

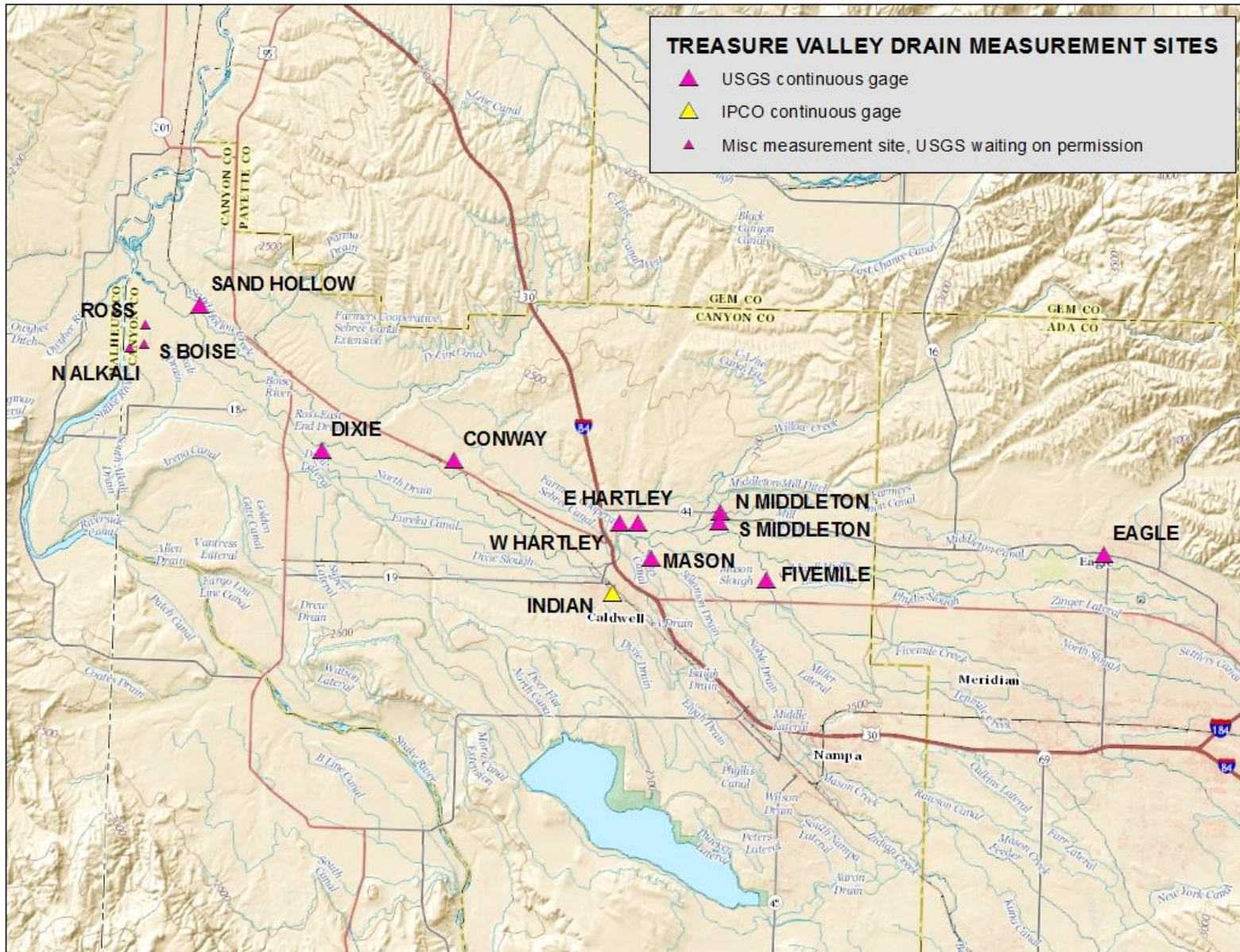
Preliminary drain discharge targets for the Treasure Valley Groundwater-Flow Model

Presented to the Treasure Valley Modeling Technical Advisory
Committee

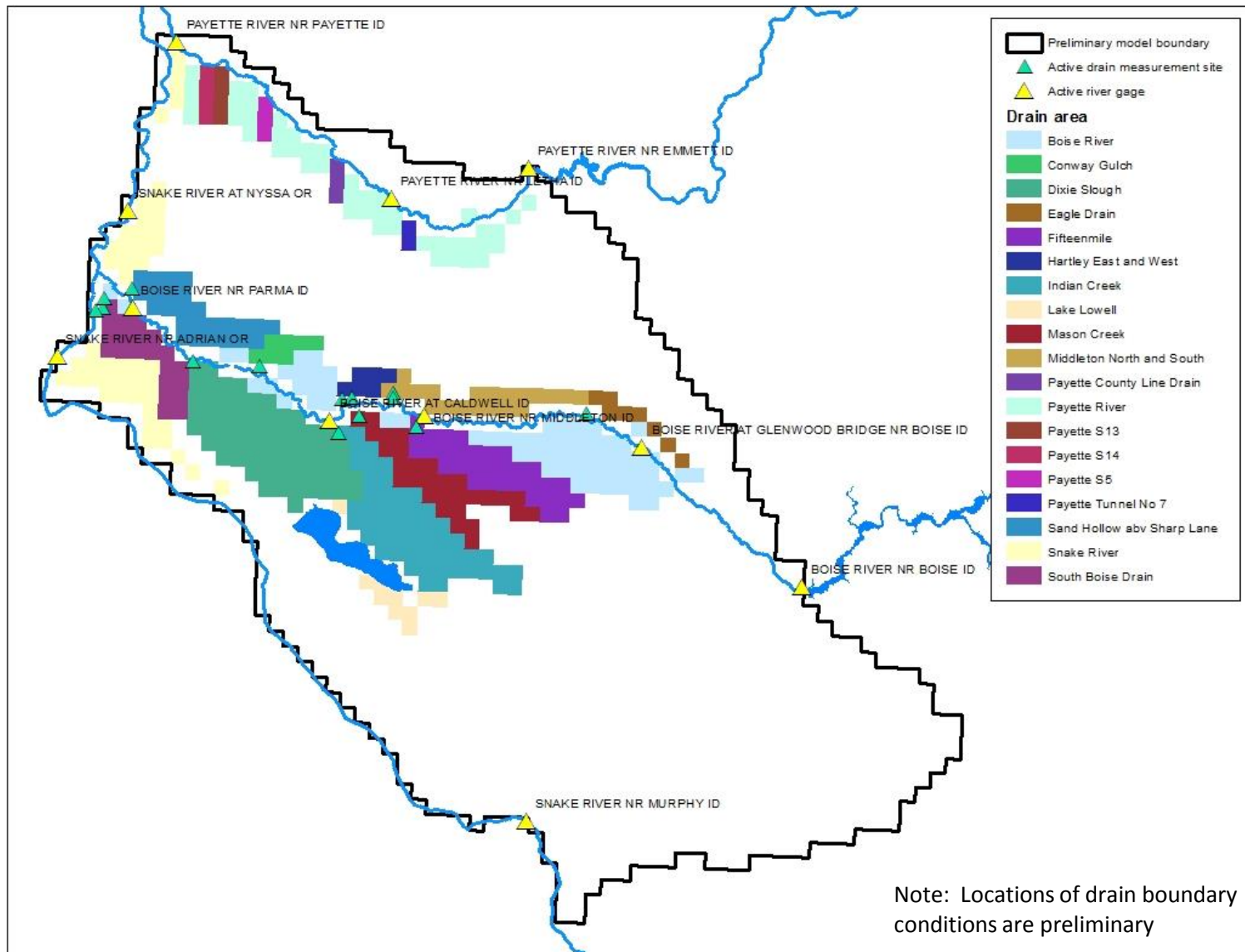
Jennifer Sukow, P.E., P.G.

September 7, 2017

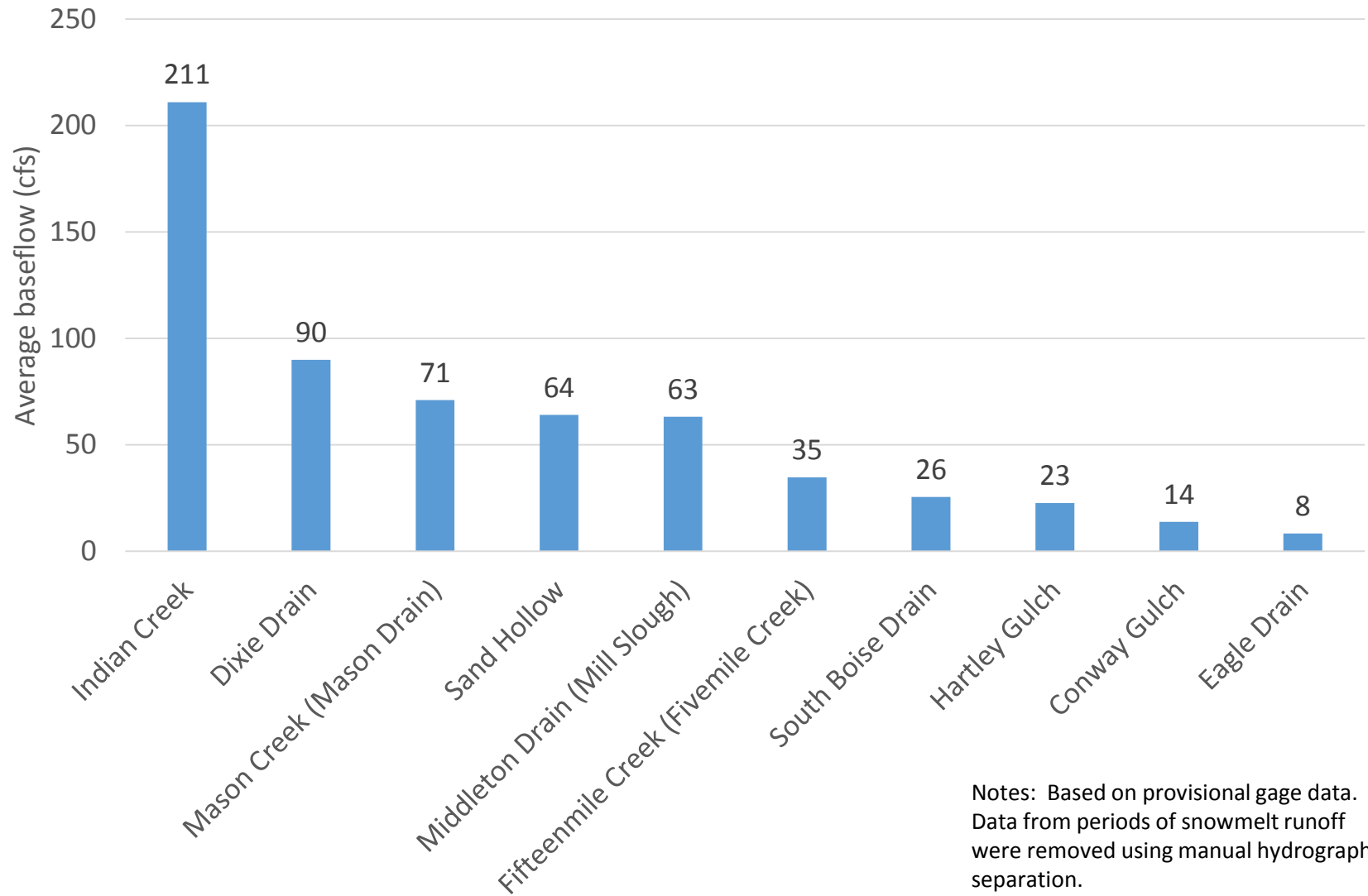
Treasure Valley drain measurement sites



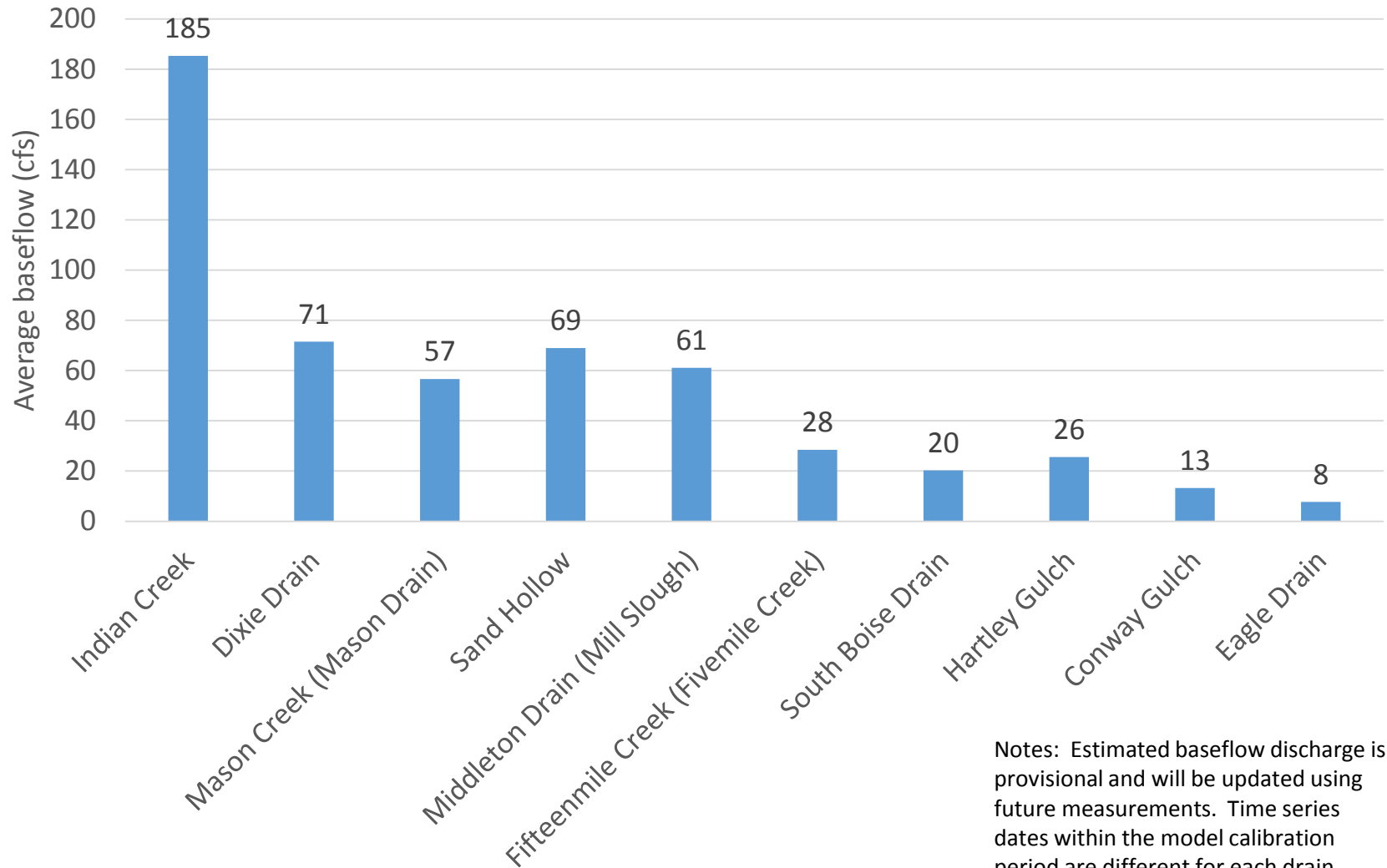
Drainage areas for groundwater discharge



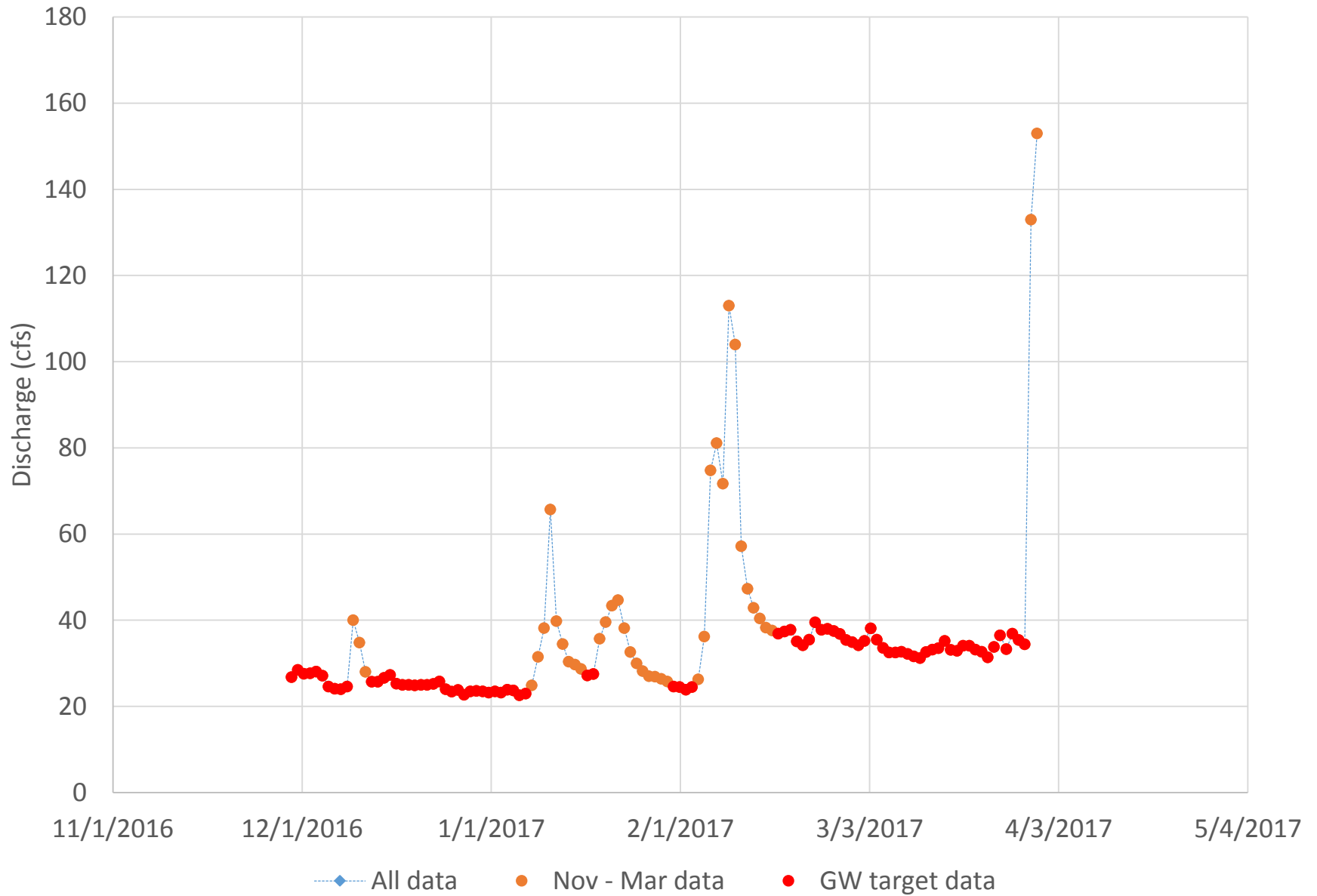
Baseflow discharge to measured Treasure Valley drains (11/2016 - 3/2017)



