



Storm Event Summary Report

City and County of Honolulu Kaelepulu Pond Monitoring

Site Location: **Hamakua Marsh (Commercial)**

Sample ID: **Hamakua**
Sample Date: **10/18/2019**
Event Rainfall: **3.89-inches**

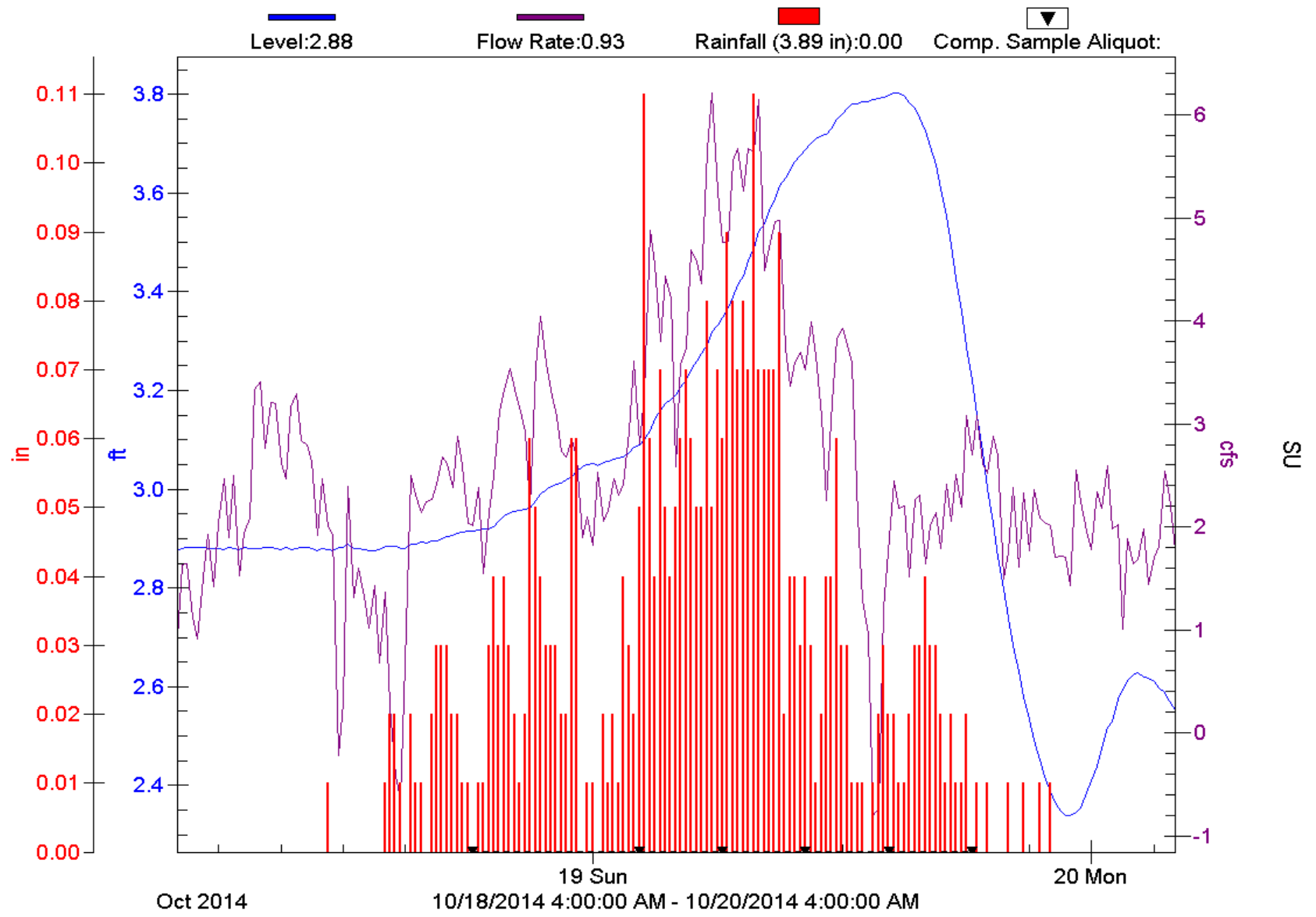
Sampling Results Summary Table

	Parameter (units)	Analytical Result	Method
	Storm Total Flow (CF)	284788	<i>Flow Meter Calculation</i>
C O M P 1	Total Suspended Solids (mg/l)	8	<i>SM 2540 D</i>
	Ammonia Nitrogen (mg/l)	<0.05	<i>EPA 350.1</i>
	Nitrate + Nitrite as Nitrogen (mg/l)	<0.05	<i>EPA 353.2</i>
	Total Phosphorous (mg/l)	0.111	<i>EPA 365.3</i>
C O M P 2	Total Suspended Solids (mg/l)	<5	<i>SM 2540 D</i>
	Ammonia Nitrogen (mg/l)	0.107	<i>EPA 350.1</i>
	Nitrate + Nitrite as Nitrogen (mg/l)	<0.05	<i>EPA 353.2</i>
	Total Phosphorous (mg/l)	0.135	<i>EPA 365.3</i>
C O M P 3	Total Suspended Solids (mg/l)	9	<i>SM 2540 D</i>
	Ammonia Nitrogen (mg/l)	0.073	<i>EPA 350.1</i>
	Nitrate + Nitrite as Nitrogen (mg/l)	<0.05	<i>EPA 353.2</i>
	Total Phosphorous (mg/l)	0.105	<i>EPA 365.3</i>
C O M P 4	Total Suspended Solids (mg/l)	8.5	<i>SM 2540 D</i>
	Ammonia Nitrogen (mg/l)	<0.05	<i>EPA 350.1</i>
	Nitrate + Nitrite as Nitrogen (mg/l)	<0.05	<i>EPA 353.2</i>
	Total Phosphorous (mg/l)	0.089	<i>EPA 365.3</i>
C O M P 5	Total Suspended Solids (mg/l)	25.5	<i>SM 2540 D</i>
	Ammonia Nitrogen (mg/l)	0.059	<i>EPA 350.1</i>
	Nitrate + Nitrite as Nitrogen (mg/l)	<0.05	<i>EPA 353.2</i>
	Total Phosphorous (mg/l)	0.112	<i>EPA 365.3</i>
C O M P 6	Total Suspended Solids (mg/l)	5	<i>SM 2540 D</i>
