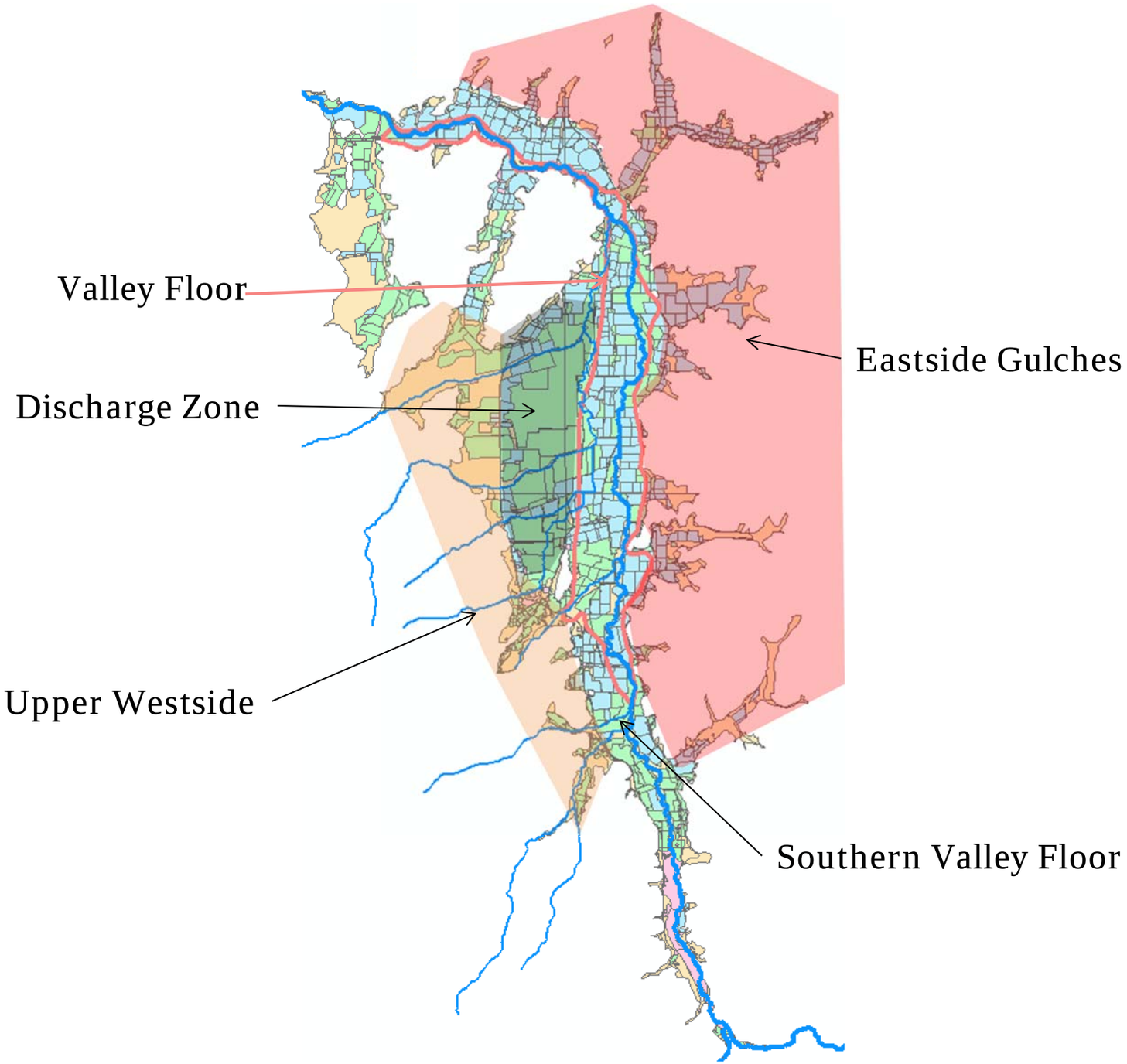
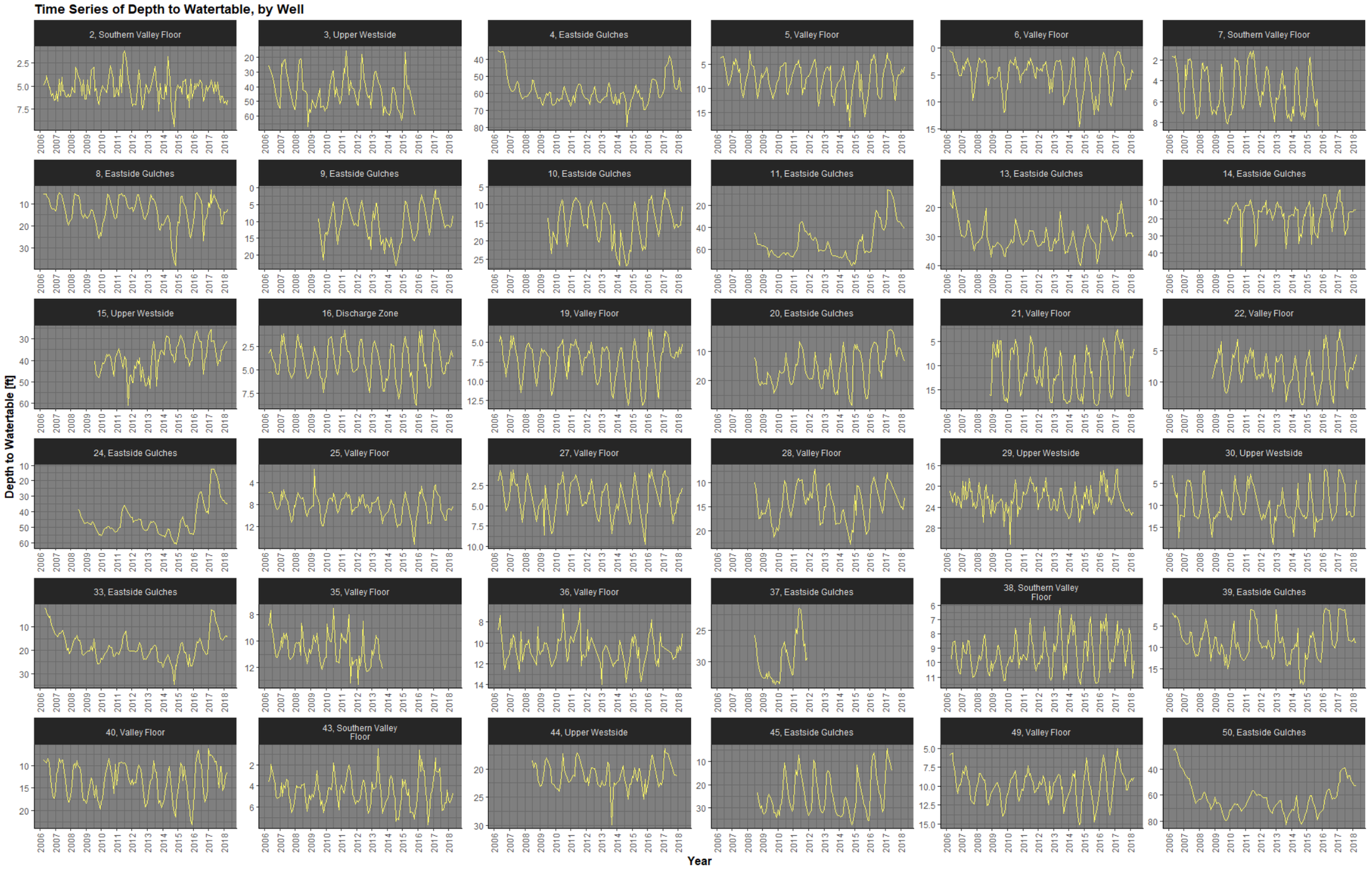
Scott Valley
Siskiyou County, California:

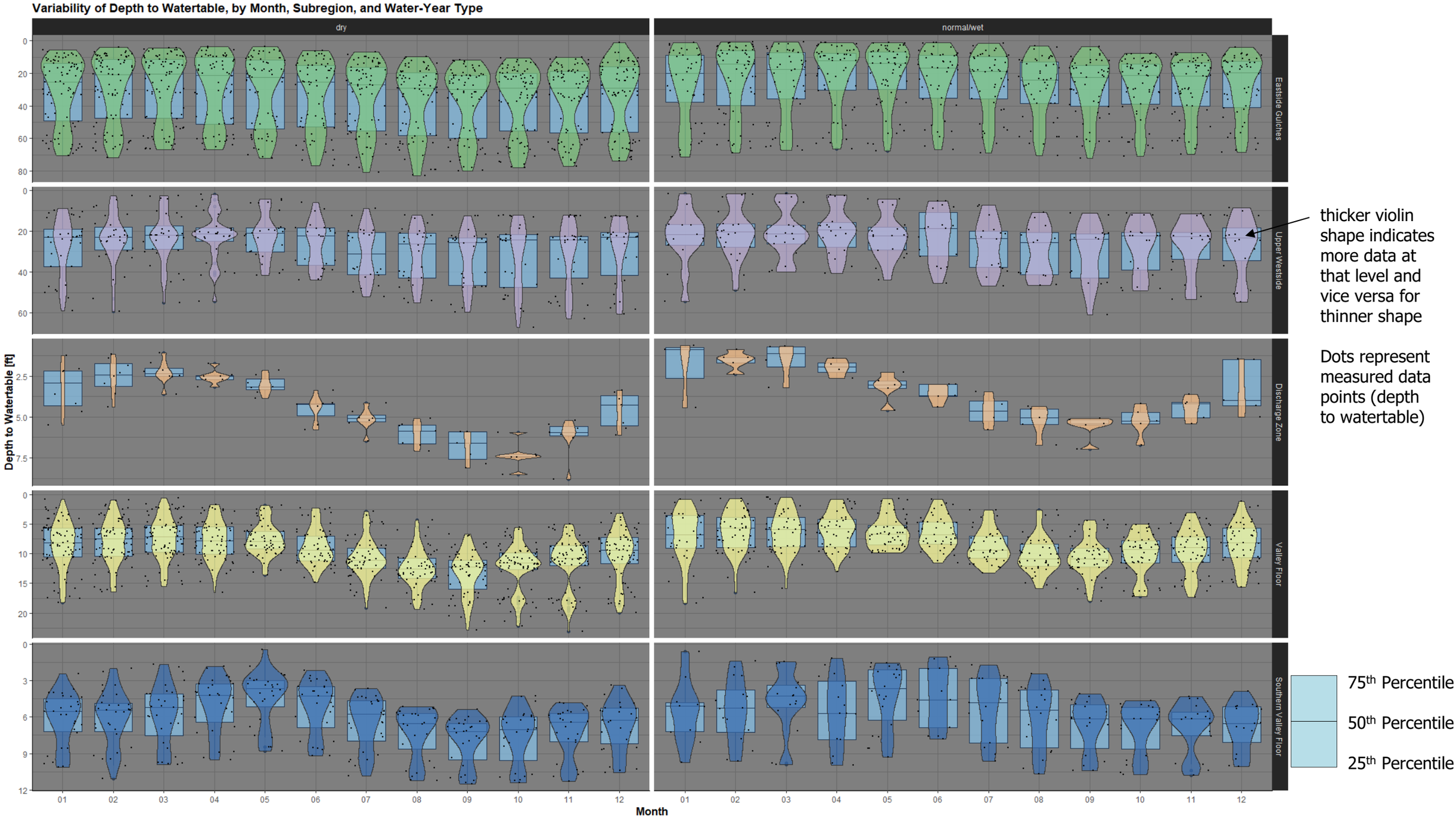
Voluntary Private Well
Water Level Monitoring Program
Winter 2006 – Winter 2018

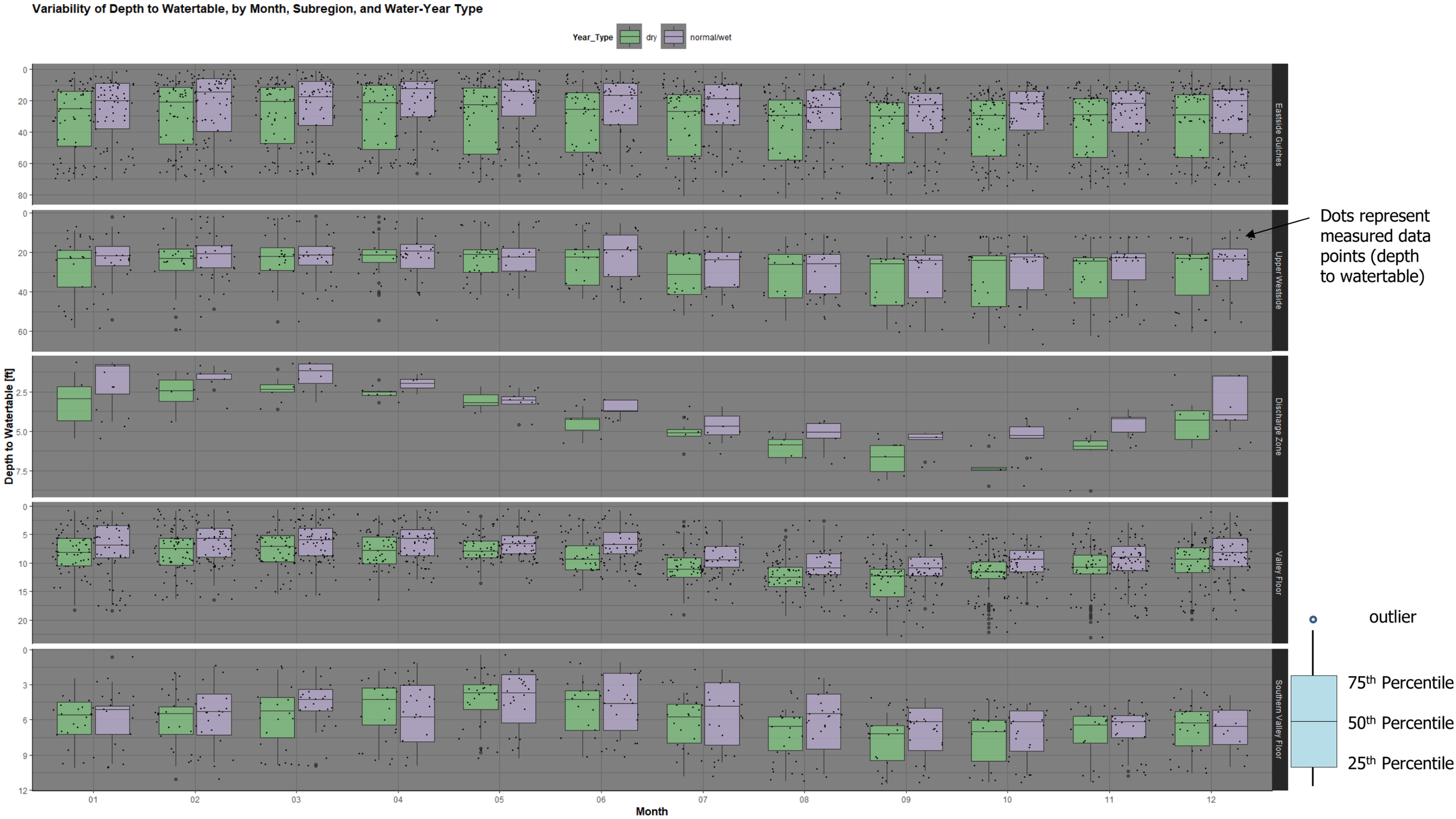
(Data collected monthly except January 2011)

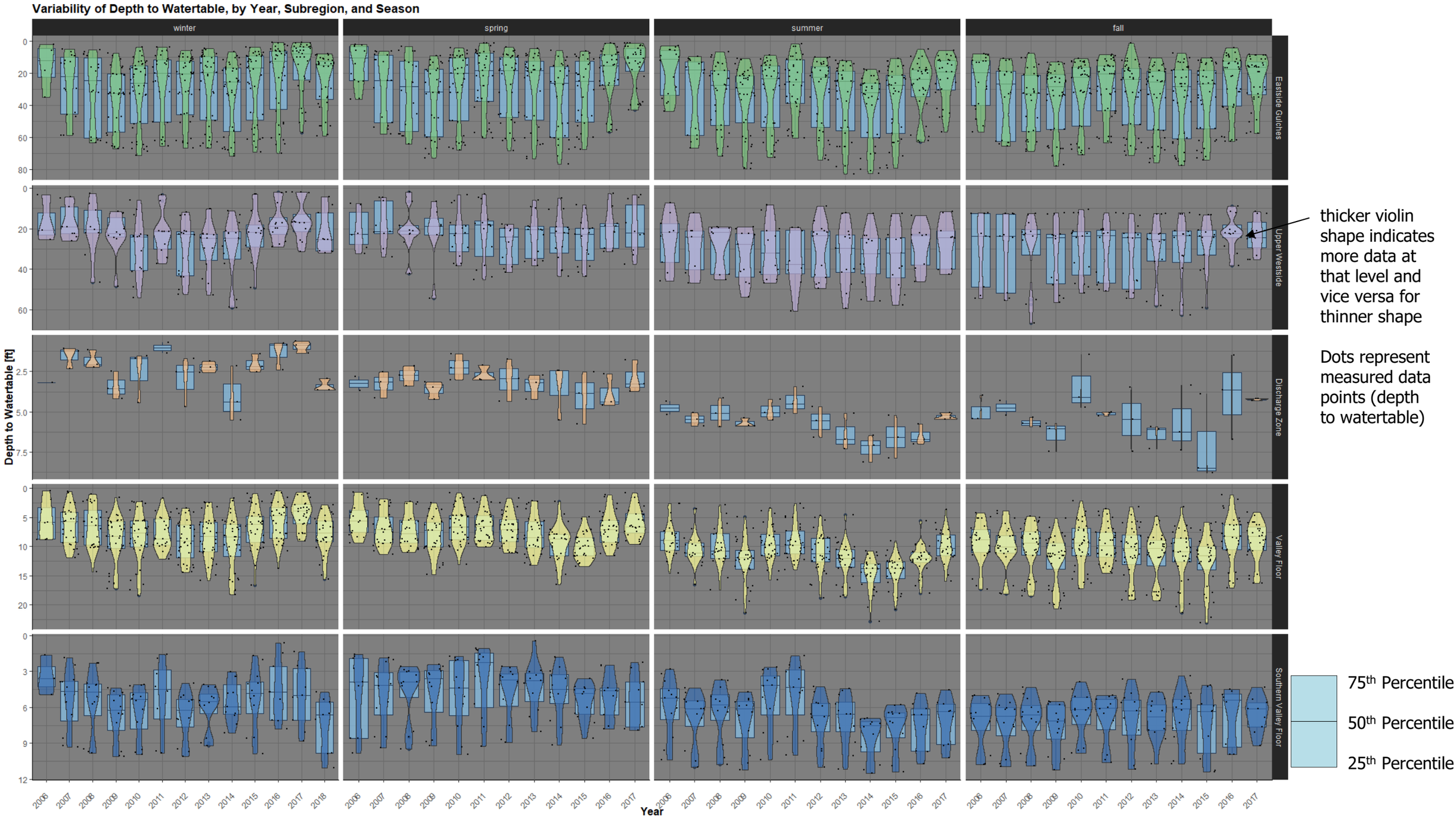
Zones for Private Well Data Network, Scott Valley Alluvial Aquifer



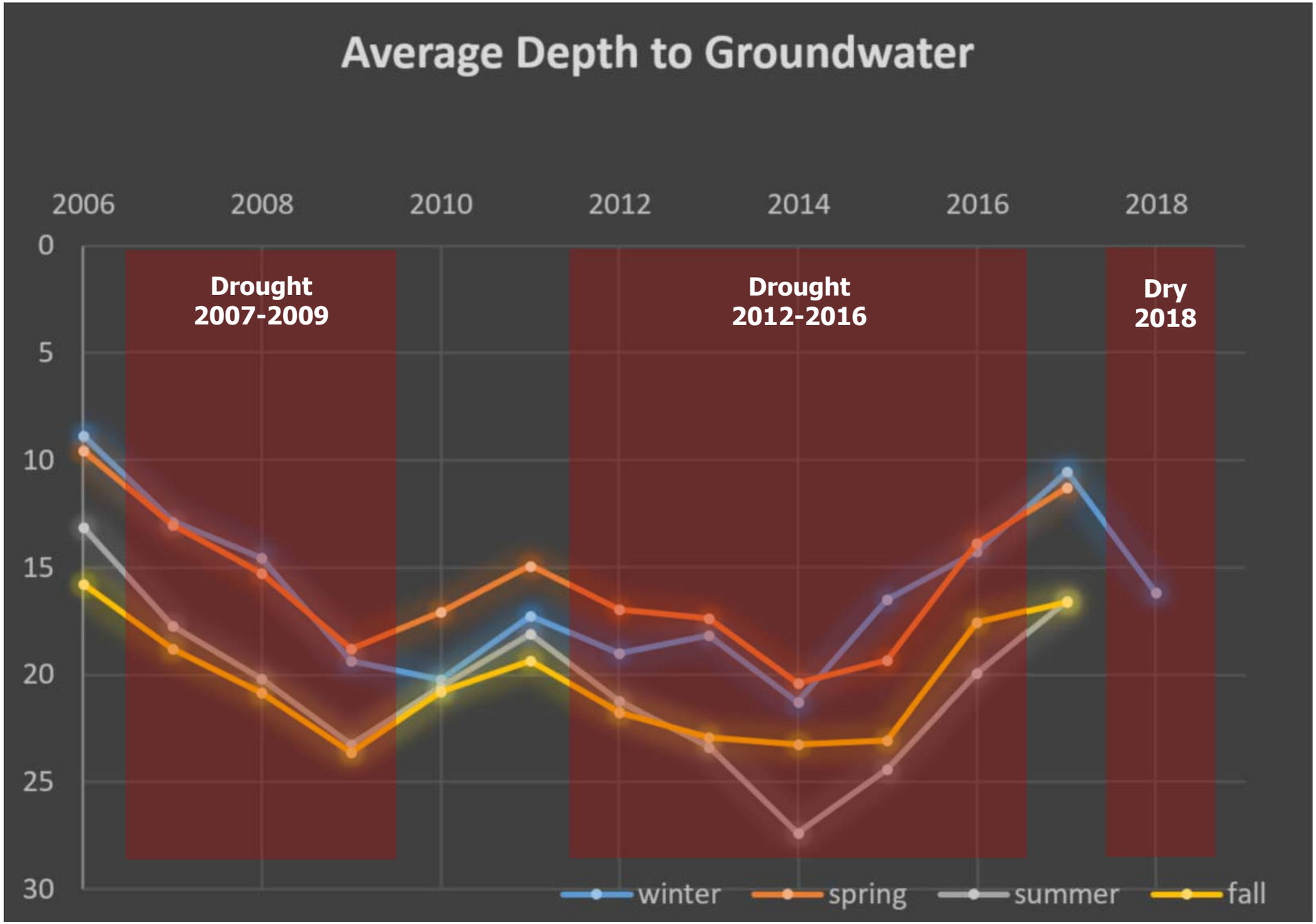

Time Series of Depth to Watertable, by Well
2, Southern Valley Floor
3, Upper Westside
4, Eastside Gulches
5, Valley Floor
6, Valley Floor
7, Southern Valley Floor
8, Eastside Gulches
