

Table I.2-1. USACE Verified Wetland Delineations used to Estimate Density of Vernal Pools and Other Seasonal Wetlands in Grassland Land Cover Types

| Site No. | Delineation Site Name Grassland Cover Type | Total Project Acreage | Total Wetlands Acres | Acres by Cover Type | Wetland Acres by Cover Type | Wetland Percentage by Cover Type | Wetland Calculation Method | Percent Vernal Pool | Acres Vernal Pool | Comments | |
|----------|--|-----------------------|----------------------|---------------------|-----------------------------|----------------------------------|----------------------------|---------------------|-------------------|---|------|
| 1 | Schmidbauer Far East | 103.8 | 11.3 | | | | | | | Grassland features are Little Chico Creek and associated features as well as some seasonal wetlands and marsh. Wetlands were not itemized so acreage was based on an estimate of breakdown. | |
| | Grassland ¹ | | | | 33.90 | 9.60 | 28.32 | Estimate | 0.00 | | 0.00 |
| | Grassland with Vernal Swale Complex | | | | 67.90 | 1.70 | 2.50 | Estimate | 40.00 | | 0.68 |
| 2 | Schmidbauer West | 97.7 | 3.1 | | | | | | | Half of grassland wetlands are stream/swale associated; some vernal pools and seasonal wetlands. Grassland with vernal swale complex has all types. | |
| | Grassland ¹ | | | | 29.00 | 0.78 | 2.69 | Estimate | 10 | | 0.08 |
| | Grassland with Vernal Swale Complex | | | 59.80 | 2.30 | 3.85 | Estimate | 40.00 | 0.92 | | |
| 3 | Chico Airport | 1562.4 | 38.5 | | | | | | | Airport associated areas account for missing 10% of acreage. Most of grassland wetlands are from Mud creek. Both grassland and GVS include all types. | |
| | Grassland ¹ | | | | 1317.40 | 7.70 | 0.58 | Estimate | 5.00 | | 0.39 |
| | Grassland with Vernal Swale Complex | | | 1598.70 | 26.95 | 1.69 | Estimate | 30.00 | 8.09 | | |
| 4 | Schmidbauer East | 164.4 | 4.7 | | | | | | | Majority of grassland wetlands are in swales/stream corridors. Some vernal pools in grassland, but nearly entire delineation is grassland with vernal swale complex. | |
| | Grassland ¹ | | | | 13.00 | 0.85 | 6.54 | GIS | 5.00 | | 0.04 |
| | Grassland with Vernal Swale Complex | | | 151.40 | 10.45 | 6.90 | GIS | 20.00 | 2.09 | | |
| 5 | Oro Bay | 420 | 5.2 | | | | | | | Grassland includes creek (no blue line) and pond. Site is evenly split between grassland and grassland with vernal swale complex. Wetlands are nearly evenly split between the two land cover types as well. More vernal pools in grasslands. | |
| | Grassland ¹ | | | | 204.70 | 2.60 | 1.27 | GIS | 25.00 | | 0.65 |
| | Grassland with Vernal Swale Complex | | | 211.50 | 2.60 | 1.23 | GIS | 10.00 | 0.26 | | |
| 6 | Bidwell Ranch | 748.2 | 62.7 | | | | | | | Grassland features are mostly "ephemeral creeks." A few other wetlands associated with grassland but bulk of wetlands are in grassland with vernal swale complex. | |
| | Grassland ¹ | | | | 651.40 | 9.40 | 1.44 | Estimate | 0.00 | | 0.00 |
| | Grassland with Vernal Swale Complex | | | 871.00 | 53.30 | 6.12 | Estimate | 5.00 | 2.67 | | |
| 7 | Camelot Equestrian Park | 47 | 1 | | | | | | | Small site. All wetlands in grasslands. | |
| | Grassland ¹ | | | | 27.76 | 1.00 | 3.60 | GIS | 97.00 | | 0.97 |
| 9 | Gateway at Butte Creek | 207 | 0.8 | | | | | | | Site is grassland and cottonwood willow riparian. Nearly all wetlands in cottonwood willow riparian areas. | |
| | Cottonwood Willow Riparian Forest | | | | 115.48 | 0.01 | 0.01 | GIS | 0.00 | | 0.00 |
| | Grassland ¹ | | | 92.10 | 0.00 | 0.00 | GIS | 0.00 | 0.00 | | |
| 10 | Hicks Lane | 11.4 | 0.9 | | | | | | | Site is all grassland with vernal swale complex. | |
| | Grassland with Vernal Swale Complex | | | | 11.44 | 0.93 | 8.13 | GIS | 5.00 | | 0.05 |
| 11 | Highway 32 Widening | 66.2 | 1.4 | | | | | | | Wetlands are all from another delineation. Individual values for features are not available and there is no total value. Calculations were made by digitizing many of the features by hand. | |
| | Grassland | | | | 40.20 | 1.25 | 3.10 | GIS | | | |
| | Grassland with Vernal Swale Complex | | | 19.26 | 0.39 | 2.05 | GIS | | | | |
| 12 | Myers | 7.2 | 0.9 | | | | | | | All grassland features are "seasonal wetlands"/channel feature. All vernal pools and remnant vernal swales are in grassland with vernal swale complex. | |
| | Grassland ¹ | | | | 4.61 | 0.87 | 18.87 | Estimate | 0.00 | | 0.00 |
| | Grassland with Vernal Swale Complex | | | 2.56 | 0.03 | 1.17 | Estimate | 60.00 | 0.02 | | |
| 13 | Oak Valley | 335.6 | 6.1 | | | | | | | All grassland features "ephemeral drainage." | |
| | Grassland ¹ | | | | 94.13 | 1.62 | 1.72 | GIS | 0.00 | | 0.00 |
| | Grassland with Vernal Swale Complex | | | 35.84 | 1.17 | 3.26 | GIS | 3.00 | 0.04 | | |
| 14 | Oro Airport business park | 188.8 | 3.8 | | | | | | | Unaccounted for acreage is in "urban" vegetation type. | |
| | Grassland | | | | 27.16 | 0.39 | 1.42 | GIS | 50.00 | | 0.19 |

