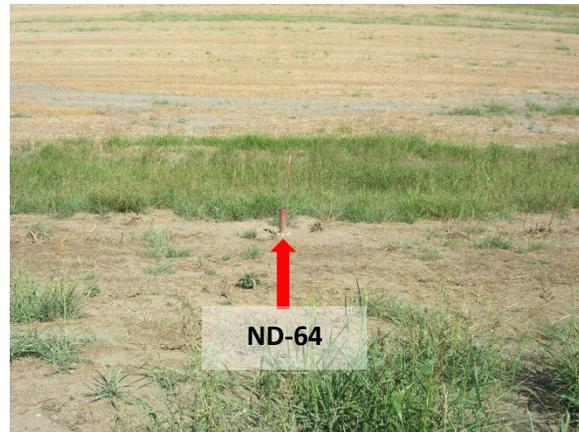
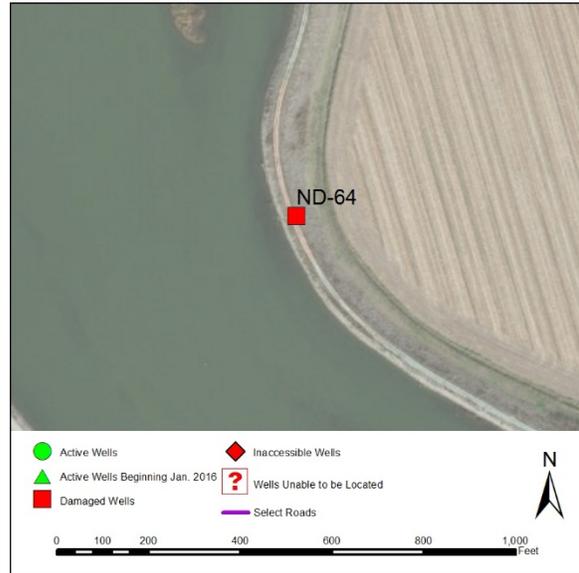
Coordinates: N 38°07'13.4" W 121°33'31.5"

State Well Number: 03N04E08K001M

Permit Status: Current

Construction Depth: 25ft

Comments: This well has an obstruction approximately 8ft down from the reference point and the last accurate reading occurred in May 2013. The cap is missing.



ND-21

Monitoring Status: Active

Reclamation District: 38

Staten Island

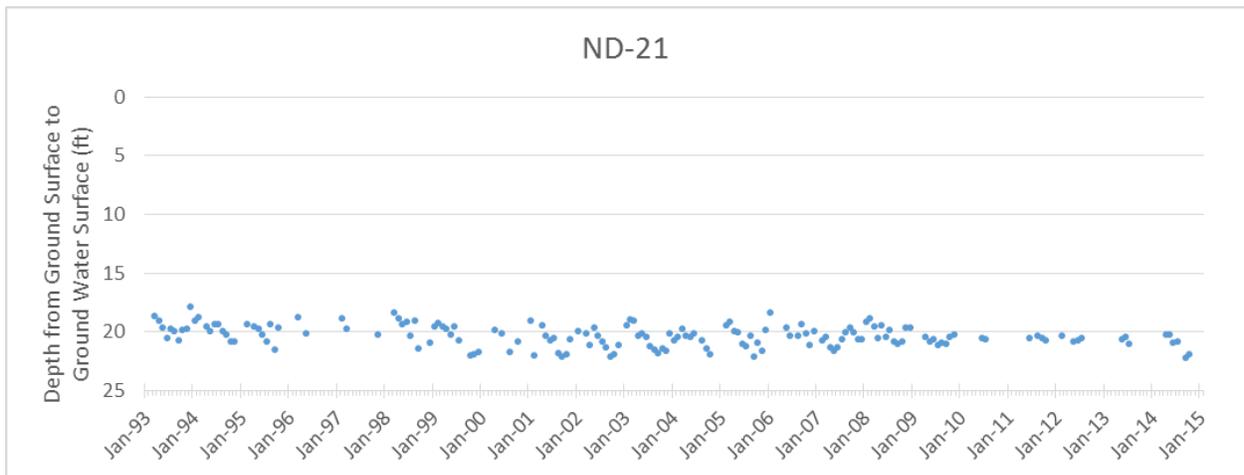
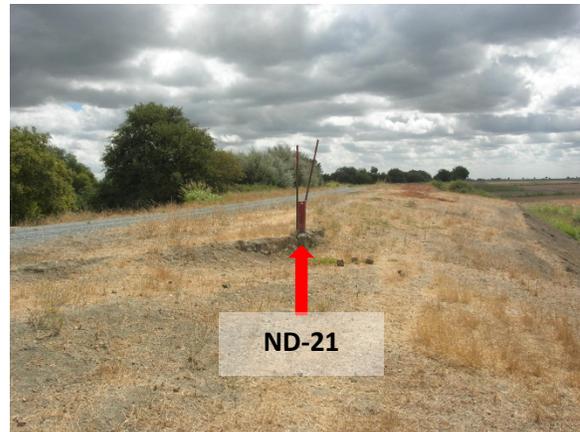
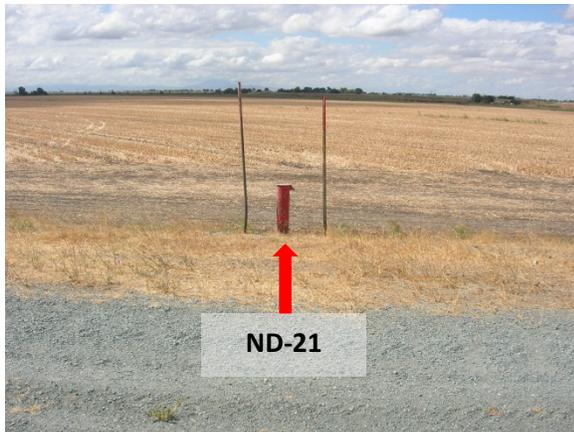
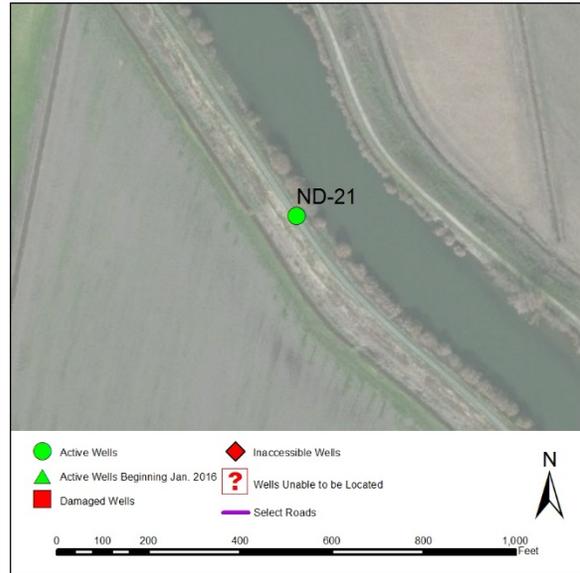
Coordinates: N 38°12'47.9" W 121°29'45.3"

State Well Number: 04N04E12F001M

Permit Status: Current

Construction Depth: 35ft

Comments: Well located on the top of the levee on the land side, and marked by two red t-posts.



ND-23A

Monitoring Status: Active

Reclamation District: 38

Staten Island

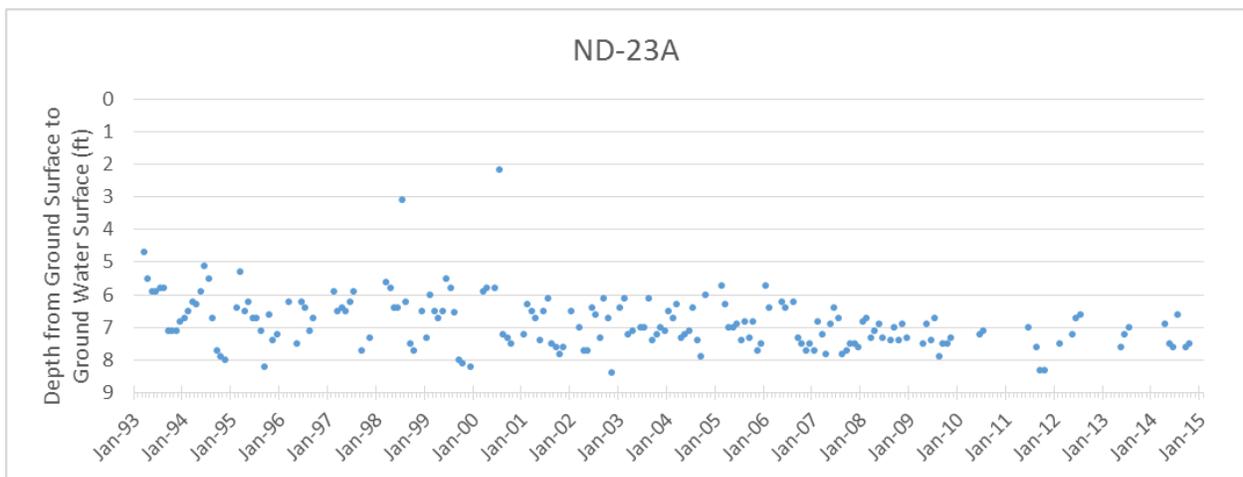
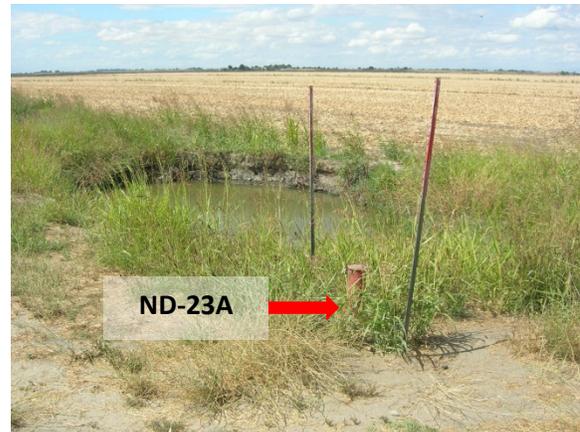
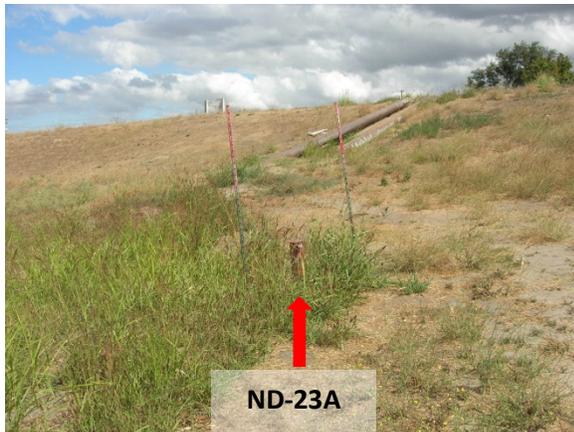
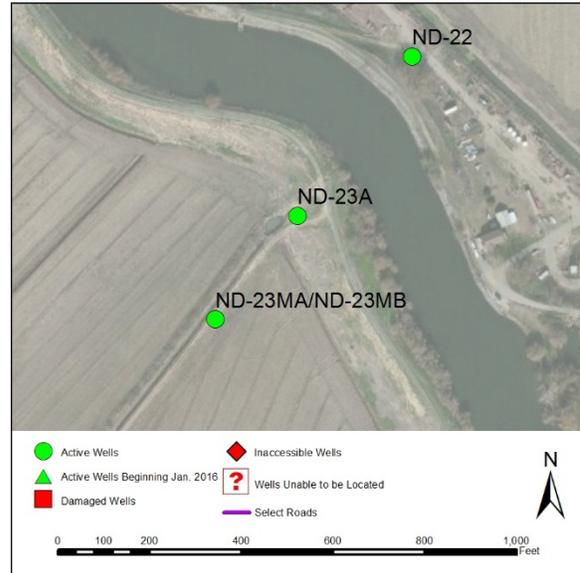
Coordinates: N 38°12'19.1" W 121°28'48.9"

State Well Number: 04N05E07N003M

Permit Status: Current

Construction Depth: 20ft

Comments: The well is located on the levee toe, near pool, marked by two red t-posts.



ND-23MA/ MD-23MB

Monitoring Status: Active

Reclamation District: 38

Staten Island

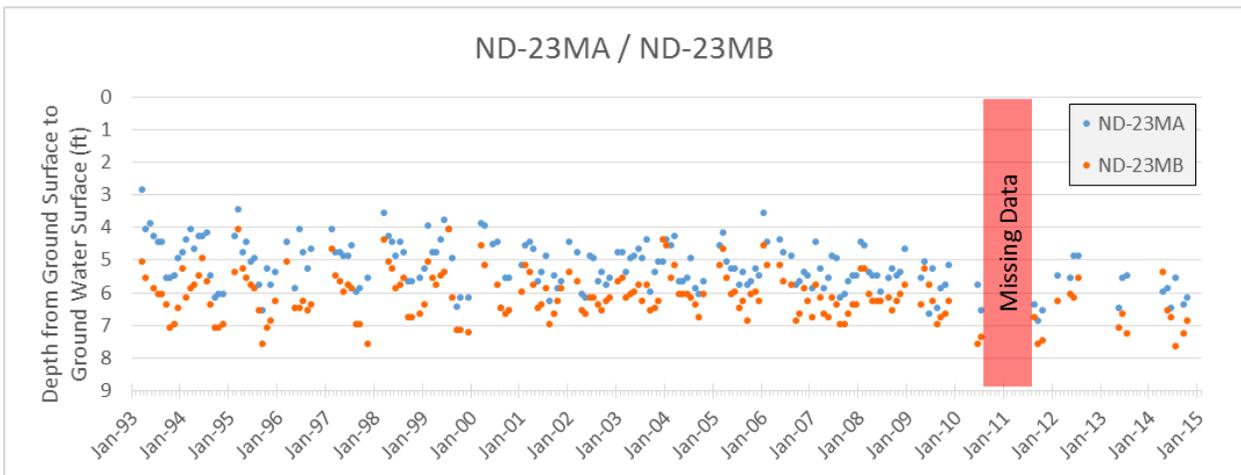
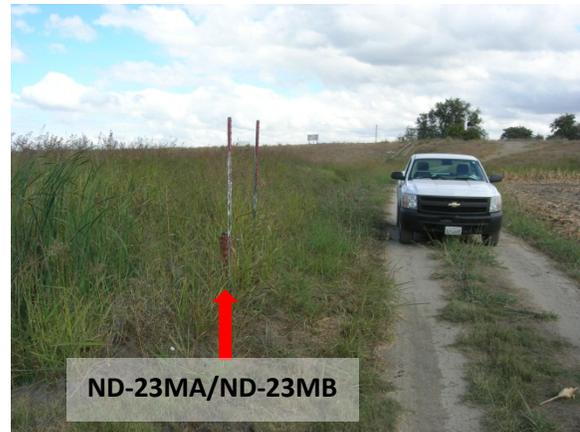
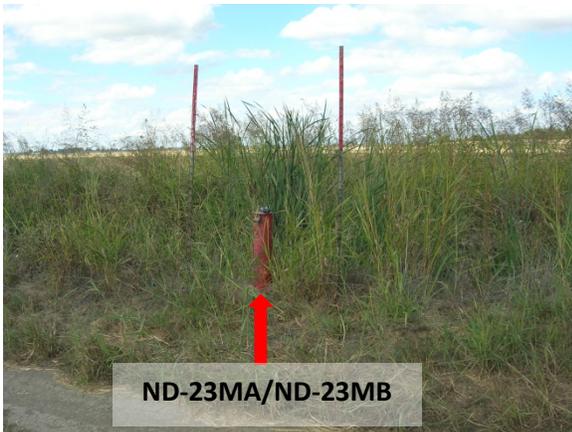
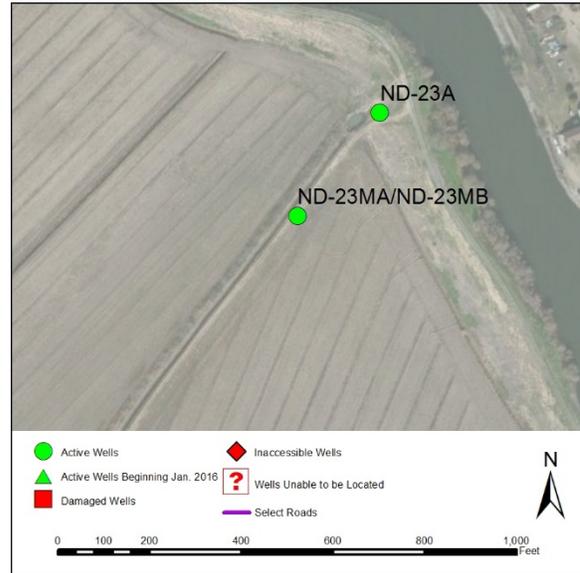
Coordinates: N 38°12'16.9" W 121°28'51.2"

State Well Number: 04N04E13A001M /
04N04E13A002M

Permit Status: Current

Construction Depth: 20ft /100ft

Comments: Well is located approximately 300ft from ND-23A, on the eastern side of the ditch, marked by two red t-posts.



ND-27

Monitoring Status: Active

Reclamation District: 38

Staten Island

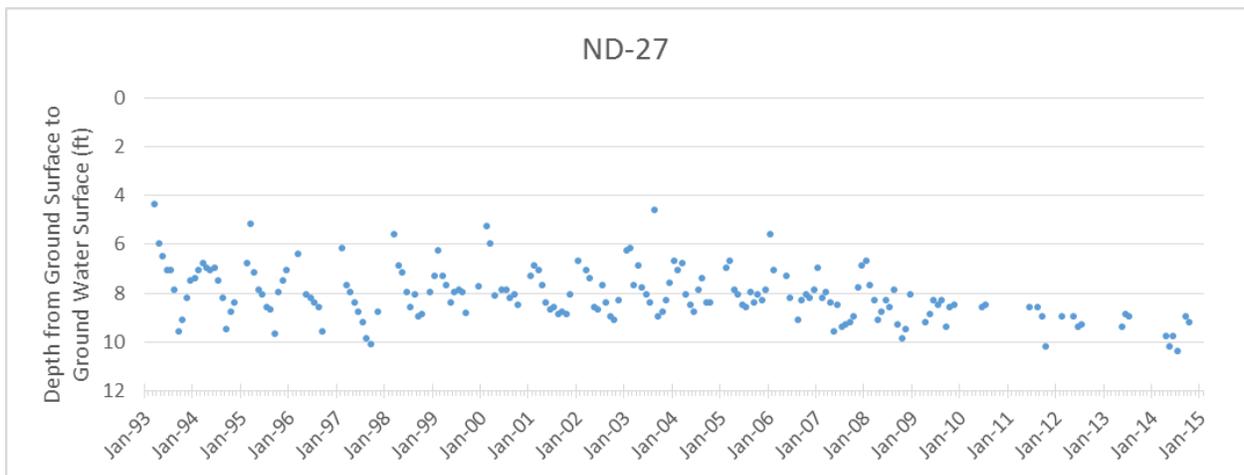
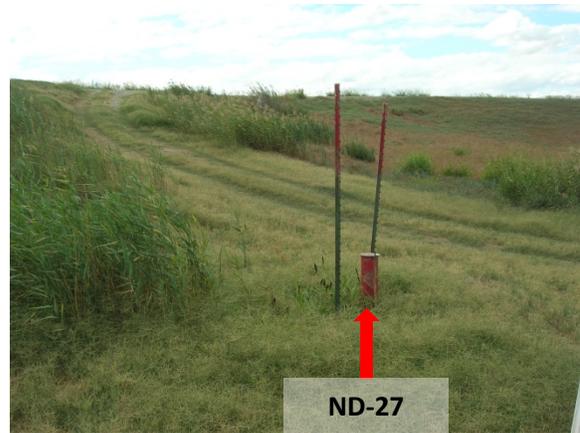
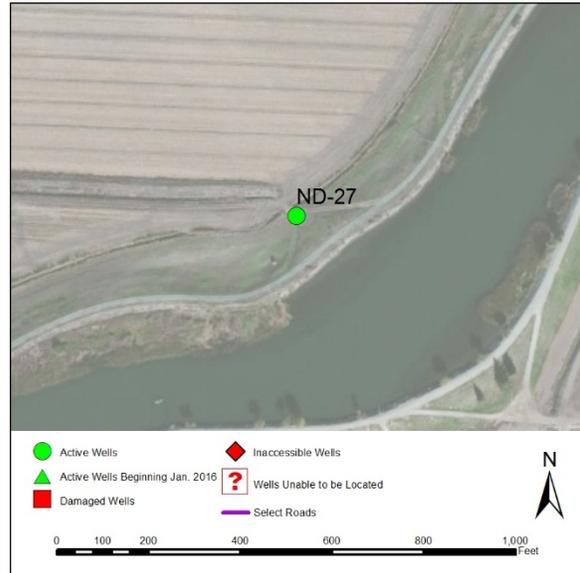
Coordinates: N 38°12'47.9" W 121°29'45.3"

State Well Number: 04N04E24F001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located at the toe of levee at the intersection of two access roads, marked with two red t-posts.



ND-31

Monitoring Status: **Not Active**

Reclamation District: 38

Staten Island

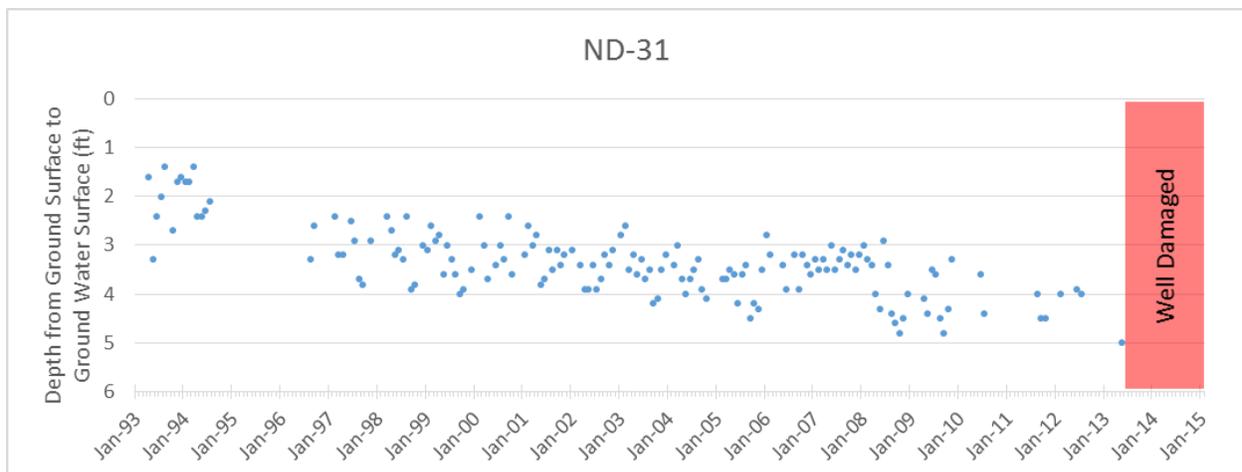
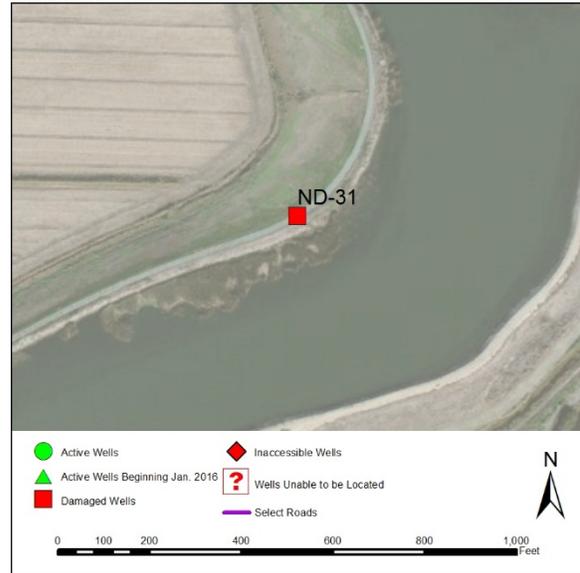
Coordinates: N 38°09'52.1" W 121°29'40.1"

State Well Number: 04N04E25L001M

Permit Status: **Current**

Construction Depth: 20ft

Comments: The well has been damaged. The well is located at the levee toe and marked with a wood stake. The well was damaged when hit by a tractor, with the last accurate measurement occurring in May 2013.



ND-55

Monitoring Status: **Not Active**

Reclamation District: 38

Staten Island

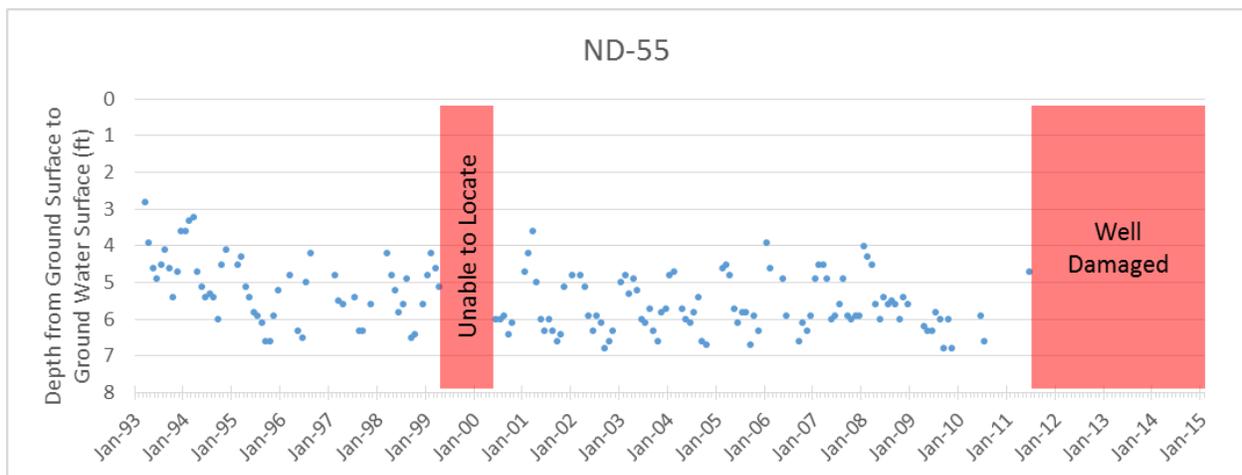
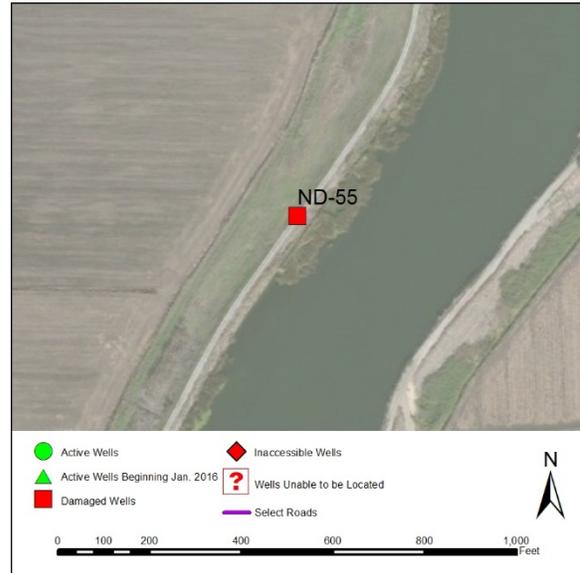
Coordinates: N 38°08'57.8" W 121°30'18.4"

State Well Number: 04N04E35Q001M

Permit Status: **Current**

Construction Depth: 20ft

Comments: The well has been damaged. Well was hit by something in September 2011.



ND-58

Monitoring Status: Not Active

Reclamation District: 38

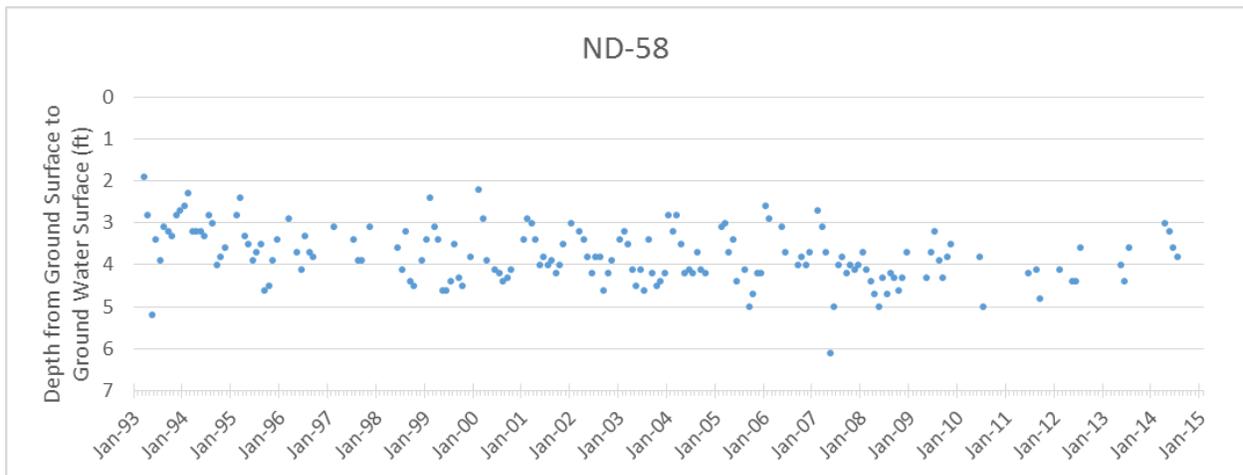
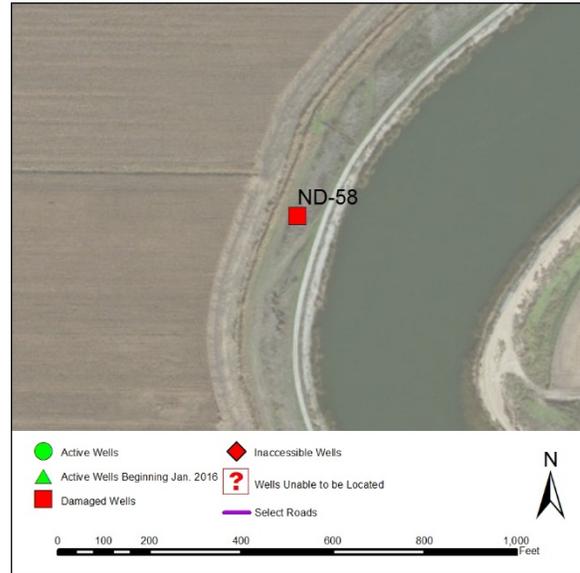
Staten Island

Coordinates: N 38°08'0.6" W 121°30'28.5"

State Well Number: 03N04E02P001M

Permit Status: Current

Comments: The well has been damaged. Last accurate measurement was July 2014. The well was damaged between July and September 2014. Located on the levee slope.



ND-73

Monitoring Status: Active

Reclamation District: 38

Staten Island

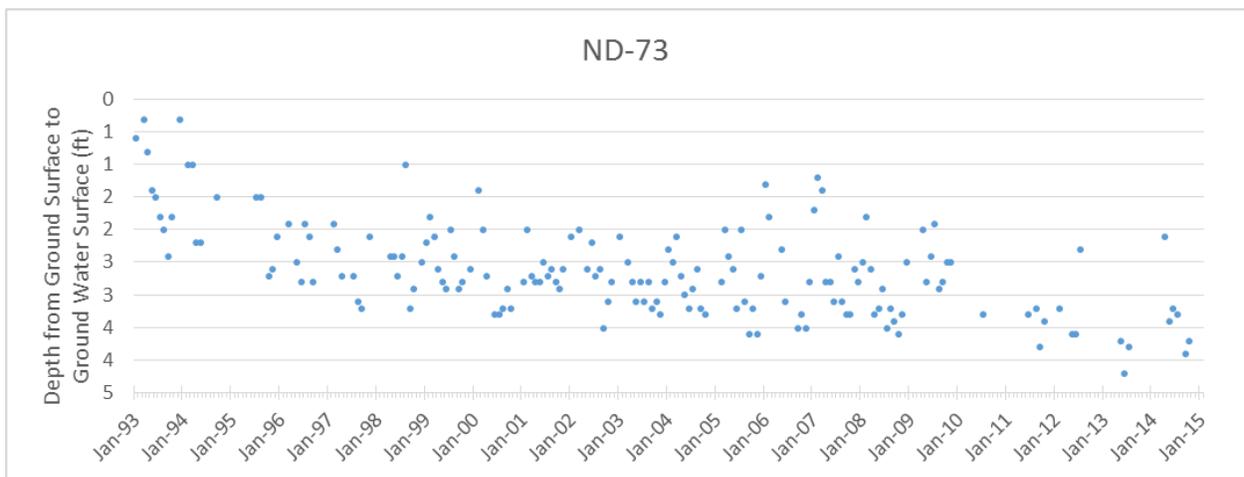
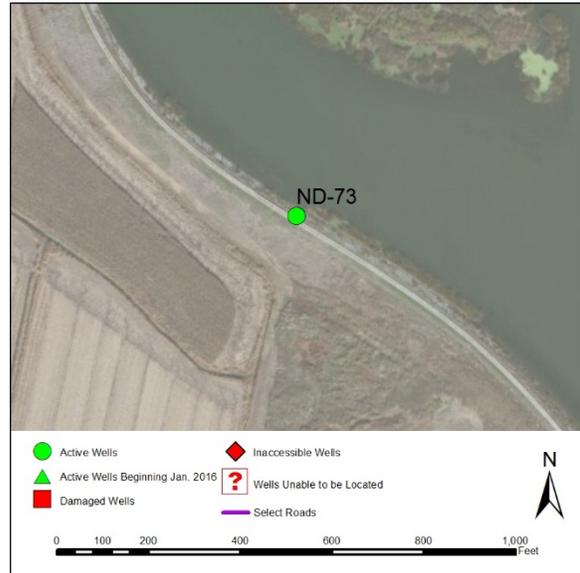
Coordinates: N 38°07'14.8" W 121°29'54.9"

State Well Number: 03N04E11J001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located on levee toe, near ditch, marked with two red t-posts.



