# 16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI

LOCATION.--Lat 21°22'18.8", long 157°54'45.8" referenced to North American Datum of 1983, Honolulu County, HI, Hydrologic Unit 20060000, on left bank, 0.9 mi west of Oahu Prison, 1.4 mi north of Salt Lake Elementary School, and 1.2 mi northeast of Radford High School.

DRAINAGE AREA.--4.68 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2001 to December 2003, July 2005 to current year.

REVISED RECORDS.--WDR-07-01:2007 (Daily and monthly discharges, November 1, 2006 to June 6, 2007, November 4, 2007 to October 4, 2009), WDR-10-01:2008-2009

GAGE.--Water-stage recorder. Elevation of gage is 60 ft above mean sea level (from topographic map).

REMARKS.--Records computed by C.A. Senter. Records fair, except for estimated periods which are poor.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--10 years (water-years 2002-2011), 4.29 $ft^3/s$ (3,110 ac-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 $ft^3/s$, January 26, 2002, gage height, 9.10 ft; no flow on many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 $ft^3/s$ and (or) maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|
| Jan 12 | 2355 | *1,760 | *9.97 |
| May 8 | 1130 | 756 | 7.49 |
| Jun 4 | 2130 | 1,530 | 9.41 |

Minimum discharge, no flow on many days.



Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 16226400, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/16226400.2011.pdf

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**DISCHARGE, CUBIC FEET PER SECOND**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
**DAILY MEAN VALUES**
[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | 14 | 34 | 1.6 | e0.00 | 0.00 | e0.00 | 13 | e0.00 | 0.00 | 0.41 | e0.00 |
| 2 | 6.6 | 4.5 | 8.0 | 0.87 | e0.00 | 0.00 | 0.18 | 47 | e0.00 | e0.00 | 0.13 | e0.00 |
| 3 | 0.25 | 51 | 28 | 0.47 | e0.00 | 0.01 | 0.09 | 55 | 127 | e0.00 | e0.00 | e0.00 |
| 4 | e0.00 | 117 | 5.1 | 0.12 | e0.00 | 4.9 | e0.00 | 17 | 146 | e0.00 | e0.00 | e0.00 |
| 5 | e0.00 | 46 | 1.6 | 0.07 | e0.00 | 0.34 | e0.00 | 16 | 54 | e0.00 | e0.00 | e0.00 |
| 6 | e0.00 | 99 | 0.56 | e0.00 | 1.2 | 4.5 | 8.0 | 49 | 16 | e0.00 | e0.00 | e0.00 |
| 7 | e0.00 | 22 | 0.17 | e0.00 | 0.94 | 3.4 | 54 | 110 | 7.9 | 3.8 | e0.00 | e0.00 |
| 8 | e0.00 | 6.2 | e0.00 | e0.00 | 6.7 | 4.2 | 8.0 | 174 | 3.3 | 1.6 | e0.00 | e0.00 |
| 9 | e0.00 | 2.8 | 0.27 | e0.00 | 0.19 | 35 | 2.5 | 46 | 1.9 | 0.19 | 1.7 | e0.00 |
| 10 | e0.00 | 1.6 | 12 | e0.00 | 0.01 | 9.1 | 0.89 | 42 | 0.84 | e0.00 | 0.01 | e0.00 |
| 11 | e0.00 | 0.60 | 4.6 | e0.00 | 19 | 2.9 | 0.27 | 32 | 0.81 | e0.00 | e0.00 | e0.00 |
| 12 | e0.00 | 0.21 | 19 | 66 | 25 | 1.1 | 0.08 | 14 | 4.5 | e0.00 | e0.00 | e0.00 |
| 13 | e0.00 | 0.04 | 3.6 | 172 | 4.9 | 0.36 | e0.00 | 5.4 | 2.8 | e0.00 | e0.00 | e0.00 |
| 14 | e0.00 | e0.00 | 1.0 | 18 | 0.88 | 0.07 | e0.00 | 2.7 | 2.1 | e0.00 | e0.00 | e0.00 |
| 15 | e0.00 | 8.5 | 0.22 | 5.8 | 0.09 | 0.07 | 0.05 | 1.8 | 0.68 | e0.00 | e0.00 | e0.00 |
| 16 | e0.00 | 1.8 | 0.02 | 2.4 | 0.02 | 0.01 | 0.01 | 1.0 | 0.37 | e0.00 | e0.00 | e0.00 |
| 17 | e0.00 | 0.42 | e0.00 | 0.92 | e0.00 | 0.01 | 0.11 | 0.48 | 0.22 | e0.00 | e0.00 | e0.00 |
| 18 | 13 | 0.12 | e0.00 | 0.30 | e0.00 | e0.00 | e0.00 | 8.5 | e0.00 | e0.00 | e0.00 | e0.00 |
| 19 | 4.4 | 0.47 | 141 | 0.08 | 7.0 | e0.00 | e0.00 | 4.8 | 12 | e0.00 | e0.00 | e0.00 |
| 20 | e0.00 | e0.00 | 59 | e0.00 | 33 | 0.30 | e0.00 | 1.5 | 5.9 | 0.01 | e0.00 | e0.00 |
| 21 | 29 | e0.00 | 22 | e0.00 | 3.1 | e0.00 | e0.00 | 0.49 | 28 | 0.18 | e0.00 | e0.00 |
| 22 | 2.1 | e0.00 | 7.5 | e0.00 | 0.75 | 0.01 | e0.00 | 1.3 | 26 | 0.92 | e0.00 | e0.00 |
| 23 | 0.11 | e0.00 | 3.6 | e0.00 | 1.3 | e0.00 | e0.00 | 0.28 | 13 | 0.03 | e0.00 | e0.00 |
| 24 | e0.00 | e0.00 | 12 | e0.00 | 5.2 | e0.00 | e0.00 | 0.01 | 10 | e0.00 | e0.00 | e0.00 |
| 25 | e0.00 | e0.00 | 4.8 | e0.00 | 1.1 | e0.00 | e0.00 | e0.00 | 4.2 | e0.00 | e0.00 | e0.00 |
| 26 | e0.00 | e0.00 | 102 | e0.00 | 0.14 | e0.00 | e0.00 | e0.00 | 3.3 | e0.00 | e0.00 | e0.00 |
| 27 | e0.00 | e0.00 | 27 | e0.00 | 0.01 | e0.00 | e0.00 | e0.00 | 2.1 | 2.6 | e0.00 | e0.00 |
| 28 | 0.18 | 2.4 | 18 | e0.00 | 0.00 | e0.00 | e0.00 | e0.00 | 1.3 | 0.40 | e0.00 | e0.00 |
| 29 | e0.00 | 0.64 | 7.9 | e0.00 | --- | e0.00 | 19 | e0.00 | 0.50 | 2.5 | e0.00 | e0.00 |
| 30 | 4.6 | 0.02 | 6.1 | e0.00 | --- | e0.00 | 4.2 | e0.00 | 0.11 | 21 | 0.04 | e0.00 |
| 31 | 3.1 | --- | 3.3 | e0.00 | --- | e0.00 | --- | e0.00 | --- | 1.8 | e0.00 | --- |
| Total | 74.34 | 379.32 | 532.34 | 268.63 | 110.53 | 66.28 | 97.38 | 643.26 | 474.83 | 35.03 | 2.29 | 0.00 |
| Mean | 2.40 | 12.6 | 17.2 | 8.67 | 3.95 | 2.14 | 3.25 | 20.8 | 15.8 | 1.13 | 0.07 | 0.00 |
| Max | 29 | 117 | 141 | 172 | 33 | 35 | 54 | 174 | 146 | 21 | 1.7 | 0.00 |
| Min | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Ac-ft | 147 | 752 | 1,060 | 533 | 219 | 131 | 193 | 1,280 | 942 | 69 | 4.5 | 0.00 |

