

# HEL List for AK644; Ketchikan Area, Alaska

R Value = 85; C = 1

| Mapunit Symbol | Mapunit name   | HEL Water (R = 85) | HEL Wind |
|----------------|--|--------------------|----------|
| 1C             | Vixen fine sandy loam, 5 to 35 percent slopes              | HEL                | NHEL     |
| 1D             | Vixen fine sandy loam, 35 to 60 percent slopes             | HEL                | NHEL     |
| 1E             | Vixen fine sandy loam, 60 to 75 percent slopes             | HEL                | NHEL     |
| 1F             | Vixen fine sandy loam, 75 to 100 percent slopes            | HEL                | NHEL     |
| 2D             | Traitors silt loam, 35 to 60 percent slopes                | HEL                | NHEL     |
| 2E             | Traitors silt loam, 60 to 75 percent slopes                | HEL                | NHEL     |
| 2F             | Traitors silt loam, 75 to 100 percent slopes               | HEL                | NHEL     |
| 3D             | Vixen-Traitors complex, 35 to 60 percent slopes            | HEL                | NHEL     |
| 3E             | Vixen-Traitors complex, 60 to 75 percent slopes            | HEL                | NHEL     |
| 3F             | Vixen-Traitors complex, 75 to 100 percent slopes           | HEL                | NHEL     |
| 4C             | Helm muck, 5 to 35 percent slopes                          | HEL                | NHEL     |
| 4D             | Helm muck, 35 to 60 percent slopes                         | HEL                | NHEL     |
| 4E             | Helm muck, 60 to 75 percent slopes                         | HEL                | NHEL     |
| 4F             | Helm muck, 75 to 100 percent slopes                        | HEL                | NHEL     |
| 5C             | Meares silt loam, 5 to 35 percent slopes                   | HEL                | NHEL     |
| 5D             | Meares silt loam, 35 to 60 percent slopes                  | HEL                | NHEL     |
| 5E             | Meares silt loam, 60 to 75 percent slopes                  | HEL                | NHEL     |
| 6              | McGilvery-Traitors complex, 60 to 100 percent slopes       | HEL                | NHEL     |
| 7D             | Waterfall extremely gravelly loam, 35 to 60 percent slopes | HEL                | NHEL     |
| 7E             | Waterfall extremely gravelly loam, 60 to 75 percent slopes | HEL                | NHEL     |
| 10             | Tonowek and Tuxekan soils, 0 to 15 percent slopes          | HEL                | NHEL     |
| 11C            | Remedios silt loam, 5 to 35 percent slopes                 | HEL                | NHEL     |
| 11D            | Remedios silt loam, 35 to 60 percent slopes                | HEL                | NHEL     |
| 11E            | Remedios silt loam, 60 to 75 percent slopes                | HEL                | NHEL     |
| 12             | Aeric Cryaquepts, 0 to 3 percent slopes                    | NHEL               | NHEL     |
| 13             | Salt Chuck extremely gravelly loam, 0 to 10 percent slopes | NHEL               | NHEL     |
| 14D            | Shakan sandy loam, 35 to 60 percent slopes                 | HEL                | NHEL     |
| 14DFX          | Shakan sandy loam, 35 to 100 percent slopes                | HEL                | NHEL     |
| 14EF           | Shakan sandy loam, 60 to 150 percent slopes                | HEL                | NHEL     |
| 15             | Cryorthents  | HEL                | NHEL     |
