

Tables

TABLE 2-1

Presence, density and acreage of HMP annual plants species found during surveys of remediation sites.
Dash mark indicates a survey was conducted and the species was not found.

HA Site HMP annual plant surveys	Sand Gilia Density and Acreage	Monterey Spineflower Density within the Survey Area	Seaside Bird's beak Density and Acreage	Figure #
18	--	Low – High	--	Fig. 2-2
22	--	Low - Medium	---	Fig. 2-3
26	--	Presence reported from 2000 survey ¹	--	Fig. 2-4
27	--	--	--	Fig. 2-5
27A	--	--	--	Fig. 2-6
28	--	Low (0.3 acre)	--	Fig. 2-7
29	--	--	--	Fig. 2-8
33	-- ³	Low - High	--	Fig. 2-9
34	--	--	--	Fig. 2-10
36	--	--	--	Fig. 2-11
37	--	Low	--	Fig. 2-12
39/40	--	Low - High	--	Fig. 2-13
44	Presence reported from 2005 survey ²	Presence reported from 2005 survey ²	Presence reported from 2005 survey ²	Fig. 2-14
48	Presence reported from 2005 survey ²	Presence reported from 2005 survey ²	Presence reported from 2005 survey ²	Fig. 2-15

¹ Data can be found in the *2000 Annual Monitoring Report* (USACE, 2001)

² Survey data in *2005 Annual Biological Monitoring Report, Ranges 43-48, Former Fort Ord, Monterey Country, California* (USACE, 2005)

³ Though not recorded in this study or in an earlier published survey, sand gilia has been reported anecdotally to be present within the maritime chaparral area of HA-28.

Table 2-2
List of plant species encountered in HA-18 remediation area.

	Scientific Name	Common Name
Shrub species		
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Artemisia californica</i>	California sagebrush
	<i>Baccharis pilularis</i>	coyote brush
*	<i>Carpobrotus edulis</i>	iceplant
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Ericameria ericameria</i>	mock heather
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Quercus agrifolia</i>	coast live oak
	<i>Salvia mellifera</i>	black sage
	<i>Toxicodendron diversilobum</i>	poison oak
Herbaceous species		
*	<i>Aira careophylla</i>	silvery hairgrass
*	<i>Avena barbata</i>	slender wild oat
*	<i>Bromus diandrus</i>	ripgut brome
*	<i>Bromus madritensis</i>	red brome
	<i>Cardionema ramosissimum</i>	sand mat
	<i>Carex brevicaulis</i>	short-stemmed sedge
	<i>Chorizanthe pungens pungens</i>	Monterey spineflower
	<i>Crassula connata</i>	sand pygmyweed
	<i>Eriophyllum confertiflorum</i>	golden yarrow
*	<i>Erodium species</i>	filaree species
*	<i>Filago gallica</i>	narrow-leaved filago
	<i>Galium californica</i>	California bedstraw
	<i>Galium porrigens</i>	climbing bedstraw
	<i>Gnaphalium californicum</i>	California cudweed
	<i>Helianthemum scoparium</i>	rush rose
*	<i>Hypochaeris glabra</i>	smooth cat's ear
	<i>Lessingia filaginifolia</i>	common Lessingia
	<i>Lotus heermannii</i>	Heermann's lotus
	<i>Lotus scoparius var. scoparius</i>	deerweed
	<i>Lotus strigosus spp. parviloba</i>	Bishop's lotus
	<i>Marah fabaceus</i>	wild cucumber
	<i>Navarretia hamata</i>	hooked Navarretia
	<i>Plantago erecta</i>	California plantain
	<i>Psilocarphus tenellus var. globiferous</i>	round woolly marbles
*	<i>Rumex acetosella</i>	sheep sorrel
*	<i>Vulpia myurus</i>	rattail fescue

