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| Table 1. Land use categories in Faga'alu subwatersheds (NOAA Ocean Service and Coastal Services Center, 2010). Land cover percentages are of the subwatershed. | | | | | | | | | | | | |
|  | **Cumulative Area** | | **Subwatershed Area** | | **Land cover as % subwatershed areaa** | | | | | | | |
| Subwatershed (outlet) | km2 | % | km2 | % | B | HI | DOS | GA | F | S | Disturbed | Undisturbed |
| Upper (FG1) | 0.9 | 50 | 0.90 | 50 | 0.4 | 0.0 | 0.0 | 0.1 | 82 | 17.1 | 0.4 | 100 |
| Lower\_Quarry (FG2) | 1.2 | 66 | 0.27 | 16 | 5.7 | 0.7 | 0.1 | 0.5 | 92 | 0.9 | 6.5 | 94 |
| Lower\_Village (FG3) | 1.8 | 100 | 0.60 | 34 | 0.0 | 9.0 | 2.6 | 0.2 | 88 | 0.6 | 11.7 | 88 |
| Lower (FG3) | 1.8 | 100 | 0.88 | 50 | 1.8 | 6.4 | 1.8 | 0.3 | 89 | 0.7 | 10.1 | 90 |
| Total (FG3) | 1.8 | 100 | 1.78 | 100 | 1.1 | 3.2 | 0.9 | 0.2 | 86 | 9.0 | 5.2 | 95 |
| 1. B=Bare, HI=High Intensity Developed, DOS=Developed Open Space, GA=Grassland (agriculture), F=Forest, S=Scrub/Shrub, Disturbed=B+HI+DOS+GA, Undisturbed=F+S 2. Disturbed area for Upper was from natural landslide. Undisturbed is 100% from rounding up. | | | | | | | | | | | | |

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| Table 2. Event­wise suspended sediment yield (SSYEV) from subwatersheds in Faga'alu for events with simultaneous data from FG1 and FG3. Storm numbers correspond with the storms presented in Appendix C Table 1. | | | | | | | | | | | |
|  | **Storm** | **Precip** | **SSYEV tons** | | | **% of SSYEV\_TOTAL** | | **PEa** | | **SSC** | |
| **Storm#** | **Start** | **mm** | **Upperb** | **Lowerc** | **Totald** | **Upper** | **Lower** | **Upper** | **Total** | **Data Source Upper** | **Data Source Total** |
| 2 | 01/19/2012 | 18 | 0.06 | 0.63 | 0.69 | 8.0 | 91.0 | 56 | 36 | T­TS | int. grab |
| 4 | 01/31/2012 | 35 | 0.03 | 1.92 | 1.95 | 1.0 | 98.0 | 56 | 118 | T­TS | T­YSI |
| 5 | 02/01/2012 | 11 | 0.01 | 0.4 | 0.42 | 3.0 | 96.0 | 56 | 118 | T­TS | T­YSI |
| 6 | 02/02/2012 | 16 | 0.06 | 1.02 | 1.08 | 5.0 | 94.0 | 56 | 118 | T­TS | T­YSI |
| 7 | 02/03/2012 | 11 | 0.08 | 2.01 | 2.09 | 3.0 | 96.0 | 56 | 118 | T­TS | T­YSI |
| 8 | 02/04/2012 | 6 | 0.0 | 0.51 | 0.51 | 0.0 | 99.0 | 56 | 118 | T­TS | T­YSI |
| 9 | 02/05/2012 | 23 | 0.05 | 0.98 | 1.03 | 5.0 | 94.0 | 56 | 118 | T­TS | T­YSI |
| 10 | 02/05/2012 | 21 | 0.09 | 1.93 | 2.02 | 4.0 | 95.0 | 56 | 118 | T­TS | T­YSI |
| 11 | 02/06/2012 | 38 | 0.28 | 4.75 | 5.03 | 5.0 | 94.0 | 56 | 118 | T­TS | T­YSI |
| 12 | 02/07/2012 | 4 | 0.01 | 0.13 | 0.15 | 9.0 | 90.0 | 56 | 118 | T­TS | T­YSI |
| 13 | 02/07/2012 | 10 | 0.03 | 0.51 | 0.54 | 5.0 | 94.0 | 56 | 118 | T­TS | T­YSI |
| 14 | 02/13/2012 | 11 | 0.0 | 0.27 | 0.27 | 1.0 | 98.0 | 56 | 118 | T­TS | T­YSI |
| 16 | 03/05/2012 | 22 | 0.0 | 4.39 | 4.4 | 0.0 | 99.0 | 56 | 118 | T­TS | T­YSI |
| 17 | 03/06/2012 | 56 | 0.19 | 9.05 | 9.25 | 2.0 | 97.0 | 56 | 118 | T­TS | T­YSI |
| 18 | 03/08/2012 | 22 | 0.09 | 2.89 | 2.98 | 2.0 | 97.0 | 56 | 118 | T­TS | T­YSI |
| 19 | 03/09/2012 | 19 | 0.2 | 2.78 | 2.97 | 6.0 | 93.0 | 56 | 118 | T­TS | T­YSI |
| 20 | 03/15/2012 | 17 | 0.01 | 1.17 | 1.18 | 0.0 | 99.0 | 56 | 118 | T­TS | T­YSI |