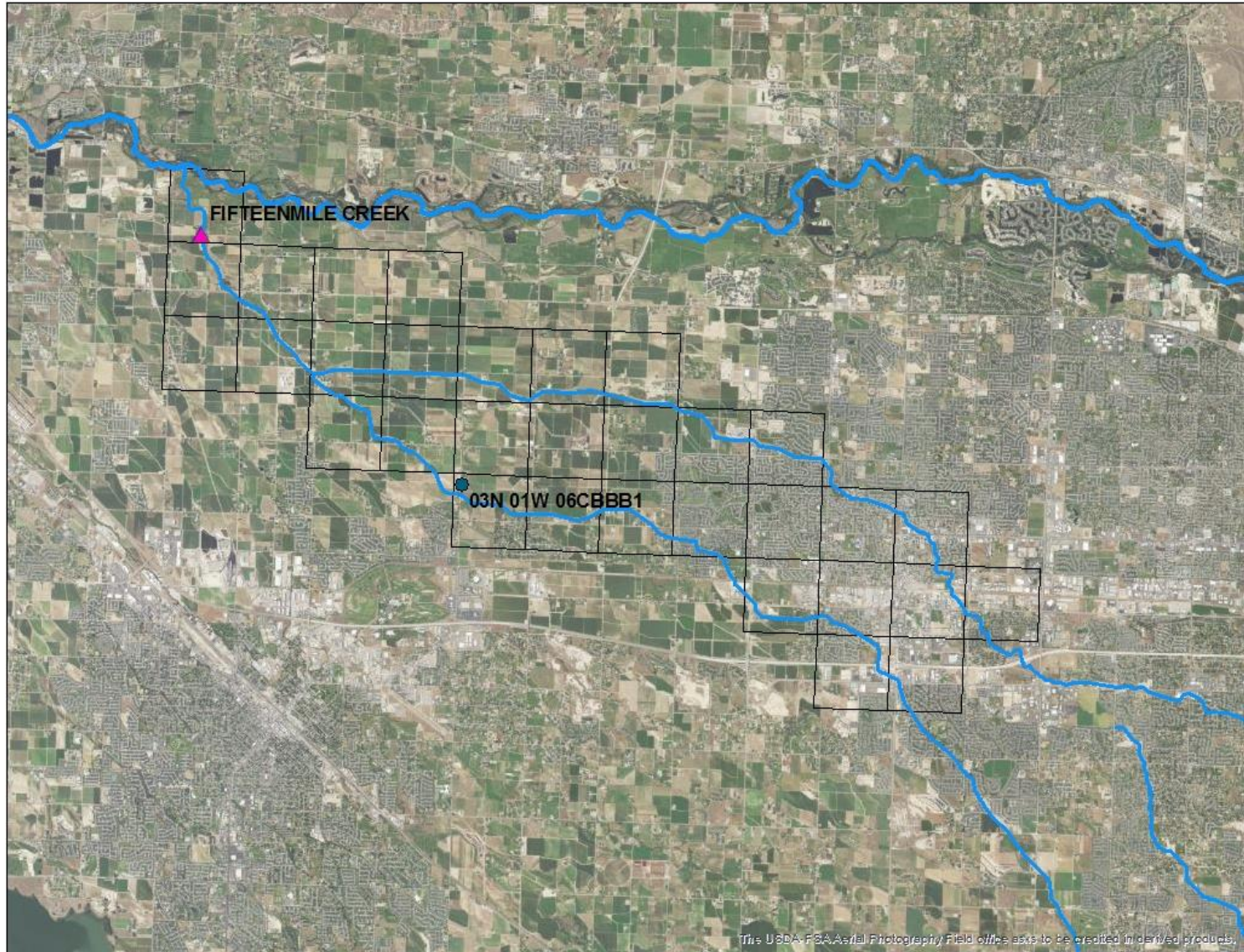
Estimated and measured baseflow discharge to Treasure Valley drains during model calibration period



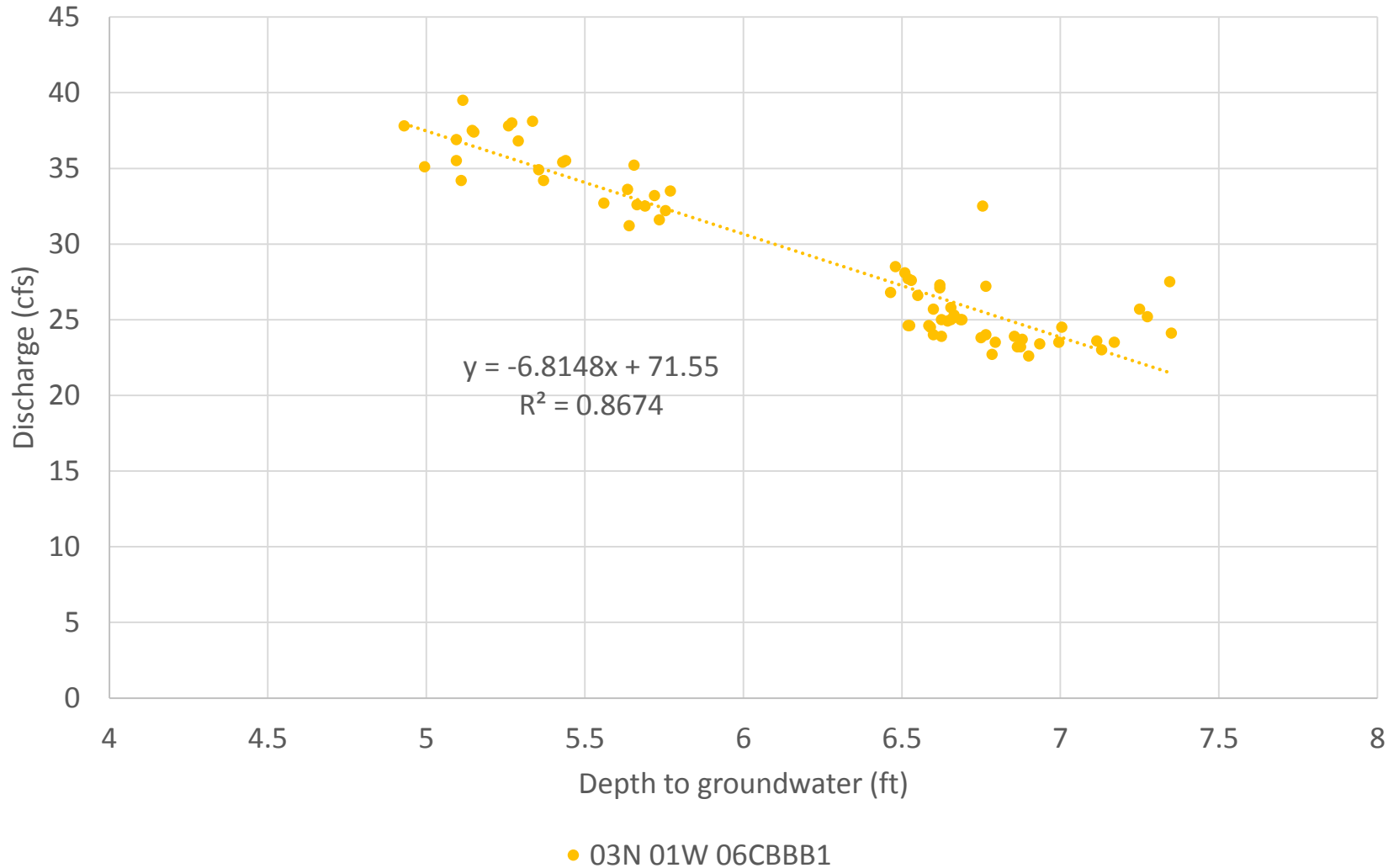
Measured discharge of Fifteenmile Creek



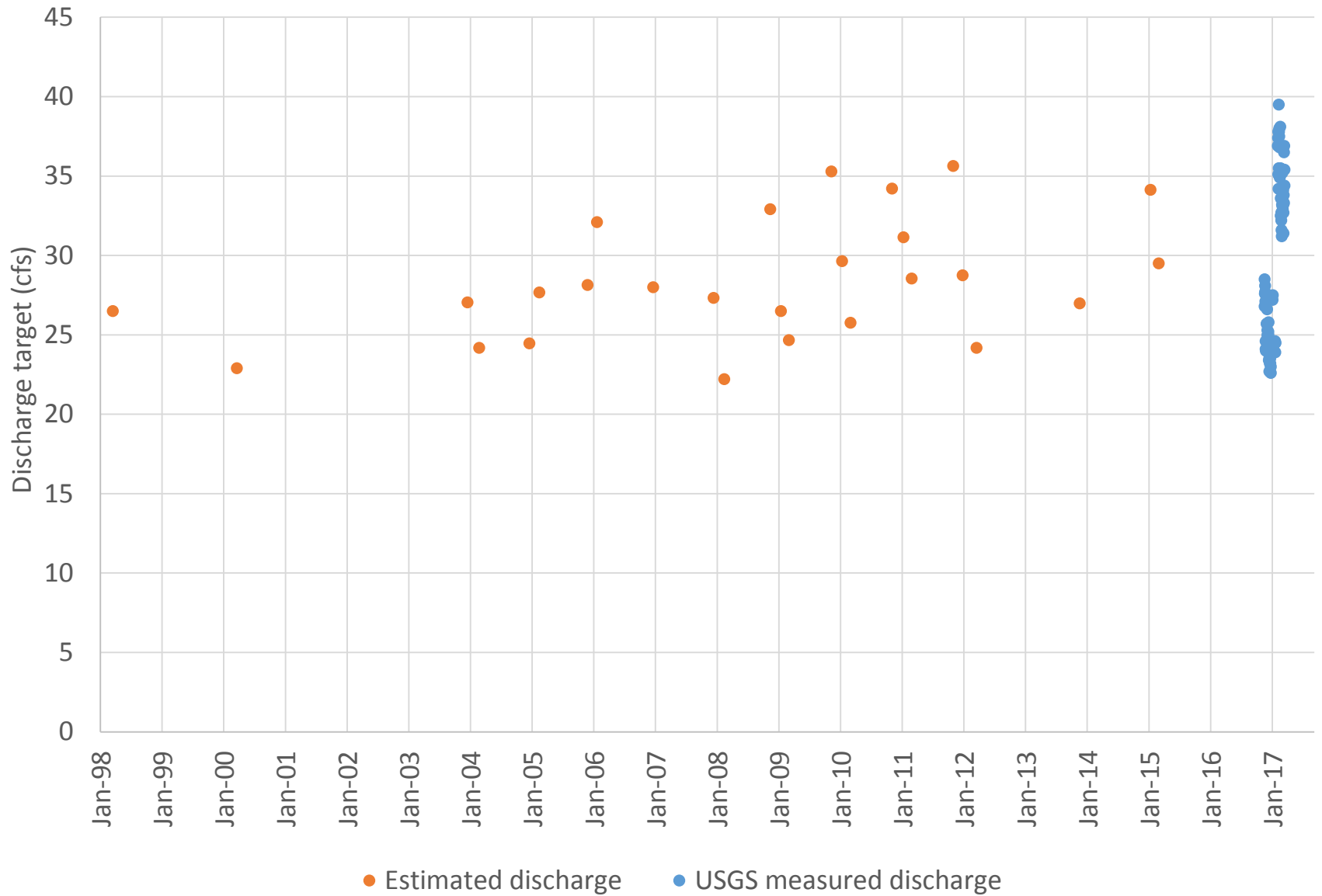
Correlation of Fifteenmile Creek baseflow with depth to groundwater



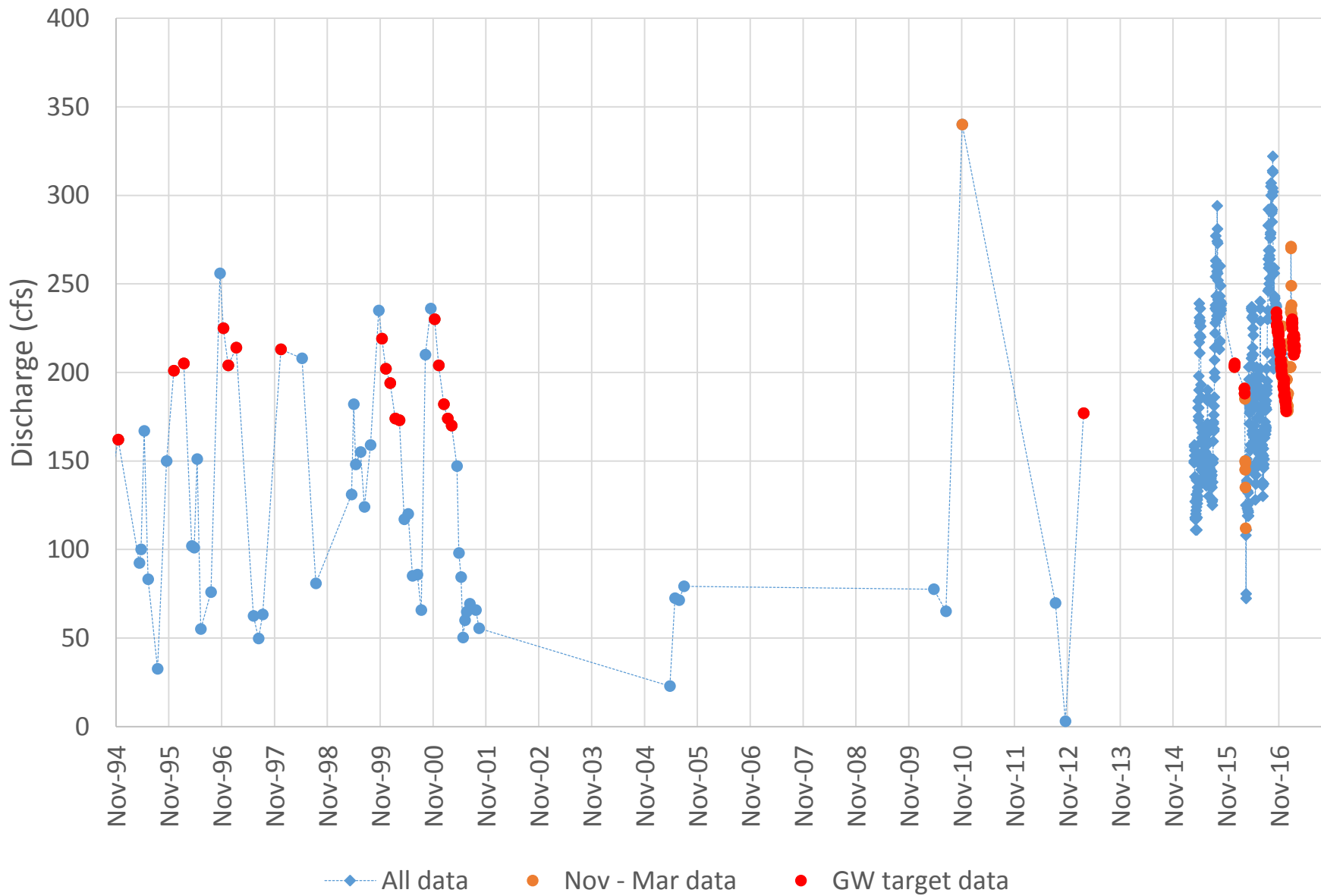
Fifteenmile Creek baseflow correlated with depth to groundwater