* non-native species

Table 2-3
List of plant species encountered in HA-22 remediation area

	Scientific Name	Common Name
Shrub species		
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Artemisia pycnocephala</i>	beach sagewort
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
*	<i>Carpobrotus edulis</i>	iceplant
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
*	<i>Cortaderia jubata</i>	pampas grass
	<i>Ericameria ericameria</i>	mock heather
	<i>Helianthemum scoparium</i>	rush rose
	<i>Horkelia cuneata spp. cuneata</i>	wedge-leaved Horkelia
	<i>Lotus scoparius var. scoparius</i>	deer weed
	<i>Lupinus chamissonis</i>	silver bush lupine
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Salvia mellifera</i>	black sage
	<i>Symphoricarpos mollis</i>	creeping snowberry
	<i>Toxicodendron diversilobum</i>	poison oak
Herbaceous species		
	<i>Achillea millefolium</i>	white yarrow
	<i>Amsinckia sp.</i>	fiddleneck
	<i>Apiastrum angustifolium</i>	wild celery
*	<i>Bromus madritensis</i>	red brome
	<i>Camissonia contorta</i>	contorted primrose
	<i>Chorizanthe diffusa</i>	diffuse spineflower
	<i>Chorizanthe pungens pungens</i>	Monterey spineflower
	<i>Corythogyne (Lessingia) filaginifolia</i>	California aster
	<i>Croton californicus</i>	California croton
	<i>Dudleya sp.</i>	live forever
	<i>Eriastrum virgatum</i>	virgate eriastrum
	<i>Eriophyllum confertiflorum</i>	golden yarrow
*	<i>Erodium spp.</i>	filaree
	<i>Lotus scoparius var. scoparius</i>	deerweed
	<i>Lotus strigosus spp. parviloba</i>	Bishop's lotus
	<i>Navarretia hamata</i>	hooked Navarretia
	<i>Plagiobothrys sp.</i>	popcorn flower

* non-native species

Table 2-4a

HA-26 remediation site: Vegetation transect data summary, showing shrub species percent cover in 5 transects.

Species Code	Scientific name	Common name	Percent Cover					Range (%)	Aver. Cover %
			T1	T2	T3	T4	T5		
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita	22.2	51.6	50.2	41.0	49.0	22.2 - 51.6	42.8
b.g		bare ground	33.4	32.2	19.4	29.2	14.8	14.8 - 33.4	25.8
ADFA	<i>Adenostoma fasciculatum</i>	chamise	31.4	7.4	10.8	22.4	13.8	7.4 - 31.4	17.2
SAME	<i>Salvia mellifera</i>	black sage	2.0	4.0	17.8	6.4	5.4	4 - 17.8	7.1
CEDE	<i>Ceanothus dentatus</i>	dwarf Ceanothus	4.2	1.6	2.0	5.6	15.0	1.6 - 15.0	5.7
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita			5.0	5.2	1.6	1.6 - 5	3.9
LECA	<i>Lepechinia calycina</i>	pitcher sage	11.6		1.0	0.6	2.4	1.0 - 11.6	3.9
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus		0.6	6.6	0.6	0.6	0.6 - 6.6	2.1
ERFA	<i>Ericameria fasciculata</i>	Eastwood's golden bush		1.8				1.8	1.8
TODI	<i>Toxicodendron diversilobum</i>	poison oak					0.6	0.6	0.6
MIAU	<i>Mimulus aurantiacus</i>	sticky monkey flower	0.6	0.2				0.2 - 0.6	0.4
Herb		herbaceous species	0.0	0.2	0.0	0.0	0.0	0 - 0.2	0.0
		Total cover	72.0	67.4	93.4	81.8	90.4		

Table 2-4b
List of plant species encountered in HA-26 remediation area.

	Scientific Name	Common Name
Shrub Species		
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Salvia mellifera</i>	black sage
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Baccharis pilularis</i>	coyote brush
	<i>Lotus scoparius</i>	deer weed
*	<i>Cortaderia jubata</i>	pampas grass
	<i>Ericameria fasciculata</i>	Eastwood's golden bush
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Lepechinia calycina</i>	pitcher sage
	<i>Garrya elliptica</i>	silk tassel
	<i>Quercus agrifolia</i>	coast live oak
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
	<i>Heteromeles arbutifolia</i>	toyon
	<i>Toxicodendron diversilobum</i>	poison oak
Herbaceous species		
	<i>Carex brevicaulis</i>	short-stemmed sedge
	<i>Chorizanthe diffusa</i>	diffuse spineflower
	<i>Corythogyne (Lessingia) filaginifolia</i>	California aster
	<i>Eriophyllum confertiflorum</i>	golden yarrow
	<i>Gnaphalium californicum</i>	California cudweed
	<i>Helianthemum scoparius</i>	rush rose
	<i>Horkelia c. cuneata</i>	wedge leaved horkelia
	<i>Navarretia hamata</i>	hooked Navarretia