| 21 | 03/16/2012 | 34 | 0.08 | 2.12 | 2.2 | 3.0 | 96.0 | 56 | 118 | T­TS | T­YSI |
| 22 | 03/17/2012 | 32 | 0.09 | 3.33 | 3.43 | 2.0 | 97.0 | 56 | 118 | T­TS | T­YSI |
| 23 | 03/20/2012 | 24 | 0.04 | 0.84 | 0.88 | 4.0 | 95.0 | 56 | 118 | T­TS | T­YSI |
| 24 | 03/21/2012 | 18 | 0.2 | 2.06 | 2.26 | 8.0 | 91.0 | 56 | 118 | T­TS | T­YSI |
| 25 | 03/22/2012 | 34 | 0.37 | 5.75 | 6.12 | 5.0 | 94.0 | 56 | 118 | T­TS | T­YSI |
| 27 | 03/24/2012 | 7 | 0.03 | 0.19 | 0.22 | 12.0 | 87.0 | 56 | 118 | T­TS | T­YSI |
| 28 | 03/25/2012 | 49 | 0.7 | 11.92 | 12.62 | 5.0 | 94.0 | 56 | 118 | T­TS | T­YSI |
| 29 | 03/31/2012 | 15 | 0.03 | 0.78 | 0.81 | 3.0 | 96.0 | 56 | 118 | T­TS | T­YSI |
| 32 | 05/07/2012 | 11 | 0.0 | 1.31 | 1.31 | 0.0 | 99.0 | 56 | 118 | T­TS | T­YSI |
| 33 | 05/08/2012 | 21 | 0.13 | 6.65 | 6.79 | 1.0 | 98.0 | 56 | 118 | T­TS | T­YSI |
| 34 | 05/20/2012 | 13 | 0.0 | 0.47 | 0.48 | 0.0 | 99.0 | 56 | 118 | T­TS | T­YSI |
| 64 | 04/16/2013 | 62 | 0.54 | 4.01 | 4.55 | 11.0 | 88.0 | 40 | 36 | int. grab | int. grab |
| 70 | 04/23/2013 | 86 | 9.57 | 13.51 | 23.08 | 41.0 | 58.0 | 40 | 36 | int. grab | int. grab |
| 79 | 06/24/2013 | 9 | 0.01 | 0.13 | 0.14 | 7.0 | 92.0 | 43 | 77 | T­YSI | T­OBS |
| 80 | 07/02/2013 | 13 | 0.02 | 0.28 | 0.3 | 5.0 | 94.0 | 43 | 77 | T­YSI | T­OBS |
| 106 | 02/14/2014 | 25 | 0.26 | 1.57 | 1.82 | 14.0 | 85.0 | 43 | 51 | T­YSI | T­OBS |
| 107 | 02/15/2014 | 7 | 0.04 | 0.63 | 0.67 | 6.0 | 93.0 | 43 | 51 | T­YSI | T­OBS |
| 109 | 02/18/2014 | 12 | 0.01 | 0.81 | 0.81 | 0.0 | 99.0 | 43 | 51 | T­YSI | T­OBS |
| 110 | 02/20/2014 | 29 | 0.13 | 3.71 | 3.84 | 3.0 | 96.0 | 43 | 51 | T­YSI | T­OBS |
| 111 | 02/21/2014 | 51 | 2.55 | 7.03 | 9.58 | 26.0 | 73.0 | 43 | 51 | T­YSI | T­OBS |
| 112 | 02/24/2014 | 16 | 0.09 | 0.56 | 0.65 | 13.0 | 86.0 | 43 | 51 | T­YSI | T­OBS |
| 113 | 02/24/2014 | 1 | 0.01 | 0.12 | 0.13 | 9.0 | 90.0 | 43 | 51 | T­YSI | T­OBS |
| 114 | 02/25/2014 | 67 | 0.62 | 7.17 | 7.79 | 7.0 | 92.0 | 43 | 51 | T­YSI | T­OBS |
| 115 | 02/27/2014 | 16 | 0.13 | 0.68 | 0.8 | 15.0 | 84.0 | 43 | 51 | T­YSI | T­OBS |
| 116 | 02/27/2014 | 12 | 0.12 | 1.25 | 1.37 | 8.0 | 91.0 | 43 | 51 | T­YSI | T­OBS |
| Total/Avg | 42 | 1004 | 17.0 | 112.2 | 129.2 | 13 | 87 | 52 | 94 | ­ | ­ |
| Tons/km2 | ­ | ­ | 18.8 | 127.5 | 72.6 | ­ | ­ | ­ | ­ | ­ | ­ |
| DR | ­ | ­ | 1 | 6.8 | 3.9 | ­ | ­ | ­ | ­ | ­ | ­ |
| 1. PE is cumulative probable error (Eq 4) as a percentage of the mean observed SSYEV. 2. Measured SSYEV at FG1. 3. SSYEV at FG3 ­ SSYEV at FG1. 4. Measured SSYEV at FG3. | | | | | | | | | | | |

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| Table 3. Suspended sediment yield (SSY), specific suspended sediment yield (sSSY), and disturbance ratio (DR) from disturbed portions of Upper and Lower subwatersheds for the storm events in Table 2. | | | |
|  | **Uppera** | **Lower** | **Total** |
| Fraction of subwatershed area disturbed (%) | 0.4 | 10.1 | 5.2 |
| SSY (tons) | 17.0 | 112.2 | 129.2 |
| Forested areas | 16.9 | 14.9 | 31.7 |
| Disturbed areas | 0.1 | 97.3 | 97.5 |
| % from disturbed areas | 0.9 | 87 | 75 |