9, Eastside Gulches
10, Eastside Gulches
11, Eastside Gulches
13, Eastside Gulches
14, Eastside Gulches
15, Upper Westside
16, Discharge Zone
19, Valley Floor
20, Eastside Gulches
21, Valley Floor
22, Valley Floor
24, Eastside Gulches
25, Valley Floor
27, Valley Floor
28, Valley Floor
29, Upper Westside
30, Upper Westside
33, Eastside Gulches
35, Valley Floor
36, Valley Floor
37, Eastside Gulches
38, Southern Valley Floor
39, Eastside Gulches
40, Valley Floor
43, Southern Valley Floor
44, Upper Westside
45, Eastside Gulches
49, Valley Floor
50, Eastside Gulches
Depth to Watertable [ft]
Year


Variability of Depth to Watertable, by Month, Subregion, and Water-Year Type
dry
normal/wet
Eastside Gulches
Upper Westside
Discharge Zone
Valley Floor
Southern Valley Floor
Depth to Watertable [ft]
Month
01
02
03
04
05
06
07
08
09
10
11
12
thicker violin shape indicates more data at that level and vice versa for thinner shape
Dots represent measured data points (depth to watertable)
75th Percentile
50th Percentile
25th Percentile


Variability of Depth to Watertable, by Month, Subregion, and Water-Year Type
Year_Type
dry
normal/wet
Eastside Gulches
Upper Westside
Discharge Zone
Valley Floor
Southern Valley Floor
Depth to Watertable [ft]
Month
01
02
03
04
05
06
07
08
09
10
11
12
Dots represent measured data points (depth to watertable)
outlier
75th Percentile