Measured and estimated aquifer discharge to Fifteenmile Creek



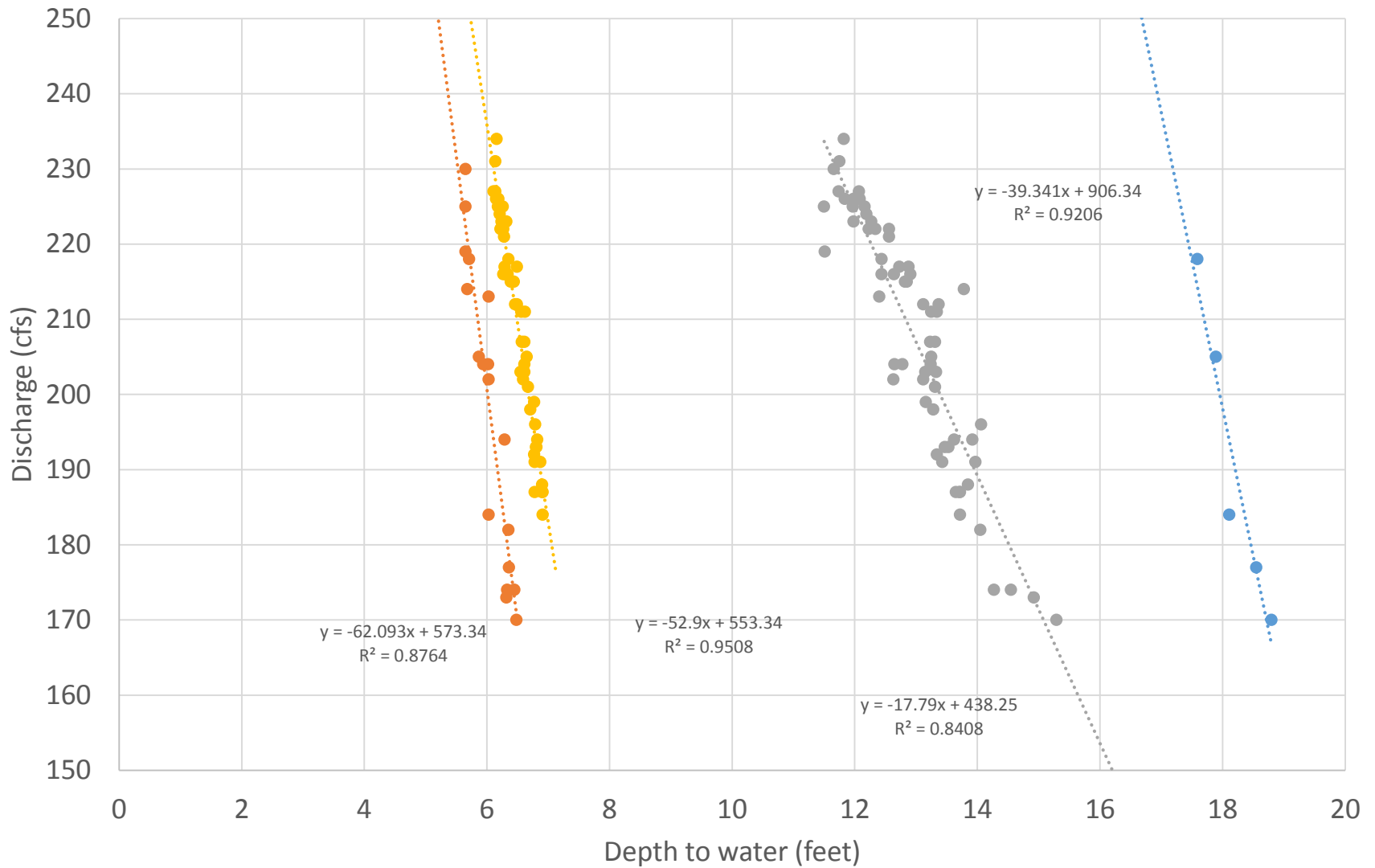
Measured discharge of Indian Creek



Correlation of Indian Creek baseflow with depth to groundwater



Indian Creek baseflow correlated with depth to groundwater



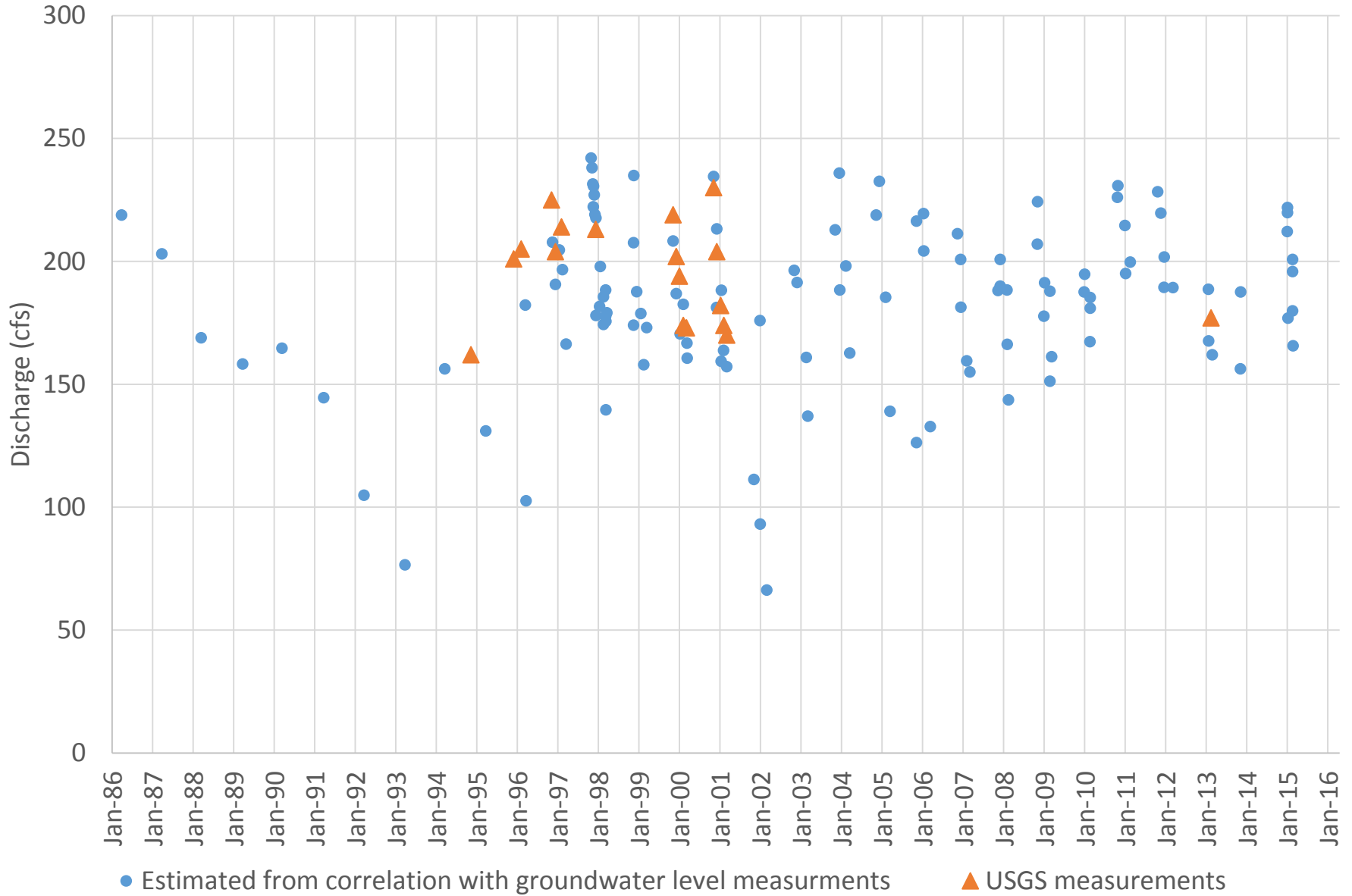
● 03N 02W 06ACD1 ft

● 03N 02W 08BCCC1

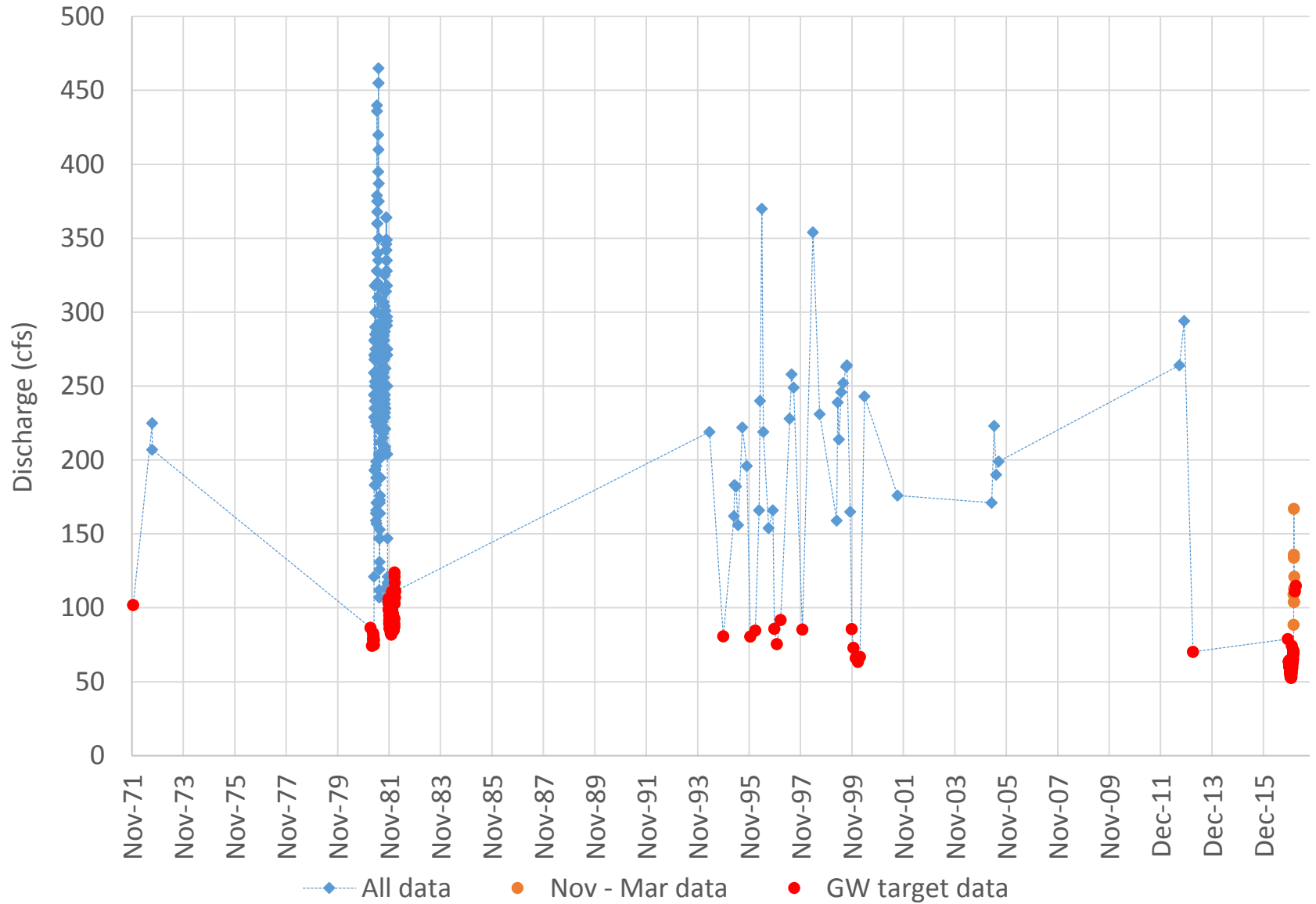
● 04N 03W 27CBAD1

● 02N 01W 07BBC1

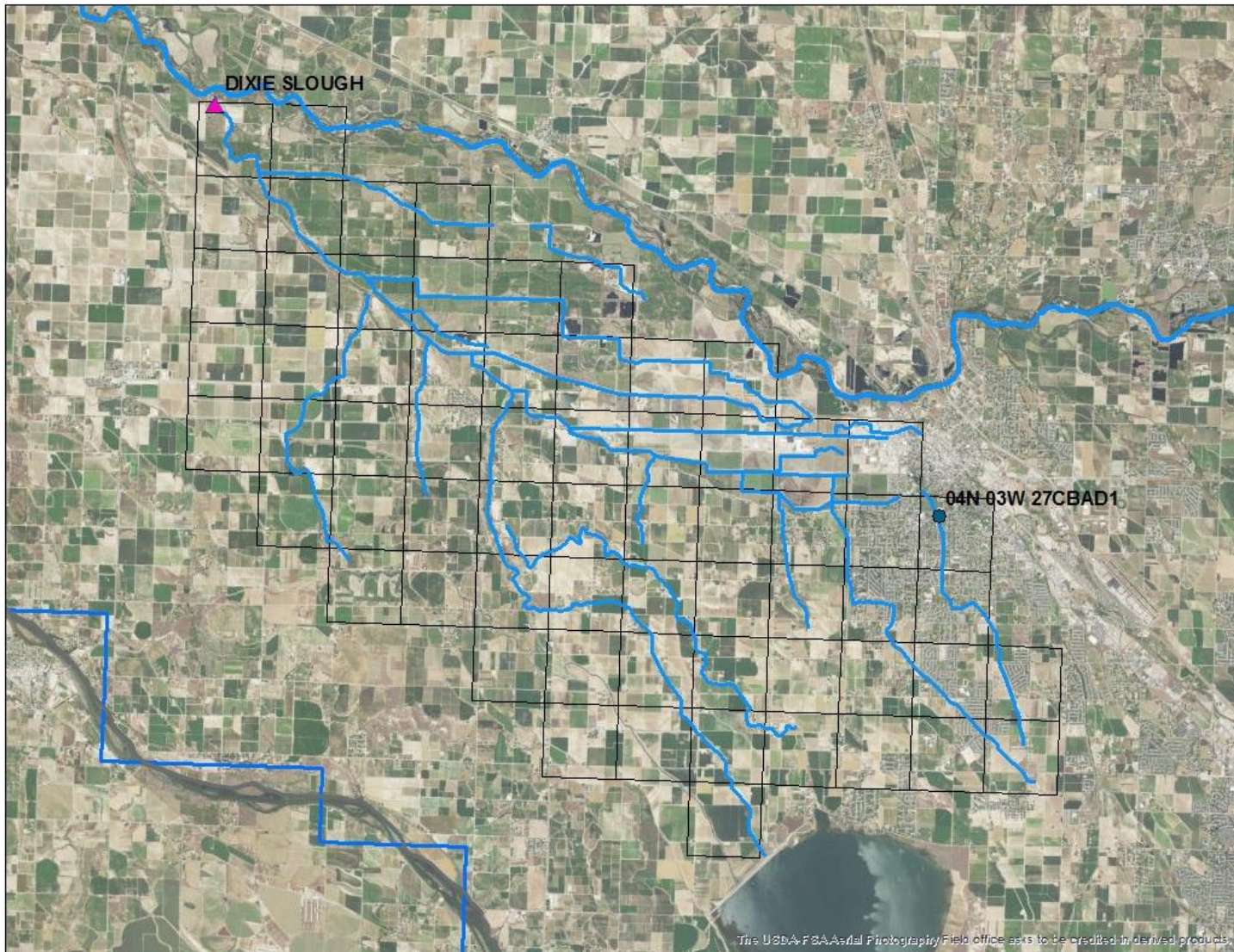
Measured and estimated aquifer discharge to Indian Creek



