ESCA RP 2014 Annual Natural Resource Report

| Scientific Name | | | Twenty-nine Baseline Transects | | | | | |
|---|----------------------------|--|--------------------------------|-------------------------------|---------------------------|-----------|--|--|
| Scientific Name | | Baseline Data 2010 - 2011 (all IAR MRA baseline transects) | | | | | | |
| Scientific Name | Common Name | Mean Percent Cover | Standard Deviation | 90% Confidence Interval | Mean Relative Cover | Frequency | | |
| Tree Species | | | | | | | | |
| Quercus agrifolia | coast live oak | 0.0% | 0.0% | | 0.0% | 0.0% | | |
| Total Cover by Native Tree Sp | ecies | 0.0% | | | 0% | | | |
| Shrub and Sub-shrub Species | | | | | | | | |
| Arctostaphylos tomentosa subsp. tomentosa | shaggy-barked manzanita | 29.3% | 15.6% | 4.9% | 31.0% | 100% | | |
| Ceanothus rigidus | Monterey ceanothus | 13.5% | 9.3% | 2.9% | 14.3% | 96.6% | | |
| Ceanothus dentatus | dwarf ceanothus | 20.2% | 16.0% | 5.0% | 21.4% | 89.7% | | |
| Adenostoma fasciculatum | chamise | 9.0% | 6.9% | 2.2% | 9.5% | 89.7% | | |
| Crocanthemum scoparium | rush-rose | 8.1% | 9.1% | 2.9% | 8.6% | 86.2% | | |
| Salvia mellifera | black sage | 5.3% | 7.2% | 2.3% | 5.6% | 69.0% | | |
| Arctostaphylos pumila | sandmat manzanita | 1.6% | 2.0% | 0.6% | 1.7% | 65.5% | | |
| Eriophyllum confertiflorum | golden yarrow | 1.5% | 2.2% | 0.7% | 1.6% | 65.5% | | |
| Frangula californica subsp. californica | California coffeeberry | 0.9% | 1.9% | 0.6% | 1.0% | 31.0% | | |
| Mimulus aurantiacus | sticky monkeyflower | 0.5% | 0.9% | 0.3% | 0.5% | 27.6% | | |
| Ericameria ericoides | dune-heather, mock-heather | 1.5% | 5.6% | 1.8% | 1.6% | 24.1% | | |
| Baccharis pilularis subsp. consanguinea | coyote brush | 0.7% | 1.8% | 0.6% | 0.7% | 24.1% | | |
| Lepechinia calycina | pitcher sage | 0.4% | 1.4% | 0.5% | 0.4% | 20.7% | | |
| Ericameria fasciculata | Eastwood's ericameria | 0.2% | 0.5% | 0.2% | 0.2% | 17.2% | | |
| Lupinus chamissonis | silver bush lupine | 0.4% | 1.1% | 0.4% | 0.4% | 13.8% | | |
| Acmispon glaber | deerweed | 1.4% | 0.0% | | 1.5% | 0.0% | | |
| Garrya elliptica | coast silk-tassel | 0.0% | 0.0% | | 0.0% | 0.0% | | |
| Symphoricarpos mollis | creeping snowberry | 0.0% | 0.0% | | 0.0% | 0.0% | | |
| Toxicodendron diversilobum | poison-oak | 0.0% | 0.0% | | 0.0% | 0.0% | | |
| Total Cover by Native Shrub and | Subshrub Species | 94.5% | | | 99 % | | | |
| Total Combined Mean Cover Between Shrubs and Subshrubs | | 1.3% | 2.3% | 1.3% | 1% | 90% | | |
| Target Weed Total (<i>Carpobrotus edulis</i>) | | 0.0% | 0.0% | | 0% | 60% | | |
| Total Mean Percent Native Veg | etative Cover | 95.8% | | | | | | |
| Total Mean Percent Bare Grou (Including Masticated Vegetation) | | 4.2% | | | | | | |
| Total Mean Percent Masticated (calculated in 2014 only) | Vegetation | | | | | | | |
| Total Mean Percent Bare Grou | nd Only | 19.3% | 9.3% | 2.9% | | 100% | | |