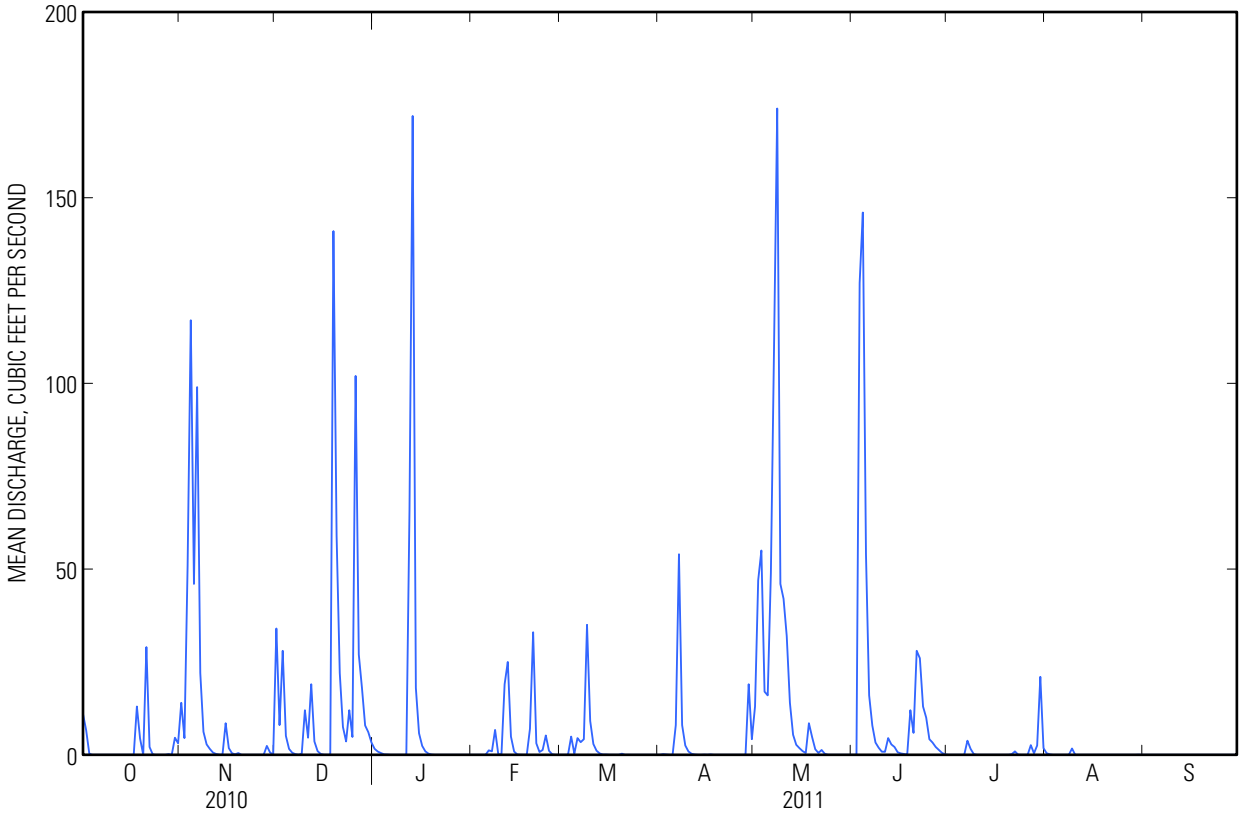
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2011, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 3.92 | 7.57 | 7.30 | 6.53 | 4.65 | 8.31 | 3.24 | 5.67 | 2.17 | 0.33 | 0.35 | 1.18 |
| Max | 15.4 | 15.3 | 19.7 | 27.1 | 12.8 | 34.8 | 10.4 | 20.8 | 15.8 | 1.13 | 2.03 | 5.18 |
| (WY) | (2006) | (2010) | (2009) | (2002) | (2008) | (2006) | (2006) | (2011) | (2011) | (2011) | (2009) | (2003) |
| Min | 0.03 | 1.12 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (WY) | (2004) | (2009) | (2003) | (2010) | (2007) | (2008) | (2008) | (2003) | (2002) | (2006) | (2003) | (2008) |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**SUMMARY STATISTICS**

| | Calendar Year 2010 | | Water Year 2011 | | Water Years 2002 - 2011 | |
|---|---|---|---|---|---|---|
| **Annual total** | 1,349.23 | | 2,684.23 | | | |
| **Annual mean** | 3.70 | | 7.35 | | 4.29 | |
| **Highest annual mean** | | | | | 7.35 | 2011 |
| **Lowest annual mean** | | | | | 1.10 | 2003 |
| **Highest daily mean** | 141 | Dec 19 | 174 | May 8 | 324 | May 6, 2002 |
| **Lowest daily mean** | 0.00 | Jan 1 | 0.00 | Oct 4 | 0.00 | Oct 3, 2001 |
| **Annual seven-day minimum** | 0.00 | Jan 1 | 0.00 | Oct 4 | 0.00 | Oct 16, 2001 |
| **Annual runoff (ac-ft)** | 2,680 | | 5,320 | | 3,110 | |
| **10 percent exceeds** | 6.5 | | 18 | | 7.9 | |
| **50 percent exceeds** | 0.00 | | 0.01 | | 0.00 | |
| **90 percent exceeds** | 0.00 | | 0.00 | | 0.00 | |



**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 2000 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 2005 to current year.