	Ammonia Nitrogen (mg/l)	0.229	<i>EPA 350.1</i>
	Nitrate + Nitrite as Nitrogen (mg/l)	<0.05	<i>EPA 353.2</i>
	Total Phosphorous (mg/l)	0.133	<i>EPA 365.3</i>

Enclosures:

1. Storm Event Hydrograph with Rainfall Data and Composite Aliquot Sample Markers
2. Storm event *Composite and Flow Calculation Form*
3. Columbia Analytical Services (CAS) Laboratory *COC and Analytical Report*

Hamakua Marsh (Commercial) Kaelepulu Watershed Study





Composite and Flow Calculation Form
City and County of Honolulu Kaelepulu Pond Monitoring

Site Location: Hamakua Marsh (Commercial)

Sample ID: Hamakua 1-6
 Sample Start Date: 10/18/2014
 Sample Team: BB/BK
 Last Significant Rain Event: 10/5/2014 15:15
 Rain Event Start Date/Time: 10/18/2014 11:15
 Sampler Enable Date/Time: 10/18/2014 17:15
 Grab Sample Date/Time: Not collected due to lab closure.
 Composite Sample Date/Time: *Six (6) Interval aliquots submitted from storm event at sample date/times below
 Composite Sample- Total Time (hrs): 25.00
 Composite Sample- Total Aliquots: 7

Composite

Aliquot Period Date/Time	Aliquot (Bottle) Number	Aliquot Period Flow - Q _A (CF)	Aliquot Total Time (Hours:Mins)	Aliquot Period Average Flow Intensity (CFS)	Aliquot Period % Q _A /Total Q (percent)
10/18/2014 18:15	1	8575.83	1:00	2.382	12.66%
10/19/2014 2:15	2	79008.48	8:00	2.743	14.58%
10/19/2014 6:15	3	63552.51	4:00	4.413	23.45%
10/19/2014 10:15	4	68235.03	4:00	4.739	25.18%
10/19/2014 14:15	5	33507.08	4:00	2.327	12.36%
10/19/2014 18:15	6	31909.50	4:00	2.216	11.77%
Storm Total:	6	284788.43		18.820	100%