HMP Species in Bold

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| | | Seven Baseline Transects Baseline Data 2010 - 2011 (South Range 44 MRA baseline transects only) | | | | | |
|--|----------------------------|---|-----------------------|-------------------------------|---------------------------|-----------|--|
| Scientific Name | Common Name | | | | | | |
| | | Mean Percent Cover | Standard Deviation | 90% Confidence Interval | Mean Relative Cover | Frequency | |
| Tree Species | | | | | | | |
| Quercus agrifolia | coast live oak | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Total Cover by Native Tree Sp | ecies | 0% | | | 0.0% | | |
| Shrub and Sub-shrub Species | | | • | | | | |
| Arctostaphylos tomentosa subsp. tomentosa | shaggy-barked manzanita | 25.8% | 9.5% | 6.9% | 23.7% | 100% | |
| Ceanothus rigidus | Monterey ceanothus | 16.3% | 5.0% | 3.7% | 14.9% | 100% | |
| Ceanothus dentatus | dwarf ceanothus | 30.4% | 14.9% | 10.9% | 27.9% | 100% | |
| Adenostoma fasciculatum | chamise | 9.9% | 7.1% | 5.2% | 9.1% | 100% | |
| Crocanthemum scoparium | rush-rose | 10.0% | 8.5% | 6.2% | 9.2% | 100% | |
| Salvia mellifera | black sage | 8.7% | 9.7% | 7.1% | 8.0% | 100% | |
| Arctostaphylos pumila | sandmat manzanita | 0.7% | 0.6% | 0.4% | 0.7% | 71.4% | |
| Eriophyllum confertiflorum | golden yarrow | 3.0% | 2.7% | 2.0% | 2.8% | 85.7% | |
| Frangula californica subsp. californica | California coffeeberry | 0.1% | 0.2% | 0.2% | 0.1% | 14.3% | |
| Mimulus aurantiacus | sticky monkeyflower | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Ericameria ericoides | dune-heather, mock-heather | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Baccharis pilularis subsp. consanguinea | coyote brush | 0.2% | 0.4% | 0.3% | 0.2% | 28.6% | |
| Lepechinia calycina | pitcher sage | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Ericameria fasciculata | Eastwood's ericameria | 0.1% | 0.2% | 0.2% | 0.1% | 14.3% | |
| Lupinus chamissonis | silver bush lupine | 1.2% | 2.1% | 1.5% | 1.1% | 28.6% | |
| Acmispon glaber | deerweed | 1.2% | 1.1% | 0.8% | 1.1% | 85.7% | |
| Garrya elliptica | coast silk-tassel | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Symphoricarpos mollis | creeping snowberry | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Toxicodendron diversilobum | poison-oak | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Total Cover by Native Shrub and Subshrub Species | | 108% | | | 99 % | | |
| Total Combined Mean Cover Between Shrubs and Subshrubs | | 1.2% | 1.2% | 0.9% | 1.1% | 71% | |
| Target Weed Total (Carpobrotus edulis) | | 0% | 0% | | 0% | 0% | |
| Total Mean Percent Native Veg | etative Cover | 108.8% | | | | | |
| Total Mean Percent Bare Grou (Including Masticated Vegetati | | 16.2% | | | | | |
| Total Mean Percent Masticated (calculated in 2014 only) | Vegetation | | | | | | |
| Total Mean Percent Bare Grou | nd Only | 16% | 8% | 6% | 15% | 100% | |