| 18C            | Hofstad peat, 5 to 35 percent slopes                       | HEL                | NHEL     |
| 18D            | Hofstad peat, 35 to 60 percent slopes                      | HEL                | NHEL     |
| 18E            | Hofstad peat, 60 to 75 percent slopes                      | HEL                | NHEL     |
| 19C            | Helm muck, granitic, 5 to 35 percent slopes                | HEL                | NHEL     |
| 19D            | Helm muck, granitic, 35 to 60 percent slopes               | HEL                | NHEL     |
| 19E            | Helm muck, granitic, 60 to 75 percent slopes               | HEL                | NHEL     |
| 19F            | Helm muck, granitic, 75 to 100 percent slopes              | HEL                | NHEL     |
| 20C            | Maybeso-Kaikli complex, 5 to 35 percent slopes             | PHEL               | NHEL     |
| 20CDX          | Maybeso-Kaikli complex, 5 to 60 percent slopes             | HEL                | NHEL     |
| 20D            | Maybeso-Kaikli complex, 35 to 60 percent slopes            | HEL                | NHEL     |
| 21A            | Kogish peat, 0 to 5 percent slopes                         | NHEL               | NHEL     |
| 22             | Talus slopes   | N/A                | N/A      |
| 23             | Kina-Kaikli association, 0 to 40 percent slopes            | NHEL               | NHEL     |
| 24AC           | Kaikli mucky peat, 0 to 35 percent slopes                  | HEL                | NHEL     |
| 24D            | Kaikli mucky peat, 35 to 60 percent slopes                 | HEL                | NHEL     |
| 24E            | Kaikli mucky peat, 60 to 75 percent slopes                 | HEL                | NHEL     |
| 25             | Kaikli-Kina association, 0 to 40 percent slopes            | HEL                | NHEL     |

|       |   |      |      |
|-------|---|------|------|
| 26A   | Staney peat, 0 to 5 percent slopes                          | NHEL | NHEL |
| 27EF  | Talus slopes-McGilvery complex, 60 to 100 percent slopes    | N/A  | N/A  |
| 28    | McGilvery and Tolstoi soils, 5 to 60 percent slopes         | HEL  | NHEL |
| 29C   | McGilvery peat, 5 to 35 percent slopes                      | HEL  | NHEL |
| 29D   | McGilvery peat, 35 to 60 percent slopes                     | HEL  | NHEL |
| 29EF  | McGilvery peat, 60 to 100 percent slopes                    | HEL  | NHEL |
| 30C   | Karta silt loam, 5 to 35 percent slopes                     | HEL  | NHEL |
| 30CFX | Karta silt loam, 5 to 100 percent slopes                    | HEL  | NHEL |
| 30D   | Karta very fine sandy loam, 35 to 60 percent slopes         | HEL  | NHEL |
| 30E   | Karta silt loam, 60 to 75 percent slopes                    | HEL  | NHEL |
| 30F   | Karta silt loam, 75 to 100 percent slopes                   | HEL  | NHEL |
| 31C   | Wadleigh gravelly silt loam, 5 to 35 percent slopes         | HEL  | NHEL |
| 31CDX | Wadleigh gravelly silt loam, 5 to 60 percent slopes         | HEL  | NHEL |
| 31D   | Wadleigh gravelly silt loam, 35 to 60 percent slopes        | HEL  | NHEL |
| 31E   | Wadleigh gravelly silt loam, 60 to 75 percent slopes        | HEL  | NHEL |
| 32C   | St. Nicholas very fine sandy loam, 5 to 35 percent slopes   | HEL  | NHEL |
| 32CDX | St. Nicholas very fine sandy loam, 5 to 60 percent slopes   | HEL  | NHEL |
| 32CFX | St. Nicholas very fine sandy loam, 5 to 100 percent slopes  | HEL  | NHEL |