| sSSY, disturbed areas (tons/km2) | 41.0 | 1095.0 | 1053.1 |
| DR for sSSY from disturbed areasb | 2 | 58 | 56 |
| 1. Disturbed areas in Upper are bare areas from landslides. 2. Calculated as (sSSY from disturbed areas)/sSSY from Upper (17.0 tons/km2) | | | |

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| Table 4. Event­wise suspended sediment yield (SSYEV) from subwatersheds in Faga'alu for events with simultaneous data from FG1, FG2, and FG3. Storm numbers correspond with the storms presented in Table 2 and Appendix C Table 1. | | | | | | | | | | | |
|  | **Storm** | **Precip** | **SSYEV tons** | | | | | **% of SSYEV\_TOTAL** | | | |
| **Storm#** | **Start** | **mm** | **Uppera** | **Lower\_Quarryb** | **Lower\_Villagec** | **Lowerd** | **Totale** | **Upper** | **Lower\_Quarry** | **Lower\_Village** | **Lower** |
| 2 | 01/19/2012 | 18 | 0.06 | 0.3 | 0.33 | 0.63 | 0.69 | 8.0 | 43.0 | 47.0 | 91.0 |
| 64 | 04/16/2013 | 62 | 0.54 | 2.77 | 1.24 | 4.01 | 4.55 | 11.0 | 60.0 | 27.0 | 88.0 |
| 70 | 04/23/2013 | 86 | 9.57 | 8.21 | 5.3 | 13.51 | 23.08 | 41.0 | 35.0 | 22.0 | 58.0 |
| 106 | 02/14/2014 | 25 | 0.26 | 1.01 | 0.55 | 1.57 | 1.82 | 14.0 | 55.0 | 30.0 | 86.0 |
| 110 | 02/20/2014 | 29 | 0.13 | 1.6 | 2.11 | 3.71 | 3.84 | 3.0 | 41.0 | 54.0 | 96.0 |
| 111 | 02/21/2014 | 51 | 2.55 | 2.07 | 4.96 | 7.03 | 9.58 | 26.0 | 21.0 | 51.0 | 73.0 |
| 115 | 02/27/2014 | 16 | 0.13 | 0.08 | 0.59 | 0.68 | 0.8 | 16.0 | 9.0 | 73.0 | 85.0 |
| 116 | 02/27/2014 | 12 | 0.12 | 0.32 | 0.93 | 1.25 | 1.37 | 8.0 | 23.0 | 67.0 | 91.0 |
| Total/Avg | 8 | 299 | 13.4 | 16.4 | 16.0 | 32.4 | 45.7 | 29 | 36 | 35 | 71 |
| Tons/km2 |  |  | 14.8 | 60.6 | 26.7 | 36.8 | 25.7 | ­ | ­ | ­ | ­ |
| DR |  |  | 1.0 | 4.08 | 1.8 | 2.5 | 1.7 | ­ | ­ | ­ | ­ |
| 1. Measured SSYEV at FG1. 2. SSYEV at FG2 ­ SSYEV at FG1. 3. SSYEV at FG3 ­ SSYEV at FG2. 4. SSYEV at FG3 ­ SSYEV at FG1. 5. Measured SSYEV at FG3. | | | | | | | | | | | |

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| Table 5. Suspended sediment yield (SSY), specific suspended sediment yield (sSSY), and disturbance ratio (DR) from disturbed portions of Upper, Lower\_Quarry, and Lower\_Village subwatersheds for the storm events in Table 4. | | | | | |
|  | **Upper** | **Lower\_Quarry** | **Lower\_Village** | **Lower** | **Total** |
| Fraction of subwatershed area disturbed (%) | 0.4 | 6.5 | 11.7 | 10.1 | 5.2 |
| SSY (tons) | 13.4 | 16.4 | 16.0 | 32.4 | 45.7 |
| Forested areas | 13.3 | 3.7 | 7.8 | 11.7 | 25.0 |
| Disturbed areas | 0.1 | 12.7 | 8.2 | 20.7 | 20.7 |
| % from disturbed areas | 1.0 | 77 | 51 | 64 | 45 |
| sSSY, disturbed areas (tons/km2) | 37.0 | 721.6 | 116.2 | 232.8 | 223.9 |
| DR for sSSY from disturbed areas | 3 | 49 | 8 | 16 | 15 |

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| Table 6. Goodness­of­fit statistics for storm metric­SSYEV relationships. Spearman correlation coefficients significant at p<0.01. | | | | | | |
| **Model** | **Spearman** | **r2** | **RMSE(tons)** | **Intercept(α)** | **Slope(β)** | **BCF** |
| Psum\_upper | 0.70 | 0.39 | 4.31 | 0.003 | 1.10 | 2.71 |
| Psum\_total | 0.88 | 0.71 | 2.43 | 0.033 | 1.11 | 1.39 |