REVISED RECORDS.--WDR-HI-10-1: 2008, 2009.

REMARKS.--Records computed by Vaughn Kunishige. Records fair, except for estimated periods which are poor.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED SEDIMENT CONCENTRATION: maximum daily mean 1,470 mg/L, October 25, 2005; minimum 0 mg/L on many days.
SUSPENDED SEDIMENT DISCHARGE: maximum daily, 788 tons, June 4, 2011; minimum, 0 tons on many days.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED SEDIMENT CONCENTRATION: Maximum daily mean, 599 mg/L, January 13; minimum, 0 mg/L on many days.
SUSPENDED SEDIMENT DISCHARGE: Maximum daily, 788 tons, June 4; minimum, 0 tons on manys days.

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**WATER-QUALITY DATA**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
Part 1 of 6
[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters]

| Date | Sample start time | Discharge, instanta-neous, ft³/s (00061) | Sampler type (84164) | Sampling method (82398) | Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331) | Suspended sediment concen-tration, mg/L (80154) |
|---|---|---|---|---|---|---|
| **10-01-2010** | **1615** | 57 | Peristaltic pump | Point sample | -- | 329 |
| **10-01-2010** | **1630** | 52 | Peristaltic pump | Point sample | -- | 165 |
| **10-01-2010** | **1645** | 55 | Peristaltic pump | Point sample | -- | 138 |
| **10-01-2010** | **1700** | 42 | Peristaltic pump | Point sample | -- | 94 |
| **10-01-2010** | **1900** | 42 | Peristaltic pump | Point sample | -- | 75 |
| **10-18-2010** | **2115** | 171 | Peristaltic pump | Point sample | -- | 1,450 |
| **10-18-2010** | **2130** | 156 | Peristaltic pump | Point sample | -- | 1,260 |
| **10-18-2010** | **2145** | 146 | Peristaltic pump | Point sample | -- | 1,320 |
| **10-18-2010** | **2200** | 144 | Peristaltic pump | Point sample | -- | 1,020 |
| **10-18-2010** | **2215** | 124 | Peristaltic pump | Point sample | -- | 861 |
| **10-18-2010** | **2230** | 112 | Peristaltic pump | Point sample | -- | 742 |
| **10-18-2010** | **2245** | 100 | Peristaltic pump | Point sample | -- | 600 |
| **10-18-2010** | **2300** | 88 | Peristaltic pump | Point sample | -- | 461 |
| **10-18-2010** | **2315** | 68 | Peristaltic pump | Point sample | -- | 340 |
| **10-18-2010** | **2330** | 55 | Peristaltic pump | Point sample | -- | 295 |
| **10-18-2010** | **2345** | 47 | Peristaltic pump | Point sample | -- | 223 |
| **10-21-2010** | **0629** | 231 | Peristaltic pump | Point sample | -- | 1,320 |
| **10-21-2010** | **0644** | 198 | Peristaltic pump | Point sample | -- | 1,210 |
| **10-21-2010** | **0744** | 135 | Peristaltic pump | Point sample | -- | 633 |
| **10-21-2010** | **0844** | 96 | Peristaltic pump | Point sample | -- | 260 |
| **10-21-2010** | **0944** | 55 | Peristaltic pump | Point sample | -- | 106 |
| **10-21-2010** | **1229** | 33 | Peristaltic pump | Point sample | -- | 54 |
| **10-30-2010** | **1829** | 24 | Peristaltic pump | Point sample | -- | 51 |
| **10-30-2010** | **1914** | 22 | Peristaltic pump | Point sample | -- | 32 |
| **11-01-2010** | **1044** | 82 | Peristaltic pump | Point sample | -- | 168 |
| **11-01-2010** | **1059** | 78 | Peristaltic pump | Point sample | -- | 164 |
| **11-01-2010** | **1144** | 46 | Peristaltic pump | Point sample | -- | 48 |
| **11-01-2010** | **1329** | 42 | Peristaltic pump | Point sample | -- | 31 |
| **11-03-2010** | **1144** | 159 | Peristaltic pump | Point sample | -- | 672 |
| **11-03-2010** | **1214** | 124 | Peristaltic pump | Point sample | -- | 523 |
| **11-03-2010** | **1259** | 108 | Peristaltic pump | Point sample | -- | 343 |
| **11-03-2010** | **1359** | 78 | Peristaltic pump | Point sample | -- | 164 |
| **11-03-2010** | **1444** | 107 | Peristaltic pump | Point sample | -- | 113 |
| **11-03-2010** | **1529** | 100 | Peristaltic pump | Point sample | -- | 174 |
| **11-04-2010** | **1814** | 70 | Peristaltic pump | Point sample | -- | 14 |
| **11-04-2010** | **2114** | 112 | Peristaltic pump | Point sample | -- | 23 |
| **11-05-2010** | **1504** | 34 | Peristaltic pump | Point sample | -- | 22 |
| **11-06-2010** | **0524** | -- | -- | -- | -- | 15 |
| **11-06-2010** | **0704** | 117 | Peristaltic pump | Point sample | -- | 23 |
| **11-06-2010** | **1159** | 203 | Peristaltic pump | Point sample | -- | 87 |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**WATER-QUALITY DATA**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
Part 2 of 6
[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters]

