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Disclaimer:

Updated General Separations Areas (GSA) Groundwater Model Calibration Targets

J. L. Wohlwend

July 9, 2018

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REVIEWS AND APPROVALS

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L. T. Reid, Director, Environmental Restoration Technology, SRNL Date

ACKNOWLEDGEMENTS

This report documents the effort to update the General Separations Area regional groundwater flow calibration targets to incorporate additional well data, emphasizing Z-Area. The author gratefully acknowledges G. P. Flach, T. S. Whiteside, D. R. Watkins, and S. P. Hommel for their counsel.

EXECUTIVE SUMMARY

The work described in this report is part of an effort to update the General Separations Area (GSA) regional groundwater flow calibration targets to incorporate additional well data, emphasizing Z-Area, and consideration of Mixed Waste Management Facility groundwater plume monitoring data. This work utilizes a modified version of the Excel-based Well Hydrograph Analysis Tool (WHAT), previously detailed by Hiergesell and coworkers (2015a and 2015b), to evaluate the water level measurements obtained from the Environmental Restoration Data Management System (ERDMS) database. The original version of WHAT did not correctly compute median well water level, and occasionally the minimum and maximum values.

Initially, well data were downloaded from B, F, H, UTR, Z, and GSA site groupings utilizing the initial date from the time slice developed in Hiergesell 2015b (January 1, 2004) to the present (May 2, 2018). After removing records from wells with missing elements (i.e. missing measurement result), wells outside the GSA footprint, and wells having less than four data points, 731 wells were investigated and will be discussed within this report. Well hydrographs are presented in Appendix A. An analysis of the selected target wells, by location, was conducted to determine an appropriate weighting factor to associate with each target well during automated flow model calibration. Each well's mean water level is taken to be the "target" water level that will ultimately be utilized in the re-calibration of the GSA groundwater model. For each well, the suite of statistical quantities and coordinates are presented in Appendix C and each well's weighting factors are given in Appendix D.

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LIST OF ABBREVIATIONS

ERDMS	Environmental Restoration Data Management System
GAU	Gordon Aquifer Unit
GCU	Gordon Confining Unit
GSA	General Separations Area
DOE	Department of Energy
HSU	Hydrostratigraphic Unit
LAZ	Lower Aquifer Zone – also “Lower Zone, Upper Three Runs Aquifer”
PA	Performance Assessment
PF	PORFLOW
SDF	Saltstone Disposal Facility
SRNL	Savannah River National Laboratory
SRS	Savannah River Site
UAZ	Upper Aquifer Zone – also “Upper Zone, Upper Three Runs Aquifer”
VBA	Visual Basic for Applications
TCCZ	Tan Clay Confining Zone
WHAT	Well Hydrograph Analysis Tool
WL	Water Level
WSRC	Westinghouse Savannah River Company
UQSA	Uncertainty Quantification and Sensitivity Analysis
yr	year

1.0 Introduction

The work described in this report is part of an effort to update the General Separations Area (GSA) regional groundwater flow calibration targets to incorporate additional well data, emphasizing Z-Area. This work utilizes a modified version of the Excel-based Well Hydrograph Analysis Tool (WHAT), previously detailed by Hiergesell and coworkers (2015a and 2015b), to evaluate the water level measurements obtained from the Environmental Restoration Data Management System (ERDMS) database. The original version of WHAT did not correctly compute median well water level, and occasionally the minimum and maximum values.

1.1 Target calibration update justification

This work is responsive to a Liquid Waste Technical Task Request (G-TRR-Z-00012, Rev. 0) for SRNL modeling and technical assistance to support an update to the Saltstone Disposal Facility (SDF) Performance Assessment (PA).

1.2 Scope of the current investigation

- Import new well measurement data for B, F, H, UTR, Z, and GSA site groupings.
- Analyze individual well hydrographs and eliminate measurements thought to be in error, or to reflect anthropogenic perturbations.
- Calculate the water level statistical quantities associated with each target well.
- Identify the hydrostratigraphic Unit (HSU) associated with each well, based on the position of the well screen in the subsurface and the configuration of the interfaces between HSU's.
- Calculate weighting factors for each calibration target.

2.0 Data Acquisition and Processing

2.1.1 Rainfall Data and "Base" Time Period

Rainfall measurements were imported from the Atmospheric Technologies Group climate data (https://weather.srs.gov/weather/climate_data/) for the two weather stations located within the GSA groundwater flow model footprint. One is in F-Area and the other in H-Area. Daily precipitation was totaled for each month; where both F- and H-Area measurements existed for a collection date, they were averaged and the monthly total was added to the "RainFall" spreadsheet discussed in Hiergesell 2015b. The updated rainfall data is illustrated in Figure 2-1. The "Base" period from Hiergesell 2015b was extended from January 1, 2004-August 1, 2014 to January 1, 2004-April 1, 2018. The extended "Base" period is relatively free from transient adjustments in groundwater levels and therefore provides optimal calibration targets.

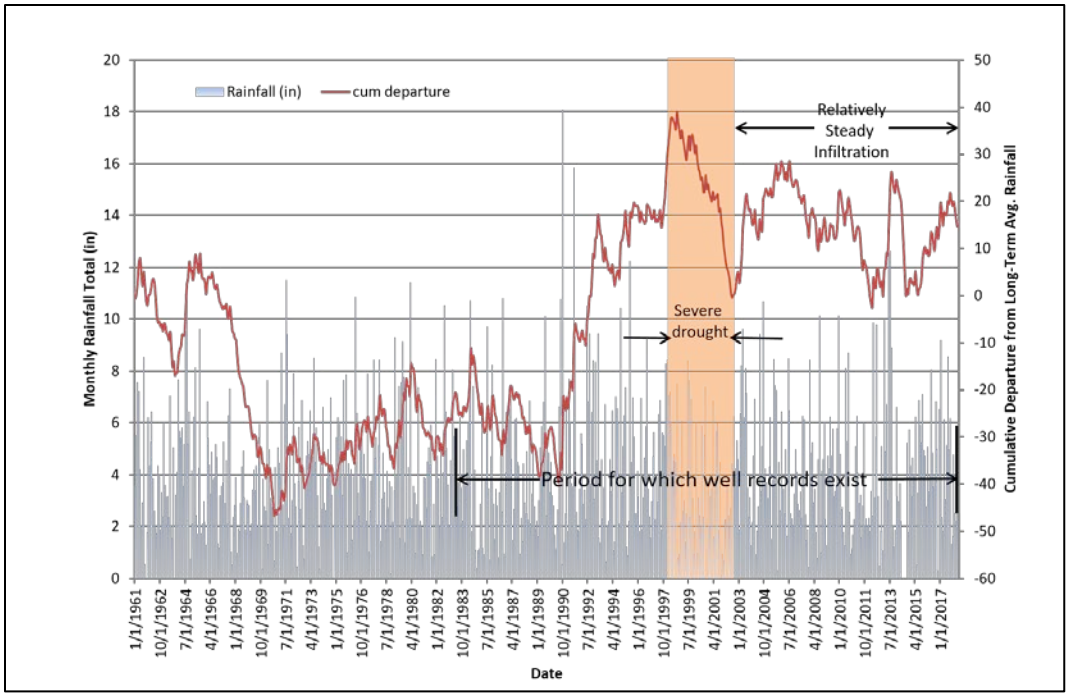


Figure 2-1. Rainfall data from F- and H-Area climate data

2.1.2 Base Period Hydrographs and Statistical Quantities

Water level measurements were downloaded from the ERDMS database (http://www.srs.gov/beidms/groundwater/) for B, F, H, UTR, Z, and GSA site groupings utilizing the initial date (January 1, 2004) of the "Base Period" time slice to the present (May 2, 2018) yielding 55,386 data points. The measured depths were then converted to water level elevations utilizing the given reference elevation. Initially, the data included multiple types of wells; only those described as monitoring wells, wells, and piezometric wells were kept for further analysis which left 48,657 data points. It was found that several measurement records were missing the measured depths, these were then removed leaving 48,155 data points and 946 wells. In addition to the missing depths, BGX 1A was found to have different reference elevations for the first few measurements (291.3 ft) compared to more recent measurements (291.62 ft). Most likely, the initial reference elevation recorded was incorrect and subsequent collections documented a more accurate reference elevation. Because of this discovery, all wells' reference and ground elevations were checked and the most recent reference elevation was used to calculate water level elevation.

Each well is required to have a HSU designation that determines with which each well studied is in hydraulic communication. It was found that many wells imported did not have documented HSU designations in the 2015 study because they were not included in the wells examined. The additional wells were further analyzed to ensure they existed within the GSA model footprint. 85 of the 946 wells were outside of the footprint leaving 861 wells. 59 new wells required HSU designations. During subsequent calibration, it was found that BSW 3C1 had incorrect ground elevations reported for the first four well measurements, leading it to be designated incorrectly to GA. With the updated reference ground elevation, BSW 3C1 should have been assigned to the LAZ HSU. Additionally, the mean water elevation for BRR 6D at 202.4 ft was notably low compared to model simulations and lower than BRR 6C at 206.8 ft. After further investigation, it was found that these wells were mislabeled in the field. FAB 6D and 7D and FOB 14D were found to be incorrectly labeled as being in the LAZ, these wells should be assigned to the UAZ HSU. Due to these discrepancies in the HSU designations reported in 2015, all well HSU designations were re-evaluated. To assign each well with a certain HSU, the elevations of the screen top and a point 5-feet

below the bottom of the well screen was compared to the elevation of the interfaces between adjacent HSUs at each well's location. A schematic of this process is shown in Figure 2-2, where TCCZ, LAZ, GCU, and GAU stand for Tan Clay Confining Zone, Lower Aquifer Zone, Gordon Confining Unit, and Gordon Aquifer Unit, respectively. Here, for example, the well is in hydraulic communication with the LAZ. Using this methodology, 26 HSU assignments from 2015 were found to be inconsistent. These, along with the 59 additional wells investigated in the current study, with their HSU designations, are listed in Table 2-1 and Table 2-2, respectively.

Table 2-1. Modified 2015 HSU designations

Well Name	2015 HSU	2018 HSU
BGO13DR	UAZ	LAZ
BGO43D	UAZ	LAZ
BGO51AA	GA	DEEPER
BGX4D	LAZ	BREACH
BSW1D3	UAZ	CONFINING
BSW2D3	UAZ	CONFINING
FAB2	BREACH	UAZ
FAB5D	BREACH	UAZ
FAB6D	LAZ	UAZ
FAB7D	LAZ	UAZ
FBI14D	BREACH	UAZ
FBP2A	BREACH	LAZ
FIP001	BREACH	UAZ
FIP002	BREACH	UAZ
FIP003	BREACH	UAZ
FNB3	BREACH	LAZ
FPZ008AR	UAZ	CONFINING
FSB140D	BREACH	UAZ
FSL11C	BREACH	LAZ
FSS1D	LAZ	UAZ
HGW3D	BREACH	UAZ
HIW5MC1	BREACH	LAZ
HSB112D	BREACH	UAZ
HSB129D	BREACH	UAZ
HSP76B	LAZ	CONFINING

Table 2-2. HSU designations for new wells

Well Name	HSU	Well Name	HSU
CBS 1	LAZ	FSB122C	LAZ
FAB008D	UAZ	FSB122D	UAZ
FAB009D	UAZ	FSB128D	UAZ
FAB010D	UAZ	FSB129D	UAZ
FCB002CRR	LAZ	FSB132D	UAZ
FGW023	LAZ	FSB133D	UAZ
FOB14C	LAZ	FSB134D	UAZ
FOB14D	UAZ	FSB135D	UAZ
FOB15D	UAZ	FSB136D	UAZ
FOB3D	UAZ	FSB137D	UAZ
FPZ 8B	UAZ	FSB138D	UAZ
FPZ008BR	UAZ	FSB142D	UAZ
FPZ1A	UAZ	FSB143D	UAZ
FPZ2A	UAZ	FSB144D	UAZ
FPZ3A	UAZ	FSB145D	UAZ
FPZ4A	UAZ	FSB146D	UAZ
FPZ5A	UAZ	FSP249A	CONFINING
FPZ5B	UAZ	FSP249B	UAZ
FPZ6A	UAZ	FSP2A	LAZ
FPZ6B	UAZ	FSP2B	UAZ
FPZ7A	UAZ	HPZ3B	UAZ
FPZ7B	UAZ	HPZ5B	UAZ
FSB104C	LAZ	HSB142D	UAZ
FSB104D	UAZ	HTF 3	UAZ
FSB112A	GA	UTR-016	LAZ
FSB112C	LAZ	ZBG002C	LAZ
FSB112DR	UAZ	ZBG002D	UAZ
FSB115C	LAZ	ZBG016C	LAZ
FSB116C	LAZ	ZBG016D	UAZ
FSB116D	UAZ		

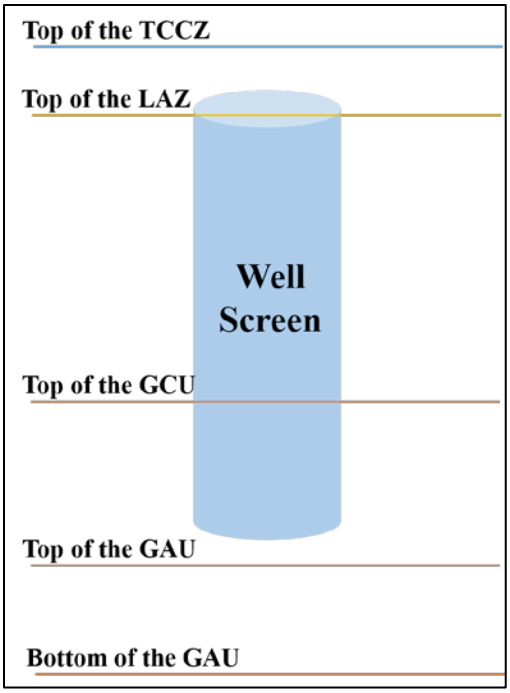


Figure 2-2. Schematic of well location and HSUs.

The WHAT "delete wells" function was then used to remove any wells with less than four recorded measurements, leaving 737 wells to be further analyzed. Of the Z-Area wells imported for this study, five were not analyzed further because there were fewer than four recorded measurements (ZBG017D, ZBG019D, ZBG020D, ZDT 1, and ZDT 2). Well hydrographs and statistical quantities were then created using the "Make Plots and Statistics" function on the WHAT dashboard. Each of the remaining 737 well hydrographs were then visually checked for outlier data points (an example of a hydrograph with outlier points circled is shown in Figure 2-3) and the statistics were re-calculated.

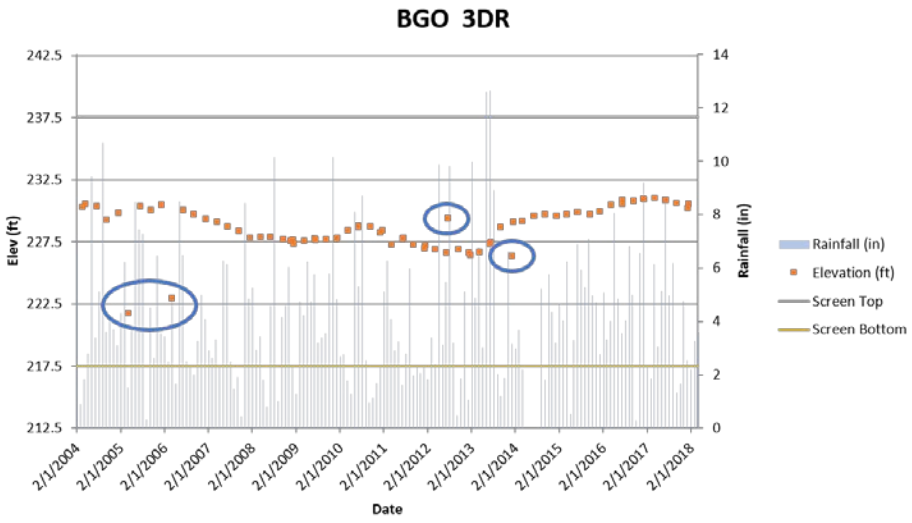


Figure 2-3. Hydrograph illustrating outlier measurement points

A discrepancy was found when comparing the median value calculated by WHAT using the "Make Plots and Statistics" function and the manually calculated median using the raw data. There was a small error in

the "maxmin" subroutine that caused the final measurement value not to be included in the median, minimum, and maximum calculations. The modified subroutine is shown in Figure 2-3. This error does not impact previously calculated targets as the median (as well as minimum/maximum) are not utilized during calibration.

```
Sub maxmin(a, xmax, xmin, median)
'add a sheet to do the sort, easiest and quickest way
On Error Resume Next ' do this because otherwise it will puke on error
Dim ws As Worksheet
Set ws = Sheets("junk")
If ws Is Nothing Then ' if sheet doesn't exist it creates it
    Worksheets.Add().Name = "junk"
    Set ws = Sheets("junk")
End If
'print array onto sheet
For irow = 1 To UBound(a) + 1
    ws.Cells(irow, 1).Value = a(irow - 1)
Next irow
' do a sort
ws.Range(Cells(1, 1), Cells(UBound(a), 1)).Select

    ActiveWorkbook.Worksheets("junk").Sort.SortFields.Clear

    ActiveWorkbook.Worksheets("junk").Sort.SortFields.Add Key:=Range(Cells(1, 1), Cells(UBound(a) + 1, 1)), _
        SortOn:=xlSortOnValues, Order:=xlAscending, DataOption:=xlSortNormal

    With ActiveWorkbook.Worksheets("junk").Sort
        .SetRange Range(Cells(1, 1), Cells(UBound(a) + 1, 1))
        .Header = xlGuess
        .MatchCase = False
        .Orientation = xlTopToBottom
        .SortMethod = xlPinYin
        .Apply
    End With
xmin = ws.Cells(1, 1).Value
xmax = ws.Cells(UBound(a) + 1, 1).Value

'find the median
idx = UBound(a) + 2

If (idx Mod 2) = 0 Then
    ' odd number
    median = ws.Cells(idx / 2, 1).Value
Else ' must be even
    median = (ws.Cells(Int(idx / 2), 1).Value + ws.Cells(Int(idx / 2) + 1, 1).Value) / 2


End If
'ws.Cells.Clear

End Sub
```

Figure 2-4. Modified WHAT "maxmin" subroutine

Additionally, 51 water level measurements were found to be below the well's bottom screen, an example of such measurements is illustrated in Figure 2-4, and represent water standing in the sump below the screen zone; these measurements were deleted from the database as well. After these deletions, FBG001D, FBP 44D, FBP 45D, FBP 47D, HTF 3, and ZBG016D no longer had a minimum of 4 well measurements and therefore were not included in the target calibration analysis. SRR's Closure and Disposal Assessment Group determined that ZBG 1A was installed to evaluate perched water near the surface and is not representative of conditions in the UAZ, therefore ZBG 1A was eliminated from further analysis. The HSU of ZBG 6, 7, and 8 were changed from Breaching to UAZ because they penetrate slightly into the Tan Clay but do not compromise it.

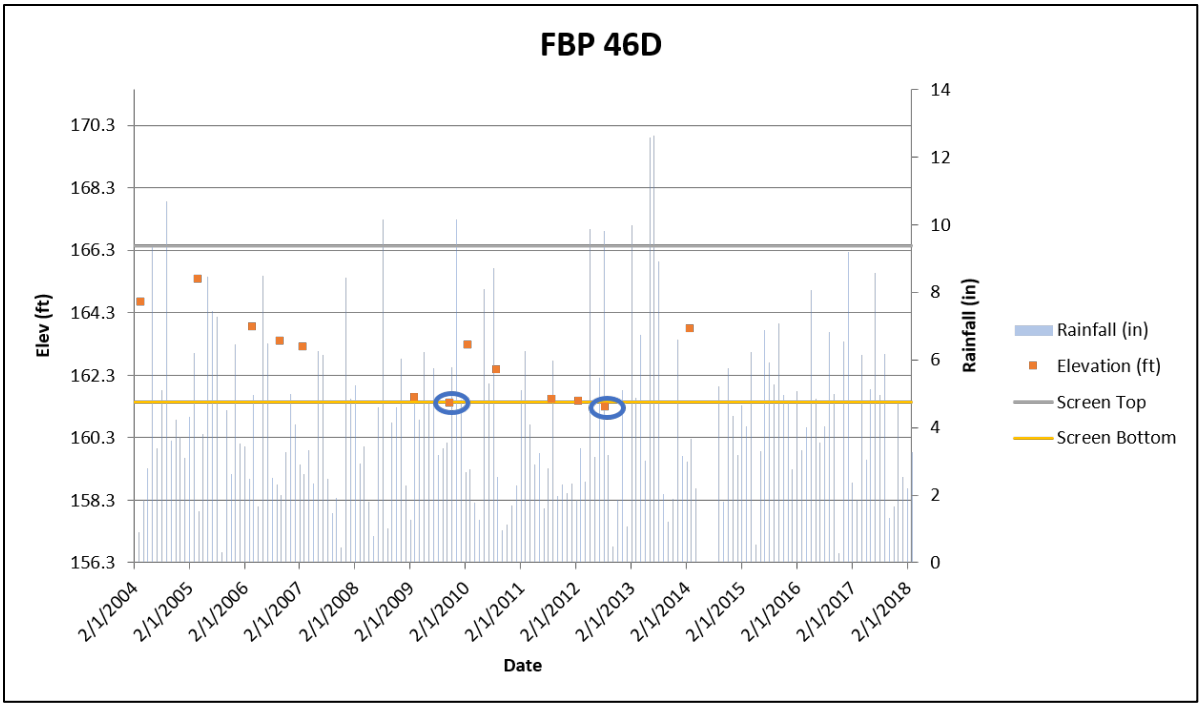


Figure 2-5. Hydrograph showing measurements below the bottom screen

Table 2-3. Number of Wells by HSU

	UAZ	LAZ	GAU	BREACHING
Number of Wells[1]	339	294	81	9

[1] Eight wells are not accounted for in this table. Six well's screen zone is entirely within the Tan Clay Confining Zone (TCCZ) and two well's screen zone is below the bottom of the GAU.

After removing records from wells with missing elements (i.e. missing measurement result), wells outside the GSA footprint, and wells having less than four data points, a total of 45,667 depth to water measurements obtained from a total of 731 wells were evaluated and used to generate new base period target well hydrographs. The wells deleted in the 2015 investigation were checked against the new well data to ensure they were included in the query. Five wells deleted in 2012 due to insufficient measurements had additional measurements taken since 2014 bringing the total number of measurements above four: BSW 2C1, BSW 2D3, BSW 3C1, HTF 4, and ZBG011D. 64 additional wells were included in the present study compared to those that underwent further analysis in 2015. The additional well hydrographs are given in Appendix A.

The water level calibration targets were then assigned a geographic weight that captures the density of wells on a spatial basis using the polygonal de-clustering approach as described in detail within Section 5.0 of Hiergesell 2015b. The polygon areas for UAZ, LAZ, and GAU are shown in Figure 2-5, Figure 2-6, and Figure 2-7, respectively. Additionally, each well was also assigned an inverse distance weight (Leuangthong 2008) either normalized by the sum of all weights, $\widetilde{w_i}$, or the average weight, $\widehat{w}_i$:

$$\overline{w_i} = \frac{1}{\sum_{num_{wells}} \frac{1}{d_i}^p}$$

$$\widehat{w}_i = \frac{\overline{w_i}}{(\frac{\overline{w_i}}{num_{wells}})}$$

$$\widetilde{w_i} = \frac{\overline{w_i}}{(\sum_{num_{wells}} \overline{w_i})}$$

where:
$\overline{w_i}$ is the inverse distance weight factor (un-normalized), d_i is the distance between well, i and each other well, p is an exponent selected as the distance criteria (weights for p=2 were computed), and num_{wells} is the number of wells in the HSU. The Fortran code utilized in assigning the inverse distance weights is given in Appendix E. Weights for each target well residing within a HSU are listed in Appendix D.

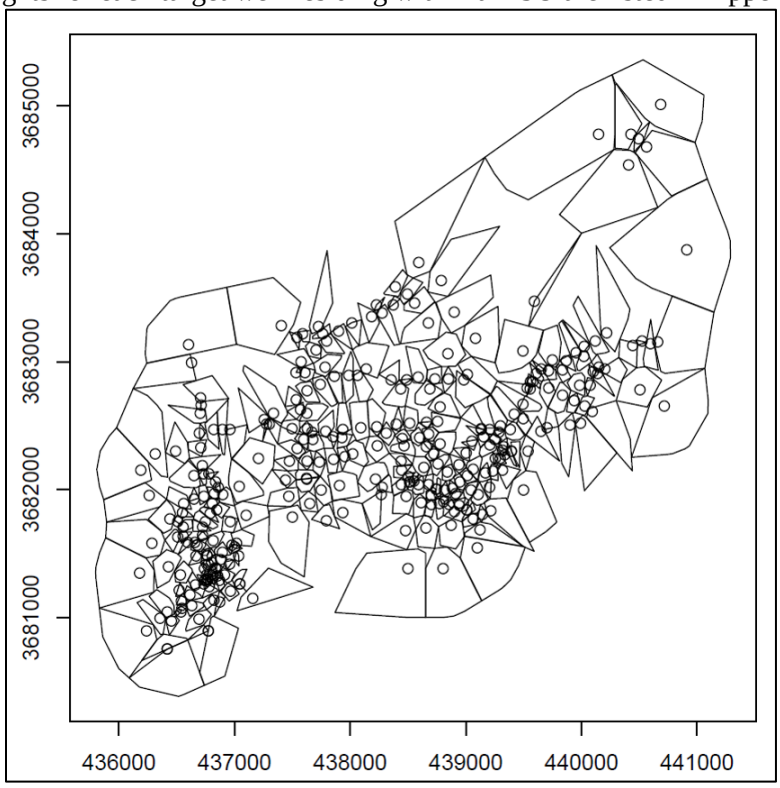


Figure 2-6. Polygon areas of the UAZ

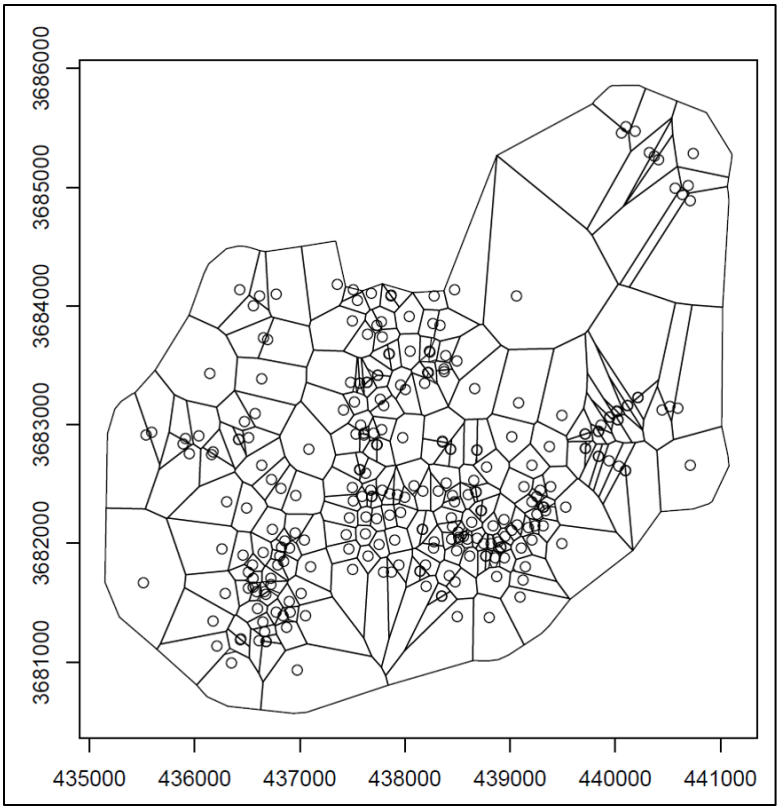


Figure 2-7. Polygon areas of the LAZ

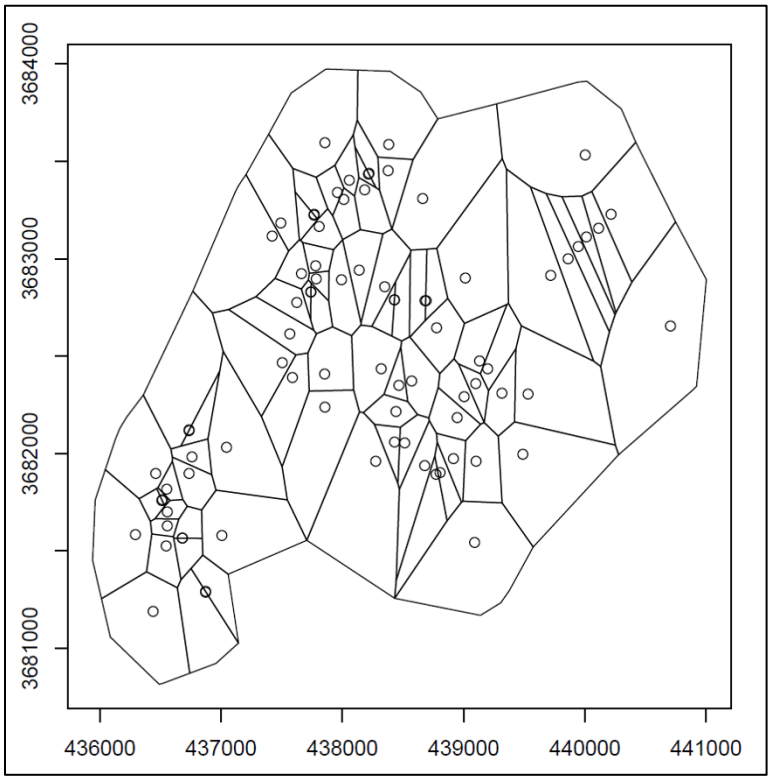


Figure 2-8. Polygon areas of the GAU

3.0 Summary and Conclusions

The work described in this report is part of an effort to update the GSA regional groundwater flow calibration targets to incorporate additional well data. A total of 45,667 depth to water measurements obtained from a total of 731 wells were evaluated and used to generate new base period target well hydrographs using a modified version of the Excel-based Well Hydrograph Analysis Tool (WHAT) developed by Hiergesell and coworkers (2015a and 2015b). The original version of WHAT did not correctly compute the median well water level, and occasionally the minimum and maximum values. An exercise was conducted to identify and remove any spurious measurements from the hydrographs and the water level statistical quantities were then computed for each well. Hydrographs for the 64 additional wells studied in this report are presented in Appendix A. As the task order requested special emphasis on Z-Area, all those area wells are given in Appendix B. Each well's mean water level is taken to be the "target" water level that will ultimately be utilized in the re-calibration of the GSA groundwater model. The suite of statistical quantities calculated for each well are presented in Appendix C.

An analysis of the selected target wells, by location, was conducted to determine an appropriate weighting factor to associate with each target well. Two different de-clustering methods were considered, the "polygonal de-clustering" method from Hiergesell and coworkers (2015b) as well as an inverse distance weighting approach (Fortran code presented in Appendix E). A listing of the all target wells, by HSU, along with its coordinates, target water level, and weighting factors is presented in Appendix D.

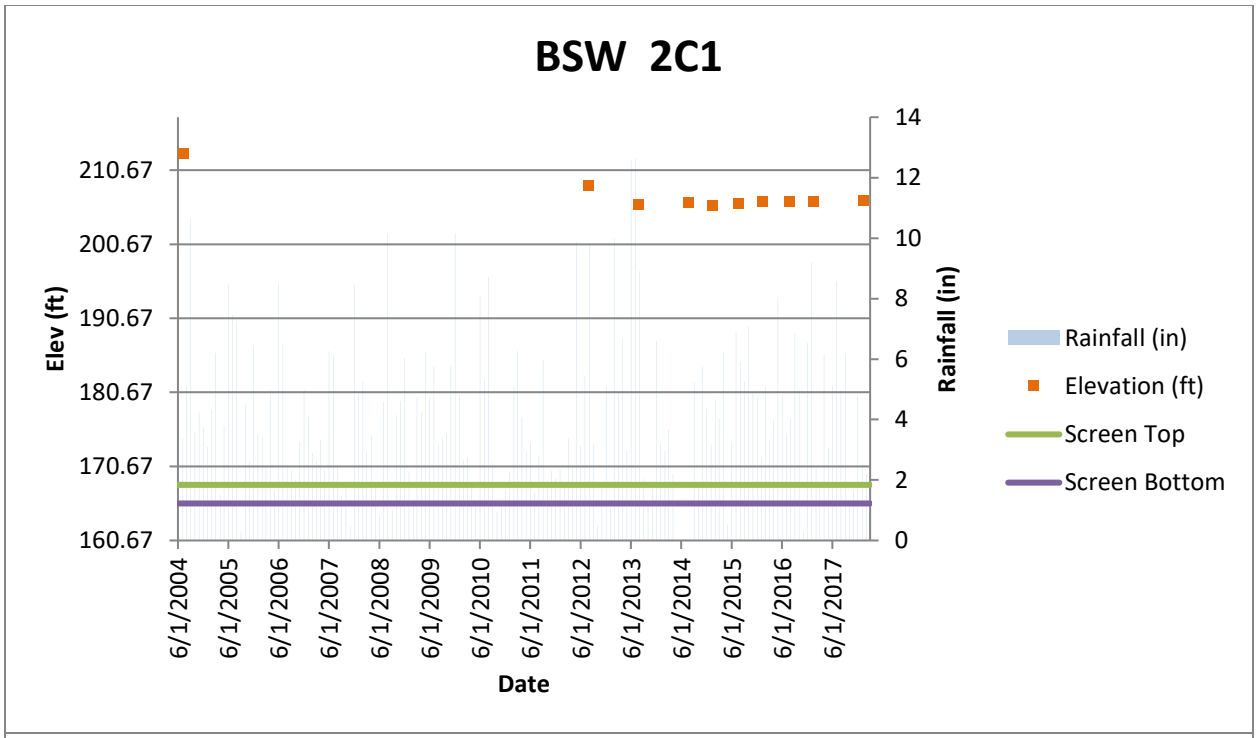
4.0 References

Hiergesell, R. A. and Taylor, G. A. General Separations Areas (GSA) Groundwater Level Measurement Analysis. SRNL-STI-2015-00034, Revision 0. February 2015.

Hiergesell, R. A., Taylor, G. A., Phifer, M. A., Whiteside, T. S., and Flach, G. P. General Separations Areas (GSA) Groundwater Model Calibration Targets. SRNL-STI-2015-00351, Revision 0. August 2015.

Leuangthong, O., Khan, K. D., and Deutsch, C. V. **Solved Problems in Geostatistics**. Hoboken, New Jersey: John Wiley & Sons. 2008.