| 32D   | St. Nicholas very fine sandy loam, 35 to 60 percent slopes  | HEL  | NHEL |
| 32E   | St. Nicholas very fine sandy loam, 60 to 75 percent slopes  | HEL  | NHEL |
| 32EFX | St. Nicholas very fine sandy loam, 60 to 100 percent slopes | HEL  | NHEL |
| 32F   | St. Nicholas very fine sandy loam, 75 to 100 percent slopes | HEL  | NHEL |
| 33C   | St. Nicholas-McGilvery complex, 5 to 35 percent slopes      | HEL  | NHEL |
| 33CFX | St. Nicholas-McGilvery complex, 5 to 100 percent slopes     | HEL  | NHEL |
| 33D   | St. Nicholas-McGilvery complex, 35 to 60 percent slopes     | HEL  | NHEL |
| 33E   | St. Nicholas-McGilvery complex, 60 to 75 percent slopes     | HEL  | NHEL |
| 33F   | St. Nicholas-McGilvery complex, 75 to 100 percent slopes    | HEL  | NHEL |
| 34D   | St. Nicholas-Shakan association, 35 to 60 percent slopes    | HEL  | NHEL |
| 34DFX | St. Nicholas-Shakan association, 35 to 100 percent slopes   | HEL  | NHEL |
| 34E   | St. Nicholas-Shakan association, 60 to 75 percent slopes    | HEL  | NHEL |
| 34F   | St. Nicholas-Shakan association, 75 to 100 percent slopes   | HEL  | NHEL |
| 35C   | St. Nicholas-Tolstoi complex, 5 to 35 percent slopes        | HEL  | NHEL |
| 35D   | St. Nicholas-Tolstoi complex, 35 to 60 percent slopes       | HEL  | NHEL |
| 35E   | St. Nicholas-Tolstoi complex, 60 to 75 percent slopes       | HEL  | NHEL |
| 35F   | St. Nicholas-Tolstoi complex, 75 to 100 percent slopes      | HEL  | NHEL |
| 36AC  | Magnetic mucky peat, 0 to 35 percent slopes                 | HEL  | NHEL |
| 36D   | Magnetic mucky peat, 35 to 60 percent slopes                | HEL  | NHEL |
| 37AC  | Golden very fine sandy loam, 0 to 35 percent slopes         | HEL  | NHEL |
| 37D   | Golden very fine sandy loam, 35 to 60 percent slopes        | HEL  | NHEL |
| 38AC  | Magnetic-Golden complex, 0 to 35 percent slopes             | HEL  | NHEL |
| 38D   | Magnetic-Golden complex, 35 to 60 percent slopes            | HEL  | NHEL |
| 40C   | Sarkar-McGilvery complex, 5 to 35 percent slopes            | HEL  | NHEL |
| 40D   | Sarkar-McGilvery complex, 35 to 60 percent slopes           | HEL  | NHEL |
| 40DEX | Sarkar-McGilvery complex, 35 to 75 percent slopes           | HEL  | NHEL |
| 40E   | Sarkar-McGilvery complex, 60 to 75 percent slopes           | HEL  | NHEL |
| 43D   | Shakan-McGilvery association, 35 to 60 percent slopes       | HEL  | NHEL |
| 43EFX | Shakan-McGilvery association, 60 to 150 percent slopes      | HEL  | NHEL |
| 48C   | Helm-Kitkun complex, 5 to 35 percent slopes                 | HEL  | NHEL |
| 49C   | Kina-Kitkun complex, 5 to 35 percent slopes                 | NHEL | NHEL |
| 49D   | Kina-Kitkun complex, 35 to 60 percent slopes                | NHEL | NHEL |
| 50CFX | Tolstoi and Karta soils, 5 to 100 percent slopes            | HEL  | NHEL |
| 50D   | Tolstoi and Karta soils, 35 to 60 percent slopes            | HEL  | NHEL |
| 50E   | Tolstoi and Karta soils, 60 to 75 percent slopes            | HEL  | NHEL |
| 50F   | Tolstoi and Karta soils, 75 to 100 percent slopes           | HEL  | NHEL |
| 51C   | Kitkun peat, 5 to 40 percent slopes                         | HEL  | NHEL |

|       |   |      |      |
|-------|---|------|------|
| 52    | Naukati silt loam, 5 to 10 percent slopes                 | HEL  | NHEL |
| 53C   | Tolstoi very fine sandy loam, 5 to 35 percent slopes      | HEL  | NHEL |
| 53CFX | Tolstoi very fine sandy loam, 5 to 100 percent slopes     | HEL  | NHEL |