50th Percentile
25th Percentile


Variability of Depth to Watertable, by Year, Subregion, and Season
winter
spring
summer
fall
Eastside Gulches
Upper Westside
Discharge Zone
Valley Floor
Southern Valley Floor
Depth to Watertable [ft]
Year
thicker violin shape indicates more data at that level and vice versa for thinner shape
Dots represent measured data points (depth to watertable)
75th Percentile
50th Percentile
25th Percentile


Variability of Depth to Watertable, by Month, Subregion, and Water-Year Type
Season
winter
spring
summer
fall
Eastside Gulches
Upper Westside
Discharge Zone
Valley Floor
Southern Valley Floor
Depth to Watertable [ft]
Year
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Dots represent measured data points (depth to watertable)
outlier
75th Percentile
50th Percentile
25th Percentile


Average Depth to Groundwater
2006
2008
2010
2012
2014
2016
2018
0
5
10
15
20
25
30
Drought
2007-2009
Drought
2012-2016
Dry
2018
winter
spring
summer
fall

Summary

- Deepest water levels occur in wells around the margin of Scott Valley: on the upper westside and in the eastside gulches.
- Water levels in the discharge zone and on the valley floor are generally shallow
- Typical irrigation season is from April/May (depending on rains) until Labor Day
- Water levels are highest in winter (Jan – Mar) or spring (April – June), often around May, after the irrigation season begins
- Water levels may continue to drop after Labor Day, through September and October
- From 2006 until 2012, and in 2017, lowest water levels were observed in the fall (Oct – Dec), slightly lower than summer (Jul – Sep).
- During the 2012 – 2016 drought, average summer water levels were as deep or deeper (2014 – 2016) than average fall water levels
- Groundwater level recovery often begins around New Year
- Water levels decrease year-over-year during drought, especially in the summer/fall; with the exception of 2015 and 2016
- 2009 had lower water levels in many regions than 2014, but 2014 had lowest summer water levels overall
- In 2015 and 2016, water levels recovered from their low in 2014, climbing steadily into and through wet year 2017.
- Water levels in dry years tend to be lower than in average/wet years
- Differences in water levels between dry years and average/wet years are most pronounced in wells on the valley floor, between June and November
- Of the 13 water years during which monitoring took place, only 4 were average or wet years (2006, 2010, 2011, 2017), while 9 were dry years
- There is no evidence of long-term water groundwater overdraft.
- The program was discontinued after winter 2018 due to lack of funding. Efforts are underway to develop a new monitoring program.