

# Model Statistics, Data, and Plots

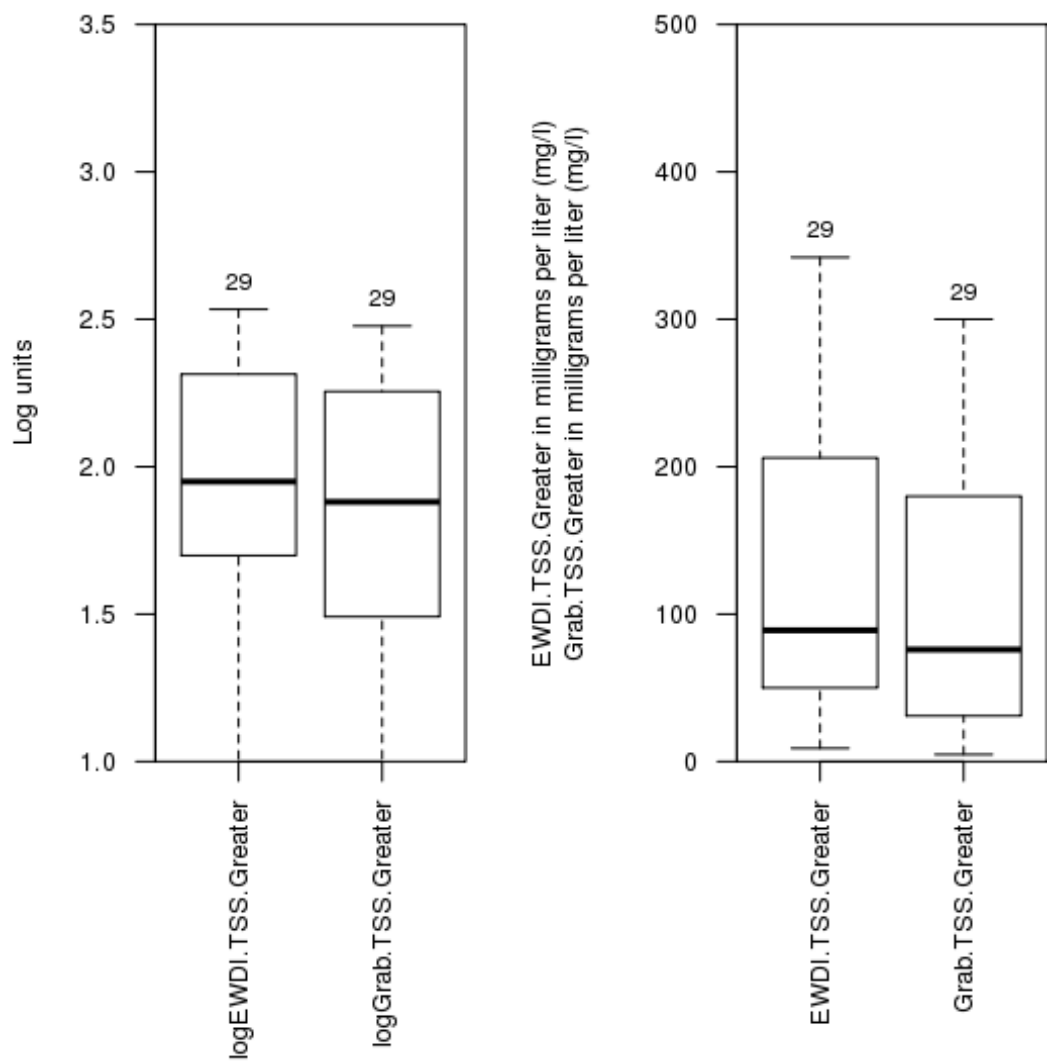
## Model

$$\text{logEWDI.TSS.Greater} = + 0.887 * \text{logGrab.TSS.Greater} + 0.3$$

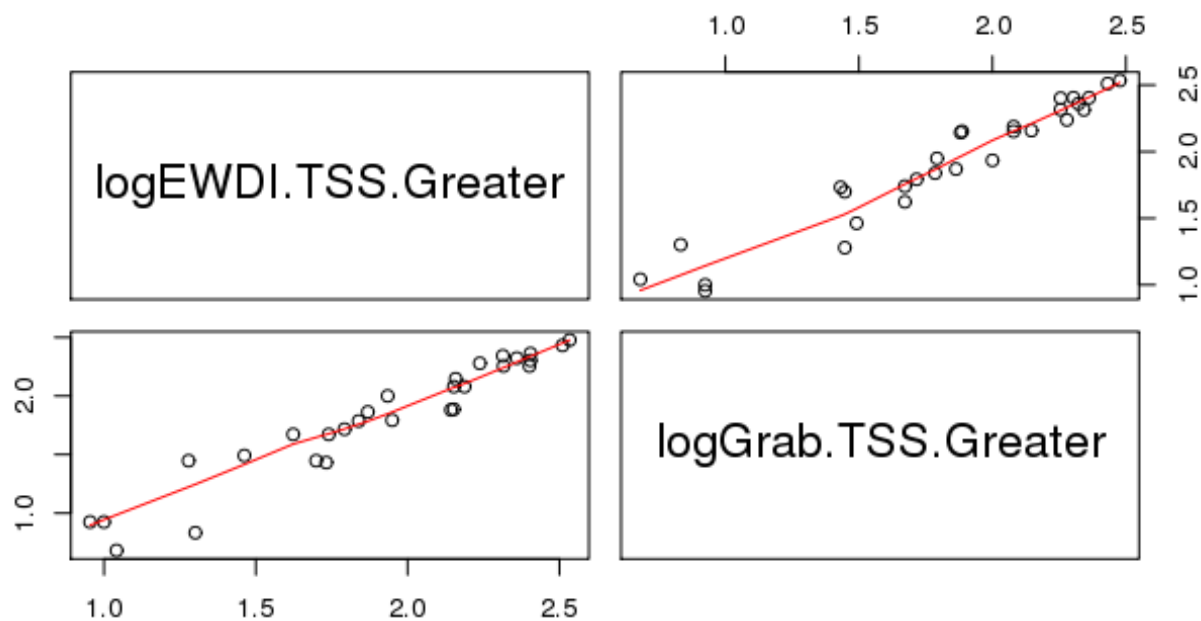
## Variable Summary Statistics

	logEWDI.TSS.Greater	EWDI.TSS.Greater	logGrab.TSS.Greater	Grab.TSS.Greater
Minimum	0.954	9	0.681	4.8
1st Quartile	1.700	50	1.490	31.0
Median	1.950	89	1.880	76.0
Mean	1.910	126	1.820	107.0
3rd Quartile	2.310	206	2.260	180.0
Maximum	2.530	342	2.480	300.0

## Box Plots



Exploratory Plots



Basic Model Statistics

Number of Observations	29
Standard error (RMSE)	0.128
Average Model standard percentage error (MSPE)	30
Coefficient of determination ( $R^2$ )	0.927
Adjusted Coefficient of Determination (Adj. $R^2$ )	0.924
Bias Correction Factor (BCF)	1.04

Explanatory Variables

	Coefficients	Standard Error	t value	Pr(> t )
(Intercept)	0.300	0.0902	3.32	2.56e-03
logGrab.TSS.Greater	0.887	0.0478	18.50	6.87e-17