Appendix A New Base Period Target Well Hydrographs by Hydrostratigraphic Unit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180.67
170.67
160.67
Rainfall (in)
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6
4
2
0
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6/1/2012
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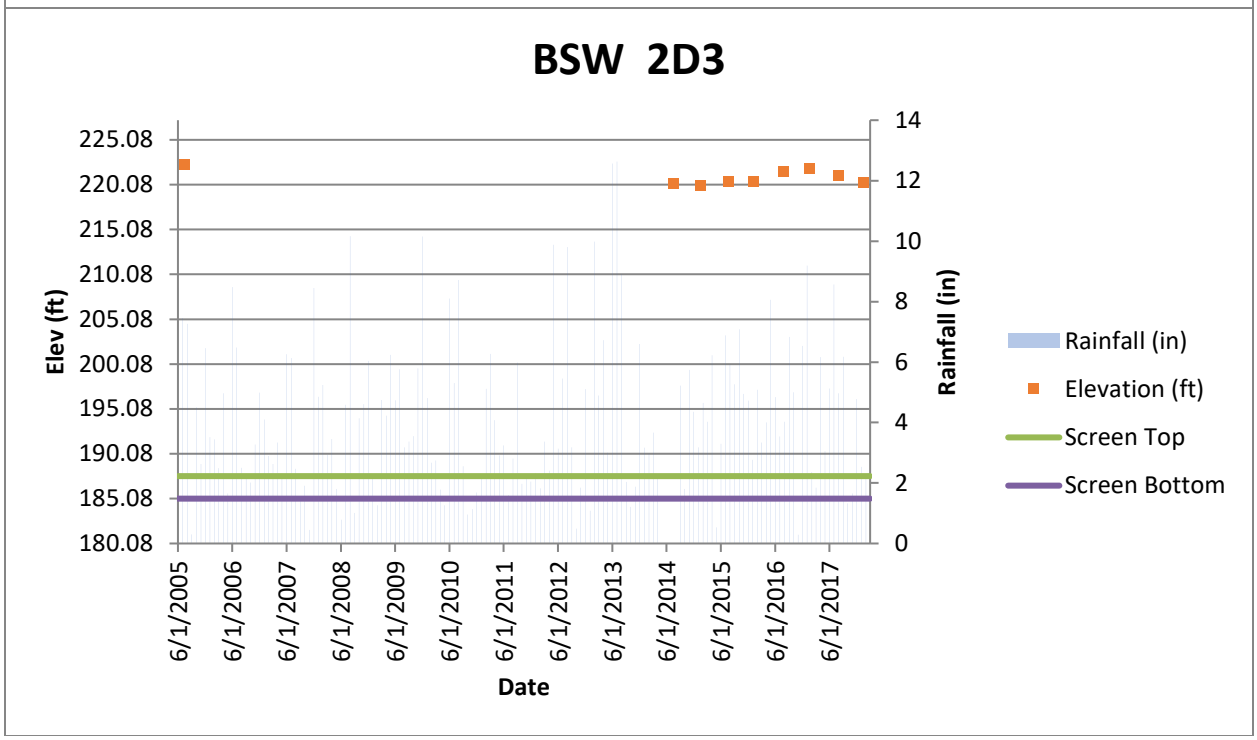
6/1/2016
6/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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Rainfall (in)
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Elevation (ft)
Screen Top
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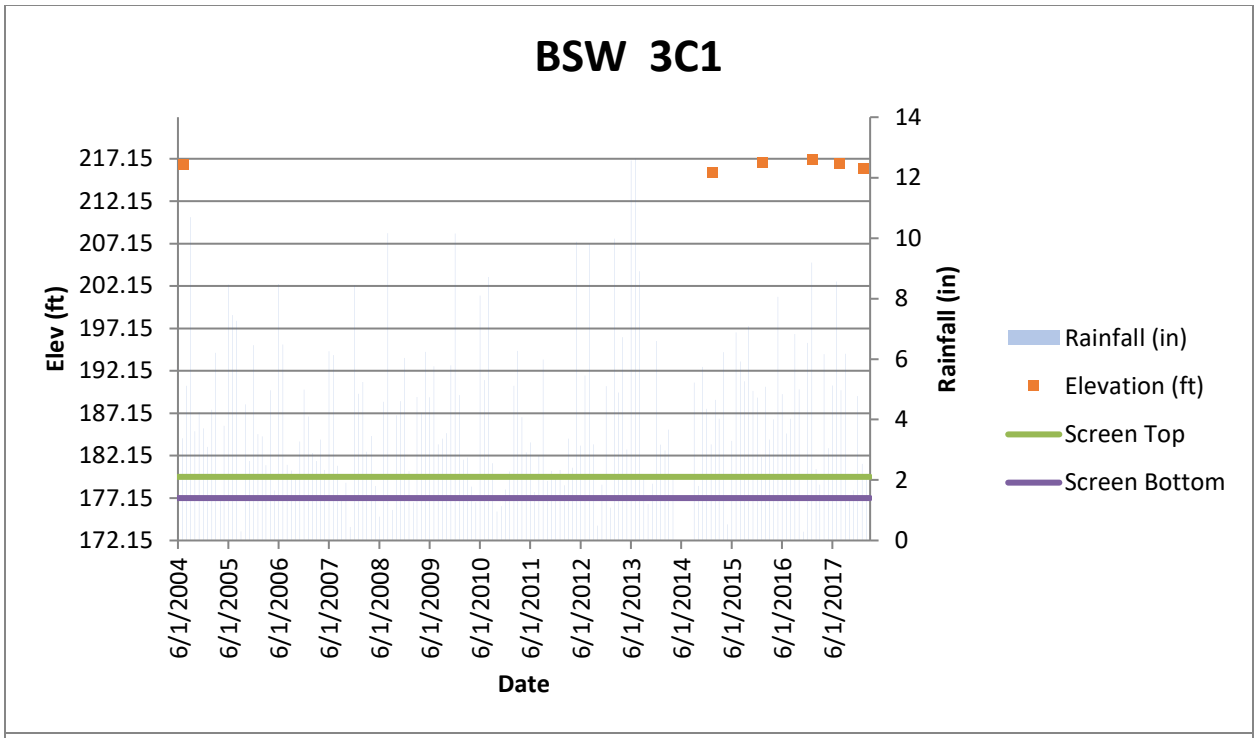
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Rainfall (in)
Elevation (ft)
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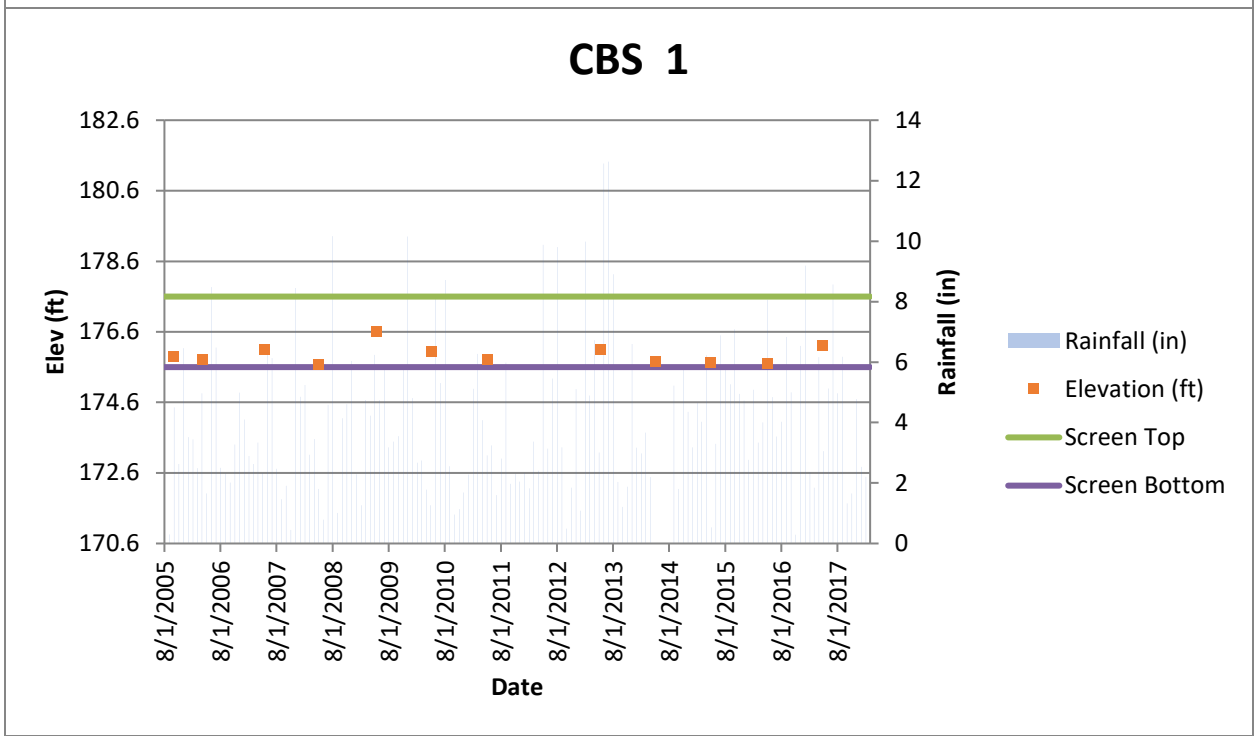
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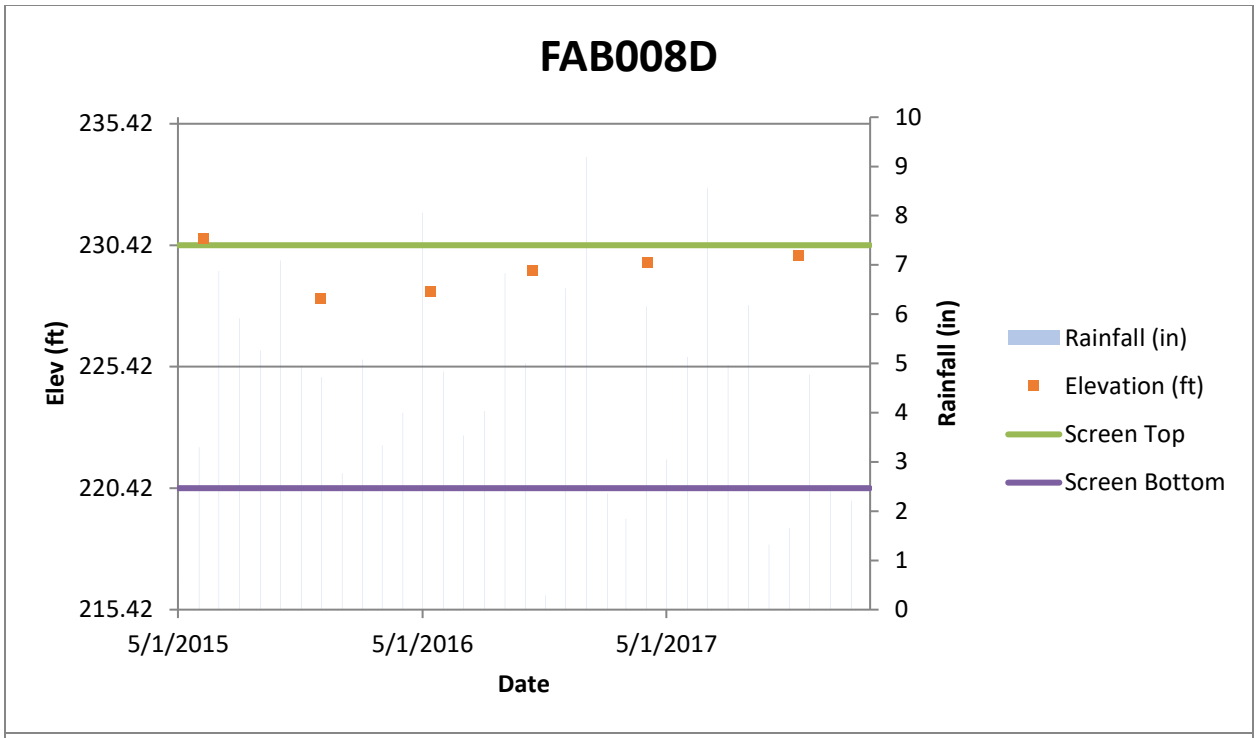
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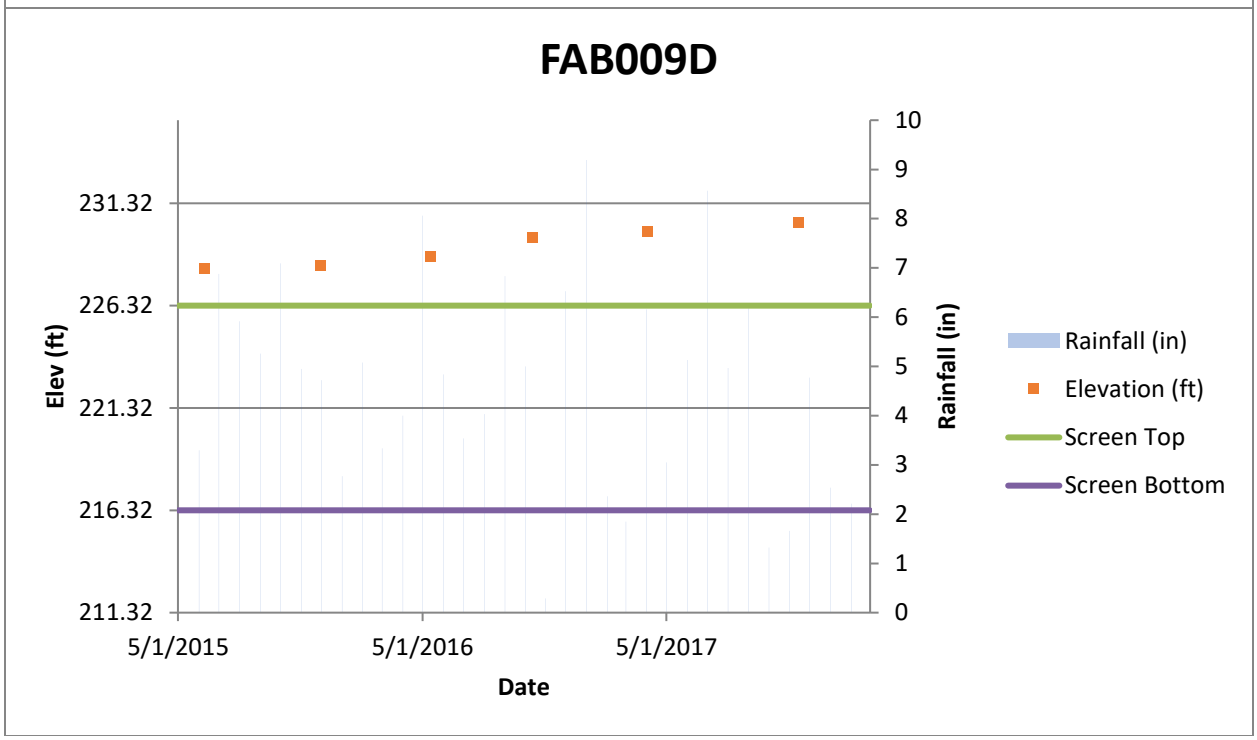
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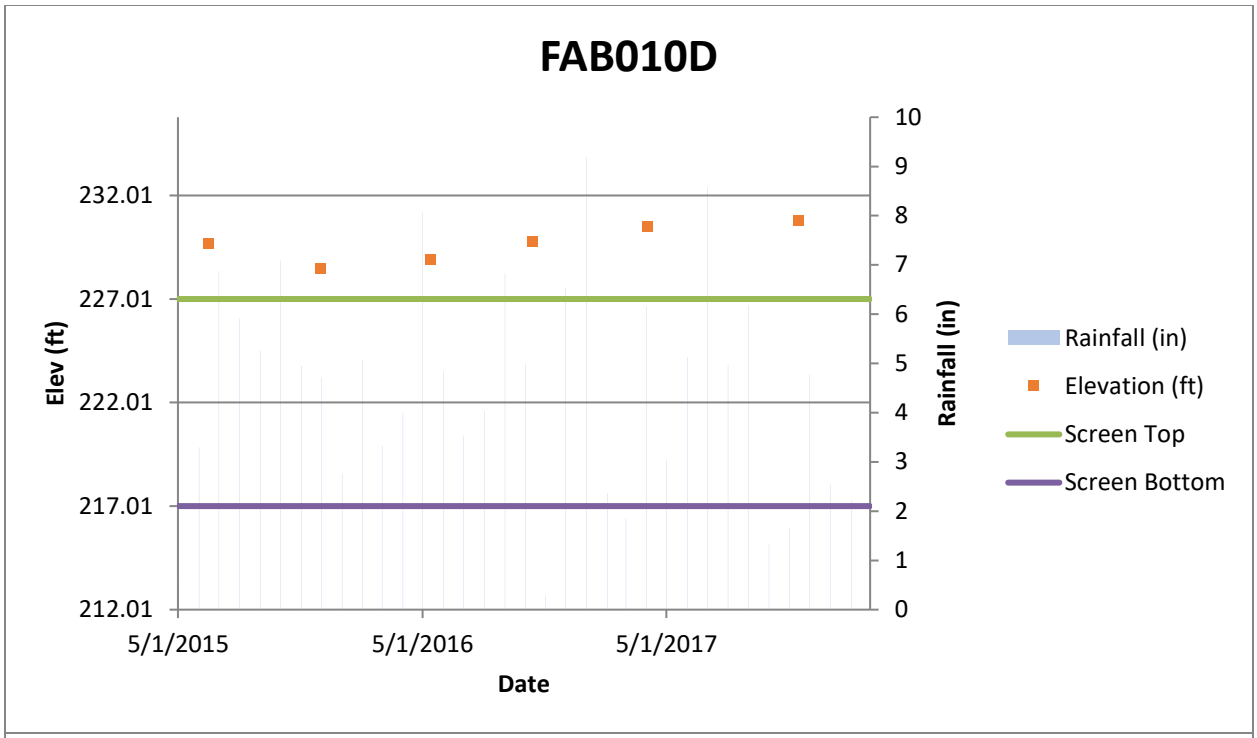
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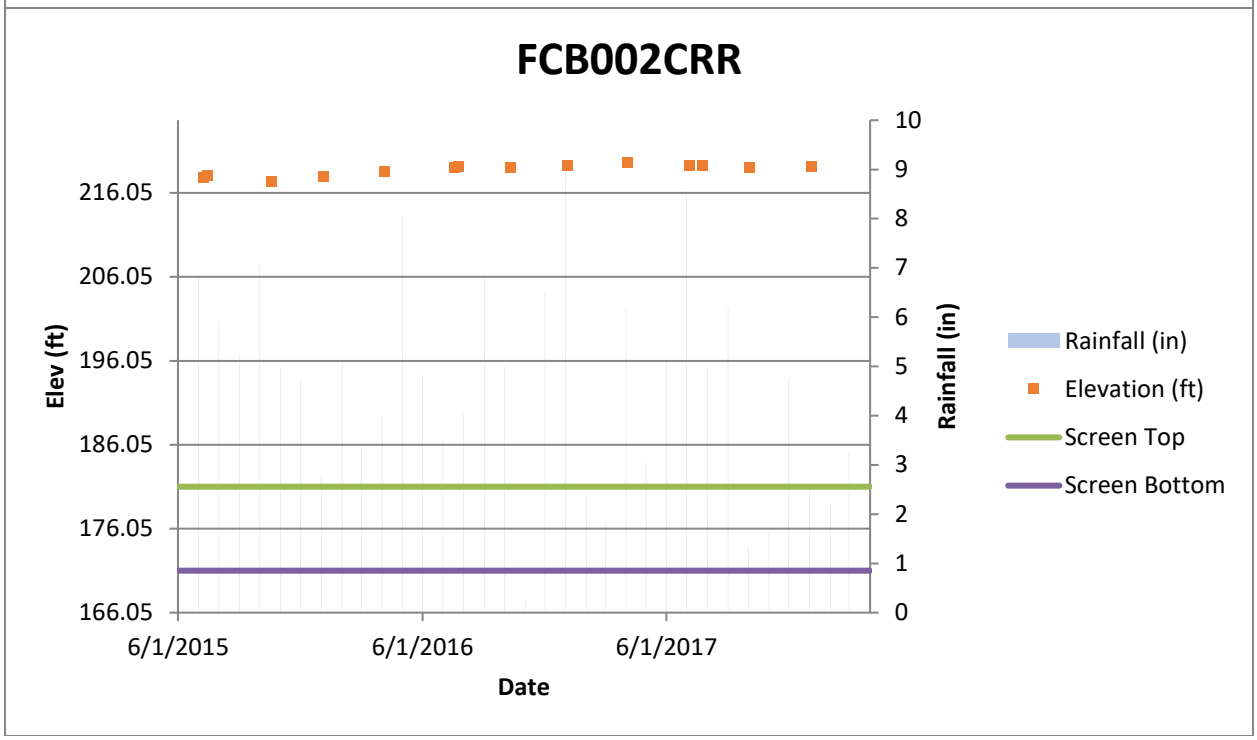
222.01
217.01
212.01
Elev (ft)
10
9
8
7
6
5
4
3
2
1
0
Rainfall (in)
5/1/2015
5/1/2016
5/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FCB002CRR
216.05
206.05
196.05
186.05
176.05
166.05
Elev (ft)
10
9
8
7
6
5
4
3
2
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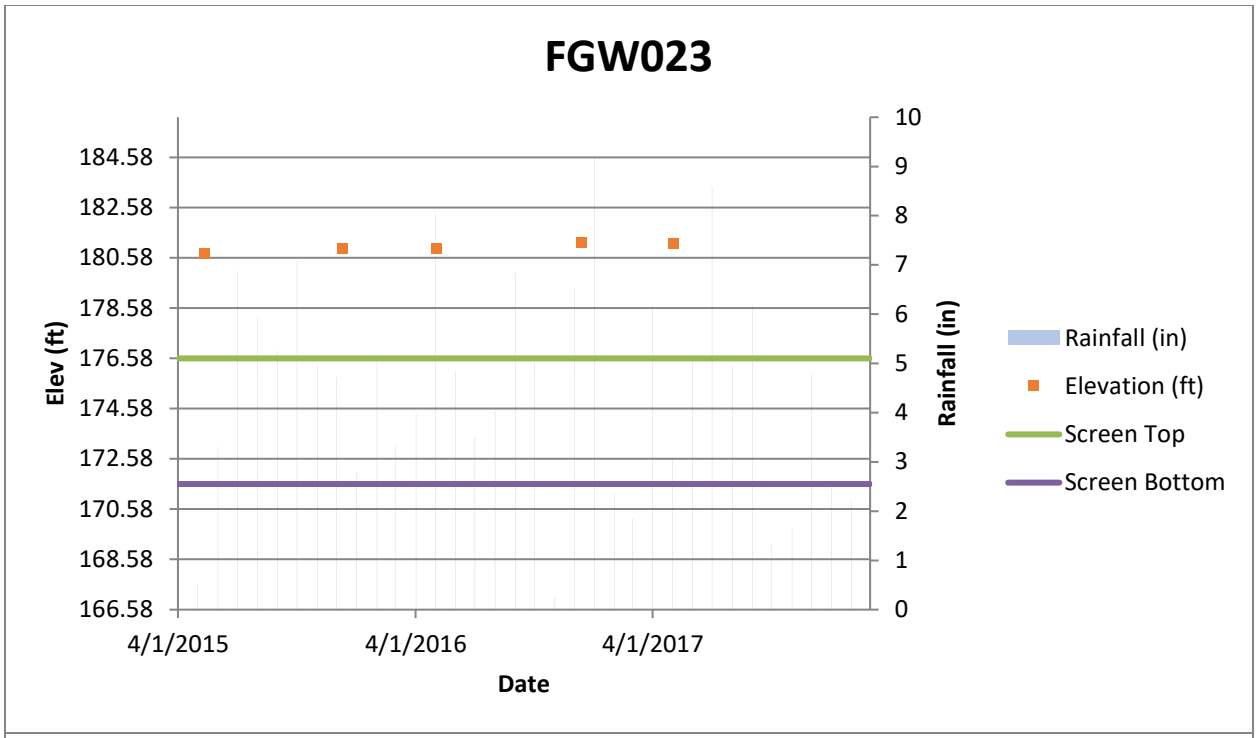
Rainfall (in)
6/1/2015
6/1/2016
6/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FGW023
184.58
182.58
180.58
178.58
176.58
174.58
172.58
170.58
168.58
166.58
Elev (ft)
10
9
8
7
6
5
4
3
2
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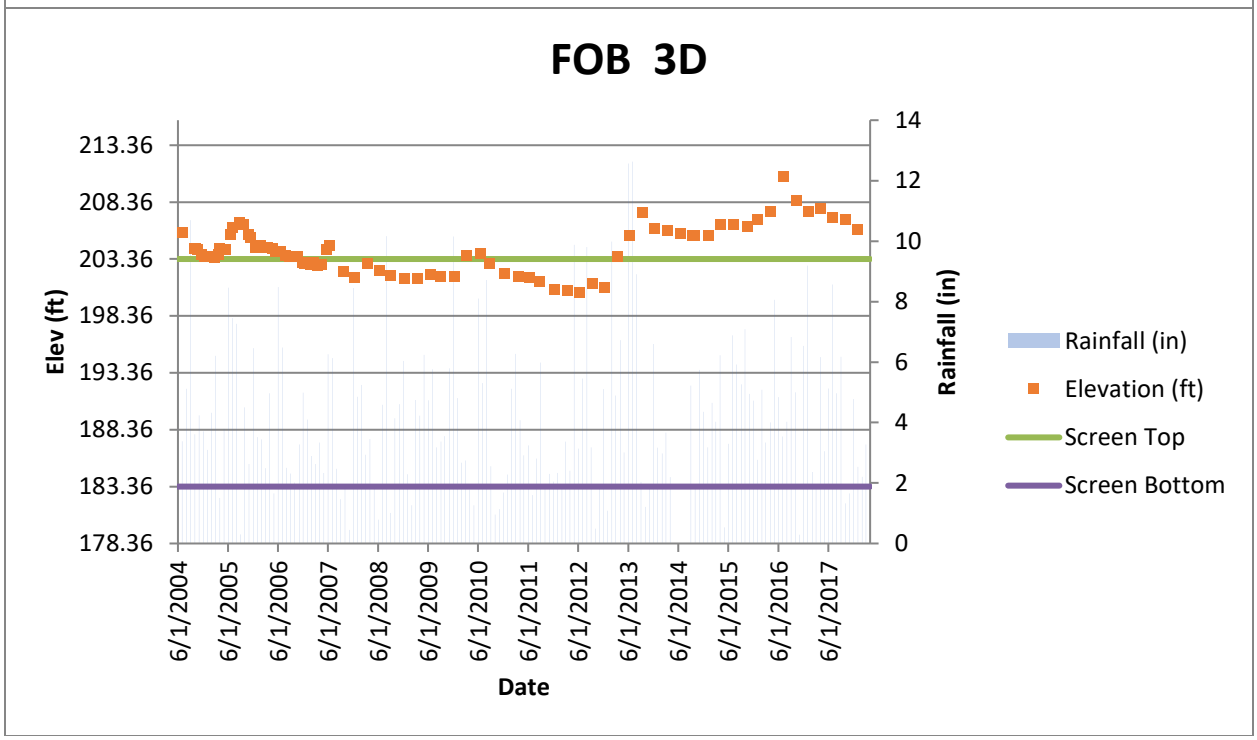
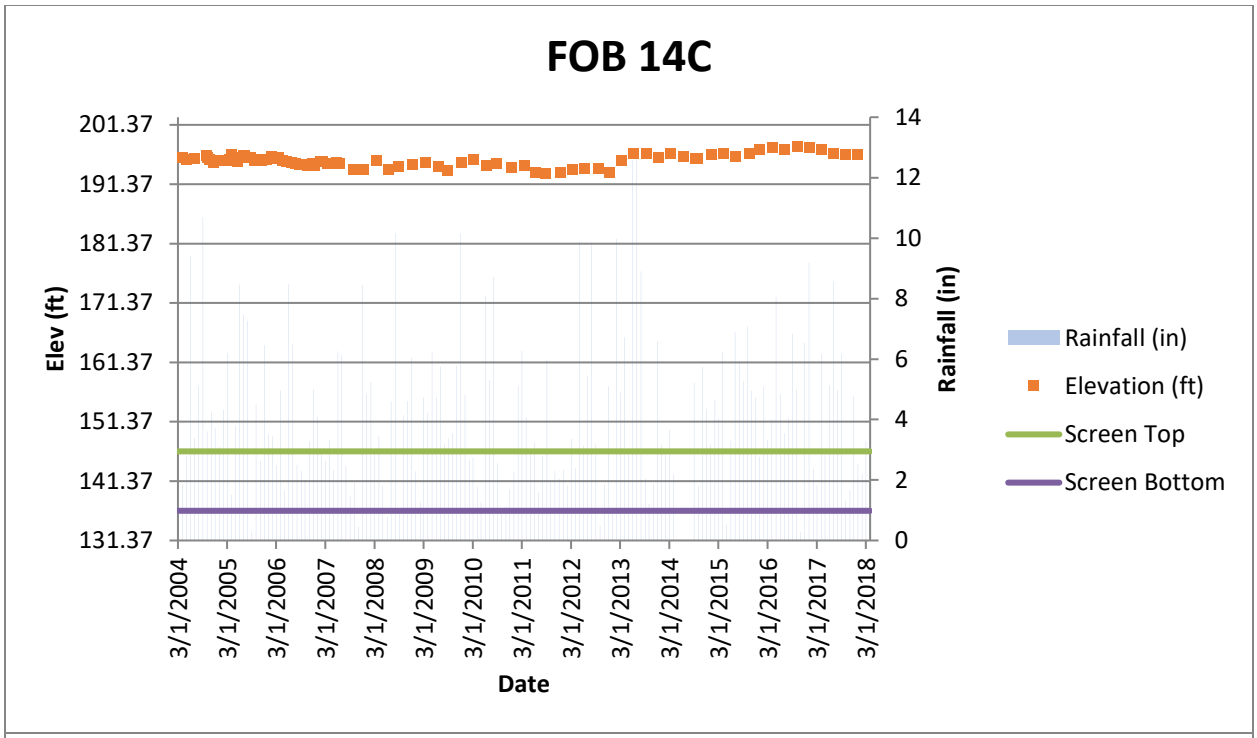
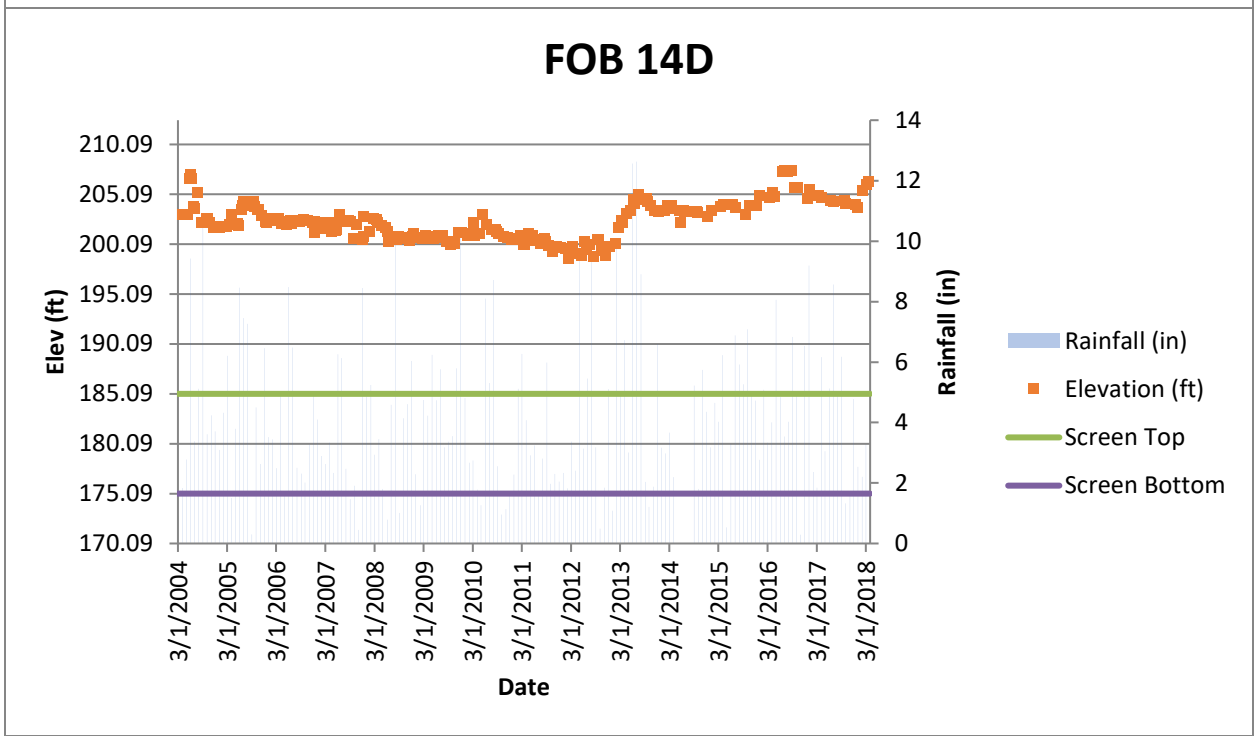
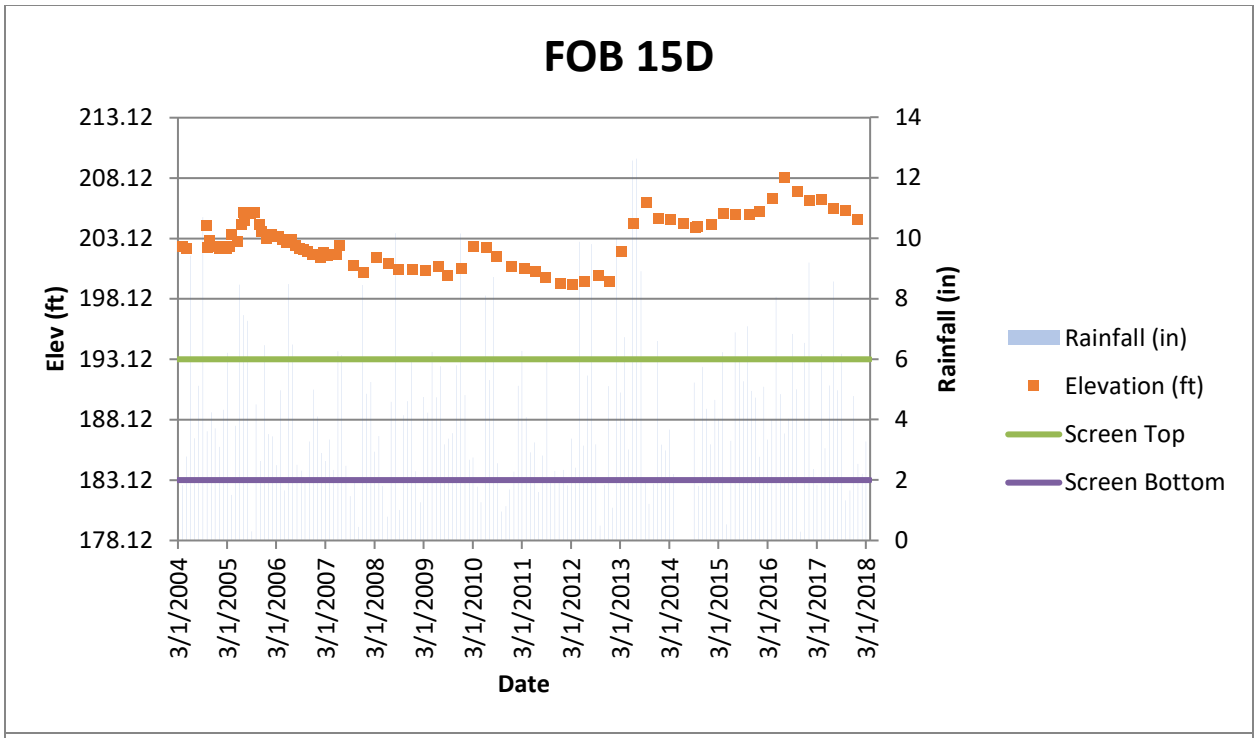
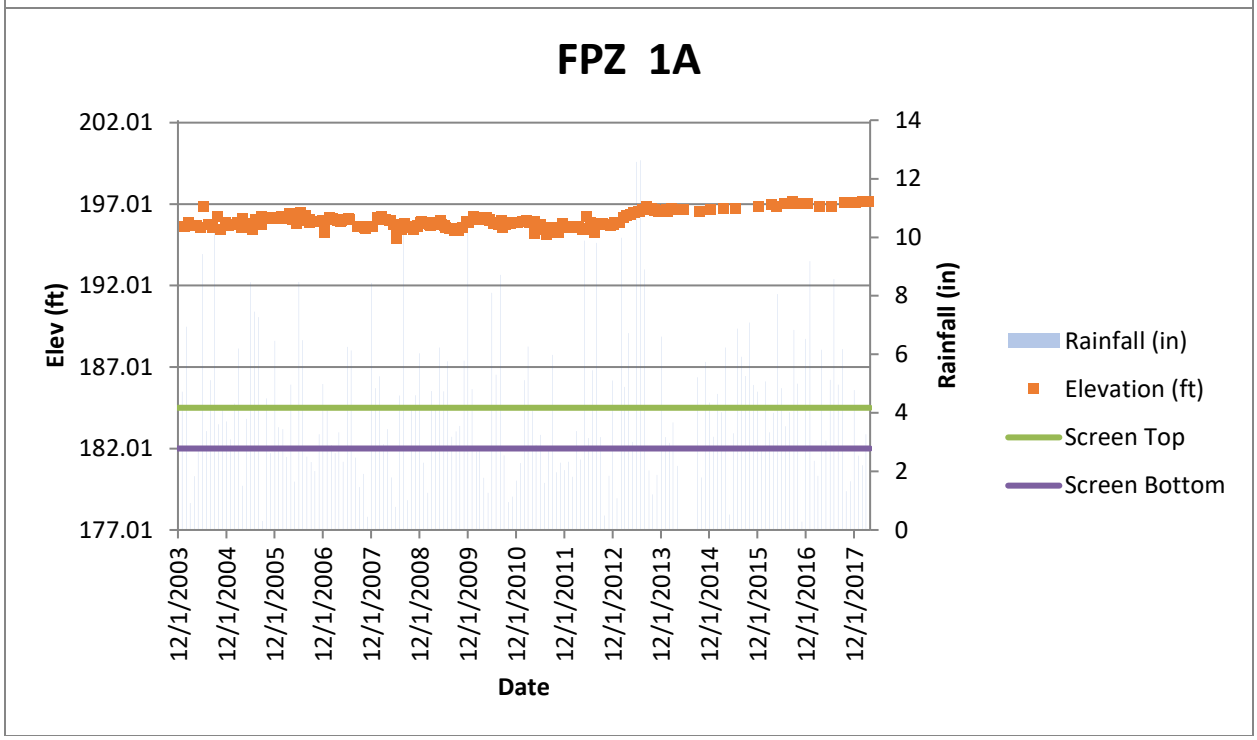
0
Rainfall (in)
4/1/2015
4/1/2016
4/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

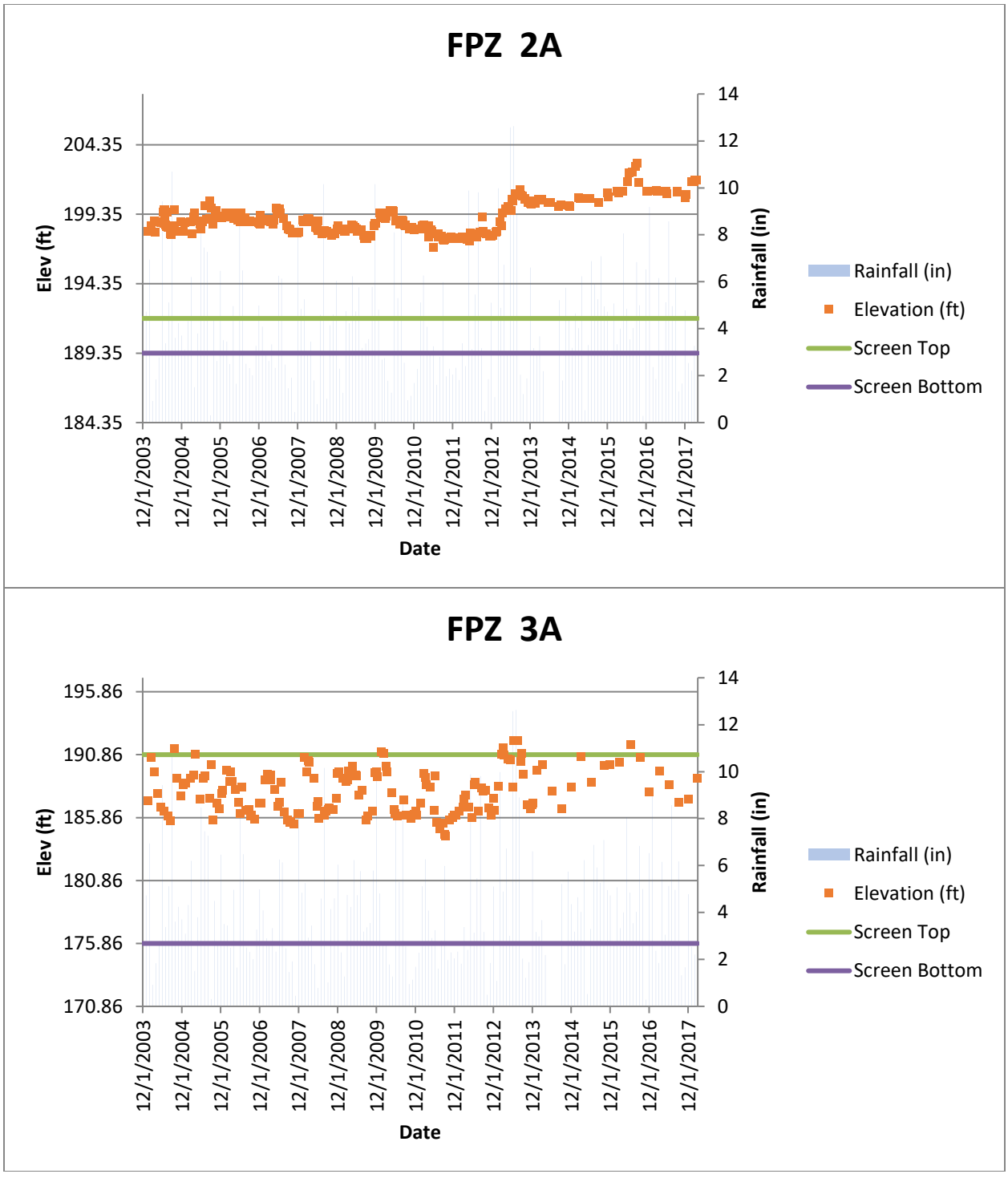

FOB 3D
213.36
208.36
203.36
198.36
193.36
188.36
183.36
178.36
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
6/1/2004
6/1/2005
6/1/2006
6/1/2007
6/1/2008
6/1/2009
6/1/2010
6/1/2011
6/1/2012
6/1/2013
6/1/2014
6/1/2015
6/1/2016
6/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

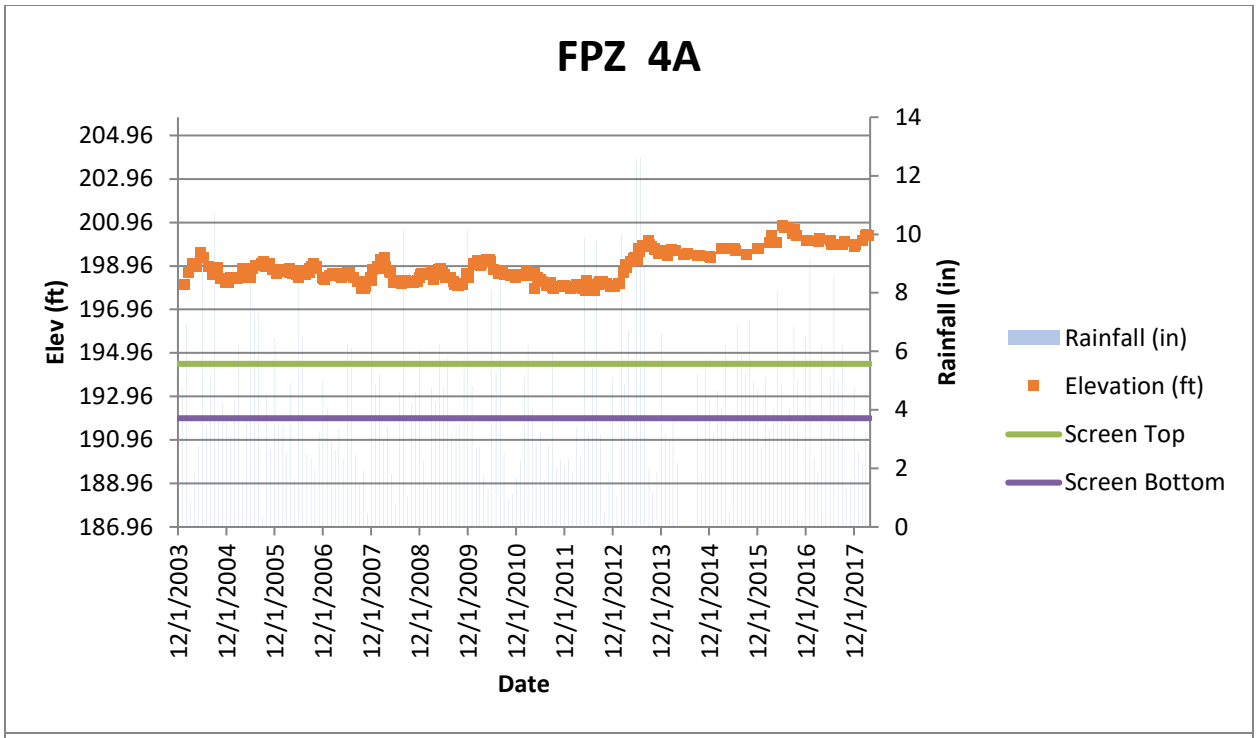

FOB 14C
201.37
191.37
181.37
171.37
161.37
151.37
141.37
131.37
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

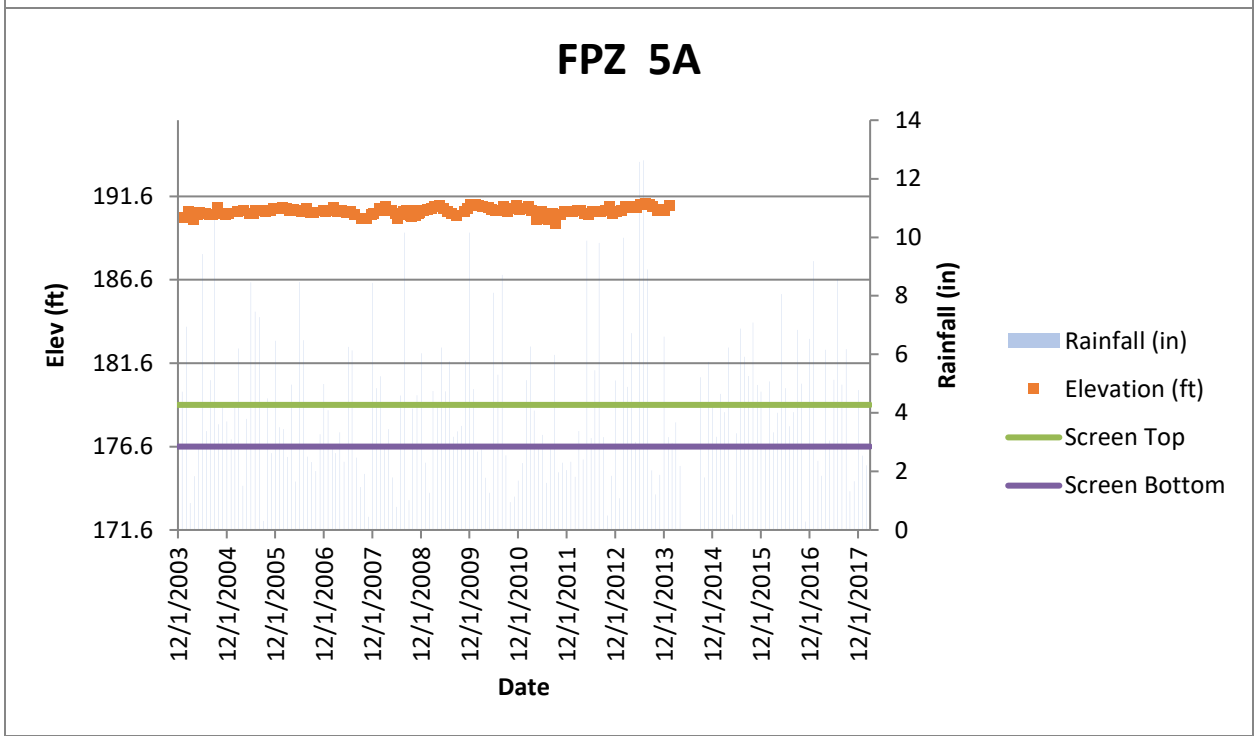

FOB 14D
210.09
205.09
200.09
195.09
190.09
185.09
180.09
175.09
170.09
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

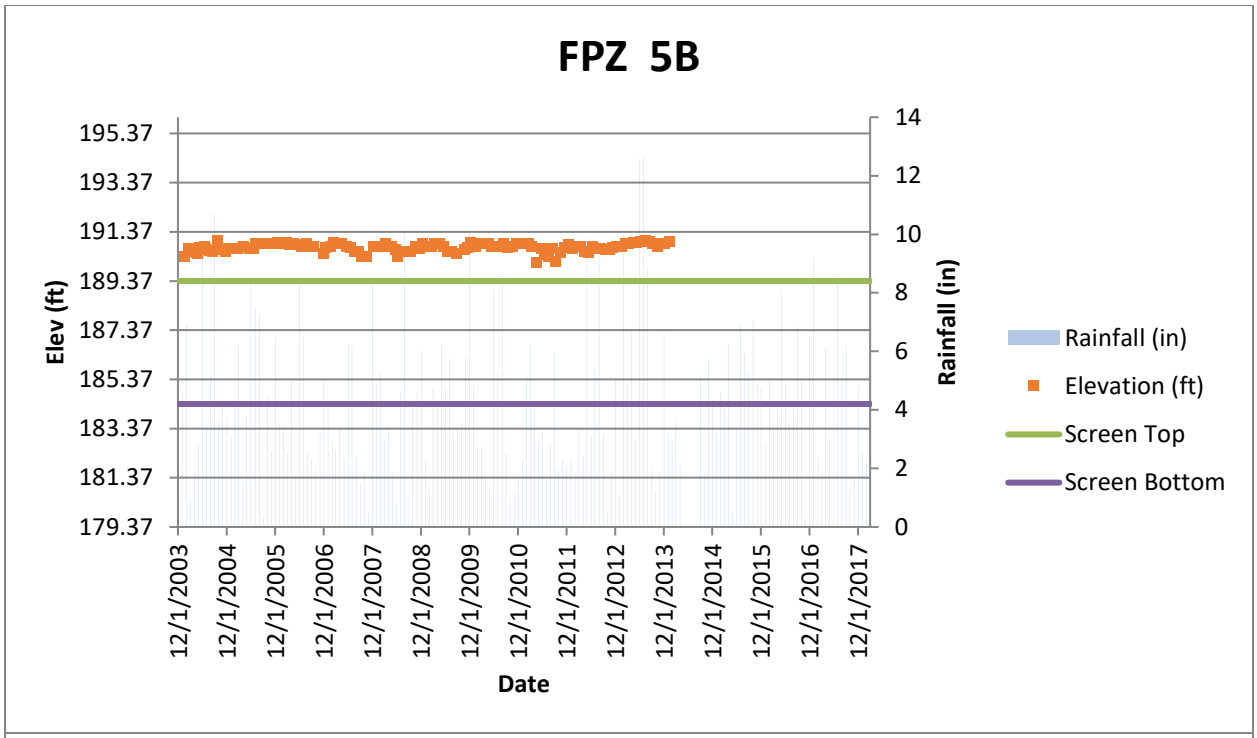

FOB 15D
213.12
208.12
203.12
198.12
193.12
188.12
183.12
178.12
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

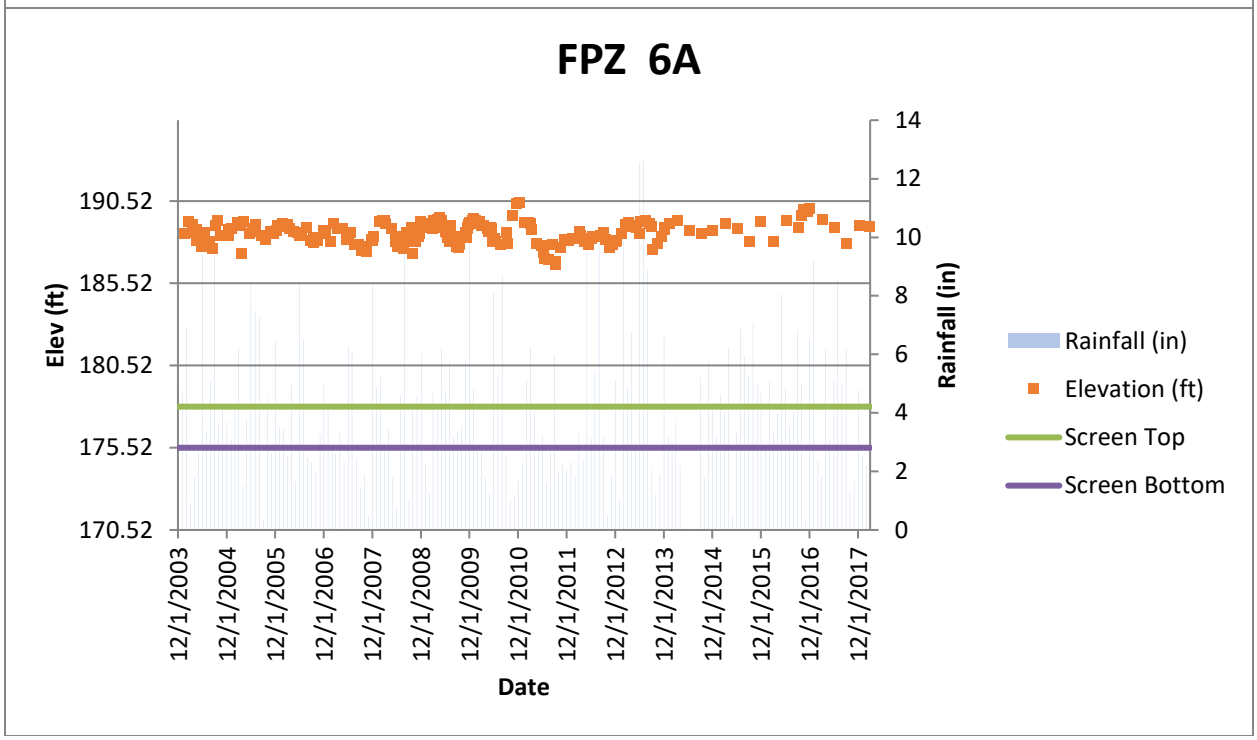

FPZ 1A
202.01
197.01
192.01
187.01
182.01
177.01
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

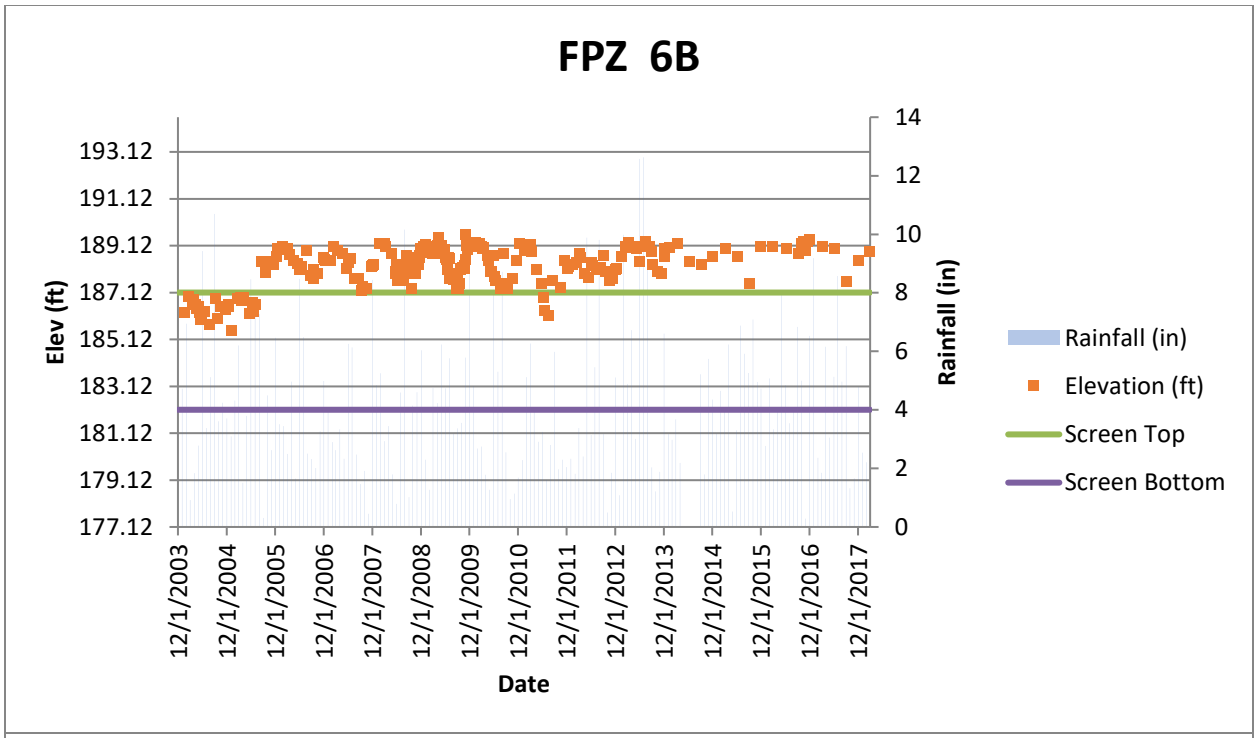

FPZ 2A
Elev (ft)
204.35
199.35
194.35
189.35
184.35
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom
FPZ 3A
Elev (ft)
195.86
190.86
185.86
180.86
175.86
170.86
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

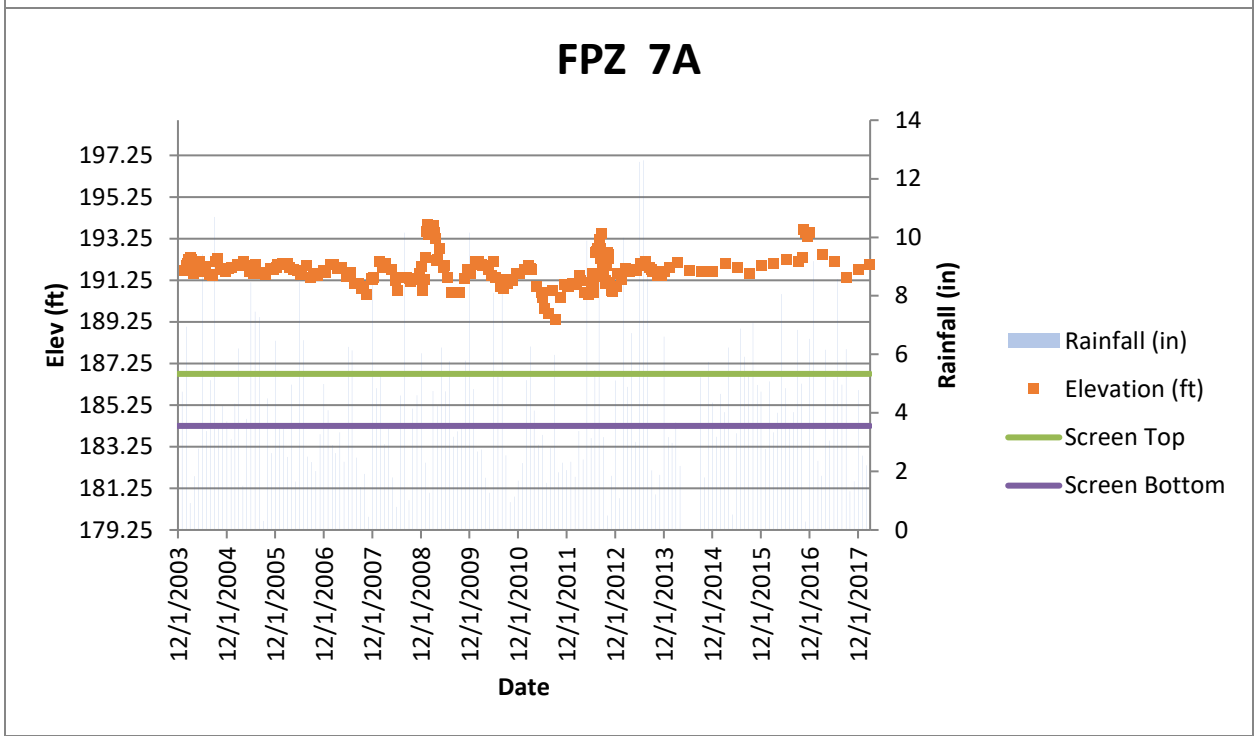

FPZ 4A
Elev (ft)
204.96
202.96
200.96
198.96
196.96
194.96
192.96
190.96
188.96
186.96
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

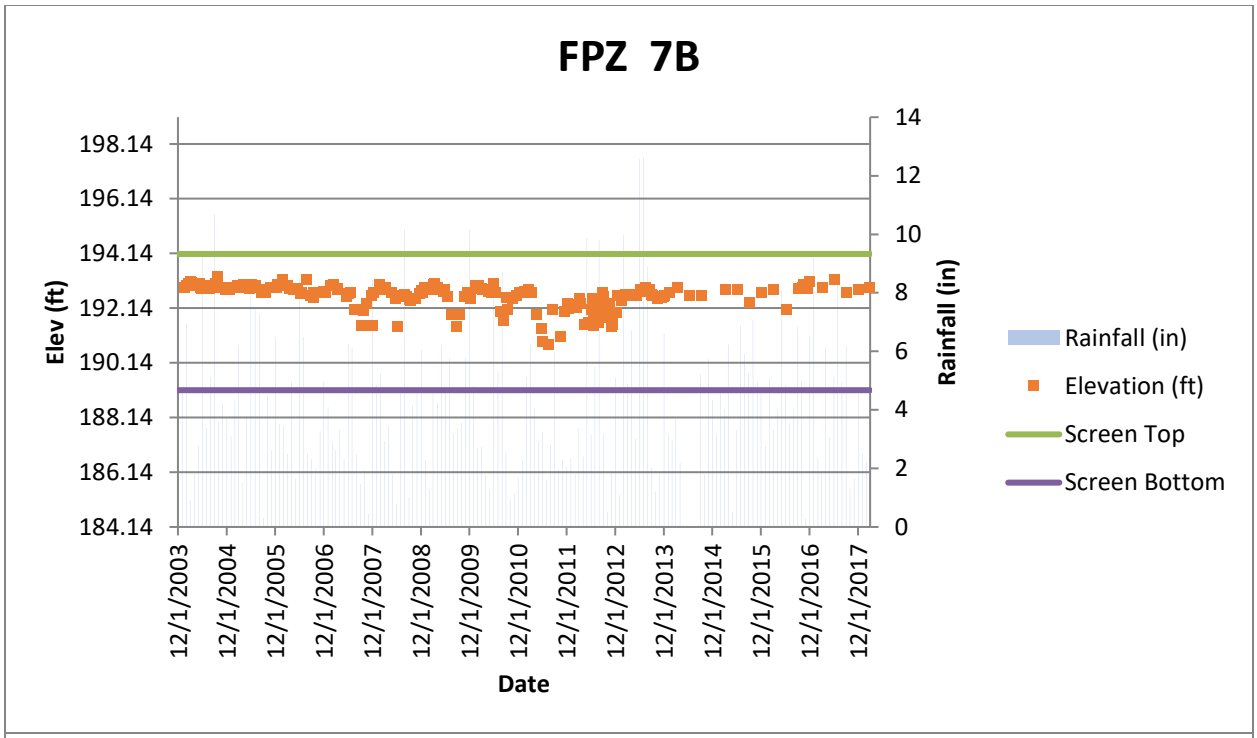

FPZ 5A
Elev (ft)
191.6
186.6
181.6
176.6
171.6
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

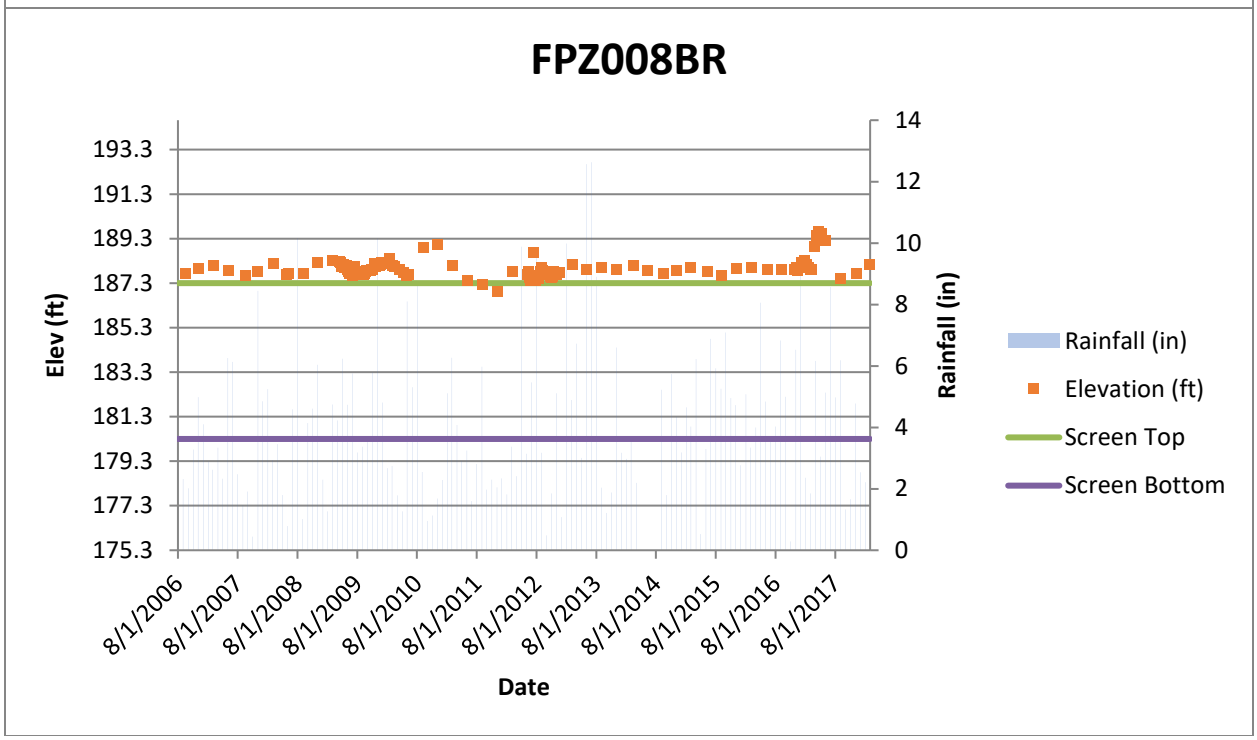

FPZ 5B
195.37
193.37
191.37
189.37
187.37
185.37
183.37
181.37
179.37
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