ND-69

Monitoring Status: Active

Reclamation District: 38

Staten Island

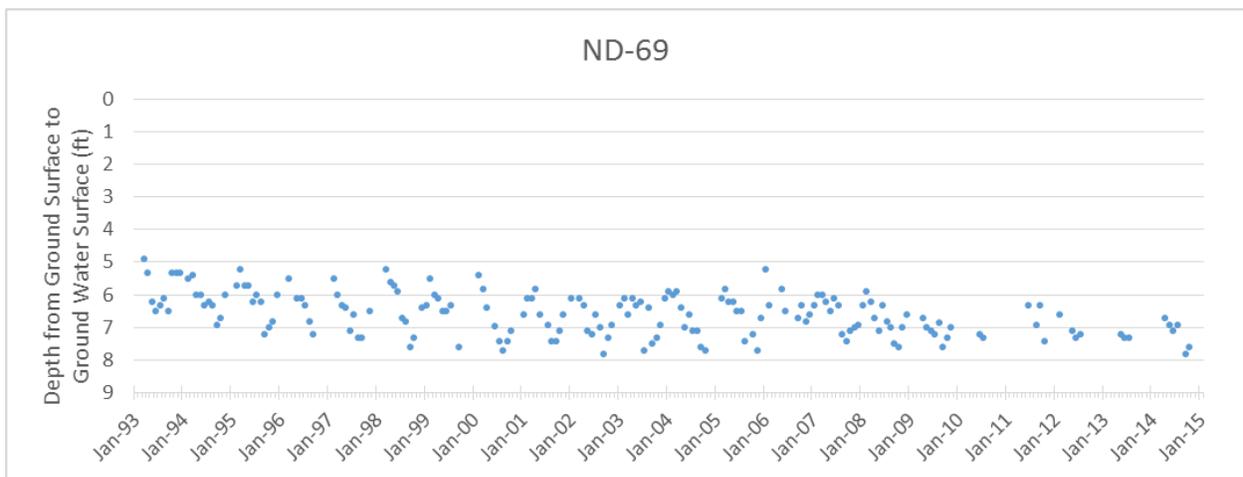
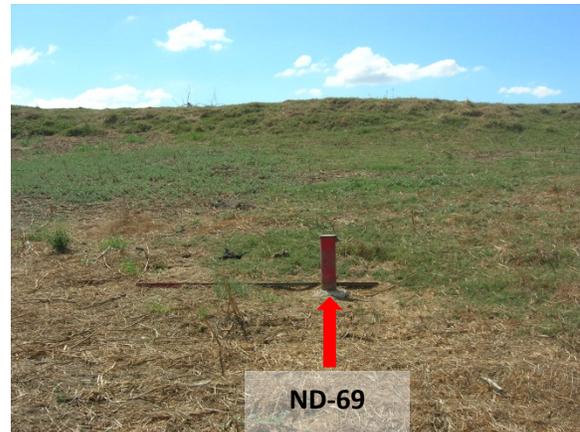
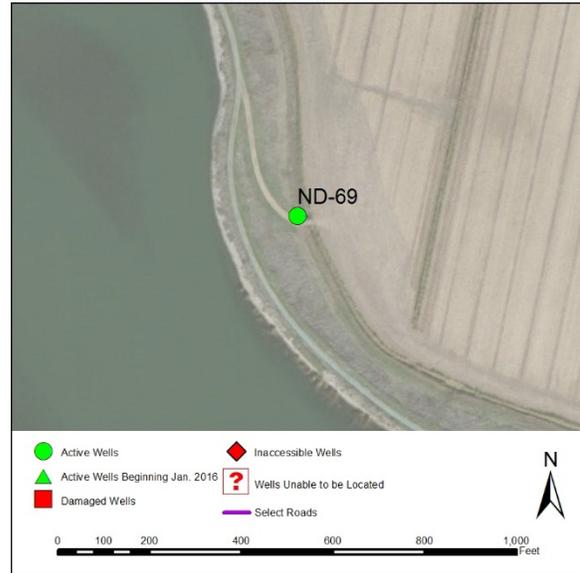
Coordinates: N 38°7'13.6" W 121°30'33.9"

State Well Number: 03N04E11L001M

Permit Status: Current

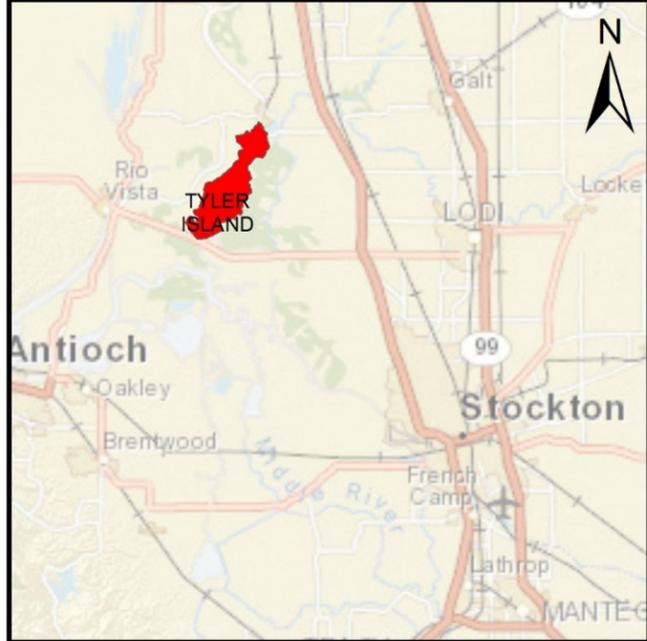
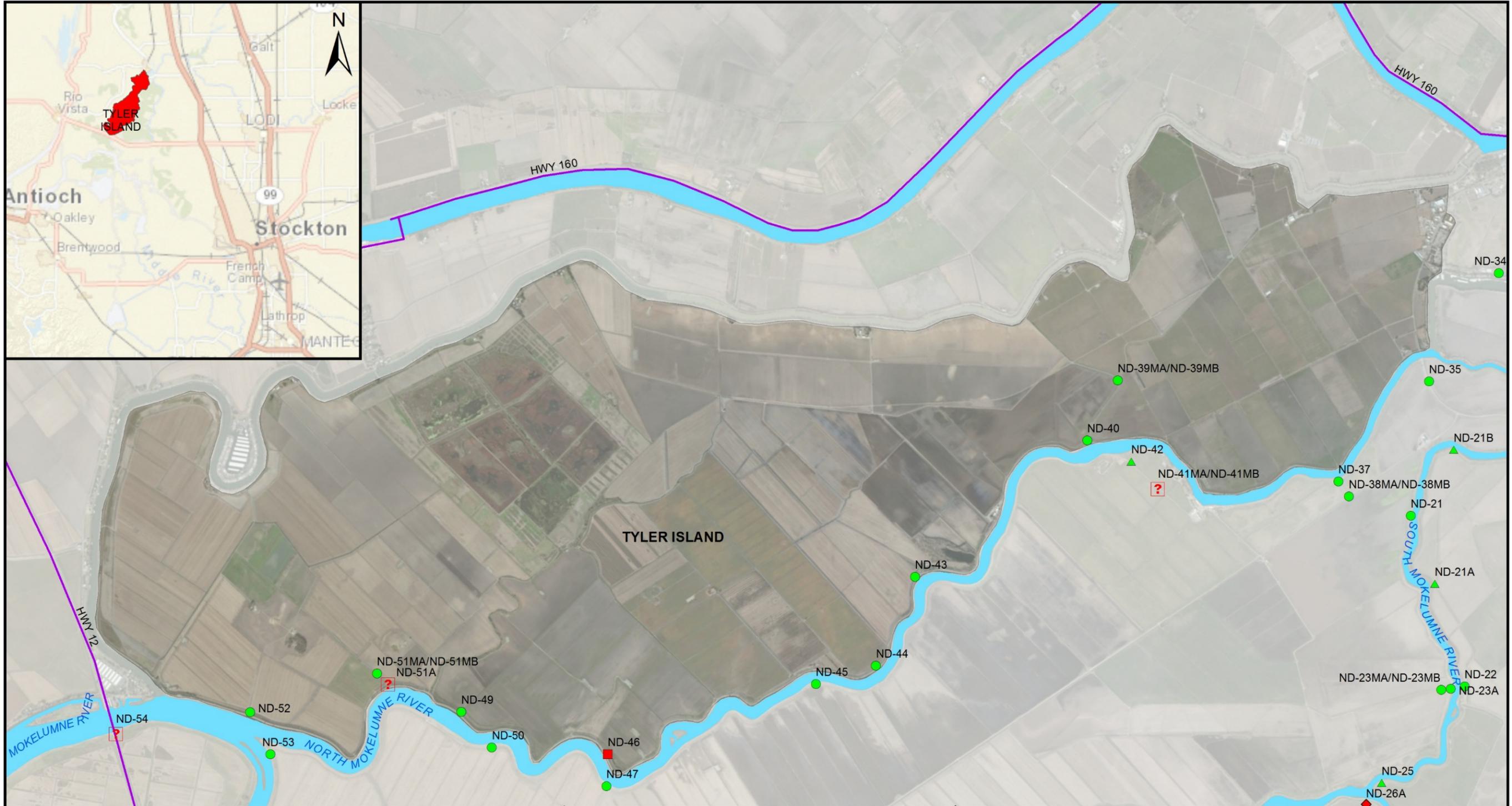
Construction Depth: 25ft

Comments: Located on levee toe near levee access ramp. Every time t-posts are put in place they get removed. Red steel casing approximately 2ft high.



Tyler Island (RD 563)

ND-39MA/ ND-39MBA60
ND-40A61
ND-43A62
ND-44A63
ND-46A64
ND-49A65
ND-51A.....A66
ND-51MA/ ND-51MBA67
ND-52A68



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.5 1
 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Tyler Island Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-39MA/ ND-39MB

Monitoring Status: Active

Reclamation District: 563

Tyler Island

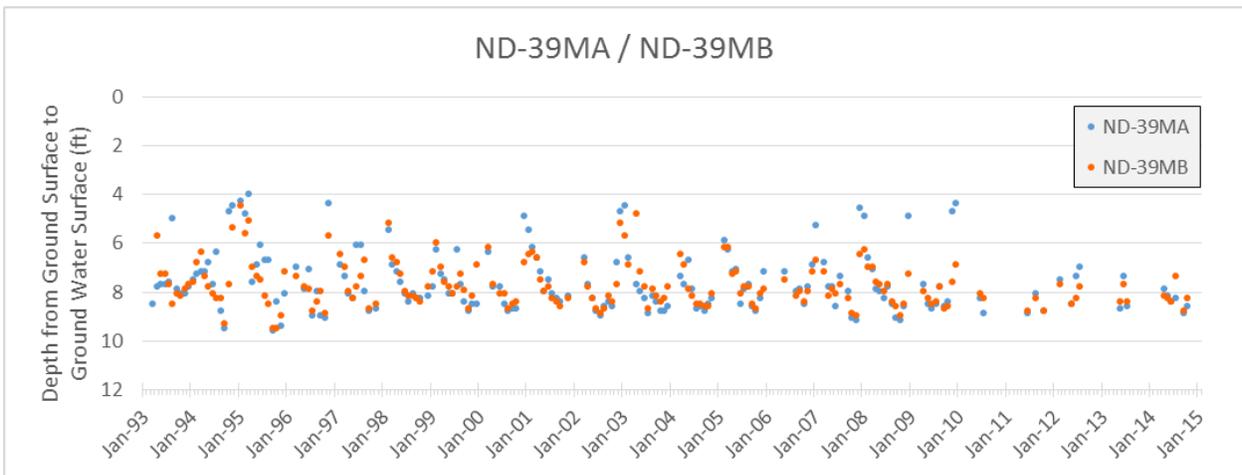
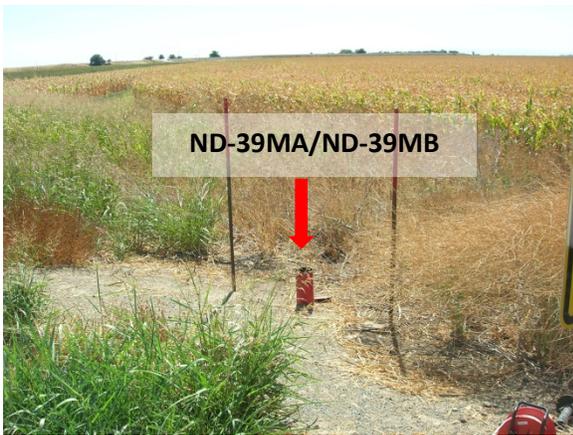
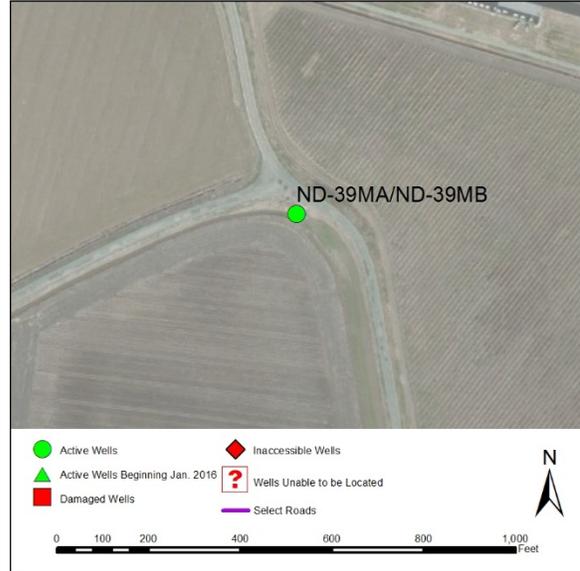
Coordinates: N 38°12'39.2" W 121°30'7.4"

State Well Number: 04N04E10Q001M /
04N04E10Q002M

Permit Status: Current

Construction Depth: 20ft / 100ft

Comments: Well is located approximately a half mile from the levee, near the fork in the road. Marked with two red t-posts.



ND-40

Monitoring Status: Active

Reclamation District: 563

Tyler Island

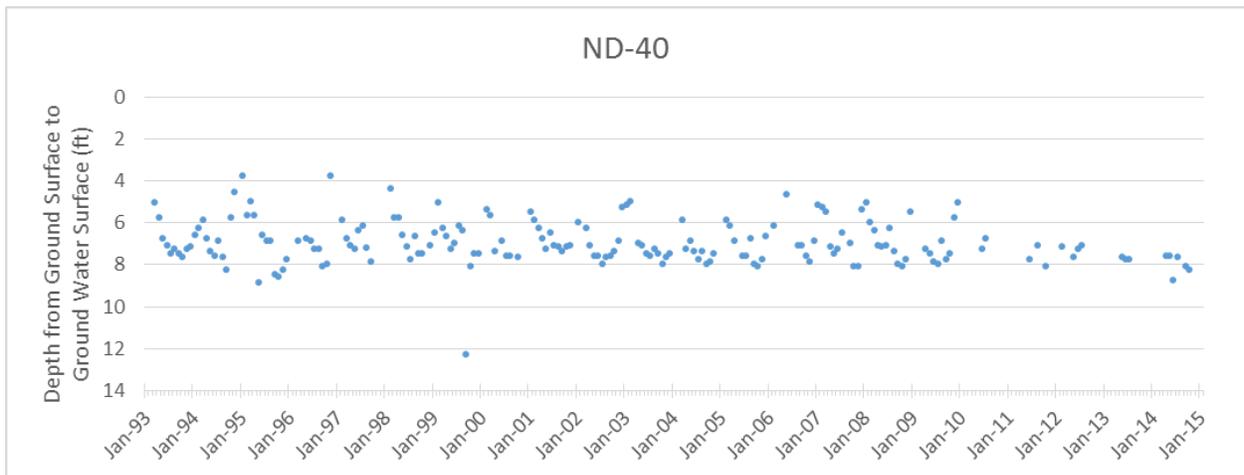
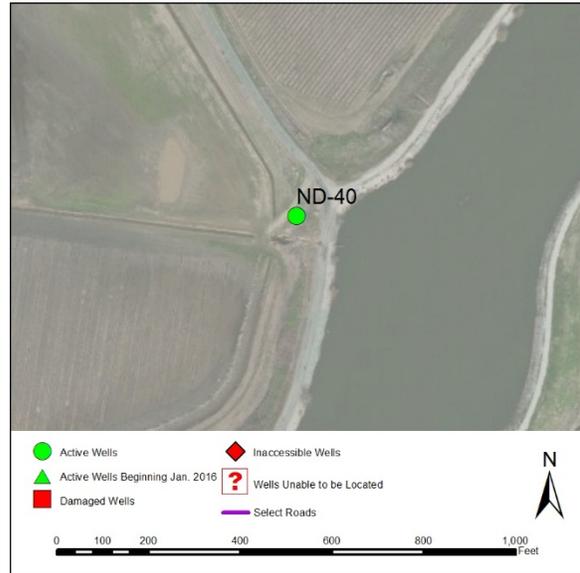
Coordinates: N 38°11'56.6" W 121°31'33.4"

State Well Number: 04N04E15G002M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located at levee toe, marked with two red t-posts. There is a tire around the well.



ND-43

Monitoring Status: Active

Reclamation District: 563

Tyler Island

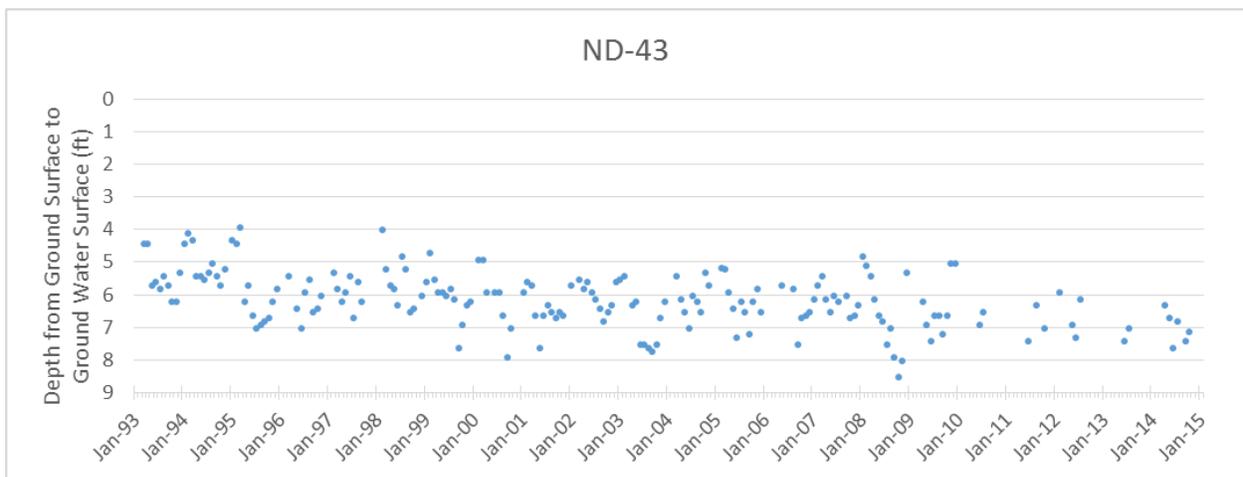
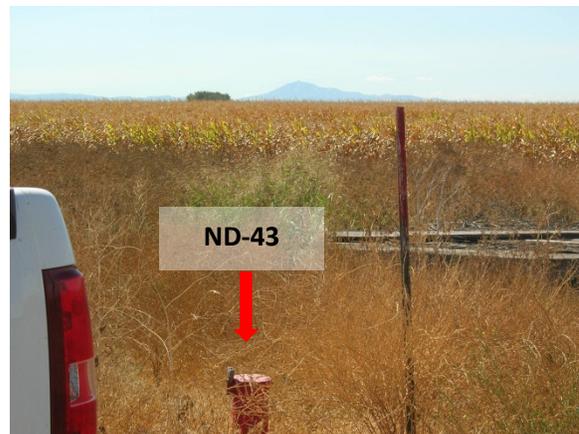
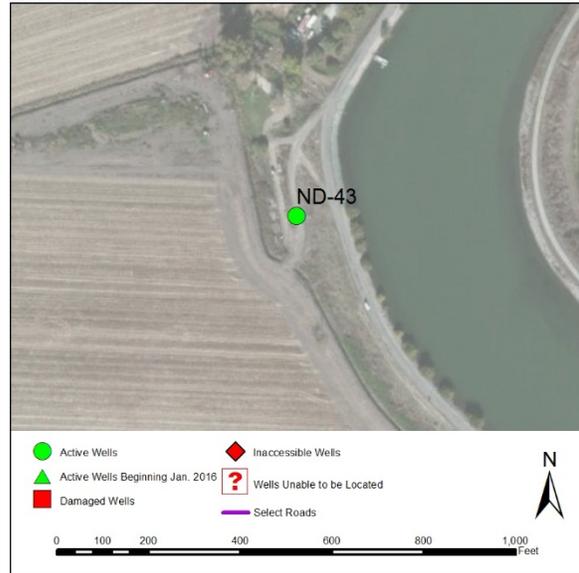
Coordinates: N38°10'51.4" W121°31'44.5"

State Well Number: 04N04E22L001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located at levee toe, down assess road, and marked by two red t-posts.



ND-44

Monitoring Status: Active

Reclamation District: 563

Tyler Island

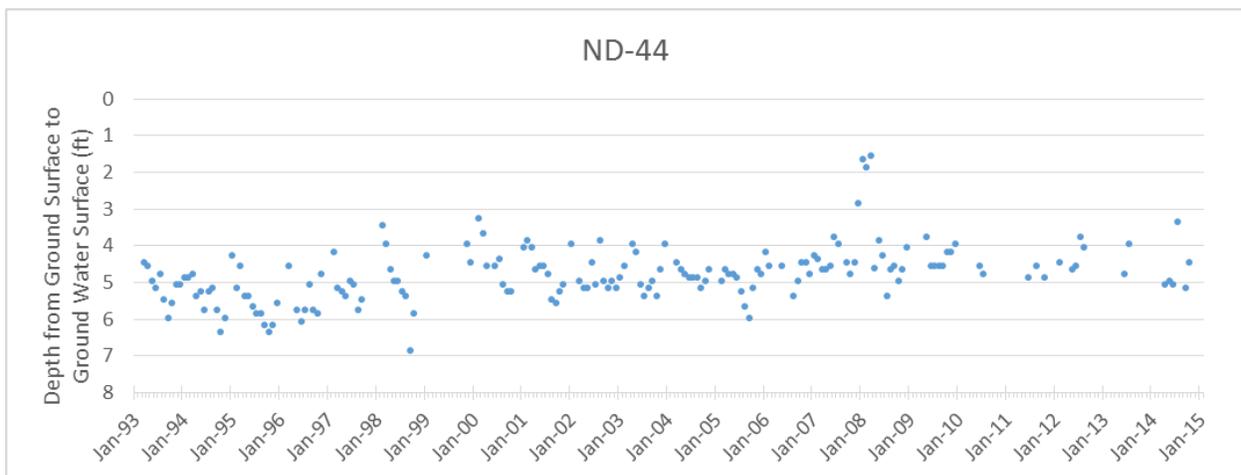
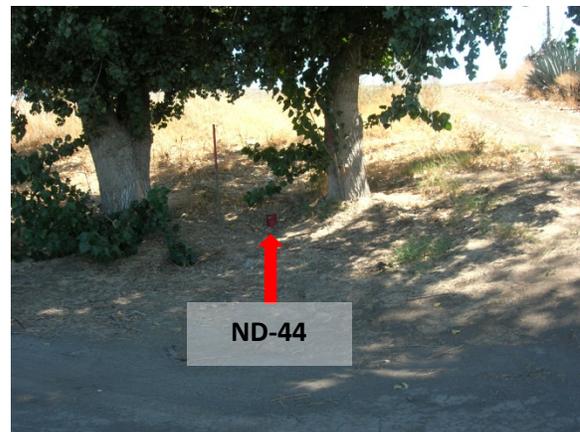
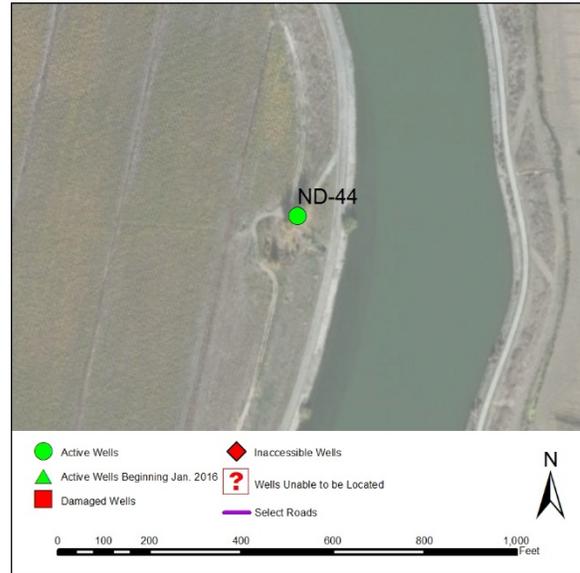
Coordinates: N 38°10'24.2" W 121°31'31.8"

State Well Number: 04N04E27B001M

Permit Status: Pending - owner wants to verify well location

Construction Depth: 20ft

Comments: The well is located mid-slope, between two trees. The casing is a few inches out of the ground and marked by a red t-post.



ND-46

Monitoring Status: Not Active

Reclamation District: 563

Tyler Island

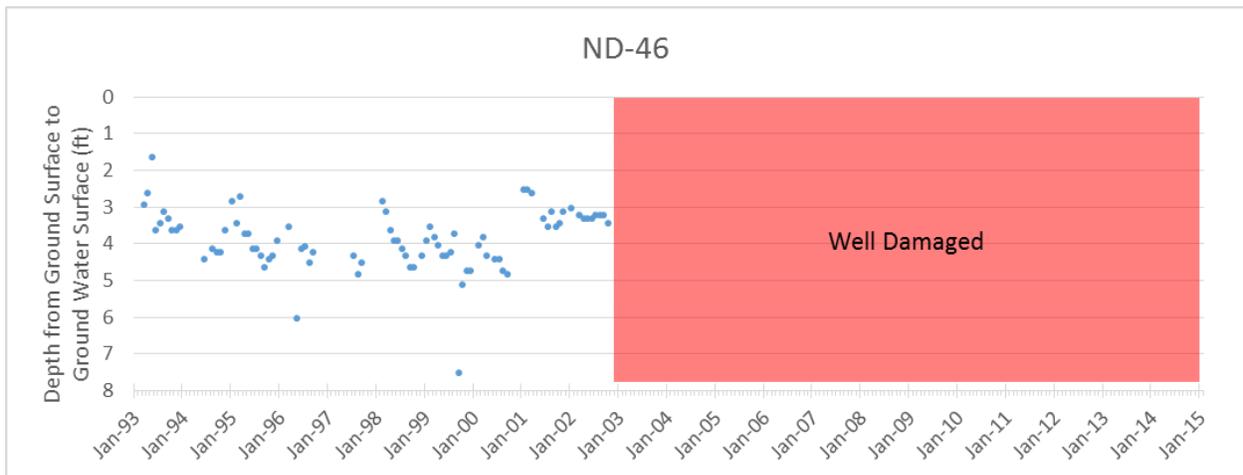
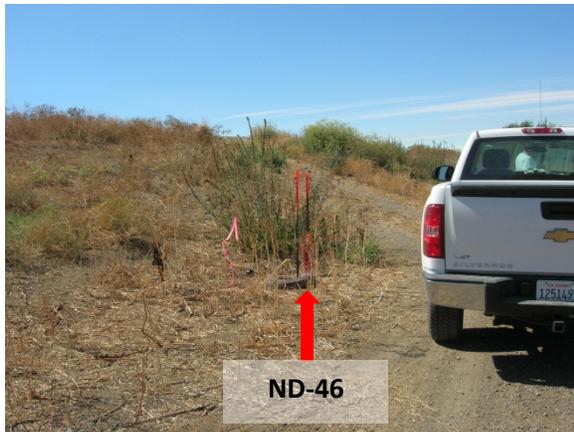
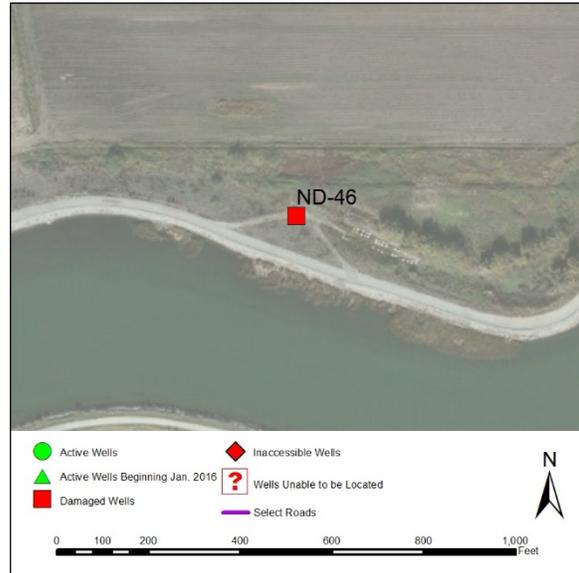
Coordinates: N 38°09'9.2" W 121°32'21.6"

State Well Number: 04N04E33J001M

Permit Status: No Permit

Construction Depth: 20ft

Comments: The well has been damaged. The well is located at the levee toe, next to the access ramp.



ND-49

Monitoring Status: Active

Reclamation District: 563

Tyler Island

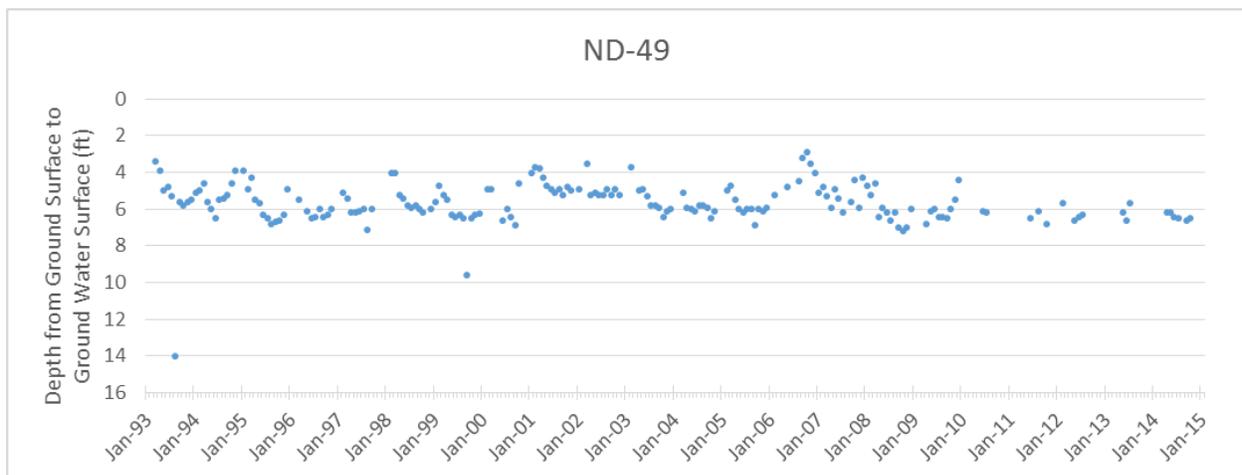
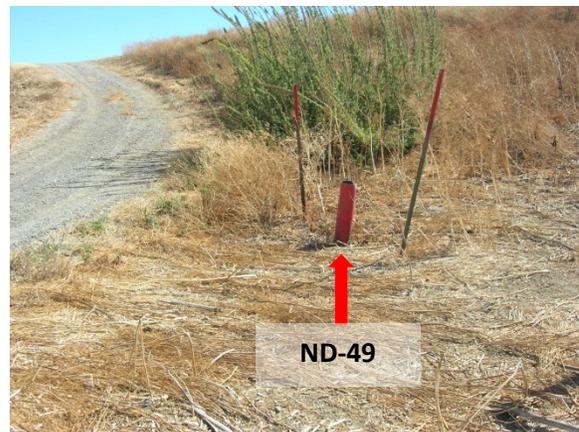
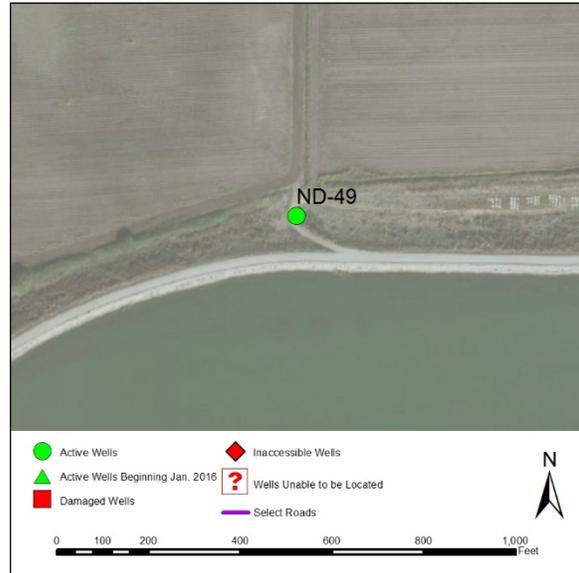
Coordinates: N 38°08'47.8" W 121°33'12.7"

State Well Number: 04N04E33N001M

Permit Status: Current

Construction Depth: 20ft

Comments: The well is located at the bottom of the access ramp, and marked by two red t-posts. The casing cap is missing.



ND-51A

Monitoring Status: Not Active

Reclamation District: 563

Tyler Island

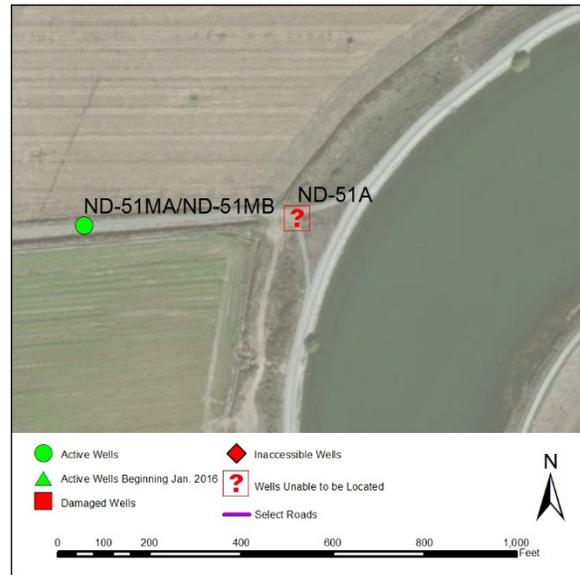
Coordinates: No Coordinates Available

State Well Number: 03N04E05B001M

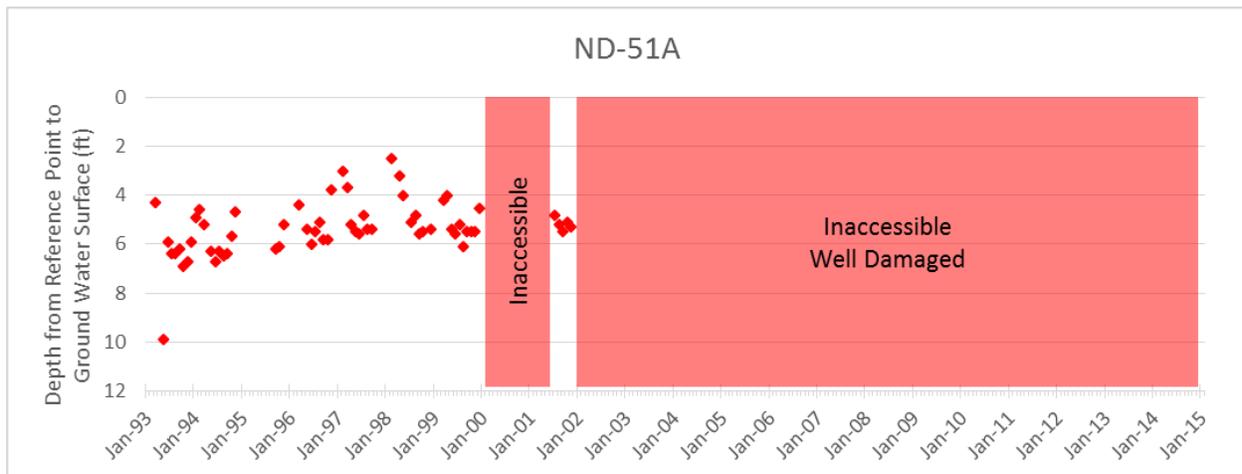
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located



No Images



ND-51MA/ ND-51MB

Monitoring Status: Active

Reclamation District: 563

Tyler Island

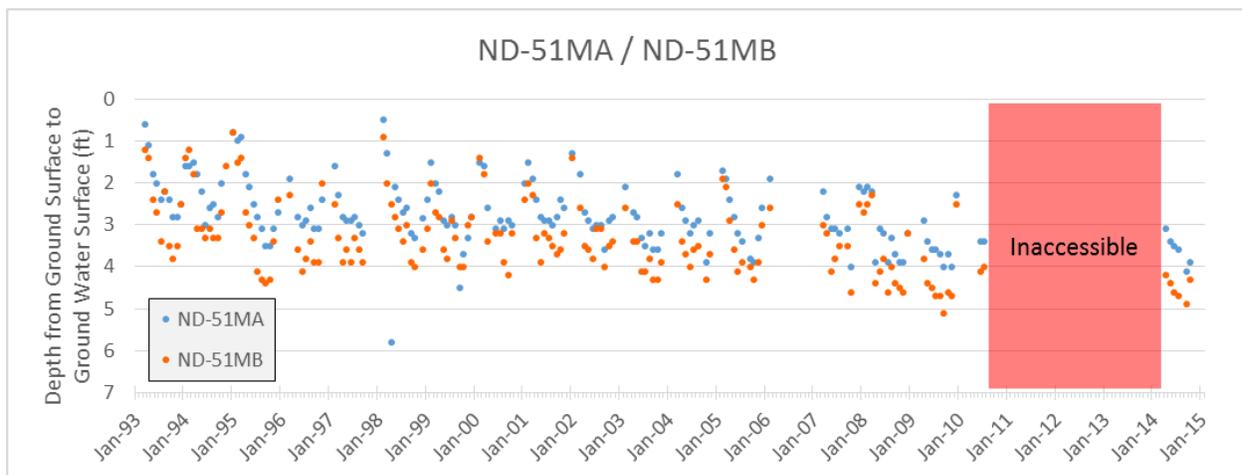
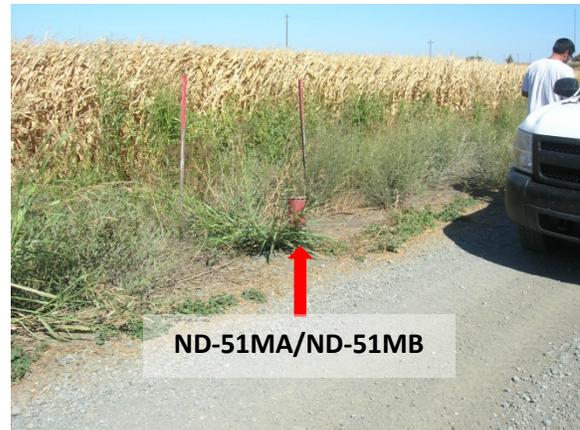
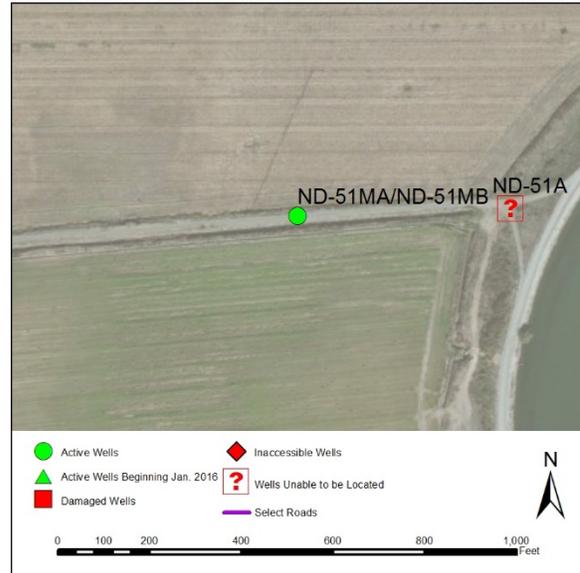
Coordinates: N 38°8'38.4" W 121°33'46.0"

State Well Number: 03N04E05C001M /
03N04E05C002M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is located approximately 1000ft from levee, and marked by two red t-posts. Data gap is the result of a frozen lock that has since been removed.