| EI\_upper | 0.48 | 0.18 | 5.48 | 0.001 | 0.97 | 4.38 |
| EI\_total | 0.73 | 0.55 | 2.98 | 0.001 | 1.32 | 2.00 |
| Qsum\_upper | 0.91 | 0.83 | 2.15 | 0.000 | 1.65 | 1.42 |
| Qsum\_total | 0.83 | 0.70 | 2.46 | 0.000 | 1.29 | 1.50 |
| Qmax\_upper | 0.90 | 0.79 | 2.36 | 0.398 | 1.51 | 2.12 |
| Qmax\_total | 0.80 | 0.67 | 2.59 | 2.429 | 1.41 | 1.49 |

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| Table 7. Estimates of Annual SSY and sSSY calculated using four different methods. | | | | | |
|  | | | **Equation 6** | | |
|  | **Psum model, Events in 2014** | **Qmax model, Events in 2014** | **Events in**  **Table 2** | **Events in**  **Table 4** | **All Measured**  **Events** |
| **Precipitation** |  |  |  |  |  |
| mm (% of Psann) | 2770 | 2770 | 1,004 (36%) | 299 (11%) | 3,457 (125%) |
| **Annual SSY (tons/year)** | | | | | |
| Upper | 35 | 129 | 46 | 120 | 41 |
| Lower | 152 | 526 | 310 | 300 | 388 |
| Lower\_Quarry | ­ | ­ | ­ | 150 | ­ |
| Lower\_Village | ­ | ­ | ­ | 150 | ­ |
| Total | 187 | 655 | 360 | 420 | 428 |
| **Annual sSSY (tons/km2/year)** | | | | | |
| Upper | 39 | 143 | 51 | 140 | 45 |
| Lower | 679 | 598 | 350 | 340 | 441 |
| Lower\_Quarry | ­ | ­ | ­ | 560 | ­ |
| Lower\_Village | ­ | ­ | ­ | 250 | ­ |
| Total | 105 | 368 | 200 | 240 | 241 |

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| Table 8. Annual Specific Suspended Sediment Yield (sSSY) from steep, volcanic islands in the tropical Pacific. | | | | | |
| **Location** | **Watershed drainage area (km2)** | **Mean annual precipitation (mm)** | | **sSSY range tons/km2/yr** | **Reference** |
| Faga’alu UPPER | 0.88 |  | | 45-143 | This study |
| Faga’alu TOTAL | 1.78 | 2.380-6,350 (varies with | | 241-368 | This study |
|  |  | elevation) | |  |  |
| Kawela, Molokai | 13.5 | 500-3,000 (varies with | | 394 | (Stock and Tribble, 2010) |
|  |  | elevation) | |  |  |
| Hanalei, Kauai | 60.04 | 500 – 9,500 (varies with | | 545 ± 128 | (Ferrier et al., 2013) |
|  |  | elevation) | |  |  |
| Hanalei, Kauai | 48.4 | 2,000-11,000 (varies with | | 525 | (Stock and Tribble, 2010) |
|  |  | elevation) | |  |  |
| Hanalei, Kauai | 54.4 | 2,000-11,000 (varies with | | 140±55 | (Calhoun and Fletcher, 1999) |
|  |  | elevation) | |  |  |
| St. John, USVIa | 3.5 | 1,300-1,400 | | 18 | (Ramos-Scharrón and |
|  |  |  | |  | Macdonald, 2007) |
| St. John, USVI | 2.3 | 1,300-1,400 | | 24 | (Nemeth and Nowlis, 2001) |
| St. John, USVI | 6 | 1,300-1,400 | | 36 | (Nemeth and Nowlis, 2001) |
| Oahu | 10.4 | 1,000-3,800 (varies with | | 330±130; 200±100 | (Hill et al., 1997) |
|  |  | elevation) | | (varies with method) |  |
| Barro Colorado, Panama | 0.033 | 2,623±458 | | 100-200 | (Zimmermann et al., 2012) |
| Fly River, PNG | 76,000 | up to 10,000 | | 1,000-1,500 | (Milliman, 1995) |
| Purari River, PNG | 35,000 |  | | 3,000 | “ |
| Milliman and Syvitski (1992) Model: | | | | | |
| sSSY = cAf |  |  |  |  | (Milliman and Syvitski, 1992) |
| *c,f = regression coeff. for* | *region/max elevation* | c | f | sSSY tons/km2/yr |  |
| Max elev >3,000m | Faga’alu | 280 | -0.54 | UPPER = 296 | - |
|  | UPPER = 0.88 |  |  | TOTAL = 205 |  |