* non-native species

Table 2-5
List of plant species encountered in HA-27 remediation area

	Scientific Name	Common Name
Shrub species		
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
*	<i>Carpobrotus edulis</i>	iceplant
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
	<i>Lepechinia calycina</i>	pitcher sage
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Quercus agrifolia</i>	coast live oak
	<i>Salvia mellifera</i>	black sage
Herbaceous species		
	<i>Carex brevicaulis</i>	short-stemmed sedge
	<i>Chorizanthe diffusa</i>	diffuse spineflower
	<i>Helianthemum scoparium</i>	rush rose
	<i>Horkelia cuneata</i> spp. <i>cuneata</i>	wedge-leaved Horkelia
	<i>Lotus scoparius</i> var. <i>scoparius</i>	deerweed

* non-native species

Table 2-6a. HA-28 Soil remediation site: Vegetation transect data summary, showing shrub species cover in 2 transects.

Species Code	Scientific Name	Common Name	Percent Cover			
			T1	T2	Range % cover	Average % cover
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	25.8	45.0	25.8 - 45	35.4
B.G		bare ground	40.0	21.8	21.8 - 40	30.9
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita	22.0	22.3	22.0 - 22.3	22.2
ADFA	<i>Adenostoma fasciculatum</i>	chamise	6.7	3.5	3.5 - 6.7	5.1
SAME	<i>Salvia mellifera</i>	black sage	4.0	2.0	2.0 - 4.0	3.0
ARMO	<i>Arctostaphylos montereyensis</i>	Monterey manzanita	0.0	3.8	0 - 3.8	1.9
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	0.0	1.5	0 - 1.5	0.8
HOCU	<i>Horkelia c. cuneata</i>	Horkelia	0.2		0.2	0.2
Herb		herbaceous species	0.0	0.0	0.0	0.0
		Total Cover	58.6	78.1		

Table 2-6b
List of plant species encountered in HA-28 remediation area.

	Scientific Name	Common Name
Shrub Species		
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos hookeri</i>	Hooker's manzanita
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Cortaderia jubata</i>	pampas grass
	<i>Ericameria fasciculata</i>	Eastwood's golden bush
	<i>Salvia mellifera</i>	black sage
Herbaceous Species		
	<i>Camissonia micrantha</i>	small evening primrose
	<i>Cardionema ramosissimum</i>	sand mat
	<i>Carex brevicaulus</i>	short stemmed sedge
	<i>Castilleja foliolosa</i>	woolly indian paintbrush
	<i>Chorizanthe diffusa</i>	diffuse spineflower
	<i>Chorizanthe pungens var. pungens</i>	Monterey spineflower
	<i>Corethrogyne filaginifolia</i>	beach aster
	<i>Crassula connata</i>	sand pigmyweed
	<i>Eriophyllum confertiflorum</i>	golden yarrow
*	<i>Erodium sp.</i>	filaree
	<i>Helianthemum scoparius</i>	rush rose
	<i>Heterotheca grandiflora</i>	telegraph weed
	<i>Horkelia c. cuneata</i>	Horkelia
	<i>Lessingia glandulifera var. pectinata</i>	valley lessingia
	<i>Lomatium parvifolium</i>	coast lomatium
	<i>Lotus scoparius</i>	deer weed
	<i>Navarettia hamata</i>	hooked navarettia
	<i>Pedicularis densiflora</i>	indian warrior
	<i>Phacelia douglasii</i>	Douglas' phacelia
	<i>Plantago erecta</i>	California plantain
	<i>Zigadenus fremontii</i>	Fremont's star lily

* non-native species

Table 2-7a

HA-29 remediation site: Vegetation transect summary data, showing shrub species percent cover in 4 transects.