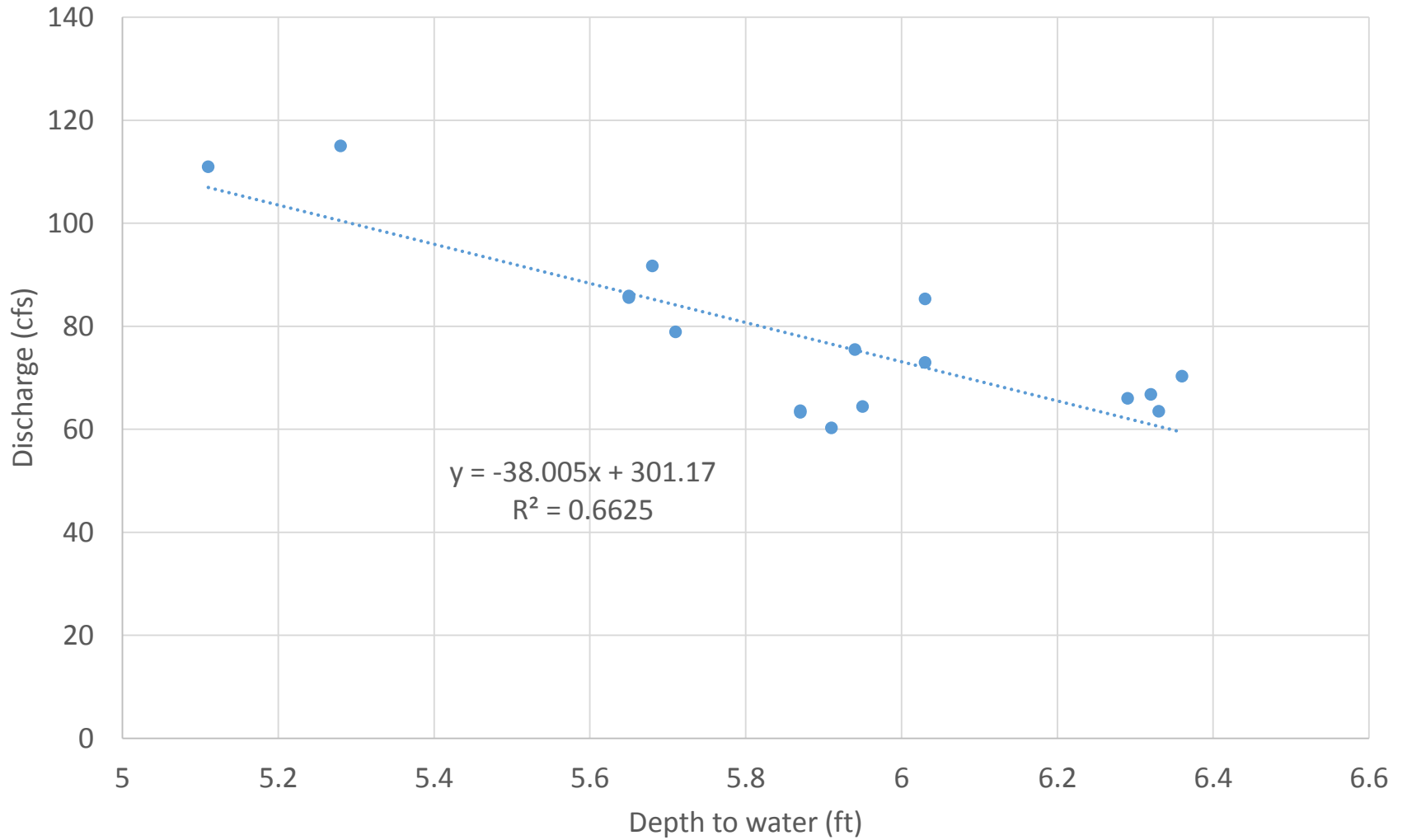
Measured discharge of Dixie Slough



Correlation of Dixie Slough baseflow with depth to groundwater

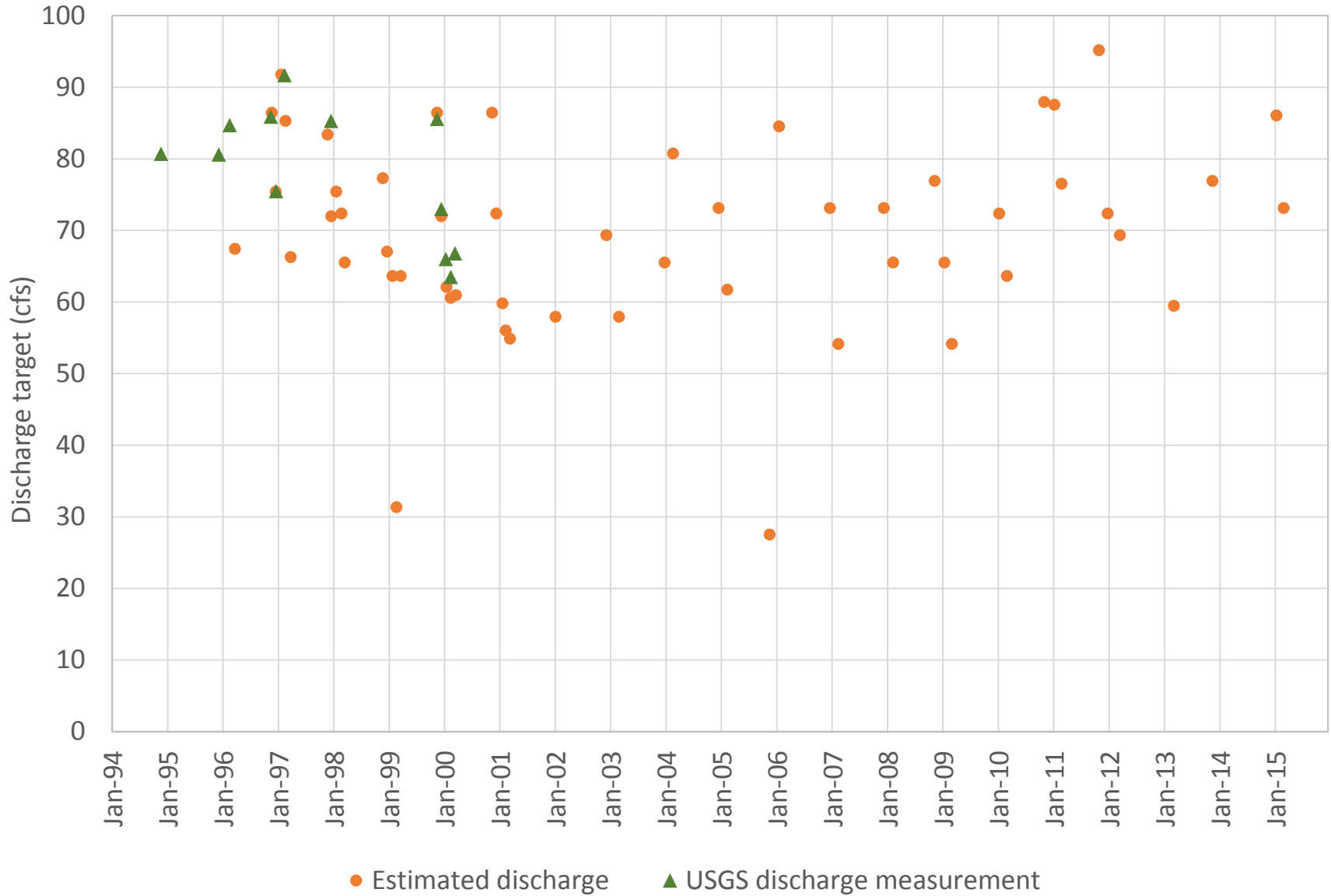


Dixie Slough baseflow correlated with depth to groundwater

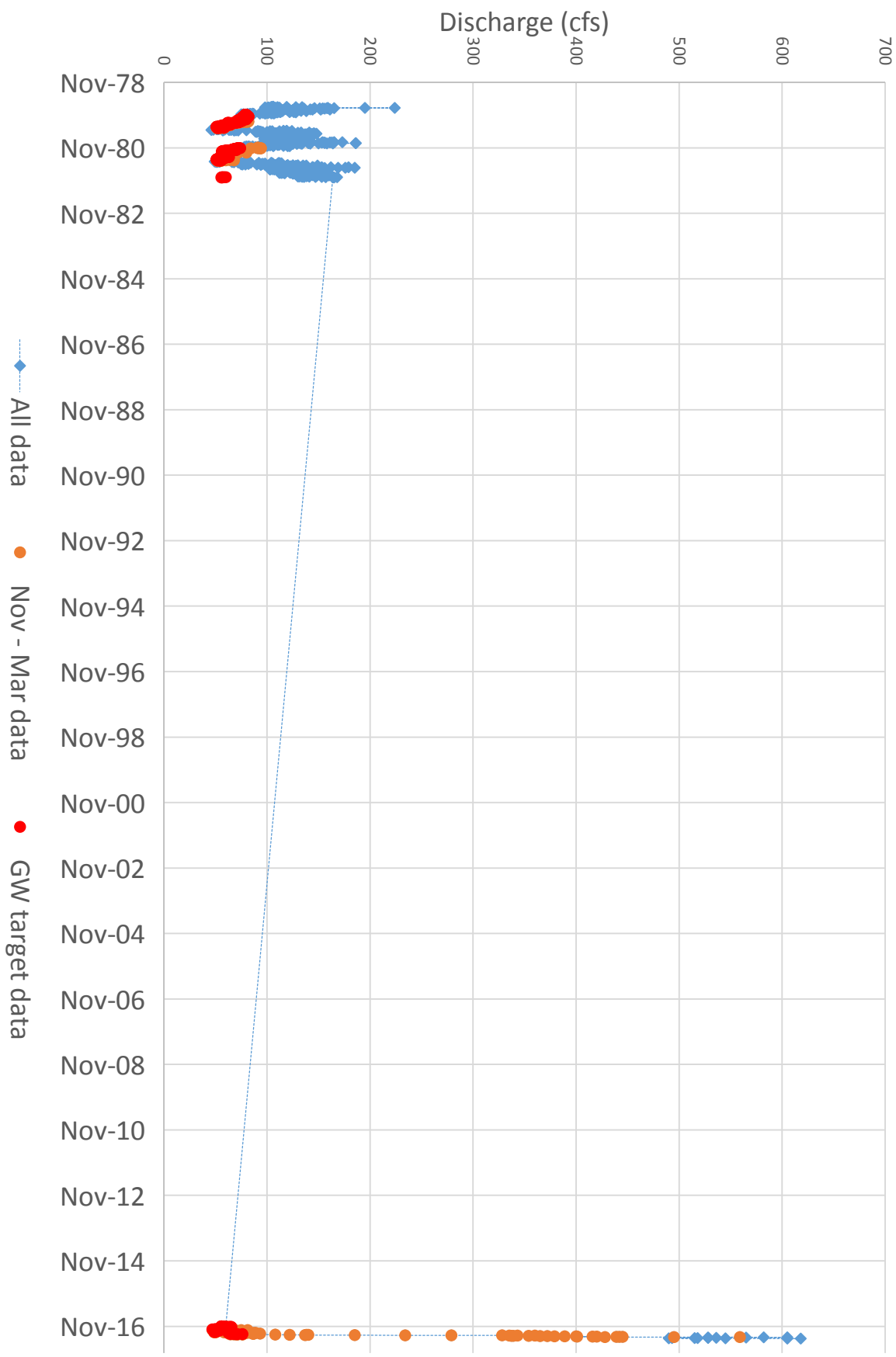


● 04N 03W 27CBAD1

Measured and estimated aquifer discharge to Dixie Slough



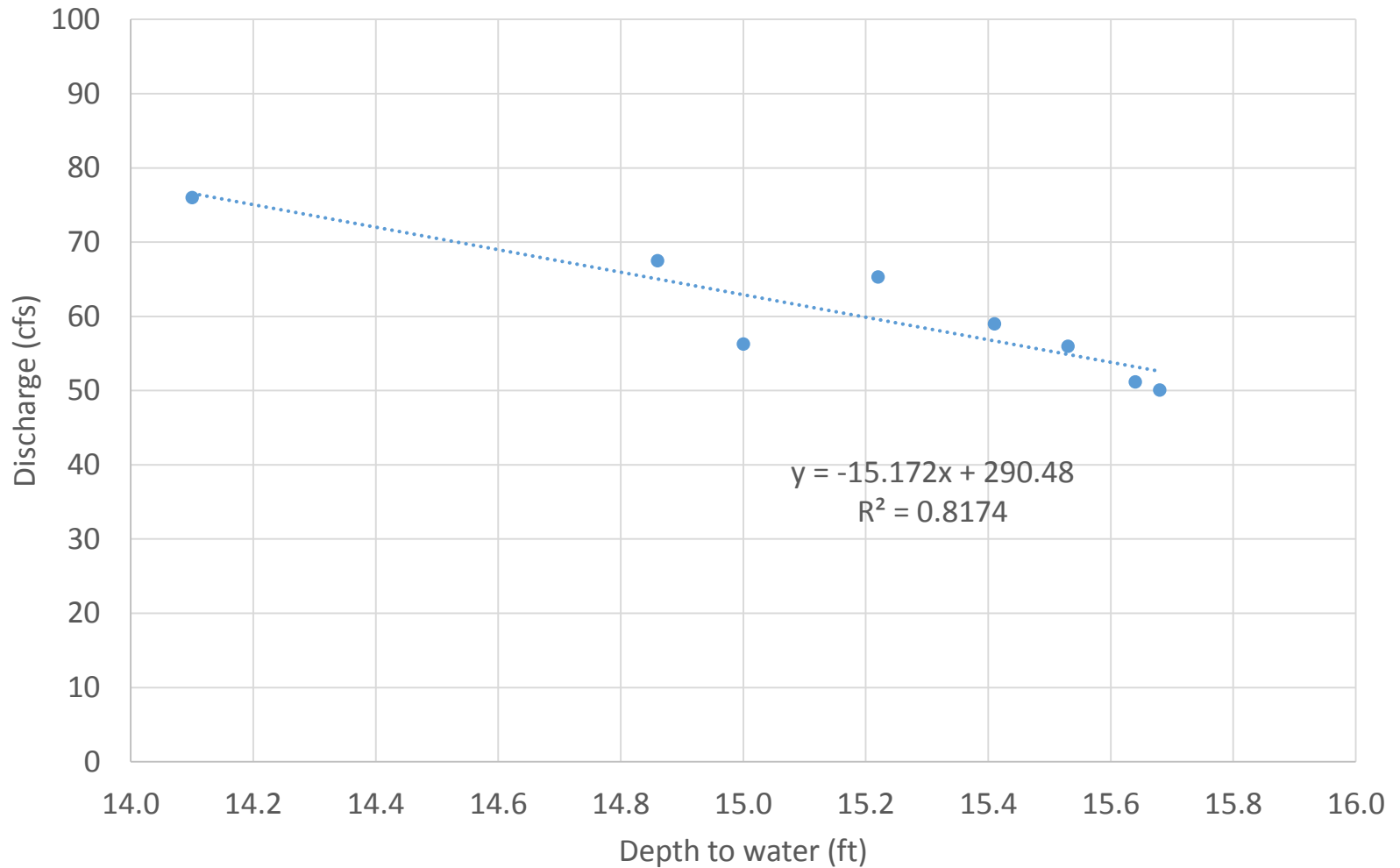
Measured discharge of Sand Hollow Creek at Sharp Lane