HMP Species in Bold

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| | Common Name | Seven Transects in Cut Vegetation Conducted in 2011 Post-activity Data 2012 (Year 1) | | | | | |
|--|----------------------------|---|-----------------------|-------------------------------|---------------------------|-----------|--|
| Scientific Name | | | | | | | |
| | | Mean Percent Cover | Standard Deviation | 90% Confidence Interval | Mean Relative Cover | Frequency | |
| Tree Species | | | | | | | |
| Quercus agrifolia | coast live oak | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Total Cover by Native Tree Sp | ecies | 0.0% | | | 0.0% | | |
| Shrub and Sub-shrub Species | | | | | | | |
| Arctostaphylos tomentosa subsp. tomentosa | shaggy-barked manzanita | 9.4% | 4.9% | 3.6% | 43.7% | 100% | |
| Ceanothus rigidus | Monterey ceanothus | 0.7% | 0.7% | 0.5% | 3.0% | 57.1% | |
| Ceanothus dentatus | dwarf ceanothus | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Adenostoma fasciculatum | chamise | 3.3% | 1.5% | 1.1% | 15.5% | 100% | |
| Crocanthemum scoparium | rush-rose | 2.0% | 5.2% | 3.8% | 9.5% | 42.9% | |
| Salvia mellifera | black sage | 1.5% | 2.2% | 1.6% | 7.1% | 85.7% | |
| Arctostaphylos pumila | sandmat manzanita | 1.6% | 1.3% | 0.9% | 7.4% | 85.7% | |
| Eriophyllum confertiflorum | golden yarrow | 0.1% | 0.1% | 0.1% | 0.4% | 42.9% | |
| Frangula californica subsp. californica | California coffeeberry | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| Mimulus aurantiacus | sticky monkeyflower | 0.0% | 0.1% | 0.1% | 0.2% | 14.3% | |
| Ericameria ericoides | dune-heather, mock-heather | 0.5% | 1.2% | 0.9% | 2.1% | 14.3% | |
| Baccharis pilularis subsp. consanguinea | coyote brush | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Lepechinia calycina | pitcher sage | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Ericameria fasciculata | Eastwood's ericameria | 0.1% | 0.2% | 0.1% | 0.3% | 14.3% | |
| Lupinus chamissonis | silver bush lupine | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| Acmispon glaber | deerweed | 1.2% | 1.3% | 0.9% | 5.7% | 85.7% | |
| Garrya elliptica | coast silk-tassel | 0.4% | 1.0% | 0.7% | 2.1% | 28.6% | |
| Symphoricarpos mollis | creeping snowberry | 0.1% | 0.3% | 0.2% | 0.6% | 14.3% | |
| Toxicodendron diversilobum | poison-oak | 0.1% | 0.1% | 0.1% | 0.3% | 28.6% | |
| Total Cover by Native Shrub and | Subshrub Species | 21.1% | | | 85.7% | | |
| Total Combined Mean Cover Between Shrubs and Subshrubs | | 3.5% | 5.3% | 4.7% | 8.0% | 90.0% | |
| Target Weed Total (<i>Carpobrotus edulis</i>) | | 0.5% | 0.5% | 0.4% | 2.2% | 57.1% | |
| Total Mean Percent Native Veg | getative Cover | 24.6% | | | | | |
| Total Mean Percent Bare Grou (Including Masticated Vegetati | | 75.2% | | | | | |
| Total Mean Percent Masticated (calculated in 2014 only) | | | | | | | |
| Total Mean Percent Bare Grou | nd Only | 75% | 7.9% | 5.8% | | 100% | |

HMP Species in Bold

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| Scientific Name | | Seven Transects in Cut Vegetation Conducted in 2011 | | | | | |
|---|----------------------------|---|-----------------------|-------------------------------|---------------------------|-----------|--|
| | Common Name | Post-activity Data 2013 (Year 2) | | | | | |
| | | Mean Percent Cover | Standard Deviation | 90% Confidence Interval | Mean Relative Cover | Frequency | |
| Tree Species | | | | | | | |
| Quercus agrifolia | coast live oak | 0.0% | 0.1% | 0.1% | 0.1% | 14.3% | |
| Total Cover by Native Tree Species | | 0.0% | | | 0.1% | | |
| Shrub and Sub-shrub Species | | | | | | - | |
| Arctostaphylos tomentosa subsp. tomentosa | shaggy-barked manzanita | 11.6% | 6.7% | 4.9% | 36.2% | 100% | |
| Ceanothus rigidus | Monterey ceanothus | 1.1% | 1.4% | 1.0% | 3.3% | 71.4% | |
| Ceanothus dentatus | dwarf ceanothus | 0.0% | 0.1% | 0.1% | 0.1% | 14.3% | |
| Adenostoma fasciculatum | chamise | 4.5% | 2.4% | 1.7% | 14.2% | 100% | |
| Crocanthemum scoparium | rush-rose | 2.0% | 4.9% | 3.6% | 6.4% | 85.7% | |
| Salvia mellifera | black sage | 3.5% | 6.1% | 4.5% | 10.9% | 85.7% | |
| Arctostaphylos pumila | sandmat manzanita | 2.7% | 1.9% | 1.4% | 8.5% | 85.7% | |
| Eriophyllum confertiflorum | golden yarrow | 0.3% | 0.4% | 0.3% | 0.9% | 57.1% | |
| Frangula californica subsp. californica | California coffeeberry | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| Mimulus aurantiacus | sticky monkeyflower | 0.1% | 0.2% | 0.1% | 0.3% | 28.6% | |
| Ericameria ericoides | dune-heather, mock-heather | 0.6% | 1.5% | 1.1% | 1.8% | 14.3% | |
| Baccharis pilularis subsp. consanguinea | coyote brush | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| Lepechinia calycina | pitcher sage | 0.1% | 0.2% | 0.1% | 0.2% | 10.0% | |
| Ericameria fasciculata | Eastwood's ericameria | 0.0% | 0.1% | 0.1% | 0.2% | 14.3% | |
| Lupinus chamissonis | silver bush lupine | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| Acmispon glaber | deerweed | 3.8% | 3.9% | 2.9% | 11.8% | 85.7% | |
| Garrya elliptica | coast silk-tassel | 0.5% | 1.4% | 1.0% | 1.7% | 28.6% | |
| Symphoricarpos mollis | creeping snowberry | 0.3% | 0.8% | 0.6% | 0.9% | 14.3% | |
| Toxicodendron diversilobum | poison-oak | 0.1% | 0.2% | 0.1% | 0.2% | 14.3% | |
| Total Cover by Native Shrub and Subshrub Species | | 31.3% | | | 91.7% | | |
| Total Combined Mean Cover Between Shrubs and Subshrubs | | 2.8% | 4.4% | 2.6% | 8.2% | 80.0% | |
| Target Weed Total (<i>Carpobrotus edulis</i>) | | 0.5% | 0.5% | 0.3% | 1.6% | 71.4% | |
| Total Mean Percent Native Ve | getative Cover | 34.1% | | | | | |
| Total Mean Percent Bare Grou (Including Masticated Vegetat | | 68.3% | | | | | |
| Total Mean Percent Masticate (calculated in 2014 only) | d Vegetation | | | | | | |
| Total Mean Percent Bare Grou | nd Only | 68.3% | 9.2% | 6.8% | | 100% | |