| Date | Sample start time | Discharge, instantaneous, ft³/s (00061) | Sampler type (84164) | Sampling method (82398) | Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331) | Suspended sediment concentration, mg/L (80154) |
|---|---|---|---|---|---|---|
| **11-06-2010** | **1359** | 139 | Peristaltic pump | Point sample | -- | 151 |
| **11-06-2010** | **1524** | 115 | Peristaltic pump | Point sample | -- | 15 |
| **11-06-2010** | **2129** | 75 | Peristaltic pump | Point sample | -- | 104 |
| **11-07-2010** | **0734** | 27 | Peristaltic pump | Point sample | -- | 36 |
| **11-08-2010** | **0539** | 7.3 | Peristaltic pump | Point sample | -- | 10 |
| **11-15-2010** | **0709** | 50 | Peristaltic pump | Point sample | -- | 75 |
| **11-15-2010** | **0949** | 18 | Peristaltic pump | Point sample | -- | 51 |
| **11-28-2010** | **0944** | 16 | Peristaltic pump | Point sample | -- | 48 |
| **12-01-2010** | **0545** | 178 | Peristaltic pump | Point sample | -- | 640 |
| **12-01-2010** | **0705** | 125 | Peristaltic pump | Point sample | -- | 557 |
| **12-01-2010** | **0739** | 215 | Peristaltic pump | Point sample | 92 | 382 |
| **12-01-2010** | **0819** | 161 | Peristaltic pump | Point sample | -- | 545 |
| **12-01-2010** | **0919** | 102 | Peristaltic pump | Point sample | -- | 749 |
| **12-01-2010** | **1134** | 35 | Peristaltic pump | Point sample | -- | 329 |
| **12-01-2010** | **1739** | 11 | Peristaltic pump | Point sample | -- | 44 |
| **12-02-2010** | **1004** | 7.6 | Peristaltic pump | Point sample | -- | 20 |
| **12-03-2010** | **0259** | 16 | Peristaltic pump | Point sample | -- | 13 |
| **12-03-2010** | **0324** | 28 | Peristaltic pump | Point sample | -- | 10 |
| **12-03-2010** | **0424** | 46 | Peristaltic pump | Point sample | -- | 17 |
| **12-03-2010** | **1424** | 24 | Peristaltic pump | Point sample | -- | 35 |
| **12-04-2010** | **0529** | 6.7 | Peristaltic pump | Point sample | -- | 14 |
| **12-09-2010** | **2349** | 12 | Peristaltic pump | Point sample | -- | 627 |
| **12-10-2010** | **0059** | 12 | Peristaltic pump | Point sample | -- | 376 |
| **12-10-2010** | **0124** | 16 | Peristaltic pump | Point sample | -- | 183 |
| **12-10-2010** | **0354** | 29 | Peristaltic pump | Point sample | -- | 96 |
| **12-10-2010** | **1649** | 9.0 | Peristaltic pump | Point sample | -- | 38 |
| **12-12-2010** | **0239** | 106 | Peristaltic pump | Point sample | -- | 189 |
| **12-12-2010** | **0434** | 39 | Peristaltic pump | Point sample | -- | 245 |
| **12-12-2010** | **1019** | 15 | Peristaltic pump | Point sample | -- | 96 |
| **12-12-2010** | **1604** | 9.3 | Peristaltic pump | Point sample | -- | 21 |
| **12-13-2010** | **0044** | 6.3 | Peristaltic pump | Point sample | -- | 8 |
| **12-19-2010** | **0334** | 11 | Peristaltic pump | Point sample | -- | 162 |
| **12-19-2010** | **0339** | 39 | Peristaltic pump | Point sample | -- | 123 |
| **12-19-2010** | **0559** | 31 | Peristaltic pump | Point sample | -- | 172 |
| **12-19-2010** | **0744** | 102 | Peristaltic pump | Point sample | -- | 131 |
| **12-19-2010** | **0824** | 228 | Peristaltic pump | Point sample | -- | 272 |
| **12-19-2010** | **0919** | 179 | Peristaltic pump | Point sample | -- | 922 |
| **12-19-2010** | **1034** | 218 | Peristaltic pump | Point sample | -- | 561 |
| **12-19-2010** | **1044** | 400 | Peristaltic pump | Point sample | -- | 734 |
| **12-19-2010** | **1119** | 294 | Peristaltic pump | Point sample | -- | 1,530 |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**WATER-QUALITY DATA**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
Part 3 of 6
[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters]