ND-52

Monitoring Status: Active

Reclamation District: 563

Tyler Island

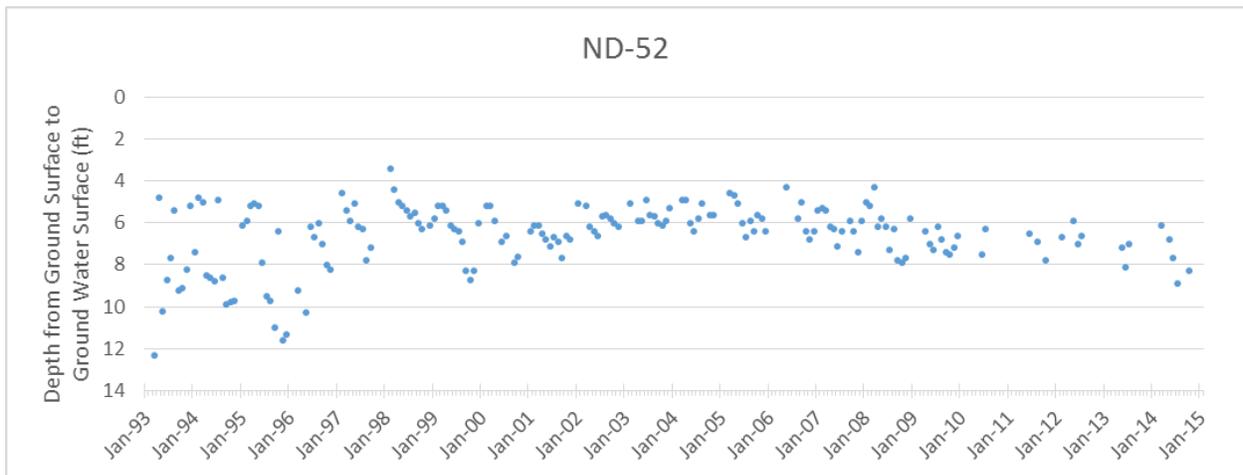
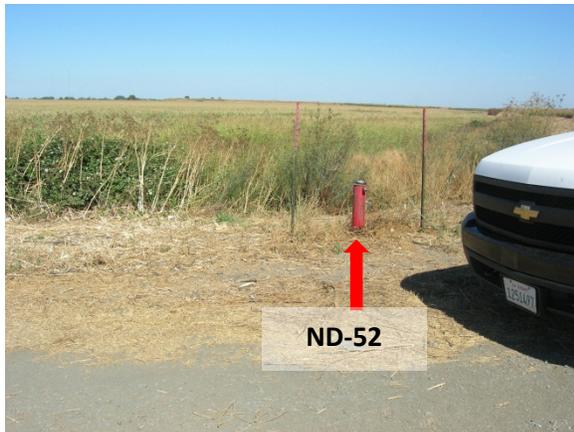
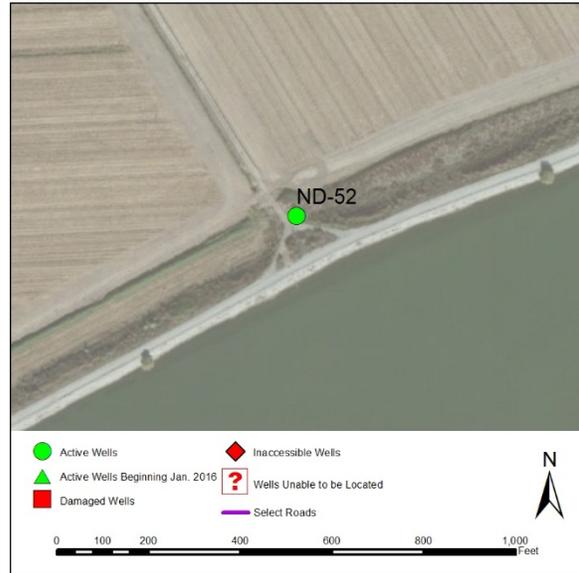
Coordinates: N 38°8'3.6" W 121°34'10.2"

State Well Number: 03N04E05M001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located at the base of an access ramp, near ditch, and marked by two red t-posts.



Canal Ranch (RD 2086)

ND-26A.....A71
ND-26A72
ND-30A73
ND-29MA/ ND-29MBA74



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Canal Ranch Tract Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-26A

Monitoring Status: Not Active

Reclamation District: 2086

Canal Ranch

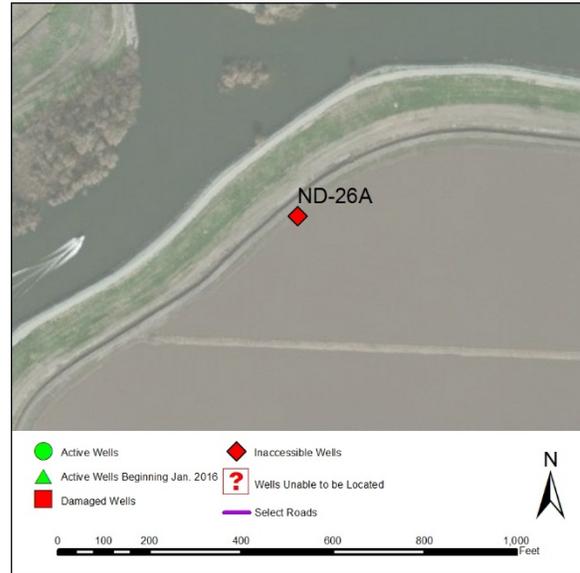
Coordinates: N 38°11'16.0" W 121°29'6.5"

State Well Number: 04N05E18M001M

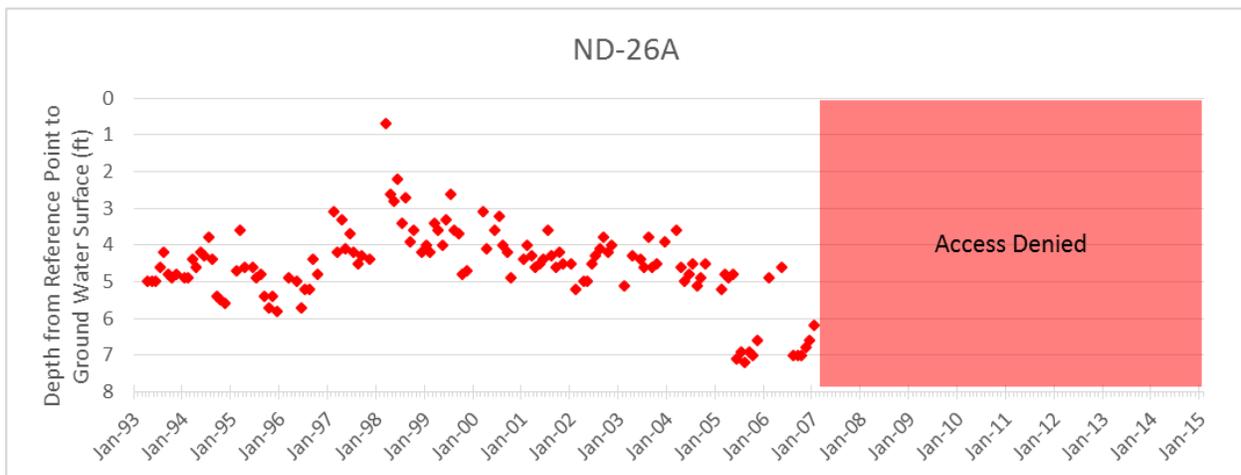
Permit Status: Denied Entry

Construction Depth: 20ft

Comments: DWR has been denied entry to Canal Ranch Tract.



No Images



ND-26

Monitoring Status: Not Active

Reclamation District: 2086

Canal Ranch

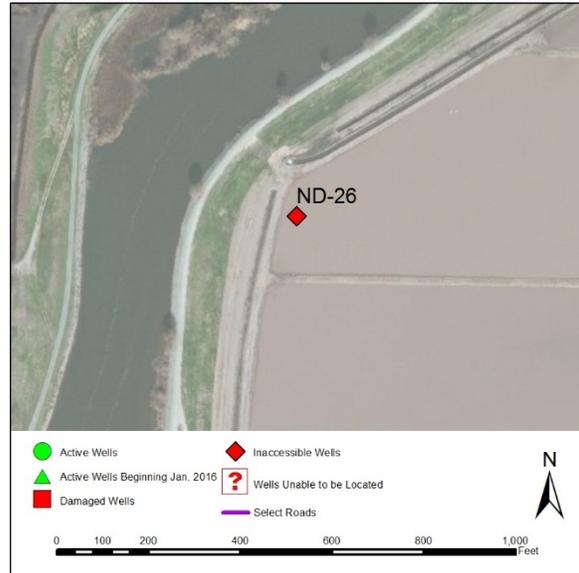
Coordinates: N 38°11'31.7" W 121°28'51.0"

State Well Number: 04N04E24A001M

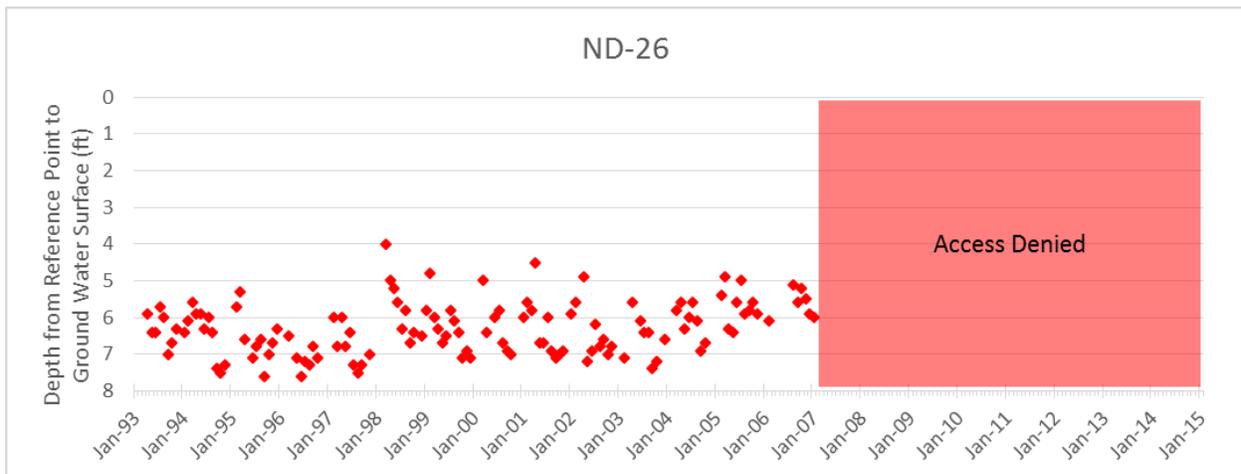
Permit Status: Denied Entry

Construction Depth: 20ft

Comments: DWR has been denied entry to Canal Ranch Tract.



No Images



ND-30

Monitoring Status: Not Active

Reclamation District: 2086

Canal Ranch

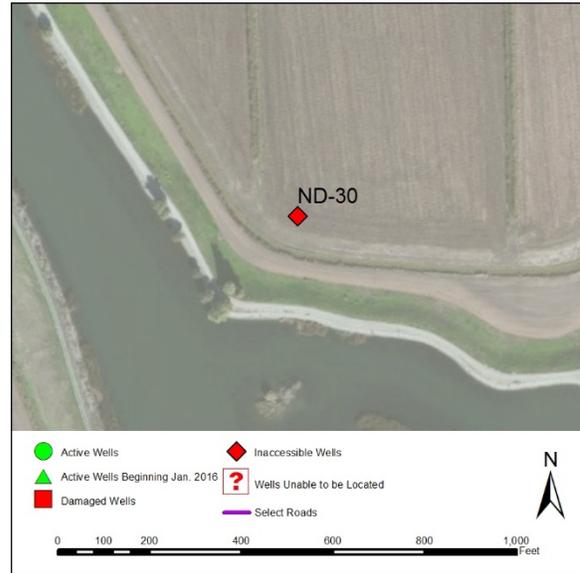
Coordinates: No Coordinates Available

State Well Number: 04N0425F001M

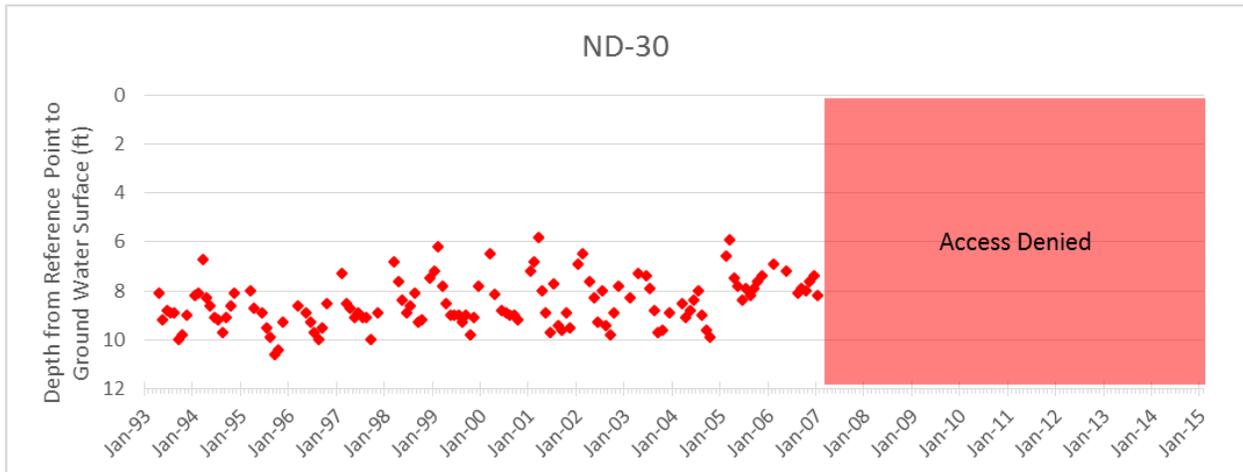
Permit Status: Denied Entry

Construction Depth: 20ft

Comments: DWR has been denied entry to Canal Ranch Tract.



No Images



ND-29MA/ ND-29MB

Monitoring Status: Not Active

Reclamation District: 2086

Canal Ranch

Coordinates: N 38°10'11.3" W 121°29'19.5"

State Well Number: 04N04E25G001M /
04N04E25G002M

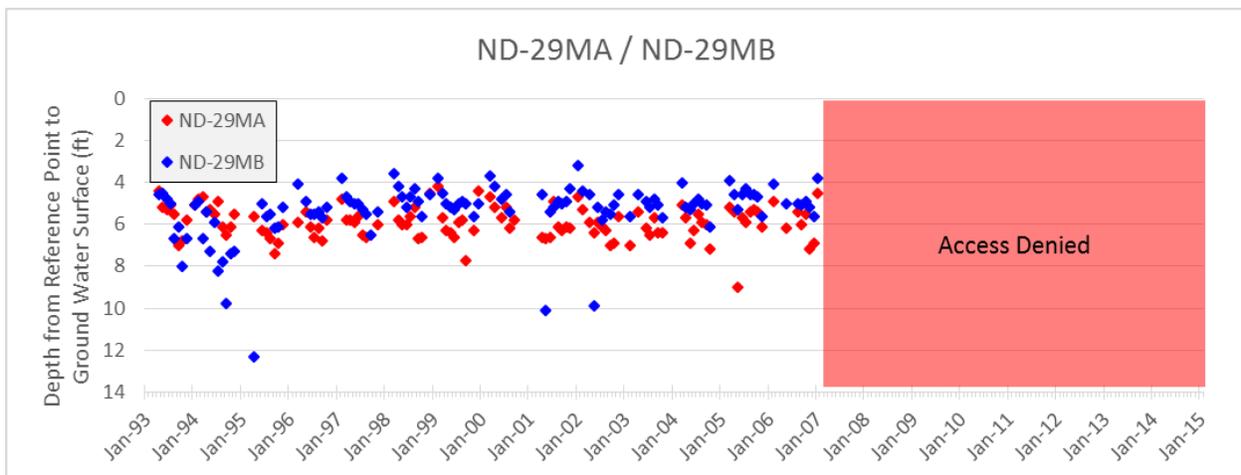
Permit Status: Denied Entry

Construction Depth: 20ft / 100ft

Comments: DWR has been denied entry to
Canal Ranch Tract.

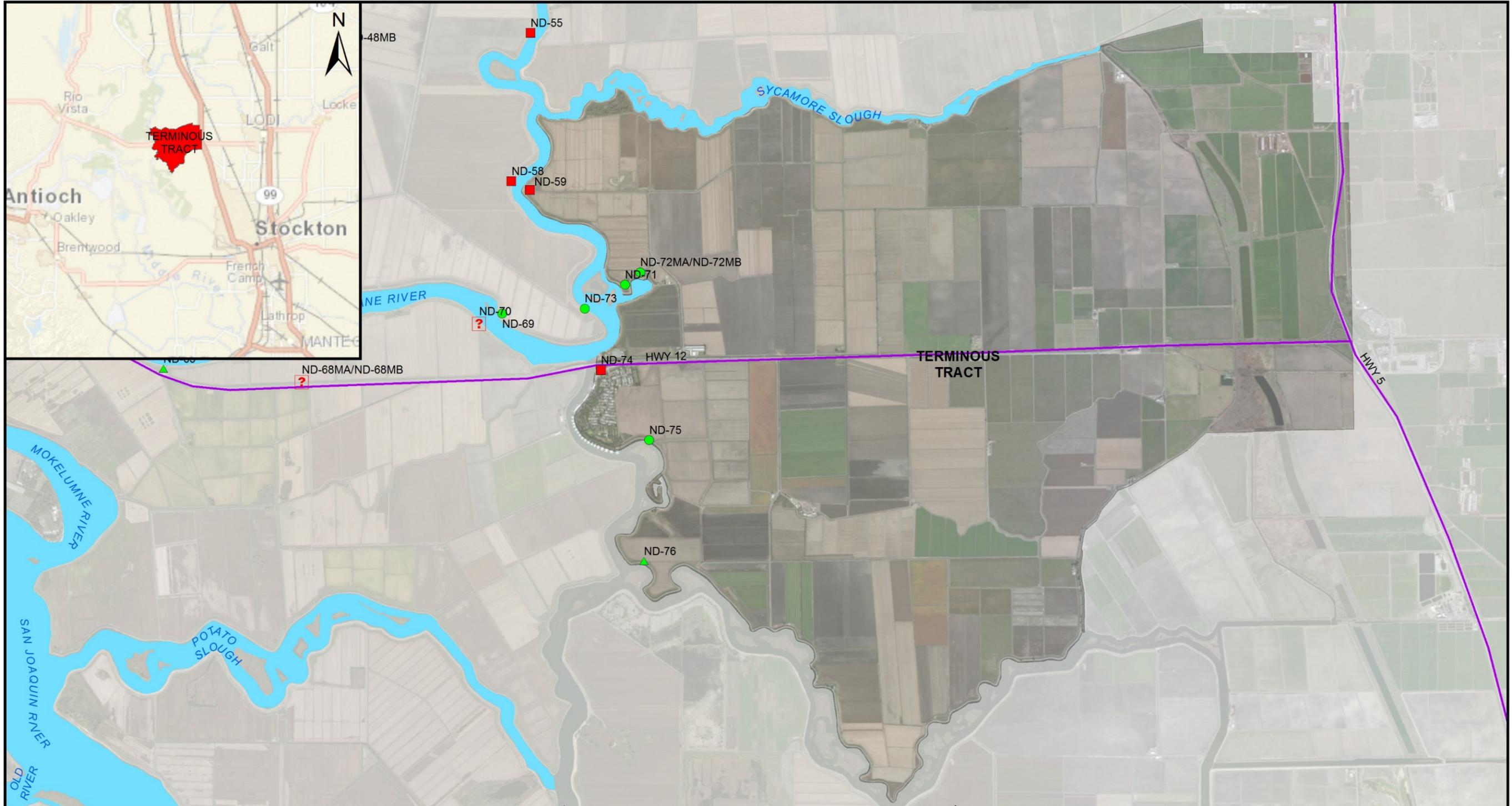


No Images



Terminous Tract (RD 548)

ND-59A77
ND-71A78
ND-72MA/ ND72-MBA79
ND-74A80
ND-75A81
ND-76A82




DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 1 2 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Terminous Tract Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-59

Monitoring Status: Not Active

Reclamation District: 548

Terminus Tract

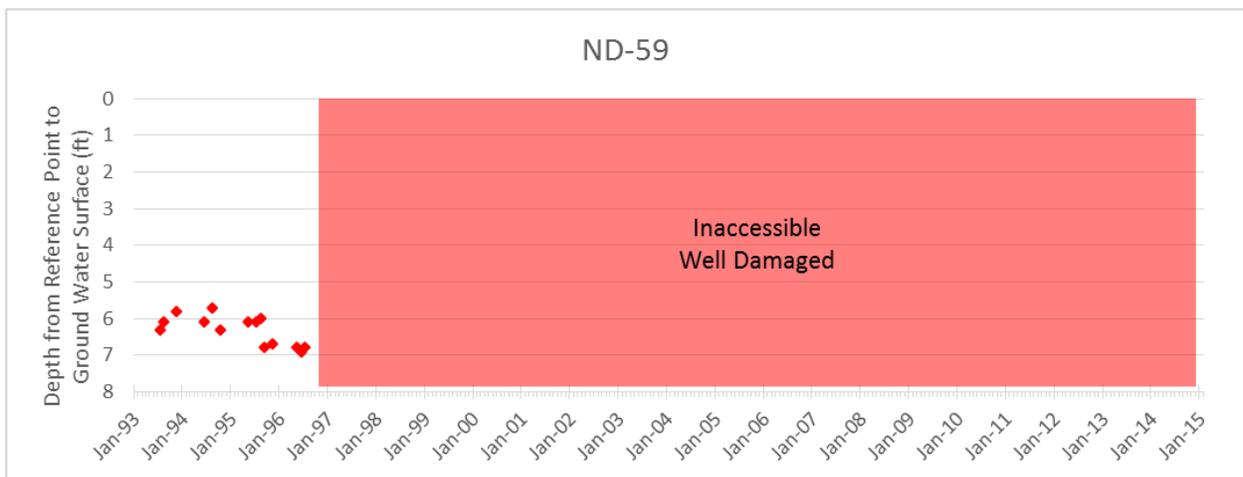
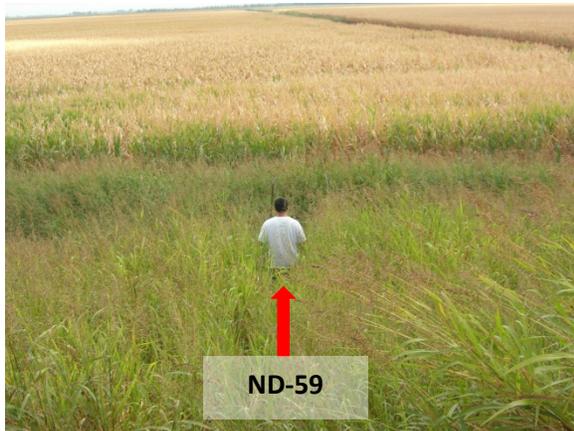
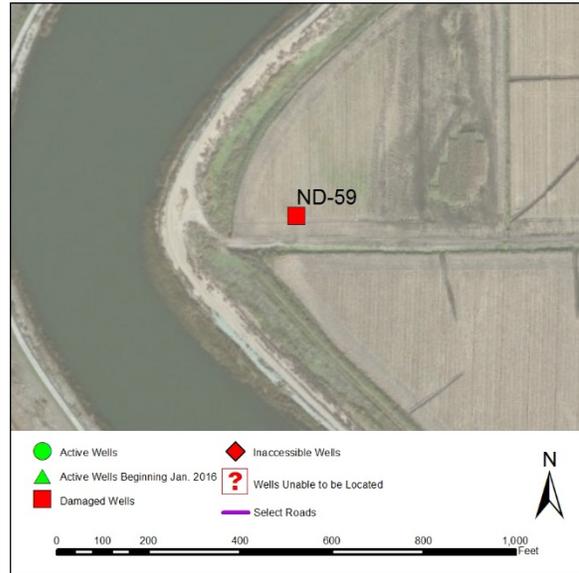
Coordinates: N 38°07'59.9" W 121°30'22.0"

State Well Number: 03N04E02Q001M

Permit Status: Pending

Construction Depth: 25ft

Comments: The well has been damaged. The well is marked by a single t-post.



ND-71

Monitoring Status: Active

Reclamation District: 548

Terminus Tract

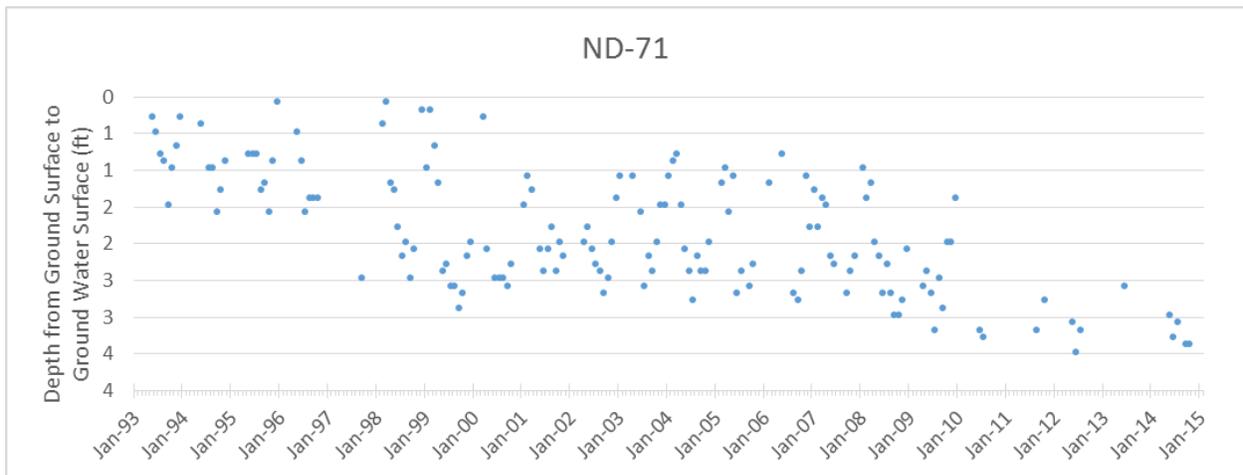
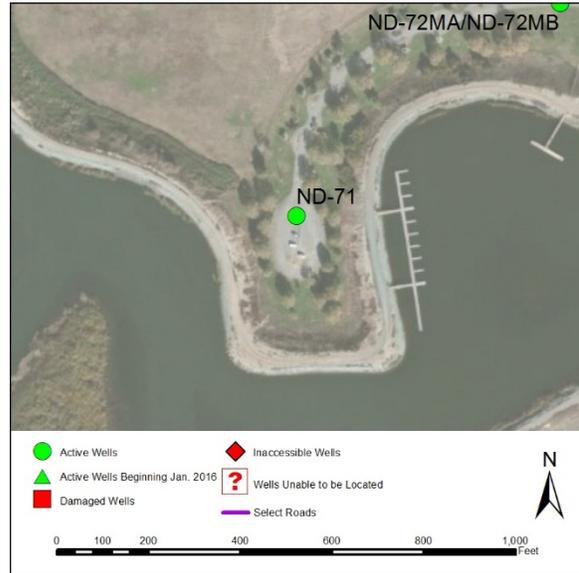
Coordinates: N 38°07'23.5" W 121°29'35.6"

State Well Number: 03N04E12E002M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well is located in Westgate Landing Park. The casing is brown, and approximately 3ft tall.



ND-72MA/ ND72-MB

Monitoring Status: Active

Reclamation District: 548

Terminus Tract

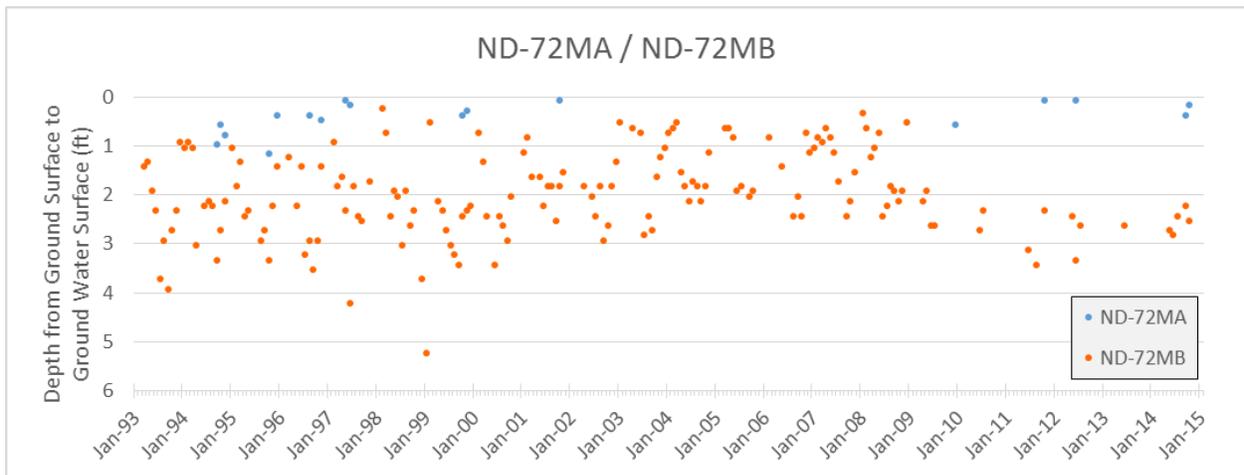
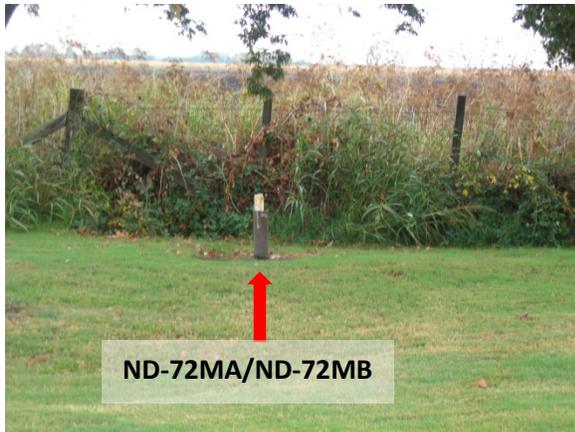
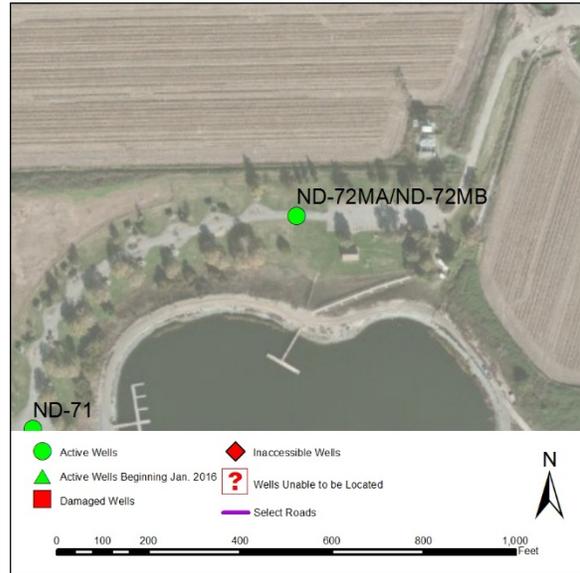
Coordinates: N 38°07'28.0" W 121°29'28.3"

State Well Number: 03N04E12F001M /
03N04E12F002M

Permit Status: Pending

Construction Depth: 20ft / 100ft

Comments: Wells are located in Westgate Landing Park. There is no cap to the cases. Park staff have modified/shortened the PVC pipes approximately 1ft over time.



ND-74

Monitoring Status: Not Active

Reclamation District: 548

Terminus Tract

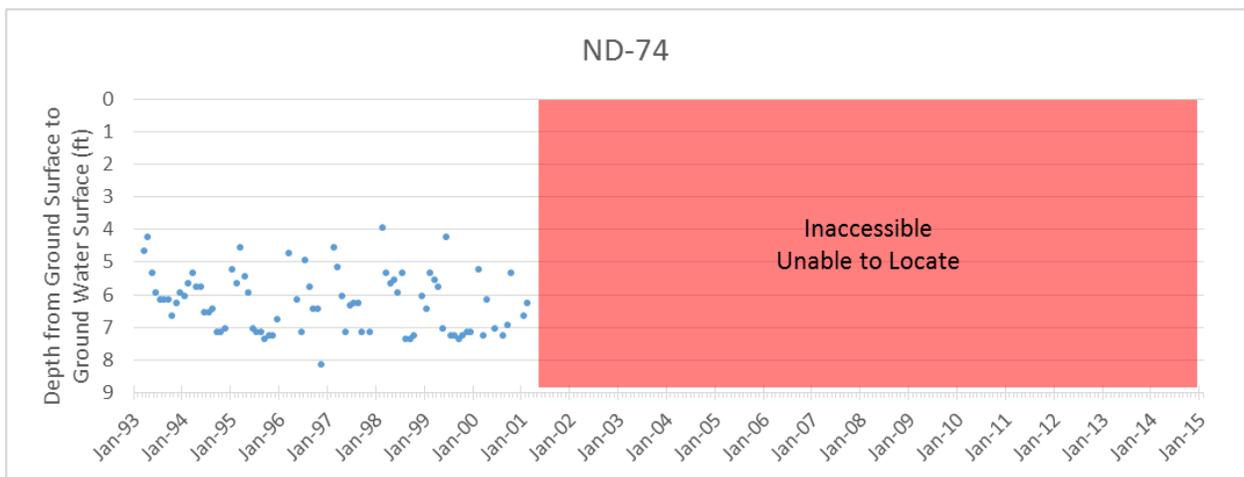
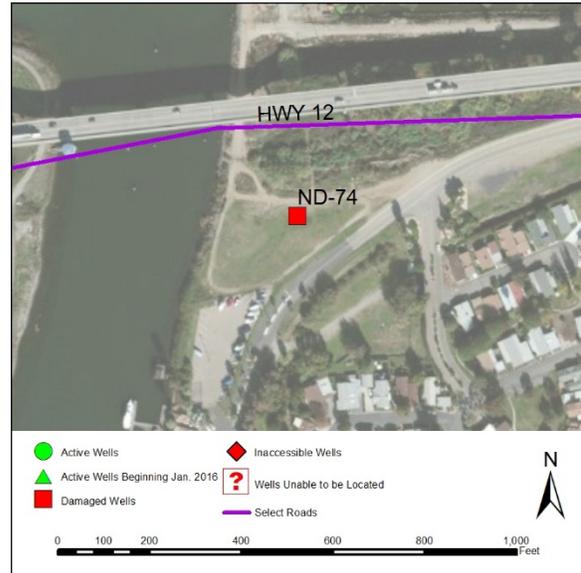
Coordinates: N 38°06'53.3" W 121°29'48.3"

State Well Number: 03N04E13D002M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well is obstructed near the top of the well. Located near the base of highway 12 overpass and Potato Slough.



ND-75

Monitoring Status: Active

Reclamation District: 548

Terminus Tract

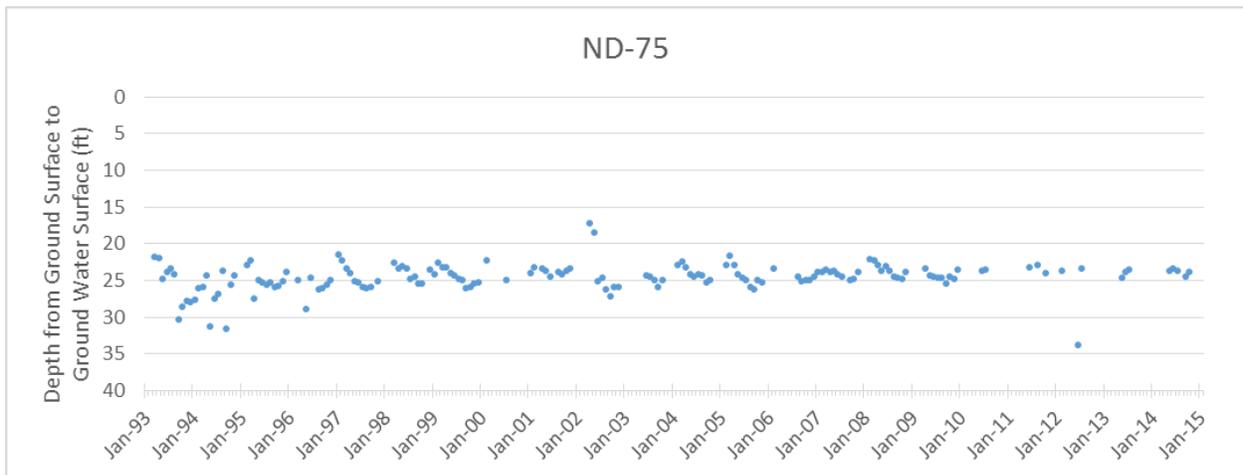
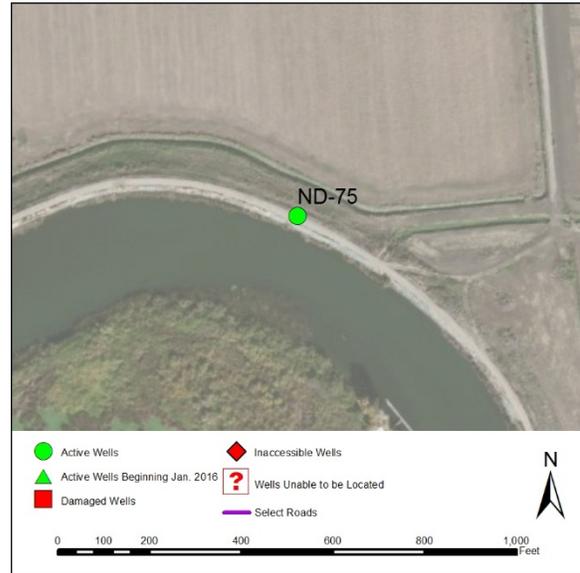
Coordinates: N 38°06'25.5" W 121°29'25.4"

State Well Number: 03N04E13L001M

Permit Status: Pending

Construction Depth: 35ft

Comments: Well located on levee crown, marked by two red t-posts. Access well through a yellow gate (access code 2543) in KOA campground.