|  | TOTAL = 1.78 |  |  |  |  |
| Max elev 1000-3000m |  | 65 | -0.46 | UPPER = 68 | - |
| (Oceania) |  |  |  | TOTAL = 50 |  |
| Max elev 500-1,000m |  | 12 | -0.59 | UPPER = 13 | - |
|  |  |  |  | TOTAL = 9 |  |

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| Table D.1. Water discharge from subwatersheds in Faga'alu. Includes all storm events for 2012, 2013, and 2014. | | | | | | | | |
|  | | | | **Discharge m3** |  |  | **Percentage** | |
| **Storm#** | **Storm Start** | **Precip mm** | **Upper** | **Lower** | **Total** |  | **Upper Lower** | |
| 1 | 01/18/2012 | 70.0 | 10765.0 | 12319.0 | 23084.0 | 46.0 | | 53.0 |
| 2 | 01/19/2012 | 18.0 | 8117.0 | 11055.0 | 19172.0 | 42.0 | | 57.0 |
| 3 | 01/25/2012 | 79.0 | 17887.0 | 17125.0 | 35012.0 | 51.0 | | 48.0 |
| 4 | 01/31/2012 | 35.0 | 6467.0 | 7868.0 | 14335.0 | 45.0 | | 54.0 |
| 5 | 02/01/2012 | 11.0 | 4071.0 | 5767.0 | 9838.0 | 41.0 | | 58.0 |
| 6 | 02/02/2012 | 16.0 | 9224.0 | 14750.0 | 23974.0 | 38.0 | | 61.0 |
| 7 | 02/03/2012 | 11.0 | 12729.0 | 18682.0 | 31411.0 | 40.0 | | 59.0 |
| 8 | 02/04/2012 | 6.0 | 1359.0 | 2765.0 | 4124.0 | 32.0 | | 67.0 |
| 9 | 02/05/2012 | 23.0 | 8374.0 | 12716.0 | 21090.0 | 39.0 | | 60.0 |
| 10 | 02/05/2012 | 21.0 | 9603.0 | 16471.0 | 26074.0 | 36.0 | | 63.0 |
| 11 | 02/06/2012 | 38.0 | 20080.0 | 25795.0 | 45875.0 | 43.0 | | 56.0 |
| 12 | 02/07/2012 | 4.0 | 2643.0 | 2970.0 | 5613.0 | 47.0 | | 52.0 |
| 13 | 02/07/2012 | 10.0 | 5178.0 | 6536.0 | 11714.0 | 44.0 | | 55.0 |
| 14 | 02/13/2012 | 11.0 | 1186.0 | 1548.0 | 2734.0 | 43.0 | | 56.0 |
| 15 | 02/23/2012 | 17.0 | 11491.0 | 15655.0 | 27146.0 | 42.0 | | 57.0 |
| 16 | 03/05/2012 | 22.0 | 1449.0 | 4629.0 | 6078.0 | 23.0 | | 76.0 |
| 17 | 03/06/2012 | 56.0 | 13131.0 | 17173.0 | 30304.0 | 43.0 | | 56.0 |
| 18 | 03/08/2012 | 22.0 | 6904.0 | 4946.0 | 11850.0 | 58.0 | | 41.0 |
| 19 | 03/09/2012 | 19.0 | 12850.0 | 10482.0 | 23332.0 | 55.0 | | 44.0 |
| 20 | 03/15/2012 | 17.0 | 2138.0 | 3305.0 | 5443.0 | 39.0 | | 60.0 |
| 21 | 03/16/2012 | 34.0 | 8794.0 | 10815.0 | 19609.0 | 44.0 | | 55.0 |
| 22 | 03/17/2012 | 32.0 | 9756.0 | 12562.0 | 22318.0 | 43.0 | | 56.0 |
| 23 | 03/20/2012 | 24.0 | 3621.0 | 3782.0 | 7403.0 | 48.0 | | 51.0 |
| 24 | 03/21/2012 | 18.0 | 13828.0 | 14072.0 | 27900.0 | 49.0 | | 50.0 |
| 25 | 03/22/2012 | 34.0 | 14265.0 | 19236.0 | 33501.0 | 42.0 | | 57.0 |
| 26 | 03/23/2012 | 16.0 | 5544.0 | 5833.0 | 11377.0 | 48.0 | | 51.0 |
| 27 | 03/24/2012 | 7.0 | 5264.0 | 3865.0 | 9129.0 | 57.0 | | 42.0 |
| 28 | 03/25/2012 | 49.0 | 31904.0 | 30062.0 | 61966.0 | 51.0 | | 48.0 |
| 29 | 03/31/2012 | 15.0 | 2106.0 | 2468.0 | 4574.0 | 46.0 | | 53.0 |
| 30 | 04/03/2012 | 9.0 | 1184.0 | 1237.0 | 2421.0 | 48.0 | | 51.0 |
| 31 | 05/02/2012 | 30.0 | 2880.0 | 4833.0 | 7713.0 | 37.0 | | 62.0 |
| 32 | 05/07/2012 | 11.0 | 1327.0 | 1890.0 | 3217.0 | 41.0 | | 58.0 |
| 33 | 05/08/2012 | 21.0 | 6129.0 | 6038.0 | 12167.0 | 50.0 | | 49.0 |
| 34 | 05/20/2012 | 13.0 | 1025.0 | 1306.0 | 2331.0 | 43.0 | | 56.0 |
| 35 | 05/22/2012 | 52.0 | 15584.0 | 14239.0 | 29823.0 | 52.0 | | 47.0 |
| 36 | 05/23/2012 | 86.0 | 104576.0 | 18743.0 | 123319.0 | 84.0 | | 15.0 |