| Date | Sample start time | Discharge, instantaneous, ft³/s (00061) | Sampler type (84164) | Sampling method (82398) | Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331) | Suspended sediment concentration, mg/L (80154) |
|---|---|---|---|---|---|---|
| **12-19-2010** | **1224** | 247 | Peristaltic pump | Point sample | -- | 1,170 |
| **12-19-2010** | **1339** | 179 | Peristaltic pump | Point sample | -- | 960 |
| **12-19-2010** | **1534** | 251 | Peristaltic pump | Point sample | -- | 343 |
| **12-19-2010** | **1554** | 368 | Peristaltic pump | Point sample | -- | 303 |
| **12-19-2010** | **1629** | 250 | Peristaltic pump | Point sample | -- | 507 |
| **12-20-2010** | **0924** | 52 | Peristaltic pump | Point sample | -- | 188 |
| **12-20-2010** | **1024** | 56 | Peristaltic pump | Point sample | -- | 36 |
| **12-21-2010** | **0559** | 28 | Peristaltic pump | Point sample | -- | 20 |
| **12-22-2010** | **0704** | 8.5 | Peristaltic pump | Point sample | -- | 14 |
| **12-24-2010** | **1954** | 139 | Peristaltic pump | Point sample | -- | 265 |
| **12-24-2010** | **2104** | 88 | Peristaltic pump | Point sample | -- | 238 |
| **12-24-2010** | **2249** | 29 | Peristaltic pump | Point sample | -- | 327 |
| **12-25-2010** | **0354** | 7.8 | Peristaltic pump | Point sample | -- | 89 |
| **12-25-2010** | **2359** | 28 | Peristaltic pump | Point sample | -- | 159 |
| **12-26-2010** | **0134** | 9.0 | Peristaltic pump | Point sample | -- | 142 |
| **12-26-2010** | **0419** | 17 | Peristaltic pump | Point sample | -- | 120 |
| **12-26-2010** | **0439** | 147 | Peristaltic pump | Point sample | -- | 149 |
| **12-26-2010** | **0444** | 147 | Peristaltic pump | Point sample | -- | 332 |
| **12-26-2010** | **0509** | 271 | Peristaltic pump | Point sample | -- | 477 |
| **12-26-2010** | **0514** | 271 | Peristaltic pump | Point sample | -- | 1,300 |
| **12-26-2010** | **0734** | 375 | Peristaltic pump | Point sample | -- | 1,140 |
| **12-26-2010** | **0809** | 251 | Peristaltic pump | Point sample | -- | 1,590 |
| **12-26-2010** | **0919** | 191 | Peristaltic pump | Point sample | -- | 964 |
| **12-26-2010** | **1154** | 127 | Peristaltic pump | Point sample | -- | 257 |
| **12-26-2010** | **1654** | 54 | Peristaltic pump | Point sample | -- | 68 |
| **12-27-2010** | **0544** | 20 | Peristaltic pump | Point sample | -- | 24 |
| **12-27-2010** | **0659** | 19 | Peristaltic pump | Point sample | -- | 12 |
| **12-27-2010** | **0829** | 42 | Peristaltic pump | Point sample | -- | 21 |
| **12-27-2010** | **0834** | 42 | Peristaltic pump | Point sample | -- | 92 |
| **12-27-2010** | **1839** | 86 | Peristaltic pump | Point sample | -- | 129 |
| **12-27-2010** | **1949** | 30 | Peristaltic pump | Point sample | -- | 114 |
| **01-12-2011** | **1204** | 14 | Peristaltic pump | Point sample | -- | 362 |
| **01-12-2011** | **1519** | 20 | Peristaltic pump | Point sample | -- | 159 |
| **01-12-2011** | **2149** | 11 | Peristaltic pump | Point sample | -- | 75 |
| **01-12-2011** | **2209** | 113 | Peristaltic pump | Point sample | -- | 220 |
| **01-12-2011** | **2244** | 206 | Peristaltic pump | Point sample | -- | 229 |
| **01-12-2011** | **2249** | 250 | Peristaltic pump | Point sample | -- | 528 |
| **01-12-2011** | **2259** | 344 | Peristaltic pump | Point sample | -- | 669 |
| **01-12-2011** | **2304** | 536 | Peristaltic pump | Point sample | -- | 1,380 |
| **01-12-2011** | **2314** | 702 | Peristaltic pump | Point sample | -- | 1,450 |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**WATER-QUALITY DATA**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
Part 4 of 6
[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters]

| Date | Sample start time | Discharge, instanta-neous, ft³/s (00061) | Sampler type (84164) | Sampling method (82398) | Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331) | Suspended sediment concen-tration, mg/L (80154) |
|---|---|---|---|---|---|---|
| **01-12-2011** | **2319** | 896 | Peristaltic pump | Point sample | -- | 1,400 |
| **01-12-2011** | **2329** | 1,270 | Peristaltic pump | Point sample | -- | 1,410 |
| **01-12-2011** | **2334** | 1,460 | Peristaltic pump | Point sample | -- | 2,100 |
| **01-12-2011** | **2339** | 1,570 | Peristaltic pump | Point sample | -- | 2,960 |
| **01-12-2011** | **2349** | 1,750 | Peristaltic pump | Point sample | -- | 3,120 |
| **01-13-2011** | **0009** | 1,480 | Peristaltic pump | Point sample | -- | 3,360 |
| **01-13-2011** | **0019** | 1,220 | Peristaltic pump | Point sample | -- | 3,820 |
| **01-13-2011** | **0049** | 1,020 | Peristaltic pump | Point sample | -- | 3,360 |
| **01-13-2011** | **0059** | 748 | Peristaltic pump | Point sample | -- | 4,140 |
| **01-13-2011** | **0109** | 626 | Peristaltic pump | Point sample | -- | 3,610 |
| **01-13-2011** | **0124** | 433 | Peristaltic pump | Point sample | -- | 2,810 |
| **01-13-2011** | **0149** | 304 | Peristaltic pump | Point sample | -- | 1,900 |
| **01-13-2011** | **0254** | 225 | Peristaltic pump | Point sample | -- | 959 |
| **02-11-2011** | **1330** | 80 | Peristaltic pump | Point sample | -- | 479 |
| **02-11-2011** | **1340** | 152 | Peristaltic pump | Point sample | -- | 333 |
| **02-11-2011** | **1440** | 64 | Peristaltic pump | Point sample | -- | 373 |
| **02-11-2011** | **1520** | 39 | Peristaltic pump | Point sample | -- | 542 |
| **02-11-2011** | **2000** | 22 | Peristaltic pump | Point sample | -- | 199 |
| **02-12-2011** | **1415** | 52 | Peristaltic pump | Point sample | -- | 63 |
| **02-12-2011** | **1430** | 55 | Peristaltic pump | Point sample | -- | 52 |
| **02-12-2011** | **1700** | 53 | Peristaltic pump | Point sample | -- | 50 |
| **02-12-2011** | **1915** | 37 | Peristaltic pump | Point sample | -- | 61 |
| **02-19-2011** | **2320** | 5.3 | Peristaltic pump | Point sample | -- | 658 |
| **02-19-2011** | **2325** | 296 | Peristaltic pump | Point sample | -- | 1,450 |
| **02-19-2011** | **2355** | 211 | Peristaltic pump | Point sample | -- | 1,460 |
| **02-20-2011** | **0035** | 167 | Peristaltic pump | Point sample | -- | 1,340 |
| **02-20-2011** | **0205** | 131 | Peristaltic pump | Point sample | -- | 658 |
| **02-20-2011** | **0355** | 54 | Peristaltic pump | Point sample | -- | 225 |
| **03-09-2011** | **1030** | 234 | Peristaltic pump | Point sample | -- | 1,010 |
| **03-09-2011** | **1110** | 155 | Peristaltic pump | Point sample | -- | 866 |
| **03-09-2011** | **1250** | 106 | Peristaltic pump | Point sample | -- | 544 |
| **03-09-2011** | **1830** | 36 | Peristaltic pump | Point sample | -- | 154 |
| **04-06-2011** | **2320** | 103 | Peristaltic pump | Point sample | -- | 342 |
| **04-06-2011** | **2330** | 179 | Peristaltic pump | Point sample | -- | 252 |
| **04-07-2011** | **0005** | 116 | Peristaltic pump | Point sample | -- | 475 |
| **04-07-2011** | **0245** | 189 | Peristaltic pump | Point sample | -- | 558 |
| **04-07-2011** | **0355** | 130 | Peristaltic pump | Point sample | -- | 509 |
| **04-07-2011** | **0625** | 61 | Peristaltic pump | Point sample | -- | 243 |
| **04-07-2011** | **0950** | 59 | Peristaltic pump | Point sample | -- | 72 |
| **04-07-2011** | **1400** | 22 | Peristaltic pump | Point sample | -- | 48 |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**WATER-QUALITY DATA**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
Part 5 of 6
[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters]