Correlation of Sand Hollow baseflow with depth to groundwater

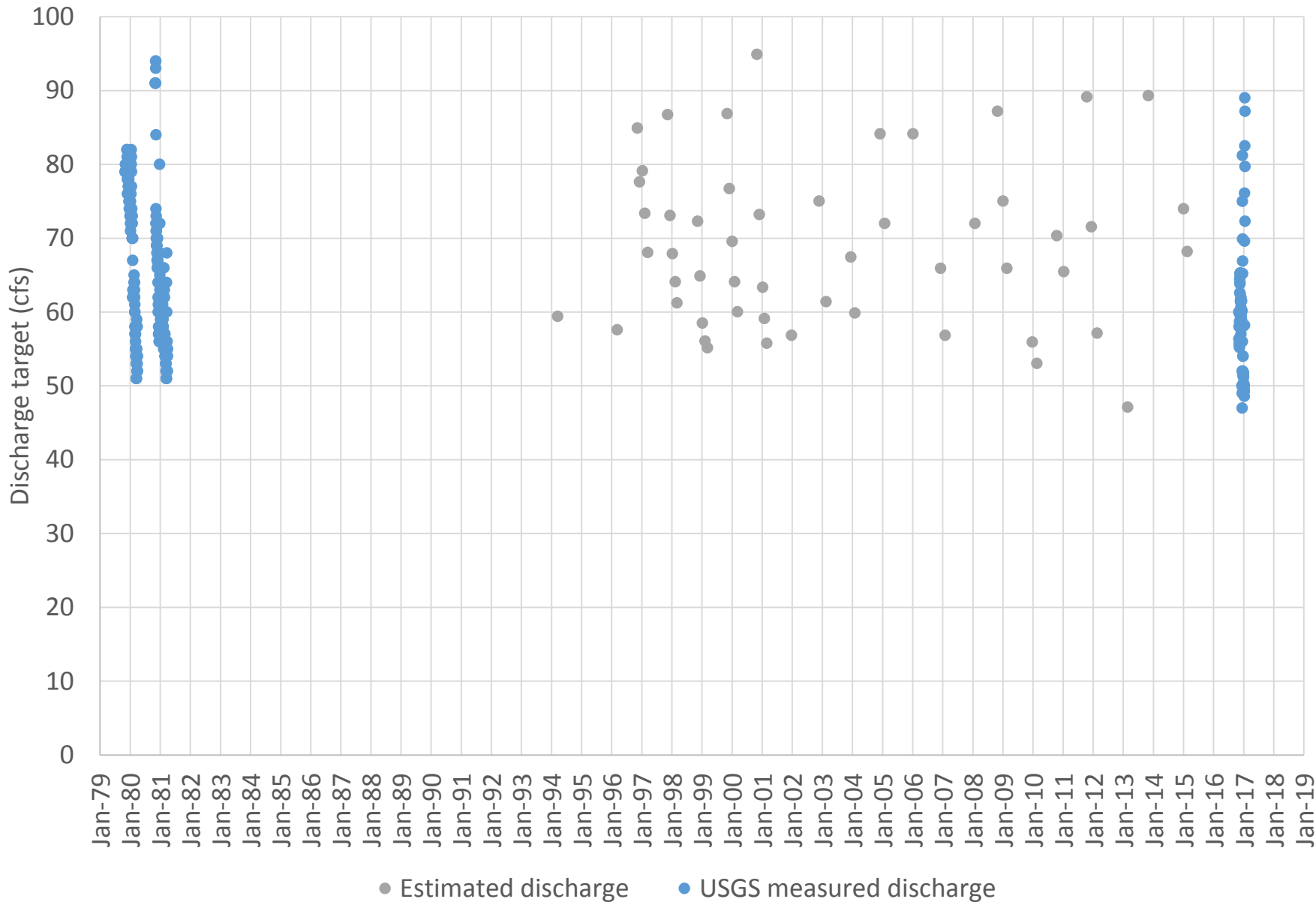


Sand Hollow baseflow correlated with depth to groundwater

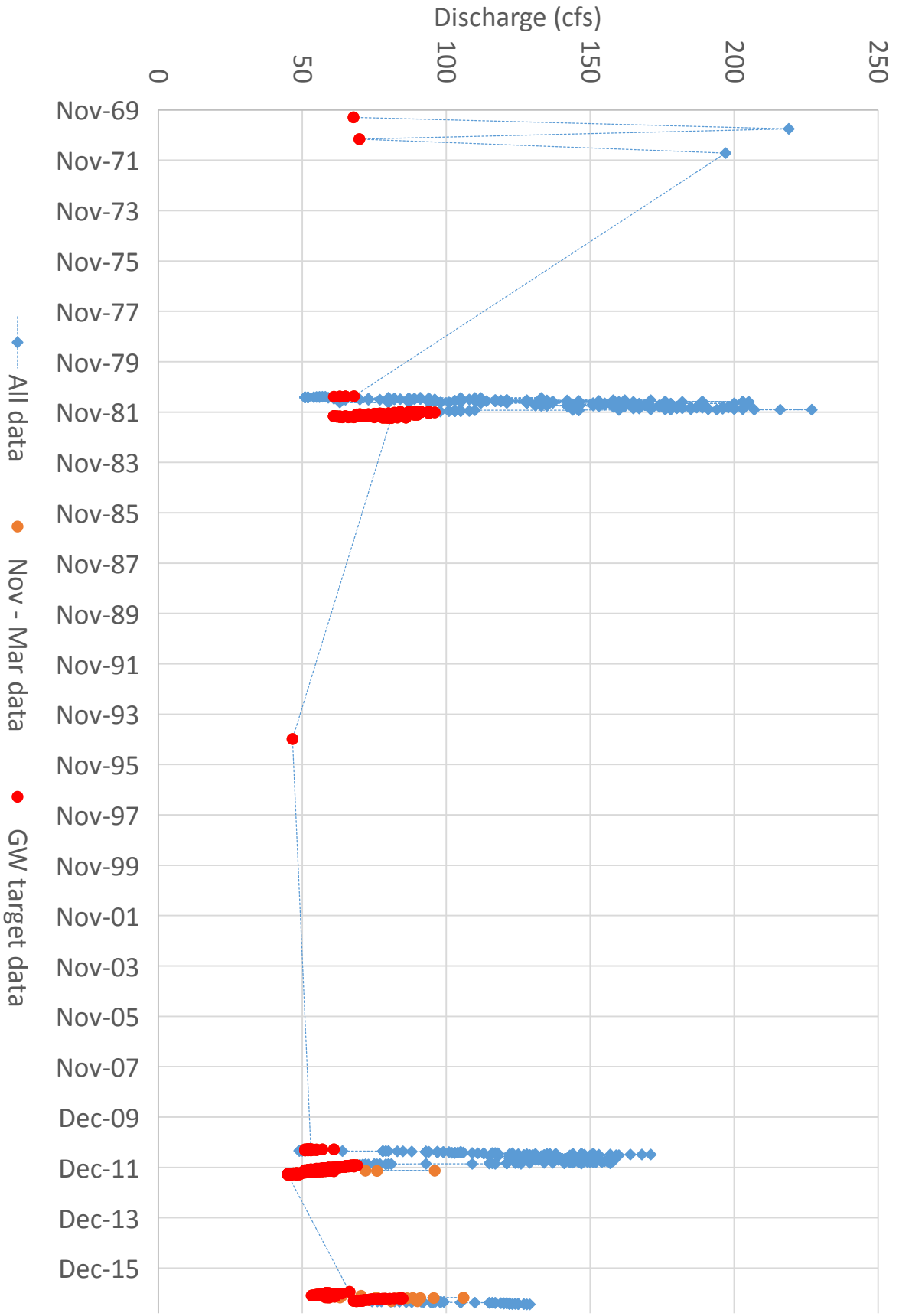


● 05N05W 04BCC1

Measured and estimated aquifer discharge to Sand Hollow Creek



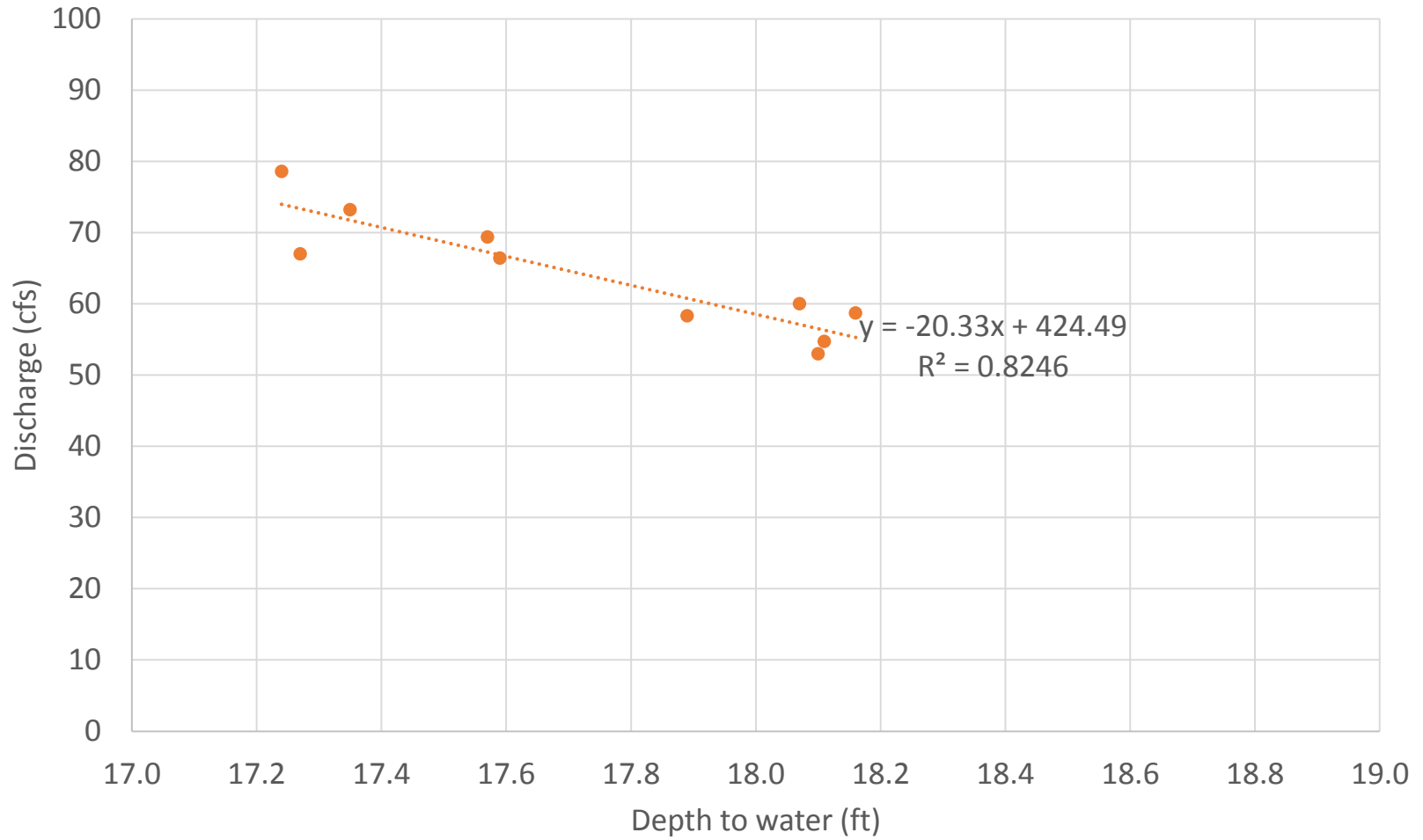
Measured discharge of Mason Creek



Correlation of Mason Creek baseflow with depth to groundwater

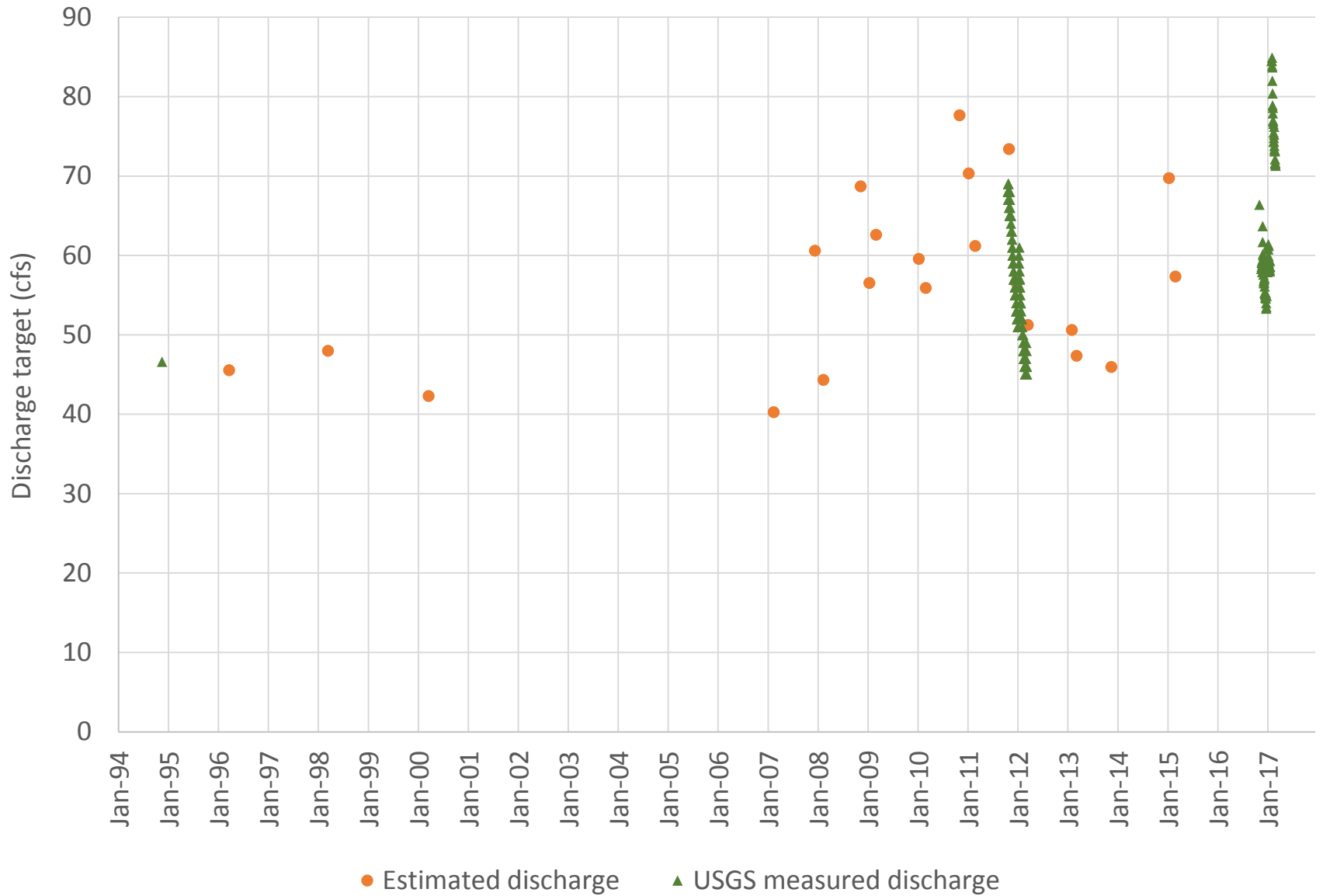


Mason Creek baseflow correlated with depth to groundwater

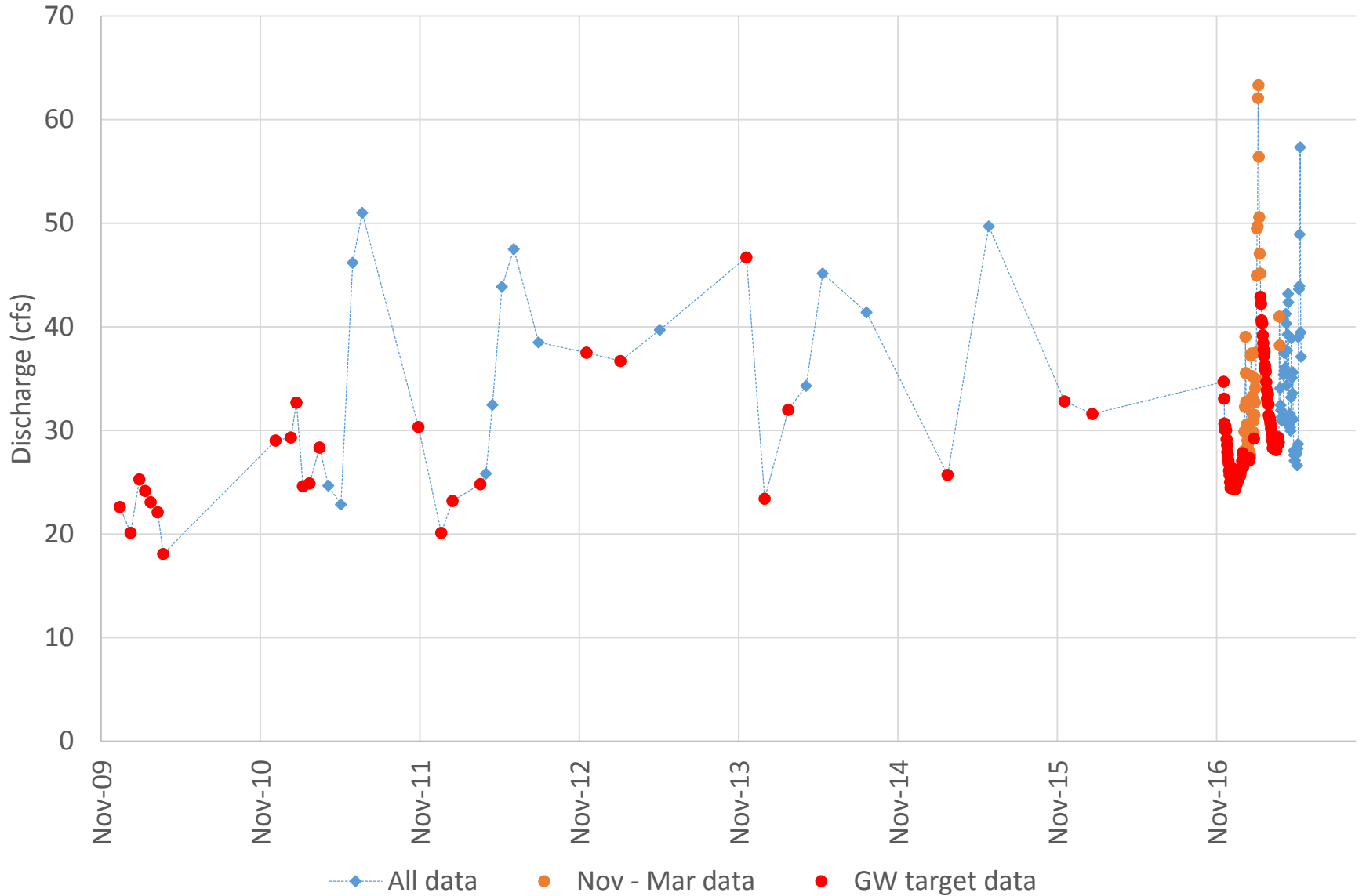


● 03N 02W 06ACD1

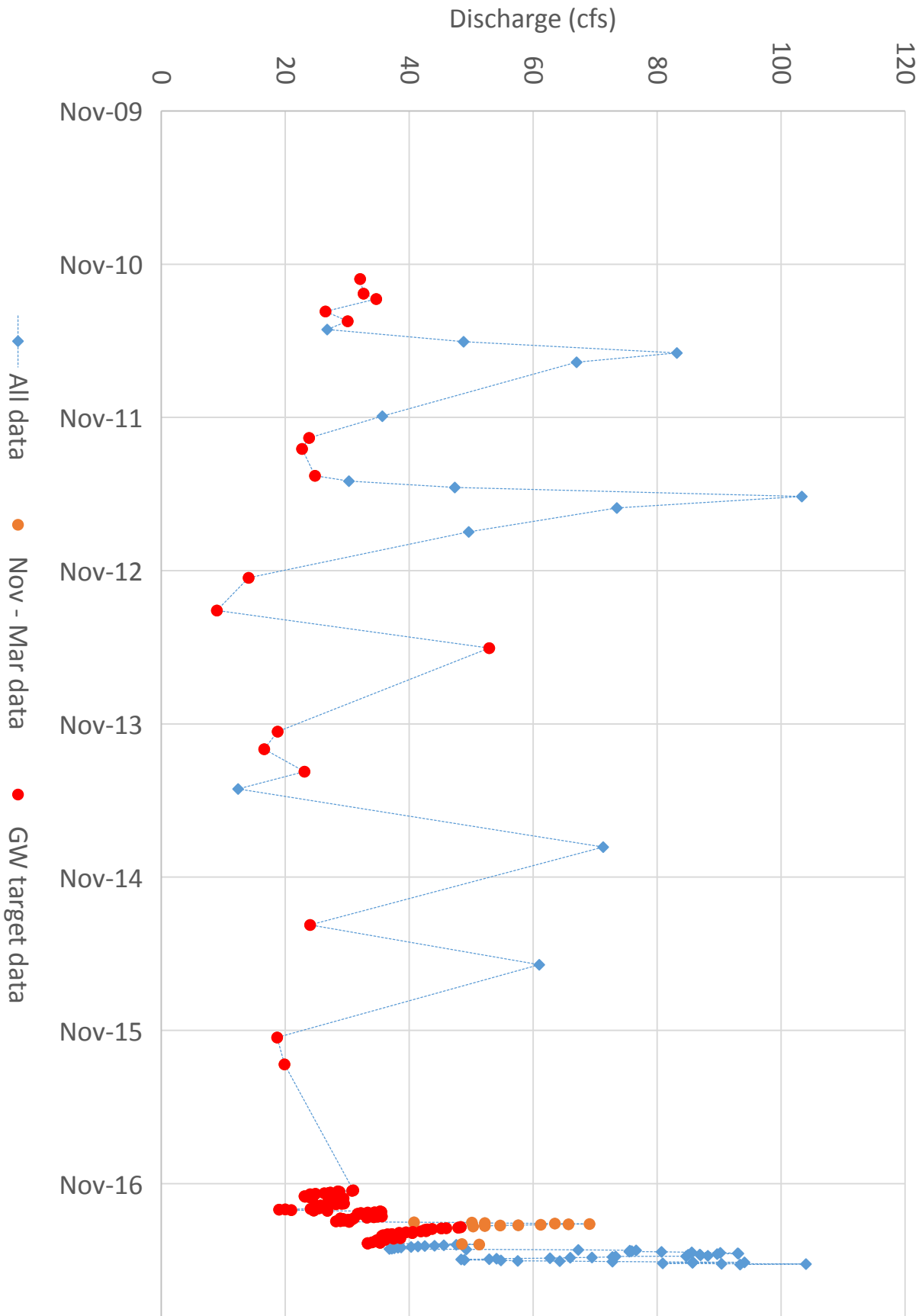
Measured and estimated aquifer discharge to Mason Creek



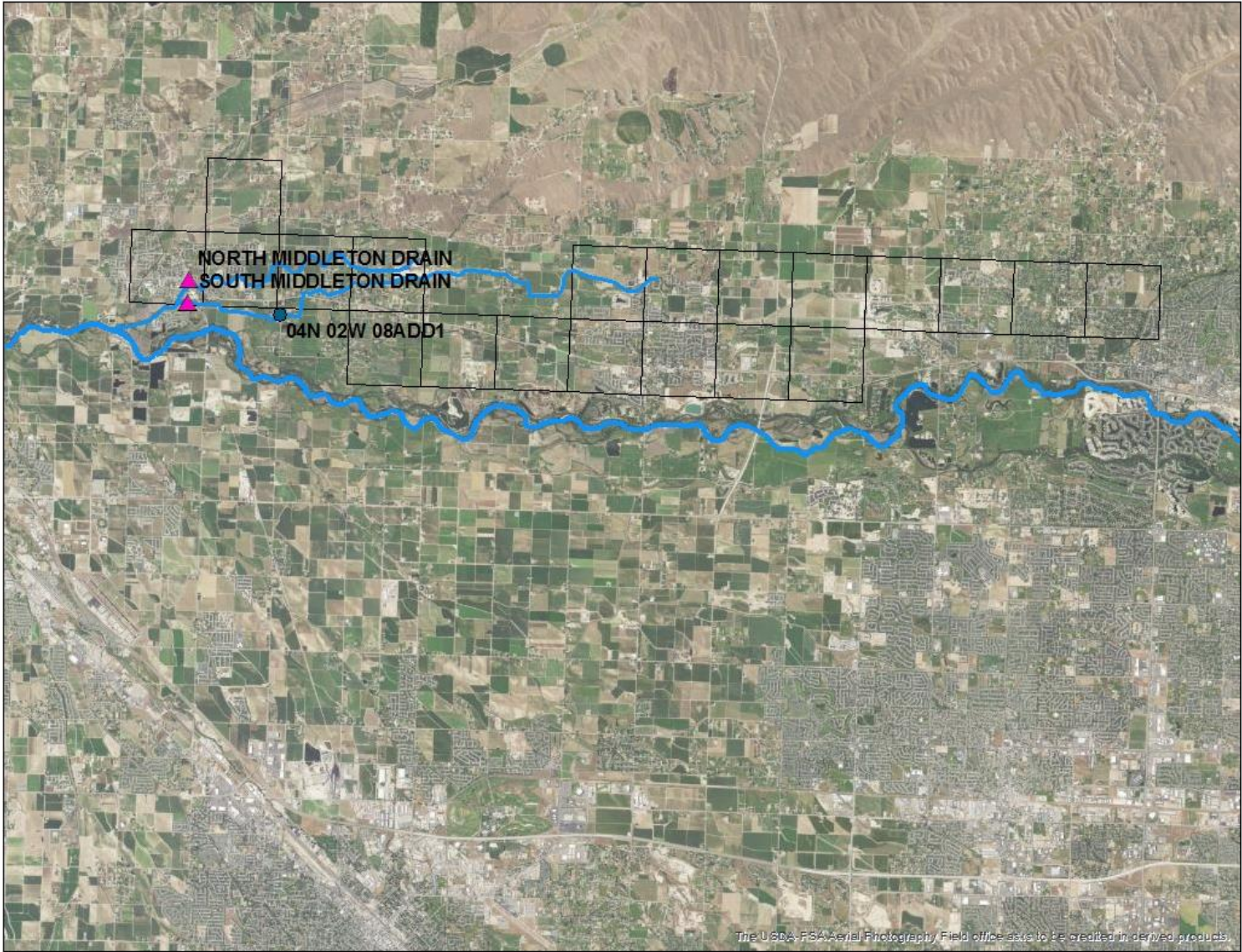
Measured discharge of North Middleton Drain



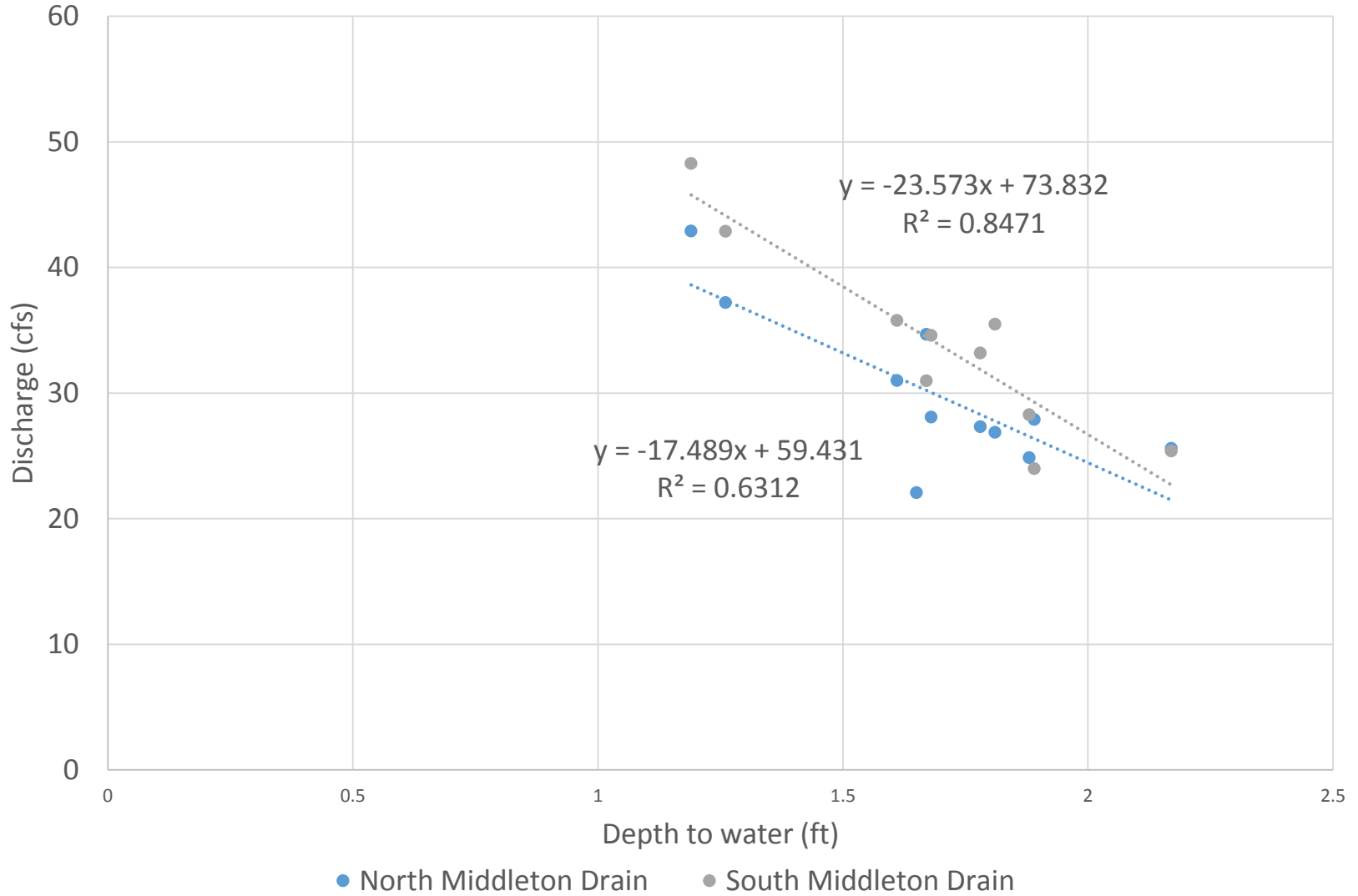
Measured discharge of South Middleton Drain



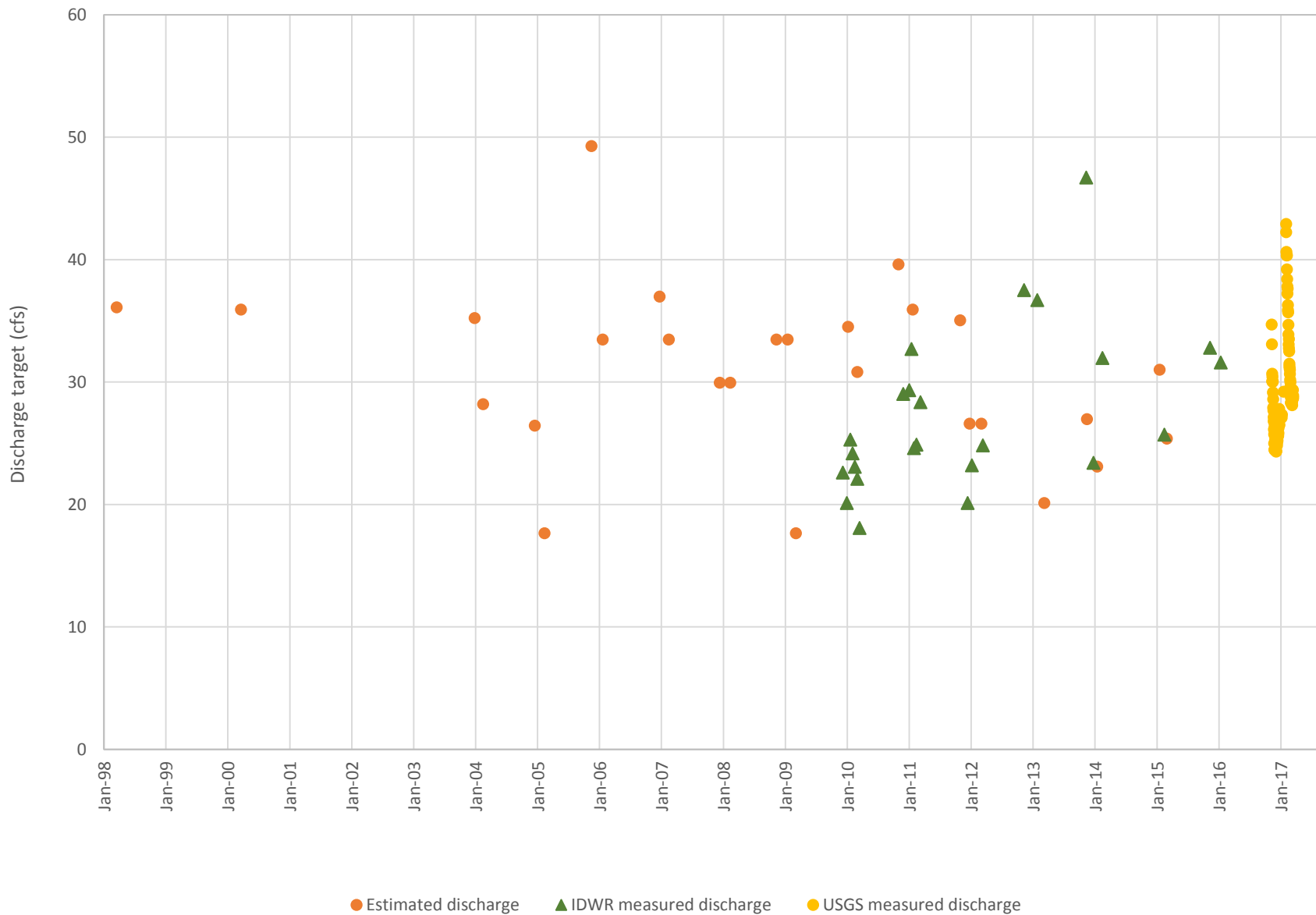
Correlation of Middleton Drain baseflow with depth to groundwater



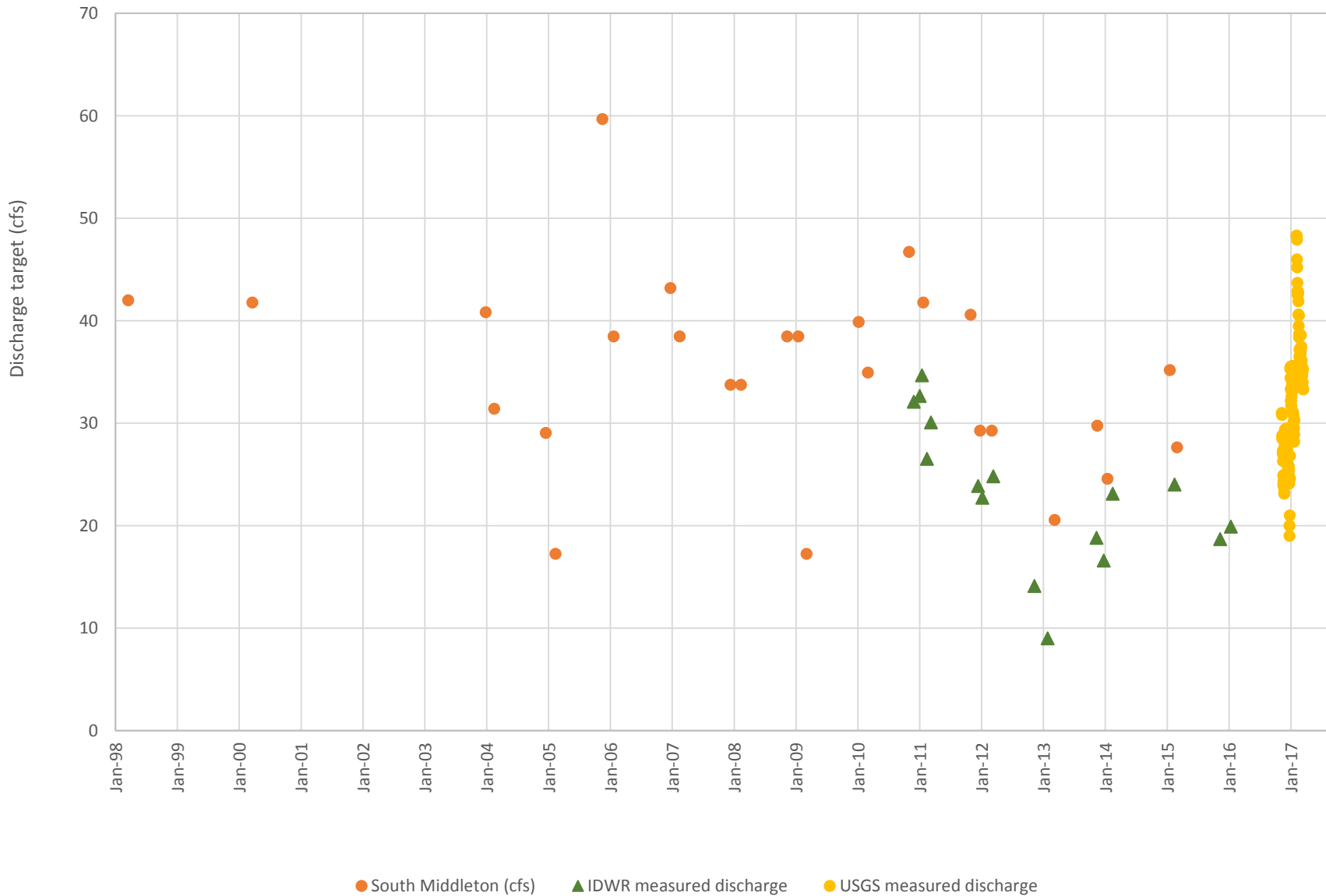
Middleton Drain baseflow correlated with depth to groundwater