Sp.Code	Scientific name	Common name	Percent Cover				Range % cover	Average % cover
			T1	T2	T3	T4		
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita	29.6	42	55.4	26	26 - 55.4	38.3
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	36.4	24.2	5.4	41.8	5.4 - 41.8	27.0
B.G		bare ground	21.2	12.6	14.4	19.2	12.6 - 21.2	16.9
*COJU	<i>Cortaderia jubata</i>	pampas grass	16.8	4.2			4.2 - 16.8	10.5
SAME	<i>Salvia mellifera</i>	black sage	0.2	18.2	11.6	4.2	0.2 - 18.2	8.6
ARMO	<i>Arctostaphylos montereyensis</i>	Monterey manzanita		5.8	8.8		5.8 - 8.8	7.3
ADFA	<i>Adenostoma fasciculatum</i>	chamise			5.4	0.6	0.6 - 5.4	3.0
ARHO	<i>Arctostaphylos hookeri</i>	Hooker's manzanita				2.2	2.2	2.2
ERFA	<i>Ericameria fasciculata</i>	Eastwood's golden bush				1.6	1.6	1.6
Herb		herbaceous species	1.8			1.4	1.4 - 1.8	1.6
PO	<i>Toxicodendron diversilobum</i>	Poison Oak		0.2	0.4	4	0.2 - 4	1.5
BAPI	<i>Baccharis pilularis</i>	coyote brush		0.6	0.4		0.4 - 0.6	0.5
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus			0.2		0.2	0.2
		Total cover	84.8	95.2	87.6	80.2		

Table 2-7b
List of plant species encountered in HA-29 remediation area.

	Scientific Name	Common Name
Shrub species		
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos hookeri</i>	Hooker's manzanita
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
*	<i>Carpobrotus chilensis</i>	ice plant
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
*	<i>Cortaderia jubata</i>	pampas grass
	<i>Ericameria fasciculata</i>	Eastwood's golden bush
	<i>Garrya elliptica</i>	silk tassel
	<i>Heteromeles arbutifolia</i>	toyon
	<i>Lepechinia calycina</i>	pitcher sage
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Quercus agrifolia</i>	coast live oak
	<i>Salvia mellifera</i>	black sage
	<i>Toxicodendron diversilobum</i>	poison oak
Herbaceous species		
*	<i>Aira careophyllea</i>	silvery hairgrass
*	<i>Anagallis arvensis</i>	scarlet pimpernel
	<i>Corythogyne (Lessingia) filaginifolia</i>	California aster
	<i>Eriophyllum confertiflorum</i>	golden yarrow
*	<i>Gnaphalium albo-luteum</i>	weedy cudweed
	<i>Helianthemum scoparius</i>	rush rose
	<i>Horkelia c. cuneata</i>	Wedge-leaved Horkelia
	<i>Lotus scoparius</i>	deer weed
	<i>Navarretia hamata</i>	hooked Navarretia
*	<i>Rumex acetosella</i>	sheep sorrel
	<i>Zigadenus fremontii</i>	Fremont's star lily

* non-native species

Table 2-8
List of plant species encountered in HA-33 remediation area

	Scientific Name	Common Name
Shrub species		
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
*	<i>Carpobrotus edulis</i>	iceplant
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
*	<i>Cortaderia jubata</i>	jubata (pampas) grass
	<i>Helianthemum scoparium</i>	rush rose
	<i>Heteromeles arbutifolia</i>	toyon
	<i>Horkelia cuneata</i> spp. <i>cuneata</i>	wedge-leaved Horkelia
	<i>Quercus agrifolia</i>	coast live oak
	<i>Salix lasiolepis</i>	shining willow
	<i>Salvia mellifera</i>	black sage
Herbaceous species		
	<i>Achillea millefolium</i>	white yarrow
*	<i>Aira careophylla</i>	silvery hairgrass
*	<i>Anagallis arvensis</i>	scarlet pimpernel
*	<i>Bromus hordaceus</i>	soft chess
*	<i>Bromus madritensis</i>	red brome
	<i>Cardionema ramosissimum</i>	sand mat
	<i>Carex brevicaulis</i>	short-stemmed sedge
	<i>Croton californicus</i>	California croton
	<i>Eriophyllum confertiflorum</i>	golden yarrow
*	<i>Filago gallica</i>	narrow-leaved Filago
*	<i>Hypochaeris glabra</i>	smooth cat's ear
*	<i>Hypochaeris radicata</i>	hairy cat's ear
	<i>Lessingia filaginifolia</i>	common Lessingia
	<i>Nassella</i> sp.	needlegrass species
	<i>Plantago erecta</i>	California plantain