ND-76

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 548

Terminus Tract

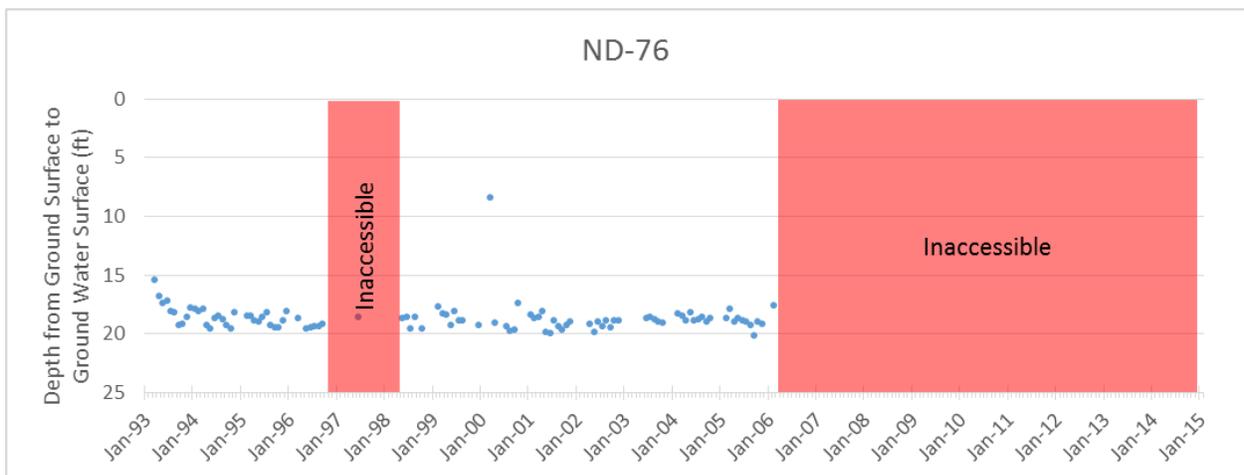
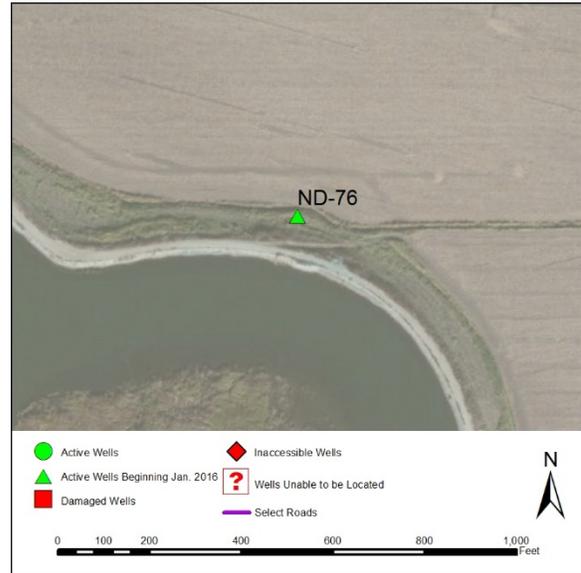
Coordinates: N 30°05'39.3" W 121°29'27.2"

State Well Number: 03N04E24F001M

Permit Status: Pending

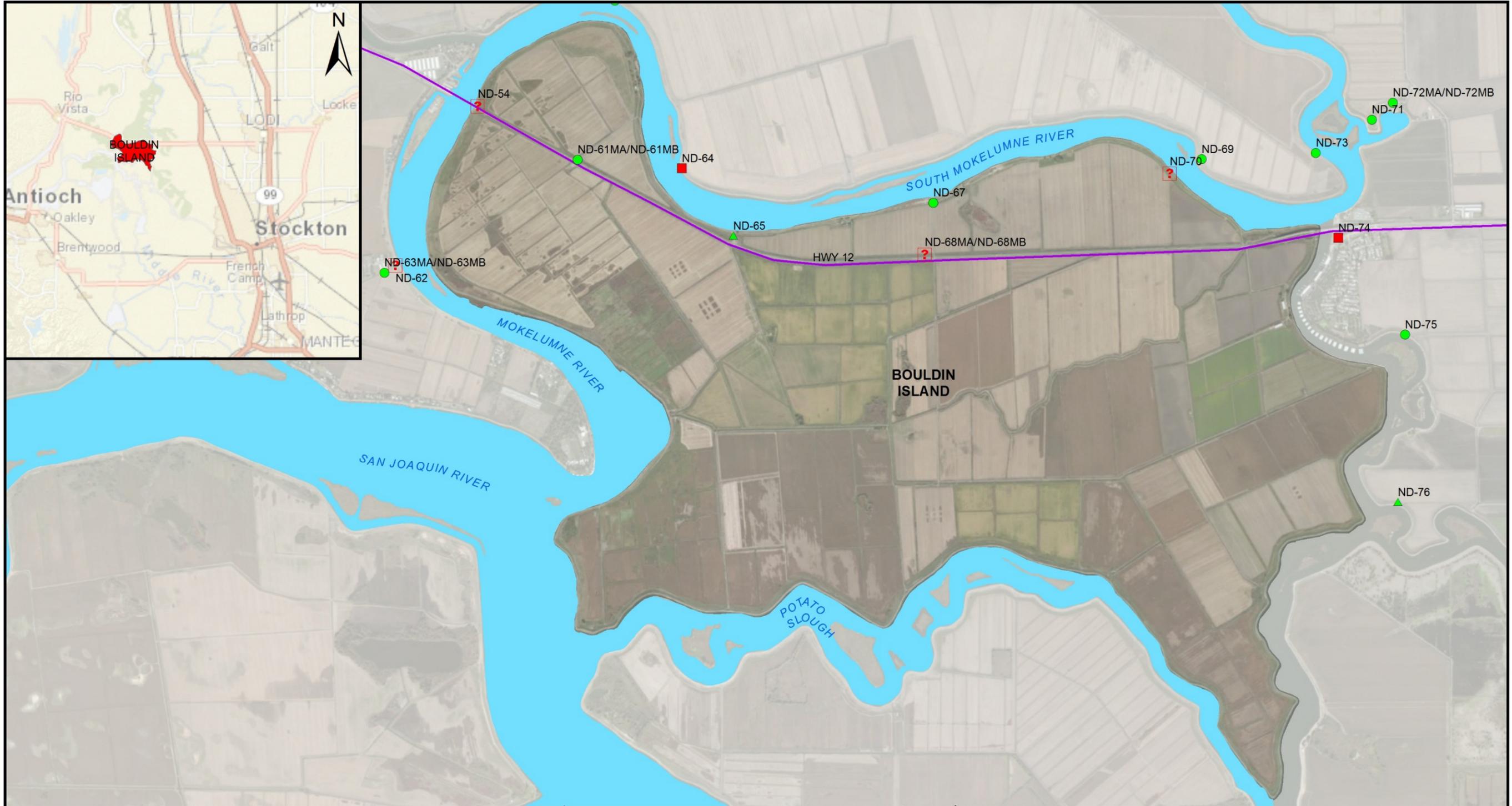
Construction Depth: 35ft

Comments: This well will begin being actively monitored in January 2016 when monitoring of the network resumes. Well was originally buried, but was unburied in September 2014. A new lock was put on the well, and a reading was taken.



Bouldin Island (RD 756)

ND-54A85
ND-61MA/ MD-61MBA86
ND-65A87
ND-67A88
ND-68MA/ ND-68MBA89
ND-70A90



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.5 1 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Bouldin Island Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-54

Monitoring Status: Not Active

Reclamation District: 756

Bouldin Island

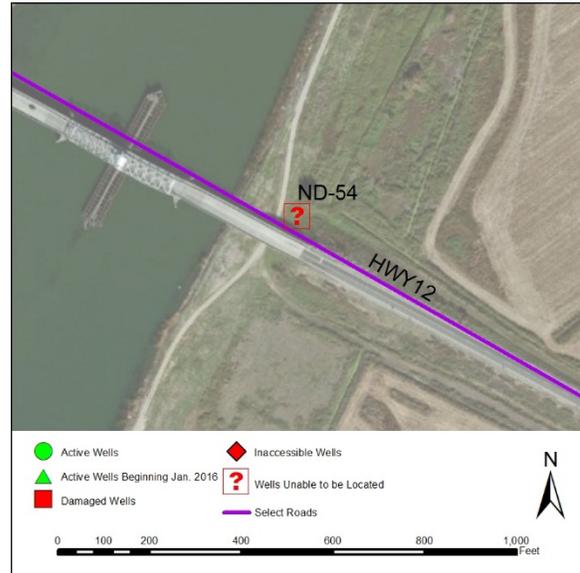
Coordinates: No Coordinates Available

State Well Number: 04N04E07G001M

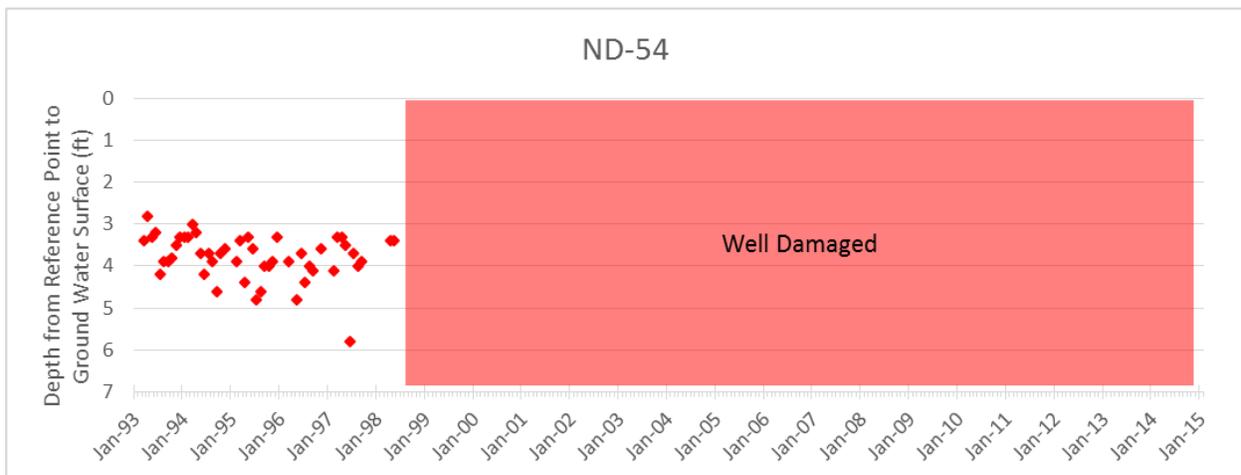
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located. According to the field book, the well was run over in 1998.



No Images



ND-61MA/ MD-61MB

Monitoring Status: Active

Reclamation District: 756

Bouldin Island

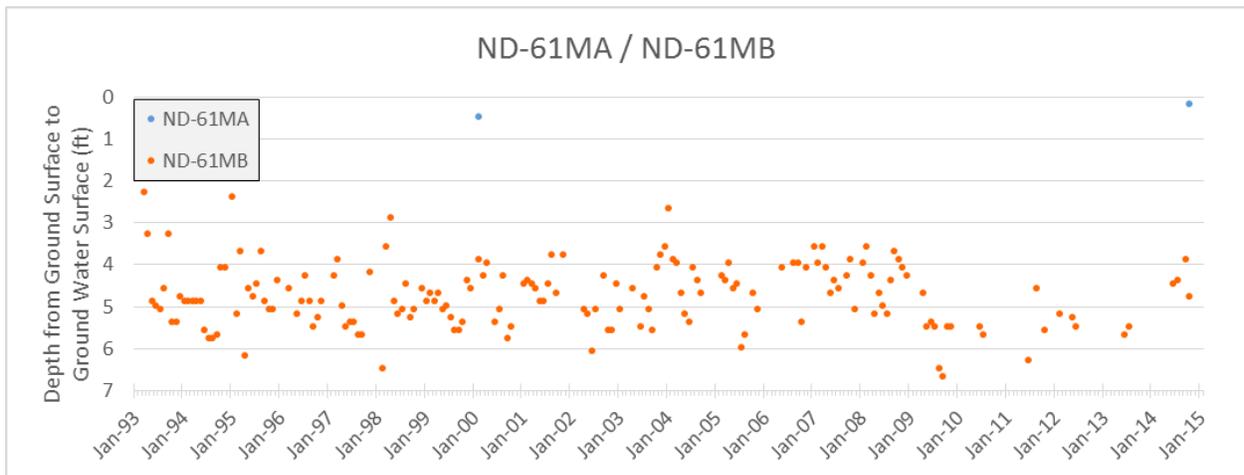
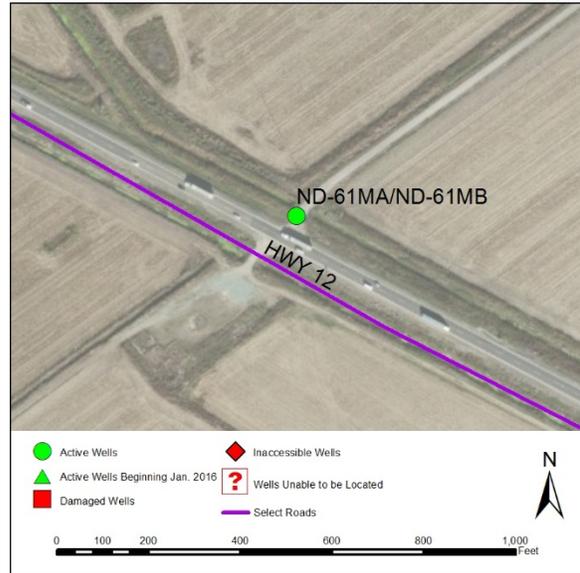
Coordinates: N 38°07'16.1" W 121°34'07.0"

State Well Number: 03N04E08M001M/
03N04E08M002M

Permit Status: Pending

Construction Depth: 20ft / 100ft

Comments: Well located approximately 20ft off of the north side of Highway 12. Significant site maintenance required to keep access open.



ND-65

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 756

Bouldin Island

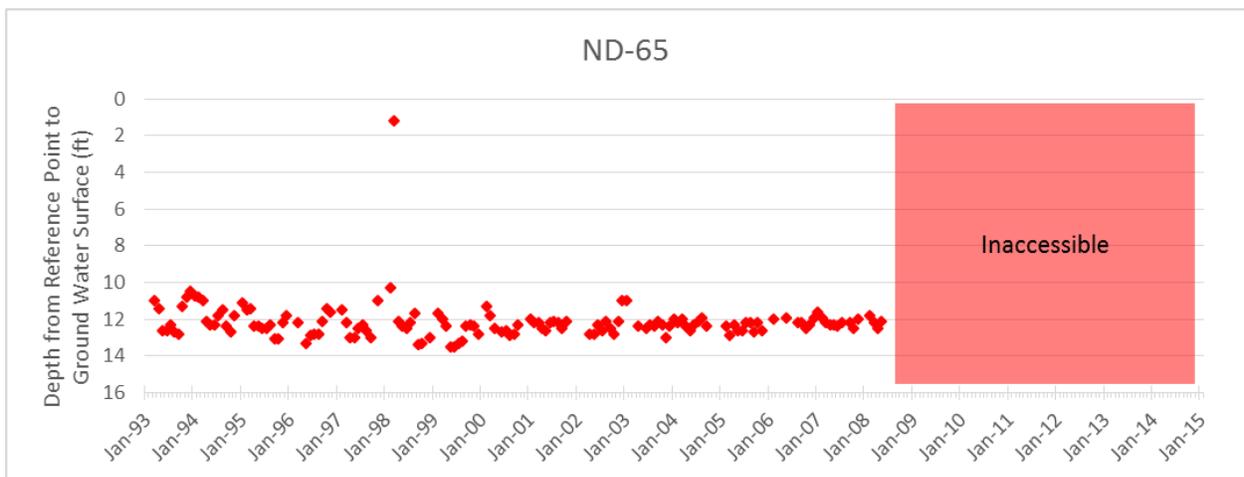
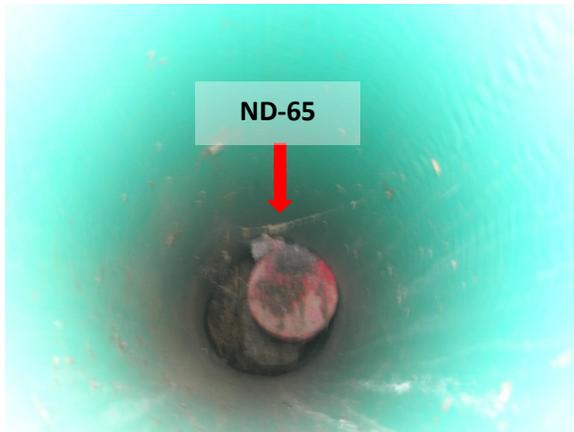
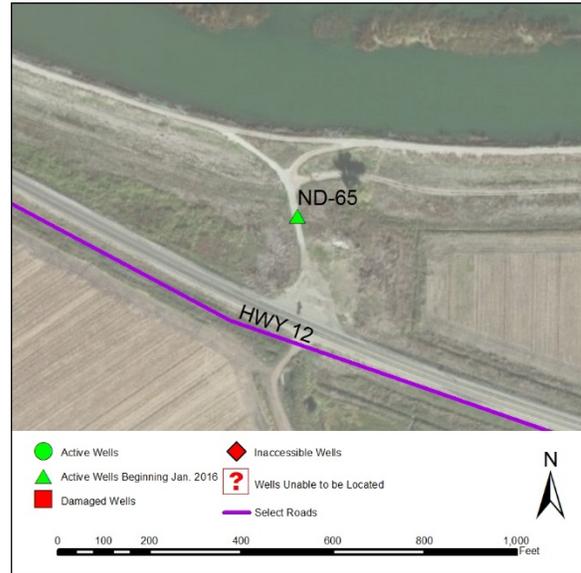
Coordinates: N 38°06'56.1" W 121°33'15.1"

State Well Number: 03N04E17A001M

Permit Status: Pending

Construction Depth: 30ft

Comments: This well will begin being actively monitored in January 2016 when monitoring of the network resumes. An 8ft PVC extension was placed over the well when work was done in the area. The pipe will be cut to provide access to the well.



ND-67

Monitoring Status: Active

Reclamation District: 756

Bouldin Island

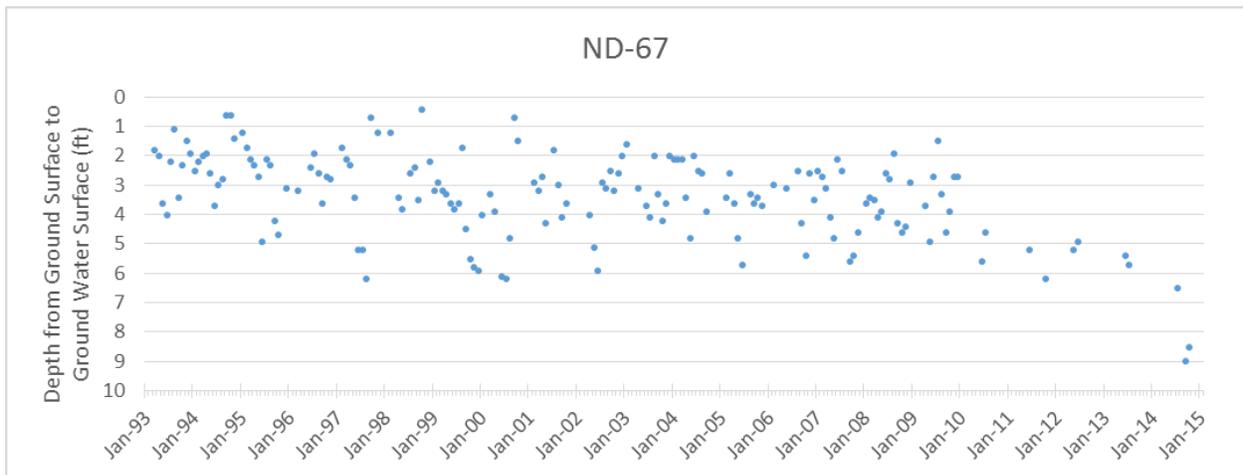
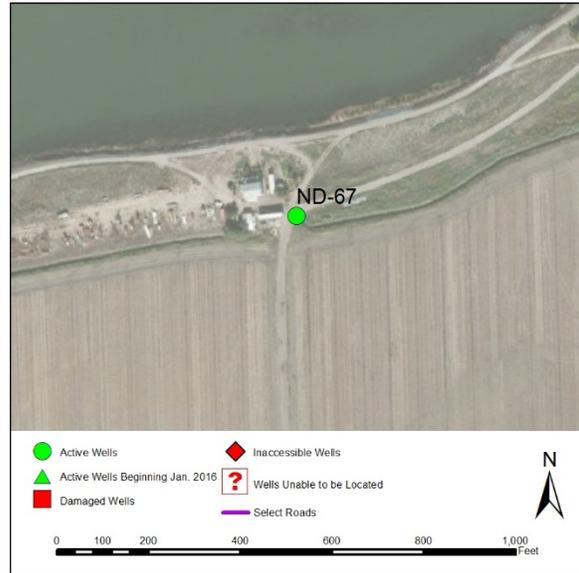
Coordinates: N 38°07'2.9" W 121°32'5.4"

State Well Number: 03N04E10N001M

Permit Status: Pending

Construction Depth: 20ft

Comments: The PVC casing is damaged, but still intact and measurements are able to be obtained.



ND-68MA/ ND-68MB

Monitoring Status: Not Active

Reclamation District: 756

Bouldin Island

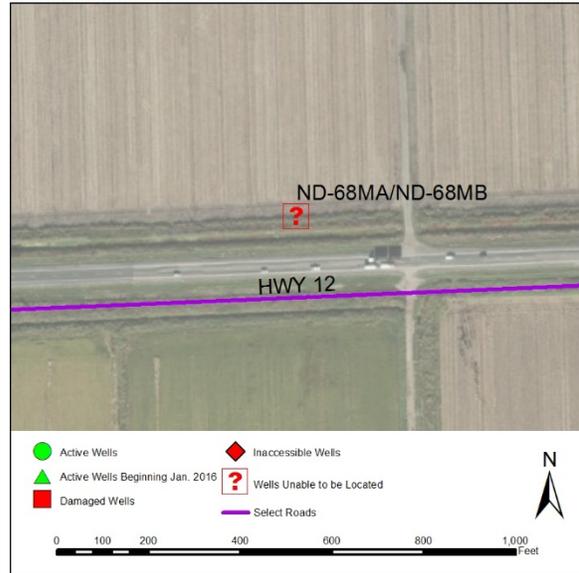
Coordinates: No Coordinates Available

State Well Number: 03N04E16A001M /
03N04E16A002M

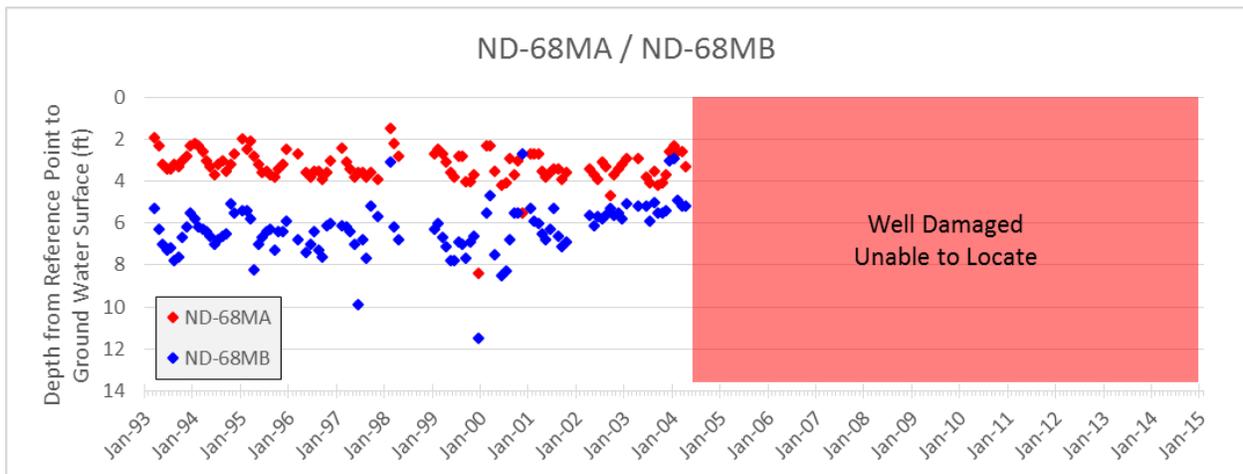
Permit Status: Pending

Construction Depth: 20ft / 100ft

Comments: The well was unable to be located.



No Images



ND-70

Monitoring Status: Not Active

Reclamation District: 756

Bouldin Island

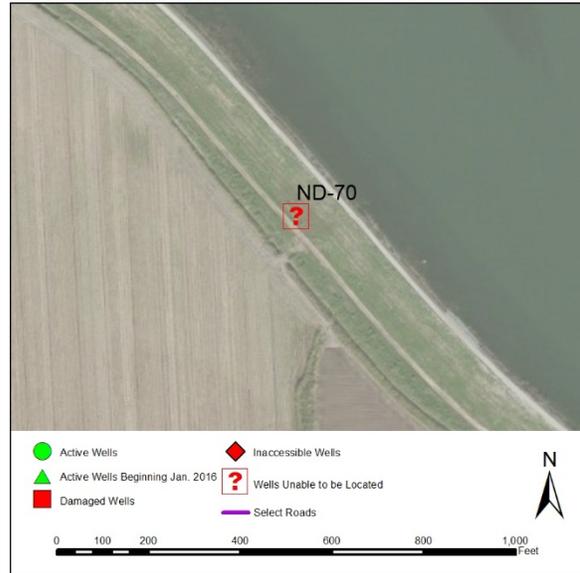
Coordinates: No Coordinates Available

State Well Number: 03N04E11N001M

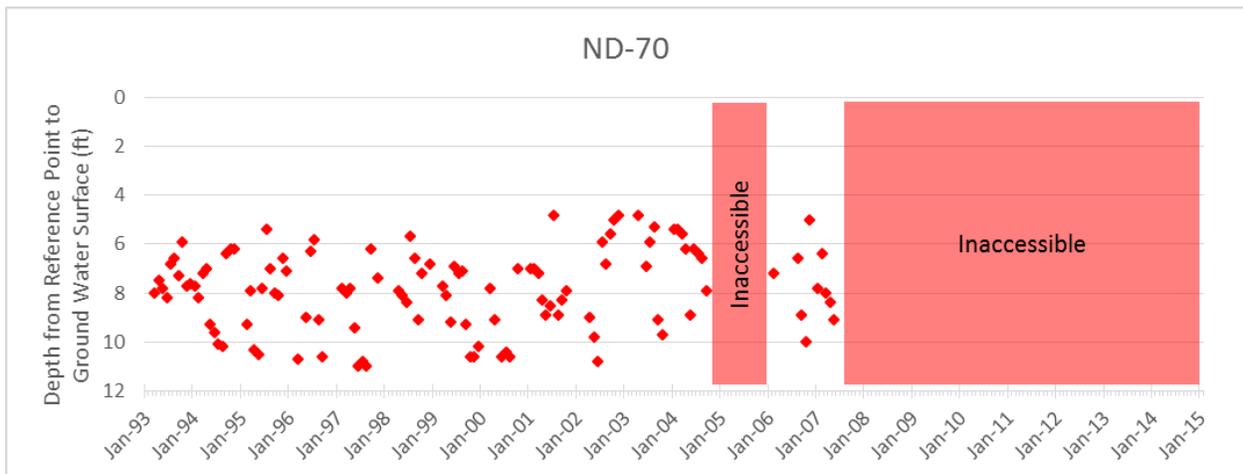
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



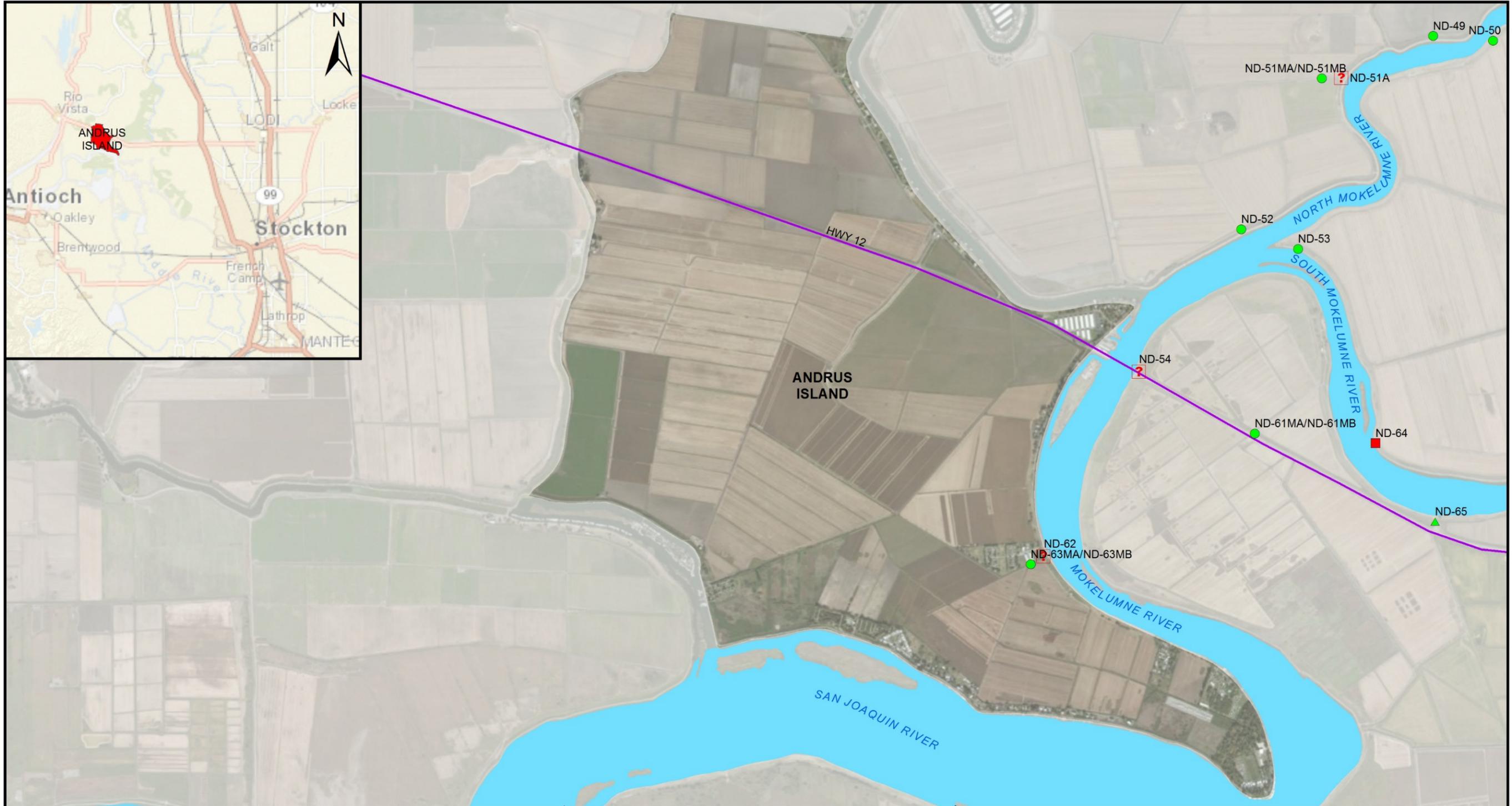
No Images



Andrus Island (RD 317)

ND-62A93

ND-63MA/ ND-63MBA94



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.5 1 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Andrus Island Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

ND-62

Monitoring Status: Not Active

Reclamation District: 317

Andrus Island

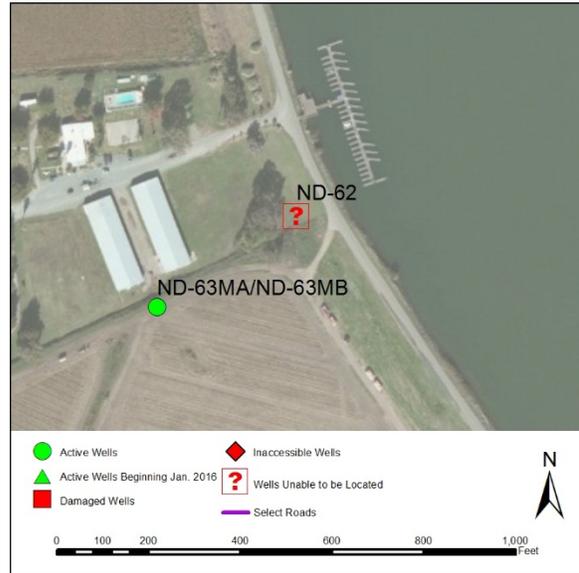
Coordinates: No Coordinates Available

State Well Number: 03N04E12R001M

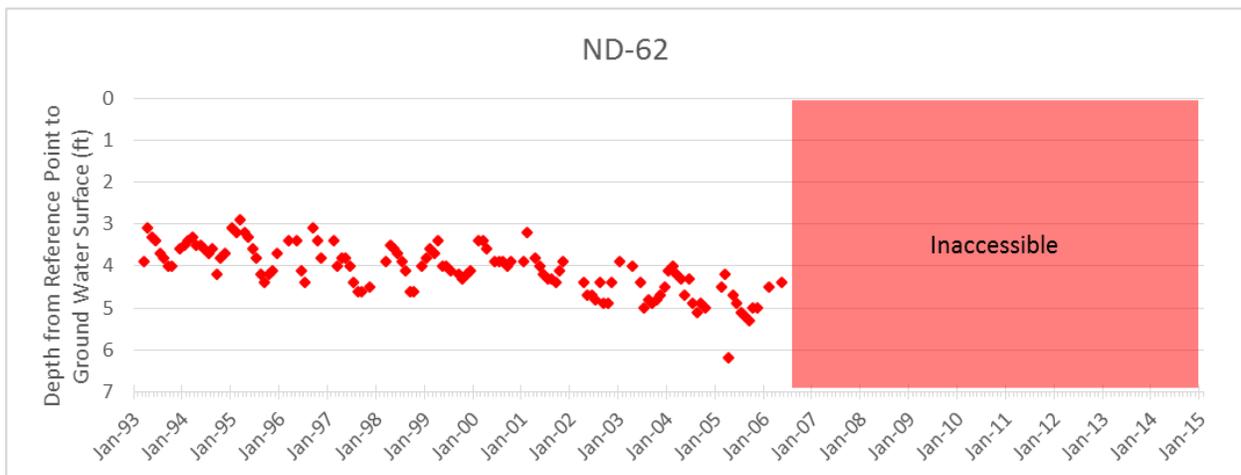
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