| Date | Sample start time | Discharge, instanta-neous, ft³/s (00061) | Sampler type (84164) | Sampling method (82398) | Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331) | Suspended sediment concen-tration, mg/L (80154) |
|---|---|---|---|---|---|---|
| **04-29-2011** | **1300** | 82 | Peristaltic pump | Point sample | -- | 208 |
| **04-29-2011** | **1345** | 37 | Peristaltic pump | Point sample | -- | 261 |
| **04-29-2011** | **1400** | 63 | Peristaltic pump | Point sample | -- | 556 |
| **04-29-2011** | **1500** | 64 | Peristaltic pump | Point sample | -- | 310 |
| **04-29-2011** | **2145** | 37 | Peristaltic pump | Point sample | -- | 62 |
| **05-01-2011** | **1755** | 94 | Peristaltic pump | Point sample | -- | 129 |
| **05-01-2011** | **1930** | 33 | Peristaltic pump | Point sample | -- | 255 |
| **05-01-2011** | **2005** | 53 | Peristaltic pump | Point sample | -- | 284 |
| **05-01-2011** | **2215** | 19 | Peristaltic pump | Point sample | -- | 138 |
| **05-01-2011** | **2335** | 179 | Peristaltic pump | Point sample | -- | 184 |
| **05-01-2011** | **2340** | 166 | Peristaltic pump | Point sample | -- | 916 |
| **05-02-2011** | **0010** | 124 | Peristaltic pump | Point sample | -- | 1,120 |
| **05-02-2011** | **0120** | 61 | Peristaltic pump | Point sample | -- | 651 |
| **05-02-2011** | **0430** | 20 | Peristaltic pump | Point sample | -- | 187 |
| **05-02-2011** | **1820** | 63 | Peristaltic pump | Point sample | -- | 51 |
| **05-02-2011** | **1845** | 114 | Peristaltic pump | Point sample | -- | 90 |
| **05-02-2011** | **1915** | 188 | Peristaltic pump | Point sample | -- | 183 |
| **05-02-2011** | **2045** | 144 | Peristaltic pump | Point sample | -- | 382 |
| **05-02-2011** | **2320** | 90 | Peristaltic pump | Point sample | -- | 399 |
| **05-03-2011** | **0505** | 57 | Peristaltic pump | Point sample | -- | 42 |
| **05-03-2011** | **0640** | 138 | Peristaltic pump | Point sample | -- | 61 |
| **05-03-2011** | **1040** | 82 | Peristaltic pump | Point sample | -- | 68 |
| **05-03-2011** | **1234** | 53 | Peristaltic pump | Point sample | -- | 34 |
| **05-03-2011** | **1238** | 48 | Peristaltic pump | Point sample | -- | 29 |
| **05-03-2011** | **1239** | 48 | US DH-81 | EWI | -- | 21 |
| **05-03-2011** | **1242** | 48 | Peristaltic pump | Point sample | -- | 27 |
| **05-03-2011** | **1246** | 48 | Peristaltic pump | Point sample | -- | 22 |
| **05-03-2011** | **1247** | 48 | US DH-81 | EWI | -- | 20 |
| **05-03-2011** | **1248** | 48 | Peristaltic pump | Point sample | -- | 25 |
| **05-03-2011** | **1252** | 48 | Peristaltic pump | Point sample | -- | 24 |
| **05-05-2011** | **2300** | 63 | Peristaltic pump | Point sample | -- | 100 |
| **05-06-2011** | **0050** | 52 | Peristaltic pump | Point sample | -- | 73 |
| **05-06-2011** | **0145** | 58 | Peristaltic pump | Point sample | -- | 59 |
| **05-06-2011** | **0520** | 59 | Peristaltic pump | Point sample | -- | 40 |
| **05-06-2011** | **0845** | -- | -- | -- | -- | 48 |
| **05-06-2011** | **1005** | 54 | Peristaltic pump | Point sample | -- | 71 |
| **05-06-2011** | **1020** | 57 | Peristaltic pump | Point sample | -- | 76 |
| **05-06-2011** | **1125** | 63 | Peristaltic pump | Point sample | -- | 65 |
| **05-06-2011** | **1540** | 51 | Peristaltic pump | Point sample | -- | 55 |
| **05-06-2011** | **2205** | 63 | Peristaltic pump | Point sample | -- | 46 |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**WATER-QUALITY DATA**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
Part 6 of 6
[ft³/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters]