* non-native species

Table 2-9
List of plant species encountered in HA-34 remediation area

	Scientific Name	Common Name
Shrub species		
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Artemesia californica</i>	California sagebrush
	<i>Arctostaphylos hookeri</i>	Hooker's manzanita
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
*	<i>Carpobrotus edulis</i>	iceplant
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Heteromeles arbutifolia</i>	toyon
	<i>Lupinus arboreus</i>	yellow bush lupine
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Quercus agrifolia</i>	coast live oak
	<i>Salix lasiolepis</i>	shining willow
	<i>Salvia mellifera</i>	black sage
	<i>Toxicodendron diversilobum</i>	poison oak
	<i>Symphoricarphus mollis</i>	creeping snowberry
Herbaceous species		
	<i>Achillea millefolium</i>	white yarrow
	<i>Agoseris grandiflora</i>	large-flowered dandelion
*	<i>Aira careophylla</i>	silvery hairgrass
*	<i>Anagallis arvensis</i>	scarlet pimpernel
	<i>Apiastrum angustifolium</i>	wild celery
*	<i>Avena barbata</i>	slender wild oat
*	<i>Bromus hordaceus</i>	soft chess
*	<i>Bromus madritensis</i>	red brome
	<i>Calystegia subacaulis</i> spp. <i>subacaulis</i>	hill morning-glory
	<i>Cardionema ramosissimum</i>	sand mat
	<i>Carex brevicaulis</i>	short-stemmed sedge
	<i>Carex</i> sp.	
*	<i>Centaurea melitensis</i>	tocalote
	<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	soap root
	<i>Chorizanthe diffusa</i>	diffuse spineflower
	<i>Cirsium occidentale</i> var. <i>occidentale</i>	cobweb thistle
	<i>Corythogyne</i> (<i>Lessingia</i>) <i>filaginifolia</i> var. <i>filaginifolia</i>	common Lessingia
	<i>Dichelostoma capitatum</i> spp. <i>capitatum</i>	blue dicks
	<i>Elymus glaucus</i>	blue wild rye
	<i>Eriogonum nudum</i> var. <i>auriculatum</i>	naked buckwheat
	<i>Eriophyllum confertiflorum</i>	golden yarrow
*	<i>Erodium</i> species	filaree species
	<i>Eschscholzia californica</i>	California poppy
	<i>Galium porrigens</i>	climbing Bedstraw
*	<i>Gnaphalium albo-luteum</i>	weedy cudweed
	<i>Gnaphalium californicum</i>	California cudweed
	<i>Gnaphalium</i> sp.	cudweed

Table 2-9
List of plant species encountered in HA-34 remediation area

	<i>Helianthemum scoparium</i>	rush rose
*	<i>Heliotropium curassavicum</i>	Chinese pusley
	<i>Heterotheca grandiflora</i>	telegraph weed
	<i>Horkelia cuneata</i> spp. <i>cuneata</i>	wedge-leaved Horkelia
	<i>Juncus effusus</i>	common rush
	<i>Juncus patens</i>	spreading rush
	<i>Juncus phaeocephalus</i>	brown-headed rush
	<i>Juncus</i> sp.	rush
	<i>Koeleria macrantha</i>	June grass
*	<i>Lactuca</i> sp.	prickly lettuce
	<i>Lotus humistratus</i>	short-podded Lotus
	<i>Lotus scoparius</i> var. <i>scoparius</i>	deer weed
	<i>Luzula comosa</i>	common wood rush
	<i>Madia sativa</i>	coast tarweed
	<i>Marah fabaceus</i>	wild cucumber
	<i>Nassella lepida</i>	foothill needlegrass
*	<i>Rumex acetosella</i>	sheep sorrel
	<i>Sanicula crassicaulis</i>	gambleweed
	<i>Silene multinervia</i>	many-nerved catchfly
	<i>Solanum umbelliferum</i>	blue witch
*	<i>Trifolium hirtum</i>	rose clover
	<i>Trileleia ixiodes</i>	coast pretty face
	<i>Vicia</i> sp.	spring vetch
*	<i>Vulpia myurus</i>	rattail fescue

* non-native species

Table 2-10a. HA-36 Soil remediation site: Vegetation transect data summary, showing shrub species cover in 3 transects.