| 37 | 05/24/2012 | 34.0 | 41794.0 | 19271.0 | 61065.0 | 68.0 | | 31.0 |
| 38 | 05/25/2012 | 5.0 | 1255.0 | 999.0 | 2254.0 | 55.0 | | 44.0 |
| 39 | 05/26/2012 | 37.0 | 38685.0 | 27294.0 | 65979.0 | 58.0 | | 41.0 |
| 40 | 06/02/2012 | 20.0 | 4486.0 | 4717.0 | 9203.0 | 48.0 | | 51.0 |
| 41 | 06/03/2012 | 22.0 | 13122.0 | 8781.0 | 21903.0 | 59.0 | | 40.0 |
| 42 | 06/04/2012 | 38.0 | 32150.0 | 25378.0 | 57528.0 | 55.0 | | 44.0 |
| 43 | 06/05/2012 | 8.0 | 12702.0 | 10050.0 | 22752.0 | 55.0 | | 44.0 |
| 44 | 06/06/2012 | 8.0 | 5433.0 | 3525.0 | 8958.0 | 60.0 | | 39.0 |
| 45 | 06/07/2012 | 7.0 | 13217.0 | 8988.0 | 22205.0 | 59.0 | | 40.0 |
| 46 | 07/08/2012 | 34.0 | 5660.0 | 5623.0 | 11283.0 | 50.0 | | 49.0 |
| 47 | 07/08/2012 | 12.0 | 4528.0 | 6015.0 | 10543.0 | 42.0 | | 57.0 |
| 48 | 07/26/2012 | 31.0 | 4796.0 | 6411.0 | 11207.0 | 42.0 | | 57.0 |
| 49 | 07/27/2012 | 13.0 | 5516.0 | 6385.0 | 11901.0 | 46.0 | | 53.0 |
| 50 | 08/07/2012 | 13.0 | 882.0 | 1571.0 | 2453.0 | 35.0 | | 64.0 |
| 51 | 08/08/2012 | 44.0 | 17172.0 | 9804.0 | 26976.0 | 63.0 | | 36.0 |
| 52 | 02/27/2013 | 4.0 | 756.0 | 1452.0 | 2208.0 | 34.0 | | 65.0 |
| 53 | 03/03/2013 | 19.0 | 792.0 | 2509.0 | 3301.0 | 23.0 | | 76.0 |
| 54 | 03/05/2013 | 11.0 | 541.0 | 1777.0 | 2318.0 | 23.0 | | 76.0 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| 55 | 03/05/2013 | 33.0 | 4994.0 | 16176.0 | 21170.0 | 23.0 | 76.0 |
| 56 | 03/06/2013 | 22.0 | 10726.0 | 26751.0 | 37477.0 | 28.0 | 71.0 |
| 57 | 03/07/2013 | 5.0 | 775.0 | 1819.0 | 2594.0 | 29.0 | 70.0 |
| 58 | 03/10/2013 | 6.0 | 680.0 | 2571.0 | 3251.0 | 20.0 | 79.0 |
| 59 | 03/11/2013 | 43.0 | 19107.0 | 40420.0 | 59527.0 | 32.0 | 67.0 |
| 60 | 03/21/2013 | 17.0 | 2580.0 | 5269.0 | 7849.0 | 32.0 | 67.0 |
| 61 | 03/23/2013 | 17.0 | 2151.0 | 7704.0 | 9855.0 | 21.0 | 78.0 |
| 62 | 03/26/2013 | 9.0 | 545.0 | 1474.0 | 2019.0 | 26.0 | 73.0 |
| 63 | 04/11/2013 | 8.0 | 369.0 | 1297.0 | 1666.0 | 22.0 | 77.0 |
| 64 | 04/16/2013 | 62.0 | 10340.0 | 28165.0 | 38505.0 | 26.0 | 73.0 |
| 65 | 04/17/2013 | 42.0 | 17144.0 | 42894.0 | 60038.0 | 28.0 | 71.0 |
| 66 | 04/18/2013 | 3.0 | 1767.0 | 4655.0 | 6422.0 | 27.0 | 72.0 |
| 67 | 04/18/2013 | 2.0 | 846.0 | 2178.0 | 3024.0 | 27.0 | 72.0 |
| 68 | 04/18/2013 | 9.0 | 1621.0 | 5532.0 | 7153.0 | 22.0 | 77.0 |
| 69 | 04/20/2013 | 27.0 | 6704.0 | 27501.0 | 34205.0 | 19.0 | 80.0 |
| 70 | 04/23/2013 | 86.0 | 63144.0 | 33894.0 | 97038.0 | 65.0 | 34.0 |
| 71 | 04/28/2013 | 14.0 | 5893.0 | 7407.0 | 13300.0 | 44.0 | 55.0 |
| 72 | 04/28/2013 | 2.0 | 10542.0 | 13364.0 | 23906.0 | 44.0 | 55.0 |
| 73 | 04/30/2013 | 111.0 | 82708.0 | 39233.0 | 121941.0 | 67.0 | 32.0 |
| 74 | 05/11/2013 | 19.0 | 3789.0 | 5916.0 | 9705.0 | 39.0 | 60.0 |
| 75 | 05/30/2013 | 10.0 | 1247.0 | 1772.0 | 3019.0 | 41.0 | 58.0 |
| 76 | 06/05/2013 | 177.0 | 138613.0 | 27276.0 | 165889.0 | 83.0 | 16.0 |
| 77 | 06/09/2013 | 1.0 | 1785.0 | 1950.0 | 3735.0 | 47.0 | 52.0 |
| 78 | 06/16/2013 | 30.0 | 11314.0 | 6350.0 | 17664.0 | 64.0 | 35.0 |
| 79 | 06/24/2013 | 9.0 | 4587.0 | 2955.0 | 7542.0 | 60.0 | 39.0 |
| 80 | 07/02/2013 | 13.0 | 3320.0 | 2578.0 | 5898.0 | 56.0 | 43.0 |
| 81 | 07/13/2013 | 24.0 | 5520.0 | 6316.0 | 11836.0 | 46.0 | 53.0 |