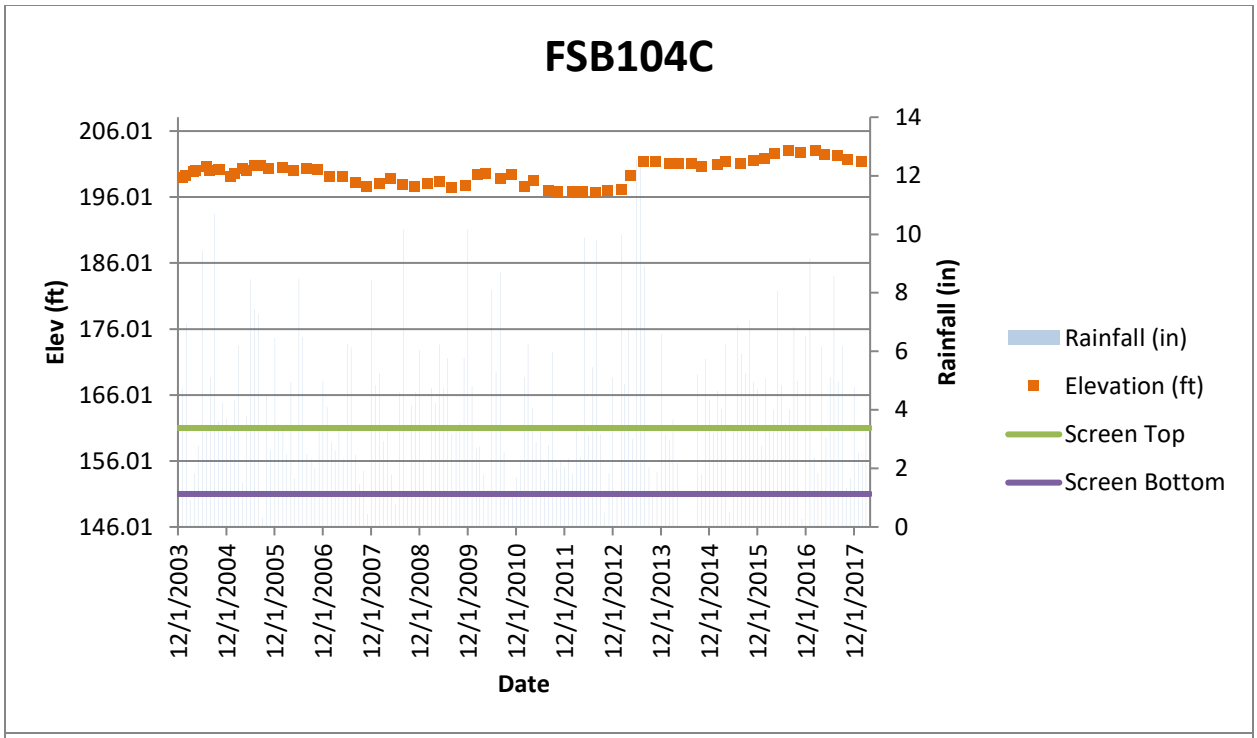

FPZ 6A
190.52
185.52
180.52
175.52
170.52
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

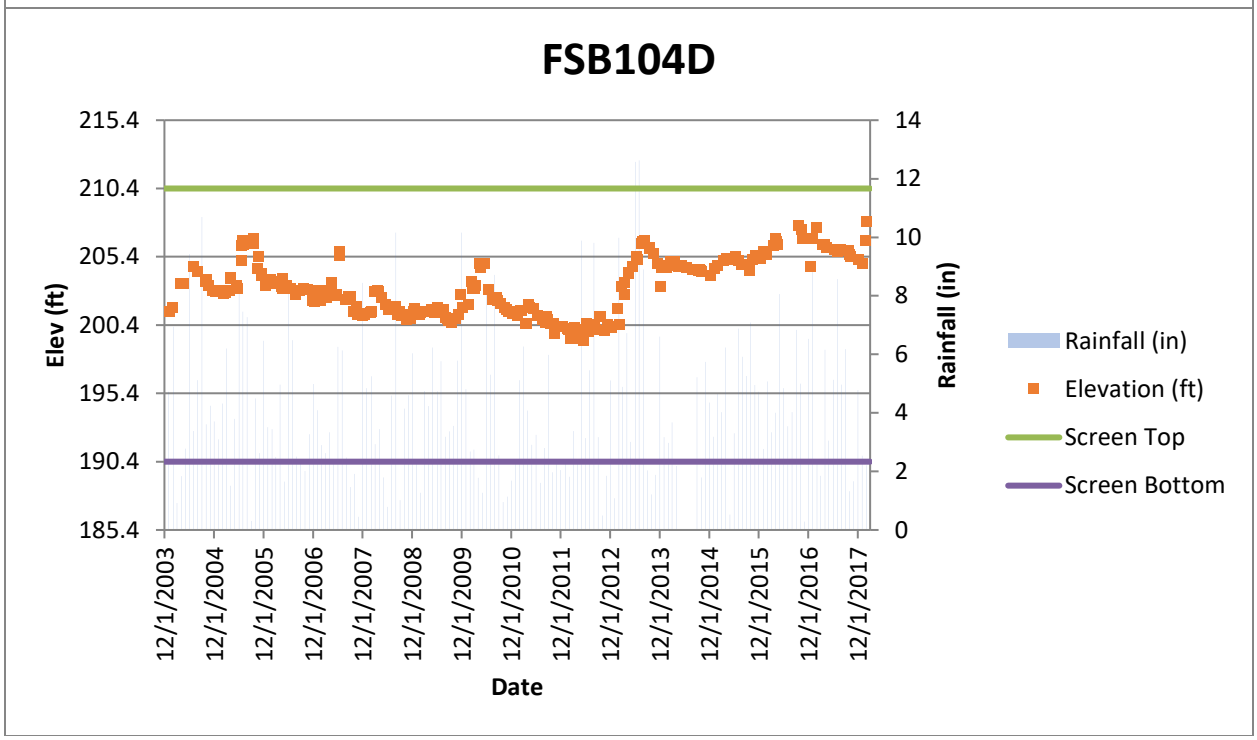

FPZ 6B
Elev (ft)
193.12
191.12
189.12
187.12
185.12
183.12
181.12
179.12
177.12
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

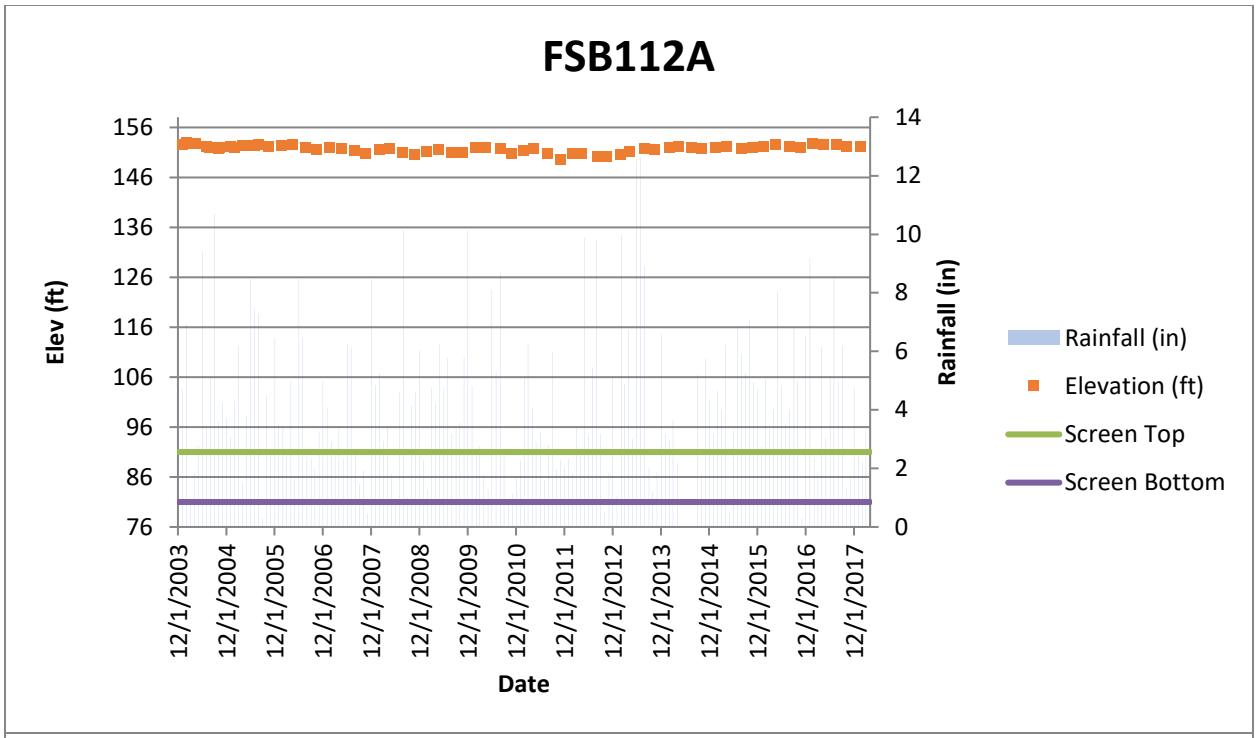

FPZ 7A
Elev (ft)
197.25
195.25
193.25
191.25
189.25
187.25
185.25
183.25
181.25
179.25
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

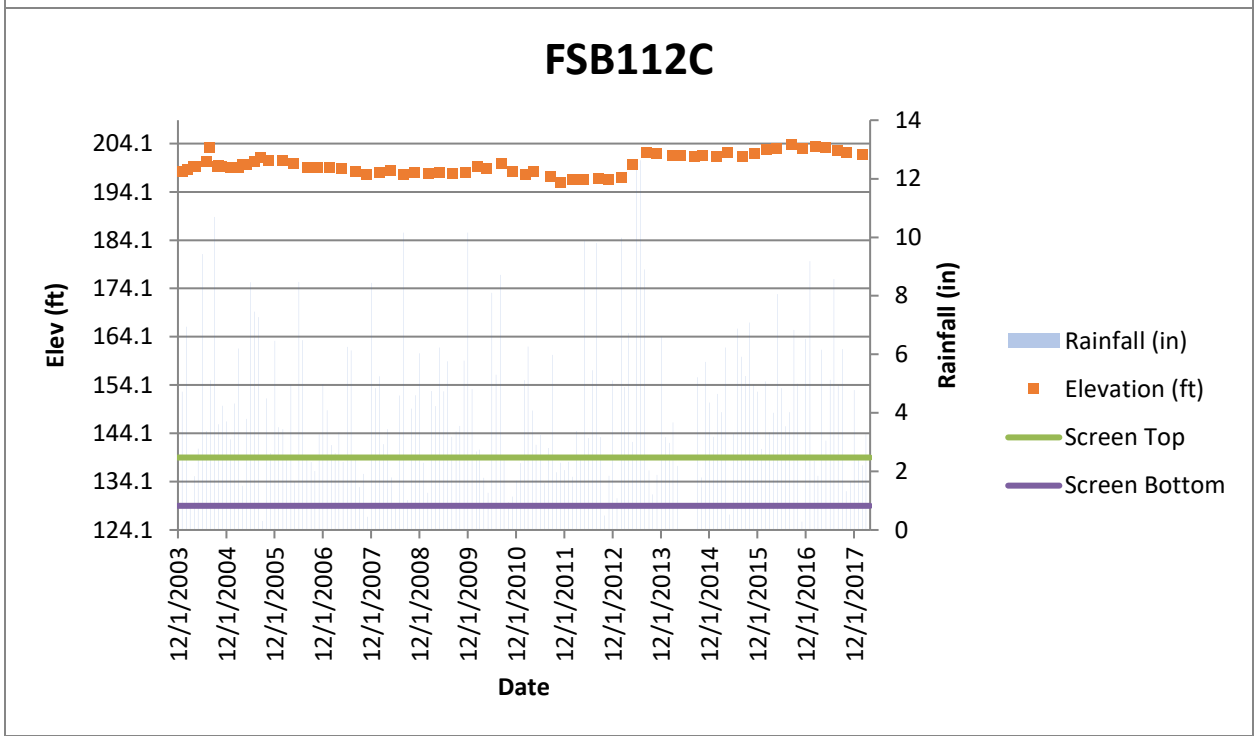

FPZ 7B
198.14
196.14
194.14
192.14
190.14
188.14
186.14
184.14
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

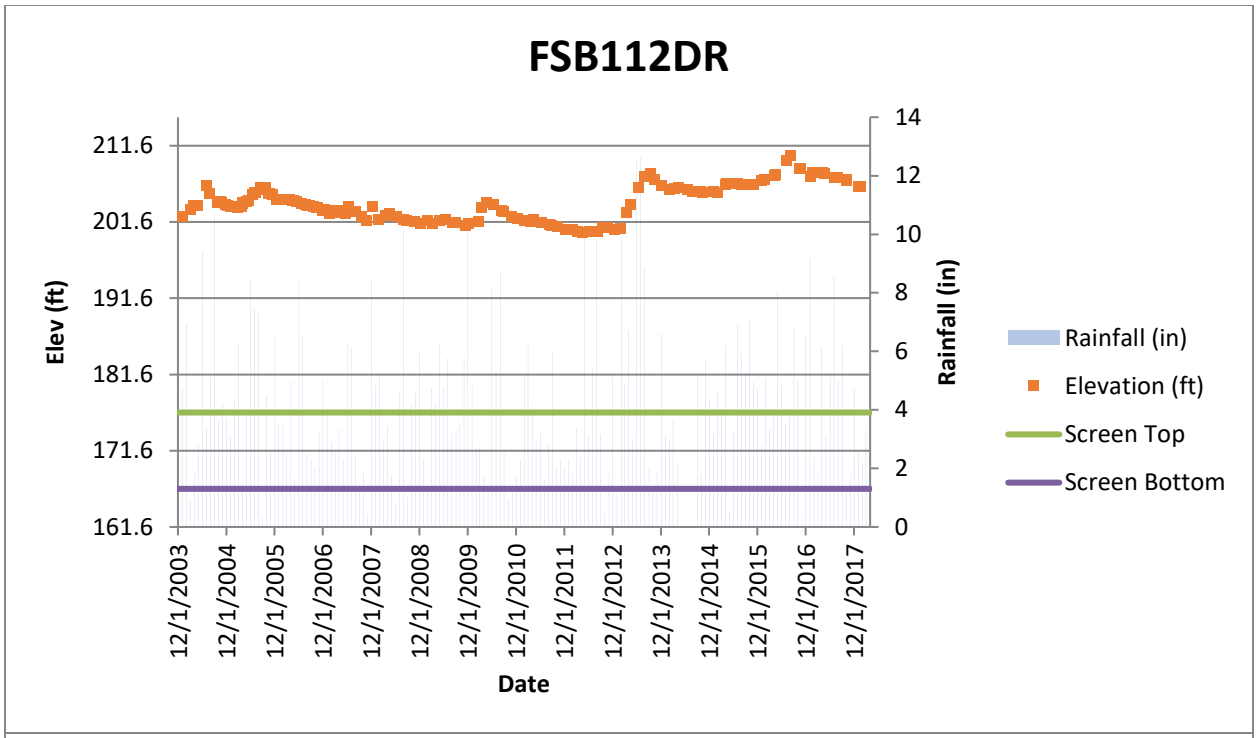

FPZ008BR
193.3
191.3
189.3
187.3
185.3
183.3
181.3
179.3
177.3
175.3
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
8/1/2006
8/1/2007
8/1/2008
8/1/2009
8/1/2010
8/1/2011
8/1/2012
8/1/2013
8/1/2014
8/1/2015
8/1/2016
8/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

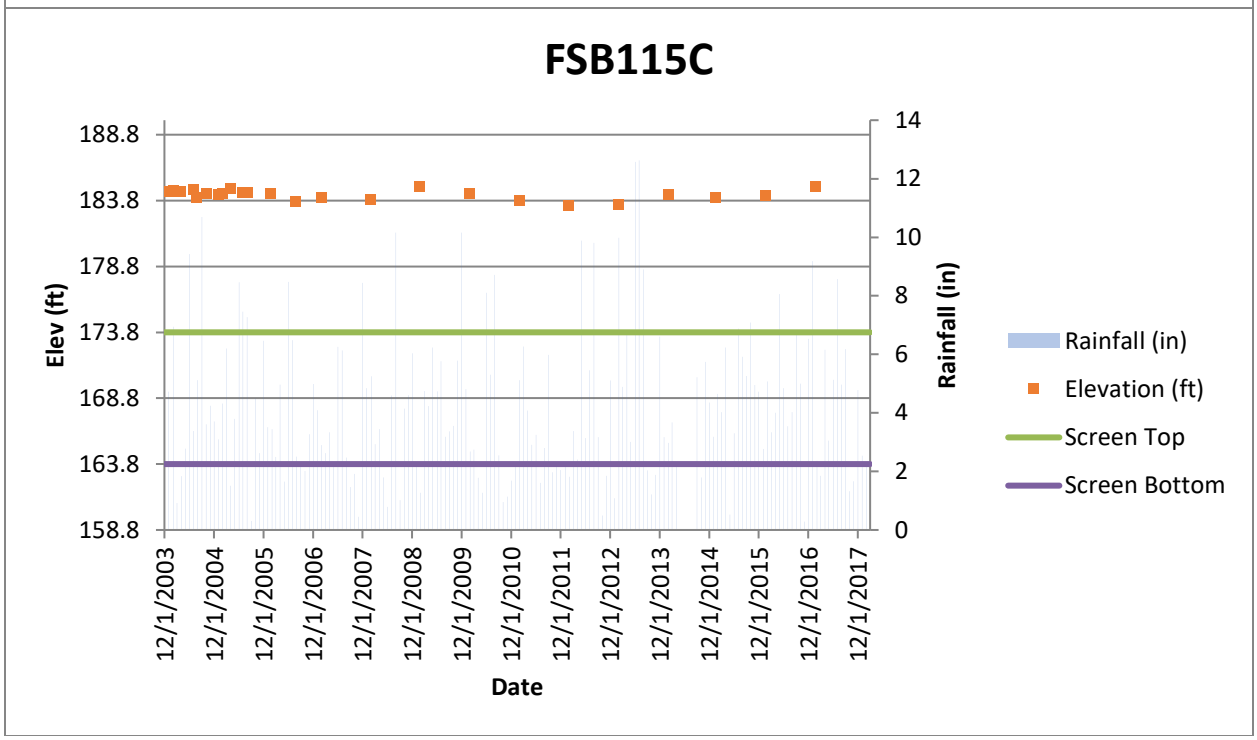

FSB104C
206.01
196.01
186.01
176.01
166.01
156.01
146.01
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

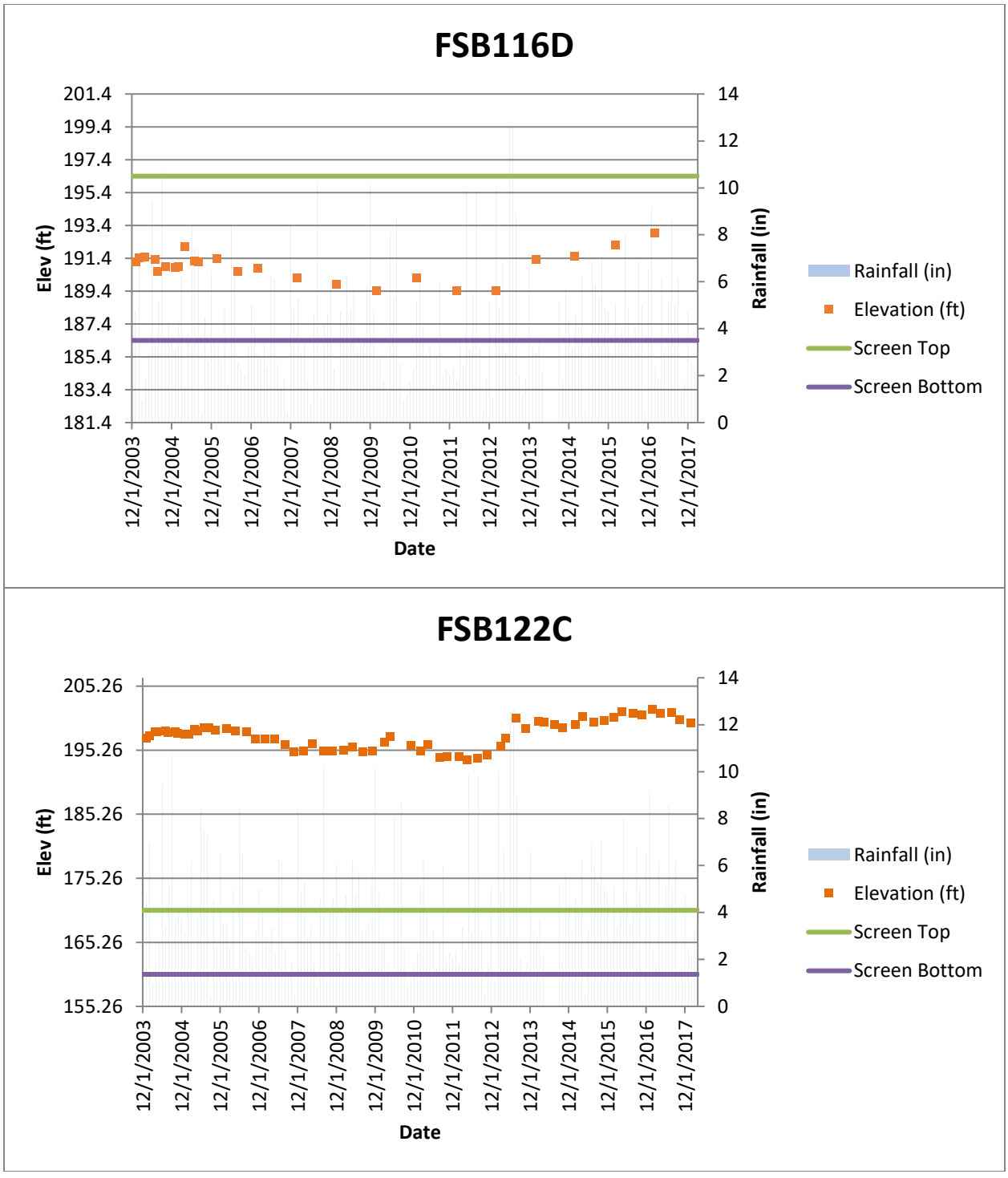

FSB104D
215.4
210.4
205.4
200.4
195.4
190.4
185.4
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

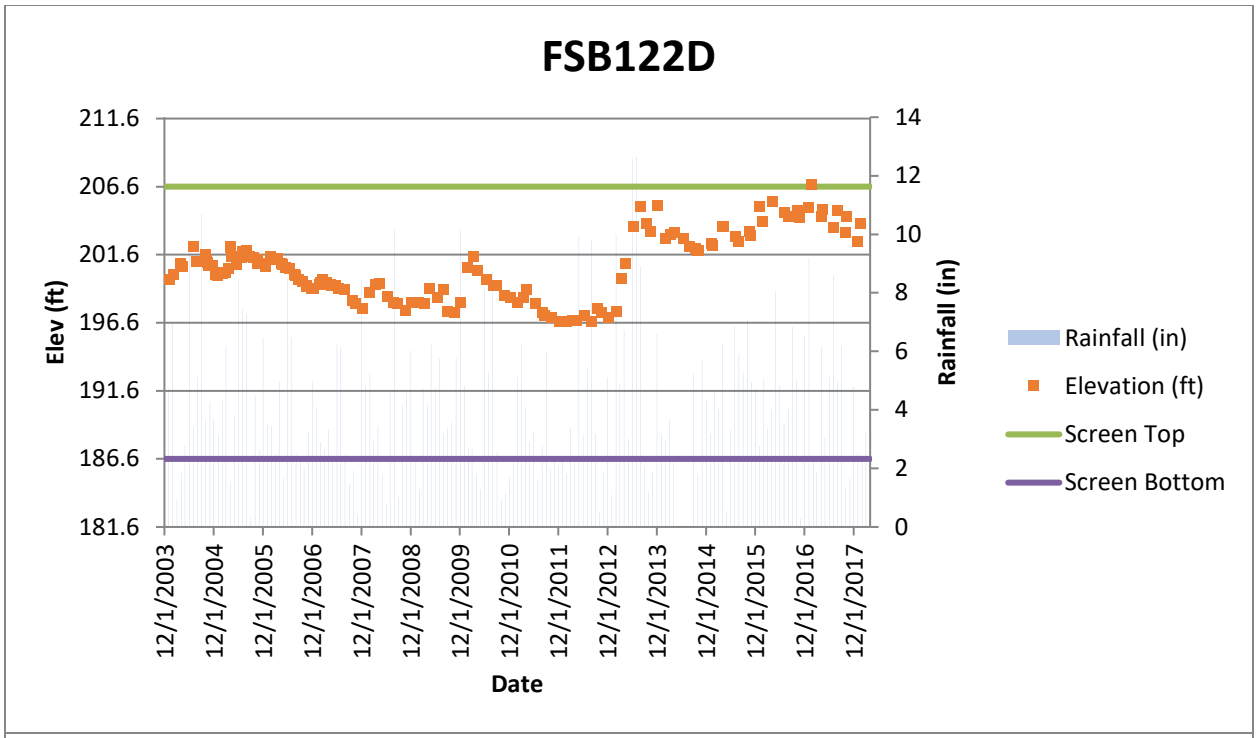

FSB112A
Elev (ft)
156
146
136
126
116
106
96
86
76
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

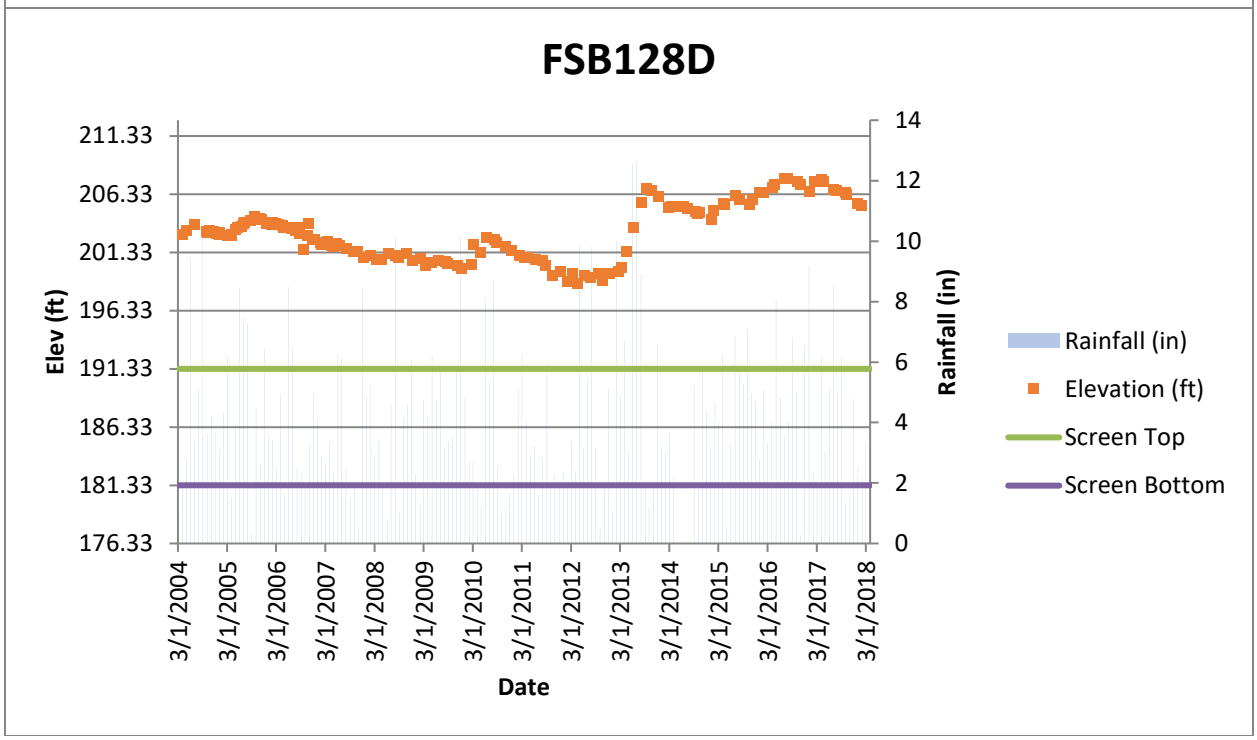

FSB112C
Elev (ft)
204.1
194.1
184.1
174.1
164.1
154.1
144.1
134.1
124.1
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

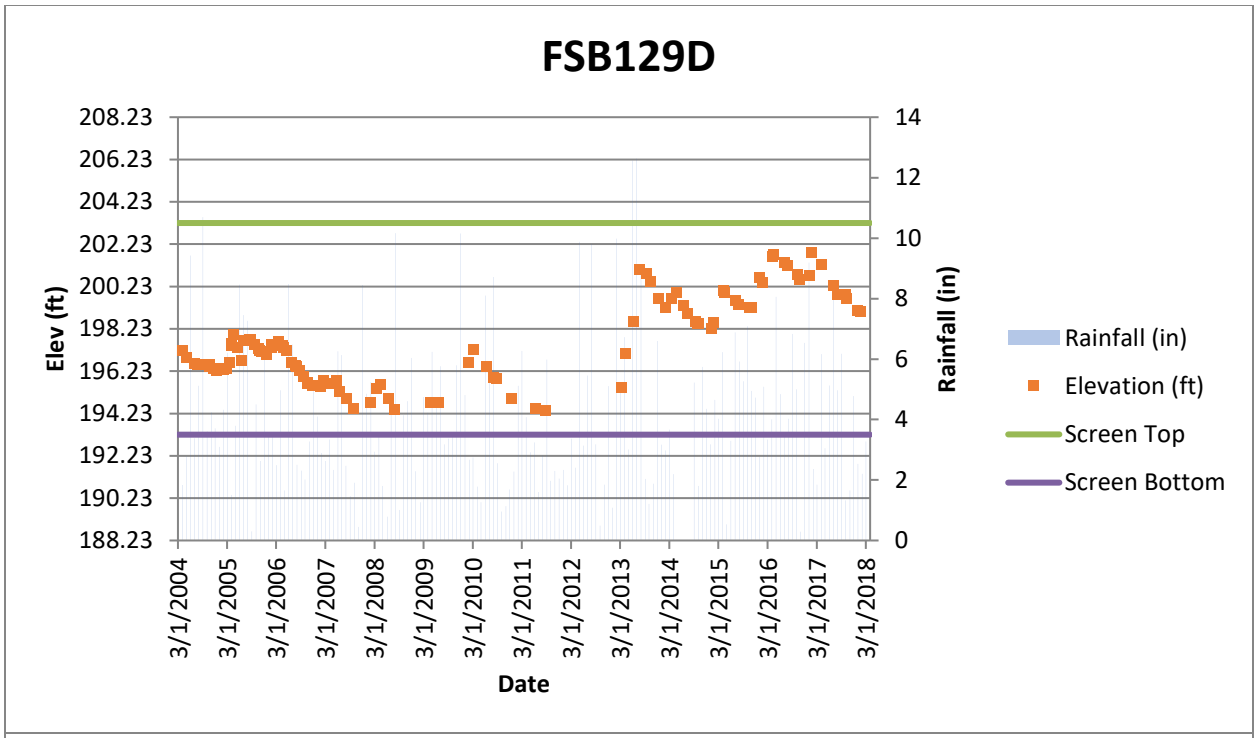

FSB112DR
Elev (ft)
211.6
201.6
191.6
181.6
171.6
161.6
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

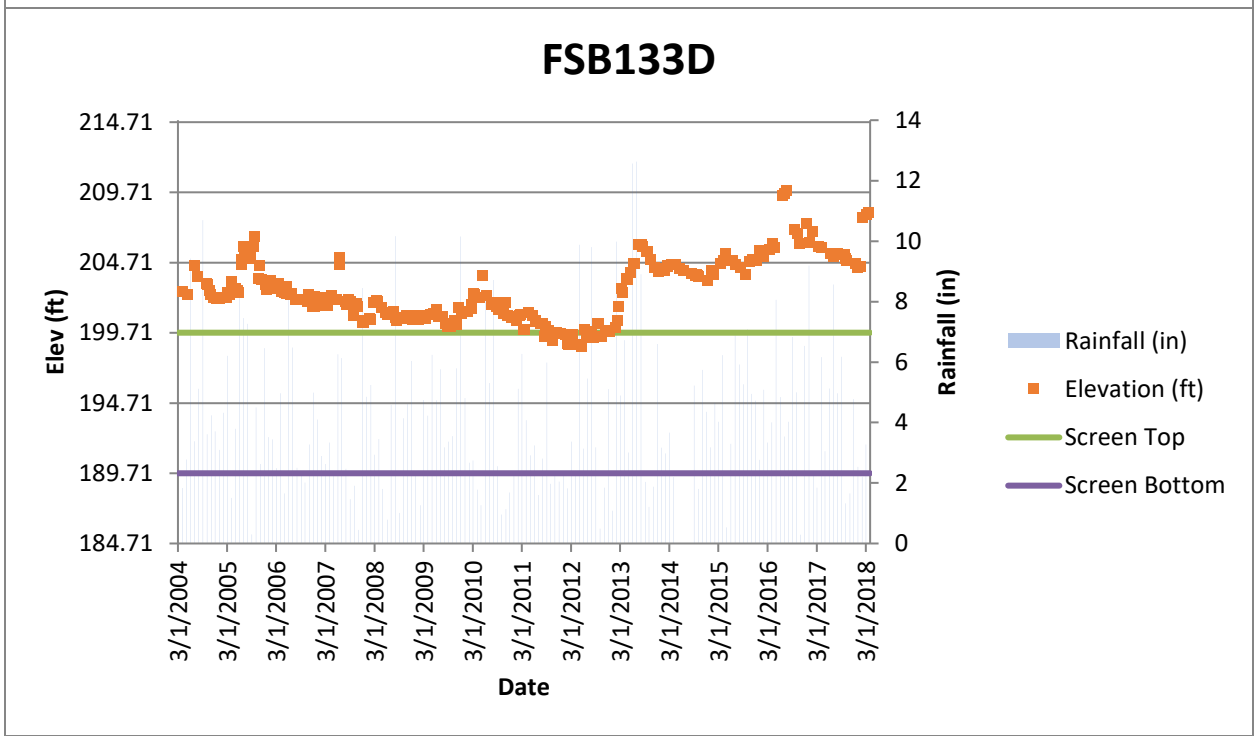

FSB115C
Elev (ft)
188.8
183.8
178.8
173.8
168.8
163.8
158.8
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

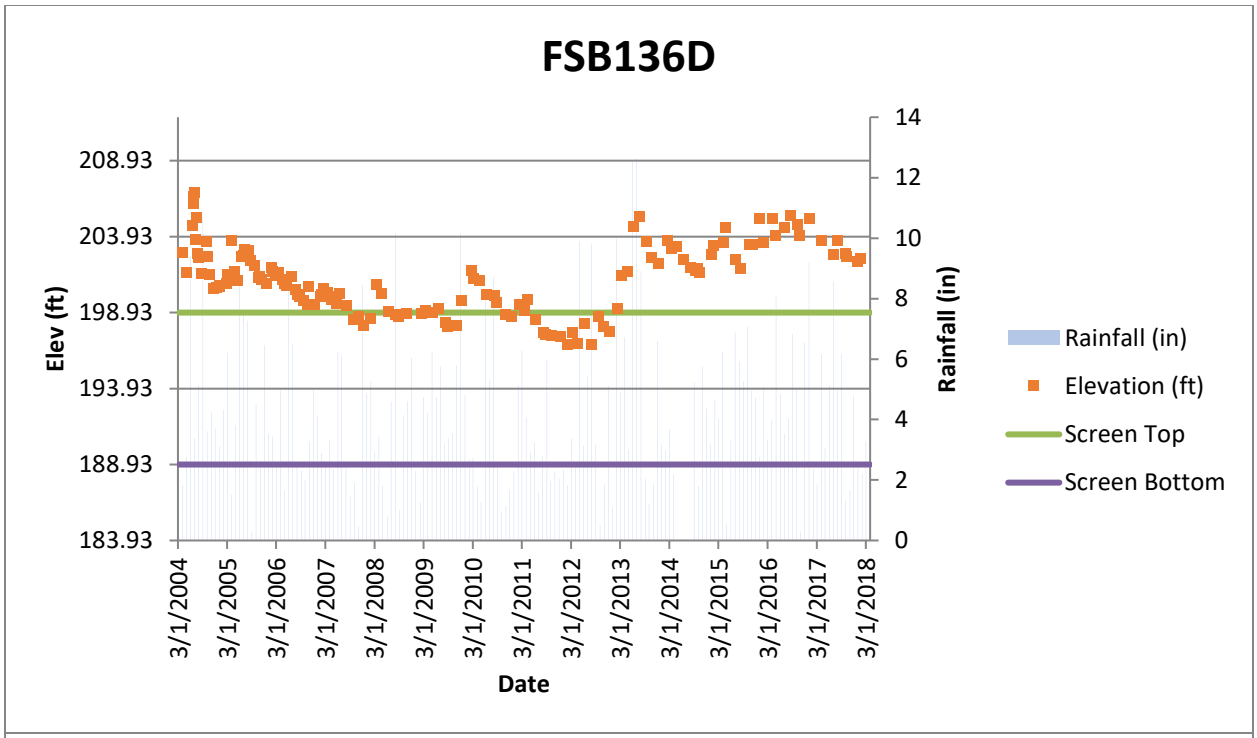

FSB116D
201.4
199.4
197.4
195.4
193.4
191.4
189.4
187.4
185.4
183.4
181.4
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom
FSB122C
205.26
195.26
185.26
175.26
165.26
155.26
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

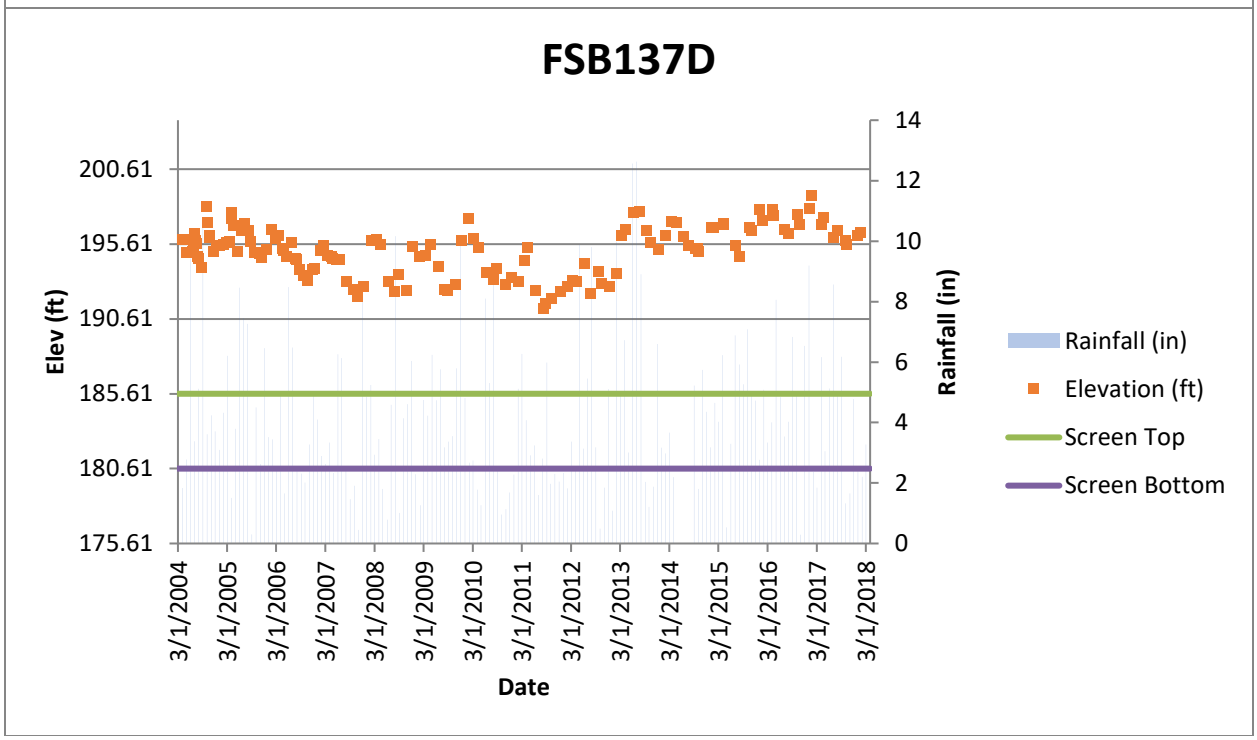

FSB122D
211.6
206.6
201.6
196.6
191.6
186.6
181.6
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

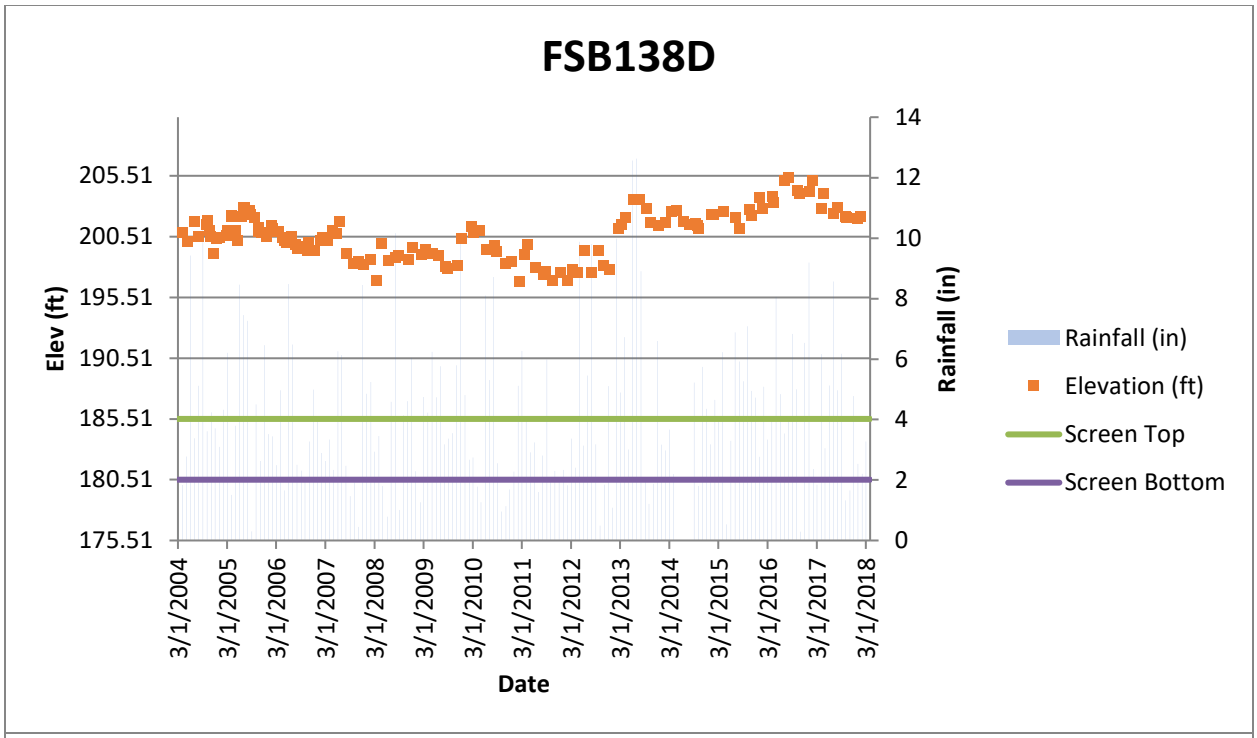

FSB128D
211.33
206.33
201.33
196.33
191.33
186.33
181.33
176.33
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

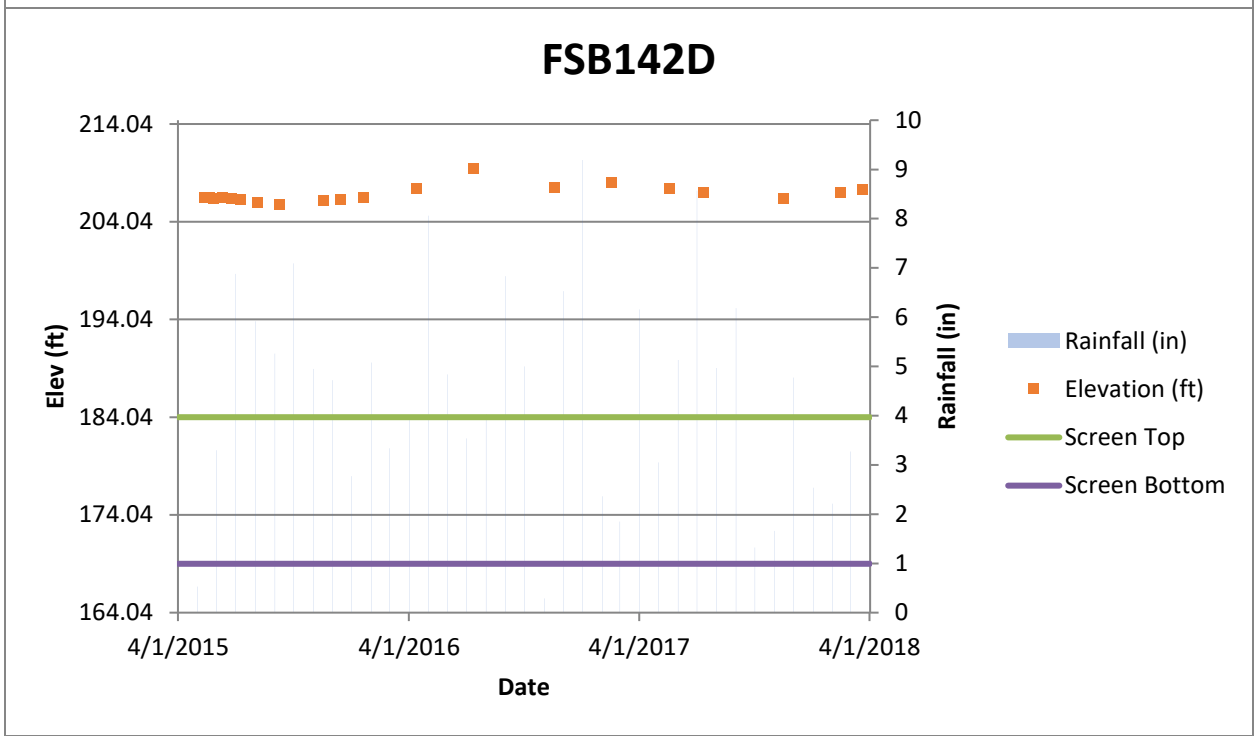

FSB129D
208.23
206.23
204.23
202.23
200.23
198.23
196.23
194.23
192.23
190.23
188.23
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

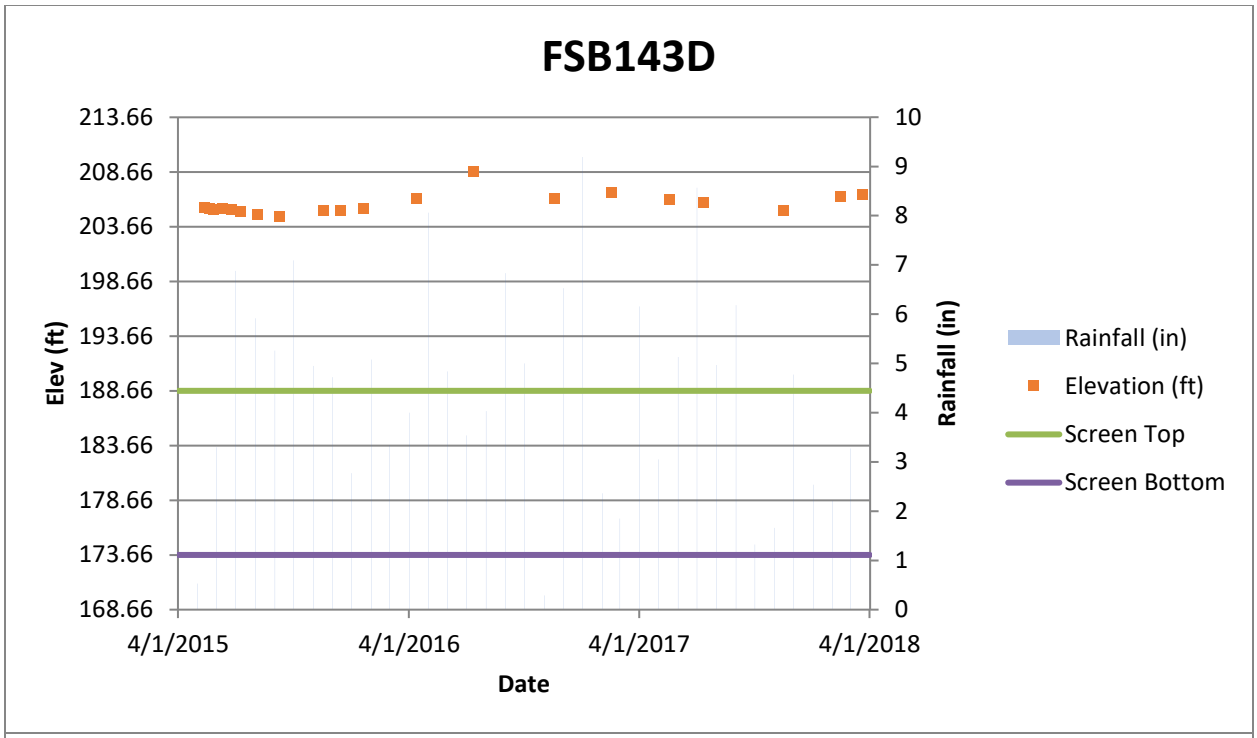

FSB133D
214.71
209.71
204.71
199.71
194.71
189.71
184.71
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