Sp. Code	Scientific Name	Common Name	Percent Cover			Range % Cover	Average % Cover
			T1	T2	T3		
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita	30.6	47.2	51.6	29.8 - 51.6	43.1
B.G		bare ground	27.8	13.4	16.2	13.4 - 27.8	19.1
ADFA	<i>Adenostoma fasciculatum</i>	chamise	19.4	9.2	10.2	10.2 - 28.0	12.9
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	4.4	21.8	9.2	2.4 - 21.8	11.8
ARMO	<i>Arctostaphylos montereyensis</i>	Monterey manzanita	11.8	3.2	12.2	3.2 - 12.2	9.1
SAME	<i>Salvia mellifera</i>	black sage	5.4	0.8	5.6	0.8 - 5.6	3.9
Herb		herbaceous species	6	0.2		0.2 - 6.0	3.1
GAEL	<i>Garrya elliptica</i>	silk tassel			2.8	2.8	2.8
CETH	<i>Ceanothus thyrsiflorus</i>	blue blossom		2.6		2.6	2.6
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita			2.2	2.2	2.2
RHCA	<i>Rhamus californica</i>	coffee berry	1.4			1.4	1.4
BAPI	<i>Baccharis pilularis</i>	coyote brush			0.6	0.6	0.6
		Total Vegetation Cover	79.0	85.0	93.8		

Table 2-10b
List of plant species encountered in HA-36 remediation area

	Scientific Name	Common Name
Shrub species		
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos hookeri</i>	Hooker's manzanita
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
	<i>Ceanothus thyrsiflorus</i>	blue blossom
*	<i>Cortaderia jubata</i>	pampas (jubata) grass
	<i>Ericameria fasciculata</i>	Eastwood's golden bush
	<i>Eriodictyon californicum</i>	California yerba santa
	<i>Garrya elliptica</i>	silk tassel
	<i>Lepechinia calycina</i>	pitcher sage
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Quercus agrifolia</i>	coast live oak
	<i>Rhamnus californica</i>	coffee berry
	<i>Salvia mellifera</i>	black sage
	<i>Symphoricarphus mollis</i>	creeping snowberry
Herbaceous species		
	<i>Carex brevicaulis</i>	short-stemmed sedge
	<i>Corythogyne (Lessingia) filaginifolia</i>	California aster
	<i>Eriophyllum confertiflorum</i>	golden yarrow
	<i>Helianthemum scoparius</i>	rush rose
	<i>Helianthemun scoparius</i>	rush rose
	<i>Horkelia cuneata spp. cuneata</i>	wedge-leaved Horkelia
	<i>Polygala californica</i>	California milkwort
	<i>Pteridium aquilinum var. pubescens</i>	bracken fern

* non-native species

Table 2-11a

HA-37 Soil remediation site: Vegetation transect data summary, showing shrub species cover in 3 transects

Sp. Code	Scientific Name	Common Name	Percent Cover			Range % Cover	Average % Cover
			T1	T2	T3		
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita	64.2	67.4	66.6	64.2 - 67.4	66.1
B.G		bare ground	15.2	16.4	17	15.2 - 17	16.2
ADFA	<i>Adenostoma fasciculatum</i>	chamise	12.2	7.4	8	7.4 - 12.2	9.2
SAME	<i>Salvia mellifera</i>	black sage	1.4	6.4	7.6	1.4 - 7.6	5.1
GAEL	<i>Garrya elliptica</i>	silk tassel	13.6	1.2	0.6	0.6 - 13.6	5.1
ARMO	<i>Arcostaphylos montereyensis</i>	Monterey manzanita			4.4	4.4	4.4
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	1.2	2.6		1.2 - 2.6	1.9
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita			1.8	1.8	1.8
LECA	<i>Lepechinia calycina</i>	pitcher sage	1			1	1.0
ARHO	<i>Arctostaphylos hookeri</i>	Hooker's manzanita	0.6	1.0		1 - 0.6	0.8
BAPI	<i>Baccharis pilularis</i>	coyote brush			0.6	0.6	0.6
Herb		herbaceous species	1	0.2		1 - 0.2	0.6
		Total Vegetation Cover	95.2	86.2	89.6		