ND-63MA/ ND-63MB

Monitoring Status: Active

Reclamation District: 317

Andrus Island

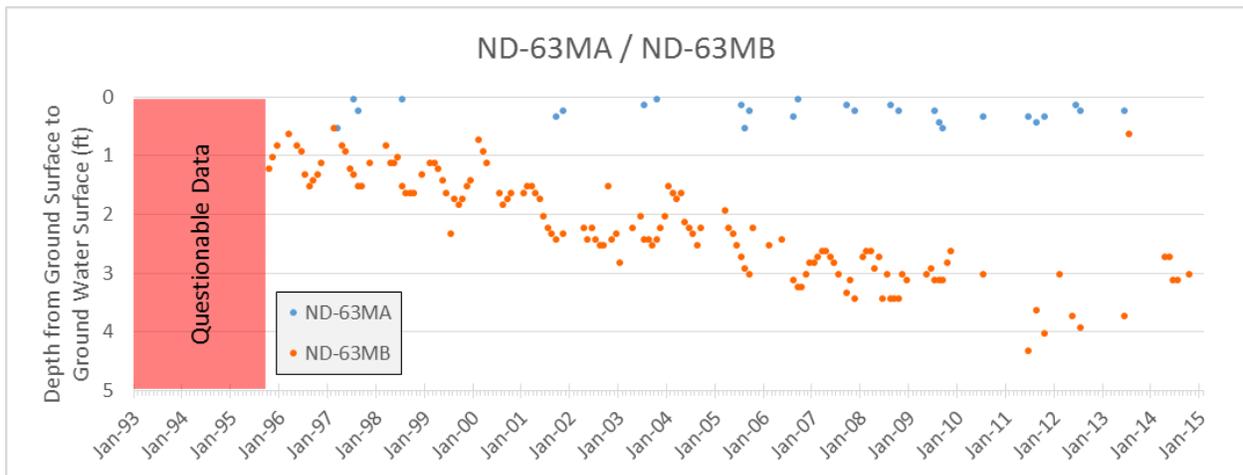
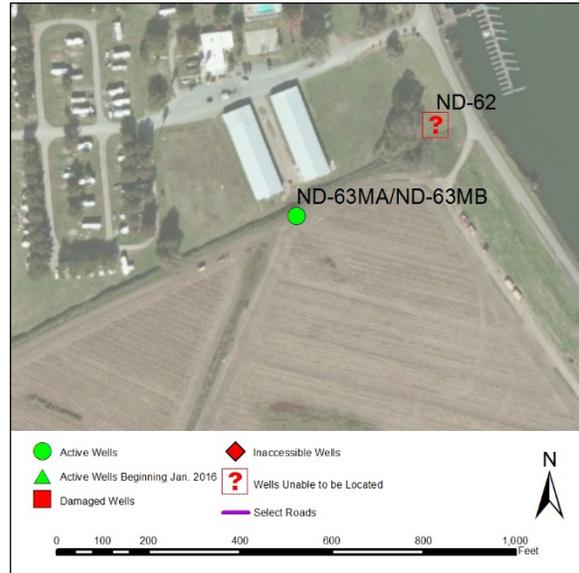
Coordinates: N 38°6'47.4" W 121°35'9.9"

State Well Number: 03N03E12R002M /
03N03E12R003M

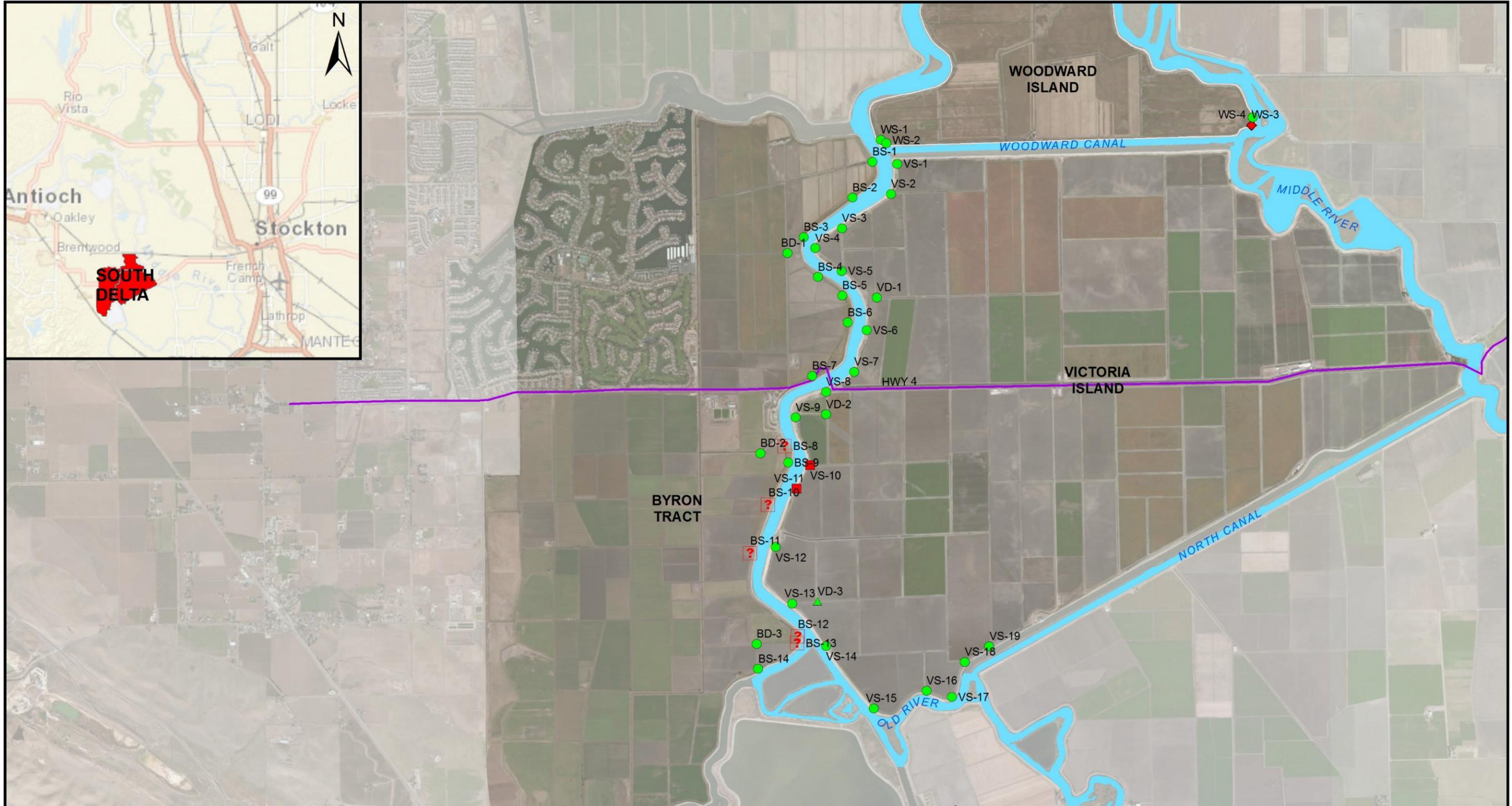
Permit Status: Pending

Construction Depth: 20ft / 100ft

Comments: Well located off access road, in berry bushes, near back the of the boat storage buildings. The well is marked by a reflective post. The site needs constant maintenance to keep access clear.



South Delta



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.75 1.5
 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

South Delta Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

Woodward Island (RD 2072)

WS-1.....A99
WS-2.....A100
WS-3.....A101
WS-4.....A102



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.25 0.5 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Woodward Island Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

WS-1

Monitoring Status: Active

Reclamation District: 2072

Woodward Island

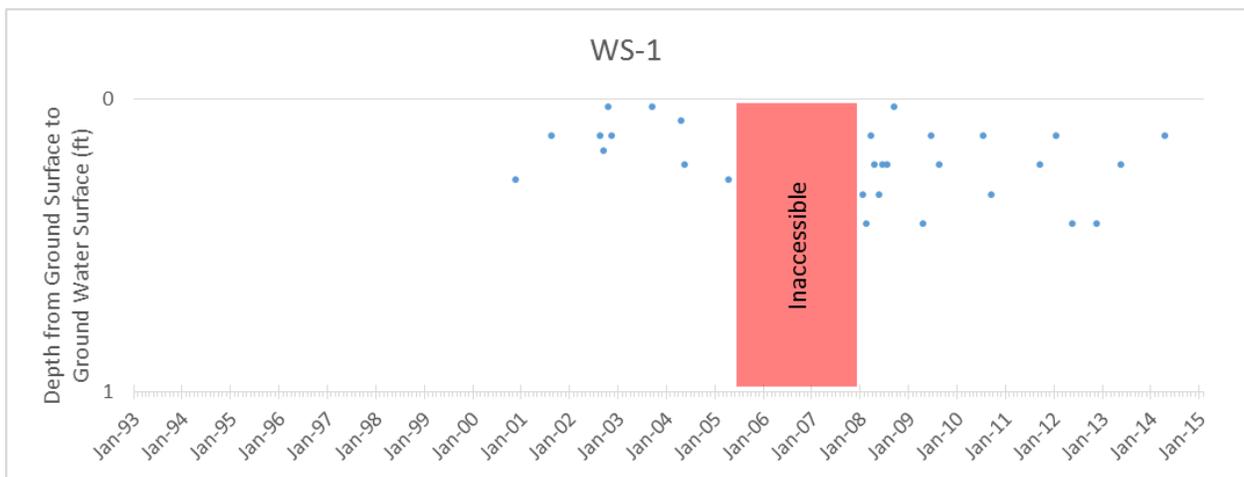
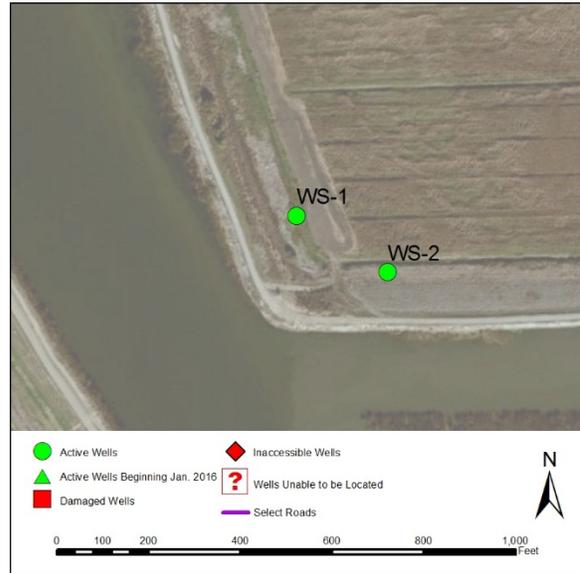
Coordinates: N 37°54'52.8" W 121°33'46.9"

State Well Number: 01N04E20L001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located at the levee toe, near ditch. The well casing is red and approximately 3ft high. Casing has a lid, but it is not locked. Island is accessed by ferry only.



WS-2

Monitoring Status: Active

Reclamation District: 2072

Woodward Island

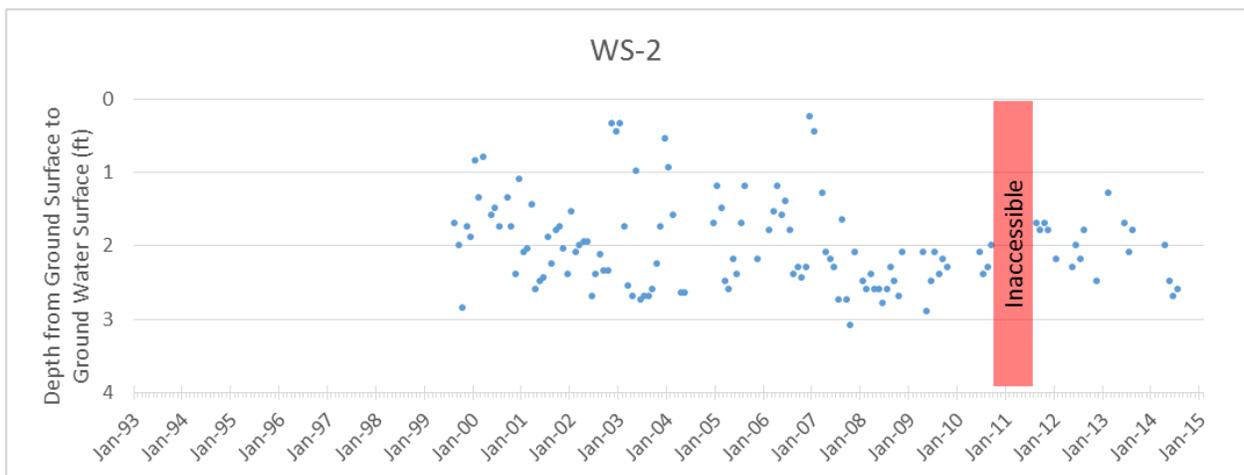
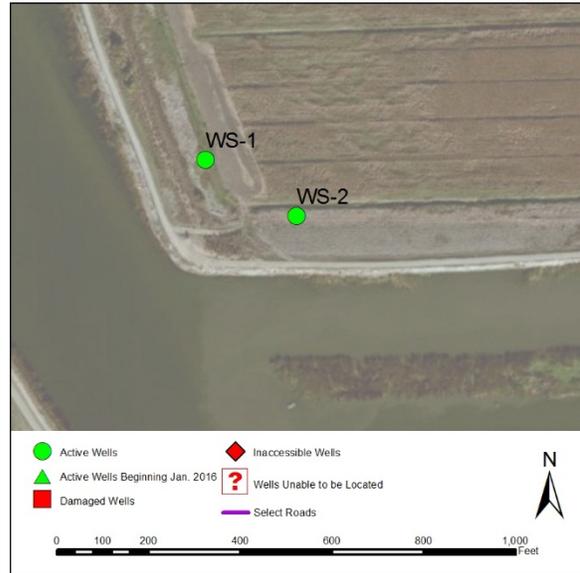
Coordinates: N 37°54'51.7" W 121°33'44.9"

State Well Number: 01N04E20P002M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located on levee toe, on the south side of the ditch, marked with a steel pipe painted red. Casing has a lid, but it is not locked. Island accessed by ferry only.



WS-3

Monitoring Status: Not Active

Reclamation District: 2072

Woodward Island

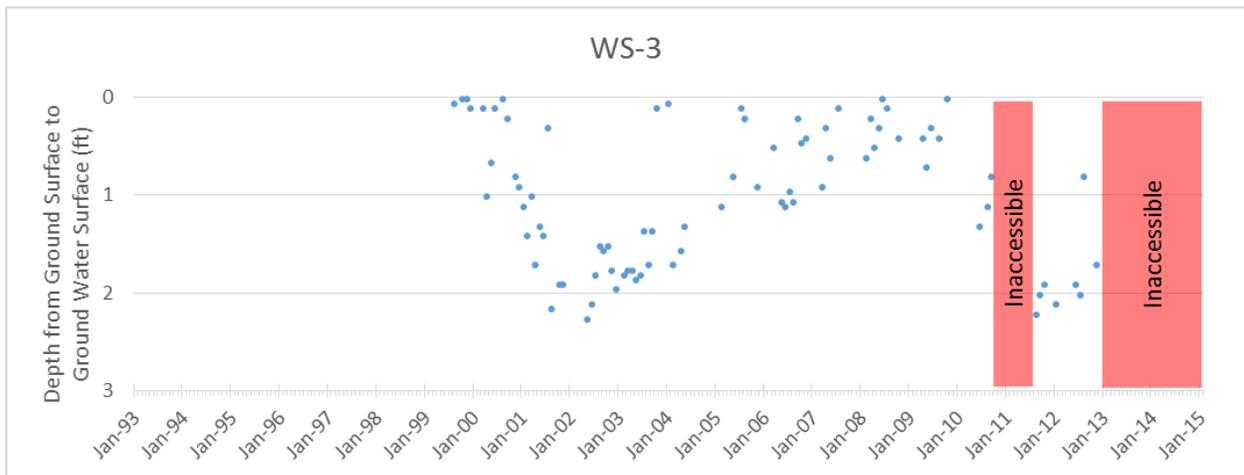
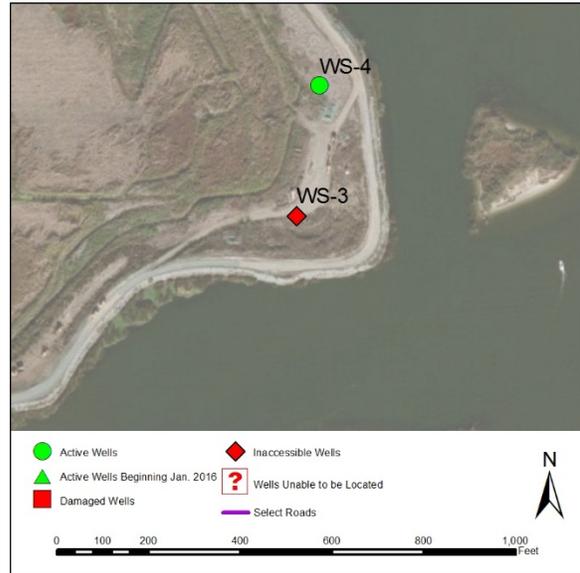
Coordinates: N 37°54'55.7" W 121°31'3.0"

State Well Number: 01N04E22J001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Construction around site resulted in raising the ground level to a point the well could not be monitored. An extension tube was used to protect the well. Casing has a lid, but it is not locked. Island is accessed by ferry only.



WS-4

Monitoring Status: Active

Reclamation District: 2072

Woodward Island

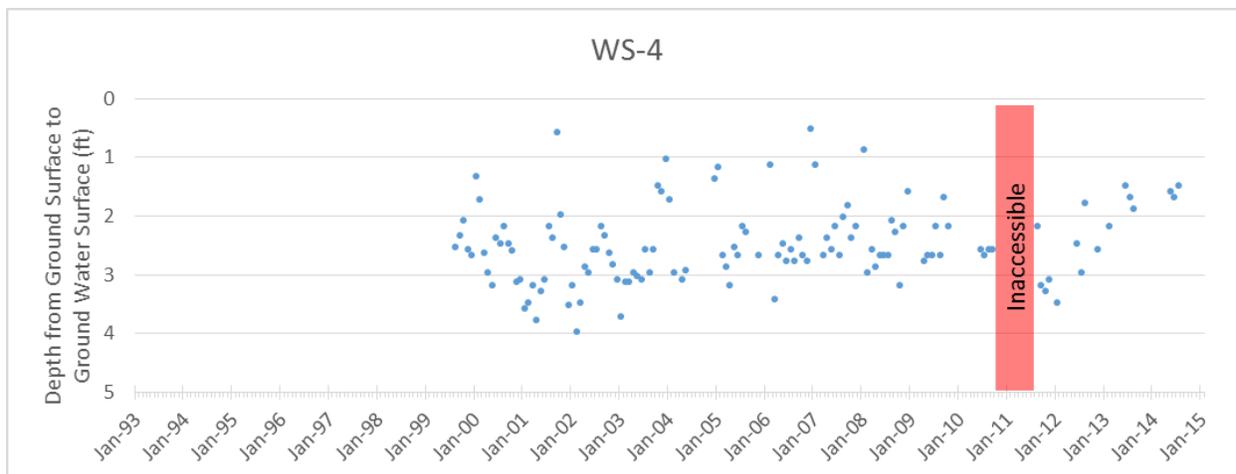
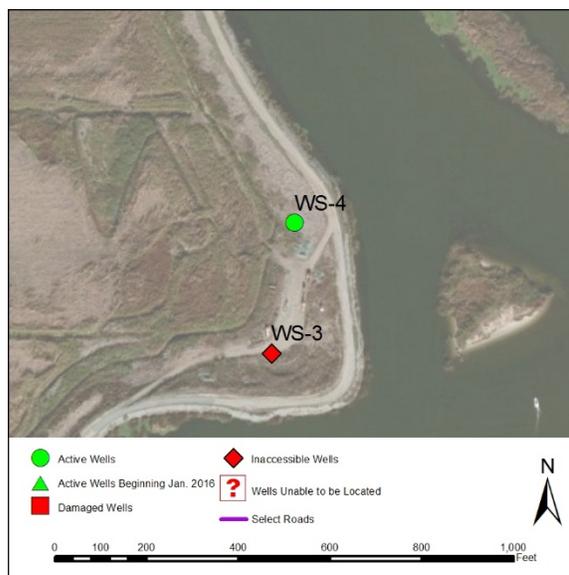
Coordinates: N 37°54'58.4" W 121°30'58.5"

State Well Number: 01N04E22K001M

Permit Status: Pending

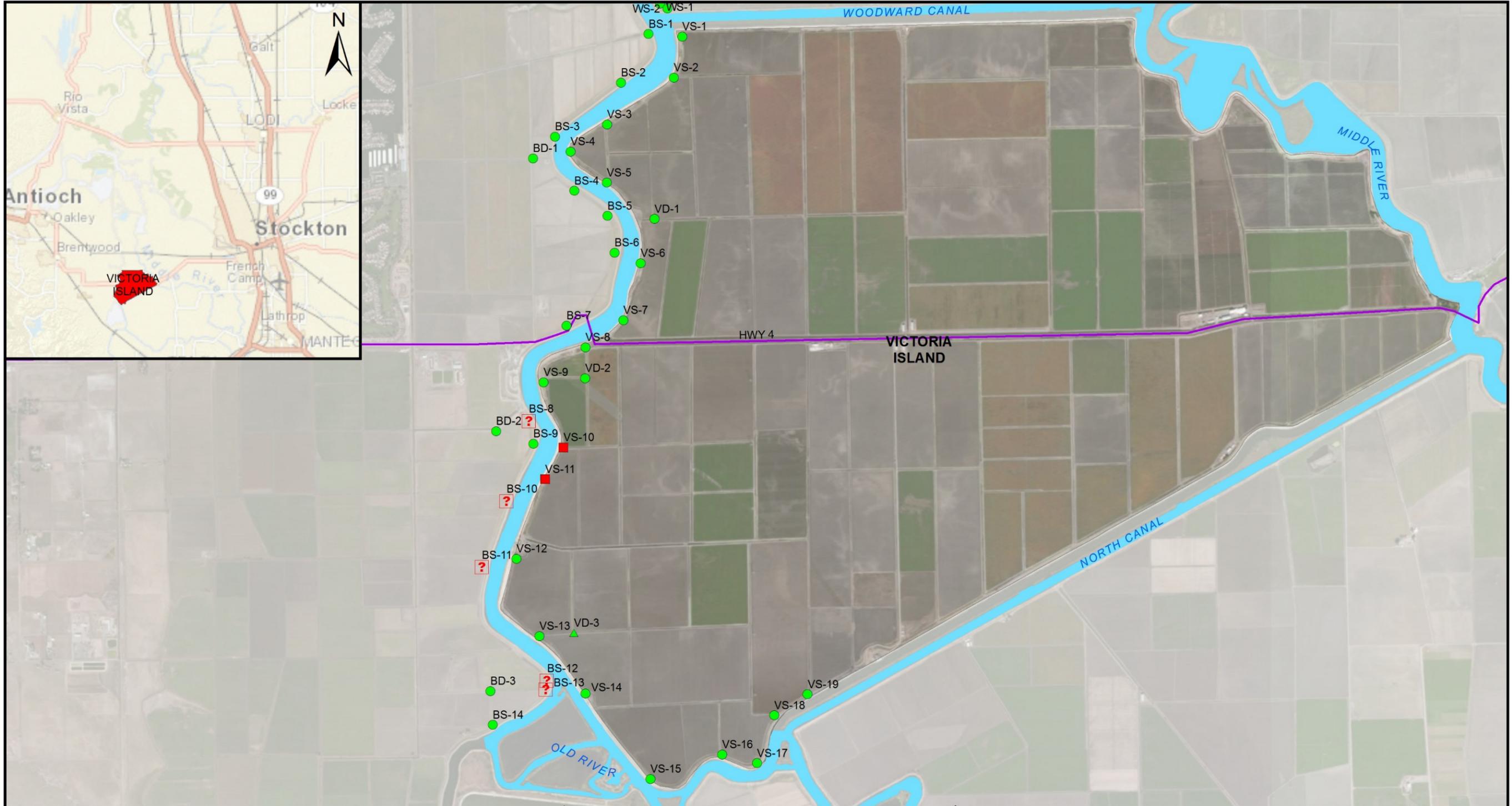
Construction Depth: 20ft

Comments: Well located approximately 40ft from levee toe near abandoned metal debris. Well marked with steel pipe painted red at the top. Casing has a lid, but it is not locked. Island access by ferry only.



Victoria Island (RD 2040)

VS-1	A105
VS-2	A106
VS-3	A107
VS-4	A108
VS-5	A109
VD-1	A110
VS-6	A111
VS-7	A112
VS-8	A113
VD-2	A114
VS-9	A115
VS-10	A116
VS-11	A117
VS-12	A118
VS-13	A119
VD-3	A120
VS-14	A121
VS-15	A122
VS-16	A123
VS-17	A124
VS-18	A125
VS-19	A126



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section

0 0.5 1
 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

**Victoria Island
 Seepage Monitoring Wells**

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ❓ Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

VS-2

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

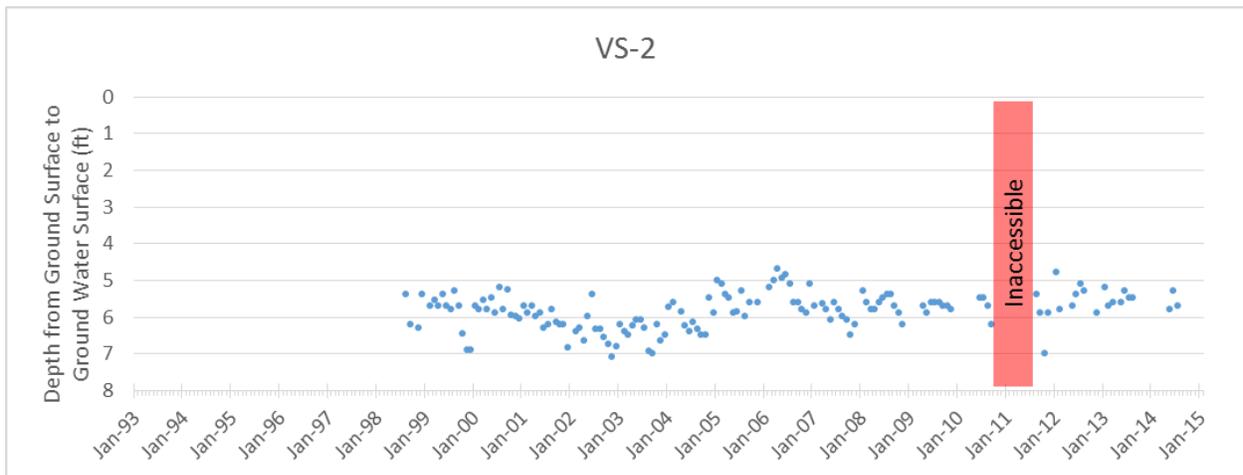
Coordinates: N 37°54'33.5" W 121°33'42.9"

State Well Number: 01N04E29C002M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well midway between levee toe and drainage ditch.



VS-3

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

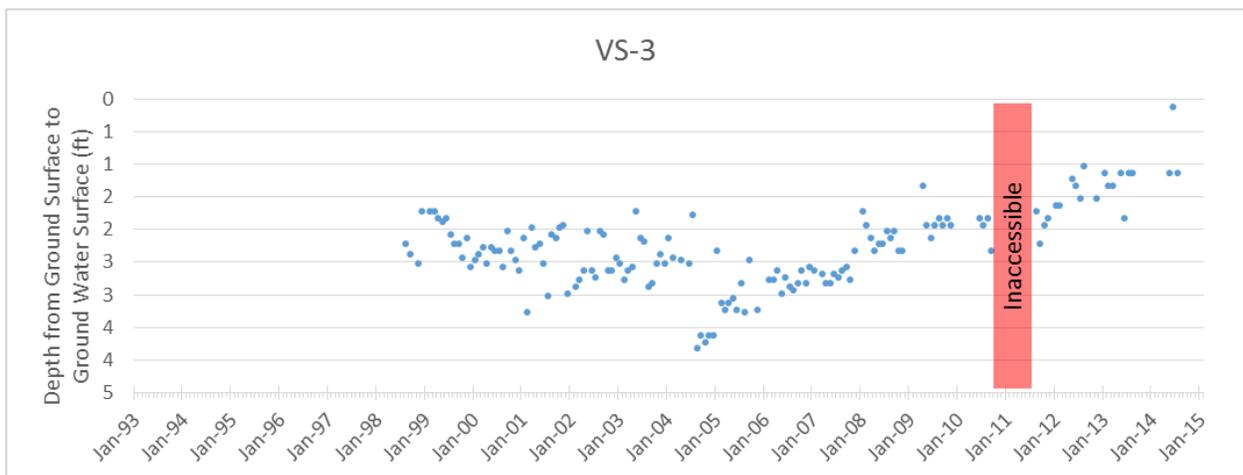
Coordinates: N 37°54'21.4" W 121°34'5.3"

State Well Number: 01N04E29E001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well adjacent to drainage ditch approximately 100ft from levee toe.



VS-4

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

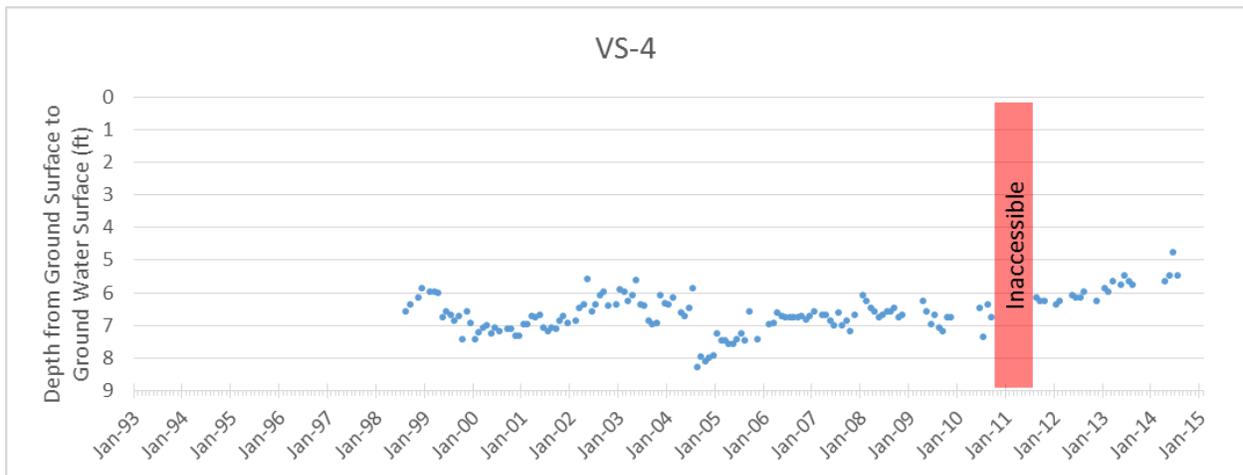
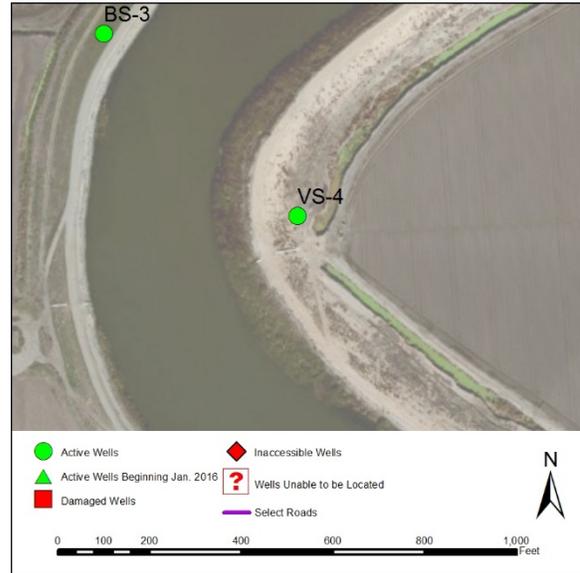
Coordinates: N 37°54'14.6" W 121°34'17.3"

State Well Number: 01N04E30H001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well adjacent to drainage ditch.
When accessing VS-5 from VS-4, take the farm road along the base of the levee.



VS-5

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

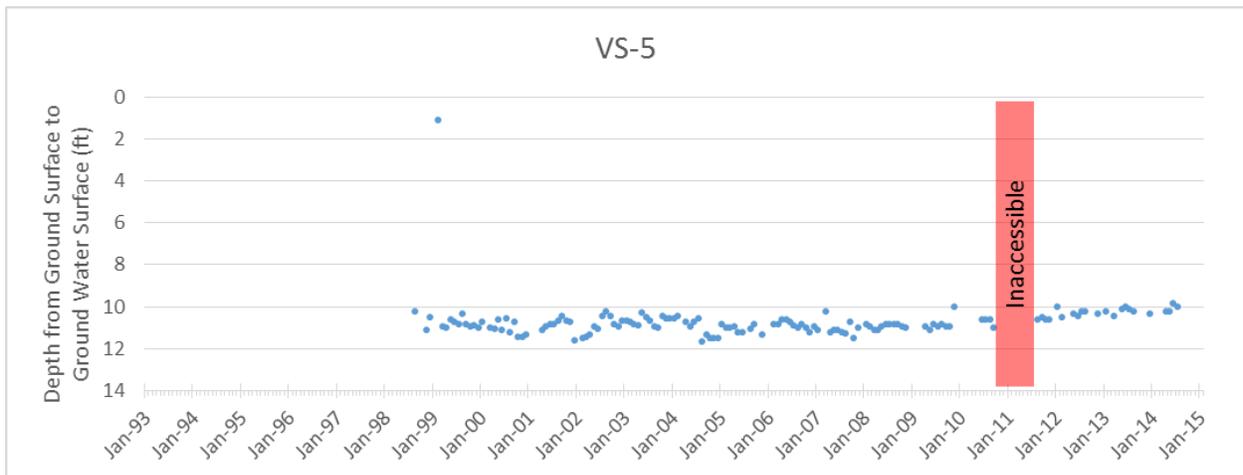
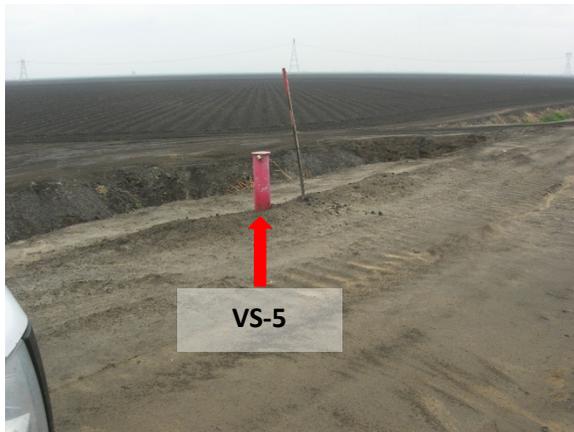
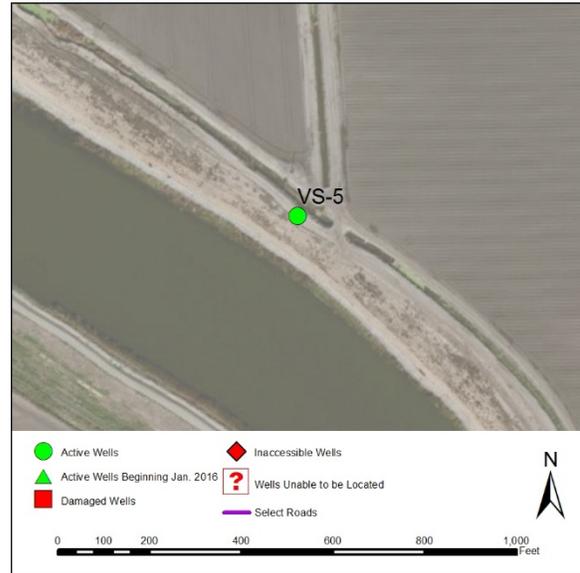
Coordinates: N 37°54'6.3" W 121°34'5.8"

State Well Number: 01N04E30J001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well adjacent to drainage ditch on levee toe, marked with a red t-post. When accessing this well from VS-4 use the farm road at the levee toe.



VD-1

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

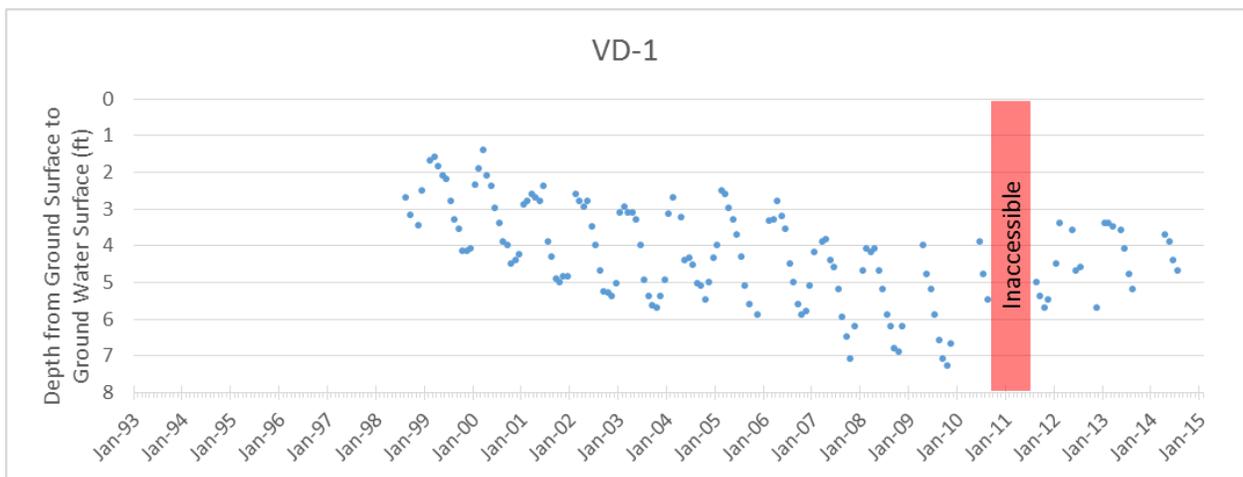
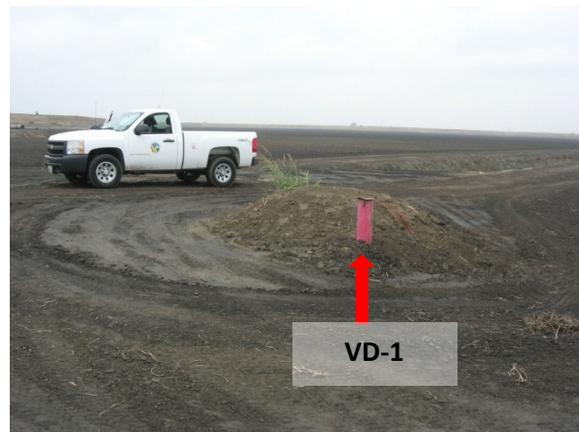
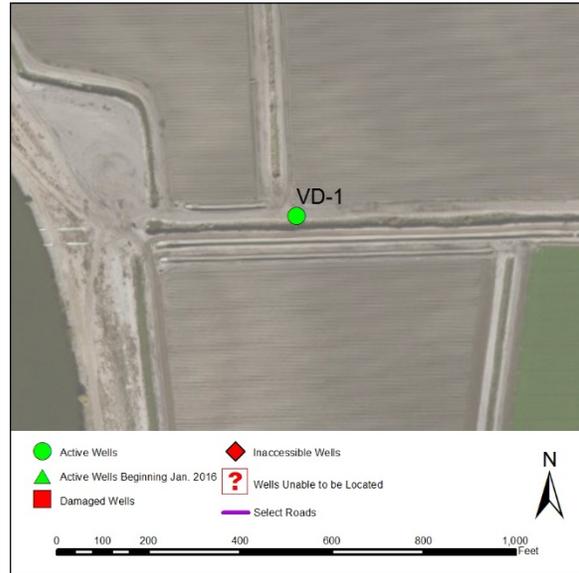
Coordinates: N 37°54'45.0" W 121°33'51.6"

State Well Number: 01N04E29P001M

Permit Status: Pending

Construction Depth: 100ft

Comments: Follow the access road and the well is approximately 300ft from the levee, on the north side of the ditch.