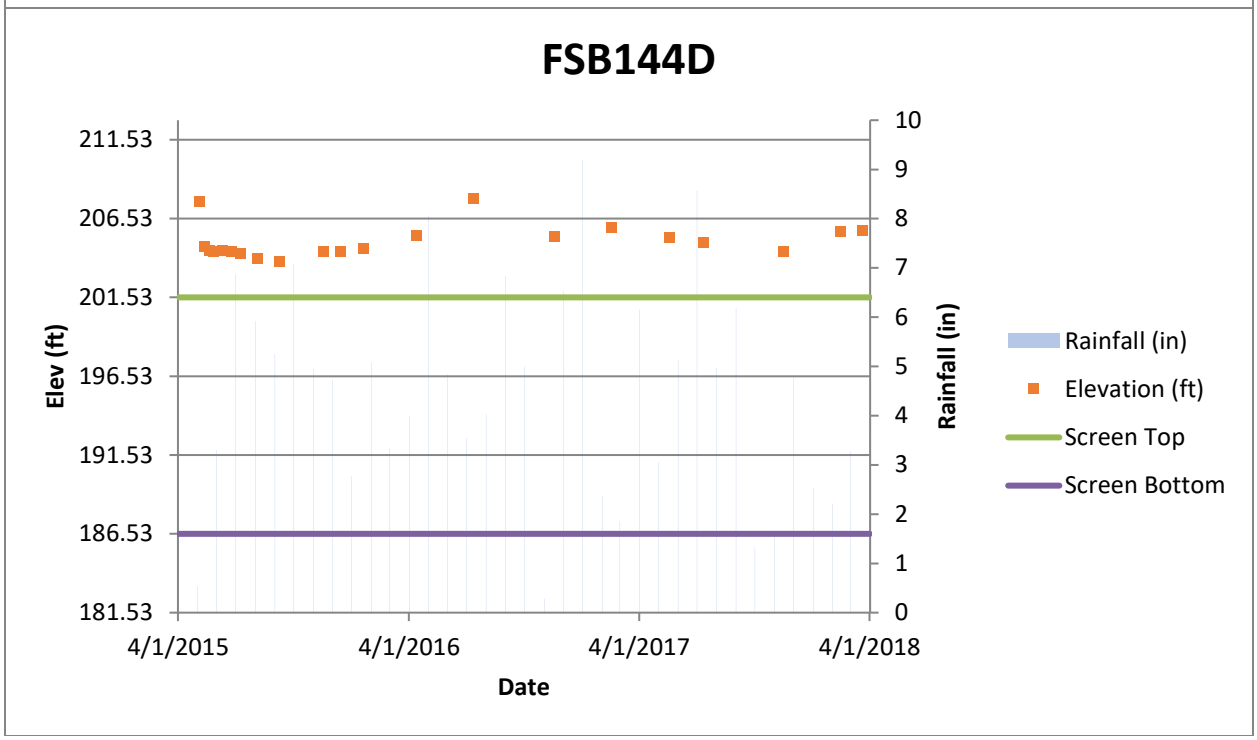

FSB136D
208.93
203.93
198.93
193.93
188.93
183.93
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FSB137D
200.61
195.61
190.61
185.61
180.61
175.61
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FSB138D
Elev (ft)
205.51
200.51
195.51
190.51
185.51
180.51
175.51
Rainfall (in)
14
12
10
8
6
4
2
0
3/1/2004
3/1/2005
3/1/2006
3/1/2007
3/1/2008
3/1/2009
3/1/2010
3/1/2011
3/1/2012
3/1/2013
3/1/2014
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FSB142D
Elev (ft)
214.04
204.04
194.04
184.04
174.04
164.04
Rainfall (in)
10
9
8
7
6
5
4
3
2
1
0
4/1/2015
4/1/2016
4/1/2017
4/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FSB143D
213.66
208.66
203.66
198.66
193.66
188.66
183.66
178.66
173.66
168.66
Elev (ft)
10
9
8
7
6
5
4
3
2
1
0
Rainfall (in)
4/1/2015
4/1/2016
4/1/2017
4/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FSB144D
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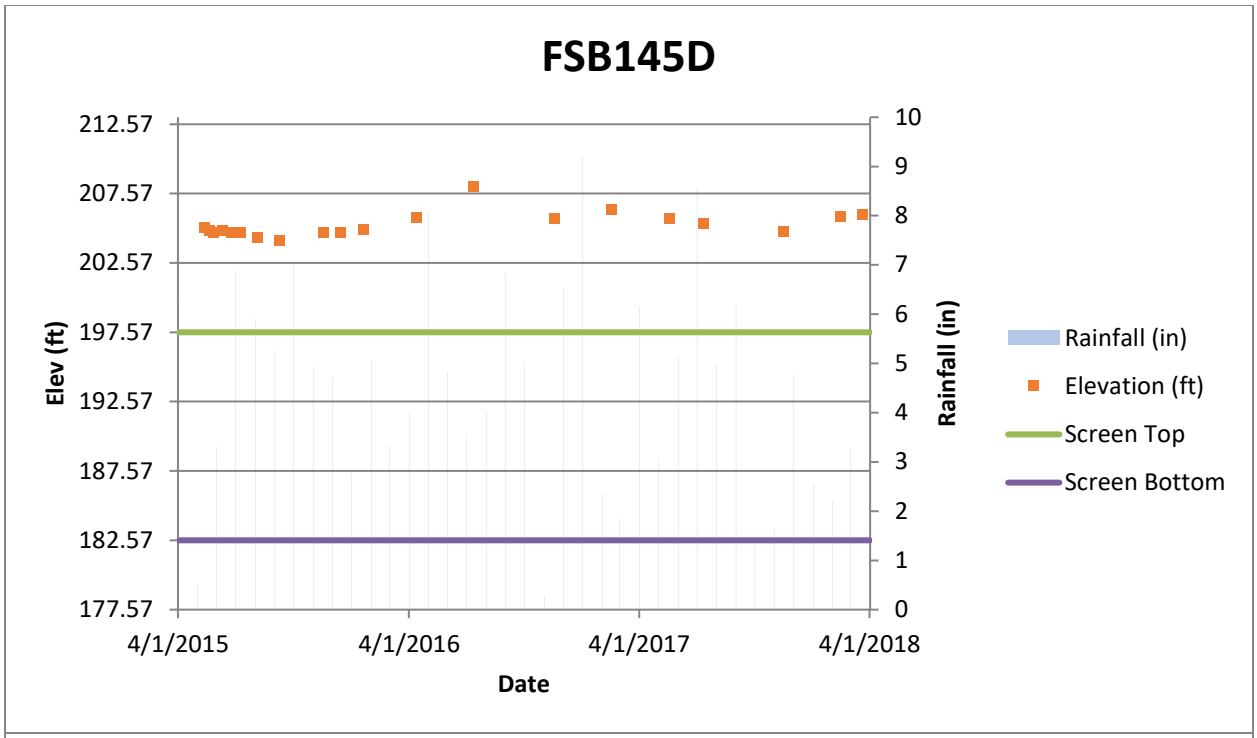
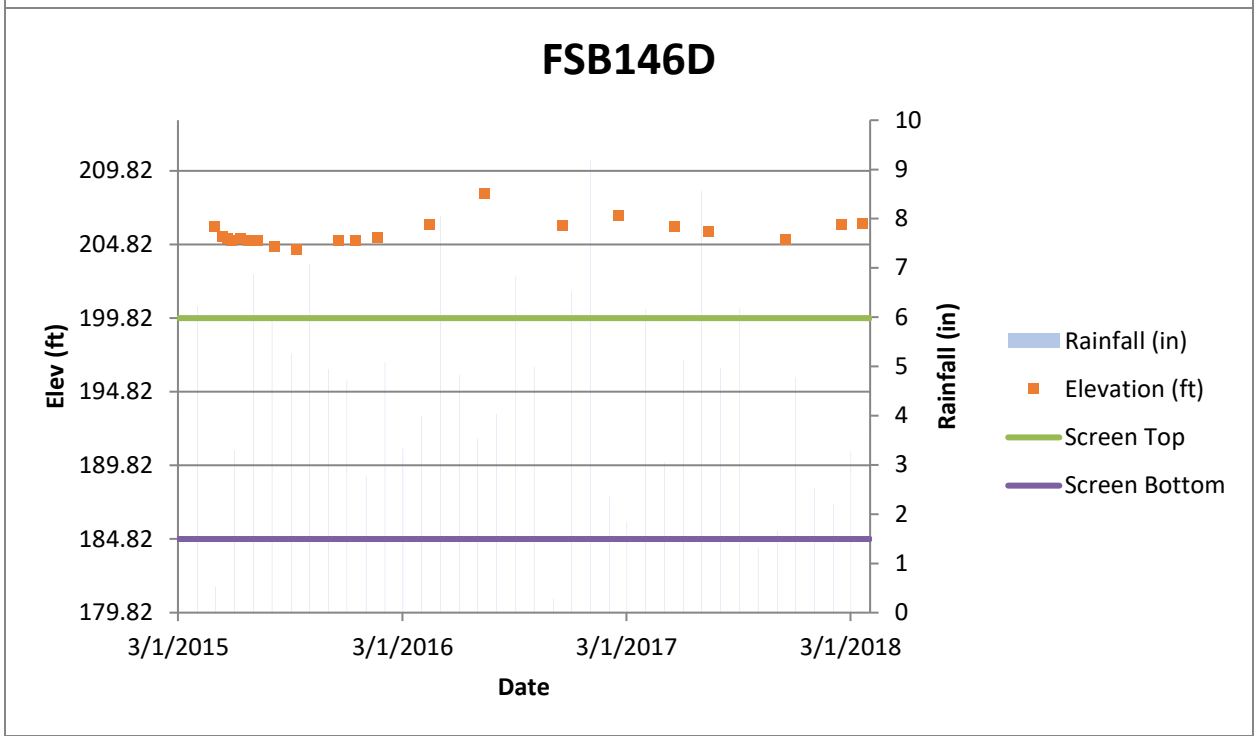
201.53
196.53
191.53
186.53
181.53
Elev (ft)
10
9
8
7
6
5
4
3
2
1
0
Rainfall (in)
4/1/2015
4/1/2016
4/1/2017
4/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FSB145D
212.57
207.57
202.57
197.57
192.57
187.57
182.57
177.57
Elev (ft)
10
9
8
7
6
5
4
3
2
1
0
Rainfall (in)
4/1/2015
4/1/2016
4/1/2017
4/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


FSB146D
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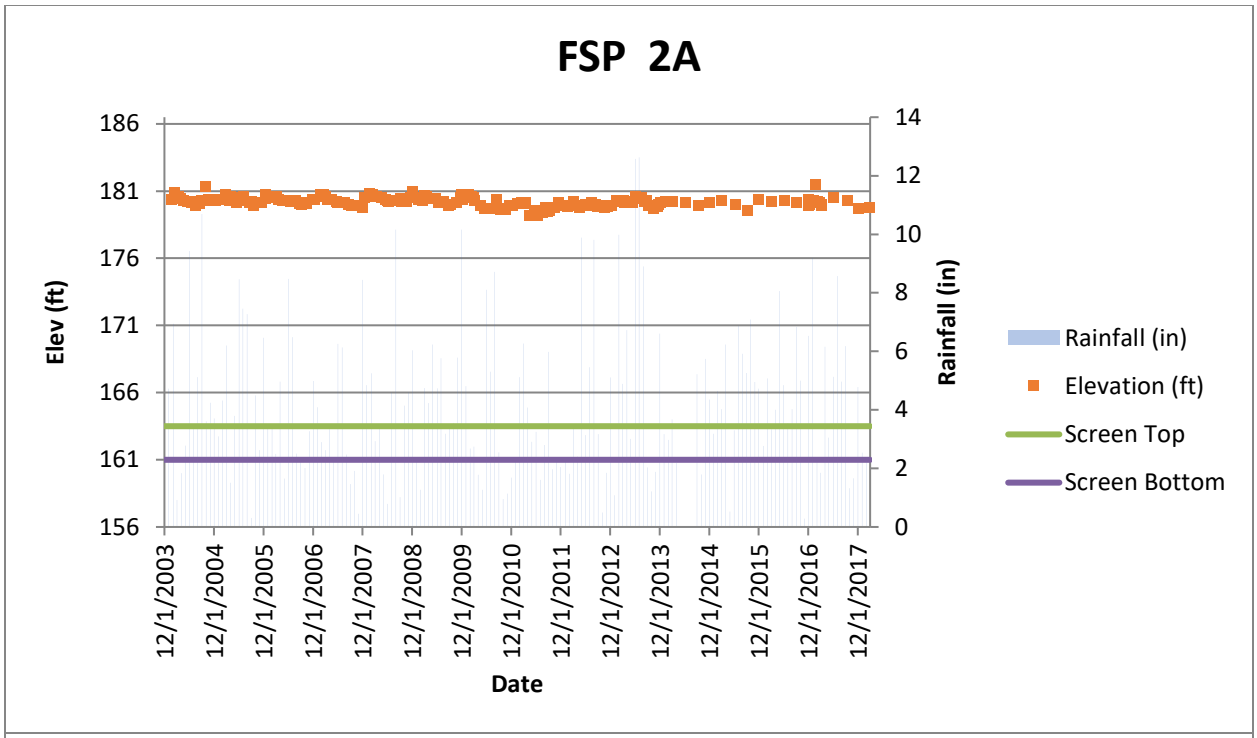
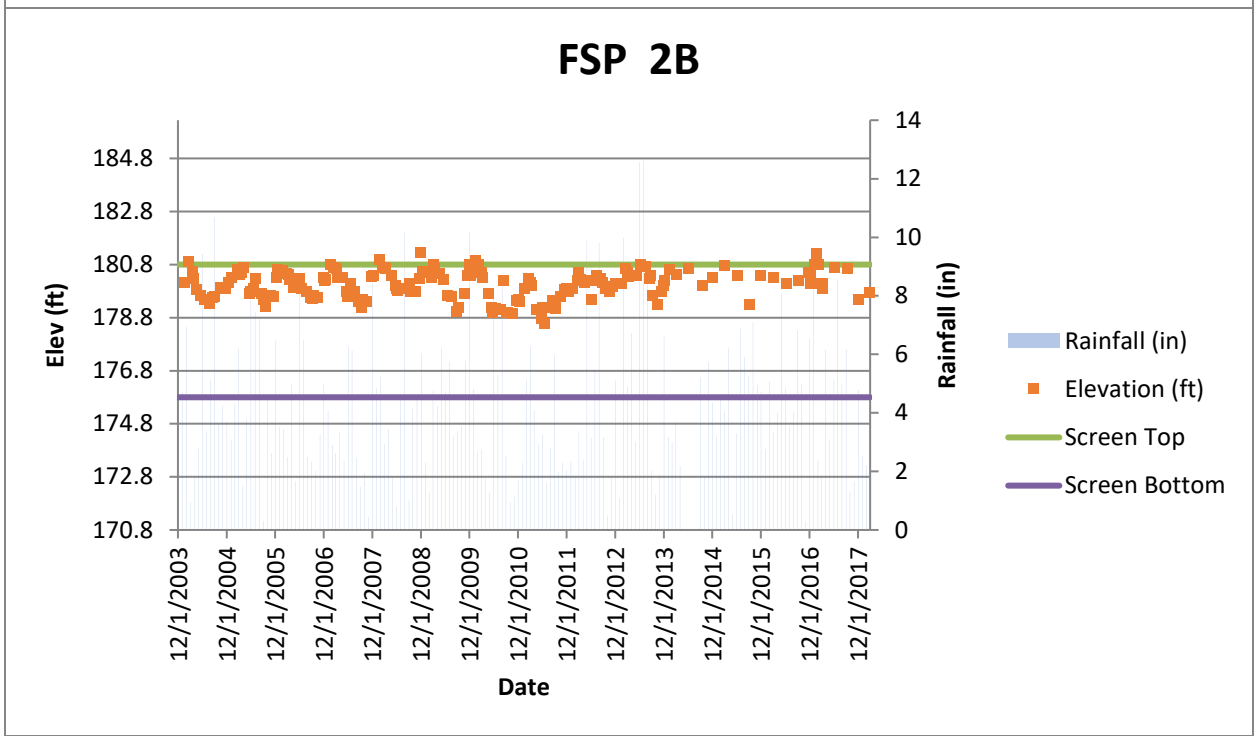
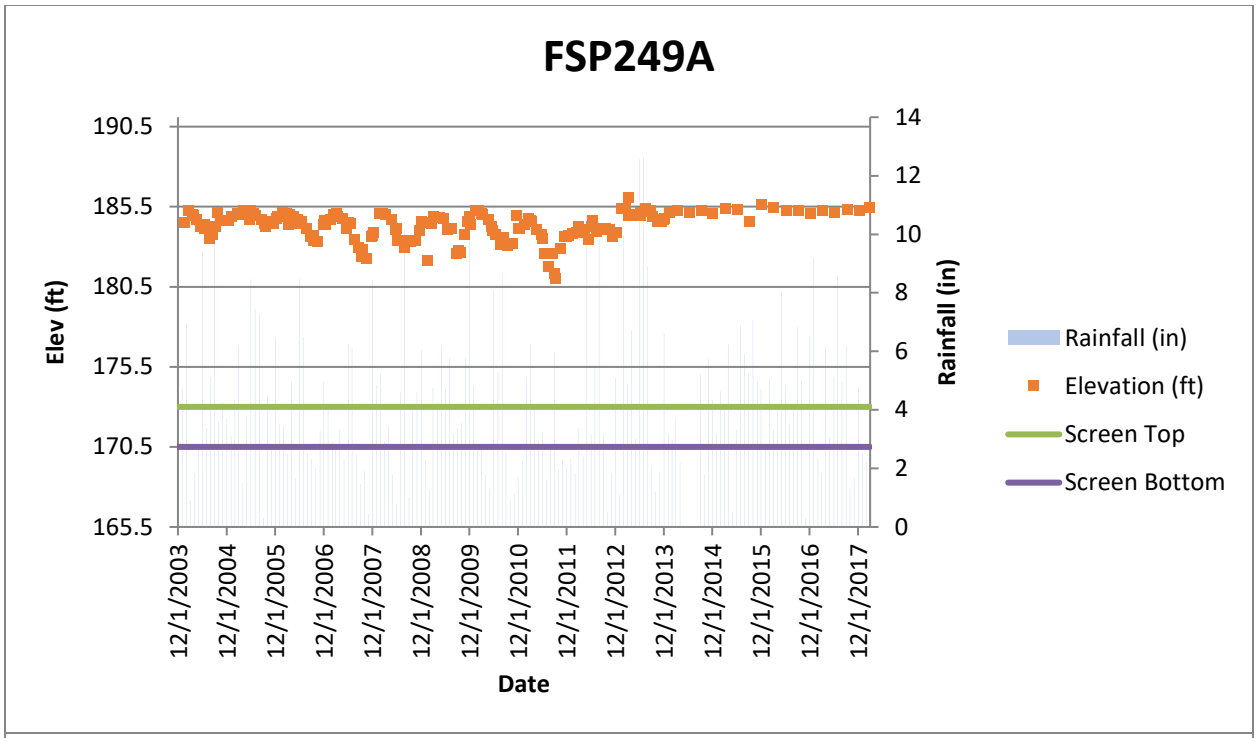
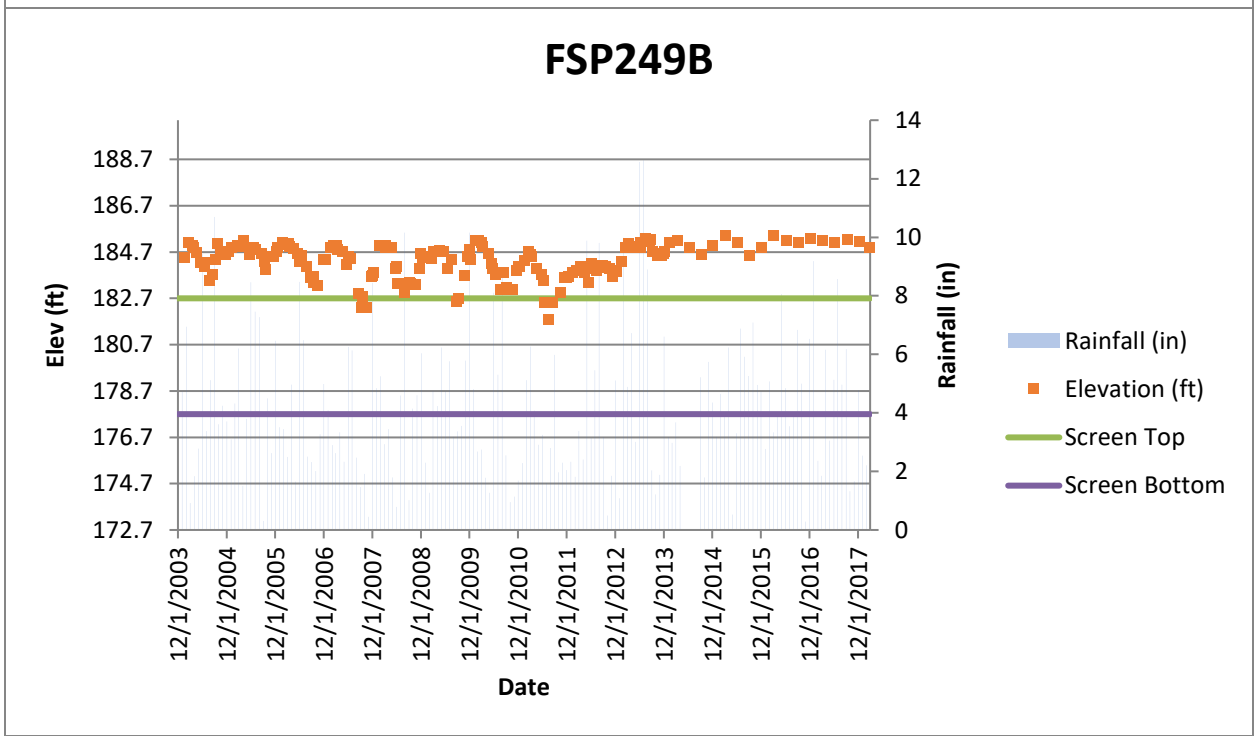
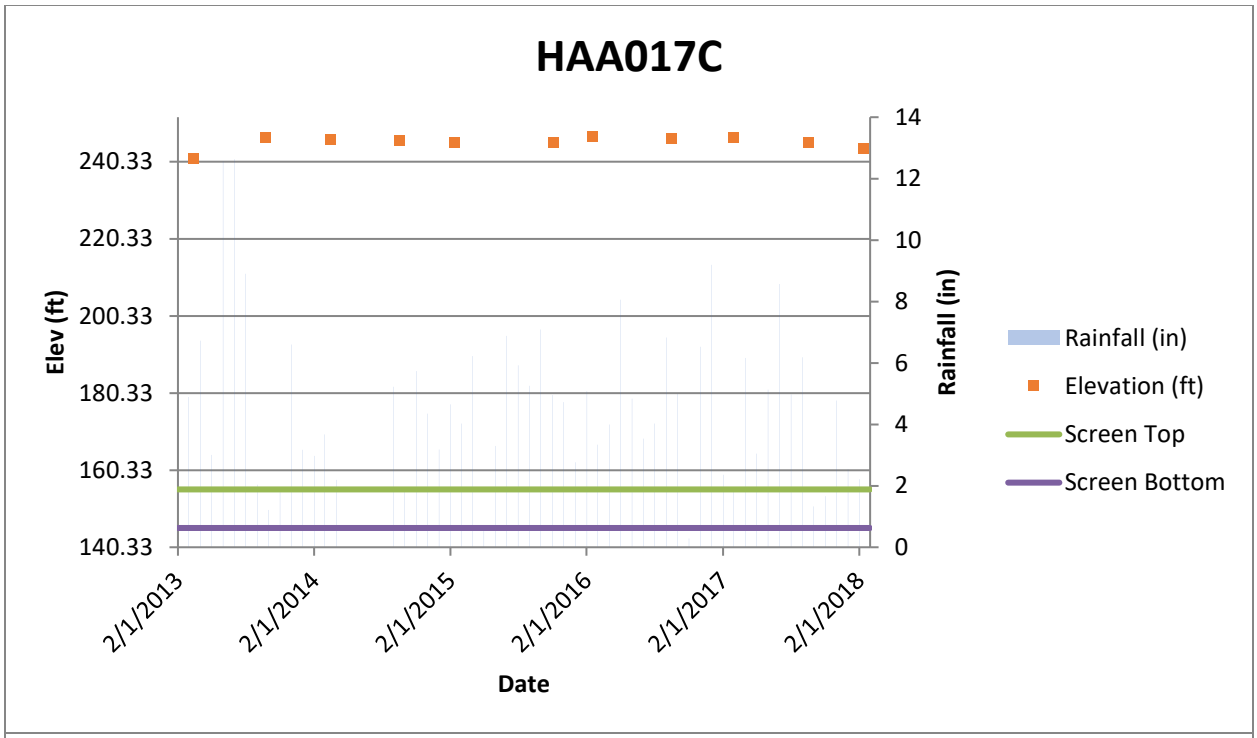
204.82
199.82
194.82
189.82
184.82
179.82
Elev (ft)
10
9
8
7
6
5
4
3
2
1
0
Rainfall (in)
3/1/2015
3/1/2016
3/1/2017
3/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

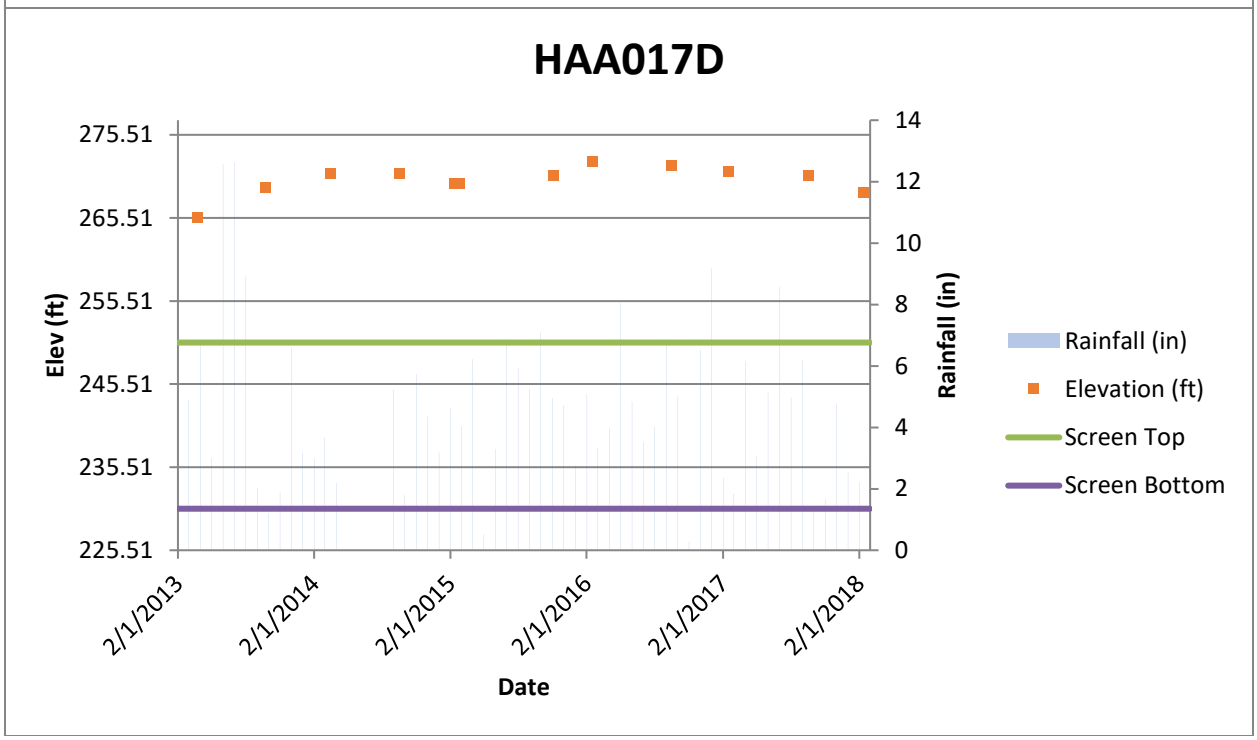

FSP 2A
Elev (ft)
186
181
176
171
166
161
156
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

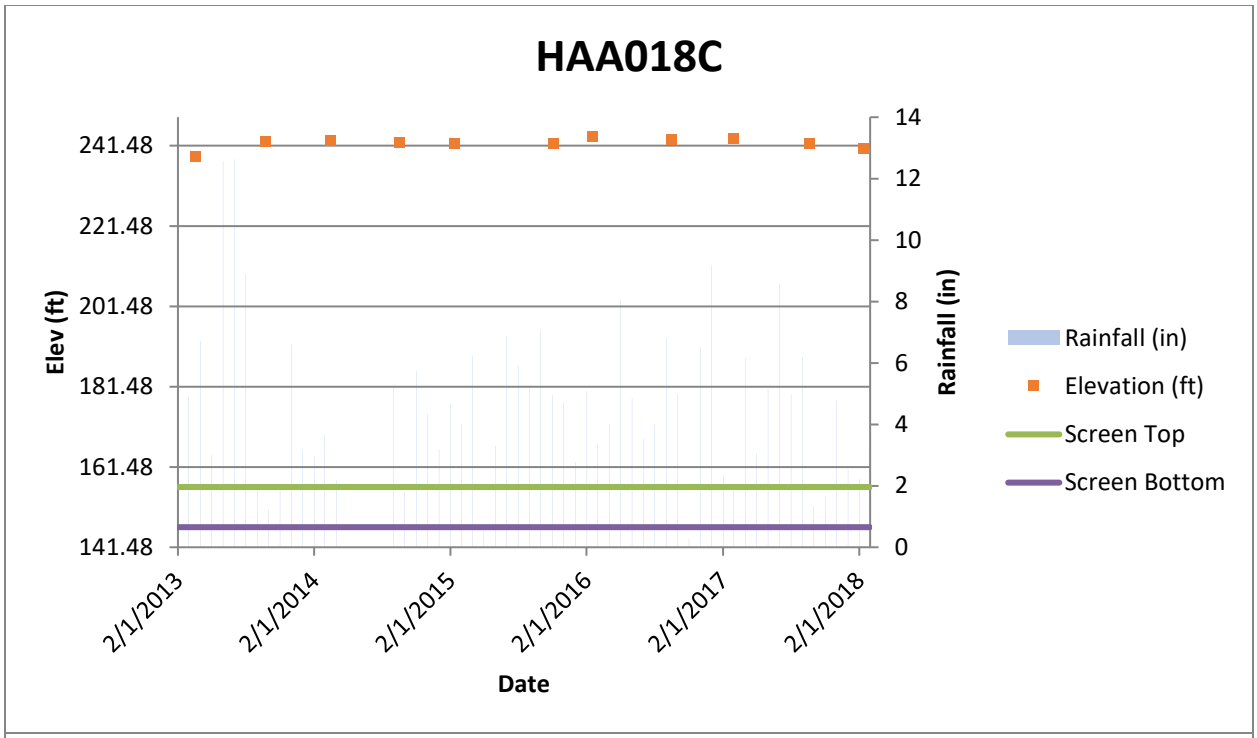

FSP 2B
Elev (ft)
184.8
182.8
180.8
178.8
176.8
174.8
172.8
170.8
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

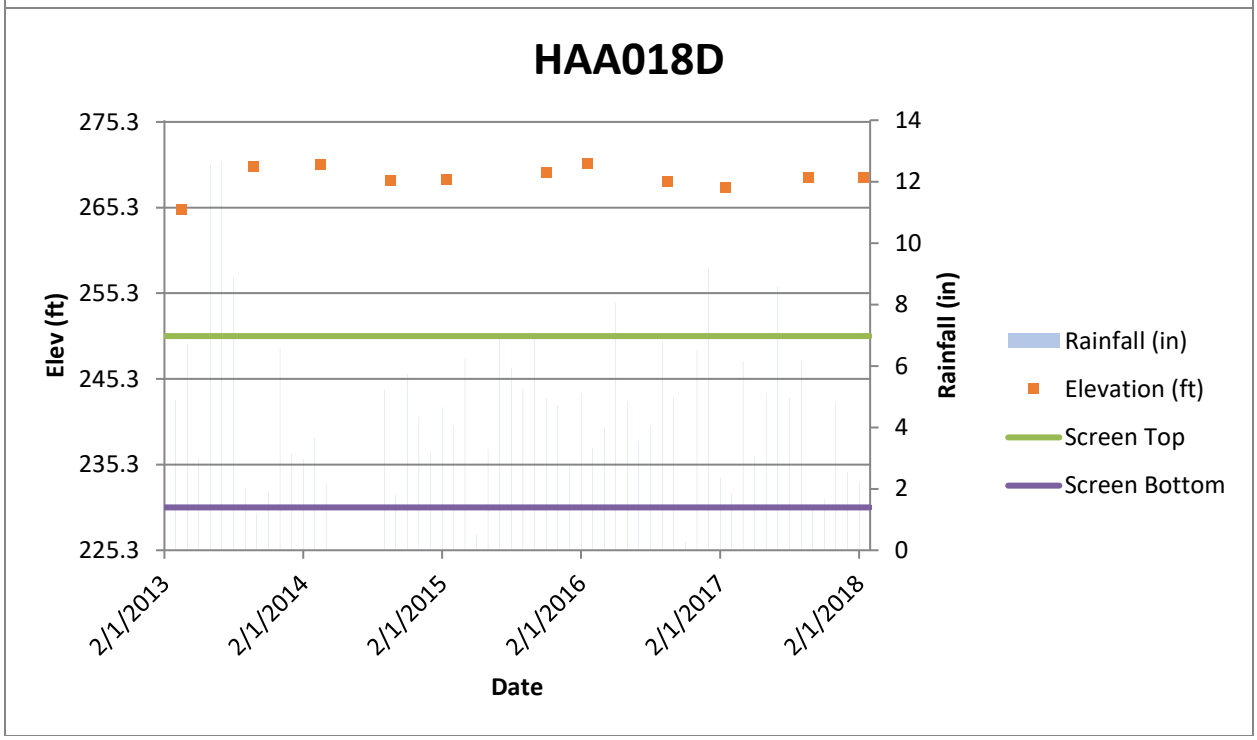

FSP249A
Elev (ft)
190.5
185.5
180.5
175.5
170.5
165.5
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

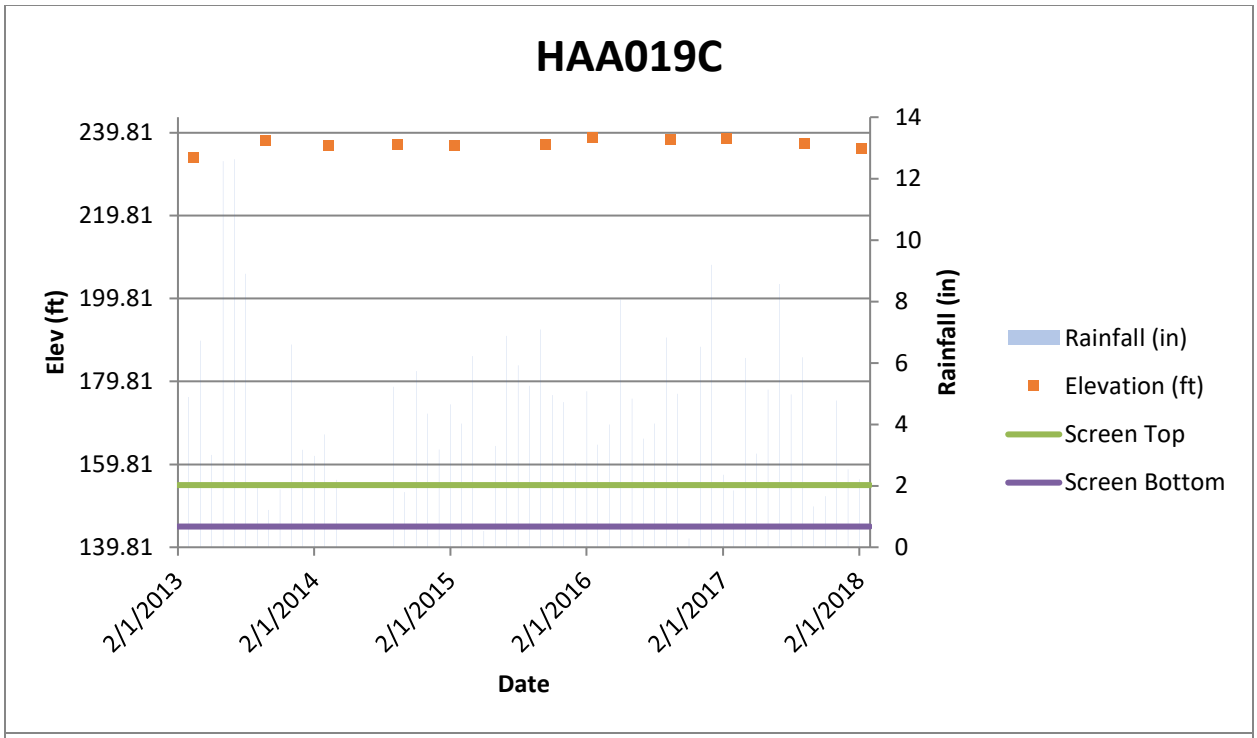

FSP249B
Elev (ft)
188.7
186.7
184.7
182.7
180.7
178.7
176.7
174.7
172.7
Rainfall (in)
14
12
10
8
6
4
2
0
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

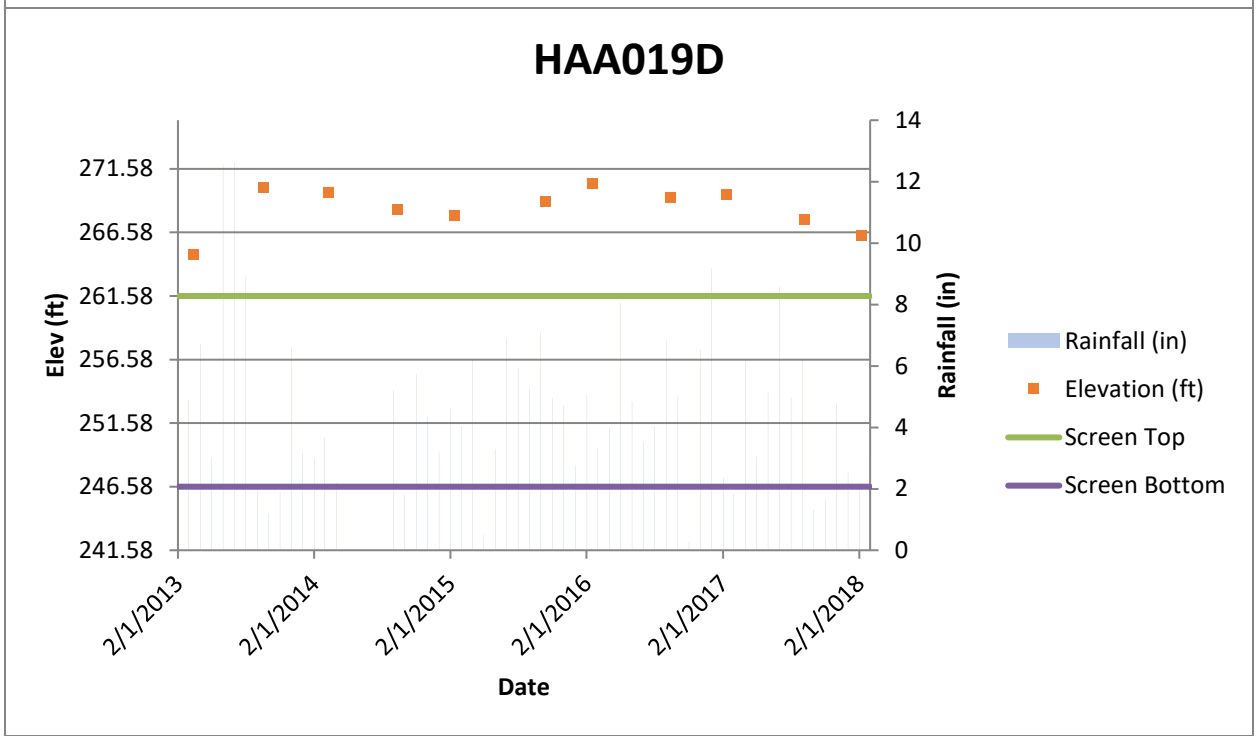

HAA017C
240.33
220.33
200.33
180.33
160.33
140.33
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

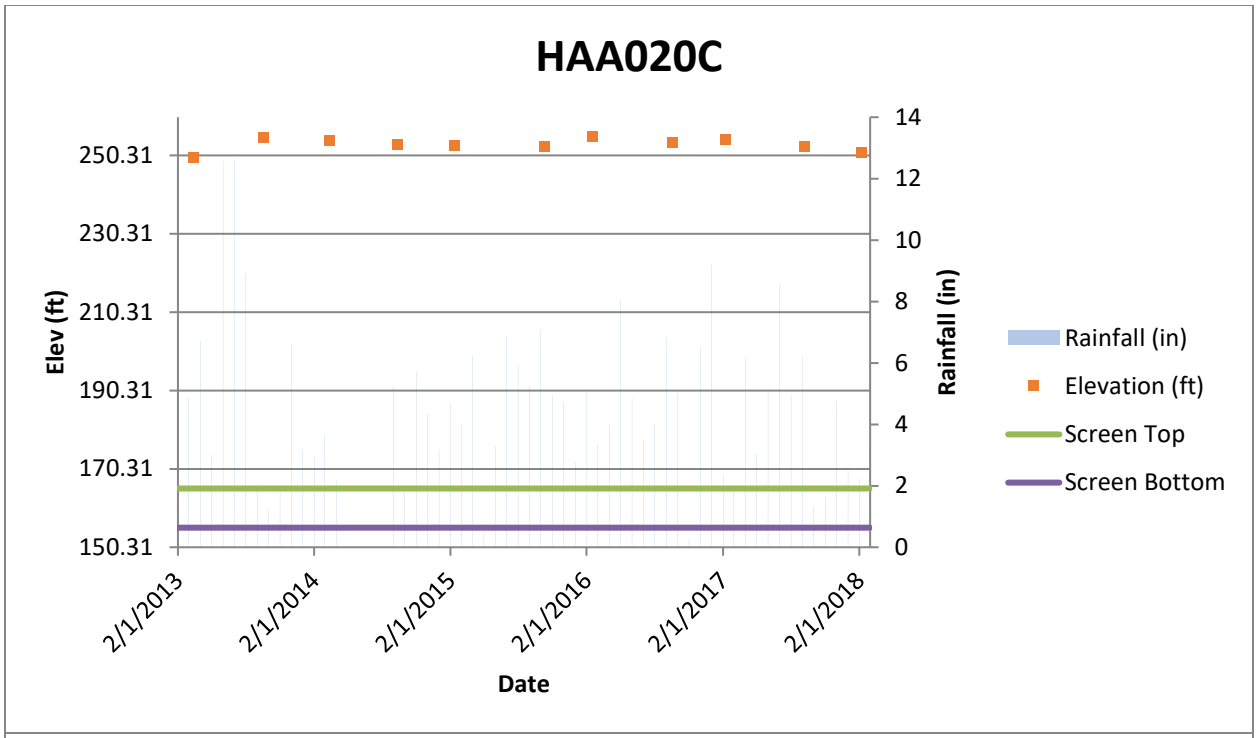

HAA017D
275.51
265.51
255.51
245.51
235.51
225.51
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

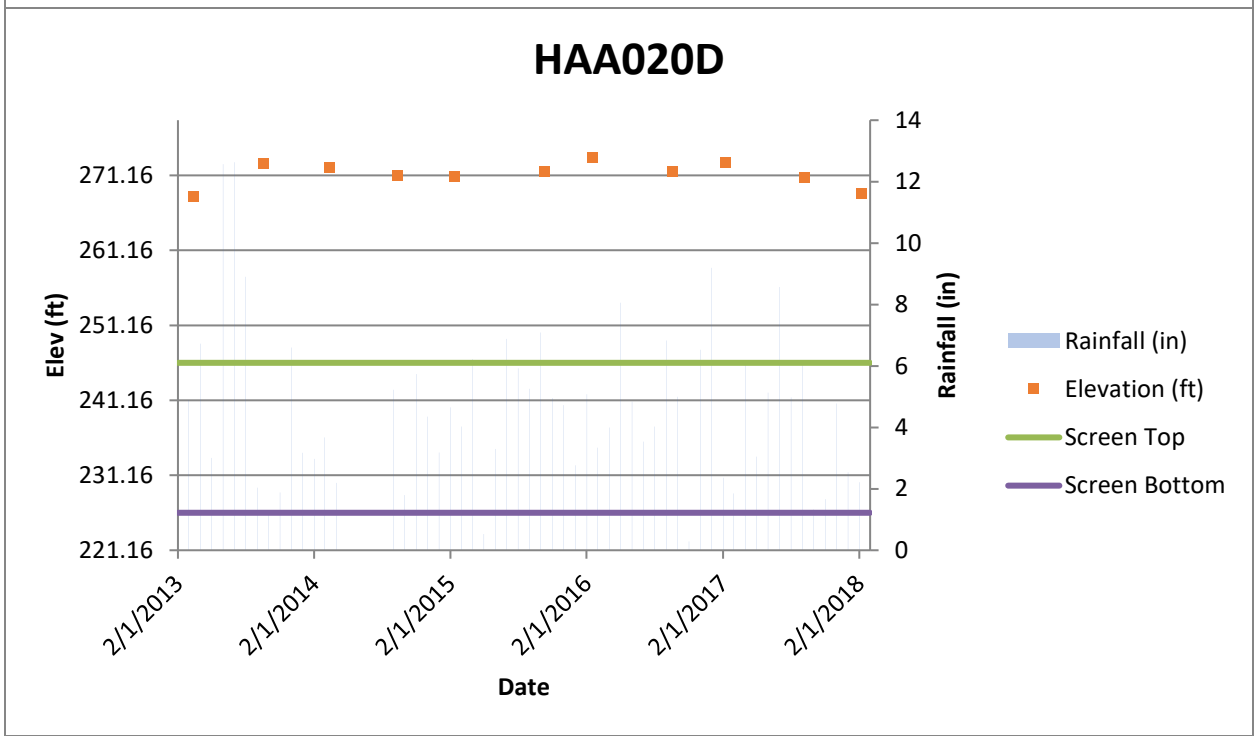

HAA018C
241.48
221.48
201.48
181.48
161.48
141.48
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

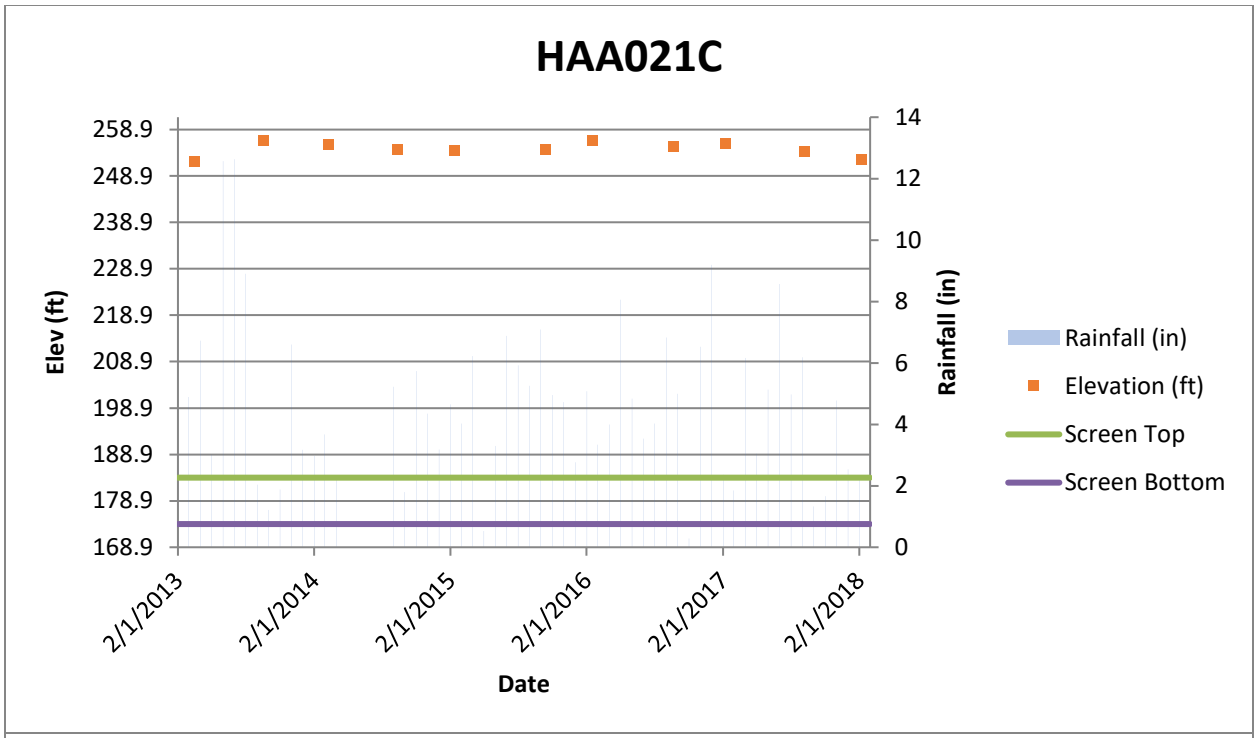

HAA018D
275.3
265.3
255.3
245.3
235.3
225.3
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

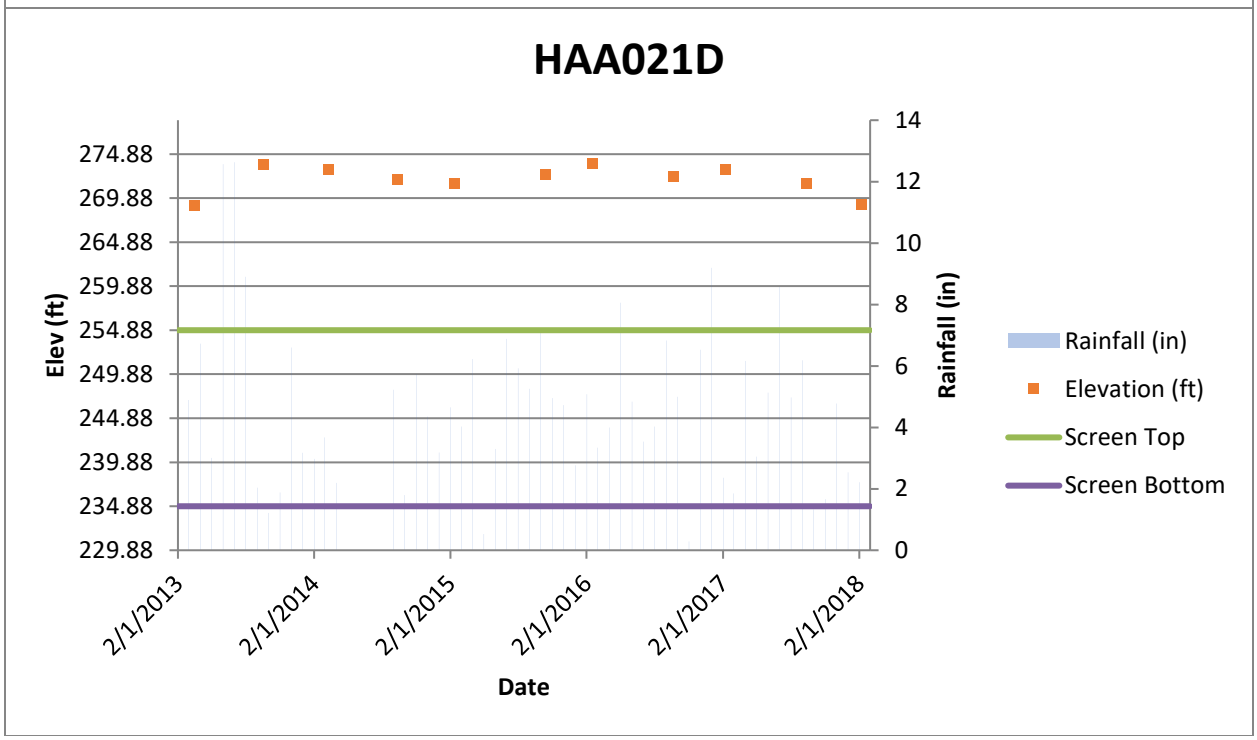

HAA019C
239.81
219.81
199.81
179.81
159.81
139.81
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

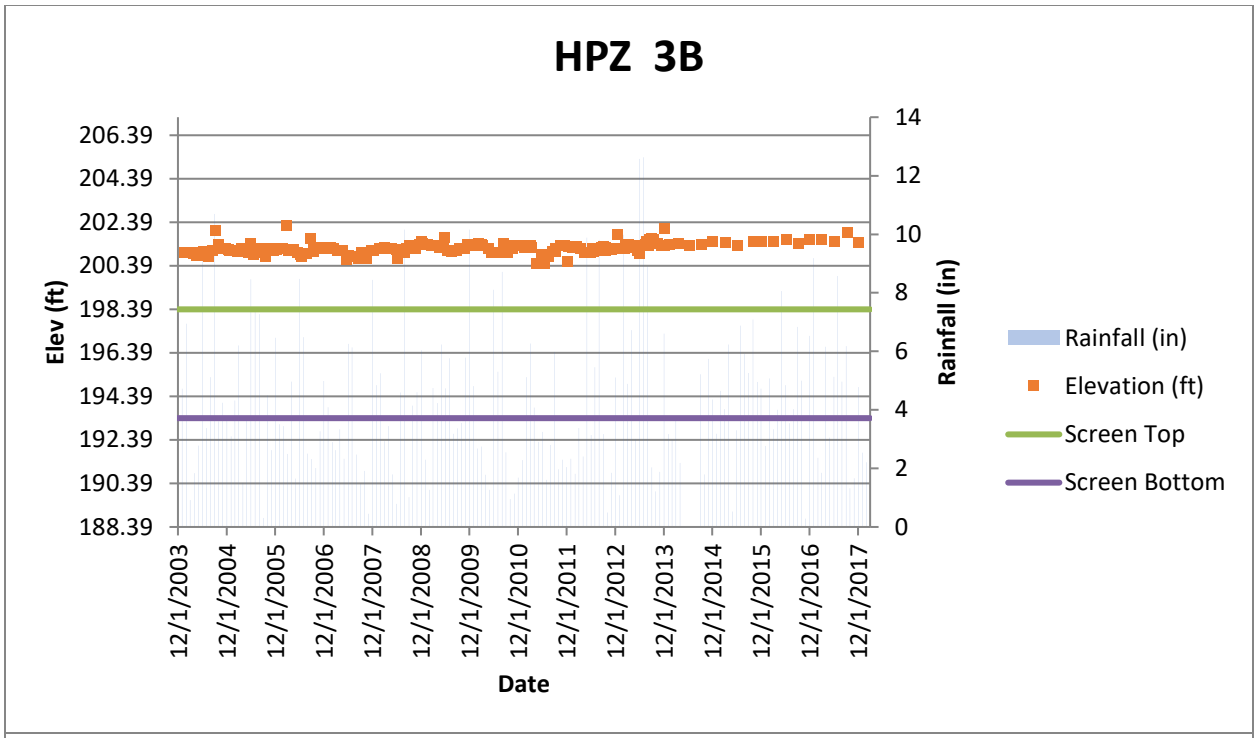

HAA019D
271.58
266.58
261.58
256.58
251.58
246.58
241.58
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