Correlation Matrix

	Intercept	E.vars
Intercept	1.000	-0.964
E.vars	-0.964	1.000

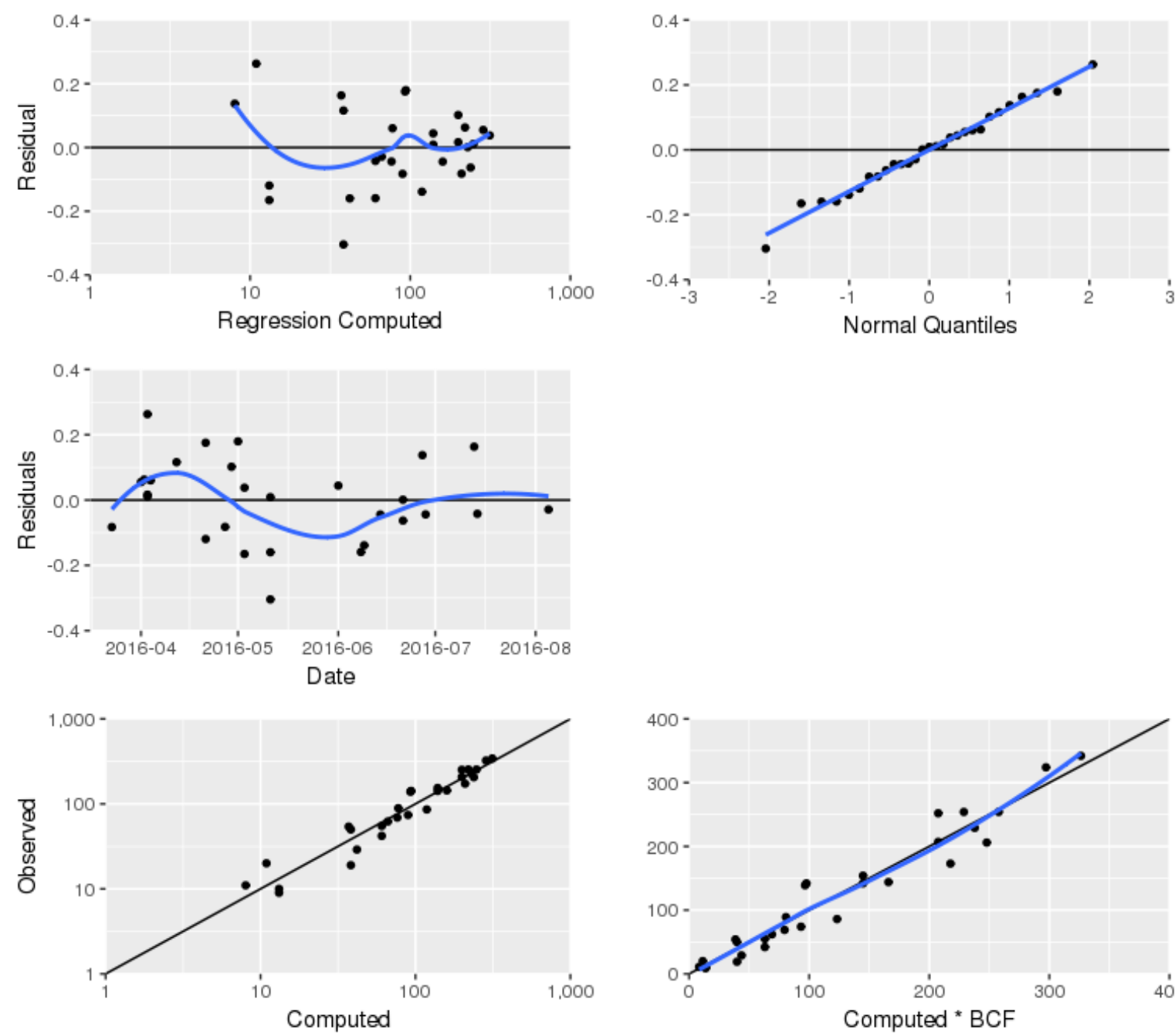
Outlier Test Criteria

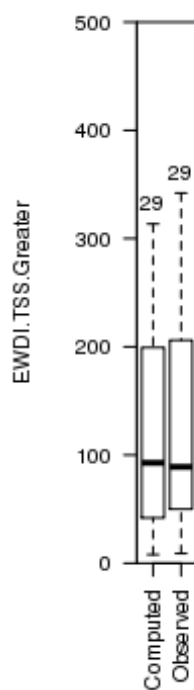
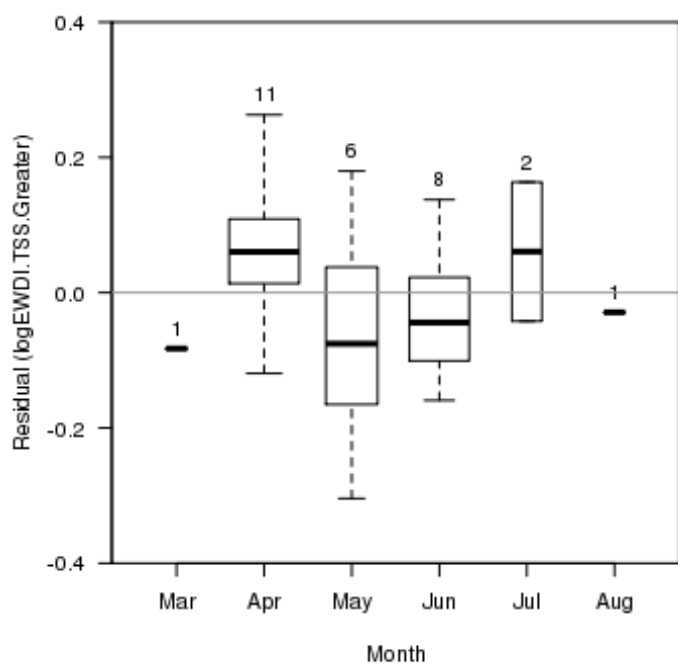
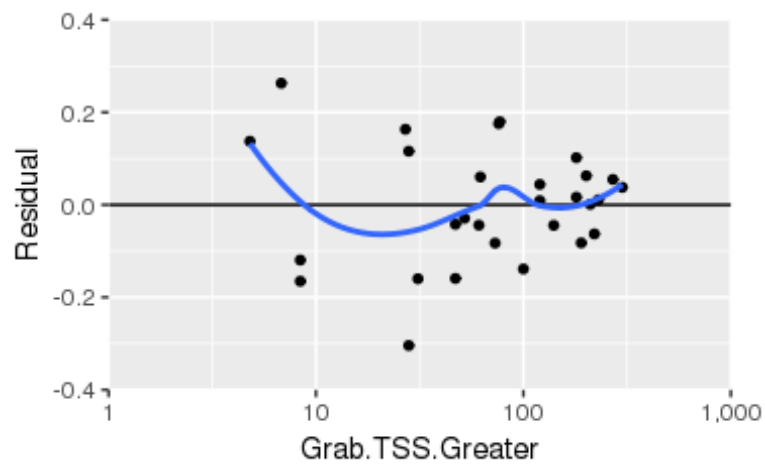
Leverage	Cook's D	DFFITS
0.103	0.106	0.371

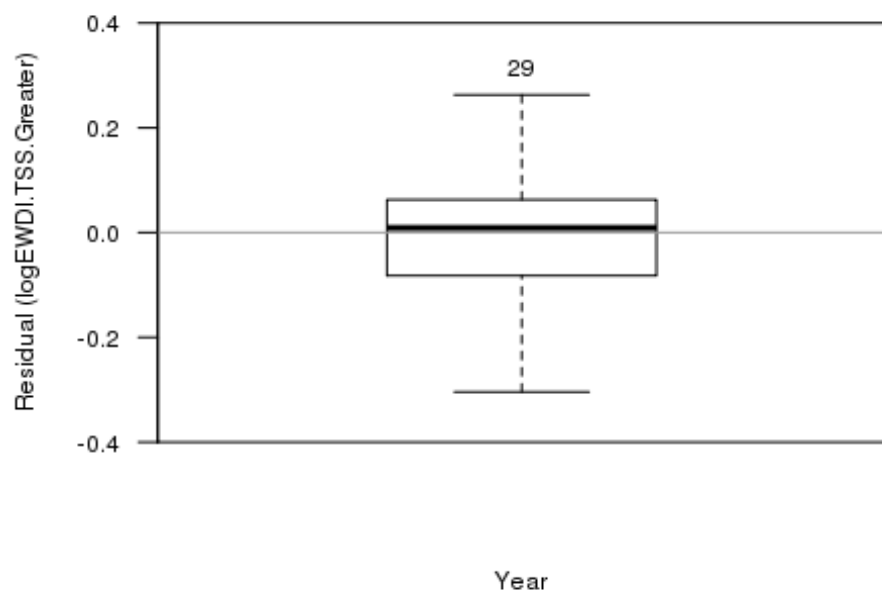
Flagged Observations

	logEWDI.TSS.Greater	Estimate	Residual	Standard Residual	Studentized Residual	Leverage	Cook's D	DFFITS
4/21/2016 10:05	1.000	1.120	-0.119	-1.01	-1.01	0.1460	0.0866	-0.416
6/27/2016 14:05	1.040	0.904	0.137	1.21	1.22	0.2150	0.2000	0.638
5/11/2016 10:05	1.280	1.580	-0.304	-2.44	-2.71	0.0538	0.1690	-0.646
4/3/2016 15:35	1.300	1.040	0.263	2.25	2.45	0.1700	0.5180	1.110
5/3/2016 17:30	0.954	1.120	-0.165	-1.39	-1.42	0.1460	0.1660	-0.586