| 53D   | Tolstoi very fine sandy loam, 35 to 60 percent slopes     | HEL  | NHEL |
| 53E   | Tolstoi silt loam, 60 to 75 percent slopes                | HEL  | NHEL |
| 53F   | Tolstoi silt loam, 75 to 100 percent slopes               | HEL  | NHEL |
| 54C   | Token gravelly sandy loam, 5 to 35 percent slopes         | HEL  | NHEL |
| 54CEX | Token gravelly sandy loam, 5 to 75 percent slopes         | HEL  | NHEL |
| 54D   | Token gravelly sandy loam, 35 to 60 percent slopes        | HEL  | NHEL |
| 54E   | Token gravelly sandy loam, 60 to 75 percent slopes        | HEL  | NHEL |
| 54F   | Token gravelly sandy loam, 75 to 100 percent slopes       | HEL  | NHEL |
| 57C   | Petrel very fine sandy loam, 5 to 35 percent slopes       | HEL  | NHEL |
| 57D   | Petrel very fine sandy loam, 35 to 60 percent slopes      | HEL  | NHEL |
| 57E   | Petrel very fine sandy loam, 60 to 75 percent slopes      | HEL  | NHEL |
| 61    | Karheen peat, 2 to 10 percent slopes                      | NHEL | NHEL |
| 62    | Karheen-McGilvery complex, 0 to 70 percent slopes         | NHEL | NHEL |
| 63C   | Helm, granitic-McGilvery complex, 5 to 35 percent slopes  | HEL  | NHEL |
| 63D   | Helm, granitic-McGilvery complex, 35 to 60 percent slopes | HEL  | NHEL |
| 63E   | Helm, granitic-McGilvery complex, 60 to 75 percent slopes | HEL  | NHEL |
| 71    | Isidor silt loam, 0 to 40 percent slopes                  | HEL  | NHEL |
| 72    | Isidor-Kina association, 0 to 40 percent slopes           | HEL  | NHEL |
| 73C   | St. Nicholas-Kina complex, 5 to 35 percent slopes         | HEL  | NHEL |
| 74C   | Kupreanof silt loam, 5 to 35 percent slopes               | HEL  | NHEL |
| 74D   | Kupreanof silt loam, 35 to 60 percent slopes              | HEL  | NHEL |
| 74E   | Kupreanof sandy loam, 60 to 75 percent slopes             | HEL  | NHEL |
| 74F   | Kupreanof sandy loam, 75 to 100 percent slopes            | HEL  | NHEL |
| 75D   | Kupreanof-McGilvery complex, 35 to 60 percent slopes      | HEL  | NHEL |
| 75E   | Kupreanof-McGilvery complex, 60 to 75 percent slopes      | HEL  | NHEL |
| 75F   | Kupreanof-McGilvery complex, 75 to 100 percent slopes     | HEL  | NHEL |
| 76    | Partofshikof loamy sand, 5 to 60 percent slopes           | HEL  | NHEL |
| 78D   | Mitkof sandy loam, 35 to 60 percent slopes                | HEL  | NHEL |
| 79D   | McGilvery-Mitkof complex, 35 to 60 percent slopes         | HEL  | NHEL |
| 79EF  | McGilvery-Mitkof complex, 60 to 100 percent slopes        | HEL  | NHEL |
| 80D   | McGilvery-Kaikli association, 35 to 60 percent slopes     | HEL  | NHEL |
| 80E   | McGilvery-Kaikli association, 60 to 75 percent slopes     | HEL  | NHEL |
| 81    | Rock outcrop  | N/A  | N/A  |
| 82D   | McGilvery-Kitkun complex, 35 to 60 percent slopes         | HEL  | NHEL |
| 82E   | McGilvery-Kitkun complex, 60 to 75 percent slopes         | HEL  | NHEL |
| 83    | Kina-Grindall complex, 0 to 40 percent slopes             | NHEL | NHEL |
| 84A   | Grindall peat, 0 to 5 percent slopes                      | NHEL | NHEL |
| 84C   | Grindall peat, 5 to 35 percent slopes                     | PHL  | NHEL |
| 85    | Kina peat, 0 to 35 percent slopes                         | NHEL | NHEL |
| 86CD  | Kaikli-Grindall association, 5 to 60 percent slopes       | HEL  | NHEL |
| 87CD  | Grindall-St. Nicholas association, 5 to 60 percent slopes | HEL  | NHEL |
| 90C   | Grindall-Kitkun complex, 5 to 35 percent slopes           | PHL  | NHEL |