| Site No. | Delineation Site Name Type | Grassland Cover | Total Project Acreage | Total Wetlands Acres | Acres by Cover Type | Wetland Acres by Cover Type | Wetland Percentage by Cover Type | Wetland Calculation Method | Percent Vernal Pool | Acres Vernal Pool | Comments |
|----------|---|-----------------|-----------------------|----------------------|---------------------|-----------------------------|----------------------------------|----------------------------|---------------------|-------------------|--|
| 15 | Palermo 690 | | 669.1 | 52.8 | | | | | | | Dredger tailings wetlands are associated with stream corridor. |
| | Dredger Tailings with Riparian Forest/Scrub | | | | 34.90 | 7.90 | 22.64 | Estimate | | | |
| | Grassland ¹ | | | | 233.80 | 2.64 | 1.13 | Estimate | 40.00 | 1.06 | |
| | Grassland with Vernal Swale Complex | | | | 361.80 | 42.20 | 11.66 | Estimate | 45.00 | 18.99 | |
| 16 | Porter Ranch | | 692.4 | 39.8 | | | | | | | Irrigated cropland mostly one large fresh emergent wetland feature. |
| | Grassland ¹ | | | | 403.00 | 5.97 | 1.48 | Estimate | 20.00 | 1.19 | |
| | Grassland with Vernal Swale Complex | | | | 113.60 | 21.90 | 19.28 | Estimate | 15.00 | 3.29 | |
| | Irrigated Cropland | | | | 114.00 | 9.95 | 8.73 | Estimate | | | |
| | Irrigated Pasture | | | | 32.90 | 0.00 | 0.00 | Estimate | | | |
| 17 | Power House Aggregate Expansion | | 490.7 | 8.5 | | | | | | | |
| | Grassland ¹ | | | | 170.47 | 0.87 | 0.51 | GIS | 0.00 | 0.00 | |
| | Irrigated Cropland | | | | 21.56 | 0.01 | 0.04 | GIS | | | |
| 18 | Richter | | 273.9 | 266.5 | | | | | | | |
| | Rice | | | | 267.72 | 13.45 | 5.02 | GIS | | | |
| 19 | Eagle Creek | | 7549.8 | 11.6 | | | | | | | Only small portion of property delineated. Area of delineation looks good. |
| | Grassland ¹ | | | | 241.39 | 1.90 | 0.79 | GIS | 0.00 | 0.00 | |
| | Grassland with Vernal Swale Complex | | | | 317.10 | 9.69 | 3.06 | GIS | 50.00 | 4.85 | |
| 20 | Schuster (Honey Run) | | 1441.6 | 10.7 | | | | | | | Grasslands include ephemeral stream corridor. |
| | Grassland ¹ | | | | 509.10 | 4.17 | 0.82 | GIS | 5.00 | 0.21 | |

| Site No. | Delineation Site Name | Grassland Cover Type | Total Project Acreage | Total Wetlands Acres | Acres by Cover Type | Wetland Acres by Cover Type | Wetland Percentage by Cover Type | Wetland Calculation Method | Percent Vernal Pool | Acres Vernal Pool | Comments |
|----------|---|-------------------------------------|-----------------------|----------------------|---------------------|-----------------------------|----------------------------------|----------------------------|---------------------|-------------------|--|
| 21 | | Grassland with Vernal Swale Complex | | | 100.10 | 1.76 | 1.76 | GIS | 50.00 | 0.88 | |
| | Foothill Park and Adjacent Lands | | 347 | 16 | | | 4.61 | | | | Project is now mapped as "developed" so grassland and grassland with vernal swale complex percentages could not be calculated. |
| | Grand Total | | | | 8601.67 | 258.29 | 3.00 | | | | |