| Date | Sample start time | Discharge, instanta-neous, ft³/s (00061) | Sampler type (84164) | Sampling method (82398) | Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331) | Suspended sediment concen-tration, mg/L (80154) |
|---|---|---|---|---|---|---|
| **05-07-2011** | **0600** | 129 | Peristaltic pump | Point sample | -- | 42 |
| **05-07-2011** | **1235** | 104 | Peristaltic pump | Point sample | -- | 51 |
| **05-08-2011** | **0045** | 234 | Peristaltic pump | Point sample | -- | 103 |
| **05-08-2011** | **0050** | 234 | Peristaltic pump | Point sample | -- | 379 |
| **05-08-2011** | **0445** | 368 | Peristaltic pump | Point sample | -- | 488 |
| **05-08-2011** | **0520** | 247 | Peristaltic pump | Point sample | -- | 800 |
| **05-08-2011** | **0655** | 193 | Peristaltic pump | Point sample | -- | 576 |
| **05-08-2011** | **1135** | 756 | Peristaltic pump | Point sample | -- | 221 |
| **05-08-2011** | **1145** | 407 | Peristaltic pump | Point sample | -- | 1,190 |
| **05-08-2011** | **1155** | 259 | Peristaltic pump | Point sample | -- | 2,040 |
| **05-08-2011** | **1210** | 222 | Peristaltic pump | Point sample | -- | 2,220 |
| **05-08-2011** | **1320** | 176 | Peristaltic pump | Point sample | -- | 1,830 |
| **05-08-2011** | **1550** | 121 | Peristaltic pump | Point sample | -- | 422 |
| **05-09-2011** | **0145** | 59 | Peristaltic pump | Point sample | -- | 58 |
| **06-03-2011** | **0750** | 151 | Peristaltic pump | Point sample | -- | 277 |
| **06-03-2011** | **0800** | 203 | Peristaltic pump | Point sample | -- | 229 |
| **06-03-2011** | **0830** | 477 | Peristaltic pump | Point sample | -- | 369 |
| **06-03-2011** | **0835** | 477 | Peristaltic pump | Point sample | -- | 844 |
| **06-03-2011** | **0910** | 273 | Peristaltic pump | Point sample | -- | 859 |
| **06-03-2011** | **1205** | 294 | Peristaltic pump | Point sample | -- | 633 |
| **06-03-2011** | **1325** | 206 | Peristaltic pump | Point sample | -- | 398 |
| **06-03-2011** | **1550** | 157 | Peristaltic pump | Point sample | -- | 168 |
| **06-03-2011** | **2110** | 96 | Peristaltic pump | Point sample | -- | 64 |
| **06-04-2011** | **0155** | 54 | Peristaltic pump | Point sample | -- | 32 |
| **06-04-2011** | **0215** | 50 | Peristaltic pump | Point sample | -- | 19 |
| **06-04-2011** | **0230** | 48 | Peristaltic pump | Point sample | -- | 19 |
| **06-04-2011** | **0550** | 54 | Peristaltic pump | Point sample | -- | 17 |
| **06-04-2011** | **0650** | 243 | Peristaltic pump | Point sample | -- | 45 |
| **06-04-2011** | **0655** | 254 | Peristaltic pump | Point sample | -- | 258 |
| **06-04-2011** | **0750** | 186 | Peristaltic pump | Point sample | -- | 386 |
| **06-04-2011** | **0920** | 122 | Peristaltic pump | Point sample | -- | 440 |
| **06-04-2011** | **1620** | 51 | Peristaltic pump | Point sample | -- | 88 |
| **06-04-2011** | **1630** | 51 | Peristaltic pump | Point sample | -- | 25 |
| **06-04-2011** | **1650** | 53 | Peristaltic pump | Point sample | -- | 18 |
| **06-04-2011** | **2115** | 1,170 | Peristaltic pump | Point sample | -- | 236 |
| **06-04-2011** | **2120** | 1,170 | Peristaltic pump | Point sample | -- | 3,910 |
| **06-04-2011** | **2130** | 1,530 | Peristaltic pump | Point sample | -- | 5,860 |
| **06-04-2011** | **2145** | 1,160 | Peristaltic pump | Point sample | -- | 8,210 |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**SUSPENDED-SEDIMENT**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
[e, estimated]

| Day | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | October | | November | | December | | January | | February | | March | |
| 1 | 19 | 1.6 | 12 | 1.4 | 158 | 39 | 1 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 |
| 2 | 6 | 0.15 | 3 | 0.03 | 10 | 0.27 | 1 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 |
| 3 | 0.0 | 0.00 | 87 | 25 | 48 | 5.5 | 0.0 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 |
| 4 | e0.0 | e0.00 | 123 | 49 | 8 | 0.13 | 0.0 | 0.00 | e0.0 | e0.00 | 4 | 0.10 |
| 5 | e0.0 | e0.00 | 18 | 2.4 | 2 | 0.01 | 0.0 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 |
| 6 | e0.0 | e0.00 | 85 | 28 | 1 | 0.00 | e0.0 | e0.00 | 1 | 0.02 | 4 | 0.05 |
| 7 | e0.0 | e0.00 | 32 | 2.5 | 0.0 | 0.00 | e0.0 | e0.00 | 1 | 0.01 | 3 | 0.06 |
| 8 | e0.0 | e0.00 | 7 | 0.13 | e0.0 | e0.00 | e0.0 | e0.00 | 6 | 0.28 | 3 | 0.05 |
| 9 | e0.0 | e0.00 | 3 | 0.02 | 7 | 0.29 | e0.0 | e0.00 | 0.0 | 0.00 | 171 | 43 |
| 10 | e0.0 | e0.00 | 1 | 0.00 | 66 | 2.8 | e0.0 | e0.00 | 0.0 | 0.00 | 22 | 0.63 |
| 11 | e0.0 | e0.00 | 1 | 0.00 | 13 | 0.17 | e0.0 | e0.00 | 105 | 17 | 5 | 0.05 |
| 12 | e0.0 | e0.00 | 0.0 | 0.00 | 76 | 6.9 | 193 | 326 | 53 | 4.9 | 0.0 | 0.00 |
| 13 | e0.0 | e0.00 | 0.0 | 0.00 | 6 | 0.06 | 599 | 745 | 5 | 0.09 | 0.0 | 0.00 |
| 14 | e0.0 | e0.00 | e0.0 | e0.00 | 3 | 0.00 | 35 | 2.3 | 1 | 0.00 | 0.0 | 0.00 |
| 15 | e0.0 | e0.00 | 20 | 0.90 | 1 | 0.00 | 6 | 0.10 | 0.0 | 0.00 | 0.0 | 0.00 |
| 16 | e0.0 | e0.00 | 5 | 0.03 | 0.0 | 0.00 | 2 | 0.01 | 0.0 | 0.00 | 0.0 | 0.00 |
| 17 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 |
| 18 | 84 | 28 | 0.0 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 19 | 16 | 0.98 | 0.0 | 0.00 | 426 | 230 | 0.0 | 0.00 | 45 | 27 | e0.0 | e0.00 |
| 20 | e0.0 | e0.00 | e0.0 | e0.00 | 102 | 16 | e0.0 | e0.00 | 148 | 52 | 0.0 | 0.00 |
| 21 | 98 | 33 | e0.0 | e0.00 | 16 | 1.1 | e0.0 | e0.00 | 2 | 0.02 | e0.0 | e0.00 |
| 22 | 11 | 0.08 | e0.0 | e0.00 | 11 | 0.22 | e0.0 | e0.00 | 0.0 | 0.00 | 0.0 | 0.00 |
| 23 | 1 | 0.00 | e0.0 | e0.00 | 7 | 0.07 | e0.0 | e0.00 | 1 | 0.02 | e0.0 | e0.00 |
| 24 | e0.0 | e0.00 | e0.0 | e0.00 | 47 | 6.6 | e0.0 | e0.00 | 4 | 0.08 | e0.0 | e0.00 |
| 25 | e0.0 | e0.00 | e0.0 | e0.00 | 65 | 1.1 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 |
| 26 | e0.0 | e0.00 | e0.0 | e0.00 | 339 | 197 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 |
| 27 | e0.0 | e0.00 | e0.0 | e0.00 | 33 | 2.8 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 |
| 28 | 0.0 | 0.00 | 3 | 0.08 | 26 | 1.6 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 |
| 29 | e0.0 | e0.00 | 0.0 | 0.00 | 8 | 0.17 | e0.0 | e0.00 | --- | --- | e0.0 | e0.00 |
| 30 | 6 | 0.21 | 0.0 | 0.00 | 5 | 0.08 | e0.0 | e0.00 | --- | --- | e0.0 | e0.00 |
| 31 | 4 | 0.05 | --- | --- | 3 | 0.03 | e0.0 | e0.00 | --- | --- | e0.0 | e0.00 |
| Total | --- | 64.07 | --- | 109.49 | --- | 511.90 | --- | 1,073.41 | --- | 101.42 | --- | 43.94 |