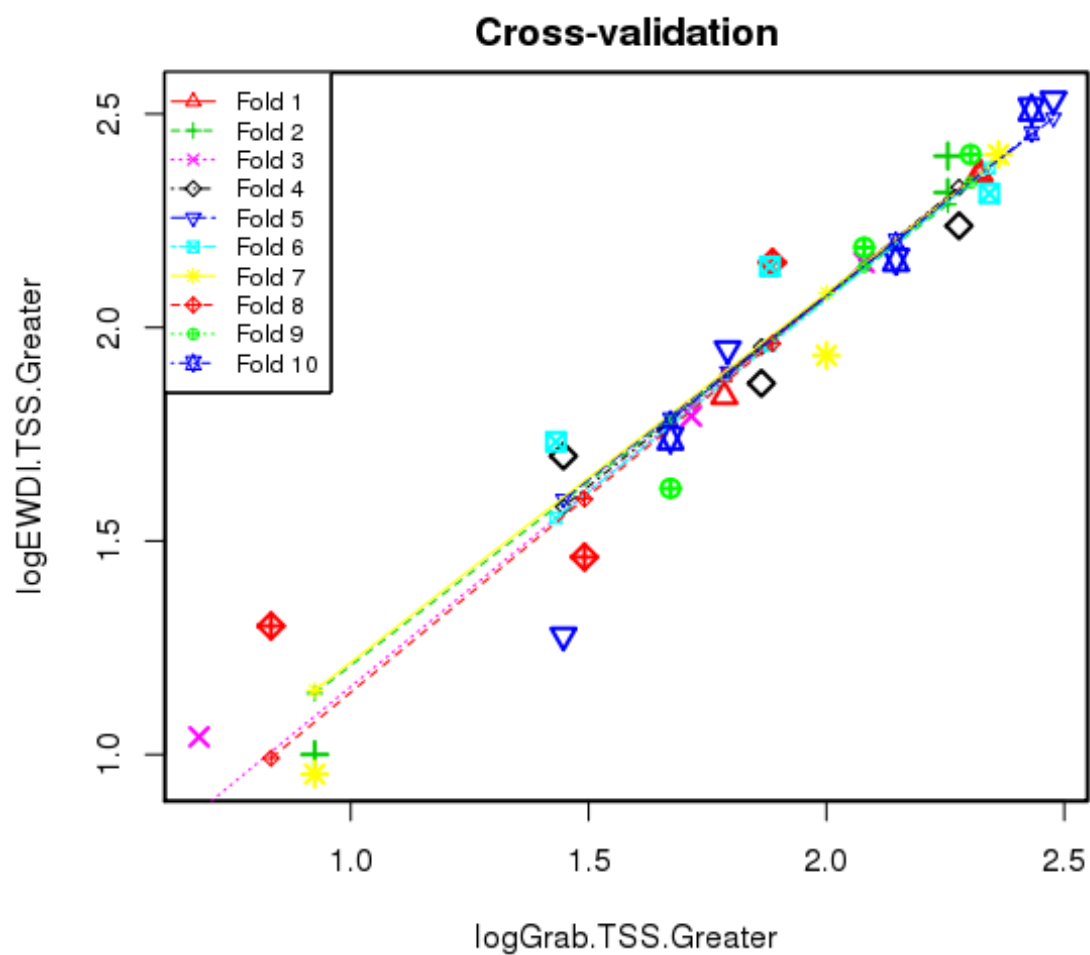
Statistical Plots



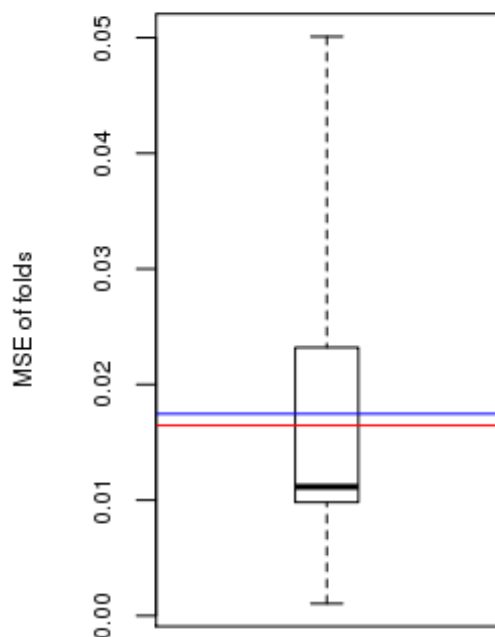




## Cross Validation



Minimum MSE of folds: 0.00104  
 Mean MSE of folds: 0.01750  
 Median MSE of folds: 0.01120  
 Maximum MSE of folds: 0.05010  
 (Mean MSE of folds) / (Model MSE): 1.06000



Red line - Model MSE

Blue line - Mean MSE of folds

## Model-Calibration Data Set

0	Date	logEWDI.TSS.Greater	logGrab.TSS.Greater	EWDI.TSS.Greater	Grab.TSS.Greater	Computed logEWDI.TSS.Greater	Computed EWDI.TSS.Greater	Residual	Normal Quantiles	Censored Values
1	2016-04-12	1.7	1.45	50	28	1.58	39.9	0.116	0.871	--
2	2016-05-11	1.46	1.49	29	31	1.62	43.6	-0.16	-1.35	--
3	2016-06-14	2.16	2.15	144	140	2.2	166	-0.0444	-0.443	--
4	2016-07-14	1.74	1.67	55	47	1.78	63.1	-0.0421	-0.26	--
5	2016-07-13	1.73	1.43	54	27	1.57	38.6	0.163	1.16	--
6	2016-05-01	2.15	1.89	142	77	1.97	97.7	0.18	1.6	--
7	2016-06-28	1.84	1.79	69	61	1.88	79.5	-0.044	-0.35	--
8	2016-03-23	1.87	1.86	74	73	1.95	93.2	-0.0828	-0.752	--
9	2016-04-04	1.95	1.79	89	62	1.89	80.6	0.0603	0.54	--
10	2016-04-21	2.14	1.88	139	76	1.97	96.6	0.176	1.35	--
11	2016-04-01	2.51	2.43	324	270	2.46	297	0.0549	0.443	--