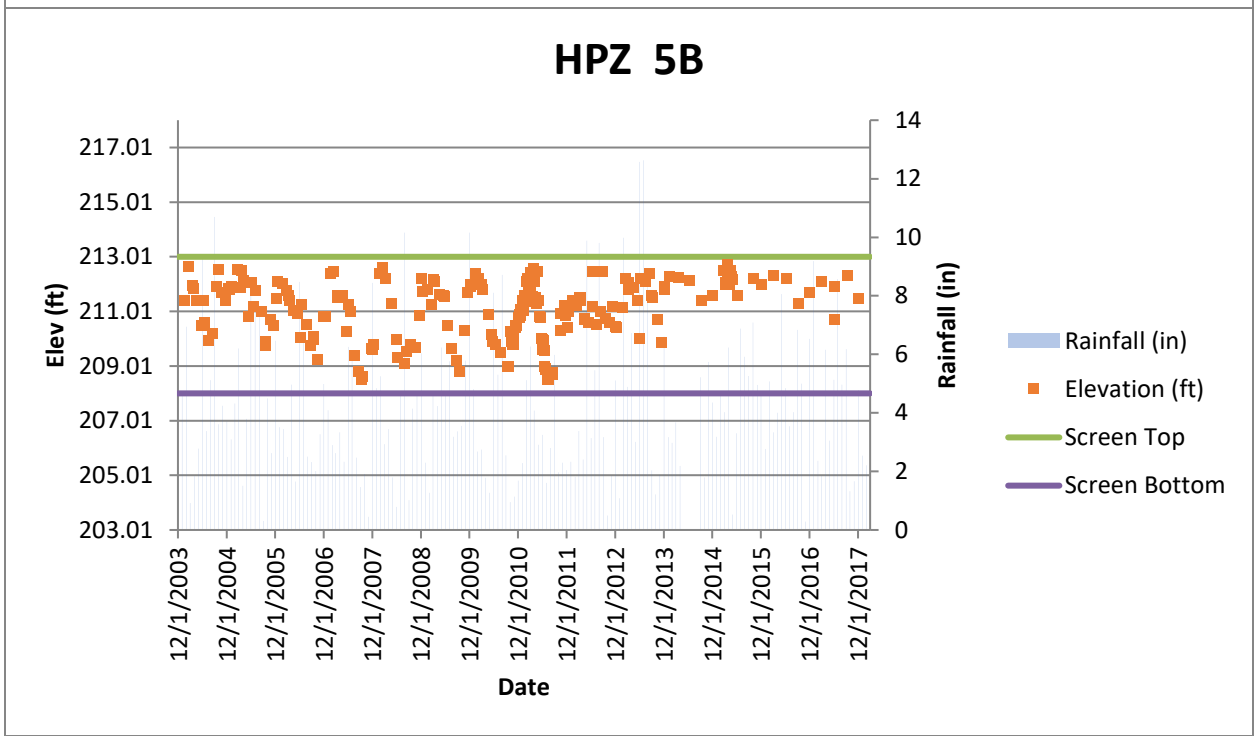

HAA020C
250.31
230.31
210.31
190.31
170.31
150.31
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

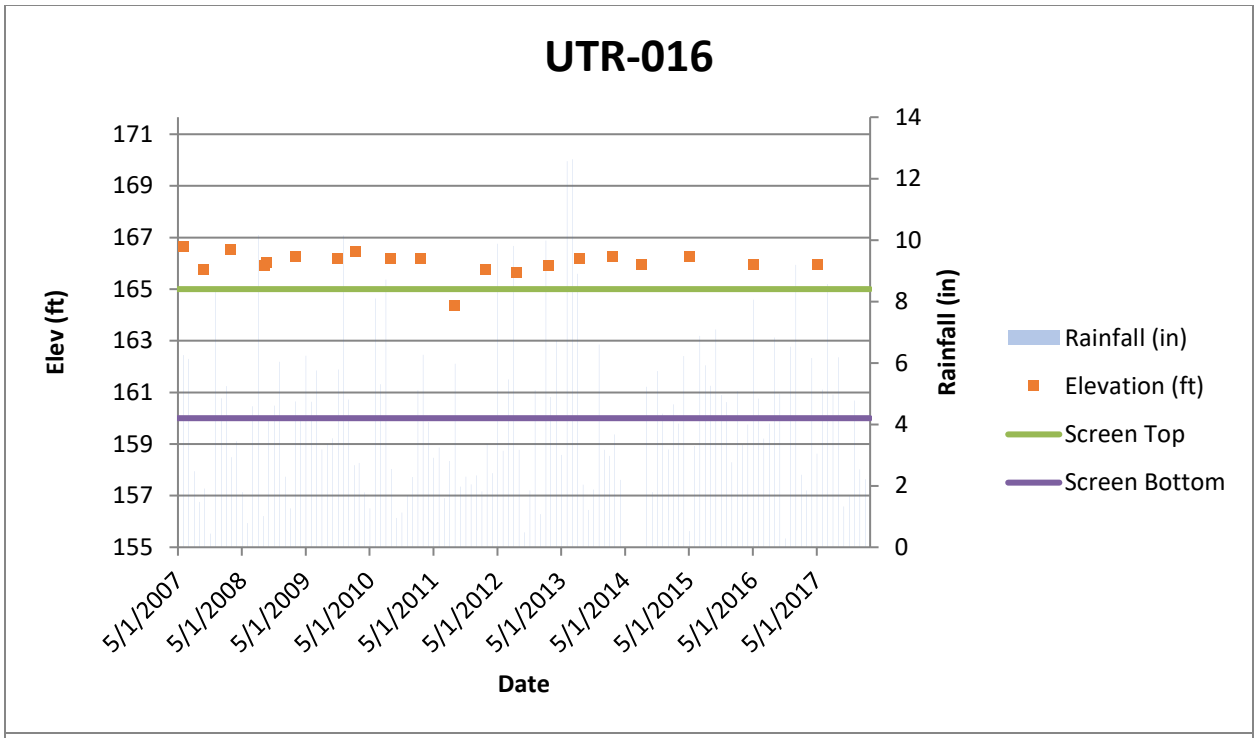

HAA020D
271.16
261.16
251.16
241.16
231.16
221.16
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

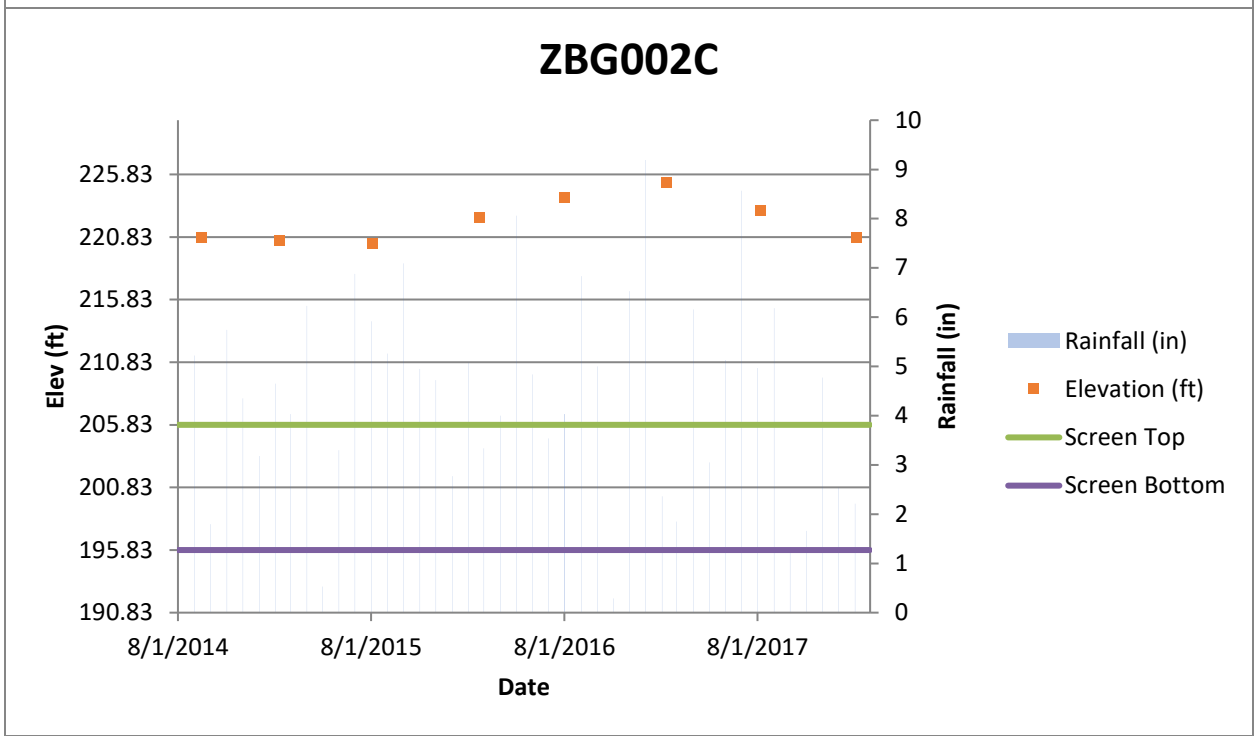

HAA021C
Elev (ft)
258.9
248.9
238.9
228.9
218.9
208.9
198.9
188.9
178.9
168.9
Rainfall (in)
14
12
10
8
6
4
2
0
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


HAA021D
Elev (ft)
274.88
269.88
264.88
259.88
254.88
249.88
244.88
239.88
234.88
229.88
Rainfall (in)
14
12
10
8
6
4
2
0
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


HPZ 3B
206.39
204.39
202.39
200.39
198.39
196.39
194.39
192.39
190.39
188.39
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


HPZ 5B
217.01
215.01
213.01
211.01
209.01
207.01
205.01
203.01
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


UTR-016
Elev (ft)
171
169
167
165
163
161
159
157
155
Rainfall (in)
14
12
10
8
6
4
2
0
5/1/2007
5/1/2008
5/1/2009
5/1/2010
5/1/2011
5/1/2012
5/1/2013
5/1/2014
5/1/2015
5/1/2016
5/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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Elev (ft)
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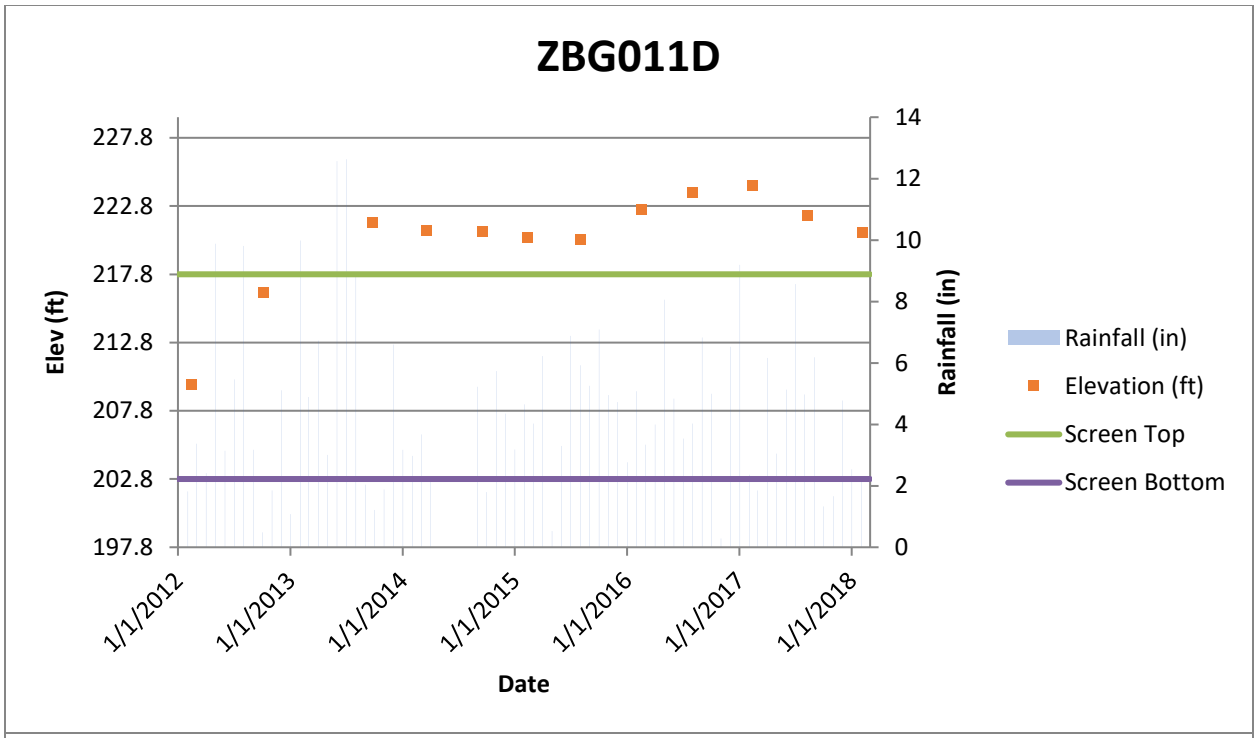
220.83
215.83
210.83
205.83
200.83
195.83
190.83
Rainfall (in)
10
9
8
7
6
5
4
3
2
1
0
8/1/2014
8/1/2015
8/1/2016
8/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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222.8
217.8
212.8
207.8
202.8
197.8
Elev (ft)
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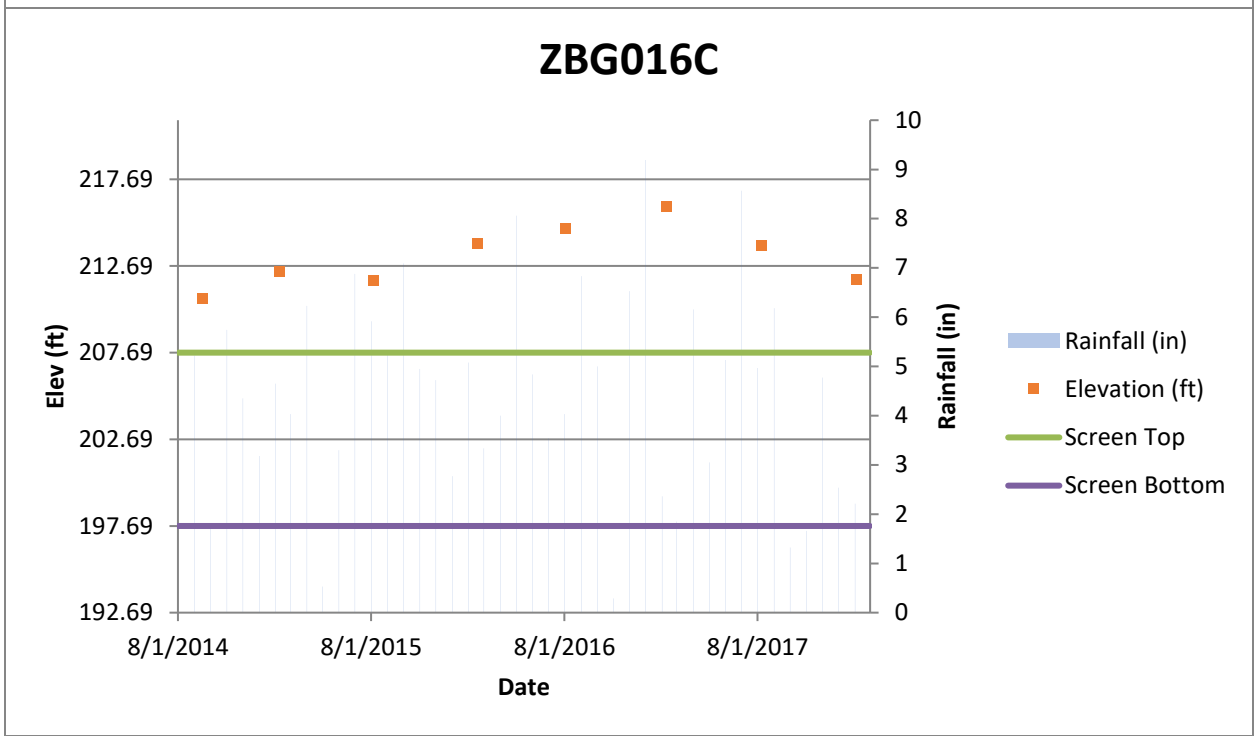
10
8
6
4
2
0
Rainfall (in)
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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202.69
197.69
192.69
Elev (ft)
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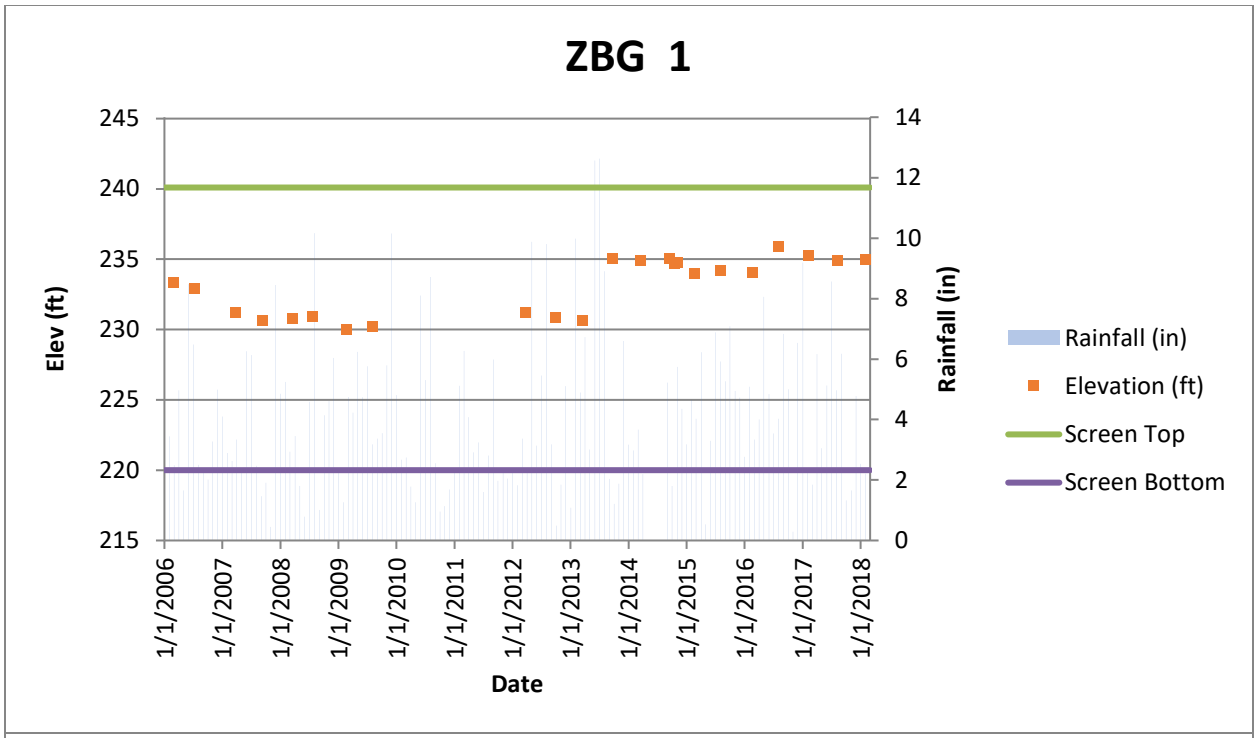
9
8
7
6
5
4
3
2
1
0
Rainfall (in)
8/1/2014
8/1/2015
8/1/2016
8/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

Appendix B Updated Z-Area Base Period Target Well Hydrographs by Hydrostratigraphic Unit


ZBG 1
Elev (ft)
245
240
235
230
225
220
215
Rainfall (in)
14
12
10
8
6
4
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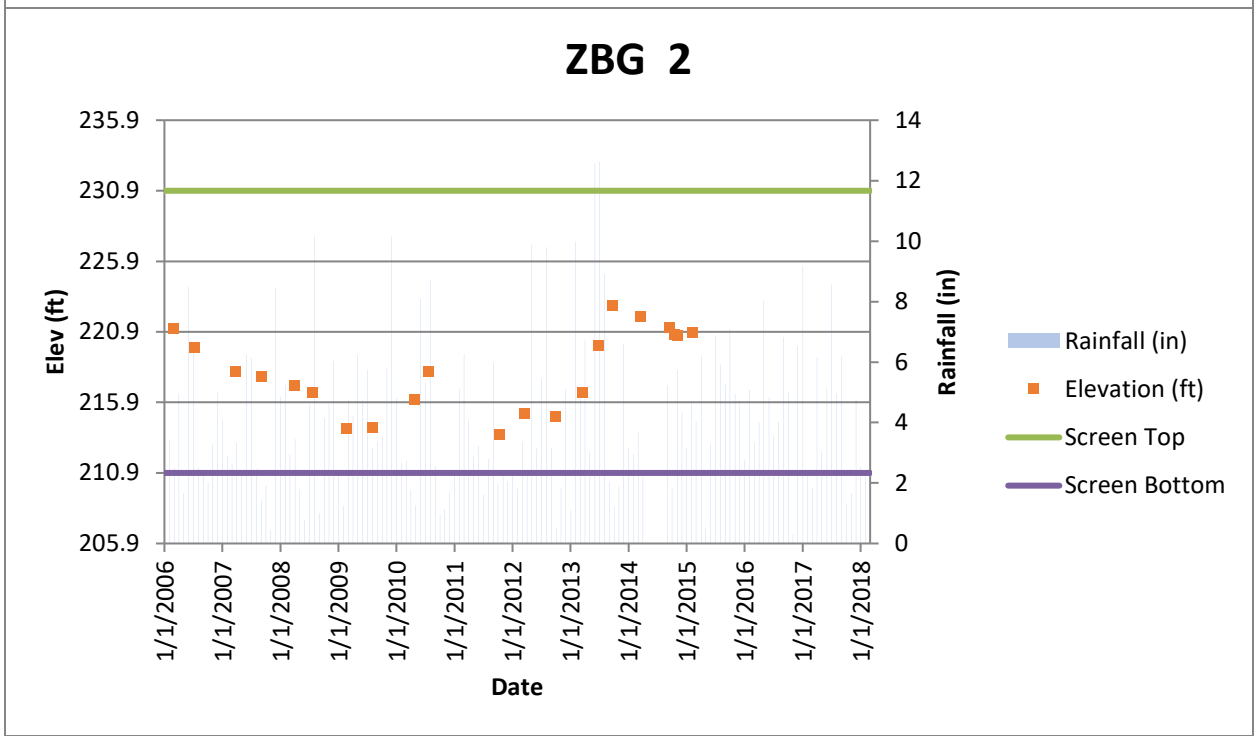
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


ZBG 2
Elev (ft)
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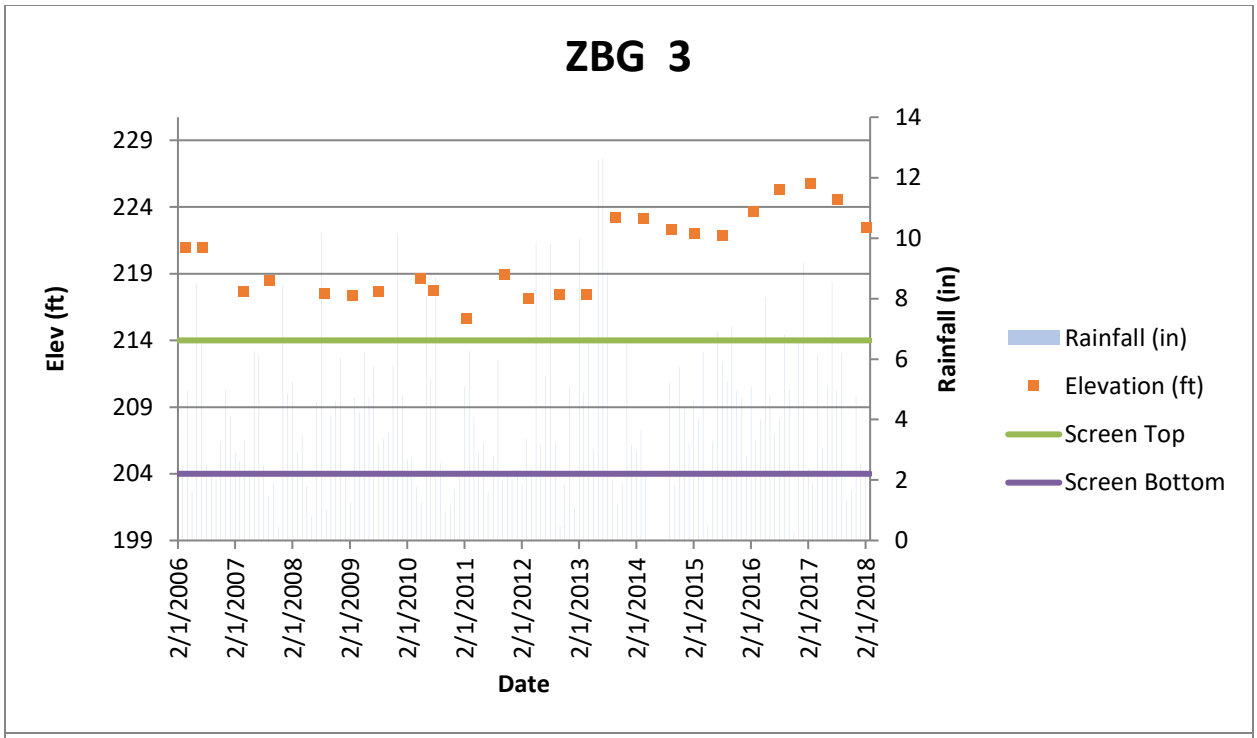
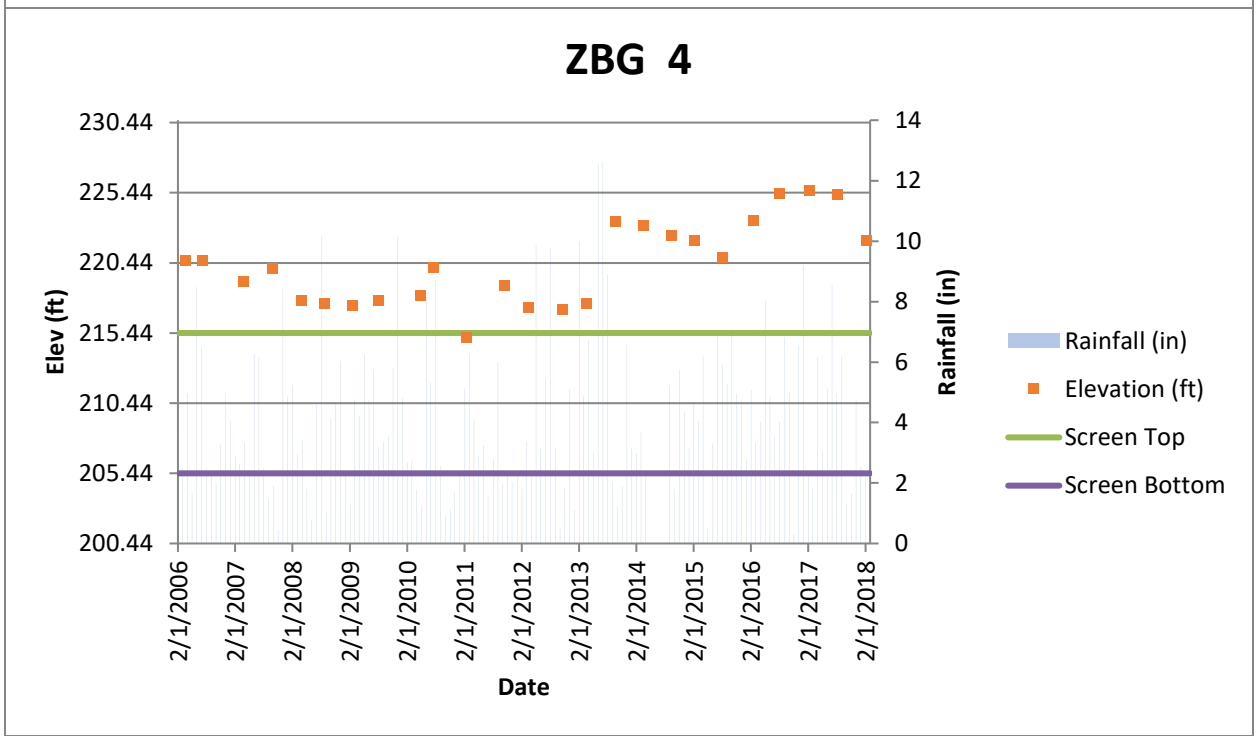
230.9
225.9
220.9
215.9
210.9
205.9
Rainfall (in)
14
12
10
8
6
4
2
0
1/1/2006
1/1/2007
1/1/2008
1/1/2009
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


ZBG 3
Elev (ft)
229
224
219
214
209
204
199
Rainfall (in)
14
12
10
8
6
4
2
0
2/1/2006
2/1/2007
2/1/2008
2/1/2009
2/1/2010
2/1/2011
2/1/2012
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


ZBG 4
Elev (ft)
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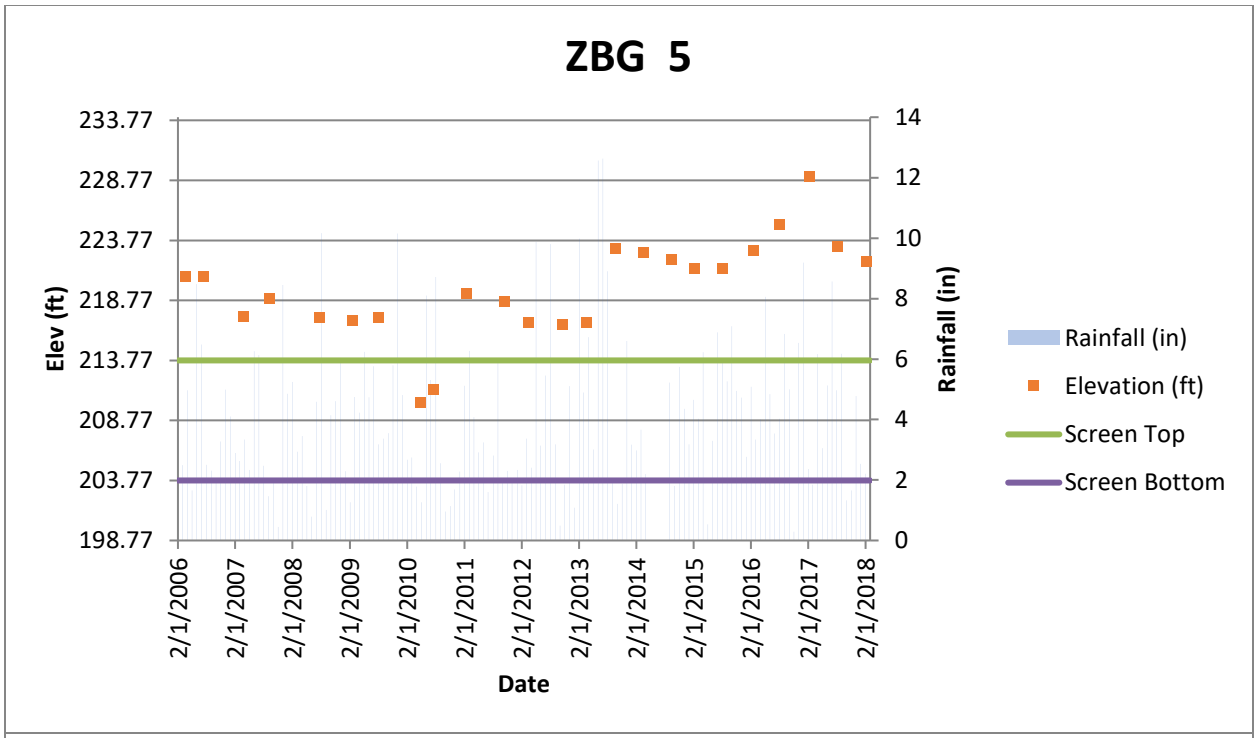
225.44
220.44
215.44
210.44
205.44
200.44
Rainfall (in)
14
12
10
8
6
4
2
0
2/1/2006
2/1/2007
2/1/2008
2/1/2009
2/1/2010
2/1/2011
2/1/2012
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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218.77
213.77
208.77
203.77
198.77
Elev (ft)
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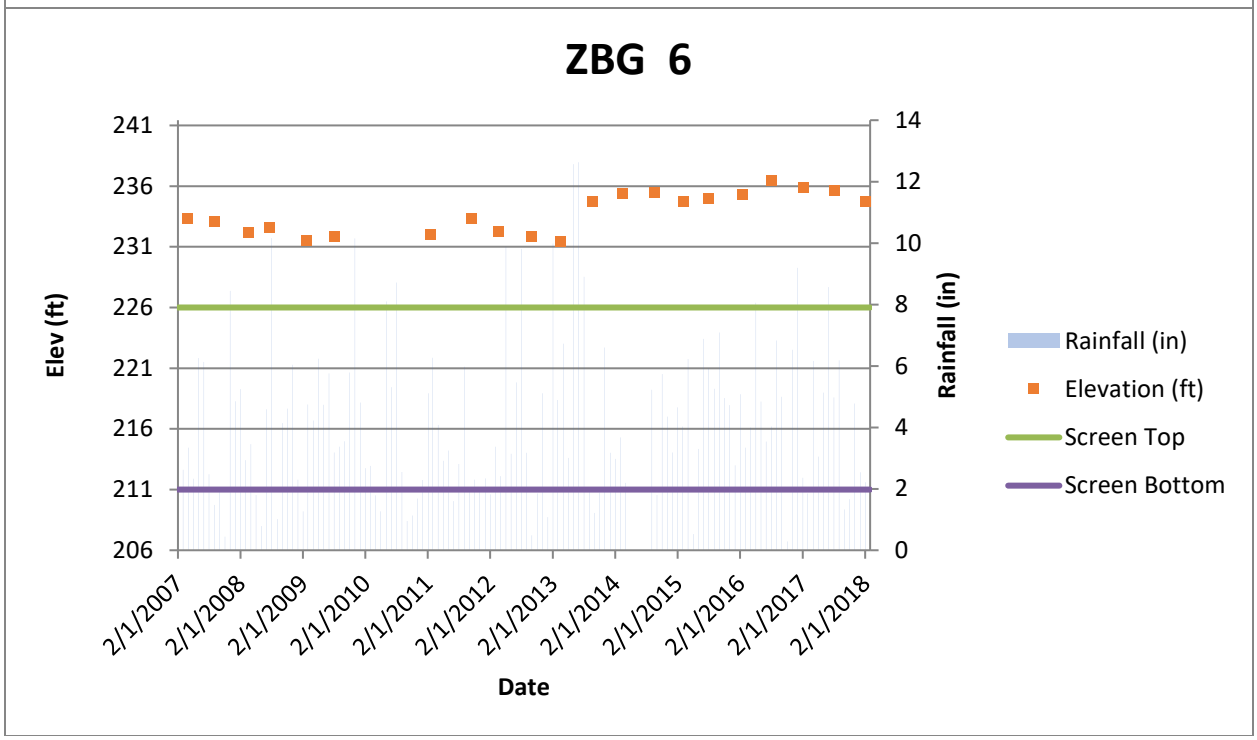
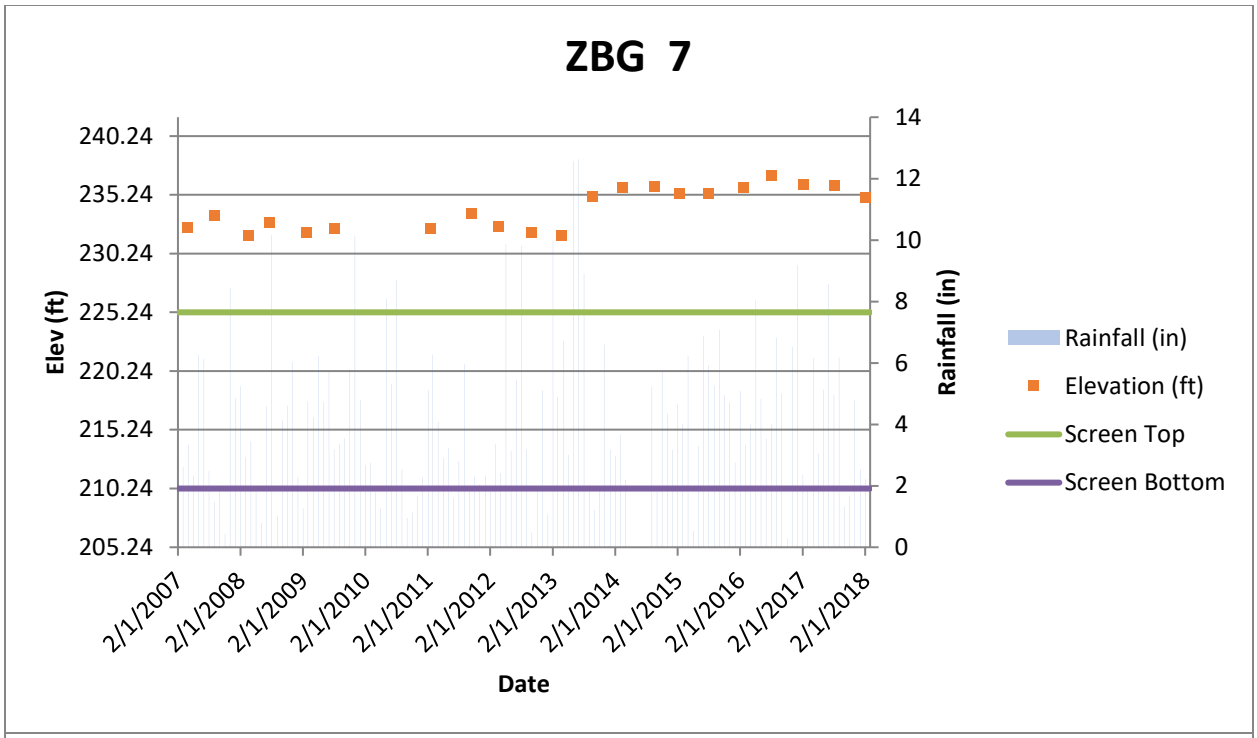
12
10
8
6
4
2
0
Rainfall (in)
2/1/2006
2/1/2007
2/1/2008
2/1/2009
2/1/2010
2/1/2011
2/1/2012
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


ZBG 6
241
236
231
226
221
216
211
206
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
2/1/2007
2/1/2008
2/1/2009
2/1/2010
2/1/2011
2/1/2012
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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215.24
210.24
205.24
Elev (ft)
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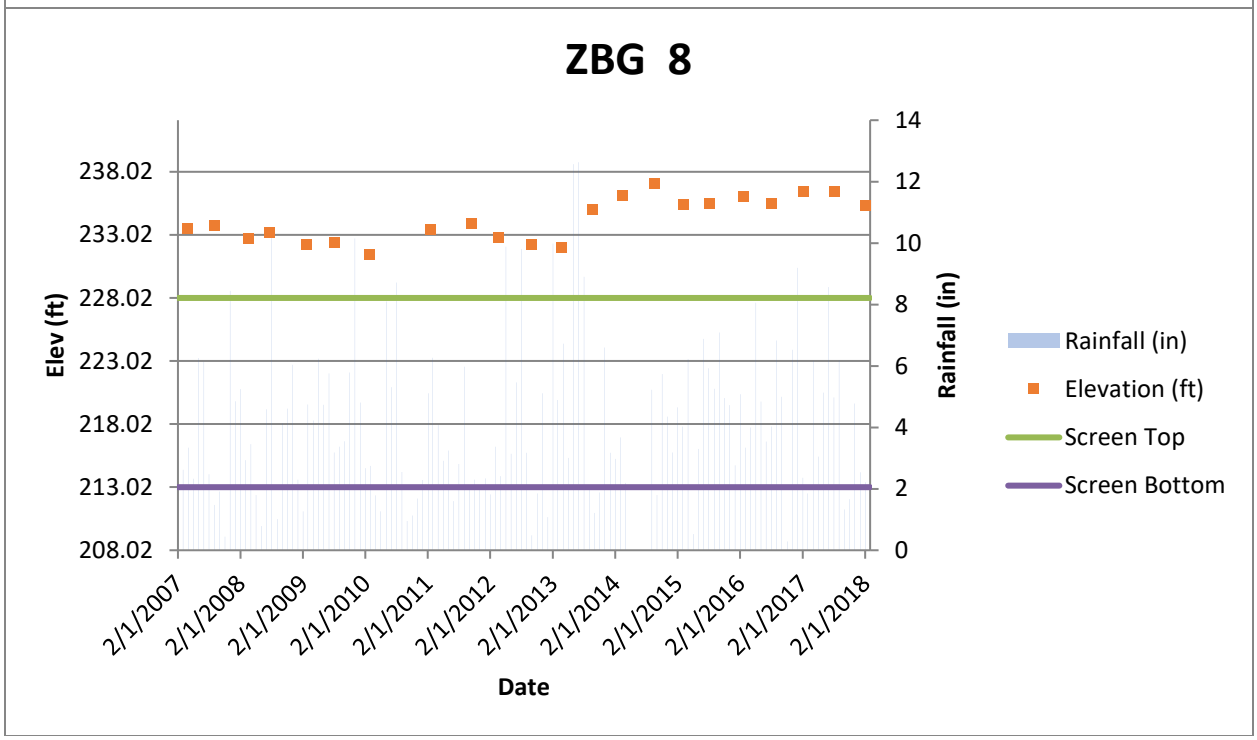
12
10
8
6
4
2
0
Rainfall (in)
2/1/2007
2/1/2008
2/1/2009
2/1/2010
2/1/2011
2/1/2012
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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218.02
213.02
208.02
Elev (ft)
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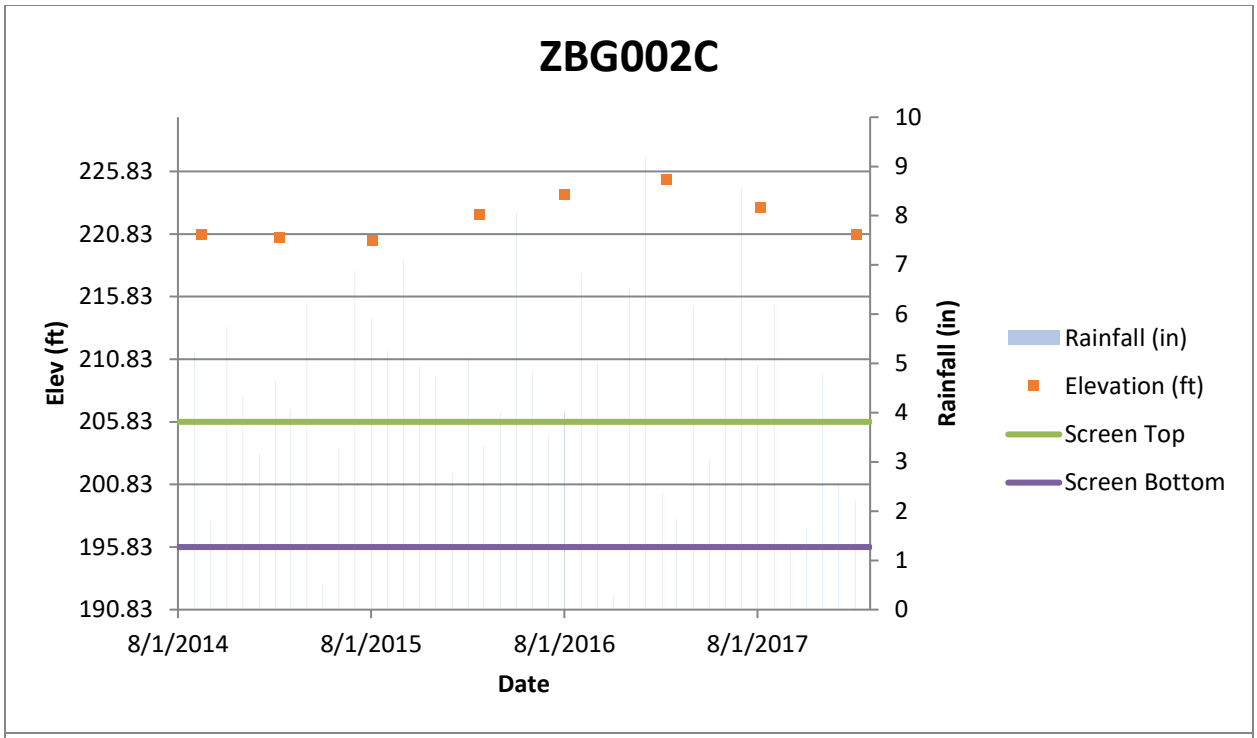
12
10
8
6
4
2
0
Rainfall (in)
2/1/2007
2/1/2008
2/1/2009
2/1/2010
2/1/2011
2/1/2012
2/1/2013
2/1/2014
2/1/2015
2/1/2016
2/1/2017
2/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