| 82 | 07/15/2013 | 9.0 | 2663.0 | 1162.0 | 3825.0 | 69.0 | 30.0 |
| 83 | 07/16/2013 | 17.0 | 5815.0 | 4509.0 | 10324.0 | 56.0 | 43.0 |
| 84 | 07/17/2013 | 26.0 | 14544.0 | 25462.0 | 40006.0 | 36.0 | 63.0 |
| 85 | 07/19/2013 | 34.0 | 13957.0 | 28596.0 | 42553.0 | 32.0 | 67.0 |
| 86 | 07/20/2013 | 26.0 | 16092.0 | 34908.0 | 51000.0 | 31.0 | 68.0 |
| 87 | 07/24/2013 | 13.0 | 2243.0 | 1888.0 | 4131.0 | 54.0 | 45.0 |
| 88 | 07/27/2013 | 22.0 | 5886.0 | 4163.0 | 10049.0 | 58.0 | 41.0 |
| 89 | 08/03/2013 | 20.0 | 3645.0 | 3731.0 | 7376.0 | 49.0 | 50.0 |
| 90 | 08/05/2013 | 19.0 | 12492.0 | 10070.0 | 22562.0 | 55.0 | 44.0 |
| 91 | 08/09/2013 | 81.0 | 26772.0 | 63930.0 | 90702.0 | 29.0 | 70.0 |
| 92 | 08/15/2013 | 28.0 | 3752.0 | 7636.0 | 11388.0 | 32.0 | 67.0 |
| 93 | 08/16/2013 | 102.0 | 60145.0 | 47130.0 | 107275.0 | 56.0 | 43.0 |
| 94 | 08/17/2013 | 0.0 | 1255.0 | 2297.0 | 3552.0 | 35.0 | 64.0 |
| 95 | 08/17/2013 | 85.0 | 47275.0 | 73771.0 | 121046.0 | 39.0 | 60.0 |
| 96 | 08/18/2013 | 5.0 | 1521.0 | 3582.0 | 5103.0 | 29.0 | 70.0 |
| 97 | 08/19/2013 | 36.0 | 13038.0 | 24494.0 | 37532.0 | 34.0 | 65.0 |
| 98 | 08/21/2013 | 12.0 | 1980.0 | 3709.0 | 5689.0 | 34.0 | 65.0 |
| 99 | 08/26/2013 | 29.0 | 2963.0 | 5490.0 | 8453.0 | 35.0 | 64.0 |
| 100 | 09/01/2013 | 41.0 | 9592.0 | 15806.0 | 25398.0 | 37.0 | 62.0 |
| 101 | 09/01/2013 | 3.0 | 3390.0 | 5620.0 | 9010.0 | 37.0 | 62.0 |
| 102 | 09/07/2013 | 23.0 | 4392.0 | 4692.0 | 9084.0 | 48.0 | 51.0 |
| 103 | 09/08/2013 | 8.0 | 4093.0 | 4949.0 | 9042.0 | 45.0 | 54.0 |
| 104 | 09/18/2013 | 16.0 | 3541.0 | 4793.0 | 8334.0 | 42.0 | 57.0 |
| 105 | 09/21/2013 | 14.0 | 2970.0 | 3809.0 | 6779.0 | 43.0 | 56.0 |
| 106 | 02/14/2014 | 25.0 | 11129.0 | 10822.0 | 21951.0 | 50.0 | 49.0 |
| 107 | 02/15/2014 | 7.0 | 4178.0 | 5397.0 | 9575.0 | 43.0 | 56.0 |
| 108 | 02/16/2014 | 0.0 | 1800.0 | 3838.0 | 5638.0 | 31.0 | 68.0 |
| 109 | 02/18/2014 | 12.0 | 2064.0 | 7026.0 | 9090.0 | 22.0 | 77.0 |
| 110 | 02/20/2014 | 29.0 | 7151.0 | 23927.0 | 31078.0 | 23.0 | 76.0 |
| 111 | 02/21/2014 | 51.0 | 19822.0 | 41477.0 | 61299.0 | 32.0 | 67.0 |
| 112 | 02/24/2014 | 16.0 | 3512.0 | 4329.0 | 7841.0 | 44.0 | 55.0 |
| 113 | 02/24/2014 | 1.0 | 2437.0 | 2558.0 | 4995.0 | 48.0 | 51.0 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| 114 | 02/25/2014 | 67.0 | 23172.0 | 53565.0 | 76737.0 | 30.0 | 69.0 |
| 115 | 02/27/2014 | 16.0 | 9496.0 | 10192.0 | 19688.0 | 48.0 | 51.0 |
| 116 | 02/27/2014 | 12.0 | 11970.0 | 16225.0 | 28195.0 | 42.0 | 57.0 |
| 117 | 03/03/2014 | 0.0 | 1435.0 | 1441.0 | 2876.0 | 49.0 | 50.0 |
| 118 | 03/06/2014 | 3.0 | 2988.0 | 1869.0 | 4857.0 | 61.0 | 38.0 |
| 119 | 03/06/2014 | 41.0 | 17760.0 | 23829.0 | 41589.0 | 42.0 | 57.0 |
| 120 | 03/13/2014 | 45.0 | 9943.0 | 13565.0 | 23508.0 | 42.0 | 57.0 |
| 121 | 03/14/2014 | 11.0 | 13503.0 | 19938.0 | 33441.0 | 40.0 | 59.0 |
| 122 | 03/14/2014 | 12.0 | 2813.0 | 5276.0 | 8089.0 | 34.0 | 65.0 |
| 123 | 03/23/2014 | 11.0 | 1337.0 | 4027.0 | 5364.0 | 24.0 | 75.0 |
| 124 | 03/24/2014 | 6.0 | 1576.0 | 3013.0 | 4589.0 | 34.0 | 65.0 |
| 125 | 03/28/2014 | 8.0 | 1512.0 | 3724.0 | 5236.0 | 28.0 | 71.0 |