12	2016-06-08	1.62	1.67	42	47	1.78	63.1	-0.159	-1.16	--
13	2016-06-09	1.93	2	86	100	2.07	123	-0.139	-1	--
14	2016-04-21	1	0.924	10	8.4	1.12	13.7	-0.119	-0.871	--
15	2016-04-29	2.4	2.26	252	180	2.3	207	0.102	0.752	--
16	2016-06-27	1.04	0.681	11	4.8	0.904	8.34	0.137	1	--
17	2016-04-03	2.4	2.36	254	230	2.39	258	0.0109	0.0859	--
18	2016-05-11	2.15	2.08	142	120	2.14	145	0.0089	0	--

19	2016-06-21	2.36	2.32	229	210	2.36	238	0.00096	-0.0859	--
20	2016-05-11	1.28	1.45	19	28	1.58	39.9	-0.304	-2.04	--
21	2016-04-03	1.3	0.833	20	6.8	1.04	11.4	0.263	2.04	--
22	2016-05-03	2.53	2.48	342	300	2.5	326	0.0378	0.26	--
23	2016-04-02	2.4	2.3	254	201	2.34	229	0.0628	0.643	--
24	2016-04-27	2.24	2.28	173	190	2.32	218	-0.0823	-0.643	--
25	2016-05-03	0.954	0.924	9	8.4	1.12	13.7	-0.165	-1.6	--
26	2016-08-05	1.79	1.72	62	52	1.82	69	-0.029	-0.173	--
27	2016-06-01	2.19	2.08	154	120	2.14	145	0.0441	0.35	--
28	2016-06-21	2.31	2.34	206	220	2.38	248	-0.0629	-0.54	--
29	2016-04-03	2.32	2.26	207	180	2.3	207	0.0165	0.173	--

Definitions

EWDI.TSS.Greater: Total suspended solids in mg/l (00530)  
Grab.TSS.Greater: Total suspended solids in mg/l (00530)

App Version 1.0