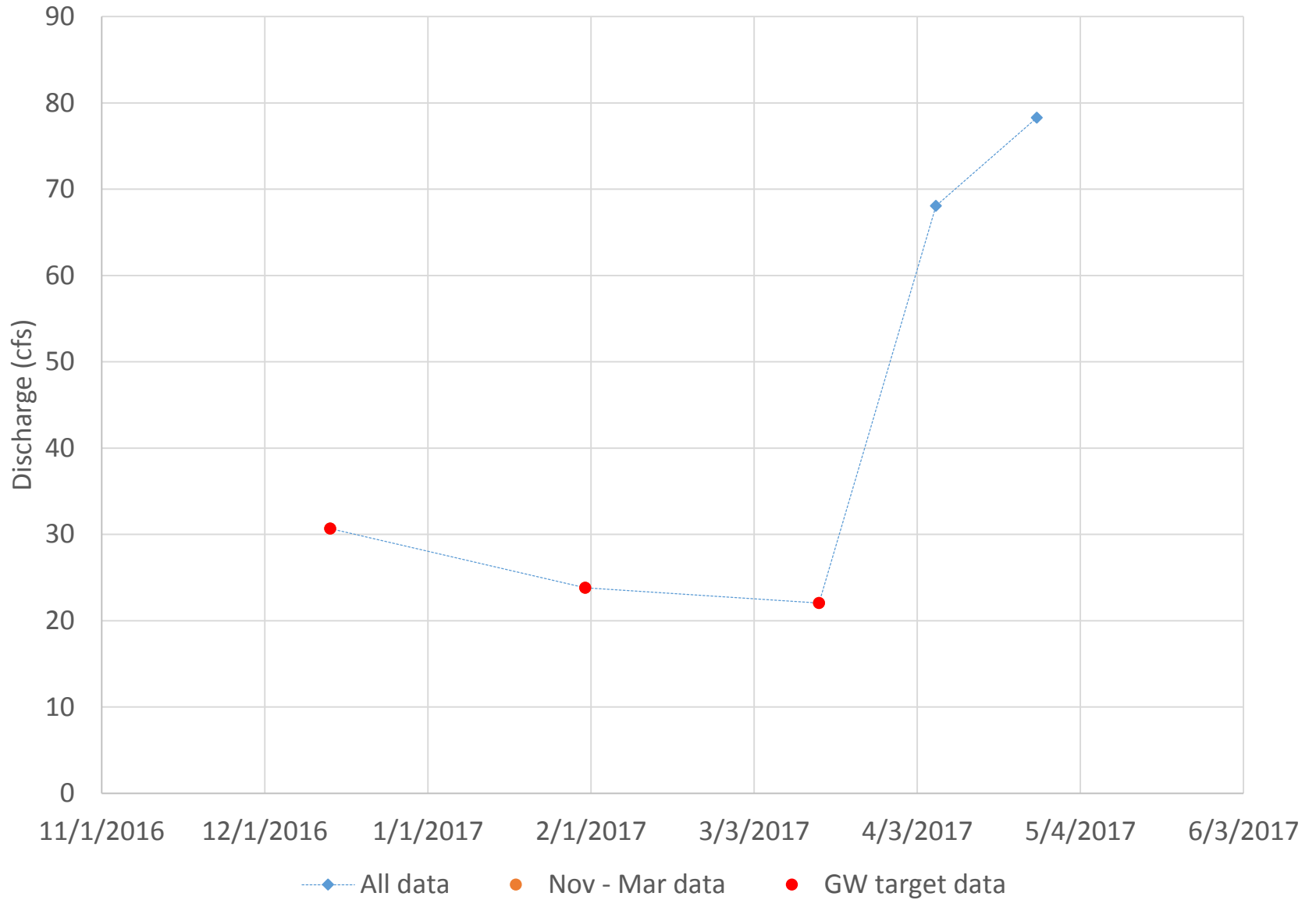
Measured and estimated aquifer discharge to North Middleton Drain



Measured and estimated aquifer discharge to South Middleton Drain



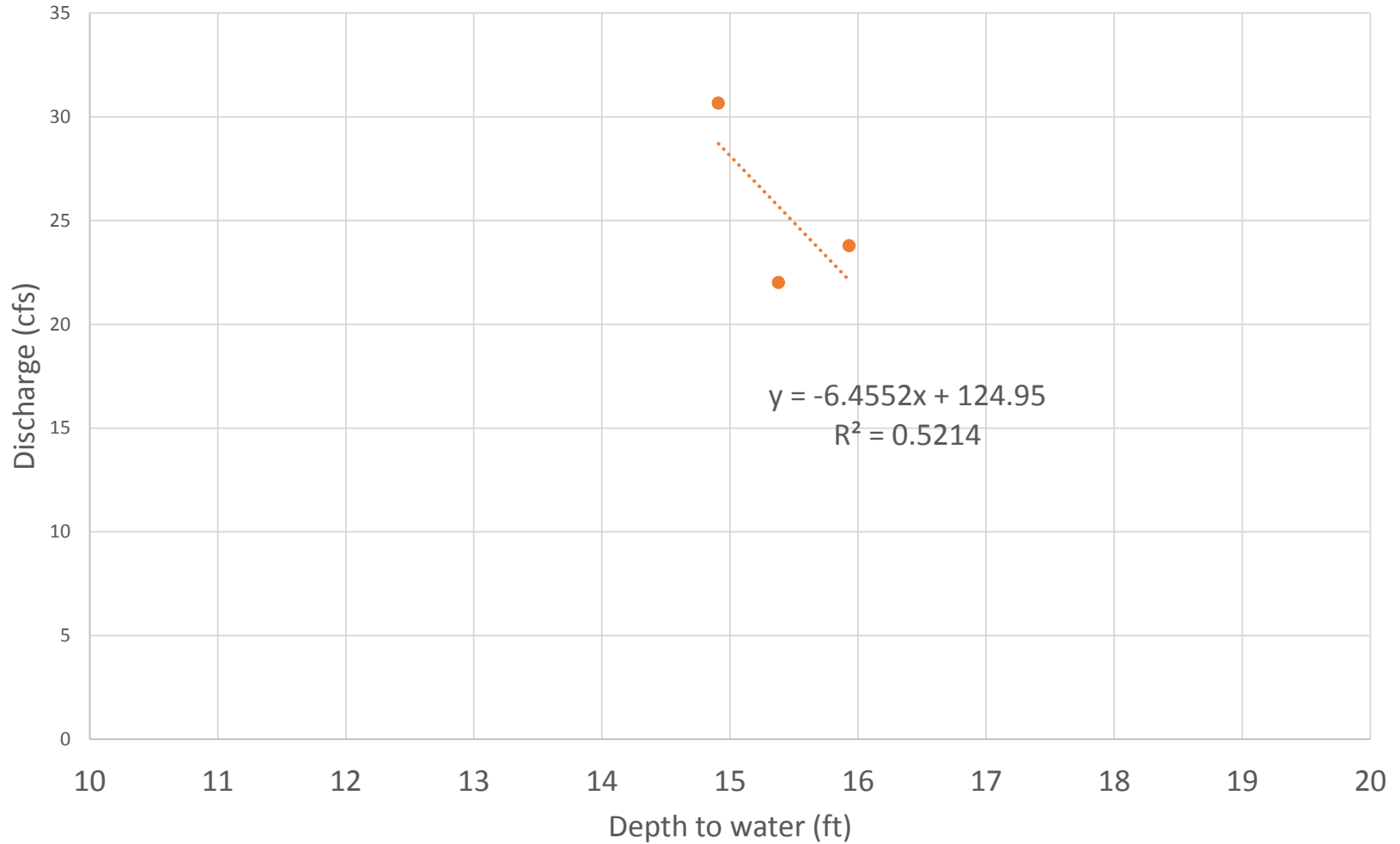
Measured discharge of South Boise Drain



Correlation of South Boise Drain baseflow with depth to groundwater

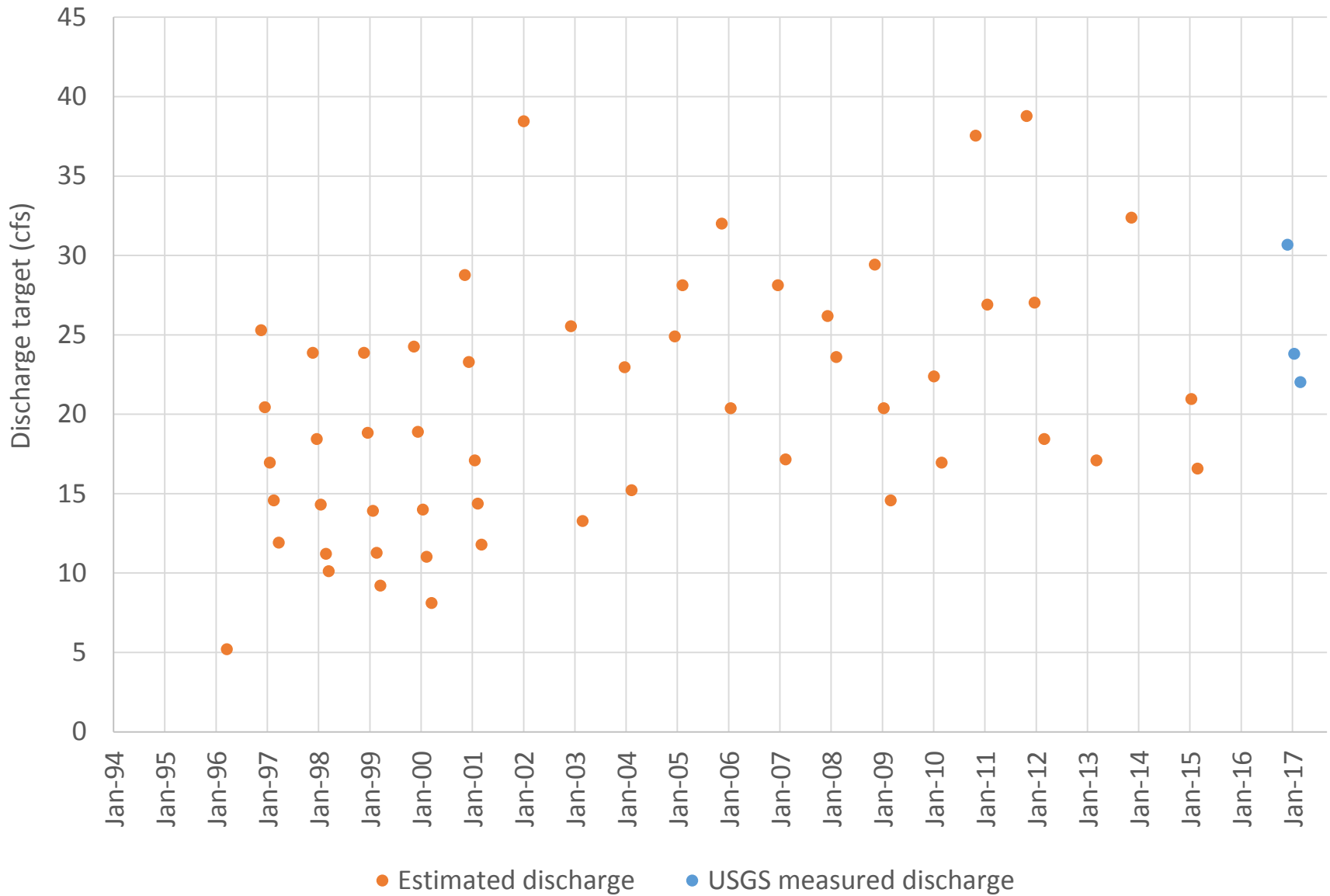


South Boise Drain baseflow correlated with depth to groundwater

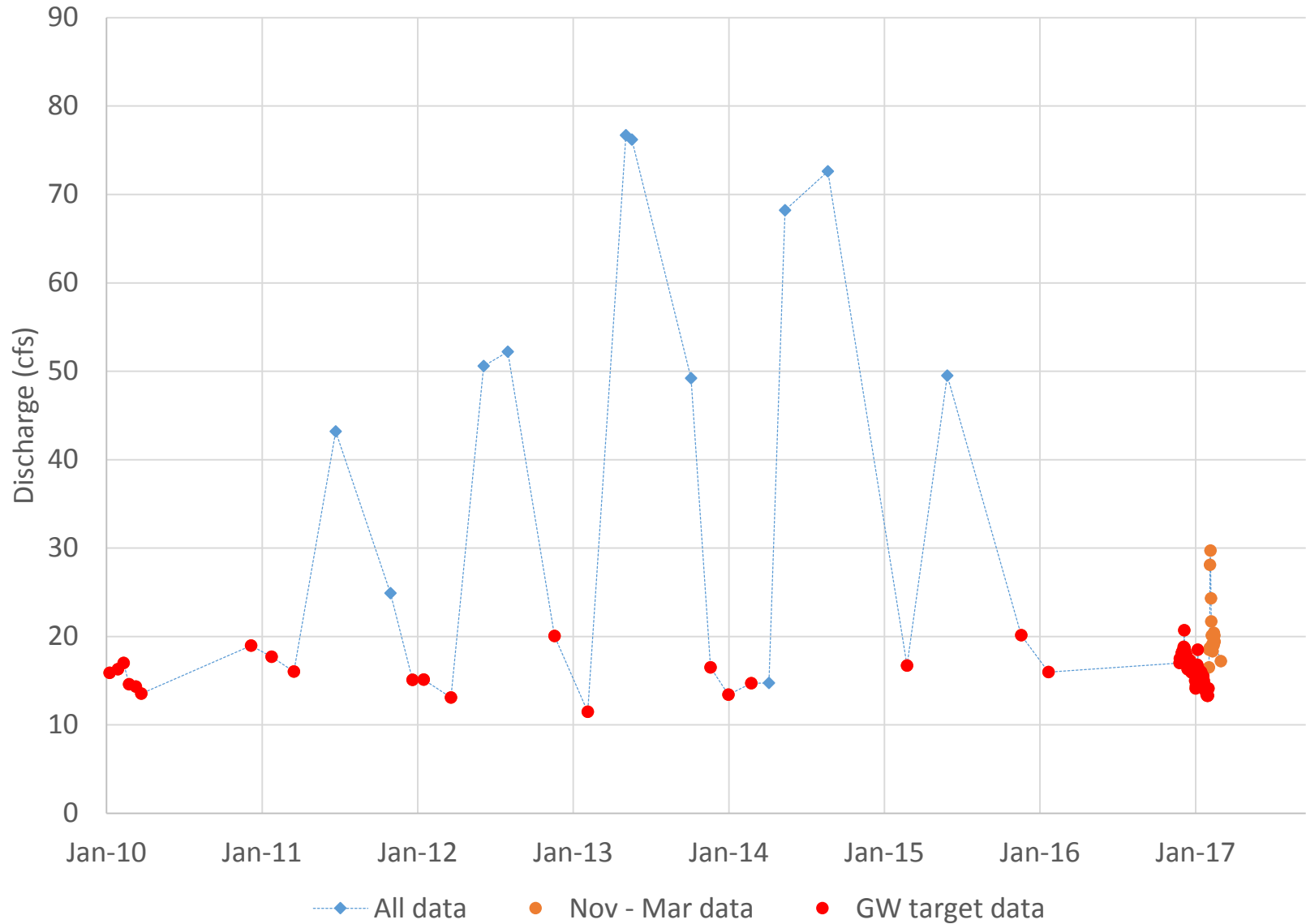


● 05N 05W 20CCD1

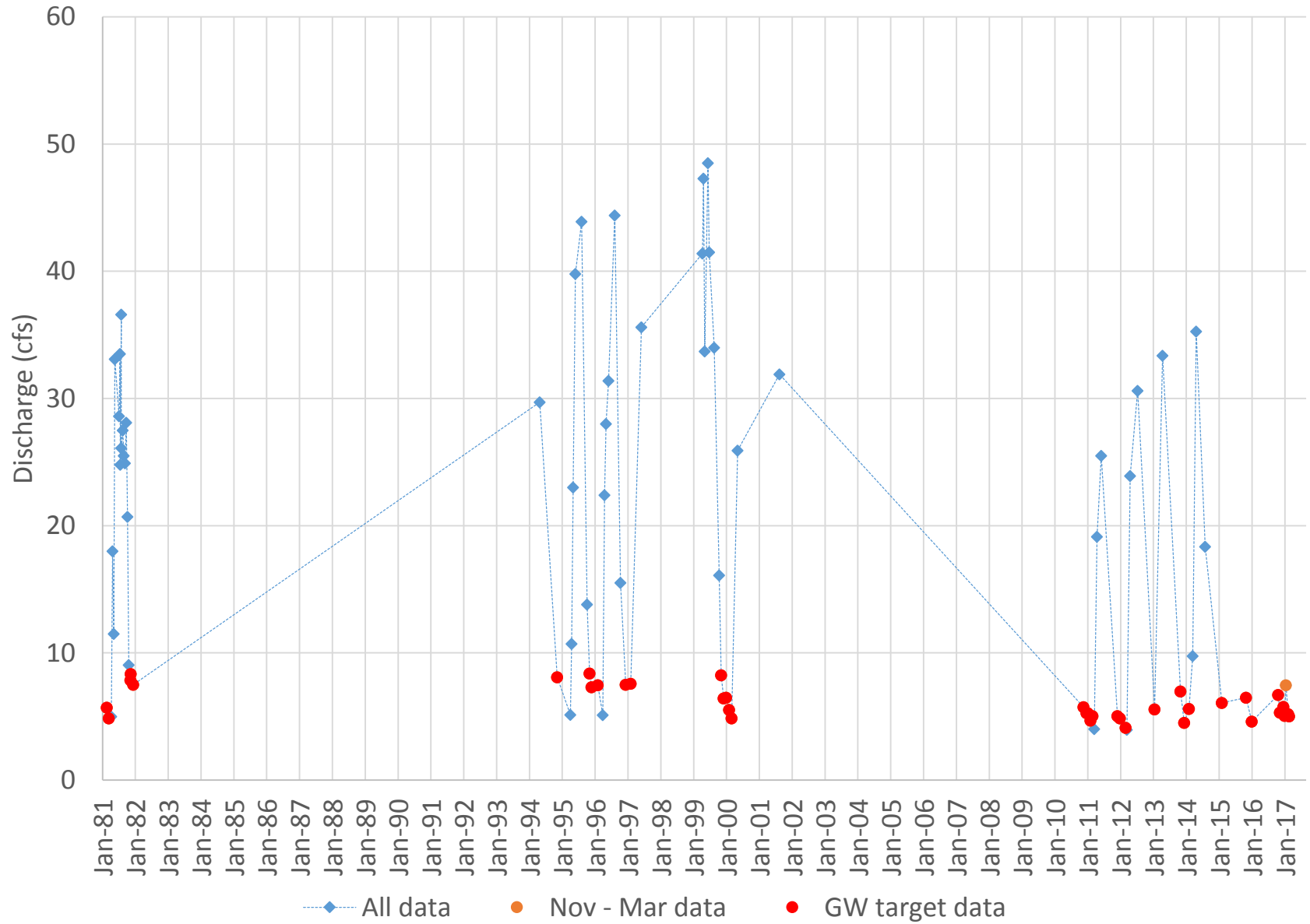
Measured and estimated aquifer discharge to South Boise Drain