HMP Species in Bold

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| | | Seven Transects in Cut Vegetation Conducted in 2011 Post-activity Data 2014 (Year 3) | | | | | |
|---|----------------------------|---|-----------------------|-------------------------------|---------------------------|-----------|--|
| Scientific Name | Common Name | | | | | | |
| | | Mean Percent Cover | Standard Deviation | 90% Confidence Interval | Mean Relative Cover | Frequency | |
| Tree Species | | | | | | | |
| Quercus agrifolia | coast live oak | 0.0% | 0.0% | 0.0% | 0.0% | 14.3% | |
| Total Cover by Native Tree Sp | pecies | 0.0% | | | 0.0% | | |
| Shrub and Sub-shrub Species | | | | | | | |
| Arctostaphylos tomentosa subsp. tomentosa | shaggy-barked manzanita | 11.8% | 5.5% | 4.0% | 38.6% | 100% | |
| Ceanothus rigidus | Monterey ceanothus | 0.8% | 0.9% | 0.6% | 2.5% | 85.7% | |
| Ceanothus dentatus | dwarf ceanothus | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Adenostoma fasciculatum | chamise | 5.0% | 3.1% | 2.3% | 16.3% | 100% | |
| Crocanthemum scoparium | rush-rose | 1.8% | 4.2% | 3.1% | 5.8% | 85.7% | |
| Salvia mellifera | black sage | 2.6% | 3.8% | 2.8% | 8.6% | 71.4% | |
| Arctostaphylos pumila | sandmat manzanita | 2.8% | 2.4% | 1.8% | 9.3% | 85.7% | |
| Eriophyllum confertiflorum | golden yarrow | 0.1% | 0.2% | 0.1% | 0.3% | 42.9% | |
| Frangula californica subsp. californica | California coffeeberry | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Mimulus aurantiacus | sticky monkeyflower | 0.1% | 0.2% | 0.2% | 0.3% | 14.3% | |
| Ericameria ericoides | dune-heather, mock-heather | 0.8% | 2.0% | 1.5% | 2.5% | 14.3% | |
| Baccharis pilularis subsp. consanguinea | coyote brush | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Lepechinia calycina | pitcher sage | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Ericameria fasciculata | Eastwood's ericameria | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Lupinus chamissonis | silver bush lupine | 0.0% | 0.0% | | 0.0% | 0.0% | |
| Acmispon glaber | deerweed | 2.0% | 1.5% | 1.1% | 6.6% | 100% | |
| Garrya elliptica | coast silk-tassel | 0.3% | 0.8% | 0.6% | 0.9% | 14.3% | |
| Symphoricarpos mollis | creeping snowberry | 0.2% | 0.6% | 0.4% | 0.8% | 14.3% | |
| Toxicodendron diversilobum | poison-oak | 0.1% | 0.2% | 0.1% | 0.2% | 14.3% | |
| Total Cover by Native Shrub and | Subshrub Species | 28.4% | | | 92.7% | | |
| Total Combined Mean Cover Between Shrubs and Subshrubs | | 2.2% | 4.7% | 3.4% | 7.3% | 85.7% | |
| Target Weed Total (<i>Carpobrotus edulis</i>) | | 0.0% | 0.0% | - | | 0.0% | |
| Total Mean Percent Native Veg | getative Cover | 30.6% | | | | | |
| Total Mean Percent Bare Grou (Including Masticated Vegetat | | 70.3% | | | | | |
| Total Mean Percent Masticated (calculated in 2014 only) | | 19.2% | 13.5% | 9.9% | | 85.7% | |
| Total Mean Percent Bare Grou | nd Only | 51.1% | 14.0% | 10.3% | | 100% | |

HMP Species in Bold