**16226400 North Halawa Stream near Quarantine Station at Halawa, Oahu, HI—Continued**

**SUSPENDED-SEDIMENT**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
[e, estimated]

| Day | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) | Mean concen-tration (mg/L) | Sediment discharge (tons) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | April | | May | | June | | July | | August | | September | |
| 1 | e0.0 | e0.00 | 78 | 16 | e0.0 | e0.00 | 0.0 | 0.00 | 1 | 0.00 | e0.0 | e0.00 |
| 2 | 0.0 | 0.00 | 185 | 44 | e0.0 | e0.00 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 |
| 3 | 0.0 | 0.00 | 49 | 8.7 | 178 | 122 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 4 | e0.0 | e0.00 | 14 | 0.67 | 408 | 788 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 5 | e0.0 | e0.00 | 15 | 1.0 | 130 | 35 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 6 | 17 | 4.2 | 40 | 5.6 | 16 | 0.88 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 7 | 153 | 47 | 54 | 17 | 7 | 0.21 | 3 | 0.06 | e0.0 | e0.00 | e0.0 | e0.00 |
| 8 | 10 | 0.29 | 473 | 252 | 3 | 0.03 | 3 | 0.02 | e0.0 | e0.00 | e0.0 | e0.00 |
| 9 | 2 | 0.01 | 37 | 5.0 | 2 | 0.00 | 1 | 0.00 | 1 | 0.01 | e0.0 | e0.00 |
| 10 | 1 | 0.00 | 46 | 12 | 1 | 0.00 | e0.0 | e0.00 | 0.0 | 0.00 | e0.0 | e0.00 |
| 11 | 0.0 | 0.00 | 28 | 2.7 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 12 | 0.0 | 0.00 | 10 | 0.44 | 4 | 0.07 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 13 | e0.0 | e0.00 | 4 | 0.06 | 2 | 0.02 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 14 | e0.0 | e0.00 | 2 | 0.02 | 2 | 0.01 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 15 | 0.0 | 0.00 | 1 | 0.00 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 16 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 17 | 0.0 | 0.00 | 0.0 | 0.00 | e0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 18 | e0.0 | e0.00 | 7 | 0.28 | 0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 19 | e0.0 | e0.00 | 4 | 0.08 | 9 | 0.53 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 20 | e0.0 | e0.00 | 1 | 0.00 | 5 | 0.08 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 21 | e0.0 | e0.00 | 0.0 | 0.00 | 24 | 2.3 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 22 | e0.0 | e0.00 | 1 | 0.00 | 21 | 2.0 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 23 | e0.0 | e0.00 | 0.0 | 0.00 | 11 | 0.49 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 24 | e0.0 | e0.00 | 0.0 | 0.00 | 8 | 0.26 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 25 | e0.0 | e0.00 | e0.0 | e0.00 | 4 | 0.04 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 26 | e0.0 | e0.00 | e0.0 | e0.00 | 3 | 0.03 | e0.0 | e0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 27 | e0.0 | e0.00 | e0.0 | e0.00 | 2 | 0.01 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 28 | e0.0 | e0.00 | e0.0 | e0.00 | 1 | 0.00 | 0.0 | 0.00 | e0.0 | e0.00 | e0.0 | e0.00 |
| 29 | 57 | 8.3 | e0.0 | e0.00 | 1 | 0.00 | 2 | 0.02 | e0.0 | e0.00 | e0.0 | e0.00 |
| 30 | 11 | 0.14 | e0.0 | e0.00 | 0.0 | 0.00 | 28 | 4.7 | 0.0 | 0.00 | e0.0 | e0.00 |
| 31 | --- | --- | e0.0 | e0.00 | --- | --- | 2 | 0.01 | e0.0 | e0.00 | --- | --- |
| Total | --- | 59.94 | --- | 365.55 | --- | 951.96 | --- | 4.81 | --- | 0.01 | --- | 0.00 |

| | Total suspended sediment discharge (tons) |
|---|---|
| Year | 3,286.50 |