



Storm Event Summary Report

City and County of Honolulu Kaelepulu Pond Monitoring

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

Sample ID: **Hamakua**

Sample Date: 8/8/2014

Event Rainfall: 0.54-inches

Sampling Results Summary Table

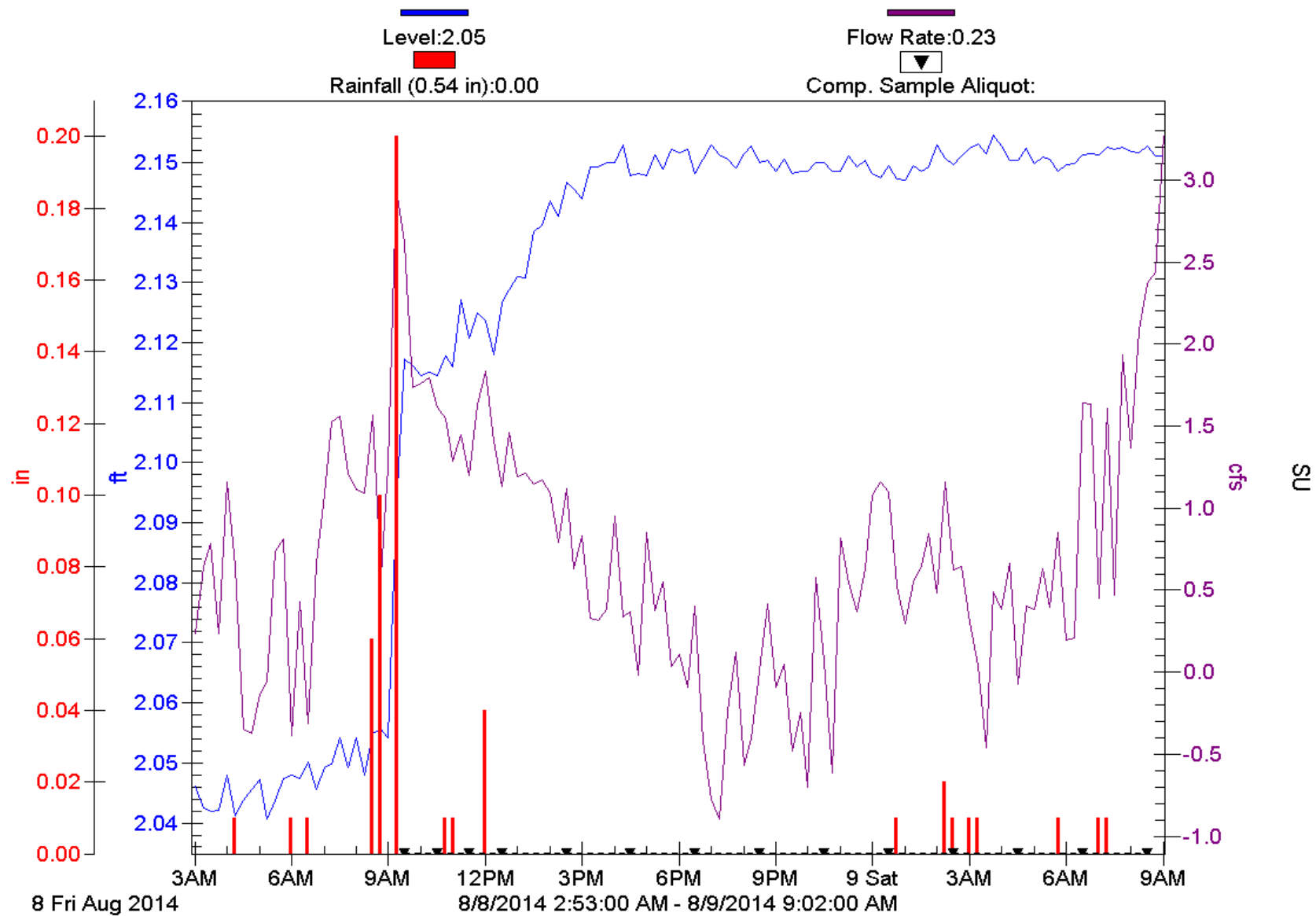
| | Parameter (units) | Analytical Result | Method |
|------------------|--------------------------------------|--------------------------|------------------|
| C O M P | Total Suspended Solids (mg/l) | 28 | <i>SM 2540 D</i> |
| | Ammonia Nitrogen (mg/l) | <1 | <i>EPA 350.1</i> |
| | Nitrate + Nitrite as Nitrogen (mg/l) | <0.05 | <i>EPA 353.2</i> |
| | Total Phosphorous (mg/l) | 0.133 | <i>EPA 365.3</i> |