| 126 | 04/01/2014 | 33.0 | 1740.0 | 7044.0 | 8784.0 | 19.0 | 80.0 |
| 127 | 04/06/2014 | 61.0 | 13915.0 | 27351.0 | 41266.0 | 33.0 | 66.0 |
| 128 | 04/08/2014 | 18.0 | 4986.0 | 10385.0 | 15371.0 | 32.0 | 67.0 |
| 129 | 04/09/2014 | 18.0 | 6119.0 | 11750.0 | 17869.0 | 34.0 | 65.0 |
| 130 | 04/11/2014 | 14.0 | 3586.0 | 7585.0 | 11171.0 | 32.0 | 67.0 |
| 131 | 04/16/2014 | 9.0 | 565.0 | 2162.0 | 2727.0 | 20.0 | 79.0 |
| 132 | 04/17/2014 | 12.0 | 2271.0 | 4559.0 | 6830.0 | 33.0 | 66.0 |
| 133 | 04/17/2014 | 9.0 | 3767.0 | 7636.0 | 11403.0 | 33.0 | 66.0 |
| 134 | 04/18/2014 | 15.0 | 5828.0 | 12730.0 | 18558.0 | 31.0 | 68.0 |
| 135 | 04/19/2014 | 26.0 | 9058.0 | 27855.0 | 36913.0 | 24.0 | 75.0 |
| 136 | 04/19/2014 | 10.0 | 7815.0 | 21881.0 | 29696.0 | 26.0 | 73.0 |
| 137 | 04/25/2014 | 24.0 | 9048.0 | 15297.0 | 24345.0 | 37.0 | 62.0 |
| 138 | 04/26/2014 | 16.0 | 5427.0 | 8943.0 | 14370.0 | 37.0 | 62.0 |
| 139 | 04/27/2014 | 25.0 | 8430.0 | 20305.0 | 28735.0 | 29.0 | 70.0 |
| 140 | 04/28/2014 | 16.0 | 2748.0 | 8205.0 | 10953.0 | 25.0 | 74.0 |
| 141 | 04/28/2014 | 0.0 | 855.0 | 2634.0 | 3489.0 | 24.0 | 75.0 |
| 142 | 04/28/2014 | 27.0 | 8785.0 | 33864.0 | 42649.0 | 20.0 | 79.0 |
| 143 | 04/29/2014 | 6.0 | 1065.0 | 3447.0 | 4512.0 | 23.0 | 76.0 |
| 144 | 04/30/2014 | 29.0 | 20768.0 | 43623.0 | 64391.0 | 32.0 | 67.0 |
| 145 | 05/19/2014 | 14.0 | 2217.0 | 4677.0 | 6894.0 | 32.0 | 67.0 |
| 146 | 05/19/2014 | 27.0 | 4698.0 | 9150.0 | 13848.0 | 33.0 | 66.0 |
| 147 | 05/20/2014 | 12.0 | 4886.0 | 10631.0 | 15517.0 | 31.0 | 68.0 |
| 148 | 05/22/2014 | 63.0 | 10344.0 | 36648.0 | 46992.0 | 22.0 | 77.0 |
| 149 | 05/23/2014 | 1.0 | 1485.0 | 5040.0 | 6525.0 | 22.0 | 77.0 |
| 150 | 05/26/2014 | 4.0 | 2264.0 | 7894.0 | 10158.0 | 22.0 | 77.0 |
| 151 | 05/29/2014 | 8.0 | 3777.0 | 8673.0 | 12450.0 | 30.0 | 69.0 |
| 152 | 06/03/2014 | 11.0 | 2485.0 | 5683.0 | 8168.0 | 30.0 | 69.0 |
| 153 | 06/05/2014 | 75.0 | 18454.0 | 51224.0 | 69678.0 | 26.0 | 73.0 |
| 154 | 06/16/2014 | 7.0 | 2398.0 | 4088.0 | 6486.0 | 36.0 | 63.0 |
| 155 | 06/16/2014 | 24.0 | 9597.0 | 22539.0 | 32136.0 | 29.0 | 70.0 |
| 156 | 07/02/2014 | 68.0 | 11276.0 | 30561.0 | 41837.0 | 26.0 | 73.0 |
| 157 | 07/05/2014 | 33.0 | 14056.0 | 30023.0 | 44079.0 | 31.0 | 68.0 |
| 158 | 07/06/2014 | 20.0 | 3794.0 | 11113.0 | 14907.0 | 25.0 | 74.0 |
| 159 | 07/09/2014 | 10.0 | 1242.0 | 2347.0 | 3589.0 | 34.0 | 65.0 |
| 160 | 07/27/2014 | 1.0 | 1121.0 | 4235.0 | 5356.0 | 20.0 | 79.0 |
| 161 | 07/29/2014 | 334.0 | 176157.0 | 132096.0 | 308253.0 | 57.0 | 42.0 |
| 162 | 07/30/2014 | 77.0 | 47946.0 | 58704.0 | 106650.0 | 44.0 | 55.0 |
| 163 | 07/31/2014 | 114.0 | 69273.0 | 85587.0 | 154860.0 | 44.0 | 55.0 |
| 164 | 08/01/2014 | 4.0 | 1075.0 | 3839.0 | 4914.0 | 21.0 | 78.0 |
| 165 | 08/02/2014 | 2.0 | 2243.0 | 6196.0 | 8439.0 | 26.0 | 73.0 |
| 166 | 08/02/2014 | 13.0 | 12712.0 | 22143.0 | 34855.0 | 36.0 | 63.0 |
| 167 | 08/17/2014 | 13.0 | 2242.0 | 2618.0 | 4860.0 | 46.0 | 53.0 |
| 168 | 08/23/2014 | 6.0 | 2280.0 | 2598.0 | 4878.0 | 46.0 | 53.0 |
| 169 | 09/15/2014 | 14.0 | 2633.0 | 6322.0 | 8955.0 | 29.0 | 70.0 |
| ­ | ­ | ­ | ­ | ­ | Average: | 45 | 55 |