Table 2-11b
List of plant species encountered in HA-37 remediation area

Species Encountered in Disturbed Range Area and Grassland		
Shrub species		
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos hookeri</i>	Hooker's manzanita
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
*	<i>Cortaderia jubata</i>	Jubata (pampas) grass
	<i>Ericameria fasciculata</i>	Eastwood's golden bush
	<i>Garrya elliptica</i>	silk tassel
	<i>Heteromeles arbutifolia</i>	toyon
	<i>Lepechinia calycina</i>	pitcher sage
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Quercus agrifolia</i>	coast live oak
	<i>Salix lasiolepis</i>	arroyo willow
	<i>Salvia mellifera</i>	black sage
Herbaceous species		
	<i>Achillea millefolium</i>	white yarrow
*	<i>Aira caryophyllea</i>	silvery hair-grass
*	<i>Anagallis arvensis</i>	scarlet pimpernel
*	<i>Avena barbata</i>	slender wild oat
*	<i>Bromus diandrus</i>	ripgut brome
*	<i>Bromus hordeaceus</i>	soft chess
*	<i>Bromus madritensis</i>	red brome
	<i>Camissonia sp.</i>	evening primrose
	<i>Carex brevicaulis</i>	short stemmed sedge
	<i>Castilleja foliolosa</i>	Indian paintbrush
*	<i>Carpobrotus chilensis</i>	ice plant
	<i>Chorizanthe diffusa</i>	diffuse spineflower
	<i>Corythogyne (Lessingia) filaginifolia</i>	California aster
	<i>Danthonia californica</i>	California oat-grass
	<i>Dichelostemma capitatum spp. capitatum</i>	blue dicks
	<i>Distichlis spicata</i>	salt grass
	<i>Eriophyllum confertiflorum</i>	golden yarrow
*	<i>Erodium spp.</i>	filaree
	<i>Eschscholzia californica</i>	California poppy
*	<i>Filago gallica</i>	narrow-leaved filago
	<i>Galium porrigens</i>	climbing Bedstraw
*	<i>Genista sp.</i>	broom
	<i>Gnaphalium californicum</i>	California everlasting
	<i>Helianthemum scoparius</i>	rush rose
	<i>Hemizonia sp.</i>	tarweed
	<i>Heterotheca grandiflora</i>	telegraph weed

Table 2-11b
List of plant species encountered in HA-37 remediation area

	<i>Horkelia c. cuneata</i>	wedge-leaved Horkelia
*	<i>Hypochaeris spp.</i>	cats' ear
	<i>Lomatium parvifolium</i>	coast parsnip
	<i>Lotus scoparius</i>	deerweed
	<i>Juncus sp.</i>	rush
	<i>Navarettia atractyloides</i>	navarettia
*	<i>Plantago coronopus</i>	cut-leaved plantain
	<i>Plantago erecta</i>	California plantain
	<i>Potentilla glandulosa</i>	sticky cinquefoil
*	<i>Rumex acetosella</i>	sheep sorrel
	<i>Sisyrinchium bellum</i>	blue-eyed grass
*	<i>Trifolium hirtum</i>	rose clover
	<i>Vicia sp.</i>	spring vetch
*	<i>Vulpia myuros</i>	rattail fescue
Species Encountered in Central Maritime Chaparral		
Shrub species		
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos hookeri</i>	Hooker's manzanita
	<i>Arctostaphylos montereyensis</i>	Monterey manzanita
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
*	<i>Cortaderia jubata</i>	Jubata (pampas) grass
	<i>Ericameria fasciculata</i>	Eastwood's golden bush
	<i>Garrya elliptica</i>	silk tassel
	<i>Lepechinia calycina</i>	pitcher sage
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Salvia mellifera</i>	black sage
Herbaceous species		
	<i>Carex brevicaulus</i>	short stemmed sedge
	<i>Eriophyllum confertiflorum</i>	golden yarrow
	<i>Gnaphalium californicum</i>	California everlasting
	<i>Galium porrigens</i>	climbing bedstraw
	<i>Helianthemum scoparius</i>	rush rose
	<i>Horkelia c. cuneata</i>	wedge-leaved Horkelia
	<i>Pedicularis densiflora</i>	Indian warrior

* non-native species

Table 2-12a

HA-39/40 remediation site vegetation data summary for Transects 1 through 6 (5-10 quadrats per transect). Species are ranked by percent cover.