| 90D   | Grindall-Kitkun complex, 35 to 60 percent slopes          | HEL  | NHEL |
| 91C   | Maybeso peat, 5 to 35 percent slopes                      | PHL  | NHEL |
| 91CDX | Maybeso peat, 5 to 60 percent slopes                      | HEL  | NHEL |
| 91D   | Maybeso peat, 35 to 60 percent slopes                     | HEL  | NHEL |
| 92C   | Maybeso-Kina association, 5 to 35 percent slopes          | PHL  | NHEL |
| 95    | Rock outcrop and Ice                                      | N/A  | N/A  |
| 153   | McGilvery-Kogish complex, 2 to 50 percent slopes          | HEL  | NHEL |
| 157   | Kina-McGilvery complex, 5 to 30 percent slopes            | NHEL | NHEL |
| 201   | Kogish-Maybeso complex, 2 to 10 percent slopes            | NHEL | NHEL |
| 220C  | Kina-Maybeso association, 5 to 35 percent slopes          | NHEL | NHEL |

|       |  |      |      |
|-------|--|------|------|
| 220D  | Kina-Maybeso association, 35 to 60 percent slopes                                  | NHEL | NHEL |
| 244CD | Hydaburg-Grindall complex, 5 to 60 percent slopes                                  | HEL  | NHEL |
| 245CD | Hydaburg-Sunnyhay association, 5 to 60 percent slopes                              | HEL  | NHEL |
| 245CE | Hydaburg-Sunnyhay association, 5 to 75 percent slopes                              | HEL  | NHEL |
| 245E  | Hydaburg-Sunnyhay association, 60 to 75 percent slopes                             | HEL  | NHEL |
| 246CD | Calamity-Hydaburg-Rock outcrop complex, 5 to 60 percent slopes                     | HEL  | NHEL |
| 246E  | Calamity-Hydaburg-Rock outcrop complex, 60 to 75 percent slopes                    | HEL  | NHEL |
| 246F  | Calamity-Hydaburg-Rock outcrop complex, 75 to 100 percent slopes                   | HEL  | NHEL |
| 247CD | Hydaburg-Rock outcrop complex, 5 to 60 percent slopes                              | HEL  | NHEL |
| 247E  | Hydaburg-Rock outcrop complex, 60 to 75 percent slopes                             | HEL  | NHEL |
| 252   | Wadleigh-Kogish association, 0 to 25 percent slopes                                | HEL  | NHEL |
| 320C  | Wadleigh-Maybeso complex, 5 to 35 percent slopes                                   | HEL  | NHEL |
| 320CD | Wadleigh-Maybeso complex, 5 to 60 percent slopes                                   | HEL  | NHEL |
| 320D  | Wadleigh-Maybeso complex, 35 to 60 percent slopes                                  | HEL  | NHEL |
| 331C  | Karta-Wadleigh complex, 5 to 35 percent slopes                                     | HEL  | NHEL |
| 331CD | Karta-Wadleigh complex, 5 to 60 percent slopes                                     | HEL  | NHEL |
| 331D  | Karta-Wadleigh complex, 35 to 60 percent slopes                                    | HEL  | NHEL |
| 351D  | Karta-Tolstoi complex, 35 to 60 percent slopes                                     | HEL  | NHEL |
| 351DE | Karta-Tolstoi complex, 35 to 75 percent slopes                                     | HEL  | NHEL |
| 351E  | Karta-Tolstoi complex, 60 to 75 percent slopes                                     | HEL  | NHEL |
| 442C  | Ulloa-Sarkar complex, 5 to 35 percent slopes                                       | HEL  | NHEL |
| 442CE | Ulloa-Sarkar complex, 5 to 75 percent slopes                                       | HEL  | NHEL |
| 442D  | Ulloa-Sarkar complex, 35 to 60 percent slopes                                      | HEL  | NHEL |
| 442E  | Ulloa-Sarkar complex, 60 to 75 percent slopes                                      | HEL  | NHEL |