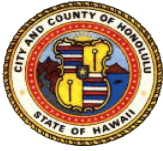
*Composite parameters analytical results represent event mean concentration (EMC).

Enclosures:

- 1. Storm Event Hydrograph with Rainfall Data and Composite Aliquot Sample Markers**
- 2. Kaelepulu Storm Water Monitoring Field Sheets**
- 3. Storm event Composite and Flow Calculation Form**
- 4. 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
 Sample Start Date: 8/8/2014
 Sample Team: BB/BK
 Last Significant Rain Event: 7/22/2014 17:00
 Rain Event Start Date/Time: 8/8/2014 4:15
 Sampler Enable Date/Time: 8/8/2014 8:38
 Grab Sample Date/Time: Not collected due to lab closure.
Composite Sample Date/Time: 8/9/2014 8:38

Sampler Part A- Aliquot Interval (hrs): 1.00
 Sampler Part A- Number of Aliquots: 4

Sampler Part B- Aliquot Interval (hrs): 2.00
 Sampler Part B- Number of Aliquots: 10

Composite Sample- Total Time (hrs): 24.00
 Composite Sample- Total Aliquots: 14

Composite

| Aliquot Period Date/Time | Aliquot (Bottle) Number | Aliquot Period Flow - Q _A (CF) | Aliquot Period Average Flow Intensity (CFS) | Aliquot Period % Q _A /Total Q (percent) | Volume for 2000 mL Composite Bottle (mL) | Volume for 1000 mL Composite Bottle (mL) | Volume for 500 mL Composite Bottle (mL) |
|--------------------------|-------------------------|---|---|--|--|--|---|
| 8/8/2014 9:38 | 1 | 6661 | 1.850 | 15.43% | 308.61 | 154.30 | 77.15 |
| 8/8/2014 10:38 | 2 | 6215 | 1.726 | 14.40% | 287.93 | 143.97 | 71.98 |
| 8/8/2014 11:38 | 3 | 4932 | 1.370 | 11.43% | 228.50 | 114.25 | 57.13 |
| 8/8/2014 12:38 | 4 | 5400 | 1.500 | 12.51% | 250.19 | 125.10 | 62.55 |
| 8/8/2014 14:38 | 5 | 8256 | 1.147 | 9.56% | 191.26 | 95.63 | 47.81 |
| 8/8/2014 16:38 | 6 | 3728 | 0.518 | 4.32% | 86.36 | 43.18 | 21.59 |
| 8/8/2014 18:38 | 7 | 1987 | 0.276 | 2.30% | 46.04 | 23.02 | 11.51 |
| 8/8/2014 20:38 | 8 | 0 | 0.000 | 0.00% | 0.00 | 0.00 | 0.00 |
| 8/8/2014 22:38 | 9 | 0 | 0.000 | 0.00% | 0.00 | 0.00 | 0.00 |
| 8/9/2014 0:38 | 10 | 4578 | 0.636 | 5.30% | 106.05 | 53.03 | 26.51 |
| 8/9/2014 2:38 | 11 | 4616 | 0.641 | 5.35% | 106.93 | 53.46 | 26.73 |
| 8/9/2014 4:38 | 12 | 1791 | 0.249 | 2.07% | 41.49 | 20.75 | 10.37 |
| 8/9/2014 6:38 | 13 | 4233 | 0.588 | 4.90% | 98.07 | 49.03 | 24.52 |
| 8/9/2014 8:38 | 14 | 10731 | 1.490 | 12.43% | 248.58 | 124.29 | 62.14 |
| Storm Total: | 14 | 63128 | 1.991 | 100% | 2000 | 1000 | 500 |