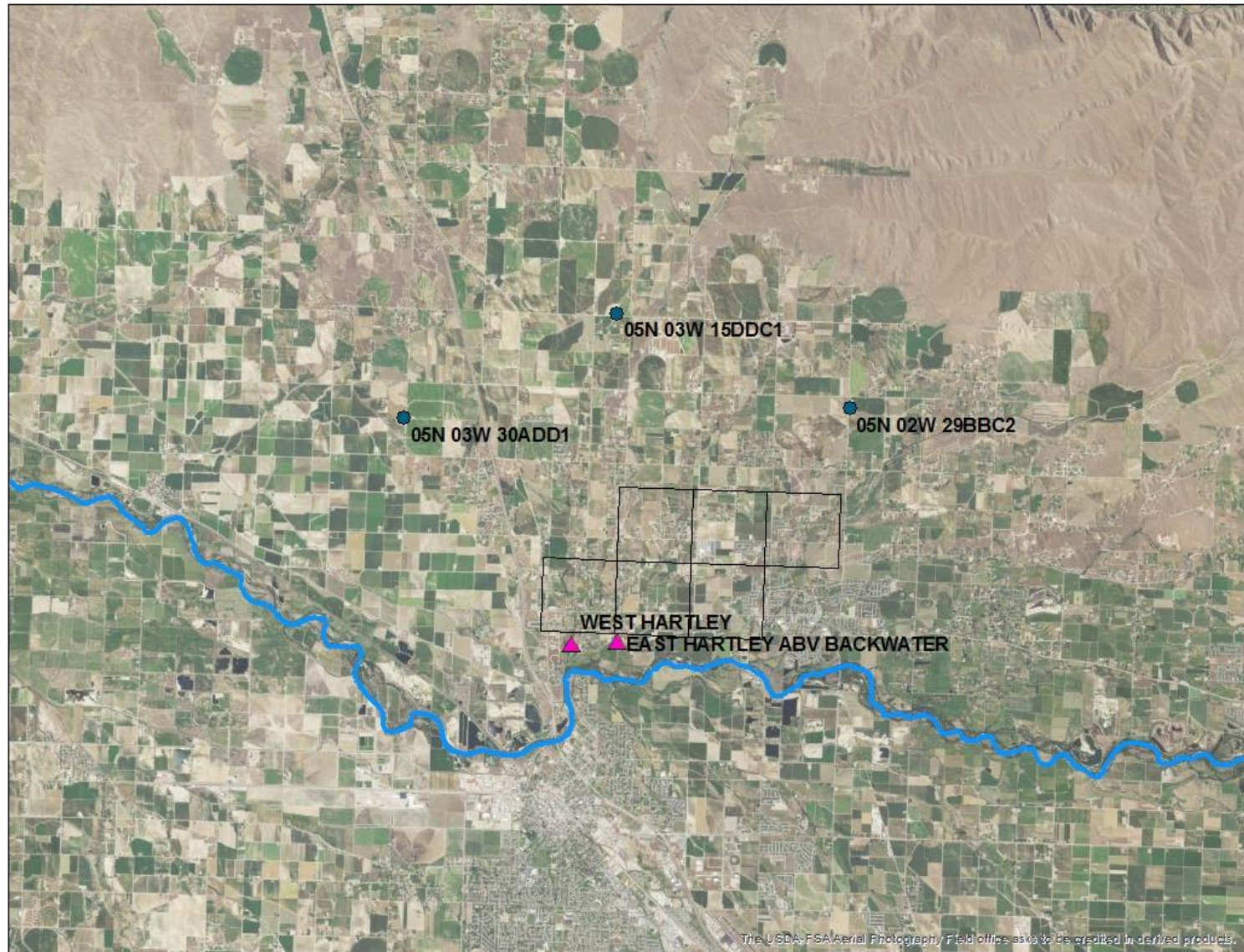
Measured discharge of East Hartley Gulch



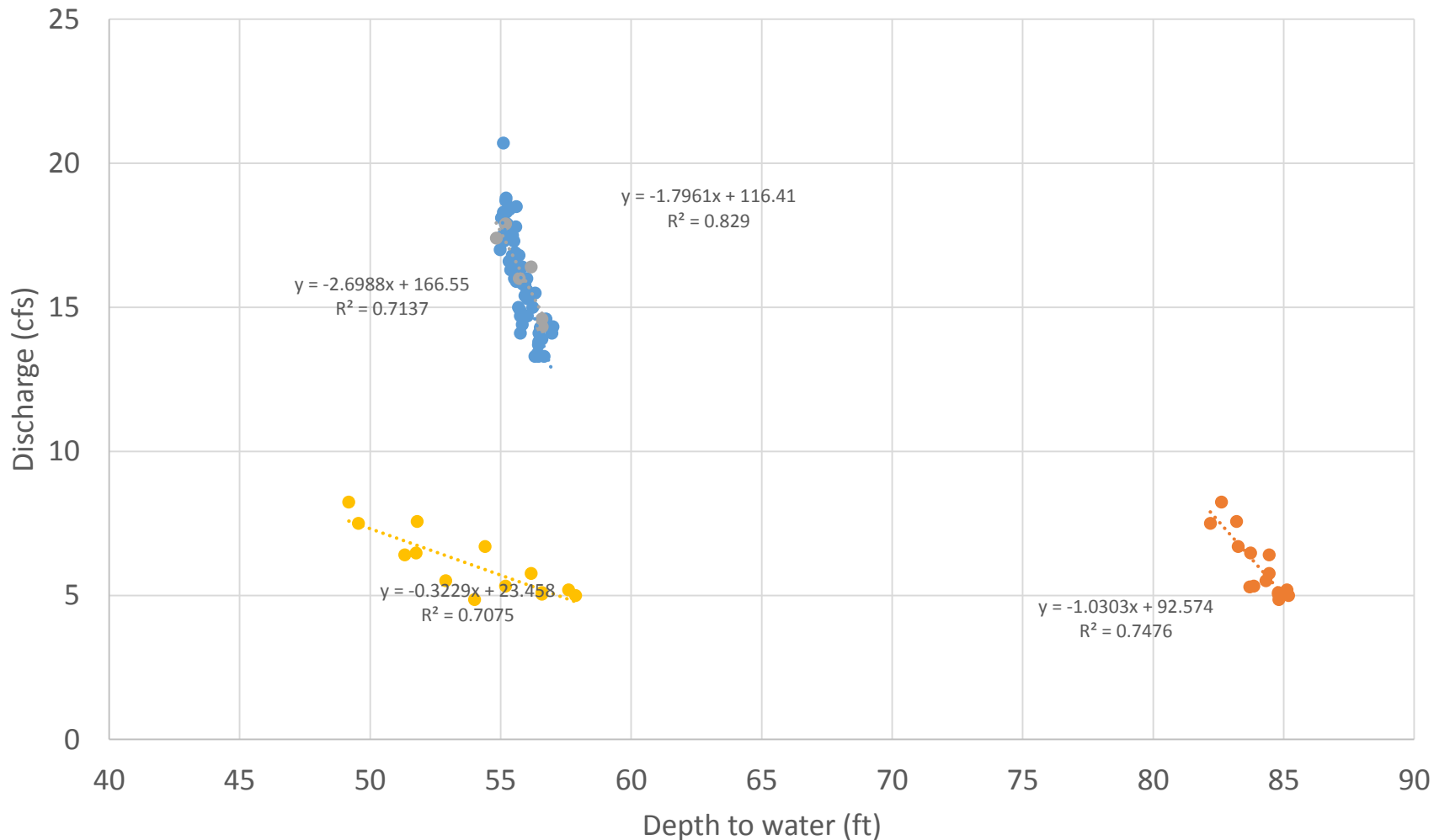
Measured discharge of West Hartley Gulch



Correlation of Hartley Gulch baseflow with depth to groundwater



Hartley Gulch baseflow correlated with depth to groundwater



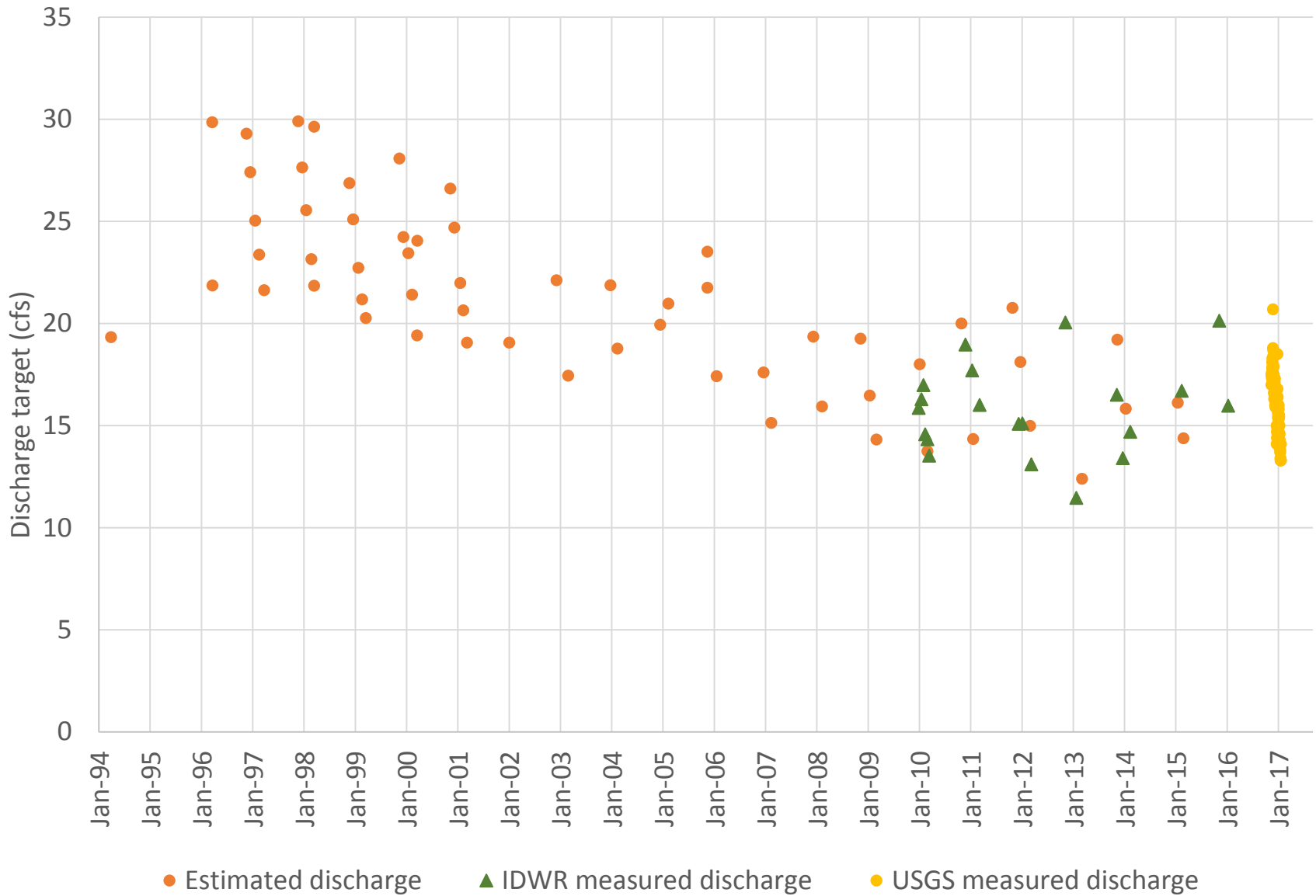
● East Hartley vs. 05N 02W 29BBC2

● East Hartley vs. 05N 03W 15DDC1

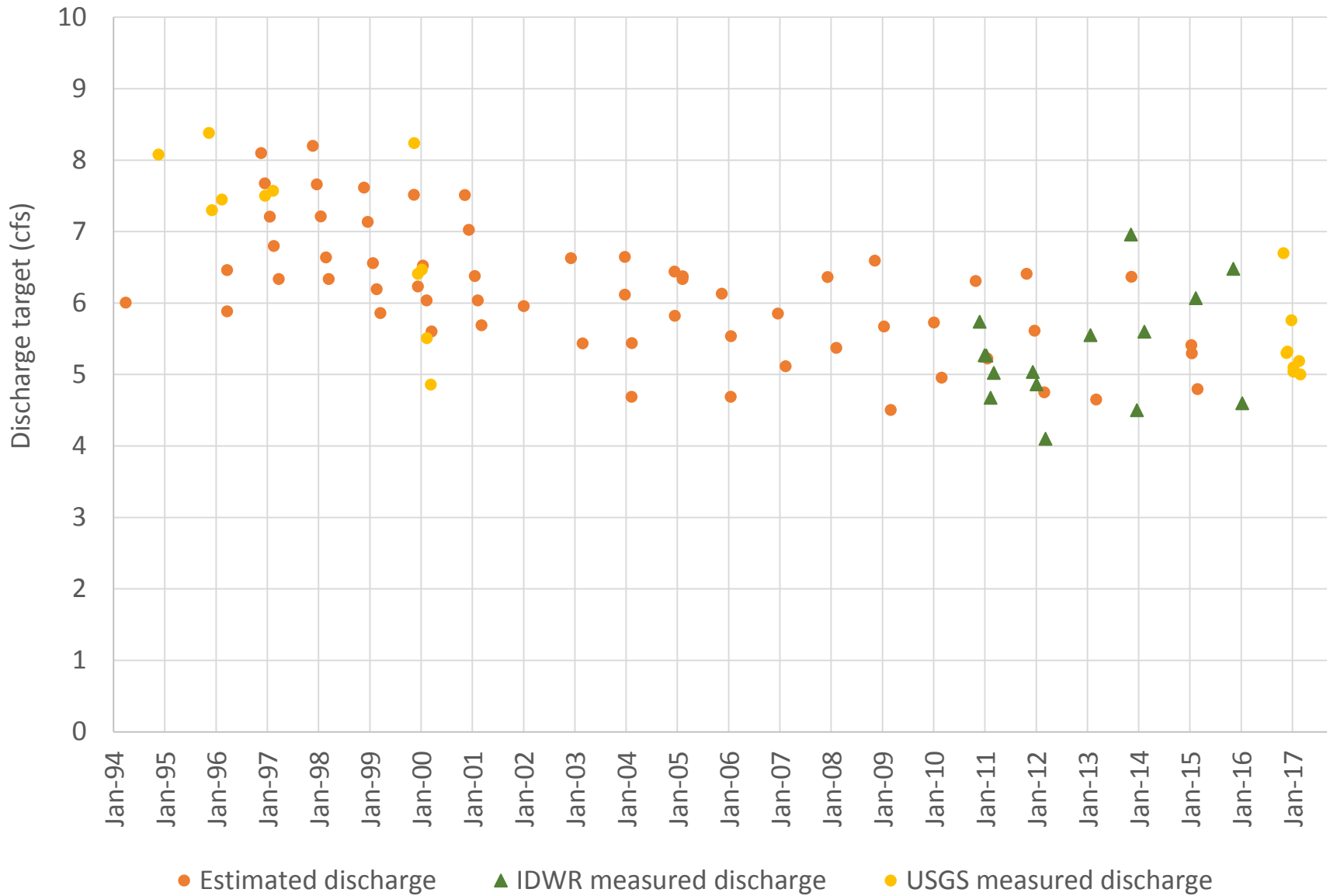
● West Hartley vs. 05N 03W 30ADD1

● West Hartley vs. 05N 03W 15DDC1

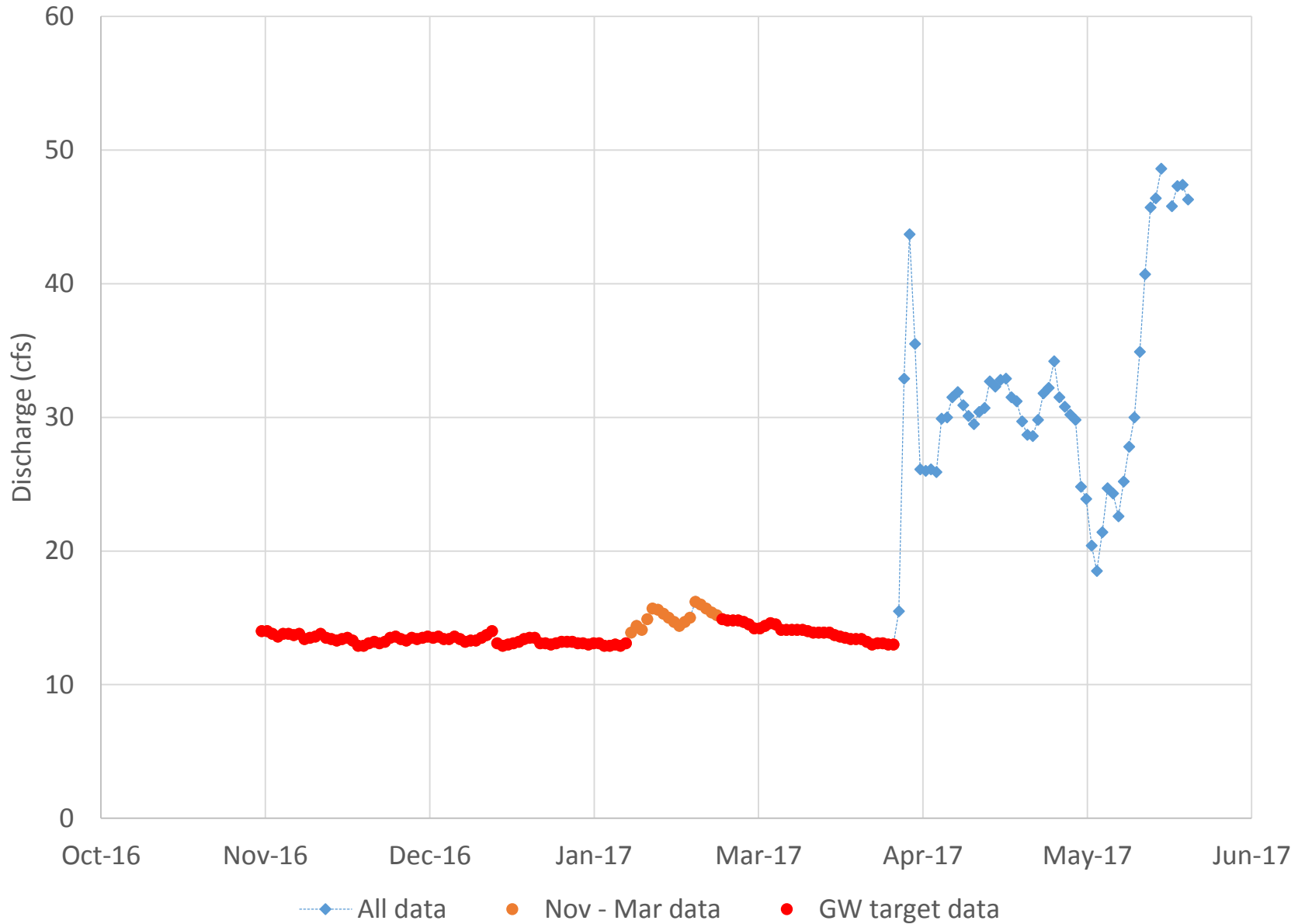
Measured and estimated aquifer discharge to East Hartley Gulch



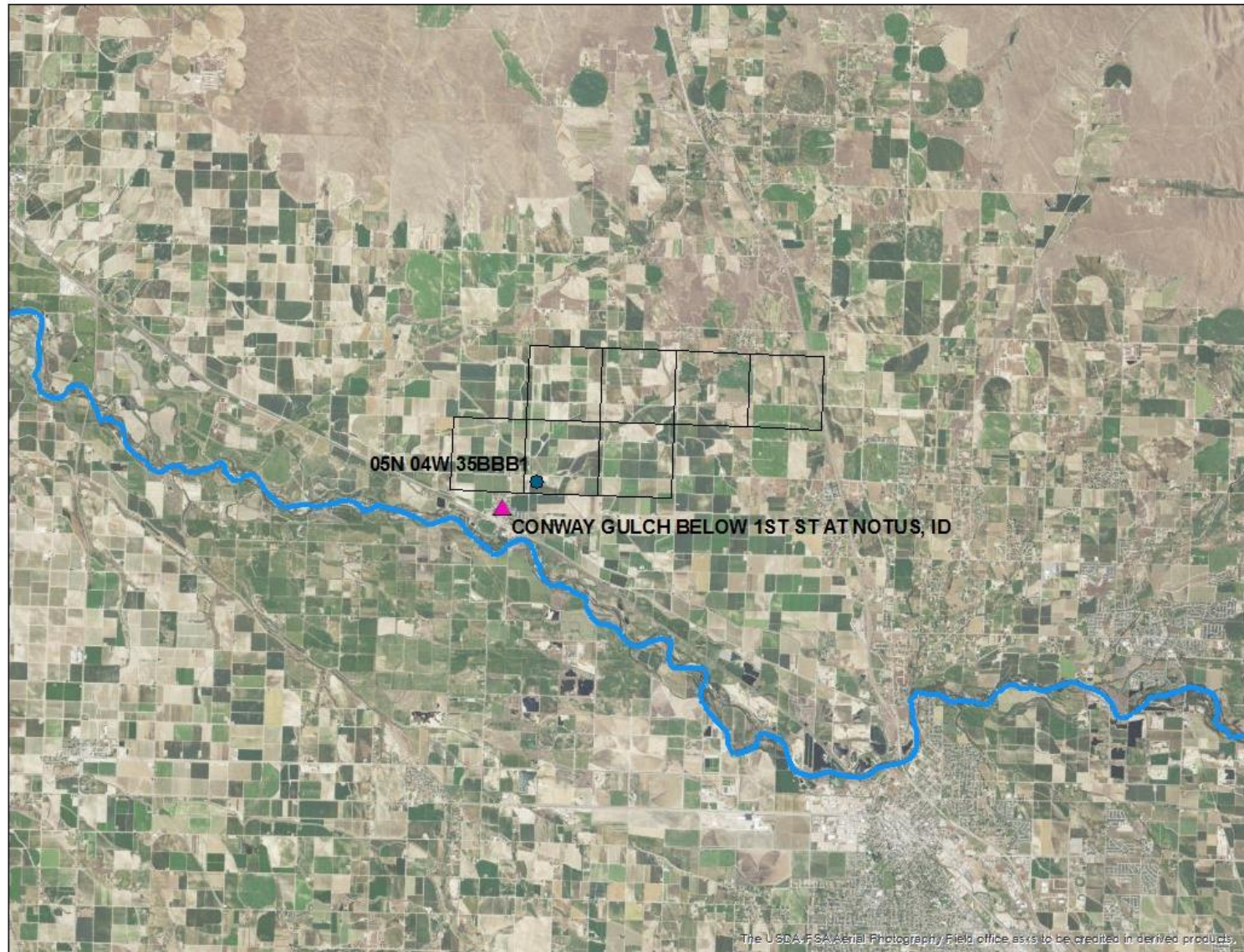
Measured and estimated aquifer discharge to West Hartley Gulch