| 528CD | Tolstoi-McGilvery complex, 5 to 60 percent slopes                                  | HEL  | NHEL |
| 528D  | Tolstoi-McGilvery complex, 35 to 60 percent slopes                                 | HEL  | NHEL |
| 528DF | Tolstoi-McGilvery complex, 35 to 100 percent slopes                                | HEL  | NHEL |
| 528E  | Tolstoi-McGilvery complex, 60 to 75 percent slopes                                 | HEL  | NHEL |
| 528F  | Tolstoi-McGilvery complex, 75 to 100 percent slopes                                | HEL  | NHEL |
| 540   | Tokeen-McGilvery complex, 10 to 65 percent slopes                                  | HEL  | NHEL |
| 550C  | St. Nicholas-Kaikli complex, 5 to 35 percent slopes                                | HEL  | NHEL |
| 550CE | St. Nicholas-Kaikli complex, 5 to 75 percent slopes                                | HEL  | NHEL |
| 550D  | St. Nicholas-Kaikli complex, 35 to 60 percent slopes                               | HEL  | NHEL |
| 550E  | St. Nicholas-Kaikli complex, 60 to 75 percent slopes                               | HEL  | NHEL |
| 615AC | Typic Humicryods and Lithic Humicryods, 0 to 35 percent slopes                     | HEL  | NHEL |
| 615DE | Typic Humicryods and Lithic Humicryods, 35 to 75 percent slopes                    | HEL  | NHEL |
| 615F  | Typic Humicryods and Lithic Humicryods, 75 to 100 percent slopes                   | HEL  | NHEL |
| 700AC | Histosols, shallow,-Rock outcrop-Calamity association, 0 to 35 percent slopes      | HEL  | NHEL |
| 700DE | Histosols, shallow,-Rock outcrop-Calamity association, 35 to 75 percent slopes     | HEL  | NHEL |
| 710AC | Cryosaprists and McGilvery soils, 0 to 35 percent slopes                           | HEL  | NHEL |
| 710F  | McGilvery and Cryosaprists soils, 75 to 100 percent slopes                         | HEL  | NHEL |
| 720AC | Lithic Cryohemists, Cryosaprists, and Staney soils, 0 to 35 percent slopes         | PHEL | NHEL |
| 720DE | Lithic Cryohemists, Cryosaprists, and McGilvery soils, 35 to 75 percent slopes     | HEL  | NHEL |
| 730AC | Kina-Kogish-Staney association, 0 to 35 percent slopes                             | NHEL | NHEL |
| 800AC | Cryaquepts-Lithic Cryaquods-Cryorthents association, 0 to 35 percent slopes        | HEL  | NHEL |
| 800DE | Cryaquepts-Lithic Cryaquods-Cryorthents association, 35 to 75 percent slopes       | HEL  | NHEL |
| 800F  | Cryaquepts-Lithic Cryaquods-Cryorthents association, 75 to 100 percent slopes      | HEL  | NHEL |
| 820AC | McGilvery-Lithic Humicryods association, 0 to 35 percent slopes                    | HEL  | NHEL |
| 820DE | McGilvery-Lithic Humicryods association, 35 to 75 percent slopes                   | HEL  | NHEL |
| 820F  | McGilvery-Lithic Humicryods association, 75 to 100 percent slopes                  | HEL  | NHEL |
| 830AC | Helm-Cryosaprists, shallow-Cryaquods, shallow association, 0 to 35 percent slopes  | HEL  | NHEL |
| 830DE | Helm-Cryosaprists, shallow-Cryaquods, shallow association, 35 to 75 percent slopes | HEL  | NHEL |
| 840AC | Cryaquods-Cryohemists-Cryosaprists association, 0 to 35 percent slopes             | HEL  | NHEL |
| 840DE | Cryaquods-Cryohemists-Cryosaprists association, 35 to 75 percent slopes            | HEL  | NHEL |
| RW    | Riverwash  | N/A  | N/A  |

|    |            |     |     |
|----|------------|-----|-----|
| SW | Salt Water | N/A | N/A |
| W  | Water      | N/A | N/A |