VS-6

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

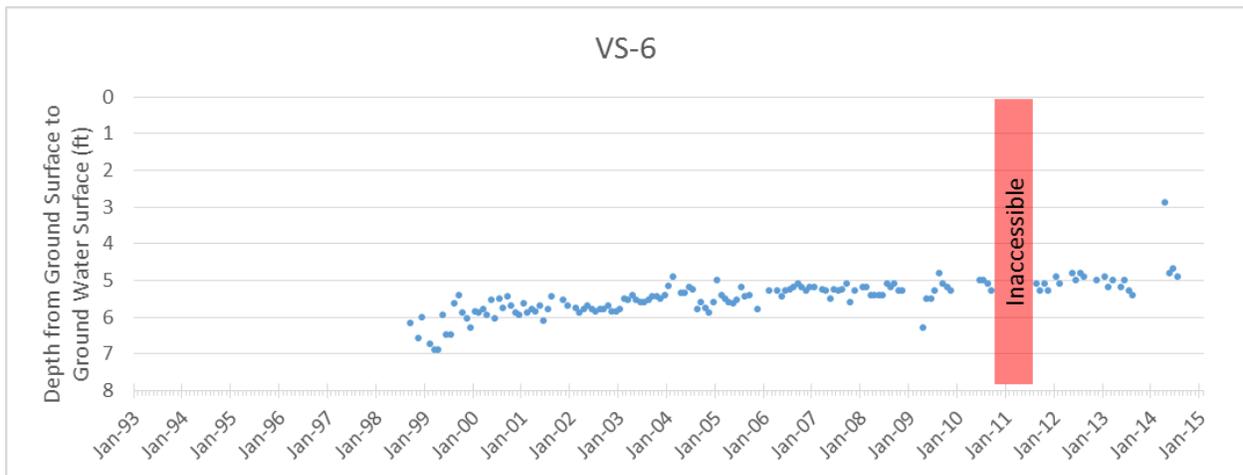
Coordinates: N 37°53'44.3" W 121°33'54.3"

State Well Number: 01N04E32D002M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located on levee toe, marked by a red t-post.



VS-7

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

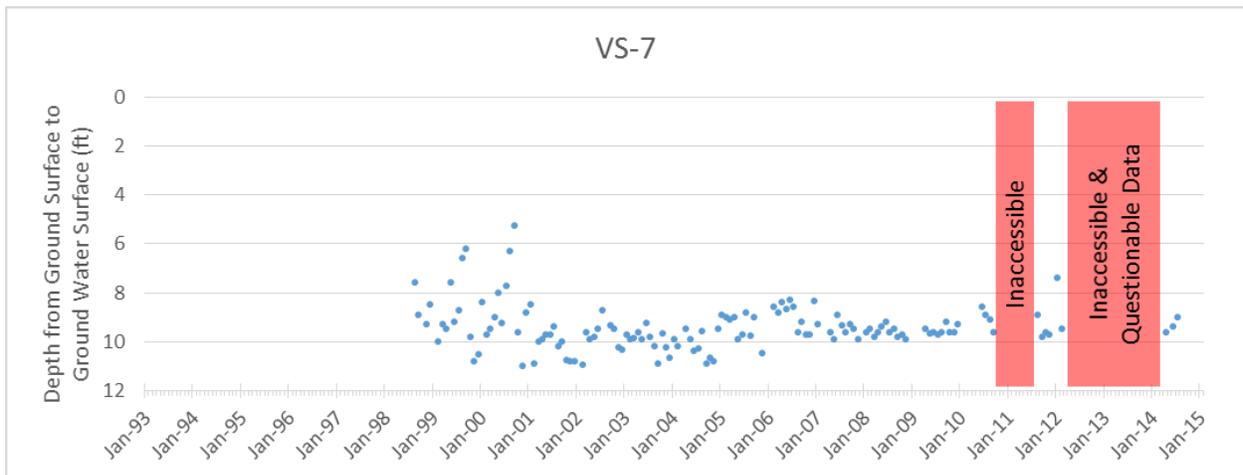
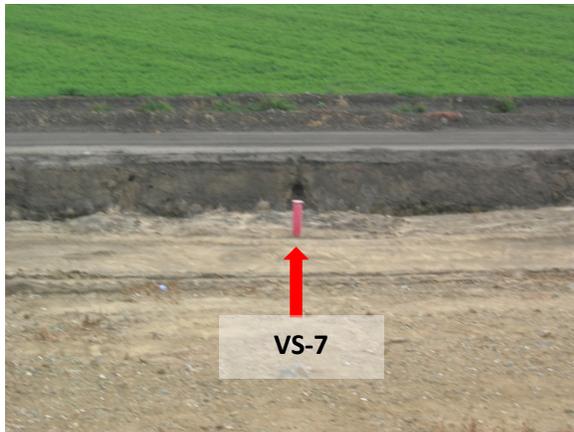
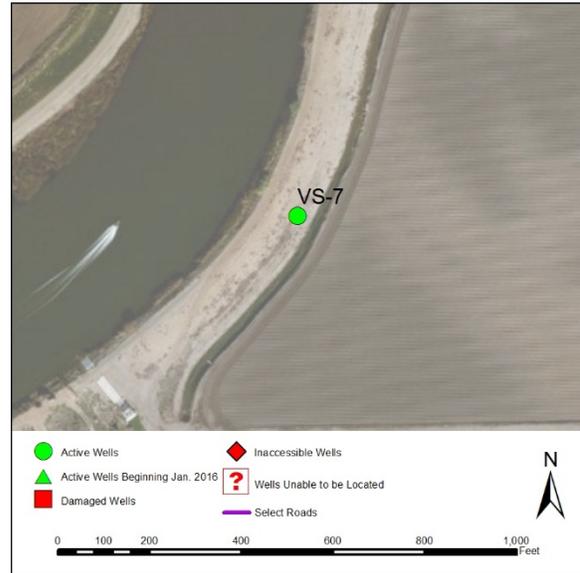
Coordinates: N 37°53'29.8" W 121°34'0.8"

State Well Number: 01N04E32E001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is on the levee side of the ditch, approximately 50ft from the ditch.



VS-8

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

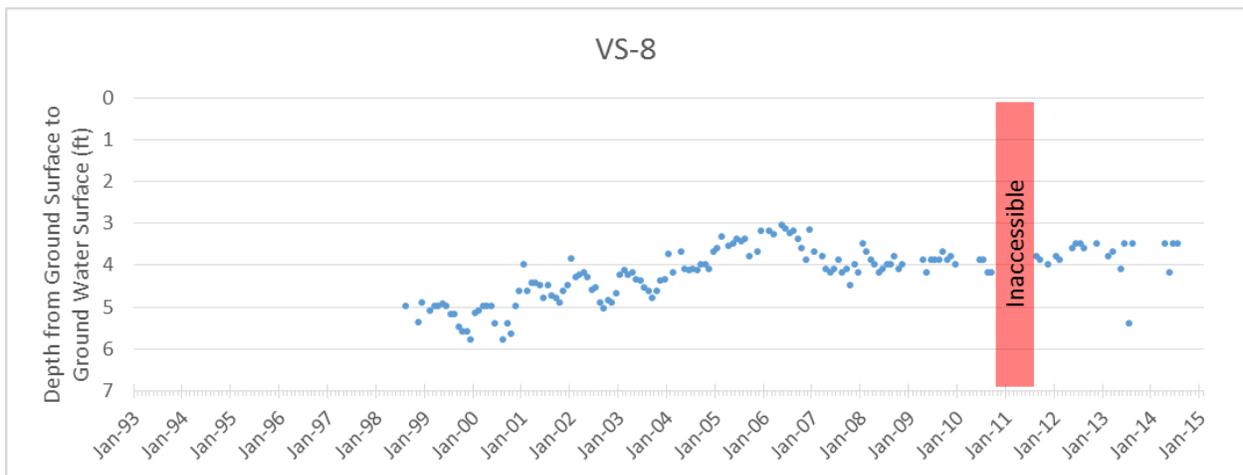
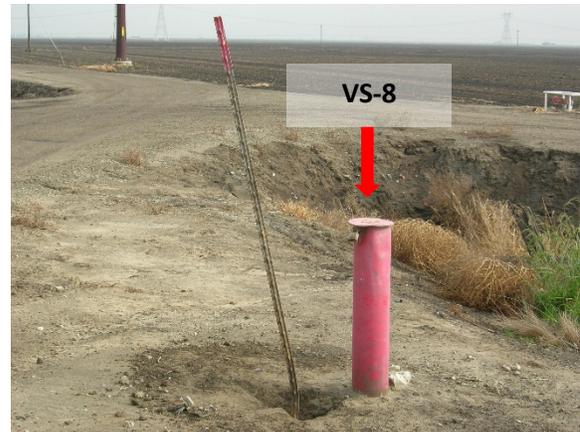
Coordinates: N 37°53'22.4" W 121°34'14.0"

State Well Number: 01N04E31H002M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well is located on the levee toe, 50ft from the gate.



VD-2

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

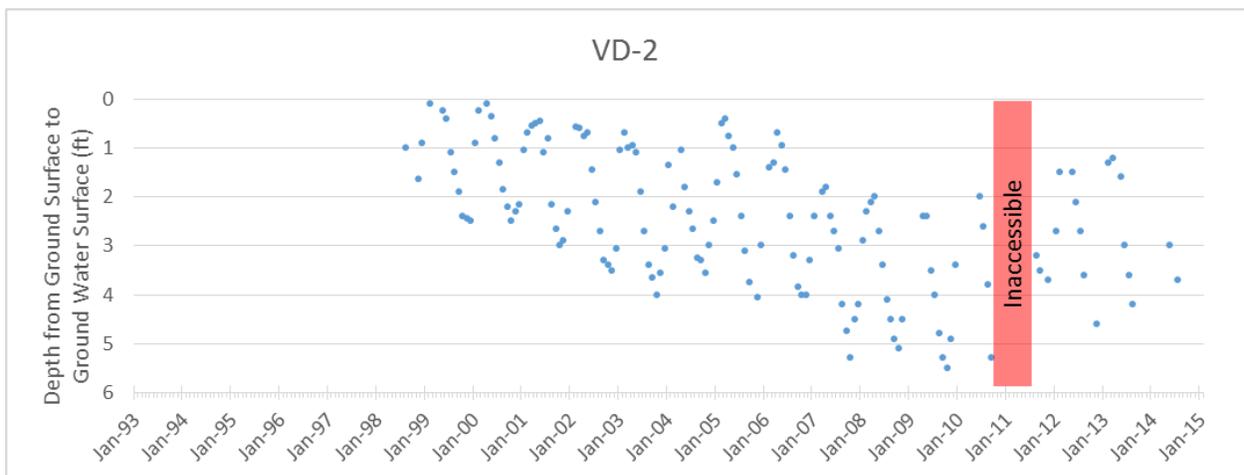
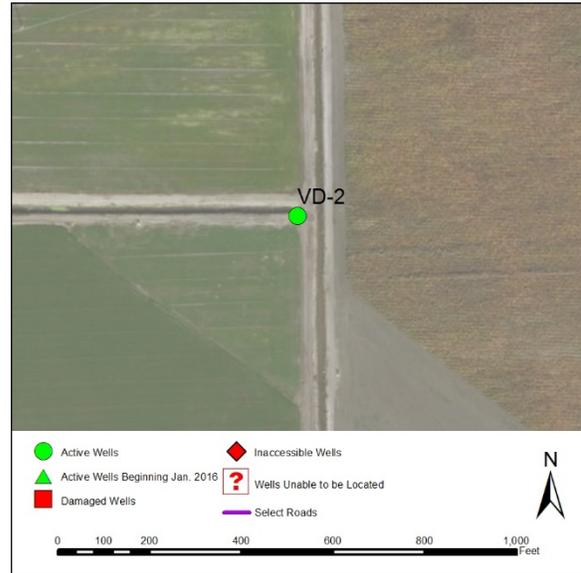
Coordinates: N 37°53'14.8" W 121°34'13.7"

State Well Number: 01N04E31J001M

Permit Status: Pending

Construction Depth: 100ft

Comments: From VS-8 take the road on the west side of the drainage ditch, approximately 800ft. Well locate at intersection of two farm roads.



VS-9

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

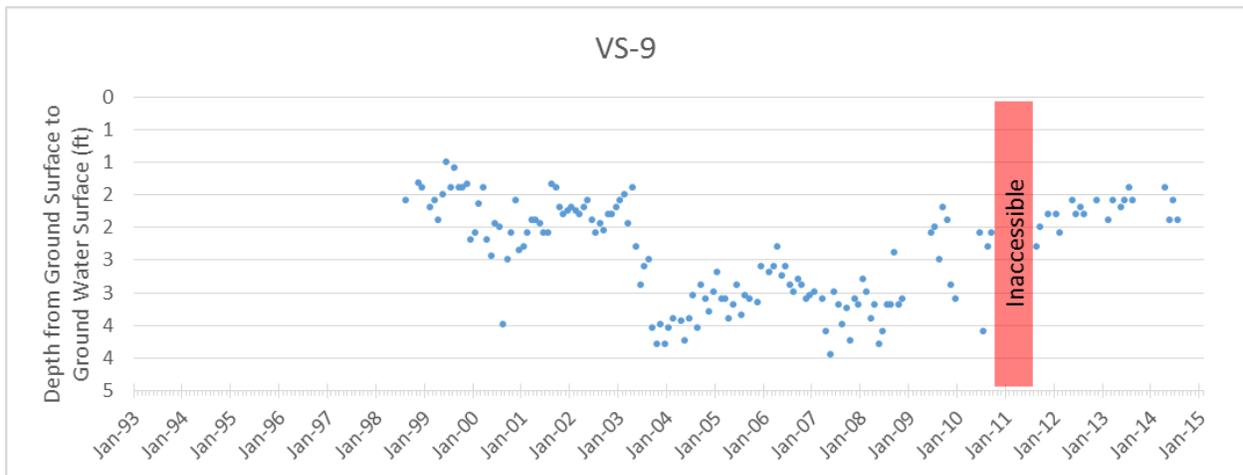
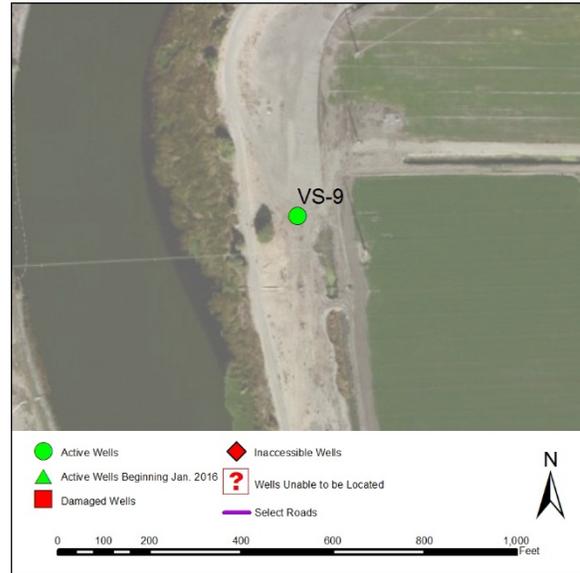
Coordinates: N 37°53'13.9" W 121°34'27.9"

State Well Number: 01N04E31K001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is approximately 300ft down the levee access ramp (from the top of the levee).



VS-10

Monitoring Status: Not Active

Reclamation District: 2040

Victoria Island

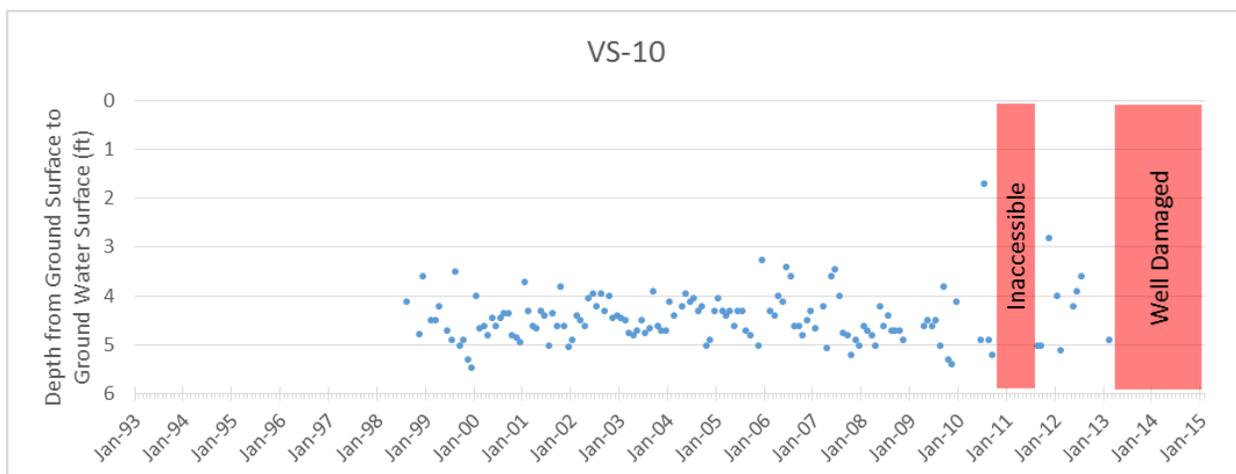
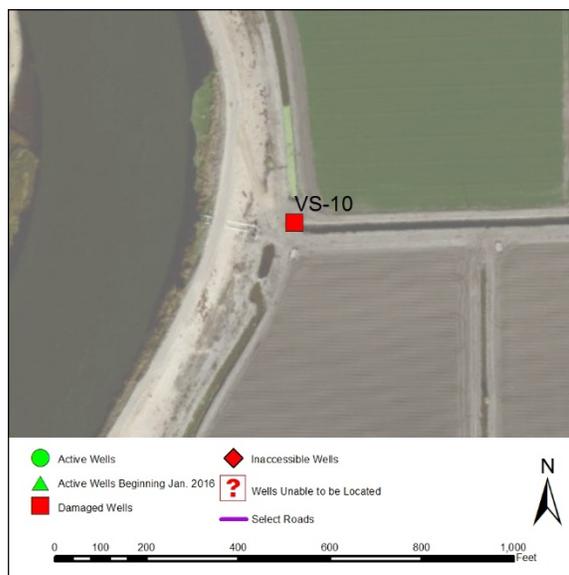
Coordinates: N 37°52'56.8" W 121°34'21.8"

State Well Number: 01N04E31R001M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well has been damaged, and has an obstruction in the casing. Well located at the base of the access ramp, near power/phone pole.



VS-11

Monitoring Status: Not Active

Reclamation District: 2040

Victoria Island

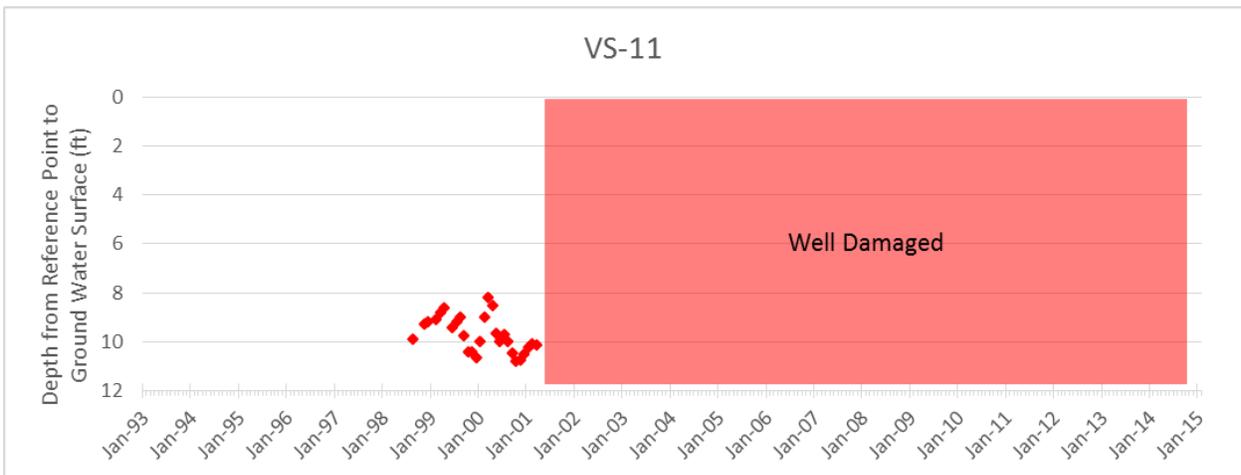
Coordinates: N 37°52'47.5" W 121°34'28.1"

State Well Number: 01S04E06B001M

Permit Status: Current

Construction Depth: 20ft

Comments: The well has been damaged.



VS-12

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

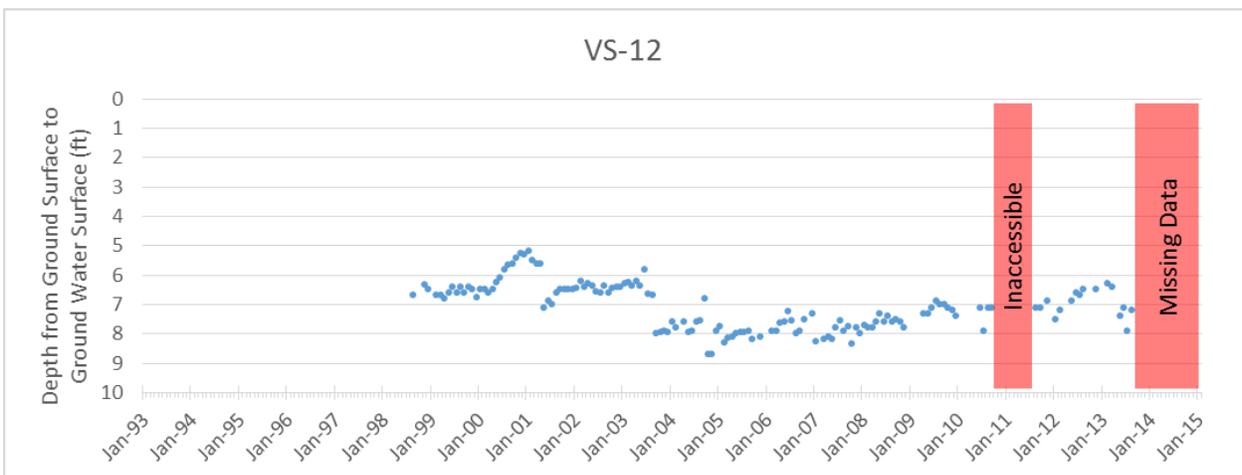
Coordinates: N 37°52'27.7" W 121°34'38.4"

State Well Number: 01S04E06L002M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well is located in the bend of the ditch on the south/ east side of the ditch; and marked by a single red t-post.



VS-13

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

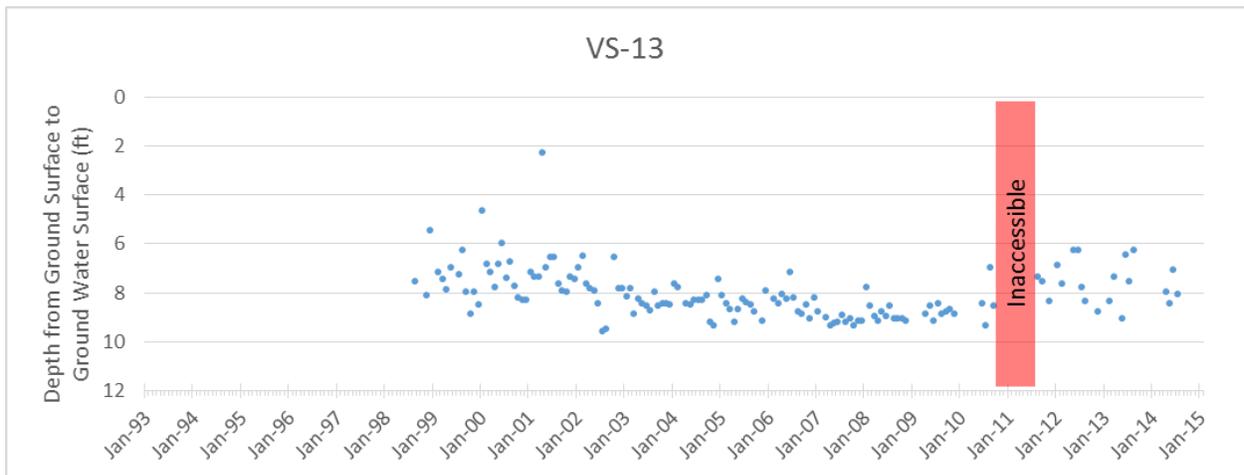
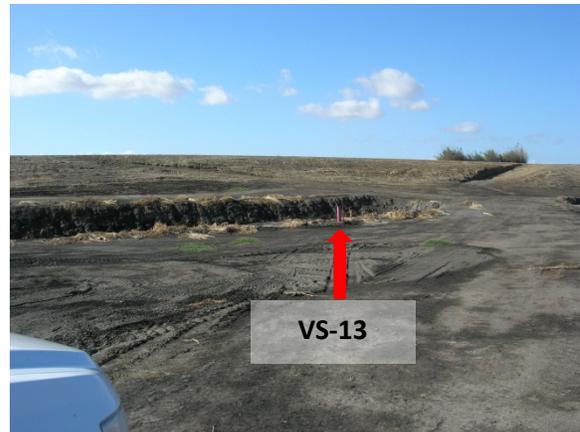
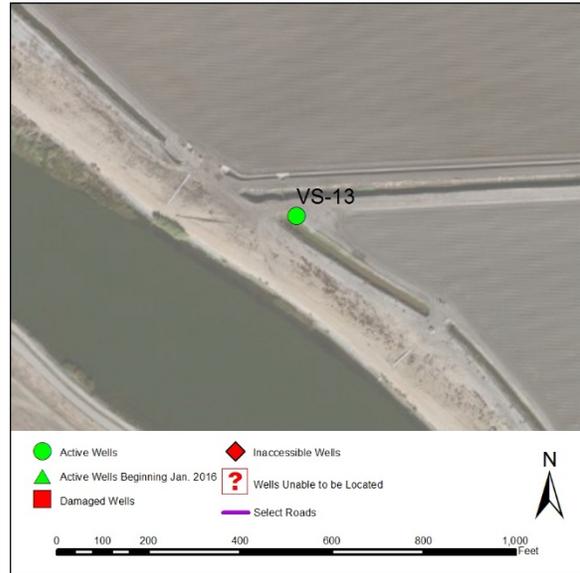
Coordinates: N 37°52'7.2" W 121°34'30.4"

State Well Number: 01S04E06Q001M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well is located at the northern tip of the ditch following the levee toe.



VD-3

Monitoring Status: Not Active (Active 1/2016)

Reclamation District: 2040

Victoria Island

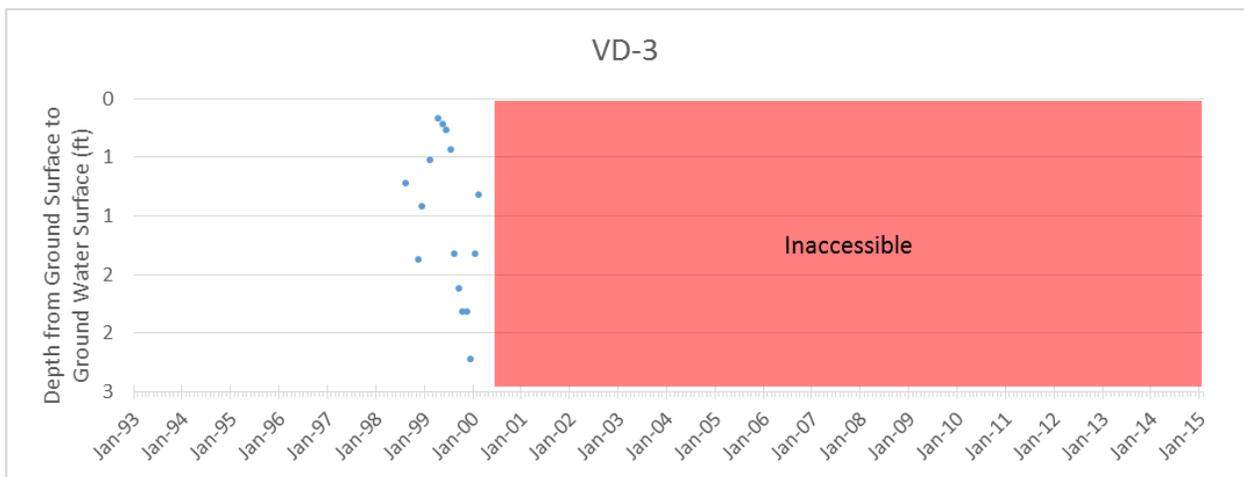
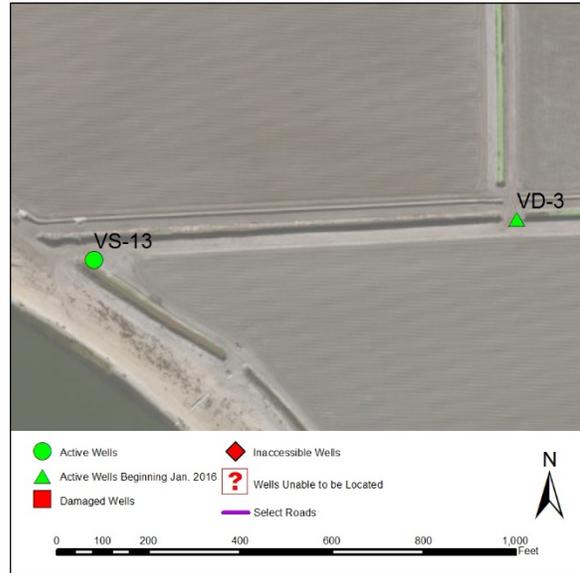
Coordinates: N 37°52'8.1" W 121°34'19.1"

State Well Number: 01S04E06R001M

Permit Status: Pending

Construction Depth: 100ft

Comments: Well located at the intersection of two farm roads, below grade. The well has been buried and has no data. Look at abandoning the well.



VS-14

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

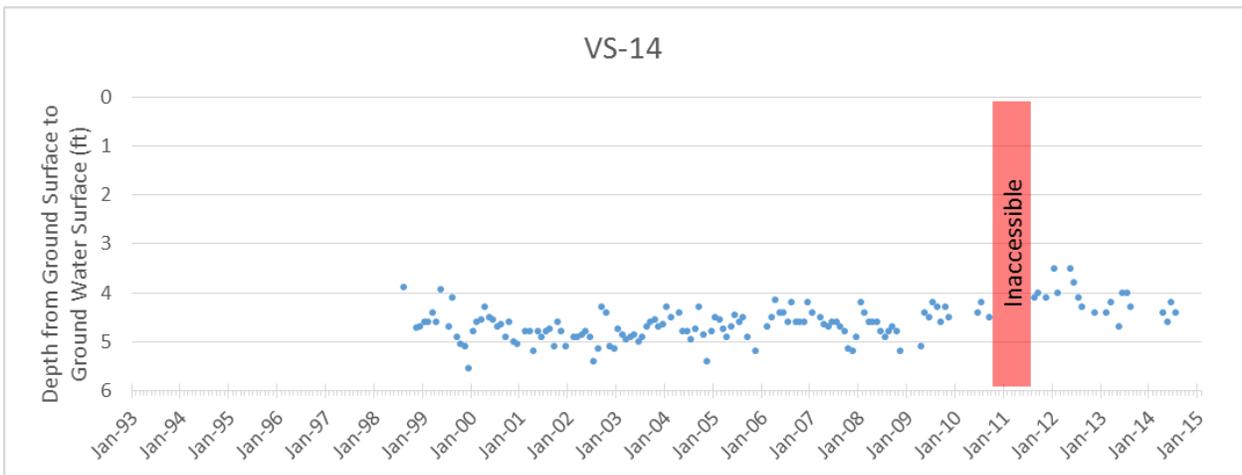
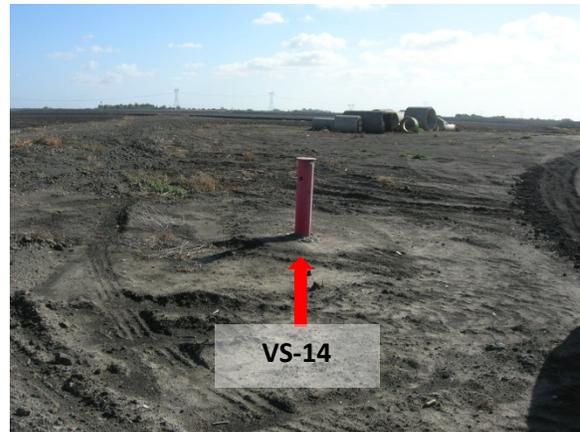
Coordinates: N 37°51'52.1" W 121°34'15.4"

State Well Number: 01S04E07A001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located between access road and ditch, sitting in the open, approximately 50ft from a tree near access ramp.



VS-15

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

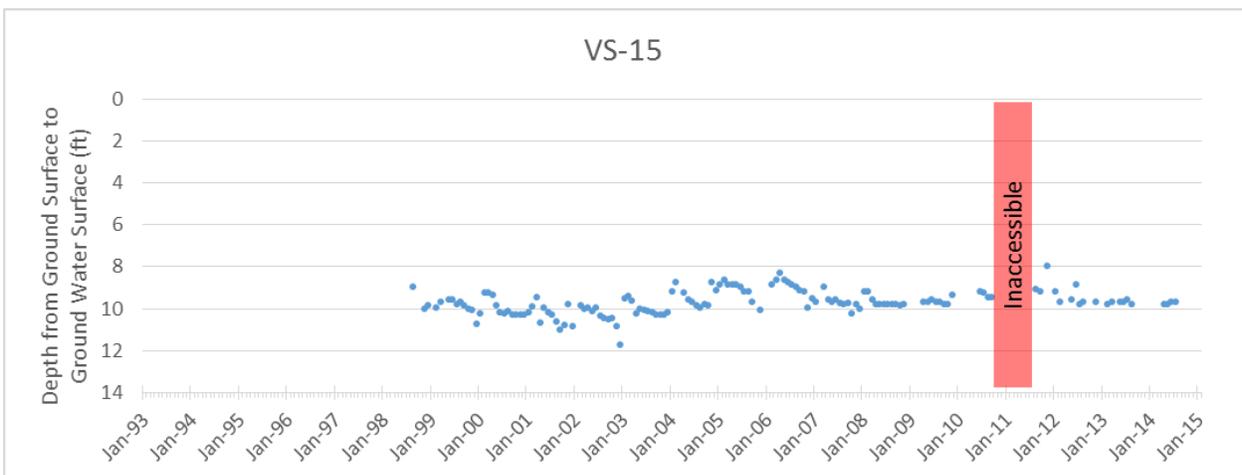
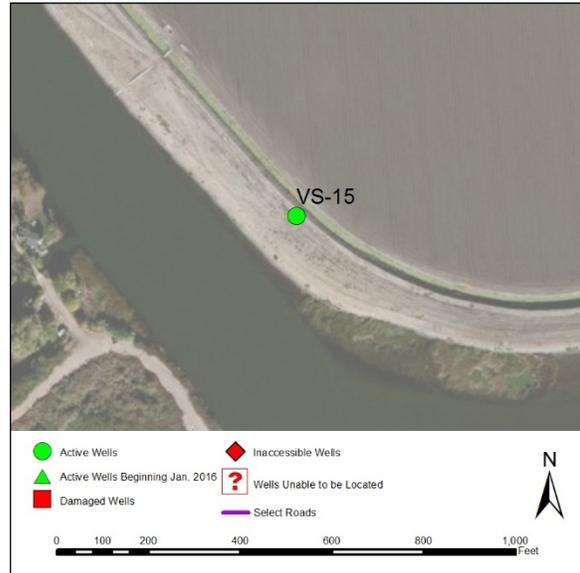
Coordinates: N 37°51'29.3" W 121°33'54.6"

State Well Number: 01S04E08M001M

Permit Status: Current

Construction Depth: 20ft

Comments: From VS-15 to VS-17 use the farm road on the levee toe. Well located at the start of the bend in the road when headed south.