ZBG002C
225.83
220.83
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210.83
205.83
200.83
195.83
190.83
Elev (ft)
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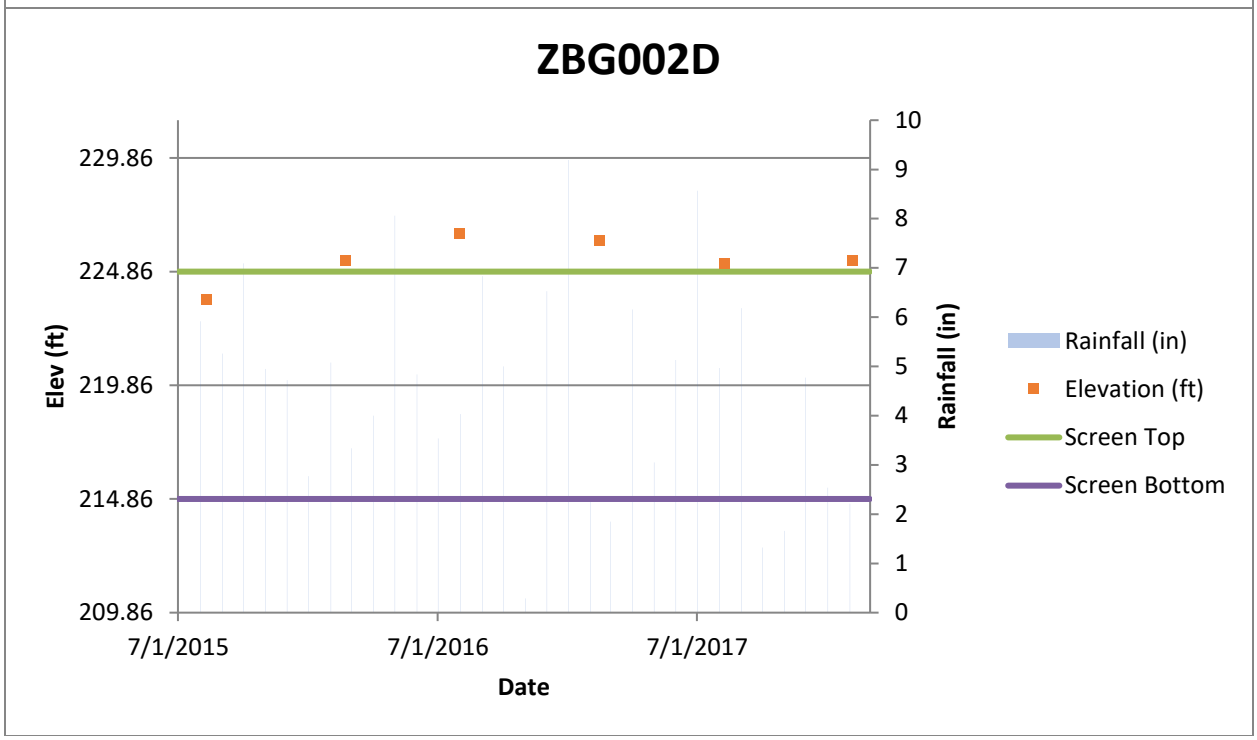
9
8
7
6
5
4
3
2
1
0
Rainfall (in)
8/1/2014
8/1/2015
8/1/2016
8/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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209.86
Elev (ft)
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8
7
6
5
4
3
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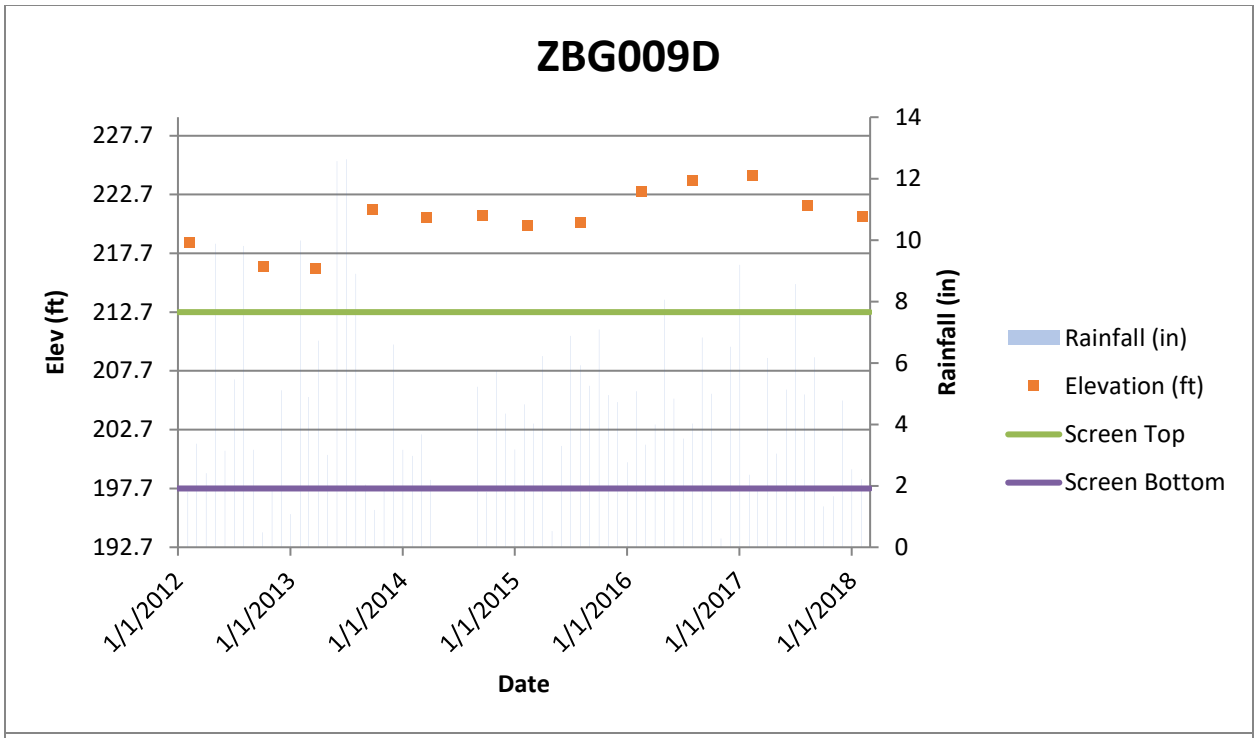
Rainfall (in)
7/1/2015
7/1/2016
7/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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202.7
197.7
192.7
Elev (ft)
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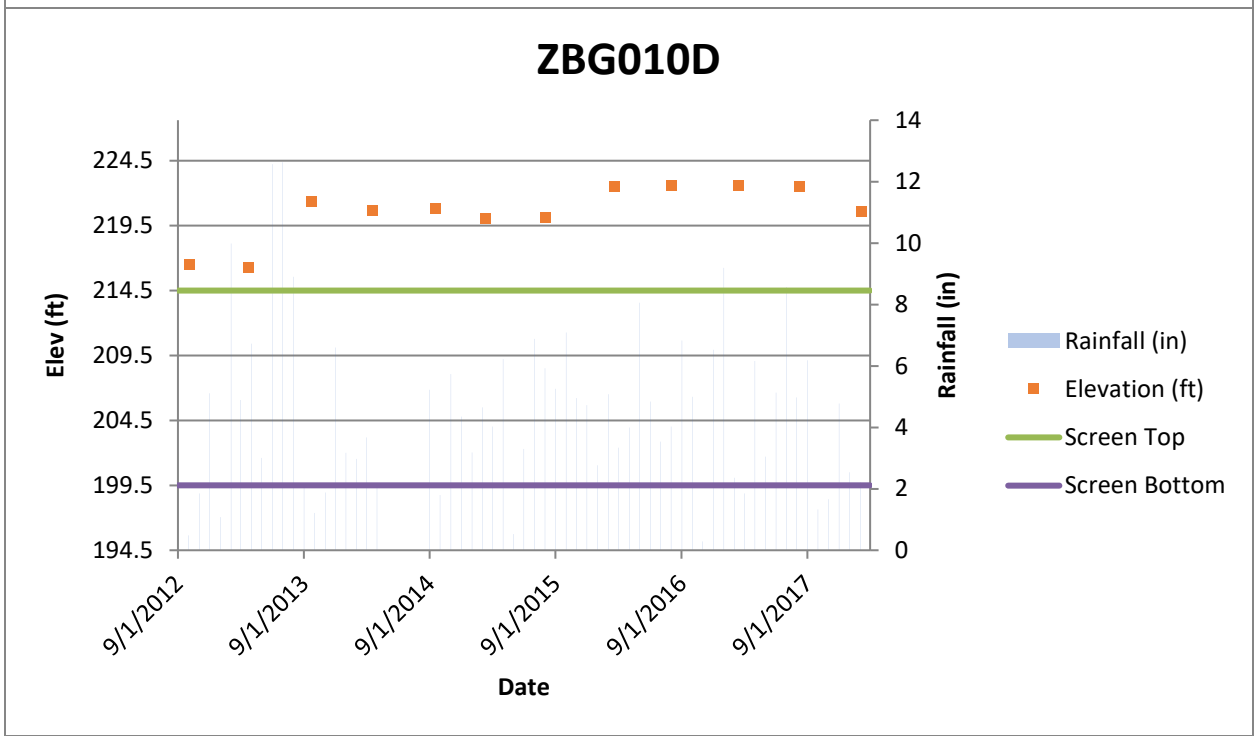
12
10
8
6
4
2
0
Rainfall (in)
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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219.5
214.5
209.5
204.5
199.5
194.5
Elev (ft)
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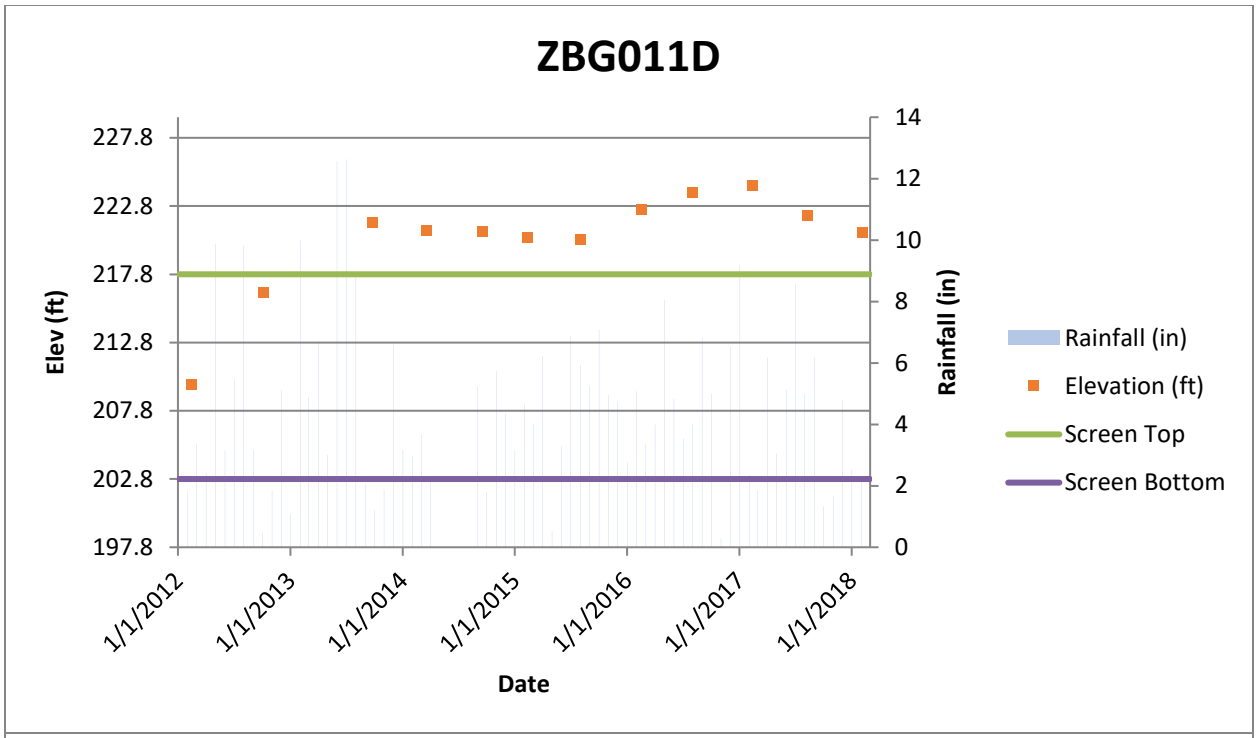
12
10
8
6
4
2
0
Rainfall (in)
9/1/2012
9/1/2013
9/1/2014
9/1/2015
9/1/2016
9/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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202.8
197.8
Elev (ft)
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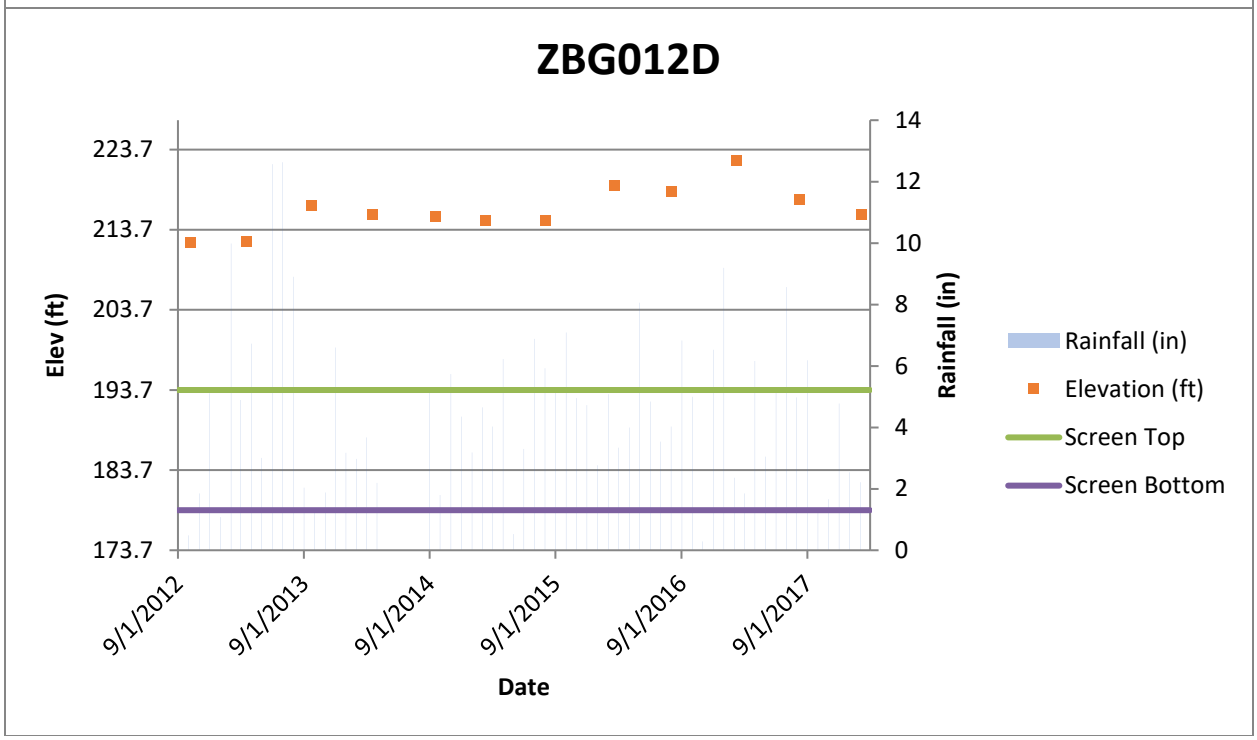
6
4
2
0
Rainfall (in)
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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173.7
Elev (ft)
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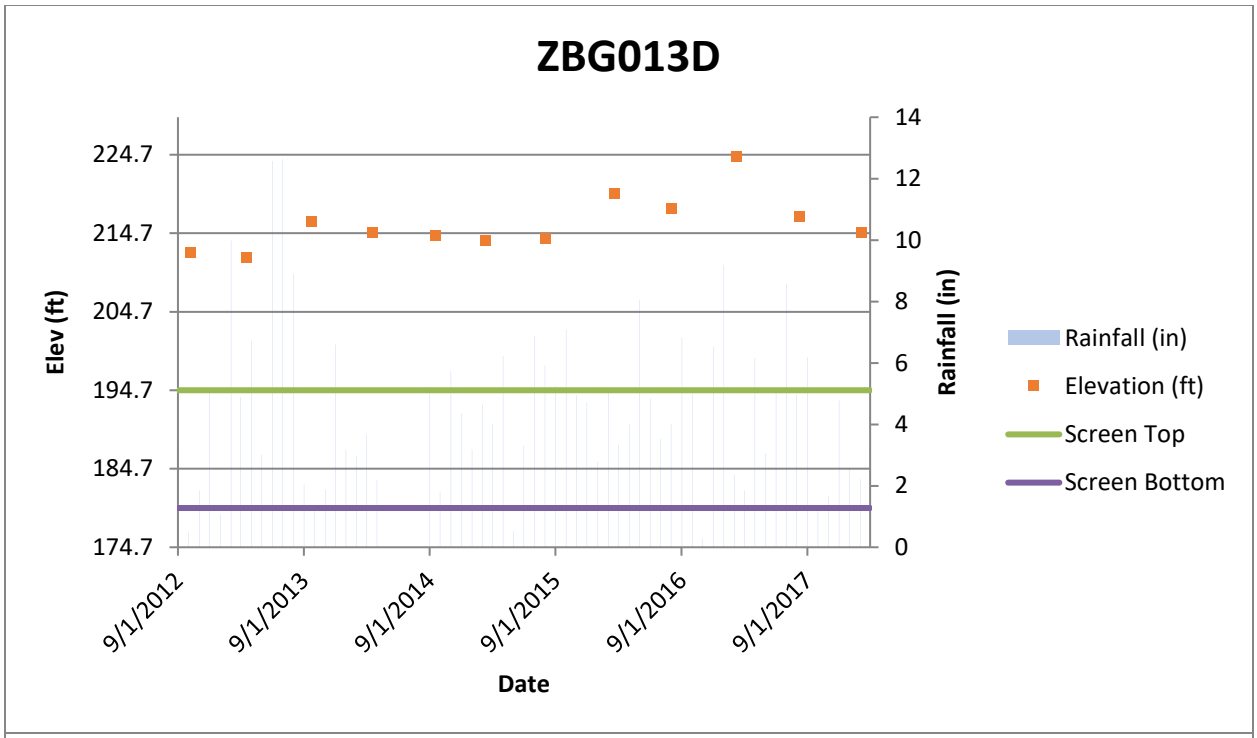
10
8
6
4
2
0
Rainfall (in)
9/1/2012
9/1/2013
9/1/2014
9/1/2015
9/1/2016
9/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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174.7
Elev (ft)
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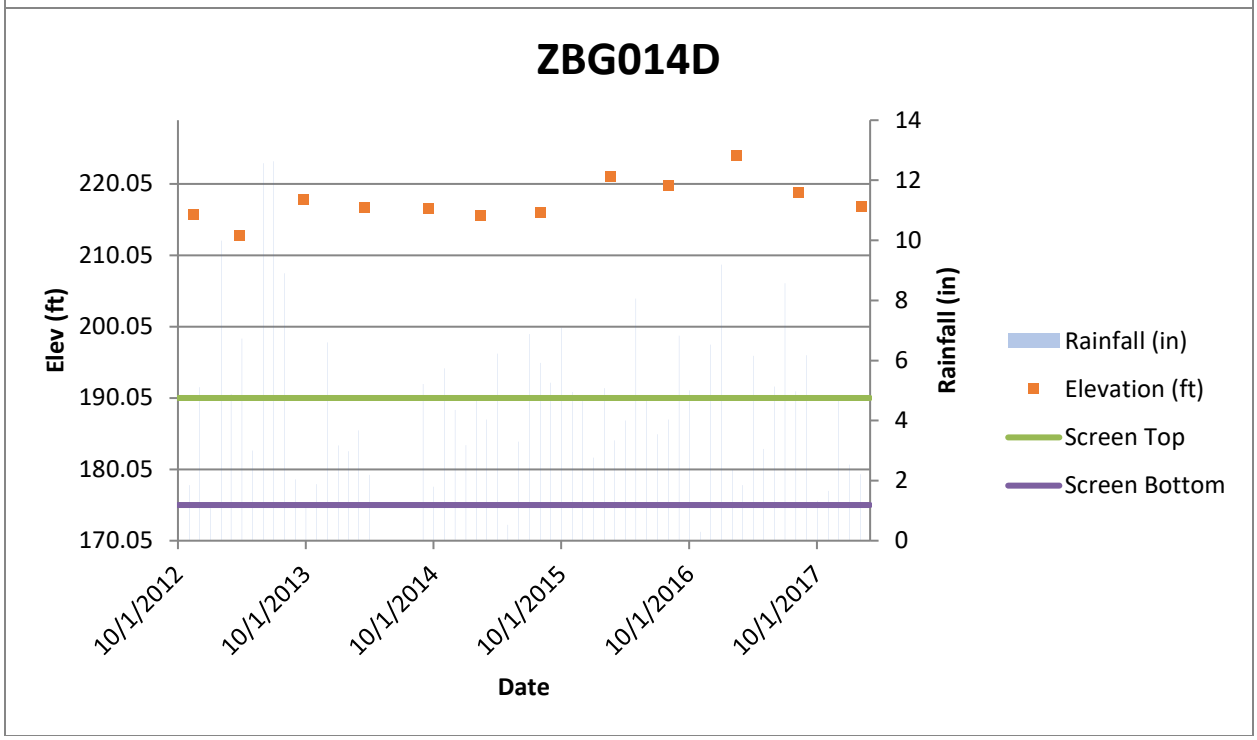
10
8
6
4
2
0
Rainfall (in)
9/1/2012
9/1/2013
9/1/2014
9/1/2015
9/1/2016
9/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom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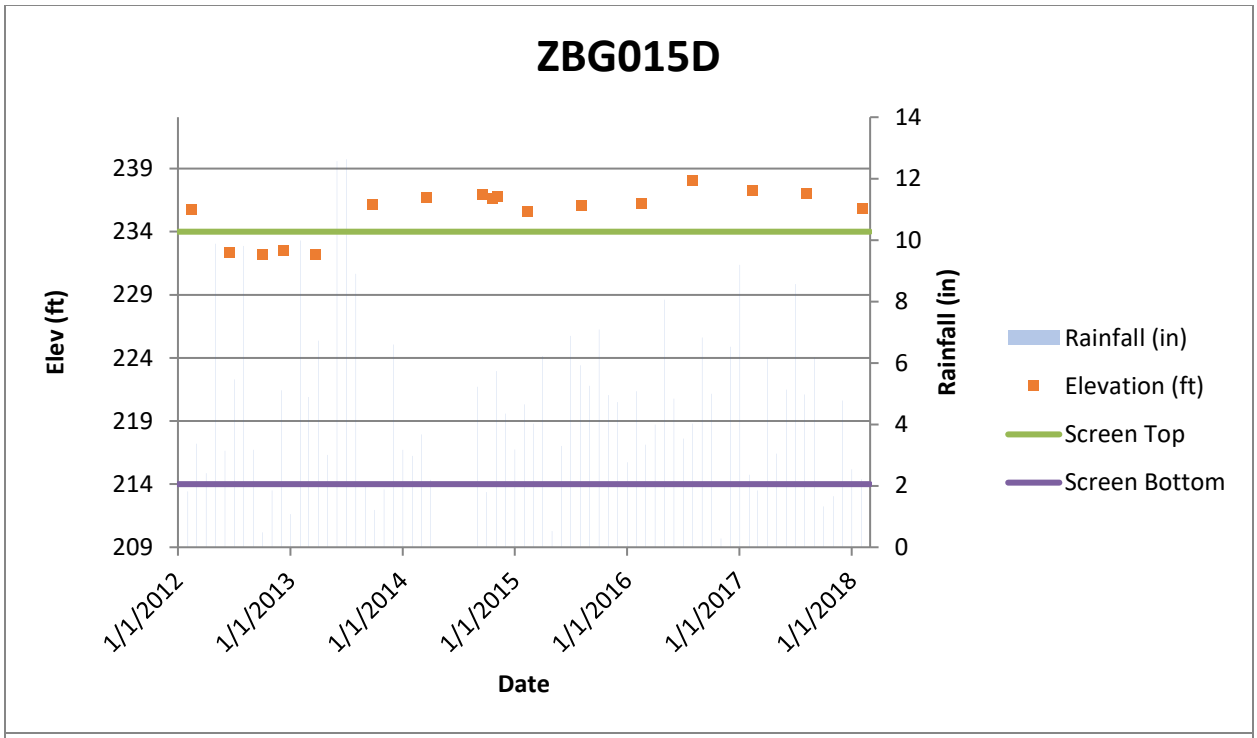
Elev (ft)
14
12
10
8
6
4
2
0
Rainfall (in)
10/1/2012
10/1/2013
10/1/2014
10/1/2015
10/1/2016
10/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


ZBG015D
Elev (ft)
239
234
229
224
219
214
209
Rainfall (in)
14
12
10
8
6
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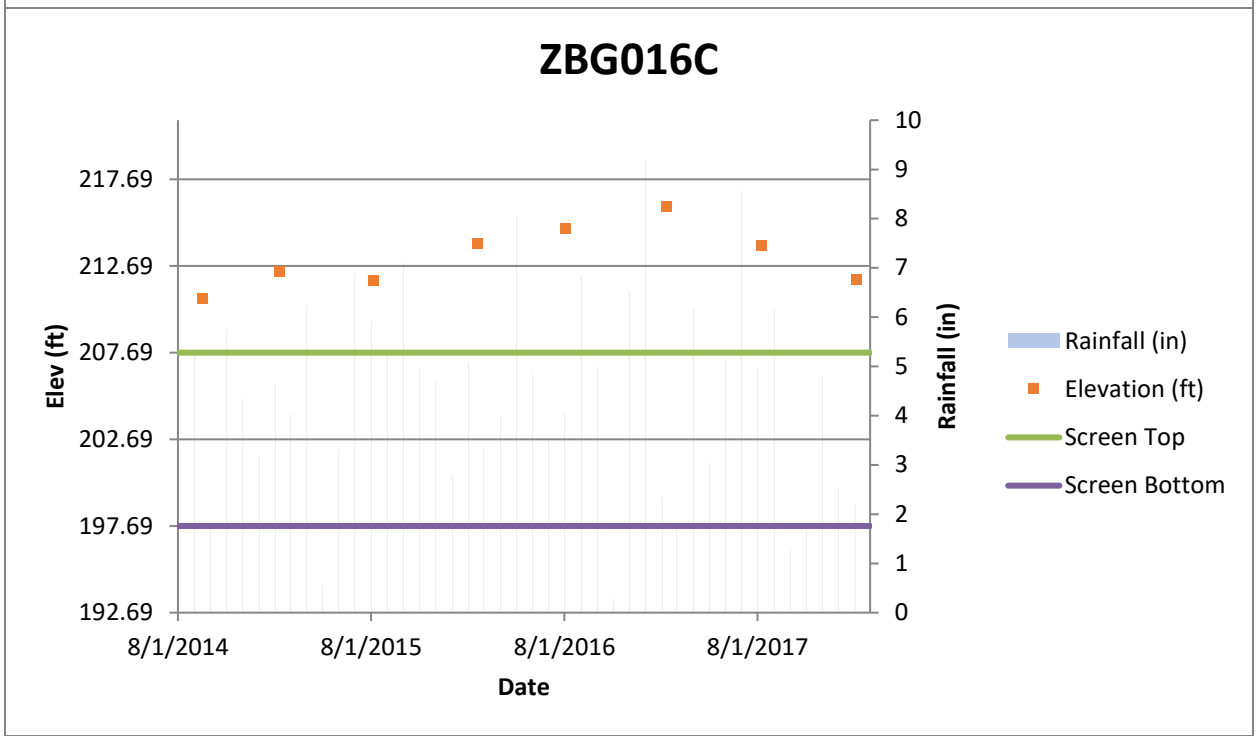
2
0
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom


ZBG016C
Elev (ft)
217.69
212.69
207.69
202.69
197.69
192.69
Rainfall (in)
10
9
8
7
6
5
4
3
2
1
0
8/1/2014
8/1/2015
8/1/2016
8/1/2017
Date
Rainfall (in)
Elevation (ft)
Screen Top
Screen Bottom

Appendix C Base Period Water Level Elevation and Statistical Quantities

Table C-1. Coordinates and Statistical Quantities for Target Wells

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
BGO 1D	UAZ	79	240.5	231.5	8.9	235.8	236.4	2.32	0.26
BGO 2D	UAZ	77	235.8	228.0	7.8	232.0	232.4	2.11	0.24
BGO 3A	GA	77	162.7	160.3	2.4	161.6	161.6	0.56	0.06
BGO 3C	LAZ	79	224.6	219.5	5.1	222.1	222.2	1.39	0.16
BGO 3DR	UAZ	75	231.0	226.4	4.6	229.0	229.1	1.37	0.16
BGO 4D	UAZ	77	228.5	224.3	4.2	226.5	226.7	1.30	0.15
BGO 5C	LAZ	80	213.2	208.6	4.6	211.0	211.3	1.30	0.15
BGO 5D	UAZ	79	227.9	223.8	4.1	226.0	225.7	1.24	0.14
BGO 6A	GA	78	159.2	156.8	2.4	158.1	158.2	0.56	0.06
BGO 6B	LAZ	78	216.5	211.9	4.7	214.3	214.5	1.37	0.16
BGO 6C	LAZ	79	218.1	212.9	5.2	215.9	216.1	1.35	0.15
BGO 6D	UAZ	78	228.7	224.4	4.3	226.8	226.9	1.29	0.15
BGO 7D	UAZ	77	229.2	224.2	5.0	226.8	226.9	1.47	0.17
BGO 8AR	GA	78	159.0	156.4	2.6	158.0	158.1	0.56	0.06
BGO 8C	LAZ	79	221.2	216.2	5.0	219.0	219.1	1.49	0.17
BGO 8D	UAZ	78	229.7	224.1	5.5	227.1	226.9	1.54	0.17
BGO 9AA	GA	63	160.3	154.8	5.5	156.3	156.3	0.92	0.12
BGO 10AA	GA	65	158.8	155.2	3.6	156.5	156.6	0.63	0.08
BGO 10AR	GA	77	158.1	155.2	2.9	157.0	157.2	0.59	0.07
BGO 10B	LAZ	57	217.4	212.4	5.0	215.3	215.5	1.48	0.20
BGO 10C	LAZ	80	218.8	213.4	5.4	216.3	216.5	1.60	0.18
BGO 10DR	UAZ	76	229.8	224.0	5.8	227.1	226.8	1.68	0.19
BGO 11DR	UAZ	79	229.8	223.8	6.0	226.9	226.9	1.72	0.19
BGO 12AX	GA	77	157.1	154.9	2.2	156.1	156.2	0.55	0.06
BGO 12CX	UAZ	76	219.0	213.6	5.4	216.6	216.9	1.65	0.19
BGO 12DR	LAZ	77	230.2	223.8	6.4	227.1	227.2	1.79	0.20
BGO 13DR	LAZ	106	229.7	223.5	6.2	226.8	227.2	1.74	0.17
BGO 14AR	GA	80	158.1	155.4	2.8	157.1	157.1	0.63	0.07
BGO 14CR	LAZ	80	222.0	215.9	6.1	219.1	219.3	1.76	0.20
BGO 14DR	UAZ	79	229.6	223.3	6.3	226.5	226.8	1.75	0.20
BGO 15D	UAZ	76	229.4	223.2	6.2	226.5	226.6	1.72	0.20
BGO 16AR	GA	65	160.6	158.2	2.4	159.5	159.6	0.61	0.08
BGO 16B	LAZ	66	218.7	211.9	6.8	215.1	215.3	1.64	0.20
BGO 16D	UAZ	69	229.3	223.4	5.9	226.6	226.8	1.73	0.21
BGO 17DR	UAZ	60	229.7	223.8	5.9	227.2	227.6	1.74	0.22
BGO 18A	GA	66	160.9	158.5	2.4	159.9	160.0	0.61	0.07
BGO 18D	UAZ	29	230.1	227.9	2.2	229.2	229.3	0.70	0.13
BGO 20A	GA	66	162.4	159.9	2.5	161.3	161.4	0.61	0.08
BGO 20B	LAZ	58	226.3	220.7	5.6	224.0	224.2	1.69	0.22
BGO 20C	LAZ	70	227.7	221.9	5.8	225.3	225.7	1.70	0.20
BGO 20D	UAZ	68	232.8	226.0	6.8	229.4	229.5	1.81	0.22
BGO 21D	UAZ	57	232.9	227.2	5.7	230.4	230.4	1.70	0.23
BGO 22DX	UAZ	58	233.5	227.6	5.8	230.9	231.1	1.78	0.23
BGO 23D	UAZ	57	235.0	228.7	6.3	232.2	232.6	1.84	0.24
BGO 24D	UAZ	57	237.0	230.0	6.9	233.5	234.1	1.91	0.25
BGO 25A	GA	65	160.2	157.8	2.4	159.2	159.3	0.62	0.08
BGO 26A	GA	80	158.1	154.9	3.2	156.5	156.5	0.70	0.08

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
BGO 26D	UAZ	74	227.5	220.2	7.3	224.5	224.5	1.92	0.22
BGO 27C	LAZ	83	220.1	213.4	6.7	216.9	217.3	1.89	0.21
BGO 27D	UAZ	79	226.7	219.5	7.2	223.4	223.9	2.06	0.23
BGO 28D	UAZ	87	225.3	218.1	7.2	222.1	222.3	2.04	0.22
BGO 29A	GA	77	159.2	156.7	2.5	158.1	158.2	0.68	0.08
BGO 29C	LAZ	67	220.9	214.3	6.6	218.1	218.6	1.88	0.23
BGO 29D	UAZ	59	225.3	218.3	7.0	222.3	223.0	1.97	0.26
BGO 30C	LAZ	78	219.0	212.1	6.9	215.8	216.4	1.95	0.22
BGO 30D	UAZ	80	225.2	218.0	7.2	222.2	222.8	2.03	0.23
BGO 31C	LAZ	80	225.1	218.0	7.1	221.8	222.3	2.00	0.22
BGO 31D	UAZ	78	226.0	218.6	7.4	222.9	223.3	2.00	0.23
BGO 32D	UAZ	81	226.4	219.5	6.9	223.4	223.8	1.99	0.22
BGO 33C	LAZ	83	224.2	217.9	6.3	221.5	221.9	1.86	0.20
BGO 33D	UAZ	79	229.1	222.3	6.8	226.1	226.5	2.00	0.22
BGO 34D	UAZ	78	231.6	224.1	7.5	228.2	228.4	2.13	0.24
BGO 35C	LAZ	79	227.7	221.5	6.2	225.1	225.5	1.83	0.21
BGO 35D	UAZ	79	233.6	226.0	7.5	230.1	230.3	2.11	0.24
BGO 36D	UAZ	78	237.7	229.5	8.2	233.8	233.9	2.34	0.27
BGO 37C	LAZ	79	230.4	223.9	6.5	227.5	227.9	1.86	0.21
BGO 37D	UAZ	80	241.3	229.9	11.4	235.1	235.9	2.79	0.31
BGO 38D	UAZ	78	238.9	228.4	10.5	233.5	233.8	2.58	0.29
BGO 39A	GA	79	168.2	164.4	3.8	165.8	165.9	0.71	0.08
BGO 39C	LAZ	77	230.9	224.5	6.4	228.0	228.5	1.81	0.21
BGO 39D	UAZ	79	237.0	227.8	9.2	232.0	232.5	2.22	0.25
BGO 40D	UAZ	37	220.3	216.7	3.6	218.6	218.7	1.06	0.18
BGO 41A	GA	76	172.8	156.0	16.9	161.3	160.0	4.97	0.57
BGO 42C	LAZ	71	221.9	215.6	6.2	219.1	219.4	1.77	0.21
BGO 43A	GA	67	158.4	154.1	4.3	155.7	155.6	0.92	0.11
BGO 43AA	GA	67	156.3	153.9	2.3	155.1	155.3	0.56	0.07
BGO 43CR	LAZ	76	218.5	213.1	5.4	216.2	216.8	1.58	0.18
BGO 43D	LAZ	73	230.4	224.1	6.3	227.4	227.8	1.81	0.21
BGO 44A	GA	65	158.3	156.0	2.3	157.3	157.4	0.55	0.07
BGO 44AA	GA	62	164.7	156.1	8.6	158.4	158.0	1.79	0.23
BGO 44B	LAZ	58	219.5	214.0	5.5	217.0	217.2	1.29	0.17
BGO 44C	LAZ	65	218.6	213.8	4.8	216.5	216.6	1.39	0.17
BGO 44D	UAZ	51	229.1	223.8	5.3	226.9	226.9	1.42	0.20
BGO 45A	GA	79	160.0	157.5	2.5	158.9	159.1	0.66	0.07
BGO 45B	LAZ	79	217.7	211.5	6.2	214.9	215.4	1.84	0.21
BGO 45C	LAZ	77	221.6	215.2	6.5	218.7	219.1	1.87	0.21
BGO 45D	UAZ	75	226.4	219.4	7.0	223.3	223.8	2.03	0.23
BGO 46B	LAZ	59	217.0	210.9	6.0	214.4	214.9	1.71	0.22
BGO 46C	LAZ	75	218.5	212.2	6.3	216.0	216.5	1.83	0.21
BGO 46D	UAZ	70	224.8	217.9	6.9	222.1	222.8	1.98	0.24
BGO 47A	GA	67	161.7	158.8	2.9	160.6	160.8	0.69	0.08
BGO 47C	LAZ	69	223.8	215.4	8.4	219.3	219.9	1.83	0.22
BGO 47D	UAZ	68	225.5	218.7	6.8	222.5	222.8	1.90	0.23
BGO 48C	LAZ	73	222.7	215.2	7.5	219.9	220.4	1.84	0.22
BGO 48D	UAZ	80	225.2	218.5	6.7	222.3	223.0	1.89	0.21
BGO 49A	GA	68	169.5	162.1	7.4	164.8	164.9	1.45	0.18

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
BGO 49C	LAZ	61	227.0	221.2	5.8	224.6	225.0	1.55	0.20
BGO 49D	UAZ	53	232.7	225.7	7.0	229.5	229.9	1.99	0.27
BGO 50A	GA	81	159.5	156.9	2.7	158.4	158.6	0.71	0.08
BGO 50C	LAZ	79	217.9	211.4	6.5	215.1	215.6	1.86	0.21
BGO 50D	UAZ	79	224.6	217.1	7.6	221.6	222.1	2.01	0.23
BGO 51A	GA	77	166.1	161.3	4.8	164.0	164.1	0.77	0.09
BGO 51B	LAZ	78	229.8	222.4	7.4	226.8	227.3	1.81	0.20
BGO 51C	LAZ	77	250.5	224.2	26.3	227.8	228.1	3.18	0.36
BGO 51D	UAZ	77	234.8	228.1	6.7	231.8	232.3	2.00	0.23
BGO 52A	GA	67	163.3	160.7	2.6	162.2	162.3	0.62	0.08
BGO 52AA	GA	66	162.9	160.1	2.8	161.5	161.6	0.64	0.08
BGO 52B	LAZ	59	227.2	220.1	7.1	224.6	225.1	1.77	0.23
BGO 52C	LAZ	58	228.4	222.6	5.8	225.9	226.4	1.72	0.23
BGO 52D	UAZ	60	232.5	226.4	6.1	229.8	229.9	1.86	0.24
BGO 53A	GA	66	159.6	156.2	3.4	157.6	157.7	0.64	0.08
BGO 53AA	GA	65	158.6	155.7	2.9	157.0	157.1	0.65	0.08
BGO 53B	LAZ	57	220.6	214.5	6.1	217.8	218.1	1.78	0.24
BGO 53C	LAZ	68	222.1	215.9	6.2	219.1	219.5	1.82	0.22
BGO 53D	UAZ	36	229.2	226.3	2.9	227.7	227.7	0.84	0.14
BGX 1A	GA	82	158.0	155.6	2.4	156.9	157.0	0.60	0.07
BGX 1C	LAZ	78	213.5	208.7	4.8	211.4	211.6	1.32	0.15
BGX 1D	UAZ	80	227.1	223.2	3.9	225.3	225.3	1.15	0.13
BGX 2B	LAZ	67	210.5	205.7	4.8	208.2	208.3	1.30	0.16
BGX 2D	LAZ	67	214.0	207.7	6.3	210.3	210.5	1.39	0.17
BGX 3D	LAZ	60	212.6	208.0	4.6	210.6	210.9	1.34	0.17
BGX 4A	GA	65	155.7	153.1	2.6	154.6	154.7	0.60	0.07
BGX 4C	LAZ	64	214.1	206.9	7.2	209.7	210.0	1.59	0.20
BGX 5D	LAZ	67	206.8	202.1	4.7	204.7	205.0	1.40	0.17
BGX 6D	LAZ	34	204.0	199.9	4.1	201.9	201.7	1.19	0.20
BGX 7D	LAZ	58	203.7	198.4	5.3	201.9	202.2	1.38	0.18
BGX 8DR	LAZ	33	204.1	200.4	3.7	201.8	201.7	1.06	0.19
BGX 9D	UAZ	58	225.6	221.9	3.7	224.0	224.1	1.03	0.14
BGX 10D	UAZ	63	224.9	221.4	3.5	223.5	223.7	1.02	0.13
BGX 11D	UAZ	57	234.3	228.4	5.9	231.7	232.1	1.72	0.23
BGX 12C	LAZ	58	234.1	227.9	6.2	231.4	231.8	1.73	0.23
BGX 12D	UAZ	57	238.6	231.0	7.6	234.9	235.3	1.99	0.26
BGX006DR	LAZ	25	205.7	201.1	4.5	204.1	204.5	1.43	0.29
BGX013D	LAZ	46	205.5	200.8	4.7	203.3	203.7	1.38	0.20
BRR 1D	UAZ	25	216.2	207.4	8.8	211.5	210.9	2.47	0.49
BRR 5D	UAZ	20	211.3	204.9	6.4	208.2	207.3	1.96	0.44
BRR 6C	LAZ	22	206.7	199.8	6.9	202.4	202.0	1.88	0.40
BRR 6D	UAZ	23	211.0	203.7	7.3	206.8	206.2	2.00	0.42
BRR 7C	LAZ	24	208.8	201.4	7.4	204.5	203.9	2.07	0.42
BSE 1C1	LAZ	4	229.9	224.7	5.2	227.8	228.3	2.25	1.12
BSE 1C2	LAZ	24	236.3	222.5	13.8	227.3	227.6	2.83	0.58
BSE 1C3	LAZ	11	232.6	224.6	7.9	226.9	226.4	2.39	0.72
BSE 1C4	LAZ	48	230.3	222.4	7.9	227.0	227.4	1.97	0.28
BSE 1D1	UAZ	53	238.6	228.5	10.1	233.4	233.8	2.54	0.35
BSE 1D3	UAZ	19	236.4	228.5	7.9	233.2	233.4	2.26	0.52

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BSE 1D4	LAZ	25	236.8	229.0	7.8	233.4	234.2	2.25	0.45
BSE 2CR1	LAZ	20	227.3	221.1	6.2	224.8	225.3	1.72	0.39
BSE 2CR3	LAZ	56	227.1	221.0	6.2	224.3	224.2	1.70	0.23
BSE 2D1	UAZ	18	233.4	227.3	6.1	229.9	229.4	1.84	0.43
BSE 2D2	UAZ	29	231.1	224.2	6.9	228.6	229.3	2.07	0.38
BSE 2D3	UAZ	10	230.0	224.2	5.8	228.5	229.4	1.93	0.61
BSE 2D4	LAZ	10	233.0	227.0	6.1	229.8	229.5	2.10	0.66
BSE 3C1	LAZ	31	228.1	221.7	6.4	225.4	225.8	1.58	0.28
BSE 3C2	LAZ	18	227.0	221.4	5.6	225.2	225.7	1.40	0.33
BSE 3C3	LAZ	52	228.4	221.7	6.8	225.4	225.4	1.69	0.23
BSE 3D1	UAZ	56	232.2	224.3	7.9	228.6	228.5	1.93	0.26
BSE 3D3	UAZ	20	230.9	224.6	6.3	228.5	228.5	1.98	0.44
BSE 3D4	UAZ	28	232.0	224.6	7.4	228.7	228.8	1.96	0.37
BSW 1C1	LAZ	32	216.0	208.3	7.7	212.1	212.4	1.76	0.31
BSW 1C2	LAZ	19	216.0	208.3	7.7	211.7	212.4	2.06	0.47
BSW 1C3	LAZ	56	214.6	208.4	6.2	211.9	212.4	1.74	0.23
BSW 1C4	LAZ	20	214.0	208.6	5.4	211.5	211.8	1.69	0.38
BSW 1D1	UAZ	53	223.9	215.3	8.6	219.2	219.7	2.07	0.28
BSW 1D2	UAZ	30	222.4	216.1	6.3	219.3	219.8	1.87	0.34
BSW 2C1	LAZ	10	212.8	205.9	6.9	207.1	206.4	2.13	0.67
BSW 2C2	LAZ	54	214.0	205.7	8.3	209.3	209.4	2.63	0.36
BSW 2C3	LAZ	8	214.1	211.2	2.9	212.6	212.8	1.17	0.42
BSW 2D1	UAZ	49	222.4	216.5	5.9	219.8	220.0	1.64	0.23
BSW 2D2	UAZ	8	221.8	218.8	3.1	220.5	220.7	1.10	0.39
BSW 3C1	LAZ	6	217.1	215.6	1.5	216.4	216.5	0.53	0.22
BSW 3C2	LAZ	57	217.4	211.5	5.9	214.9	215.5	1.71	0.23
BSW 3C4	LAZ	6	217.2	204.9	12.3	214.4	216.4	4.74	1.93
BSW 3D1	UAZ	47	223.3	218.1	5.2	220.8	221.0	1.45	0.21
BSW 3D2	UAZ	16	223.3	219.8	3.5	221.8	222.0	0.89	0.22
BSW 4C2	LAZ	23	221.3	213.4	7.9	217.6	217.7	1.78	0.37
BSW 4C3	LAZ	56	219.5	213.4	6.1	216.9	217.4	1.77	0.24
BSW 4D1	UAZ	46	224.2	219.2	5.0	221.7	221.7	1.43	0.21
BSW 4D2	UAZ	24	223.7	219.0	4.7	221.4	221.8	1.53	0.31
BSW 5C1	LAZ	31	213.6	207.9	5.7	211.3	211.7	1.65	0.30
BSW 5C4	LAZ	57	214.6	206.2	8.4	211.3	211.8	1.82	0.24
BSW 5D1	UAZ	52	219.9	214.4	5.5	217.3	217.5	1.60	0.22
BSW 5D2	UAZ	28	219.7	213.5	6.2	217.1	217.7	1.95	0.37
BSW 6C1	LAZ	57	214.6	207.0	7.6	210.0	210.3	1.65	0.22
BSW 6C2	LAZ	27	212.1	206.9	5.3	210.1	210.6	1.63	0.31
BSW 6C3	LAZ	18	211.9	206.7	5.2	209.8	210.5	1.73	0.41
BSW 6C4	LAZ	20	212.1	206.7	5.4	209.8	210.5	1.79	0.40
BSW 6D2	UAZ	55	215.9	209.4	6.4	213.0	213.3	1.64	0.22
BSW 6D3	UAZ	33	215.8	209.9	5.9	213.2	213.5	1.68	0.29
BSW 7C1	LAZ	18	213.8	208.0	5.8	212.4	213.1	1.46	0.34
BSW 7C3	LAZ	57	214.2	207.3	6.8	211.5	211.9	1.60	0.21
BSW 7D1	UAZ	57	217.6	211.4	6.2	214.7	214.8	1.69	0.22
BSW 7D2	UAZ	18	217.5	211.2	6.4	215.6	216.0	1.75	0.41
BSW 8C1	LAZ	33	217.5	211.6	5.9	215.2	215.5	1.65	0.29
BSW 8C3	LAZ	54	219.8	211.6	8.2	215.0	215.3	1.89	0.26

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
BSW 8D1	UAZ	48	220.6	214.2	6.4	217.7	218.1	1.72	0.25
BSW 8D3	UAZ	32	220.4	213.0	7.4	217.0	217.2	1.89	0.33
CBS 1	LAZ	13	176.6	175.7	1.0	175.9	175.9	0.26	0.07
FAB 2	UAZ	99	230.8	224.0	6.8	227.2	227.6	1.83	0.18
FAB 2MC	LAZ	67	217.9	211.9	6.0	214.9	215.3	1.79	0.22
FAB 5C	LAZ	20	215.1	208.9	6.2	212.8	213.5	1.95	0.44
FAB 5D	UAZ	26	230.5	226.5	4.0	228.7	228.7	0.84	0.16
FAB 6C	LAZ	18	214.5	209.1	5.4	212.5	212.9	1.73	0.41
FAB 6D	UAZ	27	232.0	225.8	6.3	229.6	229.7	1.43	0.27
FAB 7C	LAZ	18	214.7	209.5	5.1	212.8	213.2	1.69	0.40
FAB 7D	UAZ	26	230.6	224.3	6.3	228.3	228.4	1.49	0.29
FAB008D	UAZ	9	230.7	228.2	2.5	229.3	229.4	0.87	0.29
FAB009D	UAZ	9	230.4	228.1	2.3	229.3	229.6	0.91	0.30
FAB010D	UAZ	9	230.8	228.5	2.3	229.7	229.8	0.91	0.30
FBG001C	LAZ	12	218.8	212.3	6.5	216.5	216.9	2.19	0.63
FBI 13D	UAZ	77	210.4	202.4	8.0	205.1	204.5	2.10	0.24
FBI 14C	LAZ	85	200.9	196.7	4.3	198.9	199.1	0.94	0.10
FBI 14D	UAZ	182	210.0	201.1	8.9	204.5	203.4	2.63	0.20
FBI 15D	UAZ	141	203.3	194.9	8.4	198.2	198.4	1.58	0.13
FBI 16C	LAZ	85	201.2	196.4	4.8	198.9	198.9	1.05	0.11
FBI 16D	UAZ	78	210.2	202.4	7.8	204.9	204.2	2.10	0.24
FBI 17D	UAZ	151	204.6	196.2	8.4	199.2	199.2	1.84	0.15
FBP 1A	LAZ	18	203.9	199.2	4.7	201.2	200.7	1.43	0.34
FBP 2A	LAZ	23	188.1	176.8	11.3	182.0	181.4	2.83	0.59
FBP 6D	LAZ	23	190.3	182.2	8.1	185.8	185.4	2.34	0.49
FBP 9D	LAZ	6	195.0	194.1	0.9	194.7	195.0	0.44	0.18
FBP 10D	LAZ	23	198.5	193.9	4.6	196.3	196.1	1.38	0.29
FBP 12D	LAZ	23	206.6	200.0	6.7	202.8	202.5	1.79	0.37
FBP 13D	LAZ	20	189.7	183.6	6.1	186.4	186.1	2.01	0.45
FBP 43C	LAZ	23	208.6	203.3	5.3	205.9	205.6	1.66	0.35
FBP 43DL	LAZ	23	209.5	204.1	5.4	206.9	206.6	1.71	0.36
FBP 46D	LAZ	11	165.4	161.5	3.9	163.2	163.3	1.28	0.39
FCB 2C	LAZ	15	219.8	217.2	2.6	219.0	219.1	0.73	0.19
FCB 2D	UAZ	17	228.2	226.0	2.2	227.4	227.5	0.62	0.15
FCB002CR	LAZ	34	218.2	214.0	4.3	215.9	215.8	1.14	0.20
FCB002CRR	LAZ	15	219.7	217.4	2.3	218.8	219.1	0.65	0.17
FCB002DR	UAZ	49	229.0	223.0	6.0	225.9	225.5	1.89	0.27
FGW003 C	LAZ	21	212.0	206.1	5.8	209.4	208.9	1.85	0.40
FGW005 C	LAZ	21	214.4	207.3	7.1	210.6	210.4	1.89	0.41
FGW012 C	LAZ	21	207.4	199.5	7.9	203.1	202.8	2.03	0.44
FGW012 D	UAZ	21	211.4	204.6	6.8	207.7	207.0	2.00	0.44
FGW019C	LAZ	17	205.6	199.8	5.8	202.6	201.9	1.89	0.46
FGW022C	LAZ	17	212.0	204.8	7.2	207.9	207.3	2.05	0.50
FGW023	LAZ	5	181.2	180.7	0.4	181.0	180.9	0.18	0.08
FHB 4D	LAZ	104	203.0	198.3	4.7	200.9	200.9	1.00	0.10
FIB 1	UAZ	83	211.3	201.8	9.5	205.0	204.4	2.11	0.23
FIB 8	UAZ	81	210.6	202.5	8.1	205.3	204.7	2.11	0.23
FIP001	UAZ	71	202.3	199.2	3.1	200.3	200.2	0.69	0.08
FIP002	UAZ	74	202.1	199.4	2.6	200.5	200.6	0.62	0.07

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
FIP003	UAZ	73	203.1	199.7	3.4	201.0	200.9	0.80	0.09
FNB 2	LAZ	22	206.7	199.3	7.4	203.3	203.1	1.92	0.41
FNB 3	LAZ	21	208.0	201.4	6.6	204.3	203.9	1.90	0.41
FNB 5	LAZ	22	205.7	200.3	5.4	203.1	203.1	1.66	0.35
FNB 12	LAZ	20	193.4	189.5	3.9	191.7	191.8	1.17	0.26
FNB 13	LAZ	23	191.9	187.8	4.1	189.8	190.0	1.16	0.24
FNB 15	LAZ	23	194.6	190.7	3.9	193.0	193.0	1.18	0.25
FOB 1D	UAZ	14	206.5	199.9	6.6	203.2	203.3	2.05	0.55
FOB 2C	LAZ	85	204.0	197.7	6.3	200.6	200.7	1.52	0.16
FOB 2D	UAZ	83	210.0	201.1	8.9	204.2	204.1	1.81	0.20
FOB 3D	UAZ	83	210.6	200.4	10.2	204.2	204.2	2.08	0.23
FOB 4D	UAZ	83	210.6	201.8	8.8	205.4	205.3	2.03	0.22
FOB 5C	LAZ	7	203.4	202.2	1.3	202.8	202.8	0.45	0.17
FOB 7A	GA	7	155.3	152.6	2.7	153.3	152.9	0.94	0.35
FOB 7C	LAZ	6	208.1	207.3	0.8	207.7	207.8	0.32	0.13
FOB 8D	UAZ	5	210.5	209.6	0.9	210.1	210.1	0.38	0.17
FOB 9C	LAZ	7	209.6	208.8	0.8	209.3	209.5	0.36	0.14
FOB 9D	UAZ	5	212.9	211.9	0.9	212.4	212.3	0.41	0.18
FOB 10D	UAZ	5	213.5	212.7	0.8	213.1	212.9	0.38	0.17
FOB 11C	LAZ	6	212.7	211.7	1.0	212.3	212.4	0.39	0.16
FOB 13D	UAZ	210	202.7	194.8	7.9	199.4	200.4	2.28	0.16
FOB 14C	LAZ	85	197.7	193.2	4.5	195.4	195.4	1.03	0.11
FOB 14D	UAZ	224	207.5	198.6	8.9	202.4	202.3	1.89	0.13
FOB 15D	UAZ	83	208.2	199.3	8.9	202.9	202.5	2.03	0.22
FOB 16D	UAZ	99	211.4	202.9	8.5	206.4	206.1	2.02	0.20
FPZ 1A	UAZ	250	197.2	194.9	2.3	196.0	195.9	0.47	0.03
FPZ 2A	UAZ	314	203.0	197.0	6.0	199.0	198.8	1.13	0.06
FPZ 3A	UAZ	169	192.0	184.4	7.6	187.9	187.8	1.75	0.13
FPZ 4A	UAZ	303	200.8	197.8	3.0	198.8	198.6	0.68	0.04
FPZ 5A	UAZ	146	191.2	190.0	1.2	190.7	190.7	0.21	0.02
FPZ 5B	UAZ	125	191.0	190.1	0.9	190.7	190.8	0.17	0.01
FPZ 6A	UAZ	271	190.4	186.6	3.8	188.6	188.6	0.60	0.04
FPZ 6B	UAZ	268	189.6	186.2	3.4	188.5	188.6	0.59	0.04
FPZ 7A	UAZ	236	193.9	189.4	4.6	191.8	191.8	0.77	0.05
FPZ 7B	UAZ	233	193.3	190.8	2.5	192.6	192.7	0.45	0.03
FPZ008BR	UAZ	126	189.6	186.9	2.7	187.9	187.9	0.40	0.04
FRB 1	UAZ	24	226.1	219.7	6.4	223.0	223.3	1.87	0.38
FRB 2	UAZ	25	224.5	218.1	6.4	221.3	221.4	1.93	0.39
FRB 3	UAZ	22	223.7	219.1	4.6	221.4	221.9	1.56	0.33
FRB 4	UAZ	18	224.3	220.5	3.8	222.3	222.5	1.09	0.26
FSB 76	UAZ	65	217.6	209.3	8.3	213.8	214.6	2.24	0.28
FSB 76A	GA	19	155.0	150.9	4.1	154.2	154.4	0.87	0.20
FSB 76B	GA	19	151.3	150.0	1.3	150.8	150.9	0.31	0.07
FSB 76C	LAZ	68	213.0	205.7	7.3	209.7	210.3	1.95	0.24
FSB 77	UAZ	19	211.3	209.6	1.7	210.5	210.5	0.48	0.11
FSB 78	UAZ	65	211.8	203.0	8.8	207.1	207.0	2.29	0.28
FSB 78A	GA	65	155.9	153.1	2.8	154.8	155.0	0.64	0.08
FSB 78B	GA	64	154.3	151.6	2.7	153.1	153.3	0.63	0.08
FSB 78C	LAZ	68	209.6	201.3	8.3	205.6	206.1	1.98	0.24