¹ Includes both stream associated and non-stream associated grasslands. These two types were separated to calculate two different densities of associated seasonal wetlands. See methods described in Section 3.4.5.1 Vernal Pools and Other Seasonal Wetlands

Table I.2-2 Data and Statistics for Seasonal Wetlands in Different Land Cover Types

| Grassland | | | | Grassland with Vernal Swale Complex | | | | Stream Corridor in Grasslands | | | |
|---------------------|--------------------|-----------------|-----------------|-------------------------------------|--------------------|-----------------|-----------------|-------------------------------|--------------------|-----------------|-----------------|
| Delineation Site | Land Cover (acres) | Wetland (acres) | Percent Wetland | Delineation Site | Land Cover (acres) | Wetland (acres) | Percent Wetland | Delineation Site | Land Cover (acres) | Wetland (acres) | Percent Wetland |
| Camelot | 27.76 | 1.00 | 3.60 | Schmid Far East | 67.90 | 1.70 | 2.50 | Mud Creek | 15.80 | 5.00 | 31.65 |
| Gateway | 92.10 | 0.00 | 0.00 | Schmid West | 59.80 | 2.30 | 3.85 | Airport trib 1 | 19.08 | 2.65 | 13.89 |
| Oro Airport | 27.16 | 0.39 | 1.42 | Chico Airport | 1,598.70 | 26.95 | 1.69 | Airport trib 2 | 16.06 | 11.56 | 71.98 |
| Chico airport | 1,317.40 | 7.70 | 0.58 | Schmid East | 151.40 | 10.45 | 6.90 | Bidwell Trib 1 | 47.00 | 7.00 | 14.89 |
| Palermo | 233.80 | 2.64 | 1.13 | Bidwell | 871.00 | 53.30 | 6.12 | Dead Horse Slough | 22.67 | 1.60 | 7.06 |
| Porter Rancho | 403.00 | 5.97 | 1.48 | Hicks | 11.44 | 0.93 | 8.13 | Schmid Trib 1 | 9.49 | 0.80 | 8.43 |
| Power House | 170.47 | 0.87 | 0.51 | Myers | 2.56 | 0.03 | 1.17 | Schmid Trib 2 | 27.11 | 16.08 | 59.30 |
| Highway 32 Widening | 40.20 | 1.25 | 3.10 | Oak Valley | 35.84 | 1.17 | 3.26 | Comanche Creek | 3.94 | 0.10 | 2.54 |
| Eagle Creek | 241.39 | 1.90 | 0.79 | Palermo | 361.80 | 42.20 | 11.66 | Eagle Trib 2 | 11.55 | 1.78 | 15.41 |
| Oro Bay | 204.70 | 2.60 | 1.27 | Porter Ranch | 113.60 | 21.90 | 19.28 | Eagle Trib 3 | 16.20 | 0.00 | 0.00 |
| Total | 2,757.98 | 24.31 | 0.88 | Highway 32 Widening | 19.26 | 0.39 | 2.05 | Palermo Trib | 25.30 | 1.65 | 6.52 |
| Statistics | | | | Eagle Creek | 317.10 | 9.69 | 3.06 | Porter Ranch Trib 1 | 22.80 | 8.50 | 37.28 |
| Mean | 275.80 | 2.43 | 1.39 | Oro Bay | 211.50 | 2.60 | 1.23 | Porter Ranch Trib 2 | 21.95 | 2.70 | 12.30 |
| Median | 187.59 | 1.57 | 1.20 | Total | 3,821.89 | 173.62 | 4.54 | Total | 258.95 | 59.42 | 22.94 |
| Standard Deviation | 384.82 | 2.51 | 1.14 | Statistics | | | | Statistics | | | |
| Sample Variance | 148,089.80 | 6.29 | 1.29 | Mean | 293.99 | 13.36 | 5.45 | Mean | 19.92 | 4.57 | 21.63 |
| Count | 10 | 10 | 10 | Median | 113.60 | 2.60 | 3.26 | Median | 19.08 | 2.65 | 13.89 |
| | | | | Standard Deviation | 457.61 | 17.63 | 5.19 | Standard Deviation | 10.47 | 4.92 | 22.32 |
| | | | | Sample Variance | 209,405.56 | 310.79 | 26.93 | Sample Variance | 109.55 | 24.18 | 498.11 |
| | | | | Count | 13 | 13 | 13 | Count | 13 | 13 | 13 |