VS-16

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

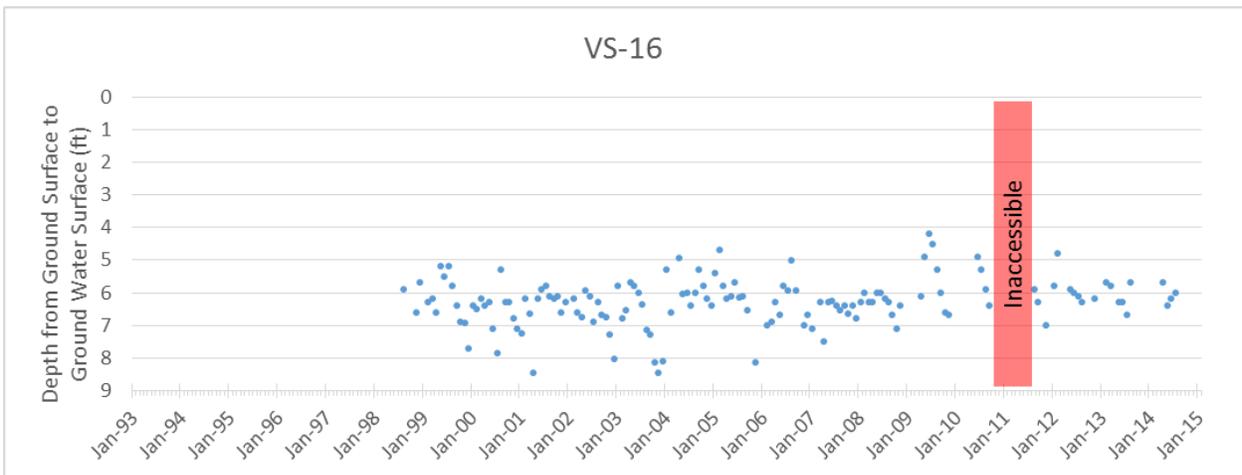
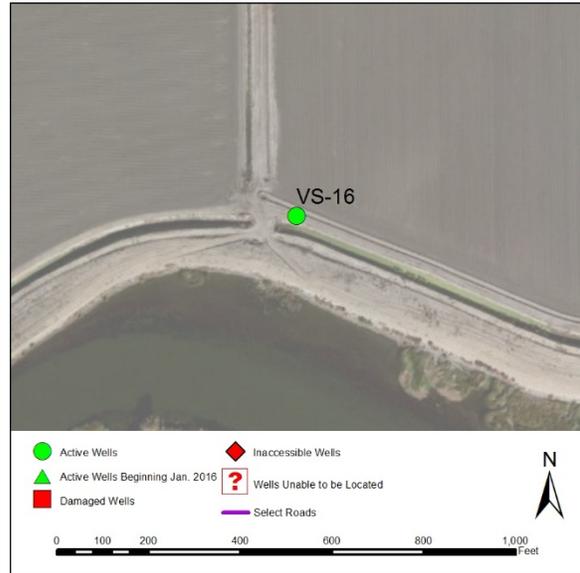
Coordinates: N 37°51'35.3" W 121°33'30.7"

State Well Number: 01S04E08L001M

Permit Status: Current

Construction Depth: 20ft

Comments: Well located on the east side of the access ramp at the head of the ditch.



VS-17

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

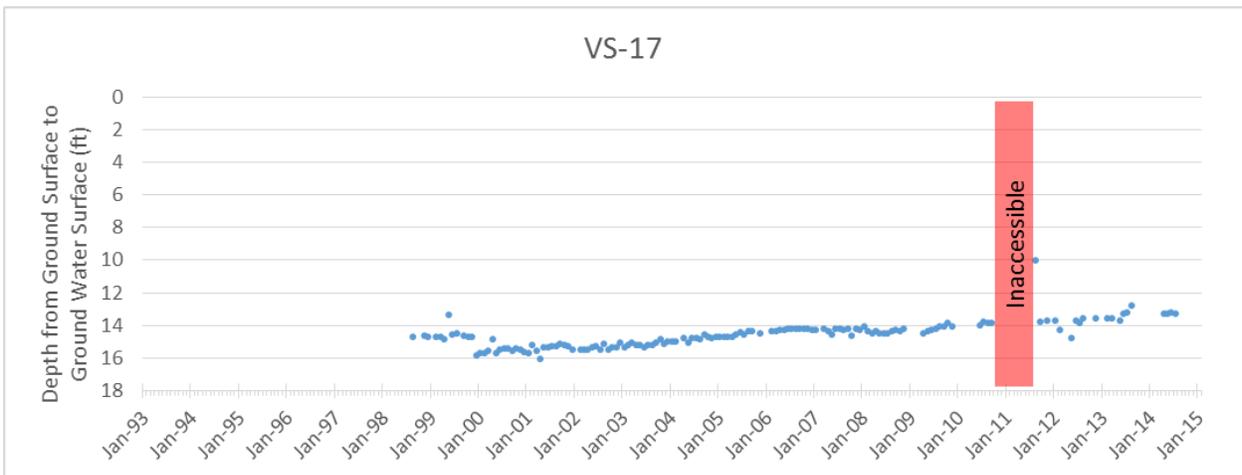
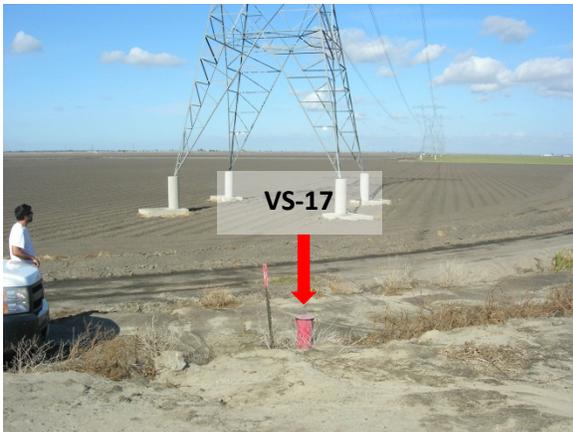
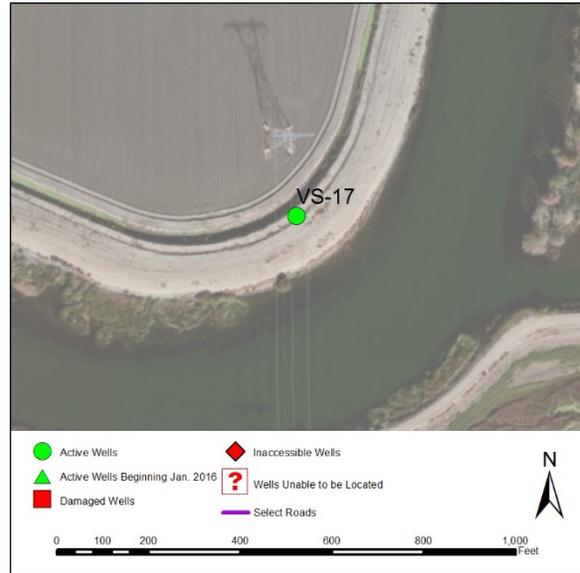
Coordinates: N 37°51'32.3" W 121°33'19.1"

State Well Number: 01S04E08K001M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well is located at the toe of the levee, next to the berm, and marked with a red t-post.



VS-18

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

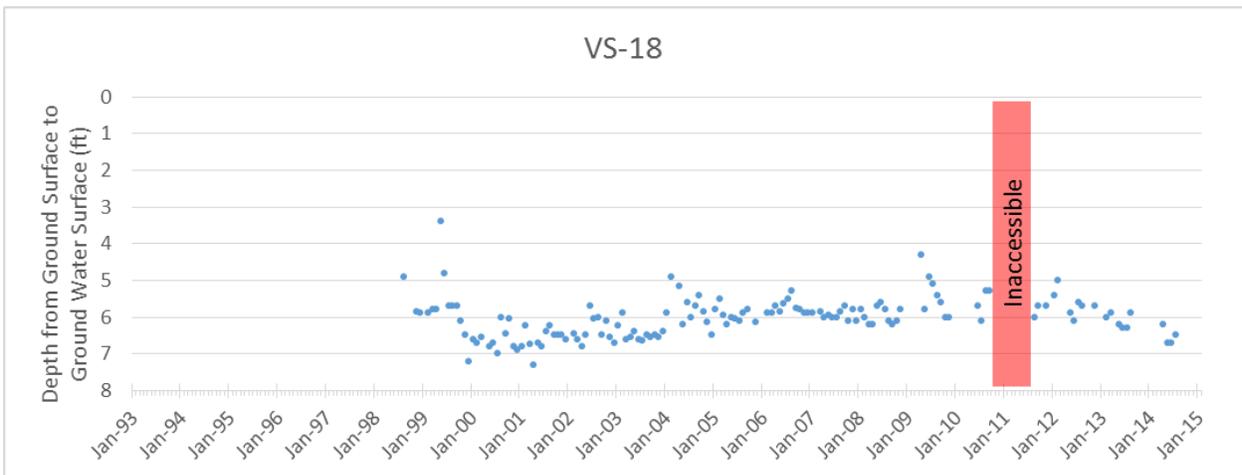
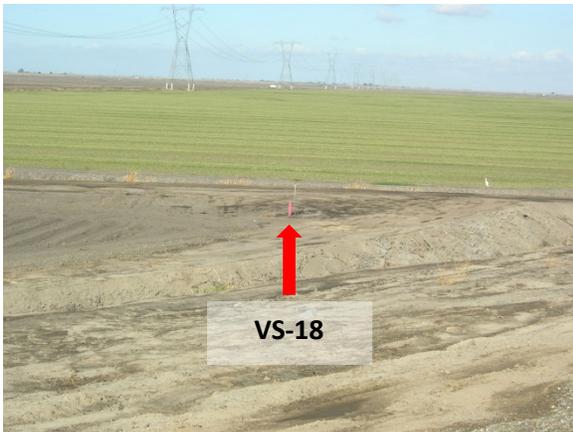
Coordinates: N 37°51'45.6" W 121°33'13.1"

State Well Number: 01S04E08H001M

Permit Status: Current

Construction Depth: 20ft

Comments: The well is located 50ft from drainage ditch, and approximately 100ft inland from levee toe, at the corner of the field and marked with a red t-post.



VS-19

Monitoring Status: Active

Reclamation District: 2040

Victoria Island

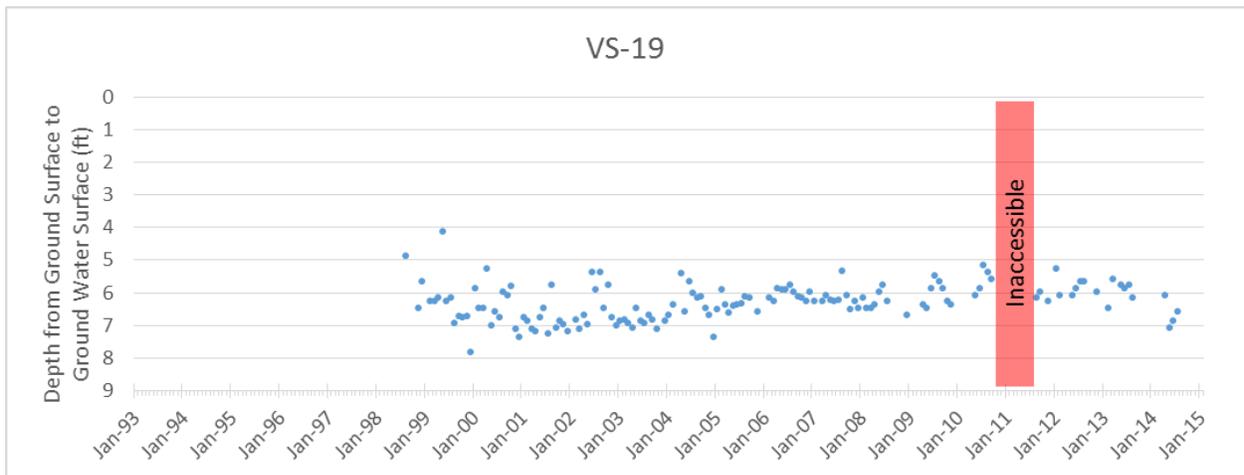
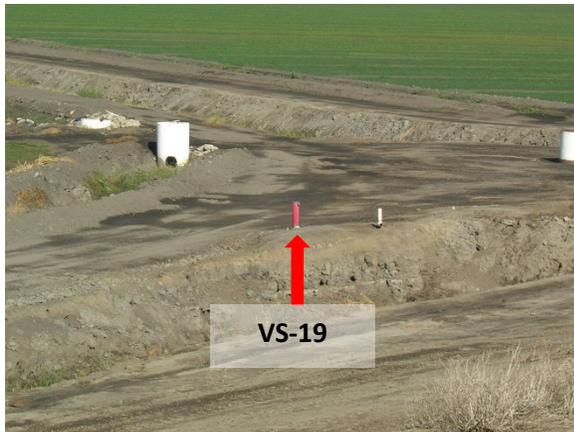
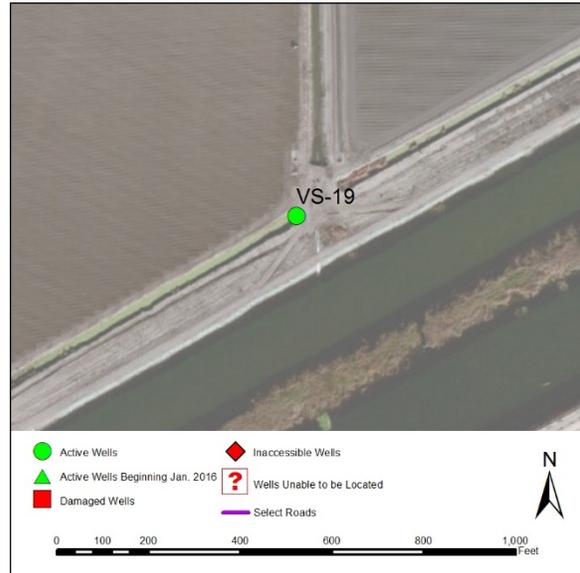
Coordinates: N 37°51'50.6" W 121°33'2.1"

State Well Number: 01S04E08A001M

Permit Status: Current

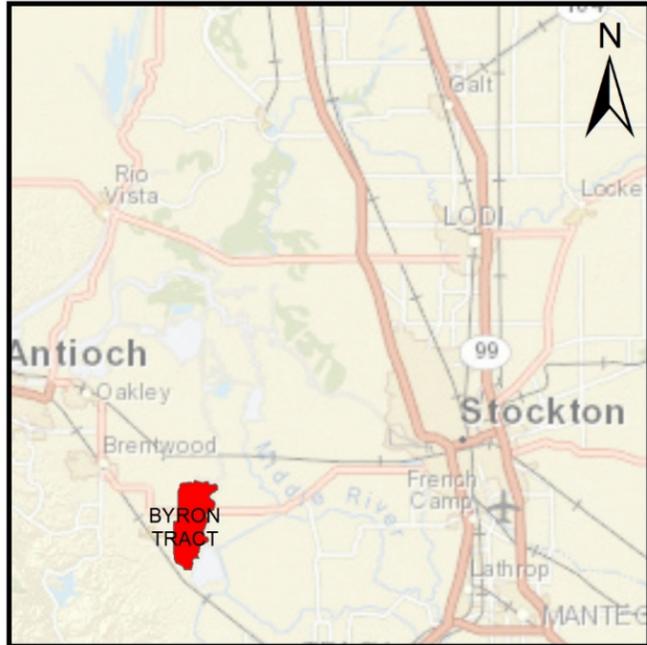
Construction Depth: 20ft

Comments: Well can be accessed by farm road or levee road. Well is on the western side of the access ramp near the head of the ditch.



Byron Tract (RD 800)

BS-1A129
BS-2A130
BS-3A131
BD-1.....A132
BS-4A133
BS-5A134
BS-6A135
BS-7A136
BS-8A137
BD-2.....A138
BS-9A139
BS-10A140
BS-11A141
BS-12A142
BS-13A143
BS-14A144
BD-3.....A145



DEPARTMENT OF WATER RESOURCES
 Groundwater Supply Assessment
 and Special Studies Section



0 0.5 1 Miles

Drawn By: DRB
 Checked By: JAS
 Date: 04/13/15

Byron Tract Seepage Monitoring Wells

Well Status

- Active Wells
- ▲ Active Wells Beginning Jan. 2016
- Damaged Wells
- ◆ Inaccessible Wells
- ? Wells Unable to be Located
- Select Roads



Document Path: \\pcdistfs1\CDGIS\PROJECTS\GroundwaterSupply\North South Delta Seepage\DATA GIS\NorthSouthDeltaMaps db.mxd

BS-1

Monitoring Status: Active

Reclamation District: 800

Byron Tract

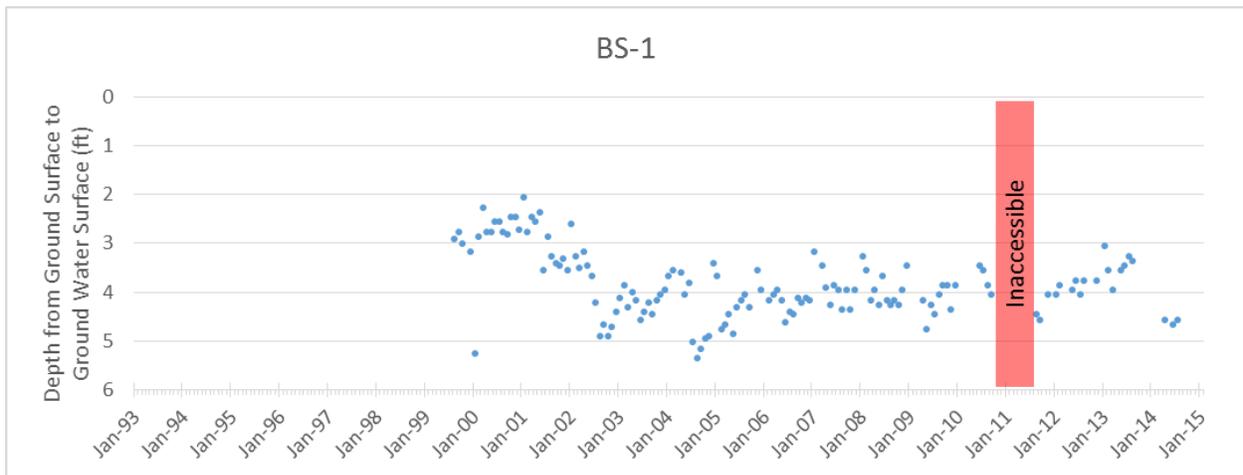
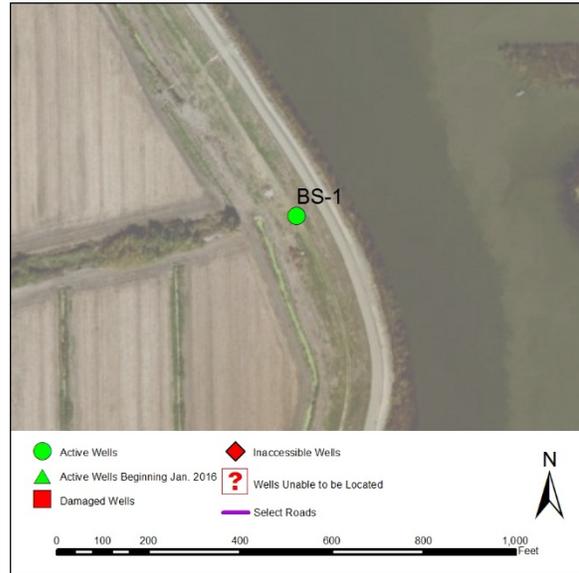
Coordinates: N 37°54'45.0" W 121°33'51.6"

State Well Number: 01N04E29D001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located between farm road and ditch, in line with row of east-west trees.



BS-2

Monitoring Status: Active

Reclamation District: 800

Byron Tract

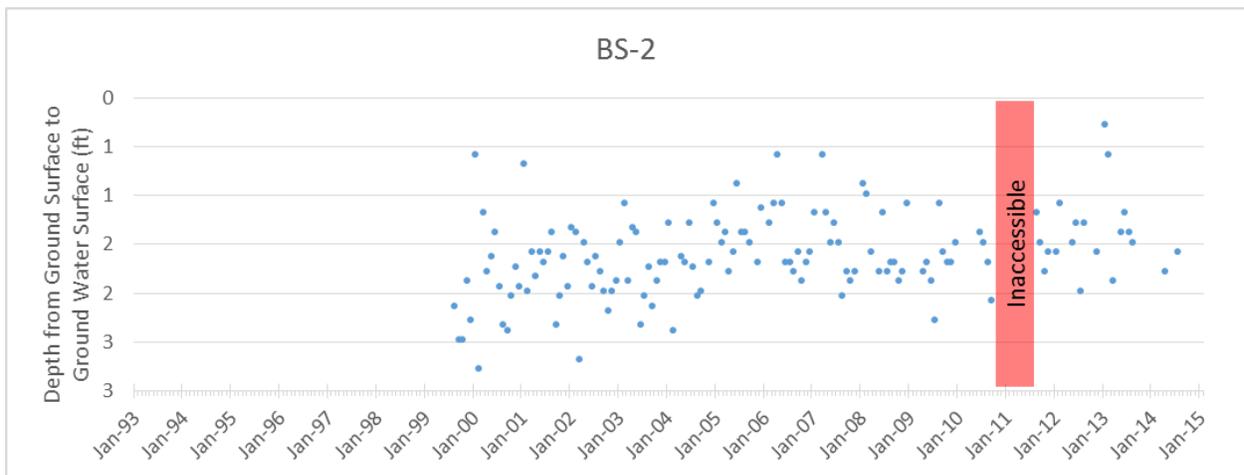
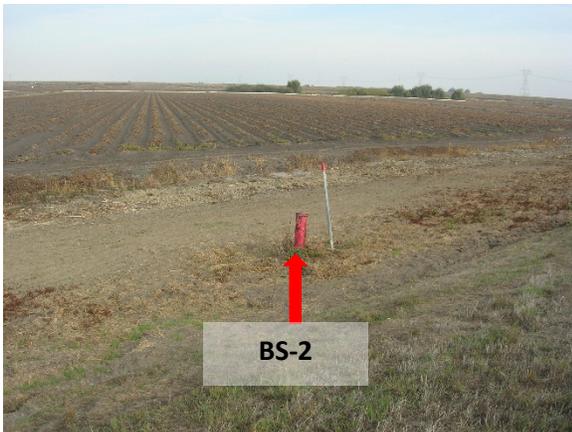
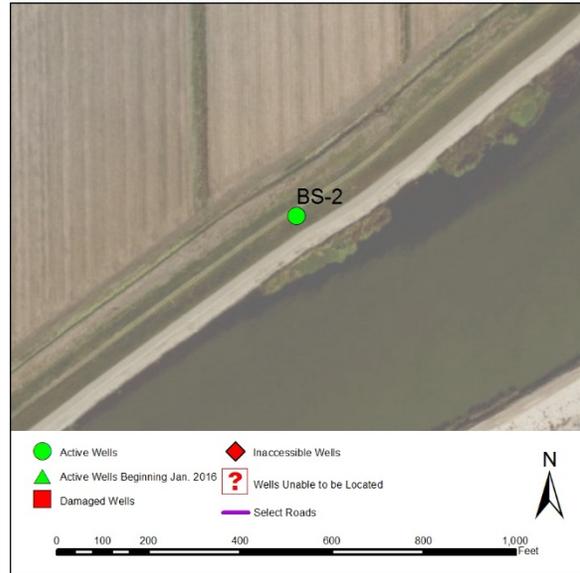
Coordinates: N 37°54'32.6" W 121°34'42.9"

State Well Number: 01N04E30A001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well adjacent to drainage ditch.



BS-3

Monitoring Status: Active

Reclamation District: 800

Byron Tract

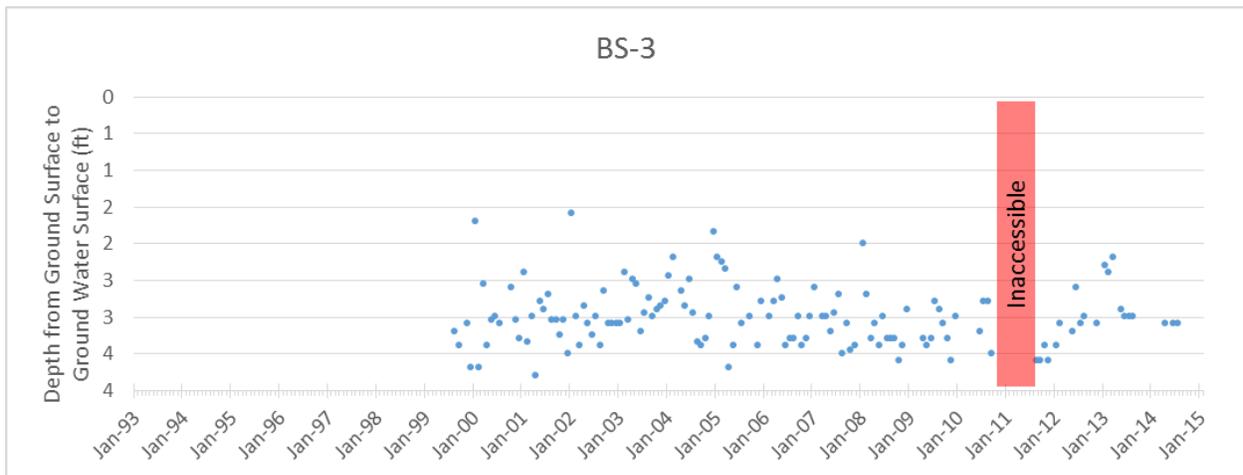
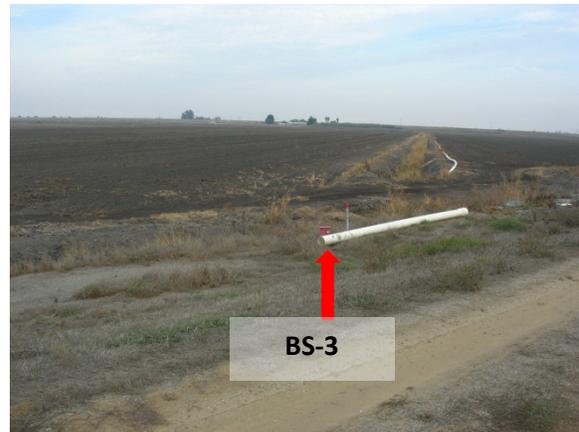
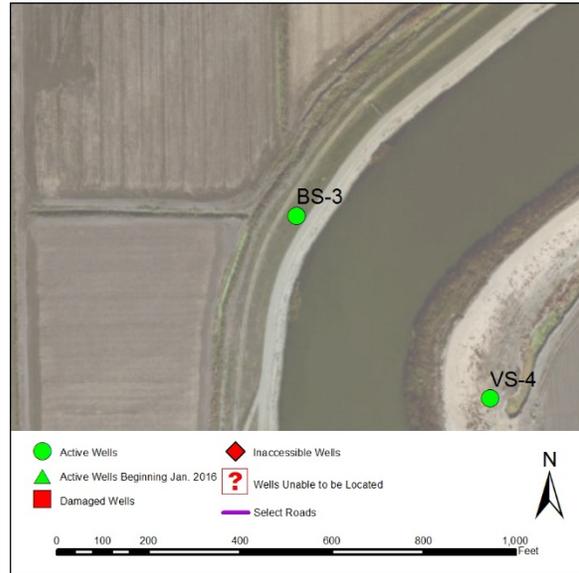
Coordinates: N 37°54'19.1" W 121°34'23.2"

State Well Number: 01N04E30G001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is located between the farm road and the ditch, marked with a red t-post.



BD-1

Monitoring Status: Active

Reclamation District: 800

Byron Tract

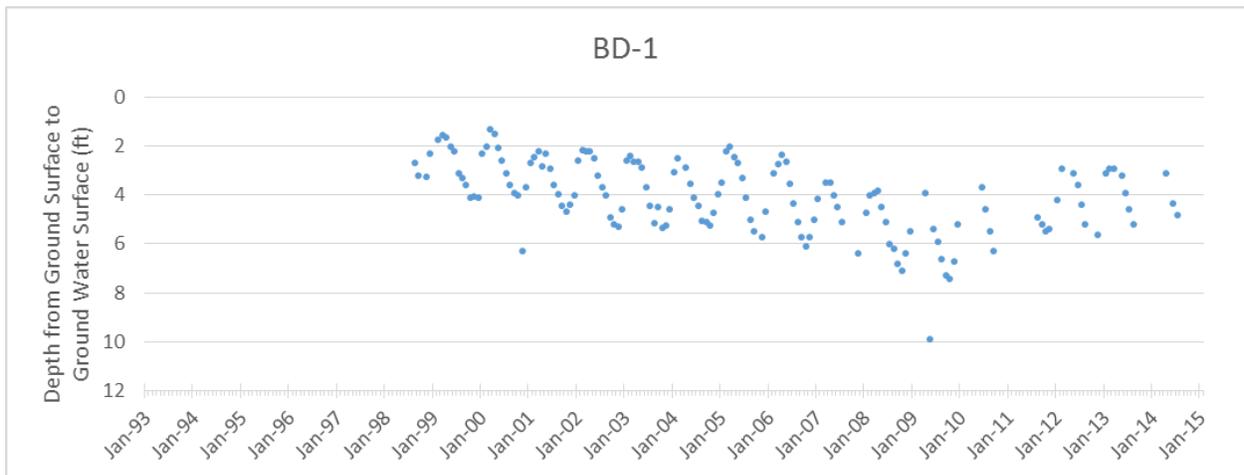
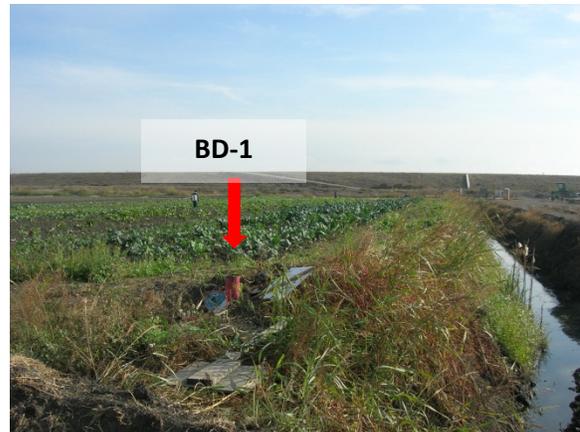
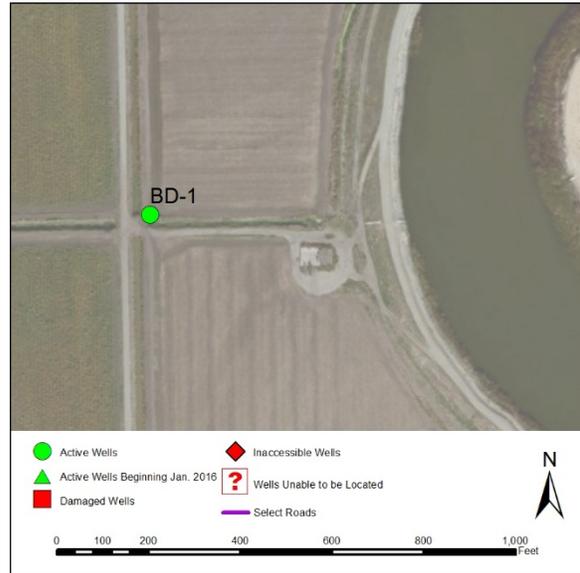
Coordinates: N 37°53'29.9" W 121°34'0.7"

State Well Number: 01N04E30K001M

Permit Status: Pending

Construction Depth: 100ft

Comments: the well is located the northern side of the western end of the ditch where the ditch intersects a north-south farm road.



BS-4

Monitoring Status: Active

Reclamation District: 800

Byron Tract

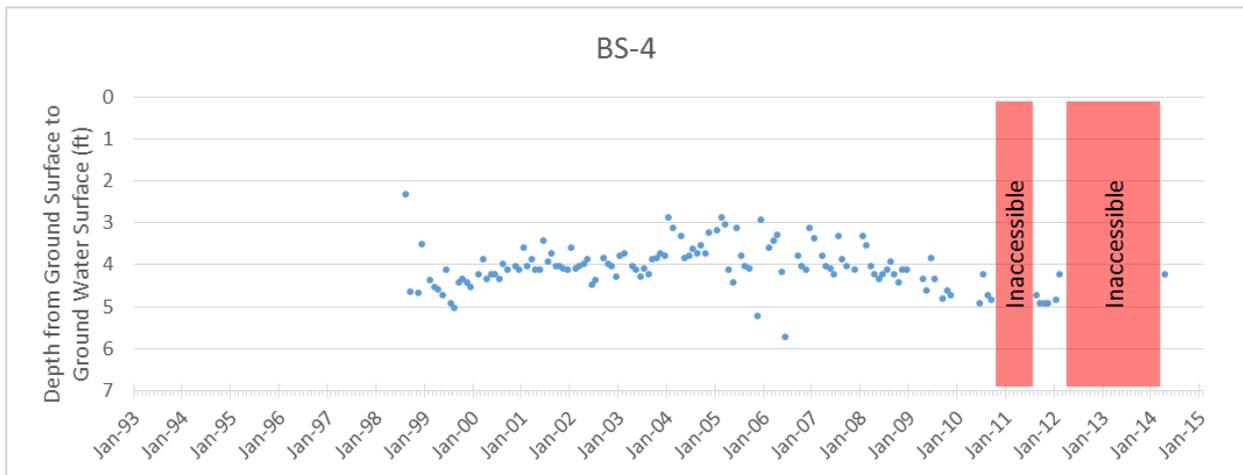
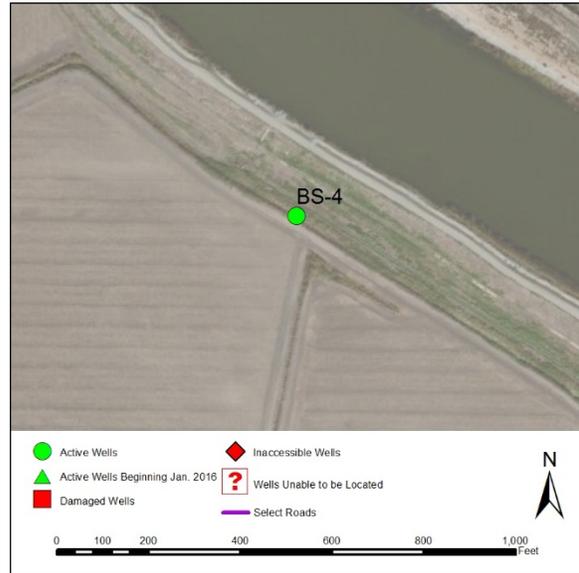
Coordinates: N 37°54'4.0" W 121°34'16.1"

State Well Number: 01N04E30J002M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is located between two ditches, next to the eastern ditch.



BS-5

Monitoring Status: Active

Reclamation District: 800

Byron Tract

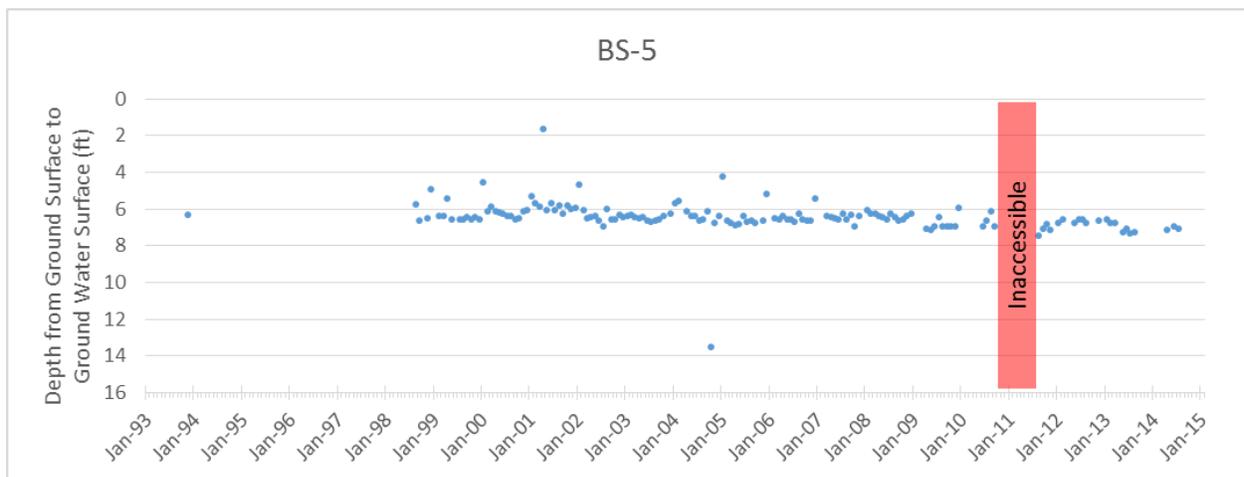
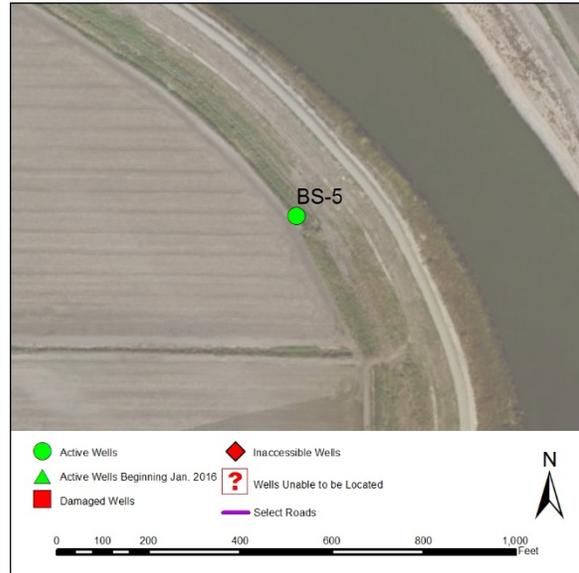
Coordinates: N 37°53'53.8" W 121°34'3.6"

State Well Number: 01N04E29N001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is located next to ditch, under the bird box.