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
FSB 79	UAZ	201	203.6	195.6	8.0	198.8	198.8	1.65	0.12
FSB 79A	GA	19	157.6	156.3	1.3	157.1	157.1	0.28	0.06
FSB 79B	GA	65	157.8	154.5	3.3	156.7	156.9	0.74	0.09
FSB 79C	LAZ	66	199.4	193.4	6.0	195.8	195.8	1.04	0.13
FSB 87A	GA	19	153.5	152.0	1.5	153.0	153.1	0.39	0.09
FSB 87BR	GA	65	150.4	147.6	2.8	149.3	149.3	0.68	0.08
FSB 87C	LAZ	65	210.0	202.6	7.4	206.4	207.1	2.01	0.25
FSB 87D	UAZ	64	213.4	204.4	9.0	209.2	209.8	2.29	0.29
FSB 88C	LAZ	64	213.5	205.6	7.9	209.4	210.1	1.97	0.25
FSB 88D	UAZ	65	216.7	208.5	8.2	212.9	213.4	2.09	0.26
FSB 89C	LAZ	65	211.9	205.1	6.8	208.9	209.7	1.86	0.23
FSB 89D	UAZ	65	216.5	207.7	8.8	212.4	213.0	2.19	0.27
FSB 90C	LAZ	65	210.6	204.0	6.6	207.7	208.4	1.84	0.23
FSB 90D	UAZ	63	215.6	206.8	8.9	211.7	212.1	2.12	0.27
FSB 91C	LAZ	66	210.6	203.1	7.6	207.7	208.4	1.95	0.24
FSB 91D	UAZ	65	215.0	206.1	8.9	210.8	211.2	2.25	0.28
FSB 92C	LAZ	65	210.2	203.4	6.8	206.8	207.4	1.88	0.23
FSB 92D	UAZ	65	214.1	205.7	8.4	209.5	209.8	2.22	0.28
FSB 93C	LAZ	65	210.0	203.0	7.0	206.6	207.3	1.83	0.23
FSB 93D	UAZ	64	213.4	204.5	8.9	208.6	208.7	2.29	0.29
FSB 94C	LAZ	68	210.3	202.2	8.1	205.9	206.2	2.06	0.25
FSB 94DR	UAZ	72	212.7	204.3	8.4	207.9	207.9	2.20	0.26
FSB 95CR	LAZ	65	209.0	200.6	8.4	205.4	205.7	1.97	0.24
FSB 95DR	UAZ	72	212.3	203.4	8.9	207.6	207.8	2.23	0.26
FSB 96AR	GA	65	153.5	150.3	3.3	151.8	151.9	0.72	0.09
FSB 97A	GA	65	152.5	148.5	4.0	150.7	150.9	0.77	0.10
FSB 97C	LAZ	64	209.3	201.8	7.5	205.6	206.1	2.07	0.26
FSB 97D	UAZ	64	212.5	203.7	8.8	208.3	208.6	2.27	0.28
FSB 98AR	GA	66	153.4	148.1	5.3	150.2	150.3	0.82	0.10
FSB 98C	LAZ	65	210.2	201.7	8.5	206.1	206.7	2.30	0.29
FSB 98D	UAZ	64	213.2	204.2	9.0	209.0	209.5	2.32	0.29
FSB 99A	GA	65	150.4	147.6	2.8	149.3	149.5	0.67	0.08
FSB 99C	LAZ	65	210.8	203.0	7.8	206.9	207.5	2.09	0.26
FSB 99D	UAZ	65	214.0	205.8	8.2	209.8	210.4	2.23	0.28
FSB100A	GA	65	152.0	148.8	3.2	150.3	150.4	0.72	0.09
FSB101A	GA	65	152.2	148.4	3.8	150.5	150.6	0.74	0.09
FSB102C	LAZ	65	195.5	191.8	3.7	194.1	194.2	0.72	0.09
FSB103C	LAZ	19	202.3	200.4	1.9	201.4	201.4	0.51	0.12
FSB104C	LAZ	65	203.1	196.7	6.4	199.8	200.0	1.75	0.22
FSB104D	UAZ	269	209.2	199.3	10.0	203.3	203.0	2.18	0.13
FSB105C	LAZ	19	206.4	204.9	1.5	205.8	205.8	0.38	0.09
FSB105DR	UAZ	19	210.1	208.5	1.6	209.1	209.1	0.43	0.10
FSB106C	LAZ	19	200.9	199.7	1.2	200.3	200.5	0.40	0.09
FSB106D	UAZ	19	205.8	204.3	1.5	205.1	205.1	0.48	0.11
FSB107C	LAZ	65	211.2	204.3	6.9	208.0	208.7	1.92	0.24
FSB107D	UAZ	20	212.6	210.8	1.8	211.7	211.7	0.52	0.12
FSB108D	UAZ	62	217.2	209.0	8.2	213.5	214.3	2.31	0.29
FSB109D	UAZ	64	214.3	206.4	7.9	210.4	210.9	2.21	0.28
FSB110C	LAZ	19	201.2	199.7	1.5	200.6	200.6	0.44	0.10

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
FSB110D	UAZ	56	206.2	202.8	3.4	204.5	204.6	0.82	0.11
FSB111C	LAZ	19	212.6	209.2	3.4	210.3	210.3	0.67	0.15
FSB111D	UAZ	18	214.3	212.2	2.0	213.3	213.3	0.55	0.13
FSB112A	GA	65	153.1	149.6	3.4	151.7	151.9	0.72	0.09
FSB112C	LAZ	66	203.9	196.1	7.9	200.0	199.9	2.05	0.25
FSB112DR	UAZ	143	210.3	200.2	10.1	204.2	203.8	2.29	0.19
FSB113A	GA	69	158.5	155.1	3.4	156.8	156.8	0.83	0.10
FSB113C	LAZ	92	203.4	197.1	6.3	200.0	200.6	1.62	0.17
FSB113D	UAZ	56	206.8	203.2	3.6	205.3	205.4	0.77	0.10
FSB114A	GA	65	155.2	151.8	3.4	154.1	154.3	0.70	0.09
FSB114C	LAZ	63	213.4	205.7	7.8	210.3	210.8	1.96	0.25
FSB114D	UAZ	62	217.0	208.5	8.5	213.3	214.1	2.14	0.27
FSB115C	LAZ	24	184.9	183.4	1.5	184.2	184.3	0.39	0.08
FSB116C	LAZ	24	190.3	188.0	2.3	189.5	189.6	0.60	0.12
FSB116D	UAZ	25	192.9	189.4	3.5	190.9	190.9	0.87	0.17
FSB117D	UAZ	194	210.6	201.9	8.7	205.0	203.9	2.46	0.18
FSB118D	UAZ	65	213.2	205.4	7.8	209.1	209.4	2.01	0.25
FSB119D	UAZ	19	207.6	205.9	1.7	206.7	206.6	0.52	0.12
FSB120AR	GA	65	148.3	145.5	2.8	147.2	147.3	0.64	0.08
FSB120C	LAZ	65	207.2	198.7	8.4	202.9	203.5	2.17	0.27
FSB120D	UAZ	64	210.2	201.6	8.6	206.1	206.6	2.27	0.28
FSB121C	LAZ	31	204.7	197.6	7.1	201.4	201.6	1.67	0.30
FSB121DR	UAZ	19	205.9	204.1	1.8	204.7	204.6	0.54	0.12
FSB122C	LAZ	64	201.6	193.8	7.8	197.7	198.0	2.12	0.27
FSB122D	UAZ	143	206.7	196.7	10.0	200.7	200.7	2.39	0.20
FSB123C	LAZ	31	210.5	204.0	6.5	207.9	208.4	1.44	0.26
FSB123D	UAZ	63	212.8	205.2	7.7	209.4	210.0	1.87	0.24
FSB124D	UAZ	140	210.6	201.3	9.3	205.8	205.8	2.27	0.19
FSB125D	UAZ	5	209.2	205.4	3.8	206.5	206.2	1.54	0.69
FSB125DR	UAZ	56	211.1	202.4	8.7	206.0	205.4	2.49	0.33
FSB126D	UAZ	141	210.0	201.1	8.9	204.9	204.6	2.09	0.18
FSB127D	UAZ	191	201.3	194.4	6.9	197.8	197.7	1.87	0.14
FSB128D	UAZ	137	207.7	198.6	9.1	203.1	203.0	2.35	0.20
FSB129D	UAZ	115	201.9	194.4	7.5	197.6	197.3	1.98	0.18
FSB130D	UAZ	318	208.7	199.8	8.9	203.4	203.3	1.98	0.11
FSB131D	UAZ	315	208.1	199.4	8.7	202.9	202.9	1.92	0.11
FSB132D	UAZ	139	209.6	199.7	9.8	203.9	203.7	2.09	0.18
FSB133D	UAZ	270	209.9	198.8	11.1	202.7	202.3	2.31	0.14
FSB134D	UAZ	140	209.4	199.3	10.1	203.5	203.4	2.16	0.18
FSB135D	UAZ	150	208.7	197.0	11.7	201.7	201.6	2.44	0.20
FSB136D	UAZ	148	206.8	196.8	10.0	201.3	201.3	2.29	0.19
FSB137D	UAZ	150	198.9	191.3	7.6	195.2	195.5	1.60	0.13
FSB138D	UAZ	139	205.3	196.8	8.5	200.7	200.8	1.95	0.17
FSB139D	UAZ	49	211.7	203.4	8.3	207.1	206.2	2.55	0.36
FSB140D	UAZ	81	204.3	197.2	7.1	199.1	198.8	1.64	0.18
FSB141D	UAZ	82	205.6	197.4	8.1	200.0	199.7	1.73	0.19
FSB142D	UAZ	21	209.4	205.7	3.7	206.9	206.5	0.84	0.18
FSB143D	UAZ	21	208.7	204.6	4.1	205.8	205.4	0.93	0.20
FSB144D	UAZ	22	207.8	203.8	4.0	205.1	204.7	1.04	0.22

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
FSB145D	UAZ	21	208.1	204.2	3.9	205.3	205.0	0.87	0.19
FSB146D	UAZ	22	208.3	204.5	3.8	205.7	205.3	0.84	0.18
FSL 1D	UAZ	65	224.5	219.7	4.8	222.3	222.7	1.34	0.17
FSL 2D	UAZ	71	225.0	220.2	4.8	222.7	223.1	1.34	0.16
FSL 3D	UAZ	67	222.4	215.7	6.7	218.9	219.4	1.84	0.23
FSL 4D	UAZ	66	219.3	209.2	10.1	213.9	214.4	2.98	0.37
FSL 5D	UAZ	68	220.3	212.0	8.3	216.5	217.2	2.25	0.27
FSL 6D	UAZ	68	219.6	210.5	9.1	215.7	216.5	2.35	0.29
FSL 7D	UAZ	68	217.8	209.4	8.4	214.0	214.7	2.32	0.28
FSL 8D	UAZ	65	217.1	208.9	8.2	213.4	214.1	2.25	0.28
FSL 9D	UAZ	65	217.1	208.4	8.7	213.3	214.0	2.21	0.27
FSL 10C	LAZ	64	212.5	206.1	6.4	209.4	210.2	1.82	0.23
FSL 11C	LAZ	68	212.7	205.4	7.3	209.4	210.0	2.02	0.25
FSP 2A	LAZ	183	181.5	179.2	2.3	180.2	180.2	0.35	0.03
FSP 2B	UAZ	183	181.2	178.6	2.6	180.0	180.1	0.52	0.04
FSP249B	UAZ	174	185.4	181.8	3.6	184.3	184.5	0.73	0.06
FSS 1D	UAZ	74	223.4	216.4	7.0	220.5	221.2	1.98	0.23
FSS 2D	UAZ	83	222.9	216.0	6.9	220.0	220.7	1.96	0.22
FSS 3D	UAZ	79	221.4	214.1	7.3	218.2	218.7	2.07	0.23
FSS 4D	UAZ	61	218.4	208.6	9.8	214.7	215.6	2.74	0.35
FSS003C	LAZ	34	215.3	208.6	6.7	212.7	213.1	2.11	0.36
FTF 22	UAZ	15	222.1	215.0	7.0	218.7	219.3	2.52	0.65
FTF 23	UAZ	15	222.2	215.2	7.0	218.9	219.6	2.56	0.66
FTF 28	LAZ	35	213.5	206.7	6.8	210.1	210.7	2.06	0.35
FTF 29	LAZ	15	214.4	207.2	7.2	210.6	211.9	2.68	0.69
FTF009R	UAZ	13	222.2	214.6	7.6	219.0	219.5	2.54	0.71
FTF030	LAZ	13	215.2	208.5	6.7	212.6	213.3	2.47	0.68
FTF030D	UAZ	13	221.5	214.5	7.0	218.4	218.7	2.54	0.70
FTF031	LAZ	13	215.3	208.6	6.7	212.7	213.4	2.50	0.69
HAA 1A	GA	13	180.0	177.5	2.5	179.0	179.1	0.77	0.21
HAA 1C	LAZ	13	252.3	244.3	8.1	249.3	250.0	2.89	0.80
HAA 1D	UAZ	13	275.7	266.0	9.7	271.7	272.2	3.25	0.90
HAA 2B	LAZ	12	253.0	247.1	5.9	250.6	250.8	1.89	0.55
HAA 2C	LAZ	13	254.5	247.4	7.1	251.8	252.4	2.29	0.64
HAA 2D	UAZ	13	276.9	269.2	7.7	273.9	274.7	2.40	0.67
HAA 4B	LAZ	14	251.1	231.3	19.8	247.8	250.0	5.20	1.39
HAA 4C	LAZ	14	252.1	231.8	20.3	248.5	250.3	5.28	1.41
HAA 4D	UAZ	13	272.2	265.4	6.8	269.7	270.5	2.22	0.61
HAA 5D	UAZ	15	278.0	272.8	5.1	275.5	275.7	1.80	0.46
HAA 7B	LAZ	14	253.5	246.0	7.5	250.6	251.1	2.17	0.58
HAA 7C	LAZ	13	255.6	248.7	6.9	252.7	253.1	2.10	0.58
HAA 7D	UAZ	15	273.4	264.5	8.9	269.9	270.7	2.73	0.71
HAA 8B	LAZ	14	253.4	245.6	7.8	250.2	250.6	2.15	0.57
HAA 8C	LAZ	13	253.9	246.5	7.3	251.2	251.6	2.09	0.58
HAA 8D	UAZ	15	271.0	262.4	8.6	267.8	268.6	2.93	0.76
HAA 9AR	GA	17	173.1	170.3	2.8	172.0	172.1	0.79	0.19
HAA 9B	LAZ	14	252.9	245.4	7.5	249.5	250.0	2.19	0.59
HAA 9C	LAZ	13	254.1	246.3	7.8	250.8	251.4	2.32	0.64
HAA 9D	UAZ	31	266.8	257.9	8.9	262.5	262.9	2.12	0.38

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
HAA 10B	LAZ	14	254.3	247.8	6.5	251.7	252.1	1.99	0.53
HAA 10C	LAZ	13	255.7	248.2	7.5	252.9	253.4	2.37	0.66
HAA 10D	UAZ	15	270.6	262.0	8.6	267.1	268.5	2.88	0.74
HAA 11A	GA	17	173.2	170.3	2.9	171.9	172.0	0.91	0.22
HAA 11B	LAZ	14	252.0	245.8	6.2	249.7	250.2	2.05	0.55
HAA 11C	LAZ	13	251.7	244.8	6.9	249.3	250.0	2.30	0.64
HAA 11D	UAZ	31	269.1	259.6	9.5	265.5	266.4	2.57	0.46
HAA 12A	GA	18	173.4	170.9	2.5	172.4	172.4	0.68	0.16
HAA 12B	LAZ	14	251.1	245.2	5.9	248.7	249.3	2.05	0.55
HAA 12C	LAZ	13	251.2	244.3	6.9	248.9	249.7	2.30	0.64
HAA 12D	UAZ	30	270.7	261.9	8.8	267.5	268.1	2.51	0.46
HAA 13A	GA	16	178.7	170.4	8.3	173.8	173.7	1.65	0.41
HAA 13B	LAZ	14	249.6	243.6	6.0	247.2	248.1	2.15	0.57
HAA 13C	LAZ	13	249.8	243.1	6.7	247.6	248.7	2.27	0.63
HAA 13D	UAZ	35	271.1	262.5	8.6	268.1	268.7	2.42	0.41
HAA 14A	GA	18	174.6	164.5	10.1	173.3	173.9	2.30	0.54
HAA 14B	LAZ	14	248.4	242.7	5.7	246.3	246.8	2.02	0.54
HAA 14C	LAZ	13	248.8	242.1	6.7	246.7	247.6	2.27	0.63
HAA 14D	UAZ	32	271.6	263.1	8.5	268.3	269.2	2.41	0.43
HAA 15A	GA	19	175.9	171.7	4.2	174.5	174.7	0.90	0.21
HAA 15B	LAZ	14	247.4	241.4	6.0	245.0	245.8	2.15	0.57
HAA 15C	LAZ	13	248.3	241.8	6.5	245.8	246.6	2.25	0.62
HAA 15D	UAZ	32	273.1	262.6	10.5	269.1	270.3	2.80	0.49
HAA017C	LAZ	11	246.9	241.1	5.8	245.3	245.7	1.65	0.50
HAA017D	UAZ	12	272.3	265.6	6.7	270.1	270.6	1.75	0.51
HAA018C	LAZ	11	243.6	238.7	4.9	242.0	242.2	1.35	0.41
HAA018D	UAZ	11	270.5	265.0	5.5	268.7	268.8	1.52	0.46
HAA019C	LAZ	11	238.6	233.9	4.7	237.0	237.1	1.32	0.40
HAA019D	UAZ	11	270.4	264.8	5.6	268.5	269.0	1.71	0.52
HAA020C	LAZ	11	255.1	249.8	5.3	253.0	253.0	1.62	0.49
HAA020D	UAZ	11	273.5	268.4	5.2	271.3	271.6	1.61	0.49
HAA021C	LAZ	11	256.6	251.9	4.7	254.7	254.6	1.49	0.45
HAA021D	UAZ	11	273.7	269.0	4.7	272.0	272.3	1.62	0.49
HC 1D	UAZ	12	269.9	262.2	7.7	267.6	268.6	2.37	0.68
HCB 2	UAZ	15	273.4	267.4	6.0	269.9	269.9	1.95	0.50
HGW 1D	UAZ	13	249.7	238.6	11.2	243.9	244.1	2.80	0.78
HGW 2D	UAZ	16	235.6	230.4	5.3	233.3	233.3	1.57	0.39
HGW 3A	GA	16	171.5	168.5	3.0	170.5	170.6	0.88	0.22
HGW 3D	UAZ	16	247.9	240.7	7.2	244.9	245.8	2.14	0.54
HGW 4D	UAZ	14	235.9	230.8	5.2	233.4	233.9	1.29	0.35
HHP 1D	UAZ	16	272.8	270.5	2.3	271.3	271.2	0.75	0.19
HHP 2D	UAZ	16	274.8	273.0	1.8	273.8	273.8	0.59	0.15
HIW 2A	GA	7	168.4	165.7	2.7	166.7	166.1	1.08	0.41
HIW 5MC1	LAZ	68	228.4	221.7	6.6	225.4	225.8	1.79	0.22
HIW 5MC2	LAZ	68	227.5	219.9	7.7	223.5	223.8	1.81	0.22
HMD 1D	LAZ	50	207.4	204.0	3.4	206.1	206.1	0.77	0.11
HMD 2D	LAZ	76	200.9	195.0	5.9	197.7	197.8	1.30	0.15
HMD 3D	LAZ	71	200.1	194.7	5.4	197.3	197.4	1.24	0.15
HMD 4B	LAZ	68	196.4	192.7	3.7	194.8	194.9	0.97	0.12

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
HMD 4D	LAZ	79	199.2	195.3	3.9	197.4	197.6	1.08	0.12
HOB 1D	UAZ	77	232.4	224.9	7.5	229.4	229.9	2.03	0.23
HOB 2D	UAZ	78	231.9	224.9	7.0	228.9	229.1	1.79	0.20
HOB 3D	UAZ	5	230.7	227.8	2.9	229.0	228.4	1.24	0.55
HOB 4D	UAZ	5	232.2	229.7	2.5	230.7	230.1	1.11	0.50
HOB 5D	UAZ	5	234.7	232.3	2.4	233.4	232.8	1.04	0.46
HOB 6D	UAZ	5	209.2	207.9	1.3	208.3	208.1	0.54	0.24
HOB 7D	UAZ	78	219.4	214.9	4.5	217.1	217.1	1.08	0.12
HPZ 1A	UAZ	210	202.2	200.1	2.1	201.5	201.6	0.39	0.03
HPZ 2A	UAZ	118	215.7	212.9	2.8	214.6	214.7	0.57	0.05
HPZ 3A	LAZ	211	202.3	200.2	2.1	201.6	201.6	0.32	0.02
HPZ 3B	UAZ	214	202.2	200.5	1.7	201.2	201.2	0.25	0.02
HPZ 4A	UAZ	179	210.1	208.5	1.6	209.5	209.6	0.29	0.02
HPZ 5A	UAZ	236	212.9	208.6	4.4	211.3	211.6	0.93	0.06
HPZ 5B	UAZ	231	212.7	208.5	4.2	211.1	211.3	1.05	0.07
HPZ 6AR	UAZ	177	205.0	203.6	1.4	204.4	204.4	0.33	0.02
HR3 15DU	UAZ	16	250.0	247.8	2.2	249.1	249.0	0.54	0.13
HR3 16DU	UAZ	16	248.2	246.7	1.5	247.5	247.4	0.43	0.11
HR8 11	UAZ	18	247.6	243.6	3.9	245.0	244.5	1.17	0.28
HSB 65	UAZ	19	232.9	229.4	3.5	231.6	232.1	1.06	0.24
HSB 65A	GA	19	171.0	169.5	1.5	170.4	170.4	0.37	0.08
HSB 65B	LAZ	65	225.5	220.1	5.4	223.1	223.4	1.42	0.18
HSB 65C	UAZ	65	235.1	227.2	7.9	231.4	231.5	1.99	0.25
HSB 66DR	UAZ	178	229.6	222.9	6.7	226.4	226.7	1.69	0.13
HSB 67	UAZ	64	224.8	220.3	4.5	222.6	222.6	1.09	0.14
HSB 68A	GA	19	171.6	170.2	1.4	170.9	171.0	0.39	0.09
HSB 68B	LAZ	19	217.2	214.8	2.3	216.3	216.3	0.61	0.14
HSB 68C	LAZ	65	218.4	214.0	4.4	216.6	216.8	1.18	0.15
HSB 68DR	UAZ	138	221.2	215.1	6.1	218.6	218.7	1.22	0.10
HSB 69	UAZ	138	218.1	213.6	4.5	215.6	215.7	0.95	0.08
HSB 69A	GA	19	171.8	169.0	2.8	171.1	171.2	0.65	0.15
HSB 70	UAZ	137	224.0	215.1	8.9	219.4	219.5	2.02	0.17
HSB 70C	LAZ	71	223.1	216.1	7.0	220.0	220.3	1.90	0.23
HSB 71	UAZ	63	226.3	215.1	11.3	220.3	220.6	2.79	0.35
HSB 71C	LAZ	65	223.2	215.3	7.9	219.6	219.9	2.15	0.27
HSB 83A	GA	65	172.8	167.4	5.4	171.7	171.9	0.92	0.11
HSB 83B	LAZ	19	223.1	220.6	2.5	222.3	222.4	0.68	0.16
HSB 83C	LAZ	65	225.7	220.2	5.5	223.4	223.8	1.37	0.17
HSB 83D	UAZ	65	225.9	221.2	4.7	223.4	223.5	1.21	0.15
HSB 84A	GA	67	171.7	168.4	3.3	170.4	170.5	0.77	0.09
HSB 84B	LAZ	20	212.3	208.7	3.6	210.2	210.3	0.74	0.17
HSB 84C	LAZ	70	213.8	210.2	3.6	212.1	212.3	0.92	0.11
HSB 84D	UAZ	67	217.5	213.5	4.0	215.4	215.4	1.00	0.12
HSB 85A	GA	113	169.4	165.8	3.6	167.4	167.5	0.69	0.06
HSB 85B	LAZ	118	233.2	226.6	6.6	230.3	230.9	1.86	0.17
HSB 85C	UAZ	108	240.1	232.0	8.1	236.5	237.1	2.21	0.21
HSB 86A	GA	19	168.3	167.0	1.3	167.8	168.0	0.36	0.08
HSB 86B	LAZ	64	221.6	215.6	6.0	218.9	219.3	1.64	0.20
HSB 86C	UAZ	138	223.0	216.4	6.6	219.7	219.8	1.61	0.14

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
HSB 86D	UAZ	52	222.7	216.7	6.0	220.1	220.3	1.32	0.18
HSB100C	LAZ	66	228.0	222.0	6.0	225.4	225.9	1.55	0.19
HSB100D	UAZ	66	236.0	227.9	8.1	232.2	232.5	2.01	0.25
HSB101C	LAZ	65	226.6	221.1	5.5	224.1	224.5	1.46	0.18
HSB101D	UAZ	67	232.5	225.6	6.9	229.4	229.6	1.77	0.22
HSB102C	LAZ	65	225.2	220.3	4.9	223.2	223.4	1.33	0.17
HSB102D	UAZ	67	229.9	222.9	7.0	227.1	227.3	1.72	0.21
HSB103C	LAZ	65	224.4	219.5	4.9	222.2	222.4	1.32	0.16
HSB103D	UAZ	64	226.4	221.3	5.1	224.0	224.1	1.36	0.17
HSB104C	LAZ	65	221.6	216.3	5.3	219.5	219.6	1.30	0.16
HSB104D	UAZ	68	226.8	219.9	6.9	223.7	223.8	1.54	0.19
HSB105C	LAZ	65	220.4	216.0	4.4	218.4	218.6	1.22	0.15
HSB105D	UAZ	65	226.7	220.2	6.6	224.2	224.5	1.55	0.19
HSB106C	LAZ	65	222.5	217.7	4.8	220.4	220.7	1.30	0.16
HSB106D	UAZ	64	227.1	221.3	5.8	224.7	224.8	1.58	0.20
HSB107C	LAZ	138	220.1	215.5	4.6	218.0	218.1	1.14	0.10
HSB107D	UAZ	137	225.6	219.5	6.1	223.2	223.4	1.37	0.12
HSB108C	LAZ	136	219.4	214.8	4.6	217.2	217.4	1.12	0.10
HSB108D	UAZ	138	224.1	218.2	5.9	221.8	221.9	1.32	0.11
HSB109C	LAZ	136	219.4	214.8	4.6	217.3	217.5	1.14	0.10
HSB109D	UAZ	137	222.1	216.2	5.9	219.2	219.3	1.30	0.11
HSB110C	LAZ	135	219.3	214.7	4.6	217.3	217.5	1.17	0.10
HSB110D	UAZ	136	221.3	214.9	6.5	217.2	217.1	1.30	0.11
HSB111C	LAZ	136	220.2	215.3	4.9	218.1	218.4	1.25	0.11
HSB111D	UAZ	136	220.8	214.4	6.4	216.8	216.7	1.38	0.12
HSB111E	UAZ	129	220.9	214.0	6.9	216.6	216.5	1.41	0.12
HSB112C	LAZ	137	221.7	216.6	5.1	219.4	219.6	1.33	0.11
HSB112D	UAZ	132	224.3	218.9	5.5	222.0	221.9	1.44	0.12
HSB112E	UAZ	137	224.6	219.0	5.6	222.2	222.2	1.48	0.13
HSB113C	LAZ	137	222.1	215.7	6.4	219.0	219.1	1.49	0.13
HSB113DR	UAZ	134	222.9	216.0	7.0	218.8	218.7	1.54	0.13
HSB114CR	LAZ	136	223.6	217.1	6.4	220.4	220.6	1.56	0.13
HSB114D	UAZ	136	223.0	215.8	7.2	219.5	219.5	1.60	0.14
HSB115CR	LAZ	137	224.3	217.4	6.9	220.9	221.2	1.64	0.14
HSB115D	UAZ	137	223.4	216.4	7.0	220.5	220.6	1.68	0.14
HSB116CR	LAZ	137	225.4	218.3	7.1	222.1	222.4	1.77	0.15
HSB116D	UAZ	129	224.7	217.0	7.7	221.4	221.7	1.97	0.17
HSB117A	GA	19	166.0	164.9	1.1	165.5	165.5	0.32	0.07
HSB117C	LAZ	67	221.9	214.4	7.5	218.3	218.7	2.05	0.25
HSB117D	UAZ	19	224.8	217.4	7.5	221.6	221.6	1.91	0.44
HSB118A	GA	65	167.5	164.3	3.2	166.2	166.4	0.74	0.09
HSB119A	GA	65	166.7	163.7	3.0	165.6	165.7	0.70	0.09
HSB119C	LAZ	183	225.5	218.4	7.1	222.5	222.9	1.78	0.13
HSB119D	UAZ	135	227.1	219.6	7.4	223.9	224.2	1.97	0.17
HSB120A	GA	65	166.4	163.2	3.3	164.9	165.1	0.71	0.09
HSB120C	LAZ	182	228.1	221.4	6.7	225.2	225.6	1.83	0.14
HSB120D	UAZ	135	229.8	222.3	7.5	226.7	227.3	1.95	0.17
HSB121A	GA	64	171.3	168.0	3.3	170.1	170.3	0.77	0.10
HSB121C	LAZ	132	224.0	218.5	5.5	221.9	222.1	1.36	0.12

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
HSB121D	UAZ	134	228.8	222.3	6.5	226.2	226.4	1.56	0.13
HSB122A	GA	65	171.2	168.0	3.1	170.0	170.1	0.72	0.09
HSB122D	UAZ	63	229.7	223.5	6.2	227.0	227.2	1.60	0.20
HSB123A	GA	65	171.9	168.2	3.7	170.2	170.3	0.86	0.11
HSB124AR	GA	65	171.7	168.4	3.3	170.3	170.4	0.73	0.09
HSB125C	LAZ	19	223.6	221.0	2.7	222.7	222.6	0.73	0.17
HSB125D	UAZ	19	221.2	219.3	2.0	220.1	220.1	0.50	0.12
HSB126C	LAZ	65	205.2	203.7	1.5	204.6	204.6	0.39	0.05
HSB126D	UAZ	65	207.0	204.5	2.5	205.5	205.4	0.55	0.07
HSB127C	LAZ	66	210.9	208.3	2.6	209.7	209.7	0.70	0.09
HSB127D	UAZ	139	218.1	213.9	4.2	215.7	215.7	0.79	0.07
HSB129C	LAZ	67	206.5	202.7	3.8	204.8	204.9	0.94	0.11
HSB129D	UAZ	65	209.7	203.5	6.2	207.2	207.5	1.56	0.19
HSB130C	LAZ	24	200.7	199.1	1.6	199.9	200.0	0.42	0.08
HSB130D	UAZ	24	200.8	199.0	1.8	199.8	199.9	0.46	0.09
HSB131C	LAZ	31	204.9	203.6	1.3	204.3	204.3	0.34	0.06
HSB131D	UAZ	31	206.5	204.4	2.2	205.4	205.4	0.56	0.10
HSB132C	UAZ	24	221.3	218.7	2.6	220.1	220.1	0.63	0.13
HSB132D	UAZ	24	220.4	218.2	2.2	219.5	219.5	0.53	0.11
HSB133C	LAZ	18	230.9	227.0	3.9	229.8	229.9	1.11	0.26
HSB133D	UAZ	19	236.8	232.2	4.6	234.8	234.7	1.19	0.27
HSB134C	LAZ	65	221.8	217.2	4.6	219.7	219.8	1.17	0.15
HSB134D	UAZ	65	224.3	217.9	6.4	220.8	220.7	1.39	0.17
HSB135C	LAZ	66	208.2	205.1	3.1	206.3	206.4	0.63	0.08
HSB135D	UAZ	66	217.3	213.5	3.8	215.4	215.4	0.91	0.11
HSB136C	LAZ	66	217.0	212.4	4.6	214.7	215.0	1.30	0.16
HSB136D	UAZ	137	220.1	214.0	6.1	216.7	216.7	1.27	0.11
HSB137CR	LAZ	65	220.5	214.3	6.1	217.5	217.8	1.69	0.21
HSB137D	UAZ	135	221.5	214.6	6.9	218.0	218.0	1.59	0.14
HSB138D	UAZ	19	225.3	219.2	6.1	222.5	222.6	1.45	0.33
HSB139A	GA	66	173.5	169.5	3.9	172.1	172.2	0.82	0.10
HSB139C	LAZ	65	215.3	211.5	3.8	213.4	213.6	1.00	0.12
HSB139D	UAZ	65	224.7	217.7	7.0	220.7	220.6	1.69	0.21
HSB140A	GA	19	175.1	173.6	1.5	174.4	174.6	0.46	0.10
HSB140C	LAZ	24	206.9	204.3	2.6	205.8	205.9	0.67	0.14
HSB140D	UAZ	24	215.2	208.5	6.7	212.4	212.6	1.71	0.35
HSB141A	GA	19	175.0	172.9	2.1	174.0	174.1	0.52	0.12
HSB141CR	LAZ	24	230.0	223.0	7.1	226.8	226.8	1.73	0.35
HSB141D	UAZ	23	242.5	227.5	15.0	233.8	232.7	3.98	0.83
HSB142C	LAZ	92	198.6	195.5	3.1	197.3	197.5	0.81	0.08
HSB142D	UAZ	89	201.0	194.2	6.8	197.5	197.9	2.02	0.21
HSB143C	LAZ	88	209.4	203.7	5.7	207.1	207.4	1.49	0.16
HSB143D	UAZ	69	214.0	207.3	6.7	211.4	211.6	1.59	0.19
HSB144A	GA	64	170.4	166.9	3.5	169.1	169.3	0.80	0.10
HSB145C	LAZ	65	214.4	211.0	3.4	212.9	213.0	0.95	0.12
HSB145D	UAZ	65	222.8	216.1	6.8	219.2	219.1	1.65	0.20
HSB146A	GA	19	175.6	173.9	1.7	174.7	174.8	0.43	0.10
HSB146C	LAZ	24	210.9	208.4	2.5	209.8	209.8	0.64	0.13
HSB146D	UAZ	23	222.5	214.5	8.0	218.7	218.8	2.21	0.46

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
HSB147D	UAZ	49	231.1	223.3	7.8	227.8	227.9	1.75	0.25
HSB148C	LAZ	26	202.1	200.2	1.9	201.4	201.6	0.55	0.11
HSB148D	UAZ	26	214.7	208.5	6.2	212.1	212.1	1.46	0.29
HSB149D	UAZ	18	223.9	218.9	5.0	221.6	221.6	1.31	0.31
HSB150D	UAZ	62	231.3	220.5	10.8	224.7	223.8	2.47	0.31
HSB151C	LAZ	92	209.5	204.2	5.3	207.1	207.3	1.36	0.14
HSB151DR	UAZ	92	209.3	203.8	5.5	206.9	207.1	1.43	0.15
HSB152C	LAZ	64	199.4	197.2	2.2	198.4	198.4	0.55	0.07
HSB153C	LAZ	134	223.9	218.0	6.0	221.7	221.9	1.39	0.12
HSB153D	UAZ	136	228.9	222.2	6.7	226.3	226.5	1.74	0.15
HSB154C	LAZ	136	225.5	218.9	6.6	223.0	223.3	1.59	0.14
HSB154D	UAZ	174	229.7	222.5	7.1	226.6	226.7	1.79	0.14
HSB155C	LAZ	76	214.7	207.9	6.8	211.4	211.4	1.61	0.18
HSL 1D	UAZ	62	238.0	229.2	8.8	233.8	234.2	2.16	0.27
HSL 2D	UAZ	58	243.1	234.2	8.9	239.4	239.7	2.34	0.31
HSL 3D	UAZ	64	252.7	242.0	10.7	248.5	248.6	2.57	0.32
HSL 4D	UAZ	8	265.4	260.7	4.7	262.7	262.5	1.79	0.63
HSL 5D	UAZ	8	268.8	263.3	5.5	266.9	267.1	1.76	0.62
HSL 6D	UAZ	60	265.5	251.6	14.0	258.6	258.5	2.84	0.37
HSL 7D	UAZ	60	264.5	253.4	11.1	258.7	258.9	2.47	0.32
HSL 8D	UAZ	64	264.0	254.7	9.3	259.8	260.1	2.32	0.29
HSL 9C	LAZ	65	244.8	236.5	8.3	241.1	241.7	2.12	0.26
HSL 10C	LAZ	66	242.8	234.1	8.7	239.1	239.8	2.26	0.28
HSL 11C	LAZ	65	234.8	227.5	7.3	231.7	232.2	1.92	0.24
HSL004DR	UAZ	59	261.9	248.8	13.1	256.0	256.2	3.06	0.40
HSL005DR	UAZ	46	264.1	251.1	13.0	258.0	257.7	3.07	0.45
HSP 60A	LAZ	178	202.1	199.3	2.9	201.1	201.3	0.63	0.05
HSP 60B	UAZ	174	200.7	198.6	2.1	199.8	199.8	0.42	0.03
HSP 76A	LAZ	174	197.0	195.2	1.8	196.2	196.2	0.39	0.03
HTF 1	UAZ	12	274.0	268.7	5.3	272.3	273.2	1.98	0.57
HTF 2	UAZ	12	275.3	269.8	5.5	273.5	274.4	1.94	0.56
HTF 4	UAZ	11	275.2	270.1	5.1	273.7	273.9	1.67	0.50
HTF 12D	UAZ	16	277.2	267.4	9.8	273.3	273.5	2.59	0.65
HTF 15D	UAZ	16	274.7	265.8	8.9	271.1	270.7	2.46	0.62
NEP 1D	LAZ	76	195.9	189.7	6.1	192.4	192.4	1.27	0.15
NEP 2D	LAZ	74	199.3	193.2	6.1	196.1	196.1	1.31	0.15
NEP 3D	LAZ	80	199.8	192.6	7.2	195.2	195.3	1.28	0.14
NEP 4D	LAZ	77	194.0	189.7	4.3	192.0	192.1	1.08	0.12
NWP 1B	LAZ	67	214.2	209.0	5.1	211.9	212.2	1.57	0.19
NWP 1D	LAZ	67	214.2	209.1	5.1	211.8	212.1	1.54	0.19
NWP 2D	LAZ	67	203.6	199.5	4.1	201.9	202.1	1.13	0.14
NWP 3C	LAZ	69	219.8	213.6	6.2	216.8	217.2	1.79	0.22
NWP 3D	UAZ	58	229.3	223.4	6.0	226.5	226.8	1.72	0.23
NWP101D	UAZ	82	230.6	224.2	6.4	227.4	227.9	1.84	0.20
NWP202C	LAZ	85	217.5	211.5	6.0	214.8	215.3	1.78	0.19
NWP302A	GA	78	158.1	151.4	6.7	154.3	154.3	0.79	0.09
NWP303A	GA	68	153.4	150.9	2.6	152.1	152.2	0.57	0.07
SEP001MD	UAZ	68	231.9	224.5	7.4	228.6	229.3	2.09	0.25
SEP002B	LAZ	68	210.1	204.5	5.7	207.0	207.1	1.42	0.17

Well Name	Hydro Unit	# of Points	Max (ft)	Min (ft)	Range (ft)	Mean (ft)	Median (ft)	StdDev (ft)	StdErr (ft)
SEP002D	LAZ	68	211.1	204.9	6.3	207.7	207.9	1.49	0.18
SEP003CL	LAZ	63	222.6	215.3	7.3	219.4	220.0	1.90	0.24
SEP003CU	LAZ	63	223.2	215.8	7.4	219.9	220.4	1.93	0.24
SWP 1C	LAZ	81	222.5	216.4	6.1	219.9	220.5	1.79	0.20
SWP 2C	LAZ	80	225.0	218.3	6.7	222.4	222.9	1.82	0.20
SWP 3D	UAZ	82	223.9	216.9	7.1	221.0	221.5	1.90	0.21
SWP004MD	UAZ	80	219.4	212.6	6.8	216.5	216.9	1.90	0.21
SWP005C	LAZ	36	215.6	209.1	6.5	213.4	213.8	1.85	0.31
SWP005D	UAZ	36	219.4	212.1	7.3	216.7	217.2	2.07	0.35
SWP006C	LAZ	36	217.5	210.5	7.0	215.2	215.8	1.99	0.33
SWP006D	UAZ	36	217.5	210.5	7.0	215.1	215.6	1.94	0.32
UTR-016	LAZ	20	166.7	164.4	2.3	166.0	166.1	0.47	0.10
UTR018R	LAZ	16	150.0	145.8	4.2	148.0	148.0	0.89	0.22
ZBG 1	UAZ	23	235.9	230.0	5.9	233.1	234.0	2.04	0.42
ZBG 3	LAZ	24	225.7	215.6	10.1	220.3	219.9	3.01	0.61
ZBG 4	LAZ	25	225.6	215.1	10.5	220.3	220.1	2.95	0.59
ZBG 5	LAZ	24	229.0	210.2	18.8	219.7	220.0	4.11	0.84
ZBG 6	UAZ	21	236.4	231.4	5.0	233.7	233.3	1.66	0.36
ZBG 7	UAZ	21	236.9	231.8	5.1	234.0	233.7	1.77	0.39
ZBG 8	UAZ	22	237.1	231.4	5.7	234.2	233.8	1.72	0.37
ZBG002C	LAZ	8	225.2	220.3	4.8	222.1	221.6	1.81	0.64
ZBG002D	UAZ	6	226.5	223.6	2.9	225.4	225.3	1.01	0.41
ZBG009D	LAZ	13	224.3	216.4	7.9	220.7	220.8	2.43	0.67
ZBG010D	LAZ	12	222.6	216.2	6.4	220.6	220.8	2.19	0.63
ZBG011D	LAZ	12	224.3	209.7	14.6	220.3	221.0	3.89	1.12
ZBG012D	LAZ	12	222.4	212.1	10.2	216.2	215.6	2.88	0.83
ZBG013D	LAZ	12	224.5	211.6	12.9	215.9	214.8	3.55	1.03
ZBG014D	LAZ	12	224.0	212.9	11.1	217.7	216.8	2.93	0.85
ZBG015D	UAZ	17	238.1	232.2	5.9	235.5	236.2	1.94	0.47
ZBG016C	LAZ	8	216.1	210.8	5.3	213.2	213.1	1.77	0.63

Appendix D Base Period Geographic Weighting Factors

Table D-1. Base Period Geographic Weighting Factors Sorted by HSU

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
BGO 3A	GA	161.6	438663.9	3683310.4	6.141	1.873
BGO 6A	GA	158.1	438377.2	3683450.5	0.922	0.738
BGO 8AR	GA	158.0	438184.9	3683352.6	0.874	0.380
BGO 9AA	GA	156.3	438056.8	3683401.4	0.528	0.445
BGO 10AA	GA	156.5	437958.9	3683338.4	0.484	0.341
BGO 10AR	GA	157.0	438011.4	3683304.3	0.570	0.327
BGO 12AX	GA	156.1	437807.7	3683166.9	0.602	0.291
BGO 14AR	GA	157.1	437778.7	3682963.8	0.423	0.319
BGO 16AR	GA	159.5	437993.4	3682890.6	1.269	0.717
BGO 18A	GA	159.9	438138.0	3682941.9	1.220	0.824
BGO 20A	GA	161.3	438350.3	3682857.7	1.363	0.554
BGO 25A	GA	159.2	437783.7	3682894.5	0.242	0.232
BGO 26A	GA	156.5	437625.1	3682773.8	0.858	0.525
BGO 29A	GA	158.1	437505.6	3682466.5	2.695	0.838
BGO 39A	GA	165.8	438777.9	3682643.9	1.435	1.098
BGO 41A	GA	161.3	437662.7	3682923.7	0.635	0.407
BGO 43A	GA	155.7	437765.9	3683221.9	0.325	0.229
BGO 43AA	GA	155.1	437768.9	3683225.8	0.606	0.234
BGO 44A	GA	157.3	438214.5	3683433.0	0.157	0.267
BGO 44AA	GA	158.4	438221.4	3683438.7	0.500	0.287
BGO 45A	GA	158.9	437567.2	3682613.1	1.448	0.837
BGO 47A	GA	160.6	437854.3	3682407.1	3.167	1.403
BGO 49A	GA	164.8	438320.5	3682435.1	1.942	0.985
BGO 50A	GA	158.4	437588.7	3682391.8	2.931	0.914
BGO 51A	GA	164.0	438682.4	3682785.3	1.460	1.051
BGO 52A	GA	162.2	438430.7	3682790.4	0.726	0.399
BGO 52AA	GA	161.5	438428.3	3682790.7	0.369	0.393
BGO 53A	GA	157.6	437739.2	3682829.1	0.130	0.190
BGO 53AA	GA	157.0	437742.1	3682829.0	0.480	0.189
BGX 1A	GA	156.9	438382.8	3683584.5	3.392	1.020
BGX 4A	GA	154.6	437856.3	3683595.9	4.293	1.468
FOB 7A	GA	153.3	436460.6	3681895.4	2.615	0.624
FSB 76A	GA	154.2	436734.9	3682121.0	4.373	0.579
FSB 76B	GA	150.8	436737.2	3682119.1	0.568	0.571
FSB 78A	GA	154.8	436681.1	3681564.0	0.507	0.350
FSB 78B	GA	153.1	436681.1	3681567.0	0.462	0.347
FSB 79A	GA	157.1	436871.4	3681290.5	2.208	1.085
FSB 79B	GA	156.7	436873.5	3681292.6	0.997	1.082
FSB 87A	GA	153.0	436515.7	3681761.7	0.053	0.138
FSB 87BR	GA	149.3	436510.2	3681757.6	0.298	0.148
FSB 96AR	GA	151.8	436547.9	3681526.2	0.829	0.507
FSB 97A	GA	150.7	436555.9	3681628.7	0.267	0.296
FSB 98AR	GA	150.2	436556.2	3681700.8	0.262	0.217
FSB 99A	GA	149.3	436551.5	3681815.5	0.324	0.243
FSB100A	GA	150.3	436735.3	3681896.2	0.870	0.562
FSB101A	GA	150.5	436759.6	3681983.4	0.540	0.526

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
FSB112A	GA	151.7	436439.5	3681189.7	4.178	2.544
FSB113A	GA	156.8	437007.5	3681579.1	3.486	1.643
FSB114A	GA	154.1	437045.9	3682032.9	4.452	1.711
FSB120AR	GA	147.2	436293.7	3681583.1	3.423	1.381
HAA 1A	GA	179.0	440708.1	3682656.7	9.629	8.416
HAA 9AR	GA	172.0	439718.6	3682916.0	5.033	1.735
HAA 11A	GA	171.9	439862.6	3682999.9	2.148	0.867
HAA 12A	GA	172.4	439945.7	3683061.0	1.154	0.566
HAA 13A	GA	173.8	440013.3	3683109.8	0.823	0.583
HAA 14A	GA	173.3	440113.3	3683156.9	1.290	0.839
HAA 15A	GA	174.5	440216.1	3683229.9	3.836	1.445
HGW 3A	GA	170.5	440004.6	3683533.7	7.490	3.833
HIW 2A	GA	166.7	438572.6	3682372.5	1.275	0.709
HSB 65A	GA	170.4	439133.1	3682473.9	1.165	0.498
HSB 68A	GA	170.9	438915.8	3681973.0	0.672	0.723
HSB 69A	GA	171.1	438806.6	3681902.0	0.532	0.168
HSB 83A	GA	171.7	439316.2	3682310.4	1.078	1.039
HSB 84A	GA	170.4	438773.8	3681892.0	1.570	0.166
HSB 85A	GA	167.4	439014.9	3682898.8	4.872	1.905
HSB 86A	GA	167.8	438514.4	3682055.2	0.704	0.552
HSB117A	GA	165.5	438275.2	3681961.5	7.058	1.346
HSB118A	GA	166.2	438431.0	3682060.9	0.472	0.549
HSB119A	GA	165.6	438441.7	3682214.2	0.733	0.679
HSB120A	GA	164.9	438467.4	3682350.7	0.405	0.605
HSB121A	GA	170.1	438949.0	3682184.9	0.969	0.751
HSB122A	GA	170.0	439006.5	3682291.2	0.771	0.617
HSB123A	GA	170.2	439100.6	3682357.4	0.443	0.540
HSB124AR	GA	170.3	439198.5	3682433.5	1.000	0.487
HSB139A	GA	172.1	439104.0	3681959.5	1.654	1.218
HSB140A	GA	174.4	439092.7	3681545.3	6.282	2.964
HSB141A	GA	174.0	439532.8	3682304.1	5.175	1.825
HSB144A	GA	169.1	438679.9	3681939.0	1.545	0.621
HSB146A	GA	174.7	439488.5	3681994.9	5.668	2.322
NWP302A	GA	154.3	437493.7	3683183.4	2.087	0.769
NWP303A	GA	152.1	437420.1	3683117.4	4.559	0.840
BGO 3C	LAZ	222.1	438665.8	3683307.5	6.092	2.042
BGO 5C	LAZ	211.0	438496.7	3683533.6	3.734	1.202
BGO 6B	LAZ	214.3	438372.7	3683472.1	0.320	0.212
BGO 6C	LAZ	215.9	438374.8	3683448.7	1.257	0.216
BGO 8C	LAZ	219.0	438188.7	3683347.9	2.193	0.842
BGO 10B	LAZ	215.3	437958.9	3683332.5	1.095	0.683
BGO 10C	LAZ	216.3	438005.9	3683300.0	1.468	0.696
BGO 12DR	LAZ	227.1	437801.0	3683161.9	0.968	0.502
BGO 13DR	LAZ	226.8	437706.6	3683089.5	0.708	0.701
BGO 14CR	LAZ	219.1	437781.3	3682960.4	0.824	0.655
BGO 16B	LAZ	215.1	437980.8	3682890.7	3.476	1.169
BGO 20B	LAZ	224.0	438357.7	3682857.5	2.599	0.474
BGO 20C	LAZ	225.3	438356.8	3682851.6	1.123	0.461
BGO 27C	LAZ	216.9	437626.4	3682594.5	0.917	0.447

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
BGO 29C	LAZ	218.1	437501.3	3682470.1	2.354	0.754
BGO 30C	LAZ	215.8	437674.2	3682446.4	0.396	0.328
BGO 31C	LAZ	221.8	437785.5	3682450.9	0.952	0.475
BGO 33C	LAZ	221.5	438088.0	3682483.3	1.781	0.712
BGO 35C	LAZ	225.1	438395.2	3682508.8	1.382	0.646
BGO 37C	LAZ	227.5	438657.6	3682528.1	1.064	0.436
BGO 39C	LAZ	228.0	438778.2	3682640.4	2.081	0.902
BGO 42C	LAZ	219.1	437703.6	3682929.0	0.346	0.486
BGO 43CR	LAZ	216.2	437766.6	3683212.5	0.190	0.324
BGO 43D	LAZ	227.4	437763.2	3683218.1	0.576	0.346
BGO 44B	LAZ	217.0	438217.9	3683435.8	0.453	0.455
BGO 44C	LAZ	216.5	438224.8	3683441.5	0.424	0.460
BGO 45B	LAZ	214.9	437568.6	3682618.1	1.249	0.327
BGO 45C	LAZ	218.7	437573.0	3682619.2	0.385	0.313
BGO 46B	LAZ	214.4	437687.9	3682392.7	0.311	0.198
BGO 46C	LAZ	216.0	437683.4	3682393.2	0.144	0.195
BGO 47C	LAZ	219.3	437854.9	3682416.3	0.498	0.446
BGO 48C	LAZ	219.9	437929.3	3682413.0	0.643	0.459
BGO 49C	LAZ	224.6	438317.2	3682438.1	0.949	0.657
BGO 50C	LAZ	215.1	437594.9	3682392.2	0.572	0.461
BGO 51B	LAZ	226.8	438684.9	3682785.2	1.484	0.605
BGO 51C	LAZ	227.8	438687.3	3682785.1	1.389	0.606
BGO 52B	LAZ	224.6	438433.1	3682790.2	0.537	0.433
BGO 52C	LAZ	225.9	438435.5	3682789.9	1.192	0.438
BGO 53B	LAZ	217.8	437736.3	3682829.2	1.006	0.386
BGO 53C	LAZ	219.1	437733.3	3682829.2	0.523	0.384
BGX 1C	LAZ	211.4	438387.3	3683583.2	0.930	0.911
BGX 2B	LAZ	208.2	438233.9	3683616.1	0.638	0.572
BGX 2D	LAZ	210.3	438238.1	3683615.0	0.474	0.568
BGX 3D	LAZ	210.6	438049.6	3683622.7	1.666	1.222
BGX 4C	LAZ	209.7	437851.8	3683595.2	1.367	1.193
BGX 5D	LAZ	204.7	437785.5	3683741.4	0.944	0.998
BGX 6D	LAZ	201.9	437778.1	3683863.5	0.933	0.658
BGX 7D	LAZ	201.9	438042.3	3683908.5	2.056	1.666
BGX 8DR	LAZ	201.8	438333.7	3683834.3	2.219	1.033
BGX 12C	LAZ	231.4	439081.2	3683186.8	8.087	2.429
BGX006DR	LAZ	204.1	437733.7	3683838.0	0.528	0.618
BGX013D	LAZ	203.3	438267.4	3683849.1	1.090	1.006
BRR 6C	LAZ	202.4	436494.8	3682297.2	2.091	1.719
BRR 7C	LAZ	204.5	436305.7	3682351.7	5.545	2.234
BSE 1C1	LAZ	227.8	438675.5	3682435.0	0.039	0.108
BSE 1C2	LAZ	227.3	438675.5	3682435.0	0.039	0.108
BSE 1C3	LAZ	226.9	438675.5	3682435.0	0.039	0.108
BSE 1C4	LAZ	227.0	438675.5	3682435.0	0.039	0.108
BSE 1D4	LAZ	233.4	438678.6	3682435.6	0.734	0.110
BSE 2CR1	LAZ	224.8	438725.2	3682276.5	0.180	0.121
BSE 2CR3	LAZ	224.3	438725.2	3682276.5	0.180	0.121
BSE 2D4	LAZ	229.8	438601.8	3682407.5	0.627	0.314
BSE 3C1	LAZ	225.4	438728.3	3682276.1	0.247	0.122