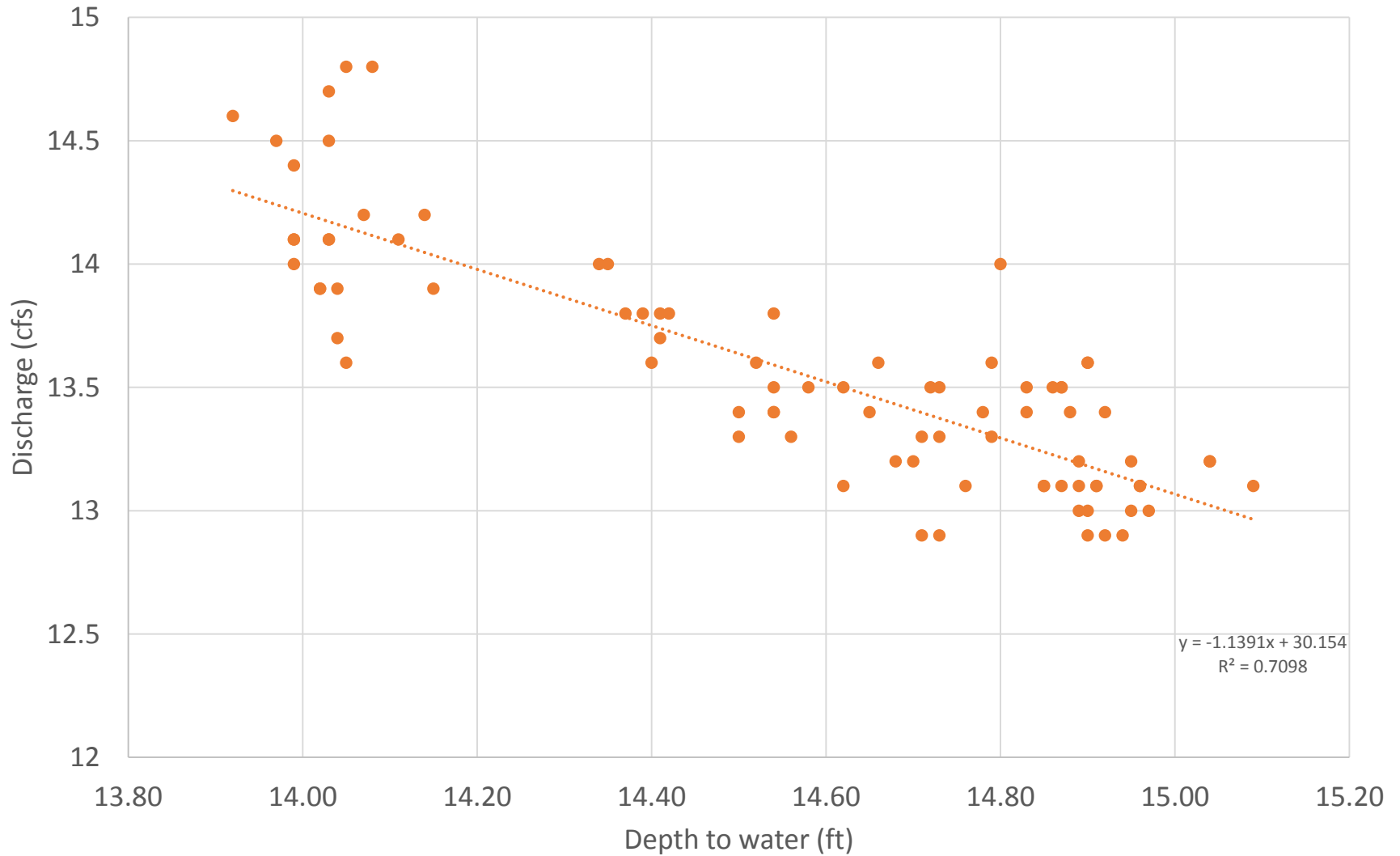
Measured discharge of Conway Gulch



Correlation of Conway Gulch baseflow with depth to groundwater

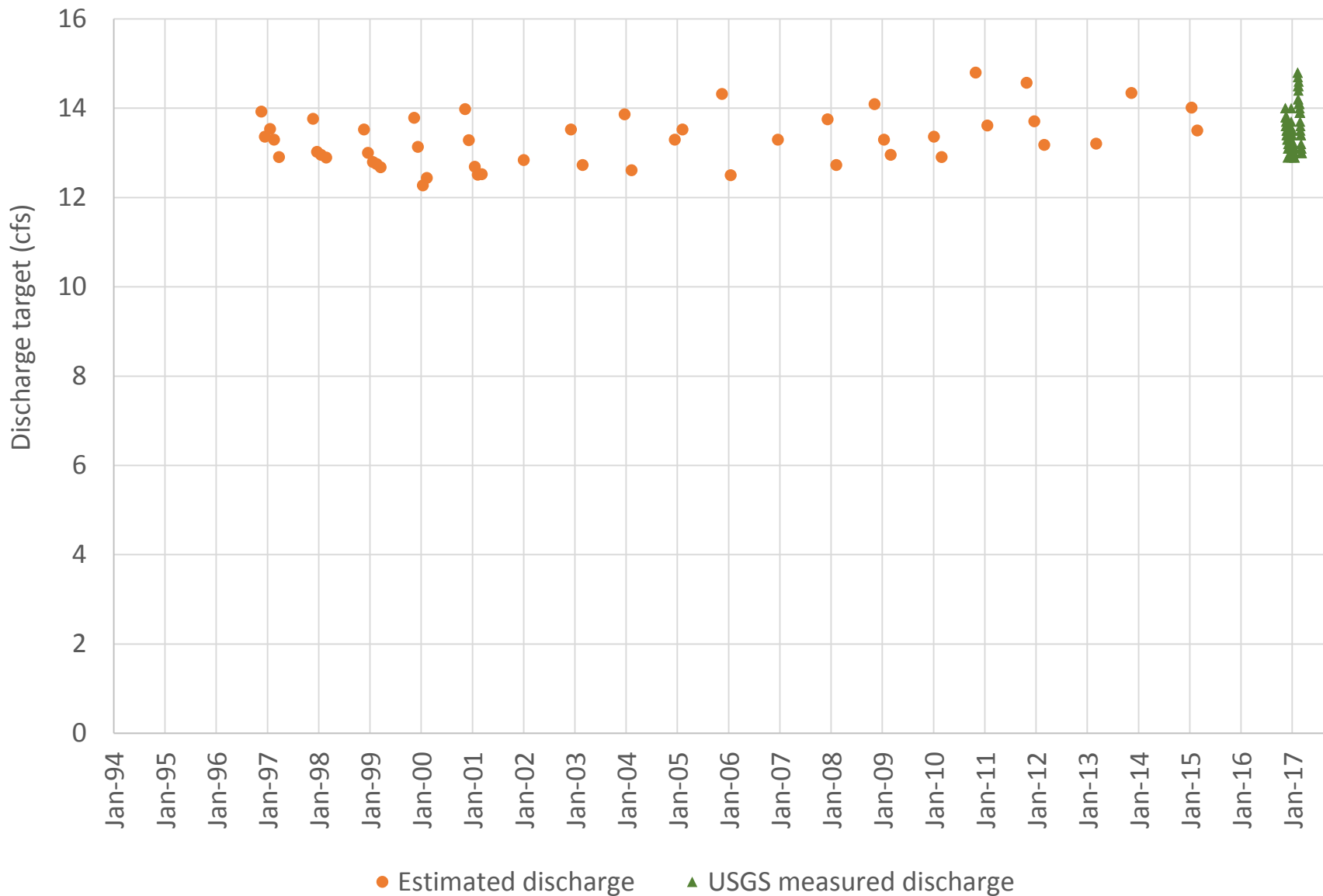


Conway Gulch baseflow correlated with depth to groundwater

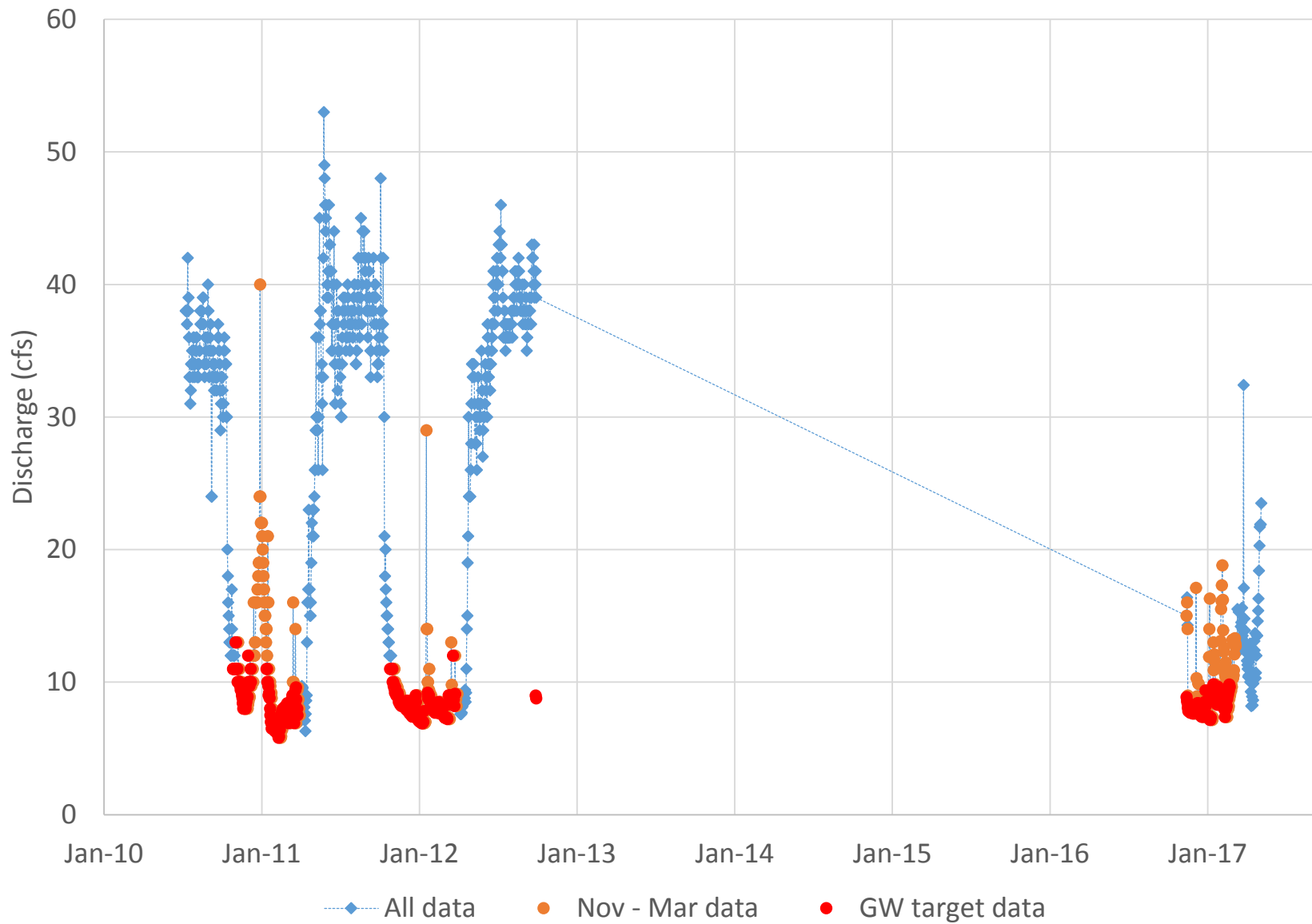


● 05N 04W 35BBB1

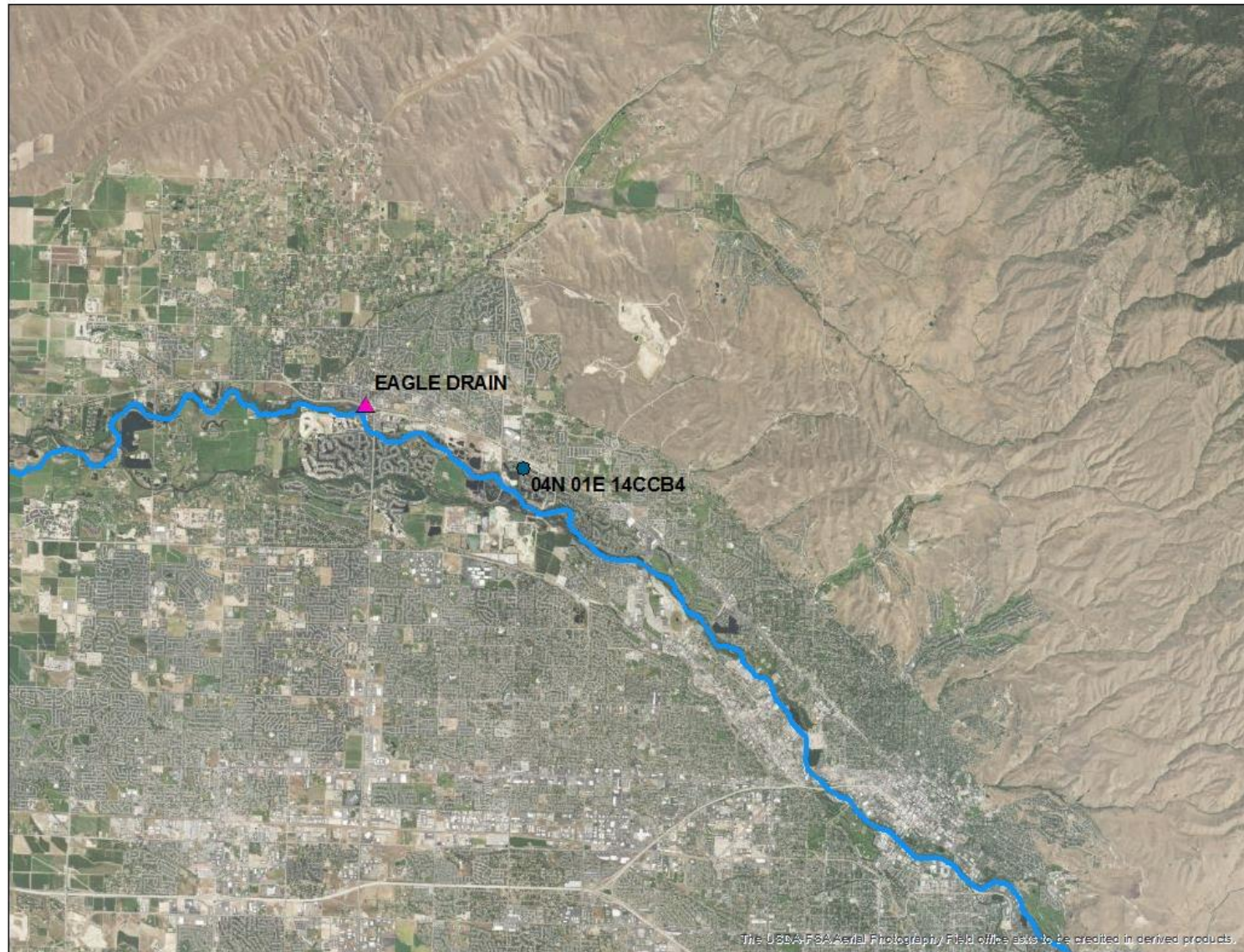
Measured and estimated aquifer discharge to Conway Gulch



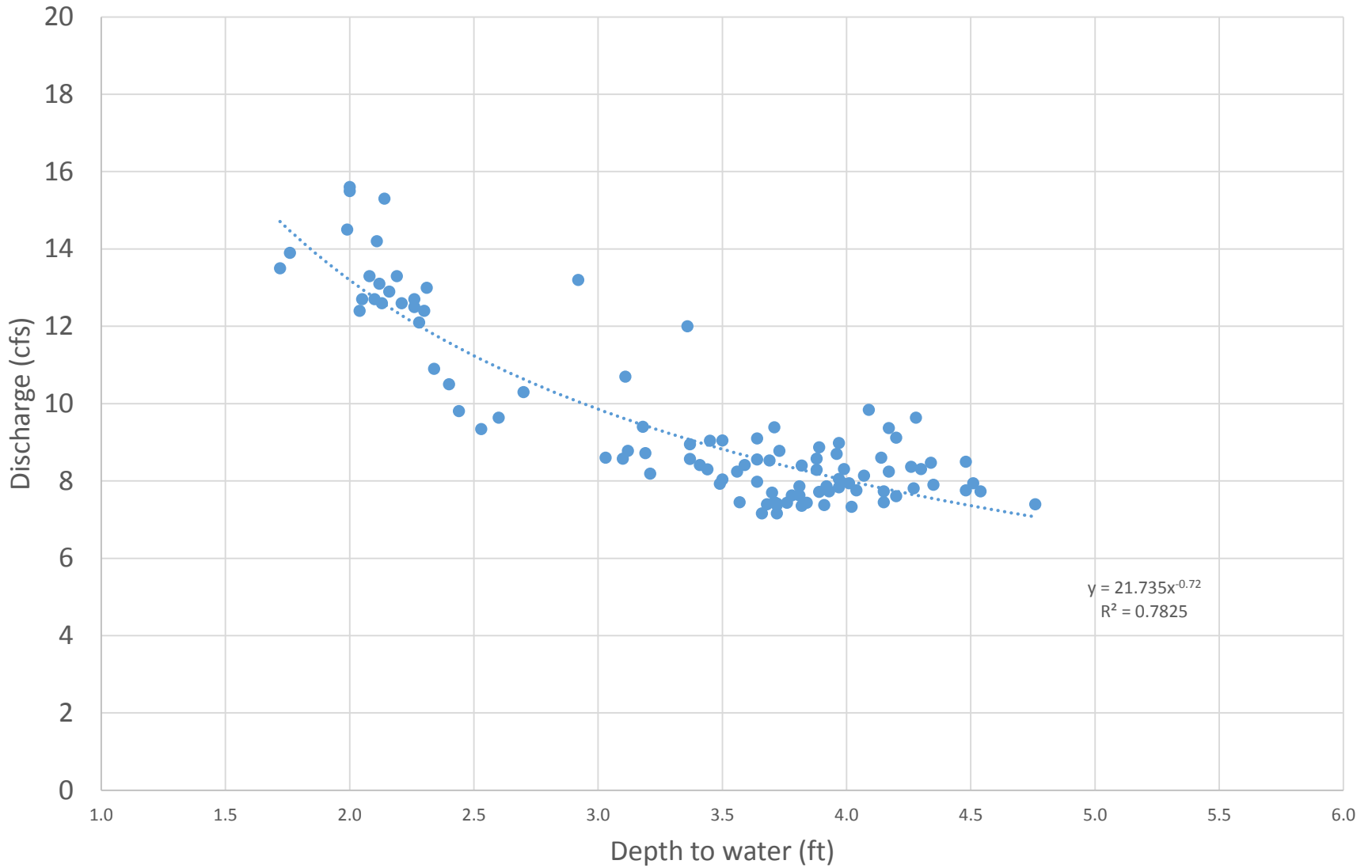
Measured discharge of Eagle Drain



Correlation of Eagle Drain baseflow with depth to groundwater



Eagle Drain baseflow correlated with depth to groundwater



● 04N 01E 14CCB4

Measured and estimated aquifer discharge to Eagle Drain