BS-6

Monitoring Status: Active

Reclamation District: 800

Byron Tract

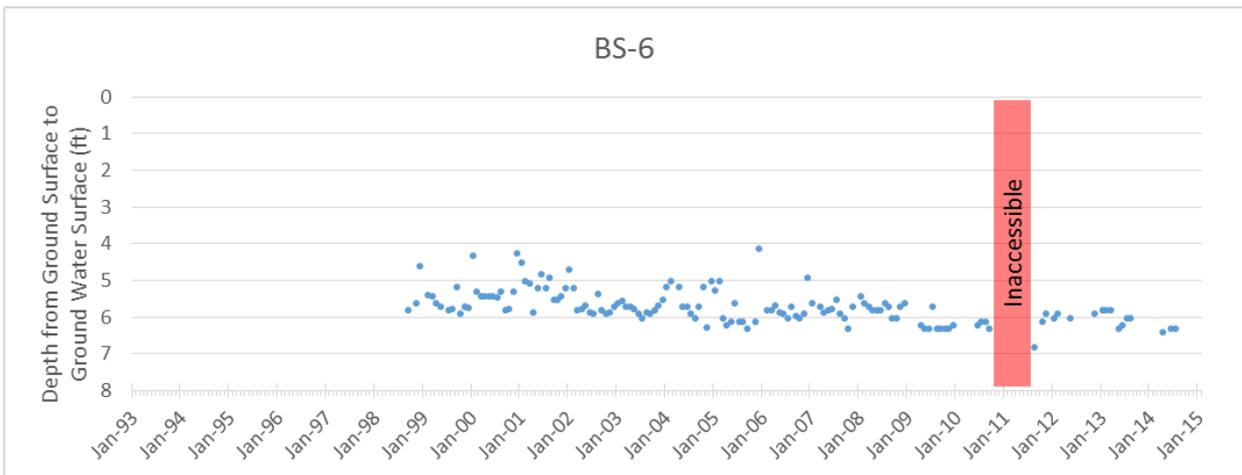
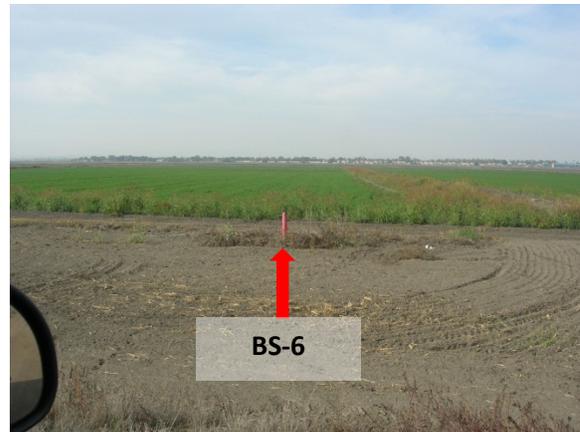
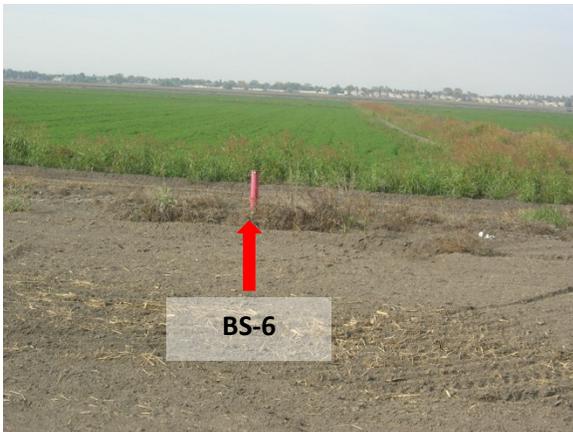
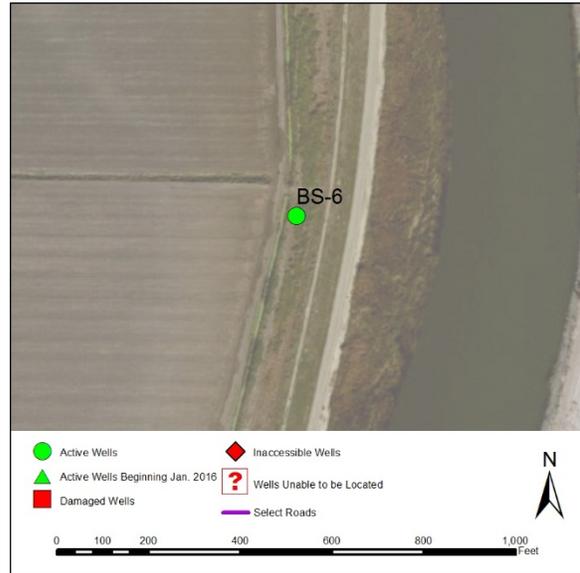
Coordinates: N 37°53'47.9" W 121°34'3.8"

State Well Number: 01N04E31A001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well is located next to the north tip of the ditch, approximately 30ft from field.



BS-7

Monitoring Status: Active

Reclamation District: 800

Byron Tract

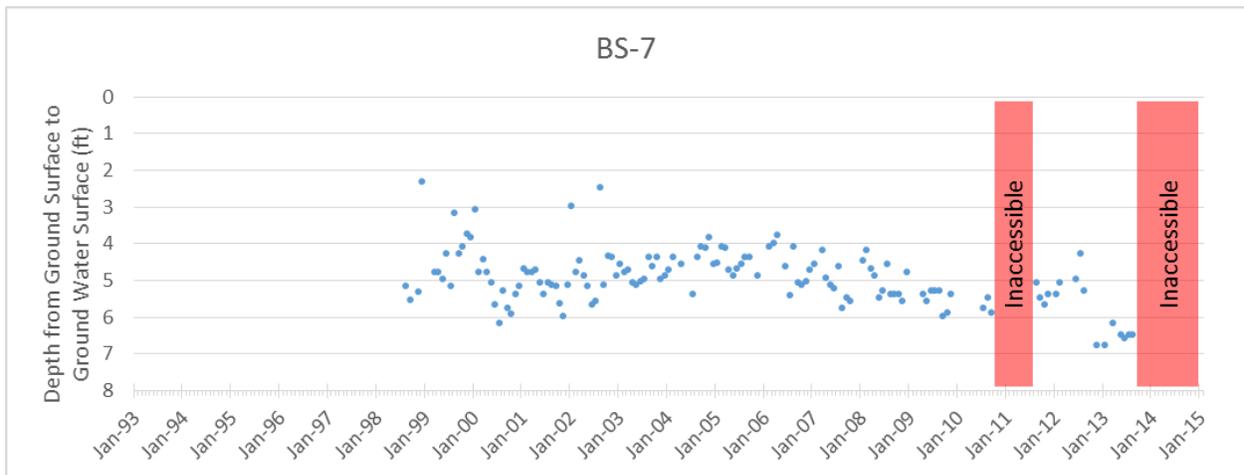
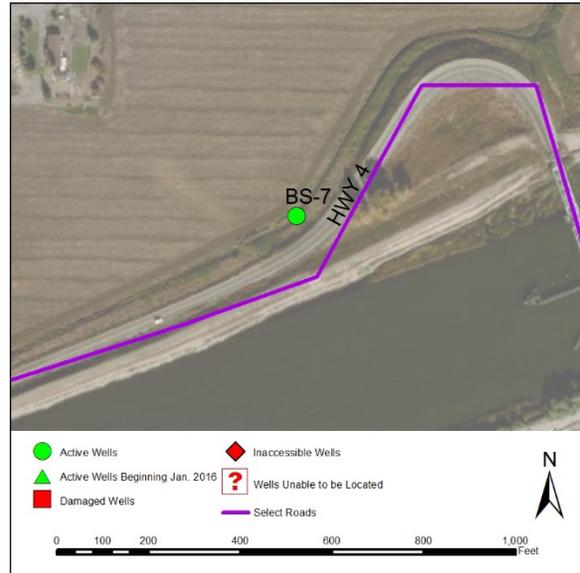
Coordinates: N 37°53'28" W 121°34'21.4"

State Well Number: 01N04E31H001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Well located next to a ditch, with a sign post. Near the "Peat land burns..." sign on Highway 4 (not visible).



BS-8

Monitoring Status: Not Active

Reclamation District: 800

Byron Tract

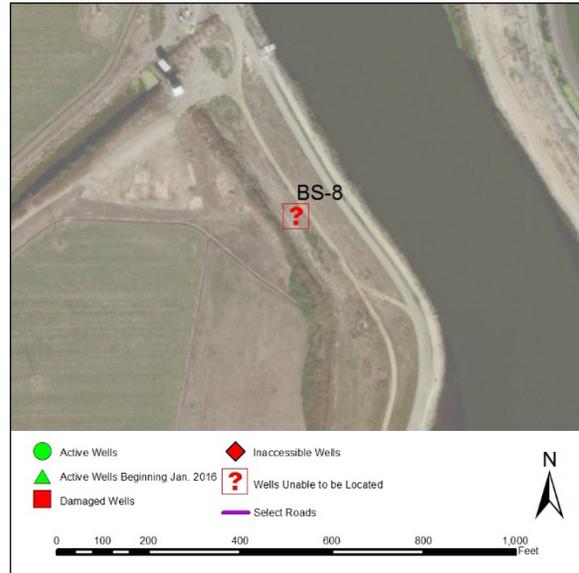
Coordinates: No Coordinates Available

State Well Number: 01N04E31K002M

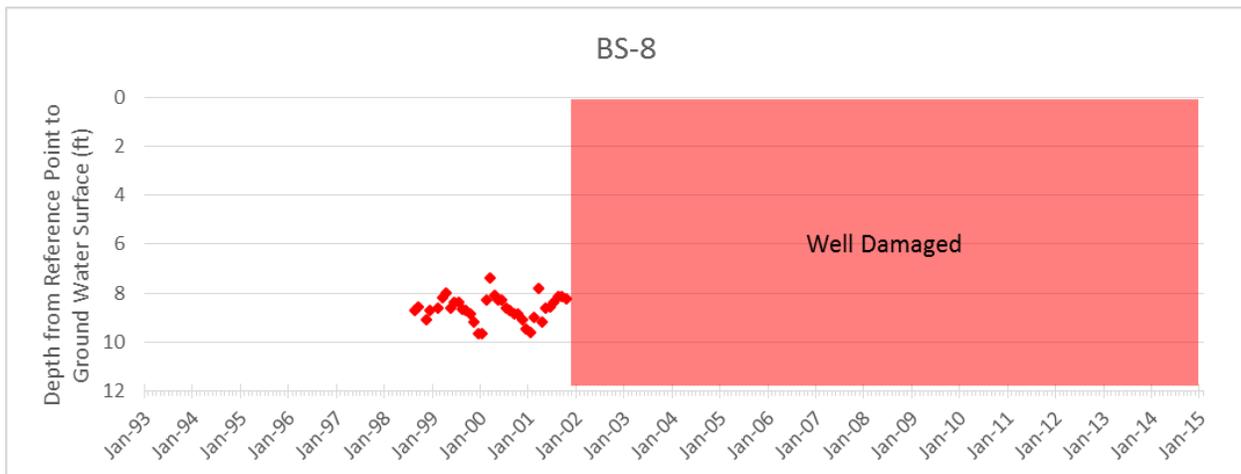
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



BD-2

Monitoring Status: Active

Reclamation District: 800

Byron Tract

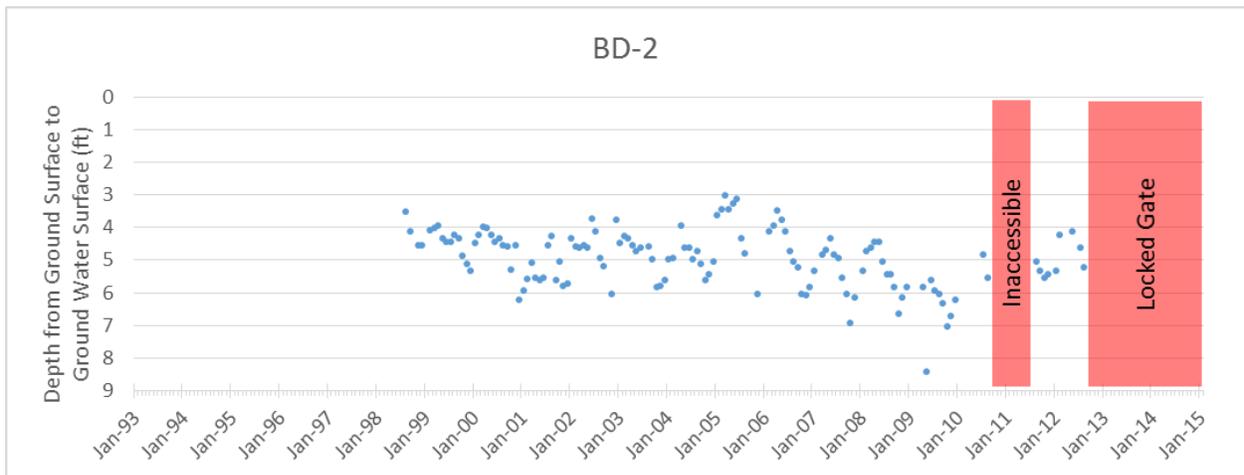
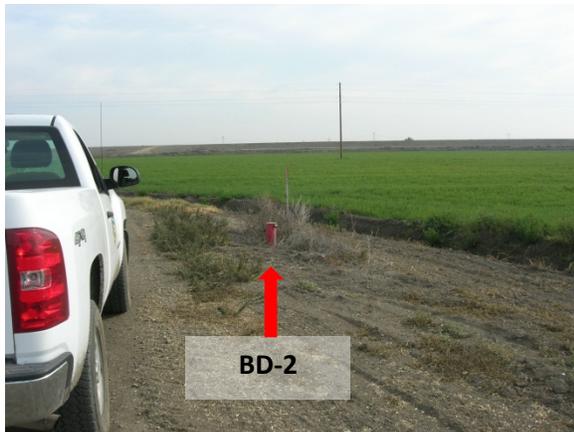
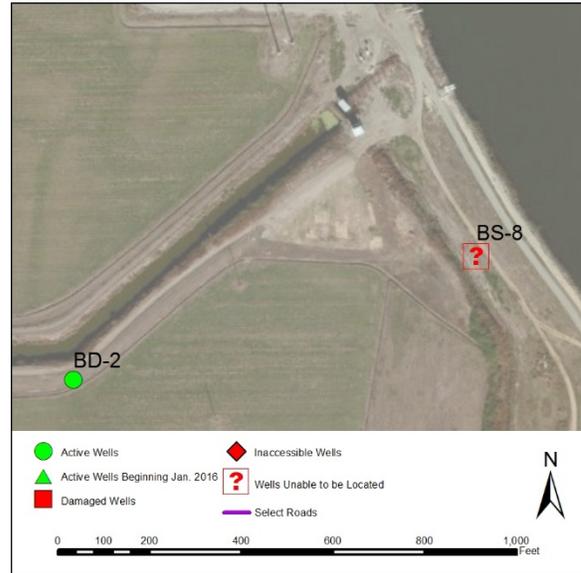
Coordinates: N 37°53'14.8" W 121°34'13.7"

State Well Number: 01N04E31P001M

Permit Status: Pending

Construction Depth: 100ft

Comments: The well is adjacent to drainage ditch, near the bend on the south side of the ditch.



BS-9

Monitoring Status: Active

Reclamation District: 800

Byron Tract

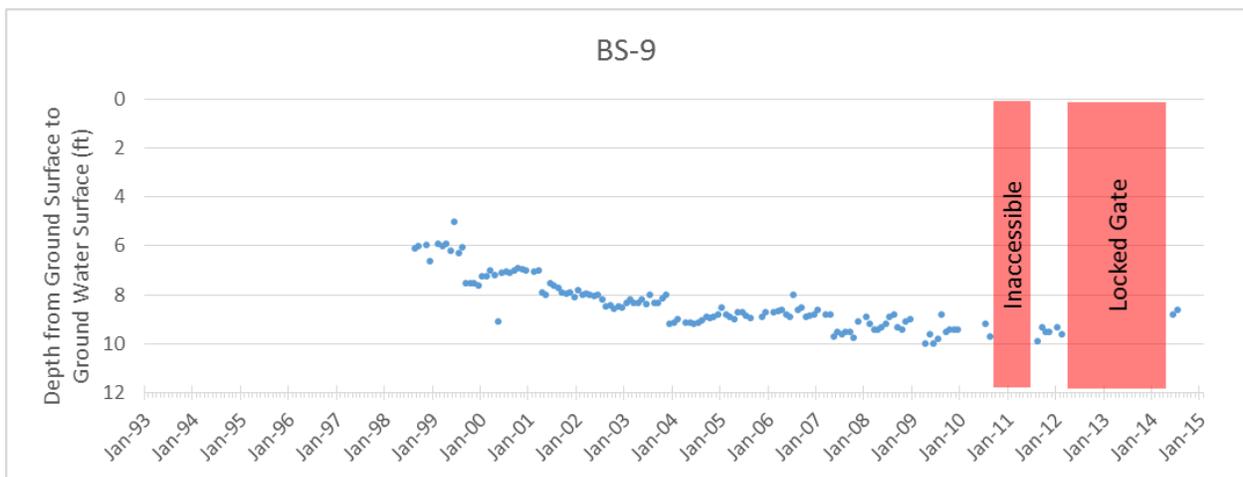
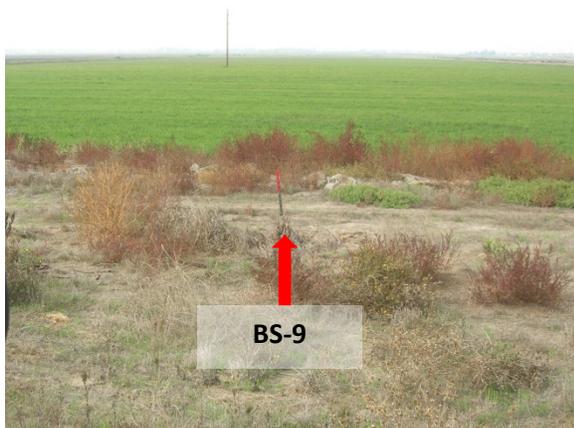
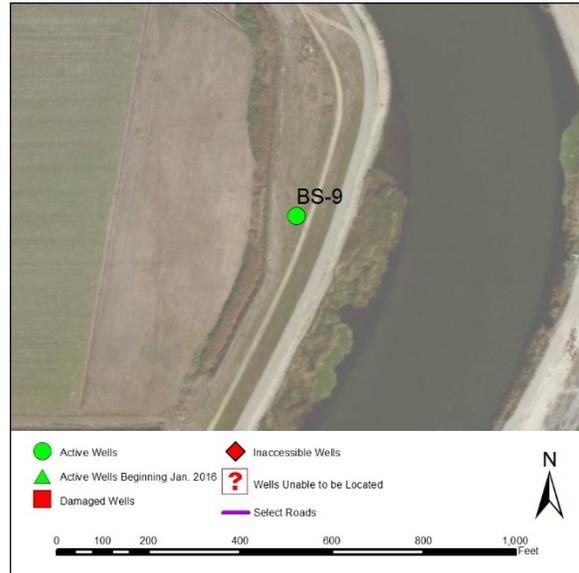
Coordinates: N 37°52'57.2" W 121°34'32.0"

State Well Number: 01N04E31Q001M

Permit Status: Pending

Construction Depth: 20ft

Comments: Access well using the farm road.
Well is located approximately 50-100ft off farm road towards field. Marked with a red topped t-post.



BS-10

Monitoring Status: Not Active

Reclamation District: 800

Byron Tract

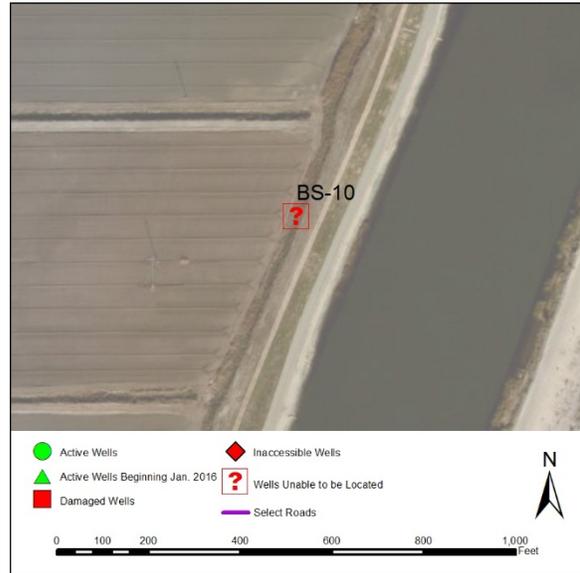
Coordinates: N 37°52'40.1" W 121°34'41.7"

State Well Number: 01S04E06C001M

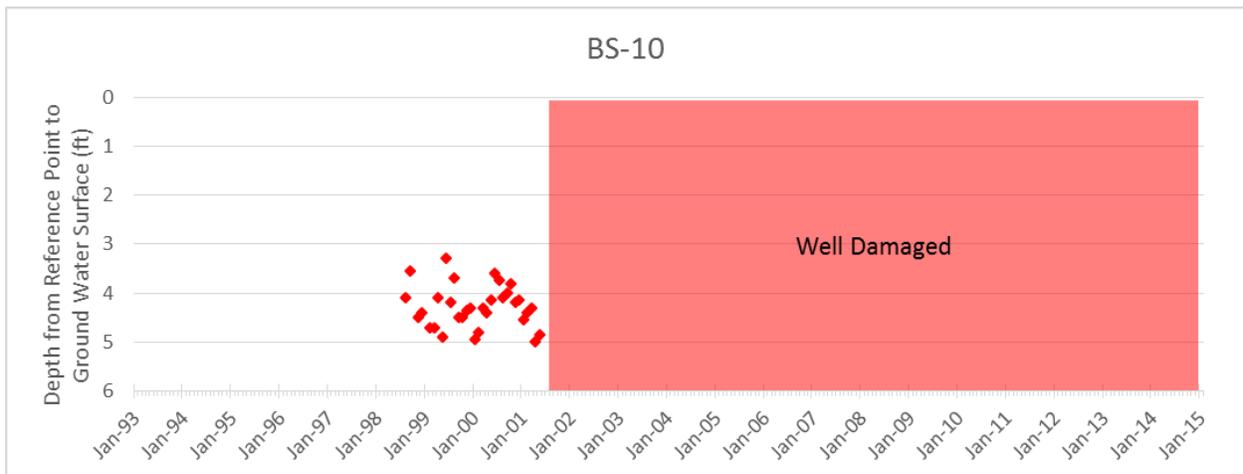
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



BS-11

Monitoring Status: Not Active

Reclamation District: 800

Byron Tract

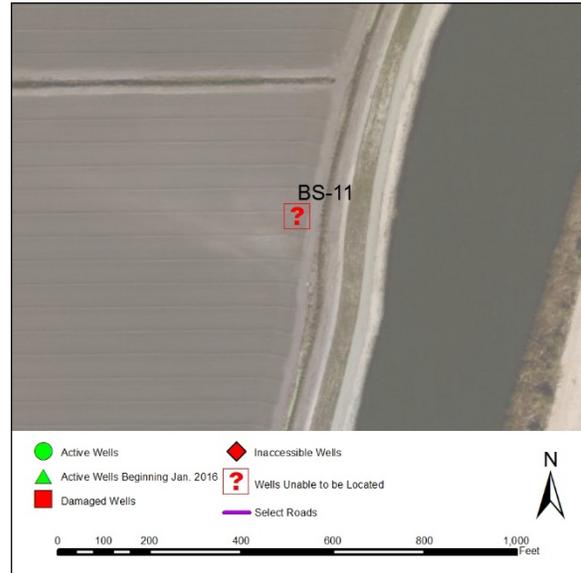
Coordinates: N 37°52'24.8" W 121°34'48.5"

State Well Number: 01S04E06L001M

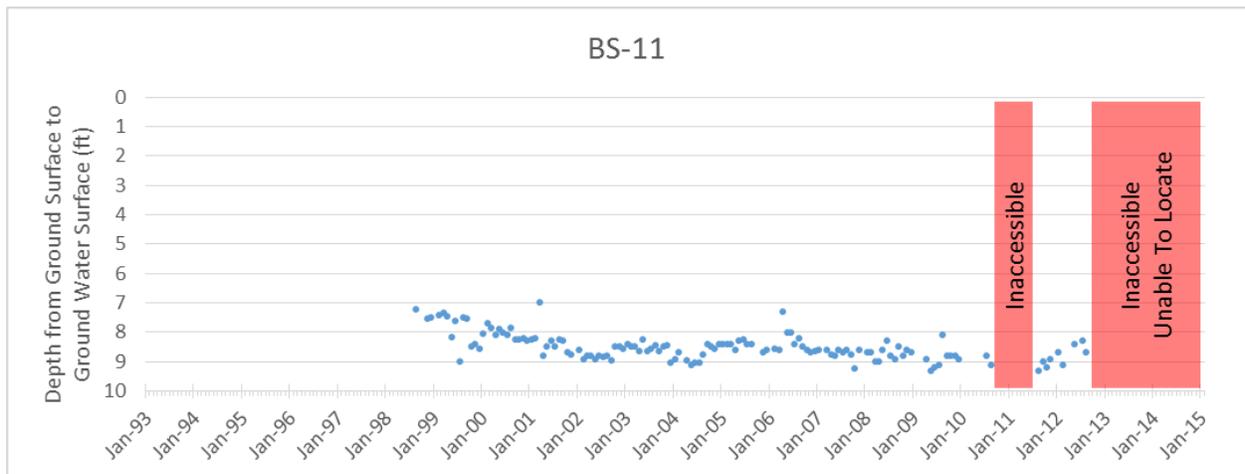
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located. Gate lock was changed, and access was lost for a few year. When access was gained again the well was gone.



No Images



BS-12

Monitoring Status: Not Active

Reclamation District: 800

Byron Tract

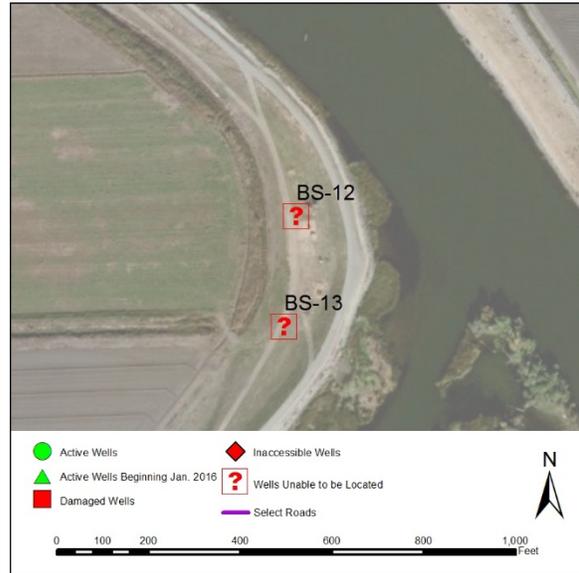
Coordinates: N 37°51'53.1" W 121°34'47.2"

State Well Number: 01S04E06P002M

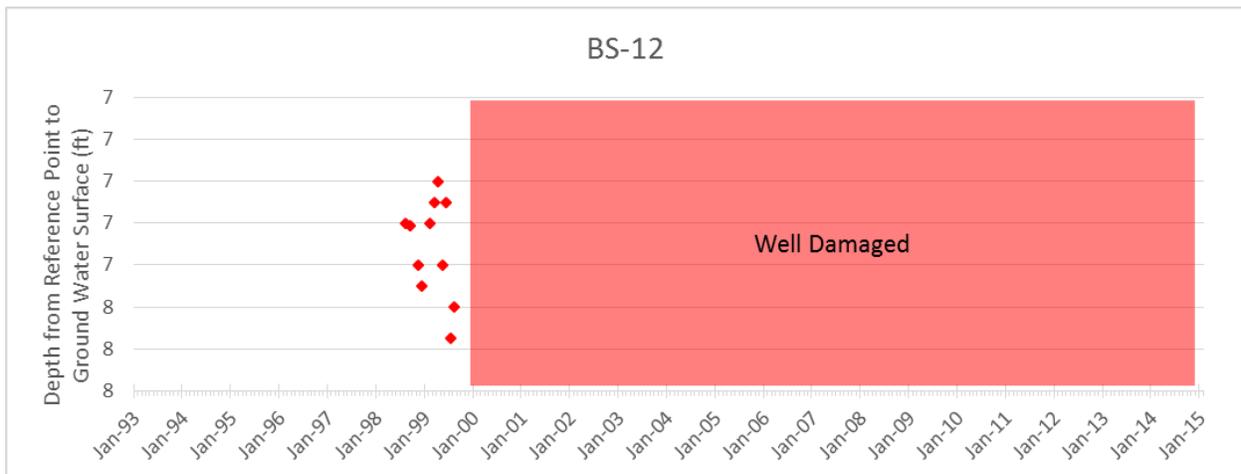
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



BS-13

Monitoring Status: Not Active

Reclamation District: 800

Byron Tract

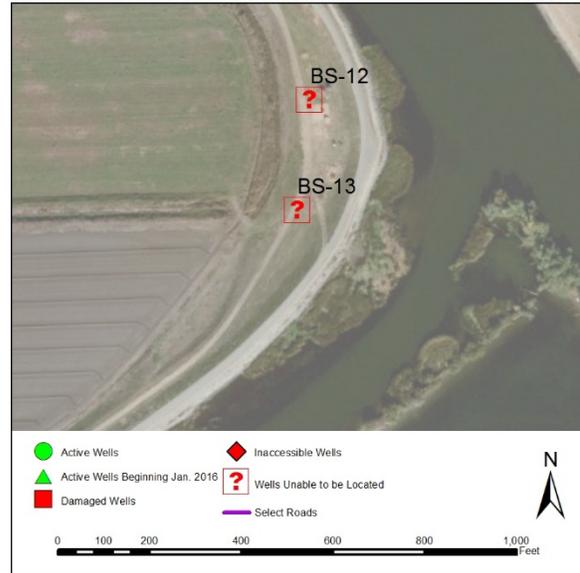
Coordinates: N 37°51'55.6" W 121°34'28.2"

State Well Number: 01S04E07B001M

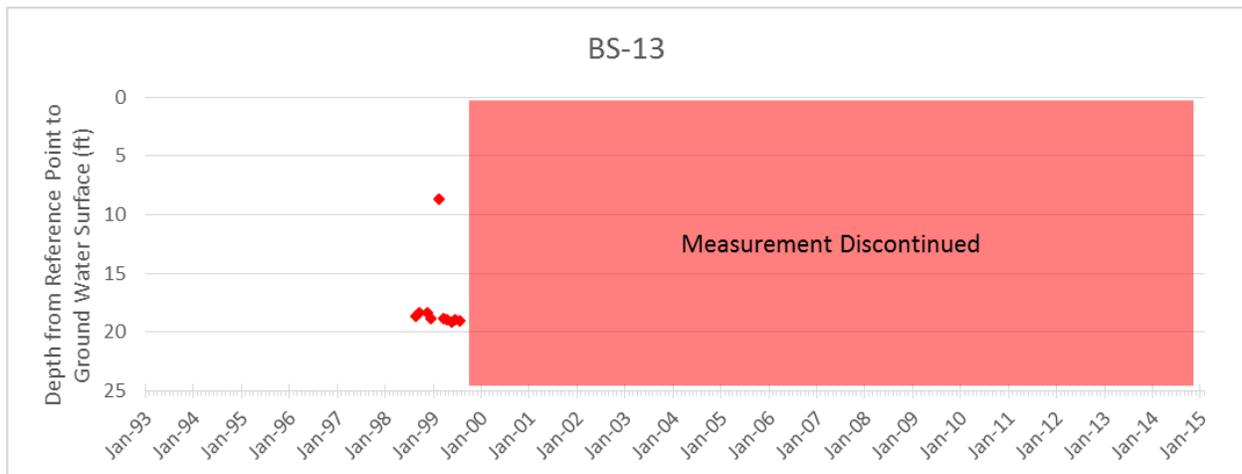
Permit Status: Pending

Construction Depth: 20ft

Comments: The well was unable to be located.



No Images



BS-14

Monitoring Status: Active

Reclamation District: 800

Byron Tract

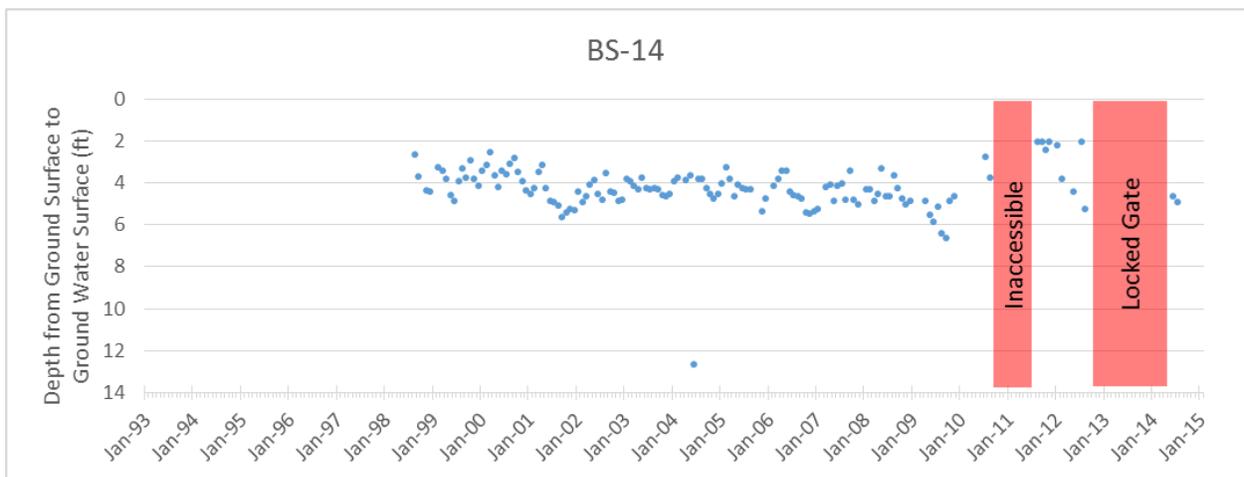
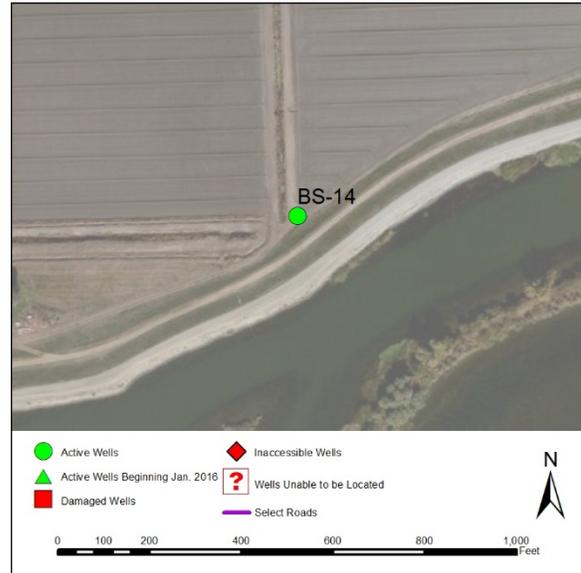
Coordinates: N 37°51'43.7" W 121°34'46.5"

State Well Number: 01S04E07F001M

Permit Status: Pending

Construction Depth: 20ft

Comments: The well is located on the levee toe, on the eastern side of the ditch just as the farm road turns north. Data gap in 2013 due to lost lock on gate.



BD-3

Monitoring Status: Active

Reclamation District: 800

Byron Tract

Coordinates: N 37°51'53.1" W 121°34'47.1"

State Well Number: 01S04E07C001M

Permit Status: Pending

Construction Depth: 100ft

Comments: Well is located at the intersection of two farm roads, and is on the north side of western end of the ditch.