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
BSE 3C2	LAZ	225.2	438728.3	3682276.1	0.247	0.122
BSE 3C3	LAZ	225.4	438728.3	3682276.1	0.247	0.122
BSW 1C1	LAZ	212.1	437629.1	3682223.4	0.157	0.125
BSW 1C2	LAZ	211.7	437629.1	3682223.4	0.157	0.125
BSW 1C3	LAZ	211.9	437629.1	3682223.4	0.157	0.125
BSW 1C4	LAZ	211.5	437629.1	3682223.4	0.157	0.125
BSW 2C1	LAZ	207.1	437731.8	3682210.0	0.235	0.138
BSW 2C2	LAZ	209.3	437731.8	3682210.0	0.235	0.138
BSW 2C3	LAZ	212.6	437731.8	3682210.0	0.235	0.138
BSW 3C1	LAZ	216.4	437856.7	3682237.6	0.239	0.162
BSW 3C2	LAZ	214.9	437856.7	3682237.6	0.239	0.162
BSW 3C4	LAZ	214.4	437856.7	3682237.6	0.239	0.162
BSW 4C2	LAZ	217.6	437959.6	3682257.8	0.479	0.260
BSW 4C3	LAZ	216.9	437959.6	3682257.8	0.479	0.260
BSW 5C1	LAZ	211.3	437625.0	3682078.8	0.410	0.266
BSW 5C4	LAZ	211.3	437625.0	3682078.8	0.410	0.266
BSW 6C1	LAZ	210.0	437650.5	3681890.8	0.244	0.206
BSW 6C2	LAZ	210.1	437650.5	3681890.8	0.244	0.206
BSW 6C3	LAZ	209.8	437650.5	3681890.8	0.244	0.206
BSW 6C4	LAZ	209.8	437650.5	3681890.8	0.244	0.206
BSW 7C1	LAZ	212.4	437754.9	3681994.1	0.450	0.285
BSW 7C3	LAZ	211.5	437754.9	3681994.1	0.450	0.285
BSW 8C1	LAZ	215.2	437904.6	3682030.8	0.695	0.346
BSW 8C3	LAZ	215.0	437904.6	3682030.8	0.695	0.346
CBS 1	LAZ	175.9	439063.3	3684082.3	41.725	5.287
FAB 2MC	LAZ	214.9	437417.6	3683126.9	3.895	1.166
FAB 5C	LAZ	212.8	437485.2	3683359.5	4.562	0.993
FAB 6C	LAZ	212.5	437571.2	3683351.9	0.646	0.676
FAB 7C	LAZ	212.8	437641.3	3683356.0	0.633	0.657
FBG001C	LAZ	216.5	437085.5	3682791.7	6.866	2.021
FBI 14C	LAZ	198.9	436907.8	3681417.2	0.403	0.637
FBI 16C	LAZ	198.9	436840.6	3681387.4	0.290	0.551
FBP 1A	LAZ	201.2	436163.2	3682745.5	1.932	0.340
FBP 2A	LAZ	182.0	435881.8	3682849.1	1.166	0.389
FBP 6D	LAZ	185.8	435891.9	3682841.9	0.224	0.379
FBP 9D	LAZ	194.7	436041.0	3682909.9	2.691	1.480
FBP 10D	LAZ	196.3	435950.6	3682755.4	5.900	1.232
FBP 12D	LAZ	202.8	436177.1	3682770.4	1.130	0.339
FBP 13D	LAZ	186.4	435914.4	3682887.0	1.760	0.476
FBP 43C	LAZ	205.9	436421.6	3682876.1	0.286	0.713
FBP 43DL	LAZ	206.9	436418.9	3682874.7	1.500	0.728
FBP 46D	LAZ	163.2	435593.6	3682937.5	4.809	1.253
FCB 2C	LAZ	219.0	437535.7	3682917.7	1.743	0.547
FCB002CR	LAZ	215.9	437609.6	3682915.7	0.340	0.275
FCB002CRR	LAZ	218.8	437611.2	3682925.5	0.130	0.267
FGW003 C	LAZ	209.4	436639.0	3683382.8	6.211	2.879
FGW005 C	LAZ	210.6	436577.6	3683095.2	3.462	1.813
FGW012 C	LAZ	203.1	436260.0	3681953.5	7.116	2.130
FGW019C	LAZ	202.6	436144.5	3683430.4	12.303	4.319

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
FGW022C	LAZ	207.9	436475.1	3683029.6	2.116	1.427
FGW023	LAZ	181.0	435515.2	3681665.6	20.100	7.291
FHB 4D	LAZ	200.9	437871.9	3681759.8	1.959	0.686
FNB 2	LAZ	203.3	436693.7	3683715.6	4.601	0.558
FNB 3	LAZ	204.3	436610.7	3683697.0	2.904	0.868
FNB 5	LAZ	203.1	436656.8	3683731.7	0.688	0.472
FNB 12	LAZ	191.7	436559.9	3684000.2	2.242	2.022
FNB 13	LAZ	189.8	436618.8	3684086.8	1.700	1.970
FNB 15	LAZ	193.0	436776.8	3684097.0	7.010	3.001
FOB 2C	LAZ	200.6	436666.2	3681258.4	0.439	0.672
FOB 5C	LAZ	202.8	436599.1	3681447.5	1.136	0.816
FOB 7C	LAZ	207.7	436460.5	3681899.6	1.537	1.111
FOB 9C	LAZ	209.3	436652.8	3681926.2	1.104	0.895
FOB 11C	LAZ	212.3	436958.1	3682088.3	1.260	0.879
FOB 14C	LAZ	195.4	436680.1	3681175.1	1.085	0.759
FSB 76C	LAZ	209.7	436739.6	3682117.1	1.929	1.139
FSB 78C	LAZ	205.6	436677.8	3681567.1	0.413	0.254
FSB 79C	LAZ	195.8	436876.1	3681295.2	1.404	0.927
FSB 87C	LAZ	206.4	436511.9	3681755.2	0.646	0.531
FSB 88C	LAZ	209.4	436857.9	3682017.5	0.361	0.480
FSB 89C	LAZ	208.9	436827.2	3681970.2	0.319	0.435
FSB 90C	LAZ	207.7	436809.4	3681893.0	0.286	0.441
FSB 91C	LAZ	207.7	436791.7	3681816.2	0.524	0.510
FSB 92C	LAZ	206.8	436724.5	3681706.9	0.571	0.508
FSB 93C	LAZ	206.6	436726.4	3681649.5	0.534	0.457
FSB 94C	LAZ	205.9	436662.9	3681592.7	0.178	0.237
FSB 95CR	LAZ	205.4	436591.7	3681590.9	0.288	0.377
FSB 97C	LAZ	205.6	436555.6	3681631.6	0.154	0.321
FSB 98C	LAZ	206.1	436555.4	3681707.4	0.345	0.455
FSB 99C	LAZ	206.9	436551.4	3681818.6	0.505	0.646
FSB102C	LAZ	194.1	437054.8	3681393.3	2.595	1.289
FSB103C	LAZ	201.4	436650.8	3681335.5	0.629	0.741
FSB104C	LAZ	199.8	436612.1	3681180.2	0.973	0.795
FSB105C	LAZ	205.8	436510.7	3681619.5	0.766	0.424
FSB106C	LAZ	200.3	436900.8	3681509.9	0.743	0.768
FSB107C	LAZ	208.0	436847.4	3681845.7	0.687	0.460
FSB110C	LAZ	200.6	436777.3	3681420.3	0.588	0.637
FSB111C	LAZ	210.3	436902.3	3681960.8	0.532	0.532
FSB112C	LAZ	200.0	436436.7	3681186.2	1.933	1.788
FSB113C	LAZ	200.0	437012.7	3681580.3	1.824	1.115
FSB114C	LAZ	210.3	437044.4	3682028.4	2.030	0.985
FSB115C	LAZ	184.2	436975.6	3680933.3	5.100	2.722
FSB116C	LAZ	189.5	437162.1	3681148.2	10.766	2.395
FSB120C	LAZ	202.9	436292.3	3681579.4	3.797	1.804
FSB121C	LAZ	201.4	436176.2	3681346.4	7.587	2.828
FSB122C	LAZ	197.7	436350.9	3680993.5	7.232	3.067
FSB123C	LAZ	207.9	437104.0	3681799.8	2.660	1.304
FSL 10C	LAZ	209.4	436515.2	3682891.0	1.531	1.063
FSL 11C	LAZ	209.4	436572.5	3682458.3	1.821	1.585

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
FSP 2A	LAZ	180.2	436774.0	3680895.1	5.543	2.743
FSS003C	LAZ	212.7	437471.8	3682219.1	1.970	0.706
FTF 28	LAZ	210.1	436731.6	3682536.2	1.163	1.314
FTF 29	LAZ	210.6	436637.7	3682655.3	2.452	1.645
FTF030	LAZ	212.6	436822.5	3682464.6	1.522	1.314
FTF031	LAZ	212.7	436961.2	3682406.3	3.468	1.519
HAA 1C	LAZ	249.3	440714.1	3682656.2	11.578	5.665
HAA 2B	LAZ	250.6	440099.7	3682611.9	6.729	0.626
HAA 2C	LAZ	251.8	440096.7	3682611.6	3.068	0.607
HAA 4B	LAZ	247.8	440027.1	3683044.3	0.994	0.216
HAA 4C	LAZ	248.5	440024.6	3683042.6	0.700	0.216
HAA 7B	LAZ	250.6	439842.2	3682733.1	0.675	0.471
HAA 7C	LAZ	252.7	439839.3	3682734.2	0.931	0.471
HAA 8B	LAZ	250.2	439720.0	3682799.8	0.362	0.445
HAA 8C	LAZ	251.2	439717.0	3682799.9	1.442	0.449
HAA 9B	LAZ	249.5	439714.2	3682923.1	0.969	0.418
HAA 9C	LAZ	250.8	439715.1	3682920.2	0.350	0.413
HAA 10B	LAZ	251.7	439843.1	3682942.5	0.384	0.230
HAA 10C	LAZ	252.9	439840.6	3682940.7	0.385	0.239
HAA 11B	LAZ	249.7	439865.2	3682999.9	0.531	0.222
HAA 11C	LAZ	249.3	439865.2	3682999.9	0.531	0.222
HAA 12B	LAZ	248.7	439948.3	3683060.9	0.316	0.224
HAA 12C	LAZ	248.9	439950.9	3683064.0	0.960	0.219
HAA 13B	LAZ	247.2	440015.9	3683109.8	0.148	0.211
HAA 13C	LAZ	247.6	440018.5	3683112.9	2.760	0.221
HAA 14B	LAZ	246.3	440115.8	3683158.6	0.562	0.406
HAA 14C	LAZ	246.7	440118.3	3683160.4	1.219	0.412
HAA 15B	LAZ	245.0	440214.8	3683231.8	15.513	0.693
HAA 15C	LAZ	245.8	440217.9	3683227.7	0.925	0.692
HAA017C	LAZ	245.3	440446.3	3683122.8	2.971	1.392
HAA018C	LAZ	242.0	440520.3	3683156.7	4.741	1.117
HAA019C	LAZ	237.0	440596.6	3683141.4	13.109	1.575
HAA020C	LAZ	253.0	440033.6	3682649.9	1.462	0.715
HAA021C	LAZ	254.7	439941.5	3682697.0	1.436	0.835
HIW 5MC1	LAZ	225.4	438454.7	3682402.8	0.231	0.233
HIW 5MC2	LAZ	223.5	438454.7	3682402.8	0.231	0.233
HMD 1D	LAZ	206.1	437643.7	3683762.5	1.707	1.172
HMD 2D	LAZ	197.7	437549.2	3684045.7	0.914	1.323
HMD 3D	LAZ	197.3	437682.0	3684109.6	0.817	1.576
HMD 4B	LAZ	194.8	437868.8	3684088.1	0.699	1.033
HMD 4D	LAZ	197.4	437866.2	3684086.0	0.688	1.024
HPZ 3A	LAZ	201.6	438874.0	3681720.7	2.069	0.980
HSB 65B	LAZ	223.1	439132.2	3682476.8	1.878	0.886
HSB 68B	LAZ	216.3	438913.6	3681970.9	0.174	0.172
HSB 68C	LAZ	216.6	438911.5	3681968.8	0.124	0.173
HSB 70C	LAZ	220.0	438444.2	3682033.2	0.452	0.411
HSB 71C	LAZ	219.6	438278.8	3682014.2	0.614	0.482
HSB 83B	LAZ	222.3	439315.0	3682306.1	0.111	0.183
HSB 83C	LAZ	223.4	439320.4	3682309.0	0.256	0.186

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
HSB 84B	LAZ	210.2	438769.1	3681895.1	0.450	0.259
HSB 84C	LAZ	212.1	438772.1	3681894.9	0.211	0.256
HSB 85B	LAZ	230.3	439017.8	3682900.0	3.483	1.743
HSB 86B	LAZ	218.9	438512.4	3682053.3	0.142	0.229
HSB100C	LAZ	225.4	439288.7	3682451.9	0.515	0.563
HSB101C	LAZ	224.1	439252.4	3682397.1	0.257	0.430
HSB102C	LAZ	223.2	439209.5	3682350.1	0.636	0.483
HSB103C	LAZ	222.2	439256.4	3682246.2	0.383	0.439
HSB104C	LAZ	219.5	439236.0	3682149.5	0.264	0.456
HSB105C	LAZ	218.4	439174.4	3682131.2	0.394	0.486
HSB106C	LAZ	220.4	439068.1	3682157.0	0.599	0.496
HSB107C	LAZ	218.0	439018.0	3682112.1	0.344	0.439
HSB108C	LAZ	217.2	438951.6	3682060.1	0.369	0.395
HSB109C	LAZ	217.3	438888.3	3682012.5	0.198	0.250
HSB110C	LAZ	217.3	438818.4	3681997.3	0.278	0.330
HSB111C	LAZ	218.1	438749.3	3681999.7	0.312	0.365
HSB112C	LAZ	219.4	438686.0	3682043.0	0.428	0.407
HSB113C	LAZ	219.0	438594.7	3682035.3	0.298	0.304
HSB114CR	LAZ	220.4	438557.2	3682060.9	0.163	0.233
HSB115CR	LAZ	220.9	438507.3	3682095.8	0.219	0.257
HSB116CR	LAZ	222.1	438452.6	3682142.4	0.445	0.401
HSB117C	LAZ	218.3	438272.1	3681961.9	0.820	0.501
HSB119C	LAZ	222.5	438441.8	3682218.9	0.897	0.498
HSB120C	LAZ	225.2	438473.5	3682348.4	0.550	0.356
HSB121C	LAZ	221.9	438945.0	3682197.6	1.181	0.557
HSB125C	LAZ	222.7	439338.9	3682272.3	0.463	0.266
HSB126C	LAZ	204.6	439147.5	3681802.8	1.668	1.015
HSB127C	LAZ	209.7	438948.0	3681877.0	0.670	0.517
HSB129C	LAZ	204.8	438422.3	3681728.2	1.006	0.787
HSB130C	LAZ	199.9	438499.0	3681381.4	8.512	2.033
HSB131C	LAZ	204.3	439123.1	3681689.7	2.017	1.168
HSB133C	LAZ	229.8	439386.5	3682474.9	1.893	0.888
HSB134C	LAZ	219.7	439316.9	3682145.7	0.819	0.619
HSB135C	LAZ	206.3	438858.7	3681879.9	0.379	0.417
HSB136C	LAZ	214.7	438616.6	3681896.0	1.026	0.605
HSB137CR	LAZ	217.5	438491.8	3681940.8	0.751	0.544
HSB139C	LAZ	213.4	439105.8	3681961.7	0.753	0.709
HSB140C	LAZ	205.8	439096.9	3681547.9	5.538	1.710
HSB141CR	LAZ	226.8	439530.1	3682307.1	4.905	1.329
HSB142C	LAZ	197.3	437795.9	3681757.9	4.119	0.733
HSB143C	LAZ	207.1	437504.5	3681779.1	4.517	1.047
HSB145C	LAZ	212.9	439208.5	3682024.8	0.984	0.712
HSB146C	LAZ	209.8	439494.5	3681996.6	9.700	1.726
HSB148C	LAZ	201.4	438802.6	3681377.4	6.191	2.306
HSB151C	LAZ	207.1	437943.2	3681819.4	1.144	0.763
HSB152C	LAZ	198.4	438201.7	3681636.1	4.814	1.029
HSB153C	LAZ	221.7	438840.1	3682145.9	0.670	0.486
HSB154C	LAZ	223.0	438635.6	3682178.2	0.752	0.440
HSB155C	LAZ	211.4	438196.8	3681817.4	0.962	0.570

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
HSL 9C	LAZ	241.1	439492.2	3683080.6	8.468	1.936
HSL 10C	LAZ	239.1	439374.9	3682819.4	2.889	1.645
HSL 11C	LAZ	231.7	439207.3	3682657.1	1.978	1.290
HSP 60A	LAZ	201.1	438479.7	3681676.0	1.615	0.854
HSP 76A	LAZ	196.2	438350.9	3681552.0	2.383	1.285
NEP 1D	LAZ	192.4	437357.9	3684179.8	6.231	2.610
NEP 2D	LAZ	196.1	437510.6	3684137.3	0.361	1.501
NEP 3D	LAZ	195.2	438278.6	3684083.8	1.266	2.321
NEP 4D	LAZ	192.0	438473.2	3684136.4	9.596	3.068
NWP 1B	LAZ	211.9	437741.7	3683413.3	0.436	0.506
NWP 1D	LAZ	211.8	437742.1	3683419.8	0.908	0.516
NWP 2D	LAZ	201.9	437500.3	3683874.9	4.463	1.718
NWP 3C	LAZ	216.8	437579.3	3682996.1	0.601	0.541
NWP202C	LAZ	214.8	437519.2	3683189.3	0.889	0.945
SEP002B	LAZ	207.0	438145.9	3681765.3	0.186	0.380
SEP002D	LAZ	207.7	438143.7	3681765.4	0.685	0.384
SEP003CL	LAZ	219.4	438168.1	3682116.2	0.740	0.400
SEP003CU	LAZ	219.9	438166.0	3682116.6	1.070	0.400
SWP 1C	LAZ	219.9	438000.0	3682390.3	0.592	0.523
SWP 2C	LAZ	222.4	438172.1	3682437.8	1.134	0.713
SWP005C	LAZ	213.4	437442.2	3682075.1	1.485	0.789
SWP006C	LAZ	215.2	437467.4	3681951.1	1.366	0.813
UTR-016	LAZ	166.0	436430.3	3684138.4	8.651	3.601
UTR018R	LAZ	148.0	435538.6	3682916.1	11.382	1.298
ZBG 3	LAZ	220.3	440568.5	3684989.9	10.185	1.671
ZBG 4	LAZ	220.3	440638.9	3684939.4	2.731	1.170
ZBG 5	LAZ	219.7	440712.8	3684886.2	19.191	1.917
ZBG002C	LAZ	222.1	440693.0	3685017.1	2.107	1.684
ZBG009D	LAZ	220.7	440325.8	3685289.1	5.272	0.993
ZBG010D	LAZ	220.6	440373.3	3685259.3	1.063	0.600
ZBG011D	LAZ	220.3	440411.9	3685229.5	2.350	0.825
ZBG012D	LAZ	216.2	440060.0	3685458.1	21.628	1.517
ZBG013D	LAZ	215.9	440100.7	3685513.3	3.656	1.327
ZBG014D	LAZ	217.7	440190.2	3685475.5	3.833	2.073
ZBG016C	LAZ	213.2	440742.4	3685283.8	7.661	5.712
BGO 1D	UAZ	235.8	438984.2	3682856.1	3.836	0.933
BGO 2D	UAZ	232.0	438845.5	3683062.3	5.443	1.885
BGO 3DR	UAZ	229.0	438676.0	3683300.6	5.657	2.337
BGO 4D	UAZ	226.5	438557.6	3683454.7	2.618	1.808
BGO 5D	UAZ	226.0	438494.3	3683532.0	1.644	1.618
BGO 6D	UAZ	226.8	438372.3	3683447.0	0.281	1.541
BGO 7D	UAZ	226.8	438277.5	3683380.6	2.294	1.210
BGO 8D	UAZ	227.1	438186.8	3683350.1	2.415	1.445
BGO 10DR	UAZ	227.1	438014.0	3683305.8	1.241	1.879
BGO 11DR	UAZ	226.9	437901.8	3683240.8	1.554	1.610
BGO 12CX	UAZ	216.6	437797.1	3683159.1	2.717	1.445
BGO 14DR	UAZ	226.5	437784.2	3682956.6	2.466	1.208
BGO 15D	UAZ	226.5	437863.9	3682883.2	1.806	1.163
BGO 16D	UAZ	226.6	437988.2	3682890.0	2.242	1.101

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
BGO 17DR	UAZ	227.2	438065.2	3682890.4	2.093	1.067
BGO 18D	UAZ	229.2	438140.8	3682944.0	4.727	1.380
BGO 20D	UAZ	229.4	438354.3	3682859.1	1.469	1.333
BGO 21D	UAZ	230.4	438491.3	3682855.6	0.189	1.040
BGO 22DX	UAZ	230.9	438588.2	3682877.9	2.888	1.174
BGO 23D	UAZ	232.2	438735.3	3682863.4	1.222	1.091
BGO 24D	UAZ	233.5	438851.1	3682862.7	1.099	1.230
BGO 26D	UAZ	224.5	437628.3	3682769.9	1.766	1.034
BGO 27D	UAZ	223.4	437626.6	3682598.8	1.952	0.732
BGO 28D	UAZ	222.1	437630.8	3682477.9	0.496	0.529
BGO 29D	UAZ	222.3	437498.7	3682473.8	1.303	0.859
BGO 30D	UAZ	222.2	437669.8	3682445.7	0.203	0.446
BGO 31D	UAZ	222.9	437790.5	3682457.3	1.568	0.731
BGO 32D	UAZ	223.4	437937.4	3682466.9	1.924	0.697
BGO 33D	UAZ	226.1	438093.4	3682483.1	3.623	1.086
BGO 34D	UAZ	228.2	438231.8	3682493.5	2.515	0.973
BGO 35D	UAZ	230.1	438399.3	3682508.8	0.849	0.848
BGO 36D	UAZ	233.8	438517.2	3682518.4	1.699	0.765
BGO 37D	UAZ	235.1	438662.3	3682528.7	0.241	0.631
BGO 38D	UAZ	233.5	438756.5	3682536.4	2.313	0.755
BGO 39D	UAZ	232.0	438778.3	3682648.0	2.609	1.034
BGO 40D	UAZ	218.6	437535.9	3682701.8	1.200	0.957
BGO 44D	UAZ	226.9	438228.2	3683444.6	0.237	1.333
BGO 45D	UAZ	223.3	437571.5	3682625.4	0.819	0.715
BGO 46D	UAZ	222.1	437677.9	3682393.6	1.184	0.509
BGO 47D	UAZ	222.5	437854.5	3682411.3	0.298	0.640
BGO 48D	UAZ	222.3	437930.8	3682409.1	0.922	0.606
BGO 49D	UAZ	229.5	438313.8	3682441.0	1.196	0.824
BGO 50D	UAZ	221.6	437599.5	3682392.1	0.658	0.554
BGO 51D	UAZ	231.8	438689.7	3682785.0	2.311	1.047
BGO 52D	UAZ	229.8	438437.8	3682789.8	2.408	1.062
BGO 53D	UAZ	227.7	437742.3	3682825.8	2.138	1.123
BGX 1D	UAZ	225.3	438391.3	3683582.2	1.843	1.928
BGX 9D	UAZ	224.0	438593.7	3683777.2	23.318	3.812
BGX 10D	UAZ	223.5	438788.6	3683635.4	12.195	3.461
BGX 11D	UAZ	231.7	438901.5	3683385.0	9.635	2.864
BGX 12D	UAZ	234.9	439084.0	3683182.4	8.342	2.550
BRR 1D	UAZ	211.5	436315.8	3682280.8	14.295	2.399
BRR 5D	UAZ	208.2	436190.8	3682152.7	13.845	2.691
BRR 6D	UAZ	206.8	436491.9	3682298.0	3.149	1.880
BSE 1D1	UAZ	233.4	438678.6	3682435.6	0.448	0.247
BSE 1D3	UAZ	233.2	438678.6	3682435.6	0.448	0.247
BSE 2D1	UAZ	229.9	438601.8	3682407.5	0.312	0.188
BSE 2D2	UAZ	228.6	438601.8	3682407.5	0.312	0.188
BSE 2D3	UAZ	228.5	438601.8	3682407.5	0.312	0.188
BSE 3D1	UAZ	228.6	438725.2	3682276.5	0.220	0.188
BSE 3D3	UAZ	228.5	438725.2	3682276.5	0.220	0.188
BSE 3D4	UAZ	228.7	438725.2	3682276.5	0.220	0.188
BSW 1D1	UAZ	219.2	437629.7	3682220.5	0.471	0.346

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
BSW 1D2	UAZ	219.3	437629.7	3682220.5	0.471	0.346
BSW 2D1	UAZ	219.8	437734.1	3682212.3	0.578	0.350
BSW 2D2	UAZ	220.5	437734.1	3682212.3	0.578	0.350
BSW 3D1	UAZ	220.8	437856.6	3682234.2	0.764	0.366
BSW 3D2	UAZ	221.8	437856.6	3682234.2	0.764	0.366
BSW 4D1	UAZ	221.7	437956.4	3682258.5	0.423	0.348
BSW 4D2	UAZ	221.4	437956.4	3682258.5	0.423	0.348
BSW 5D1	UAZ	217.3	437625.0	3682082.2	0.601	0.297
BSW 5D2	UAZ	217.1	437625.0	3682082.2	0.601	0.297
BSW 6D2	UAZ	213.0	437651.7	3681893.5	0.782	0.561
BSW 6D3	UAZ	213.2	437651.7	3681893.5	0.782	0.561
BSW 7D1	UAZ	214.7	437751.3	3681995.0	0.966	0.459
BSW 7D2	UAZ	215.6	437751.3	3681995.0	0.966	0.459
BSW 8D1	UAZ	217.7	437908.0	3682029.9	2.048	0.554
BSW 8D3	UAZ	217.0	437908.0	3682029.9	2.048	0.554
FAB 2	UAZ	227.2	437417.7	3683122.5	8.273	1.692
FAB 5D	UAZ	228.7	437482.0	3683360.0	9.133	1.365
FAB 6D	UAZ	229.6	437567.8	3683351.6	0.235	1.044
FAB 7D	UAZ	228.3	437639.1	3683358.5	8.465	1.189
FAB008D	UAZ	229.3	437406.0	3683282.6	13.068	1.671
FAB009D	UAZ	229.3	437590.0	3683218.1	0.748	0.910
FAB010D	UAZ	229.7	437727.0	3683271.5	2.124	1.397
FBI 13D	UAZ	205.1	436803.8	3681430.2	0.296	0.177
FBI 14D	UAZ	204.5	436911.3	3681412.4	0.318	0.194
FBI 15D	UAZ	198.2	436913.8	3681334.0	0.575	0.262
FBI 16D	UAZ	204.9	436835.7	3681387.9	0.049	0.103
FBI 17D	UAZ	199.2	436854.8	3681323.2	0.158	0.160
FCB 2D	UAZ	227.4	437533.7	3682915.7	0.069	1.012
FCB002DR	UAZ	225.9	437610.0	3682912.9	0.881	0.925
FGW012 D	UAZ	207.7	436263.9	3681955.9	7.940	2.129
FIB 1	UAZ	205.0	436813.9	3681340.5	0.165	0.138
FIB 8	UAZ	205.3	436840.7	3681380.7	0.104	0.102
FIP001	UAZ	200.3	436976.6	3681417.3	0.645	0.040
FIP002	UAZ	200.5	436961.5	3681413.4	0.027	0.037
FIP003	UAZ	201.0	436970.3	3681427.2	0.107	0.044
FOB 1D	UAZ	203.2	436814.6	3681304.9	0.207	0.132
FOB 2D	UAZ	204.2	436662.7	3681255.1	0.775	0.310
FOB 3D	UAZ	204.2	436523.4	3681215.9	0.270	0.398
FOB 4D	UAZ	205.4	436534.2	3681333.6	1.481	0.630
FOB 8D	UAZ	210.1	436441.9	3681772.2	2.963	0.815
FOB 9D	UAZ	212.4	436648.8	3681924.0	0.349	0.721
FOB 10D	UAZ	213.1	436735.2	3681943.7	0.857	0.613
FOB 13D	UAZ	199.4	436959.1	3681419.0	0.007	0.046
FOB 14D	UAZ	202.4	436679.7	3681171.6	0.403	0.187
FOB 15D	UAZ	202.9	436679.7	3681171.6	0.403	0.187
FOB 16D	UAZ	206.4	436667.1	3681481.1	0.561	0.429
FPZ 1A	UAZ	196.0	436536.9	3681043.4	0.132	0.343
FPZ 2A	UAZ	199.0	436546.2	3681074.7	0.162	0.292
FPZ 3A	UAZ	187.9	436694.2	3680989.0	1.691	0.822

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
FPZ 4A	UAZ	198.8	436782.4	3681237.5	0.426	0.199
FPZ 5A	UAZ	190.7	436825.1	3681133.3	0.278	0.180
FPZ 5B	UAZ	190.7	436825.1	3681133.3	0.278	0.180
FPZ 6A	UAZ	188.6	436872.8	3681120.5	0.262	0.198
FPZ 6B	UAZ	188.5	436872.8	3681120.5	0.262	0.198
FPZ 7A	UAZ	191.8	436967.8	3681207.4	0.524	0.289
FPZ 7B	UAZ	192.6	436967.8	3681207.4	0.524	0.289
FPZ008BR	UAZ	187.9	437047.8	3681260.6	0.560	0.649
FRB 1	UAZ	223.0	437339.0	3682597.6	5.337	0.971
FRB 2	UAZ	221.3	437257.8	3682546.3	4.855	0.507
FRB 3	UAZ	221.4	437278.6	3682511.4	0.161	0.249
FRB 4	UAZ	222.3	437302.1	3682512.9	0.611	0.271
FSB 76	UAZ	213.8	436732.5	3682122.9	0.442	0.495
FSB 77	UAZ	210.5	436747.5	3681752.4	1.117	0.470
FSB 78	UAZ	207.1	436678.0	3681564.0	0.557	0.287
FSB 79	UAZ	198.8	436869.2	3681288.3	0.396	0.211
FSB 87D	UAZ	209.2	436509.9	3681751.6	0.254	0.551
FSB 88D	UAZ	212.9	436859.7	3682019.7	0.168	0.436
FSB 89D	UAZ	212.4	436825.8	3681967.3	0.534	0.478
FSB 90D	UAZ	211.7	436808.5	3681890.1	0.574	0.475
FSB 91D	UAZ	210.8	436791.0	3681813.5	0.727	0.489
FSB 92D	UAZ	209.5	436724.2	3681703.9	0.735	0.423
FSB 93D	UAZ	208.6	436726.5	3681646.3	0.266	0.426
FSB 94DR	UAZ	207.9	436658.7	3681589.6	0.085	0.286
FSB 95DR	UAZ	207.6	436595.6	3681589.9	0.401	0.422
FSB 97D	UAZ	208.3	436555.2	3681634.8	0.419	0.390
FSB 98D	UAZ	209.0	436555.9	3681704.3	0.688	0.498
FSB 99D	UAZ	209.8	436551.6	3681821.7	0.351	0.630
FSB104D	UAZ	203.3	436615.1	3681179.6	0.377	0.260
FSB105DR	UAZ	209.1	436509.6	3681627.7	1.062	0.486
FSB106D	UAZ	205.1	436896.7	3681508.0	0.670	0.327
FSB107D	UAZ	211.7	436846.5	3681842.5	0.829	0.501
FSB108D	UAZ	213.5	436650.4	3682108.1	3.042	0.875
FSB109D	UAZ	210.4	436561.9	3681891.1	1.759	0.732
FSB110D	UAZ	204.5	436774.6	3681419.3	0.262	0.178
FSB111D	UAZ	213.3	436899.9	3681958.8	1.134	0.605
FSB112DR	UAZ	204.2	436442.1	3681193.7	1.901	0.588
FSB113D	UAZ	205.3	437017.2	3681581.4	1.614	0.246
FSB114D	UAZ	213.3	437042.4	3682023.3	5.037	1.212
FSB116D	UAZ	190.9	437157.7	3681145.7	11.842	1.386
FSB117D	UAZ	205.0	436881.7	3681450.9	0.361	0.234
FSB118D	UAZ	209.1	436963.7	3681747.1	1.144	0.816
FSB119D	UAZ	206.7	436814.8	3681601.7	1.078	0.496
FSB120D	UAZ	206.1	436287.1	3681582.8	9.173	1.607
FSB121DR	UAZ	204.7	436181.0	3681348.5	12.821	1.980
FSB122D	UAZ	200.7	436355.5	3680990.7	1.253	0.890
FSB123D	UAZ	209.4	437100.9	3681796.0	3.571	1.152
FSB124D	UAZ	205.8	436430.4	3681393.9	2.951	0.954
FSB125D	UAZ	206.5	436761.3	3681487.7	0.239	0.174

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
FSB125DR	UAZ	206.0	436766.8	3681484.0	0.255	0.167
FSB126D	UAZ	204.9	436740.3	3681381.3	0.111	0.222
FSB127D	UAZ	197.8	437036.0	3681484.5	0.056	0.383
FSB128D	UAZ	203.1	436212.5	3681134.7	8.552	1.710
FSB129D	UAZ	197.6	436239.5	3680896.8	12.657	2.004
FSB130D	UAZ	203.4	436743.6	3681291.9	0.192	0.039
FSB131D	UAZ	202.9	436736.6	3681261.5	0.172	0.124
FSB132D	UAZ	203.9	436587.2	3681202.6	0.324	0.278
FSB133D	UAZ	202.7	436541.8	3681128.6	0.239	0.311
FSB134D	UAZ	203.5	436507.2	3681156.4	0.394	0.337
FSB135D	UAZ	201.7	436408.0	3681079.1	0.457	0.420
FSB136D	UAZ	201.3	436420.1	3681045.9	0.493	0.401
FSB137D	UAZ	195.2	436454.9	3680970.4	0.813	0.770
FSB138D	UAZ	200.7	436632.2	3681090.0	0.895	0.450
FSB139D	UAZ	207.1	436979.3	3681568.2	0.038	0.206
FSB140D	UAZ	199.1	436995.4	3681528.8	0.335	0.191
FSB141D	UAZ	200.0	437004.2	3681553.4	0.110	0.149
FSB142D	UAZ	206.9	436757.9	3681331.9	0.122	0.125
FSB143D	UAZ	205.8	436747.6	3681295.8	0.019	0.033
FSB144D	UAZ	205.1	436761.4	3681285.6	0.050	0.026
FSB145D	UAZ	205.3	436767.9	3681294.0	0.007	0.031
FSB146D	UAZ	205.7	436774.1	3681293.9	0.093	0.034
FSL 1D	UAZ	222.3	436603.6	3683130.3	27.207	3.989
FSL 2D	UAZ	222.7	436630.4	3682989.0	11.298	3.330
FSL 3D	UAZ	218.9	436706.5	3682715.9	5.757	1.159
FSL 4D	UAZ	213.9	436704.7	3682596.8	2.043	1.099
FSL 5D	UAZ	216.5	436696.7	3682438.4	0.353	1.331
FSL 6D	UAZ	215.7	436709.9	3682329.5	1.146	1.246
FSL 7D	UAZ	214.0	436722.9	3682186.2	1.507	0.726
FSL 8D	UAZ	213.4	436778.8	3682123.9	0.215	0.528
FSL 9D	UAZ	213.3	436837.6	3682058.8	0.009	0.493
FSP 2B	UAZ	180.0	436773.4	3680895.3	9.747	1.321
FSP249B	UAZ	184.3	436418.5	3680752.7	17.089	2.333
FSS 1D	UAZ	220.5	437509.0	3682355.1	1.581	0.553
FSS 2D	UAZ	220.0	437541.9	3682320.9	0.677	0.519
FSS 3D	UAZ	218.2	437476.2	3682219.2	1.395	0.892
FSS 4D	UAZ	214.7	437207.1	3682240.9	6.691	1.522
FTF 22	UAZ	218.7	436895.6	3682471.5	2.021	0.921
FTF 23	UAZ	218.9	436961.4	3682466.8	2.426	1.117
FTF009R	UAZ	219.0	436711.9	3682659.3	0.008	0.864
FTF030D	UAZ	218.4	436820.6	3682467.1	1.786	1.079
HAA 1D	UAZ	271.7	440717.3	3682655.9	23.292	5.739
HAA 2D	UAZ	273.9	440093.8	3682611.4	8.444	1.284
HAA 4D	UAZ	269.7	440022.1	3683040.8	1.030	0.834
HAA 5D	UAZ	275.5	440507.5	3682779.3	6.792	3.712
HAA 7D	UAZ	269.9	439836.4	3682735.2	2.299	1.129
HAA 8D	UAZ	267.8	439716.8	3682796.9	1.534	0.977
HAA 9D	UAZ	262.5	439716.0	3682926.3	0.733	0.714
HAA 10D	UAZ	267.1	439838.2	3682938.9	0.920	0.866

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
HAA 11D	UAZ	265.5	439867.8	3683002.9	0.726	0.887
HAA 12D	UAZ	267.5	439953.5	3683067.1	0.325	0.892
HAA 13D	UAZ	268.1	440023.7	3683115.9	0.132	0.964
HAA 14D	UAZ	268.3	440120.7	3683162.1	2.840	1.454
HAA 15D	UAZ	269.1	440220.2	3683224.3	7.844	2.158
HAA017D	UAZ	270.1	440445.1	3683124.6	2.183	1.892
HAA018D	UAZ	268.7	440524.1	3683158.7	0.137	1.432
HAA019D	UAZ	268.5	440598.7	3683143.0	2.236	1.204
HAA020D	UAZ	271.3	440029.2	3682651.0	1.180	1.027
HAA021D	UAZ	272.0	439938.5	3682698.0	0.988	1.057
HC 1D	UAZ	267.6	440102.1	3682919.1	0.288	0.511
HCB 2	UAZ	269.9	440659.6	3683153.0	19.225	1.610
HGW 1D	UAZ	243.9	439494.8	3683084.0	9.894	1.953
HGW 2D	UAZ	233.3	439592.8	3683472.1	1.615	4.082
HGW 3D	UAZ	244.9	440001.8	3683538.9	35.713	4.635
HGW 4D	UAZ	233.4	440912.5	3683873.7	52.519	12.341
HHP 1D	UAZ	271.3	439902.6	3682502.9	3.696	1.429
HHP 2D	UAZ	273.8	439994.1	3682516.6	9.041	1.394
HOB 1D	UAZ	229.4	438659.1	3682338.9	0.285	0.419
HOB 2D	UAZ	228.9	438779.4	3682358.1	2.151	0.565
HOB 3D	UAZ	229.0	439054.0	3682374.9	0.474	0.696
HOB 4D	UAZ	230.7	439154.9	3682409.7	0.631	0.437
HOB 5D	UAZ	233.4	439207.5	3682466.5	0.292	0.448
HOB 6D	UAZ	208.3	439216.3	3681834.1	5.725	0.964
HOB 7D	UAZ	217.1	438704.0	3681951.9	0.441	0.354
HPZ 1A	UAZ	201.5	438656.7	3681699.3	3.187	1.218
HPZ 2A	UAZ	214.6	438703.6	3681880.8	0.698	0.473
HPZ 3B	UAZ	201.2	438874.0	3681720.7	3.335	0.937
HPZ 4A	UAZ	209.5	438903.9	3681824.2	0.550	0.501
HPZ 5A	UAZ	211.3	439010.6	3681841.6	0.185	0.307
HPZ 5B	UAZ	211.1	439010.6	3681841.6	0.482	0.307
HPZ 6AR	UAZ	204.4	439065.2	3681773.7	0.834	0.661
HR3 15DU	UAZ	249.1	439701.3	3682483.5	1.133	0.982
HR3 16DU	UAZ	247.5	439650.1	3682455.3	2.620	0.942
HR8 11	UAZ	245.0	439497.9	3682554.6	1.097	0.891
HSB 65	UAZ	231.6	439134.0	3682470.6	0.437	0.301
HSB 65C	UAZ	231.4	439135.2	3682476.7	1.467	0.314
HSB 66DR	UAZ	226.4	438759.9	3682203.9	1.236	0.469
HSB 67	UAZ	222.6	439297.2	3682242.4	0.371	0.313
HSB 68DR	UAZ	218.6	438912.5	3681964.7	0.407	0.411
HSB 69	UAZ	215.6	438809.5	3681903.2	0.298	0.311
HSB 70	UAZ	219.4	438442.9	3682035.8	0.848	0.503
HSB 71	UAZ	220.3	438276.5	3682016.1	0.929	0.678
HSB 83D	UAZ	223.4	439318.8	3682304.5	0.232	0.241
HSB 84D	UAZ	215.4	438772.0	3681889.8	0.724	0.339
HSB 85C	UAZ	236.5	439014.0	3682902.1	3.925	0.991
HSB 86C	UAZ	219.7	438512.4	3682057.3	0.154	0.153
HSB 86D	UAZ	220.1	438516.7	3682057.6	0.051	0.145
HSB100D	UAZ	232.2	439287.0	3682449.3	0.194	0.417

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
HSB101D	UAZ	229.4	439250.9	3682394.3	0.415	0.408
HSB102D	UAZ	227.1	439209.3	3682347.1	0.969	0.465
HSB103D	UAZ	224.0	439255.5	3682243.4	0.158	0.379
HSB104D	UAZ	223.7	439235.5	3682146.7	0.619	0.547
HSB105D	UAZ	224.2	439171.4	3682131.9	0.860	0.588
HSB106D	UAZ	224.7	439065.2	3682157.5	1.240	0.593
HSB107D	UAZ	223.2	439013.5	3682108.1	0.777	0.530
HSB108D	UAZ	221.8	438949.3	3682058.2	0.695	0.496
HSB109D	UAZ	219.2	438885.7	3682010.9	0.380	0.394
HSB110D	UAZ	217.2	438815.3	3681997.2	0.460	0.377
HSB111D	UAZ	216.8	438746.2	3682000.1	0.397	0.192
HSB111E	UAZ	216.6	438743.2	3682000.4	0.096	0.190
HSB112D	UAZ	222.0	438682.7	3682042.6	0.212	0.221
HSB112E	UAZ	222.2	438679.7	3682042.3	0.132	0.222
HSB113DR	UAZ	218.8	438591.1	3682037.0	0.808	0.358
HSB114D	UAZ	219.5	438551.9	3682065.1	0.120	0.232
HSB115D	UAZ	220.5	438502.2	3682099.9	0.183	0.291
HSB116D	UAZ	221.4	438447.2	3682148.7	0.879	0.531
HSB117D	UAZ	221.6	438269.1	3681962.3	2.796	0.764
HSB119D	UAZ	223.9	438442.1	3682222.6	0.865	0.651
HSB120D	UAZ	226.7	438465.8	3682342.8	1.468	0.594
HSB121D	UAZ	226.2	438941.3	3682195.7	1.012	0.628
HSB122D	UAZ	227.0	439003.2	3682288.1	0.783	0.707
HSB125D	UAZ	220.1	439337.7	3682269.4	0.050	0.279
HSB126D	UAZ	205.5	439144.4	3681802.7	0.456	0.739
HSB127D	UAZ	215.7	438945.4	3681878.5	0.481	0.435
HSB129D	UAZ	207.2	438419.5	3681728.7	3.331	1.171
HSB130D	UAZ	199.8	438501.9	3681381.6	28.017	2.815
HSB131D	UAZ	205.4	439123.9	3681686.6	3.497	1.094
HSB132C	UAZ	220.1	439392.5	3682299.5	0.361	0.259
HSB132D	UAZ	219.5	439395.9	3682300.9	0.879	0.271
HSB133D	UAZ	234.8	439385.5	3682472.0	1.402	0.691
HSB134D	UAZ	220.8	439317.3	3682148.6	1.615	0.659
HSB135D	UAZ	215.4	438855.5	3681880.1	0.205	0.391
HSB136D	UAZ	216.7	438613.7	3681896.0	1.526	0.624
HSB137D	UAZ	218.0	438486.3	3681943.8	1.999	0.678
HSB138D	UAZ	222.5	438221.0	3682082.8	3.262	0.944
HSB139D	UAZ	220.7	439107.7	3681964.3	1.233	0.636
HSB140D	UAZ	212.4	439101.5	3681546.3	14.825	1.880
HSB141D	UAZ	233.8	439538.6	3682297.3	1.500	1.167
HSB142D	UAZ	197.5	437794.0	3681754.2	1.863	1.541
HSB143D	UAZ	211.4	437502.0	3681783.3	12.105	1.481
HSB145D	UAZ	219.2	439206.8	3682019.4	0.491	0.806
HSB146D	UAZ	218.7	439499.8	3681999.7	12.112	1.847
HSB147D	UAZ	227.8	438235.2	3682344.8	2.250	0.985
HSB148D	UAZ	212.1	438803.8	3681381.7	16.228	2.726
HSB149D	UAZ	221.6	439046.6	3681997.4	0.924	0.563
HSB150D	UAZ	224.7	439329.7	3682336.8	0.319	0.293
HSB151DR	UAZ	206.9	437938.6	3681819.5	1.554	1.502

Well Name	Hydro Unit	Mean (ft)	UTM_E	UTM_N	Poly weight	Inverse Distance p=2
HSB153D	UAZ	226.3	438841.3	3682141.2	0.943	0.567
HSB154D	UAZ	226.6	438639.0	3682175.8	1.562	0.549
HSL 1D	UAZ	233.8	439299.5	3682498.4	1.978	0.510
HSL 2D	UAZ	239.4	439420.3	3682590.5	2.663	0.845
HSL 3D	UAZ	248.5	439495.0	3682667.7	1.297	0.948
HSL 4D	UAZ	262.7	439557.5	3682789.5	0.054	0.285
HSL 5D	UAZ	266.9	439579.4	3682846.3	0.242	0.187
HSL 6D	UAZ	258.6	439609.1	3682904.7	0.572	0.561
HSL 7D	UAZ	258.7	439653.7	3682942.7	0.229	0.624
HSL 8D	UAZ	259.8	439748.4	3683016.7	3.868	1.012
HSL004DR	UAZ	256.0	439531.4	3682797.5	1.146	0.296
HSL005DR	UAZ	258.0	439560.4	3682841.8	0.224	0.181
HSP 60B	UAZ	199.8	438479.8	3681677.0	1.329	1.198
HTF 1	UAZ	272.3	440151.5	3682954.8	0.616	0.518
HTF 2	UAZ	273.5	440202.3	3682940.9	2.024	0.736
HTF 4	UAZ	273.7	440141.3	3682904.0	1.023	0.464
HTF 12D	UAZ	273.3	440075.1	3682814.5	0.477	0.985
HTF 15D	UAZ	271.1	439984.6	3682814.1	1.641	1.010
NWP 3D	UAZ	226.5	437577.4	3682999.7	2.018	1.091
NWP101D	UAZ	227.4	437540.3	3683188.1	0.894	0.936
SEP001MD	UAZ	228.6	438450.5	3682401.2	0.667	0.600
SWP 3D	UAZ	221.0	438022.1	3682276.6	2.131	0.656
SWP004MD	UAZ	216.5	437624.6	3682086.2	0.988	0.295
SWP005D	UAZ	216.7	437440.8	3682072.9	1.200	1.066
SWP006D	UAZ	215.1	437470.5	3681950.3	2.714	1.136
ZBG 1	UAZ	233.1	440150.1	3684777.6	48.762	9.495
ZBG 6	UAZ	233.7	440430.6	3684778.0	6.186	2.517
ZBG 7	UAZ	234.0	440495.4	3684740.3	0.951	1.935
ZBG 8	UAZ	234.2	440564.5	3684682.7	16.196	3.115
ZBG002D	UAZ	225.4	440685.8	3685010.9	23.923	12.010
ZBG015D	UAZ	235.5	440409.3	3684538.1	18.686	6.348

Appendix E Fortran Code to Develop Inverse Distance Weight Factors

```
Program inv_dist_weight.f90
      implicit real (a-h,o-z)
      parameter (max=50000)
      real::utmeast(max),utmnorth(max),weight(max),ir2(max)
      integer::num_wells,tnrtot,well,num_repeat,repeated(max),nn
      real::rx1,ry1,p,sum_weights
      real:: norm_weight_median(max), norm_weight_sum(max),cutoff
      character:: input
      read(*,*)p
      open(unit=12, file='Wells_UTMcoord')
      open(unit=32, file='weights.out')
      read(12,*) num_wells
      do 5 i=1,num_wells
      read(12,*)well, utmeast(well), utmnorth(well)
      ir2(i)=0
      nn=0
      weight(i)=0
5       continue
      cutoff=15       !m
      ! p=1  !eight exponent
      tnrtot=num_wells
      sum_weights=0
      write(32,*) 'number of wells',num_wells, 'p',p
      do i=1,tnrtot
      num_repeat=1
        do j=1,tnrtot
         if (i.ne.j) then
            rx1=utmeast(j)-utmeast(i)
            ry1=utmnorth(j)-utmnorth(i)
            r3=((rx1*rx1)+(ry1*ry1))
            r2=sqrt(r3)
            if (r2.le.cutoff) then  !not unique
            num_repeat=num_repeat+1
            else    !unique
            ir2(i)=ir2(i)+(1/r2)**p
            endif
        endif       !if (i.ne.j) then
        enddo !do j=1,tnrtot
            nn=nn+1
            repeated(i)=num_repeat
            weight(i)=1/ir2(i)
            sum_weights=sum_weights+weight(i)
      enddo   !do i=1,tnrtot
      do 15 i=1,num_wells
      norm_weight_sum(i)=weight(i)/sum_weights
      norm_weight_median(i)=weight(i)/(sum_weights/nn)
      write(32,*) i, utmeast(i),utmnorth(i),weight(i), &
        norm_weight_sum(i),norm_weight_median(i),repeated(i), &
        norm_weight_sum(i)/repeated(i), &
        norm_weight_median(i)/repeated(i)
15      continue
      stop
      end program
```

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