TRANSECT 1 (location is shown on Figure 2-13)									
Scientific Name	Common Name								Percent Shrub cover
Shrub Cover									
<i>Baccharis pilularis</i>	coyote bush								5.6
<i>Lupinus arboreus</i>	yellow bush lupine								1.0
	bare ground								93.4
Total Shrub Cover								6.6	
Average % Cover of Herbaceous Species									
	Quadrat #	1a	1b	1c	1d	1e	1f		
Herbaceous Species Cover									
	thatch	32	28	52	80	36	0	48.0	
*	<i>Bromus diandrus</i>	12	16	24	0	24	0	13.3	
	bare ground	24	24	8	4	4	12	10.7	
	<i>Achillea millefolium</i>	0	0	0	0	24	0	6.0	
*	<i>Bromus hordeaceus</i>	8	2	1	16	<1	0	5.4	
*	<i>Erodium botrys</i>	24	2	4	0	0	0	5.0	
	<i>Vulpia myurus</i>	0	0	0	0	0	0	4.0	
	<i>Vicia sp.</i>	0	<1	0	0	0	0	4.0	
*	<i>Rumex acetosella</i>	0	20	0	0	0	0	3.3	
*	<i>Hypochaeris sp.</i>	0	4	8	0	4	0	2.7	
	<i>Escholzia californica</i>	<1	<1	1	0	8	0	2.3	
	<i>Lupinus arboreus</i>	0	4	0	0	0	0	0.7	
*	<i>Aira caryophylla</i>	<1	0	1	0	0	0	0.2	
*	<i>Avena fatua</i>	0	0	1	0	0	24	0.2	
*	<i>Cerastium sp.</i>	0	0	0	0	<1	60	<1	
*	<i>Geranium sp.</i>	<1	0	0	0	0	4	<1	
	<i>Plectritis sp.</i>	<1	0	0	0	0	0	<1	
	<i>Solidago sp.</i>	<1	0	0	0	<1	0	<1	
*	<i>Thysanocarpus curvipes</i>	<1	0	0	0	0	0	<1	

* non-native species

Table 2-12a

HA-39/40 remediation site vegetation data summary for Transects 1 through 6 (5-10 quadrats per transect). Species are ranked by percent cover.

TRANSECT 2 (location is shown on Figure 2-13)													
												Average % of Herbaceous Cover	
Scientific Name	Common Name	Quadrat #	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	
thatch	thatch		48	76	28	16	72	76	36	44	40	36	47.2
bare ground	bare ground		48	16	56	72	4	0	36	36	0	24	29.2
* <i>Bromus diandrus</i>	ripgut brome		0	<1	4	<1	8	12	24	4	48	20	15.0
* <i>Rumex acetosella</i>	sheep sorrel		0	<1	<1	<1	16	12	<1	12	4	4	8.0
<i>Escholzia californica</i>	California poppy		0	<1	0	0	0	<1	<1	<1	8	16	4.0
<i>Heterotheca grandiflora</i>	telegraph weed		<1	<1	<1	<1	0	0	0	0	0	0	4.0
* <i>Erodium cicutarium</i>	filaree		<1	<1	<1	<1	0	0	<1	<1	4	<1	1.3
<i>Lupinus nanus</i>	sky lupine		0	0	0	0	<1	8	0	<1	0	<1	1.1
<i>Croton californica</i>	dove weed		0	0	0	8	0	0	0	0	0	0	0.8
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Monterey spineflower		0	<1	6	<1	0	0	0	0	0	0	0.8
* <i>Aira caryophylla</i>	silvery hairgrass		<1	4	<1	<1	0	0	0	0	0	0	0.4
* <i>Bromus hordaceus</i>	soft chess		0	<1	0	<1	<1	<1	<1	<1	<1	0	0.4
* <i>Hypochaeris</i> sp.	cat's ear		<1	<1	0	0	<1	<1	<1	<1	0	0	0.4
<i>Achillea millefolium</i>	white yarrow		0	0	0	0	0	0	0	0	0	<1	0.4
<i>Plantago erecta</i>	California plantain		0	0	<1	0	0	0	0	0	0	0	0.4
<i>Distichlis spicata</i>	salt grass		0	0	0	<1	0	0	0	0	0	0	0.4

* non-native species

Table 2-12a

HA-39/40 remediation site vegetation data summary for Transects 1 through 6 (5-10 quadrats per transect). Species are ranked by percent cover.

TRANSECT 3 (location is shown on Figure 2-13)								
Scientific Name	Common Name							
Shrub Cover							% Shrub cover	
Herbaceous species							97.4	
<i>Baccharis pilularis</i>	coyote bush							5.6
<i>Lupinus arboreus</i>	yellow bush lupine							1.0
Total Shrub Cover							6.6	
							Average	
							% Cover of Herbaceous	
Herbaceous Species Cover	Quadrat #	3a	3b	3c	3d	3e	Species	
thatch	thatch	56	52	44	48	20	44.0	
* <i>Vulpia myurus</i>	rat tail fescue	20	0	0	32	20	14.4	
<i>Achillea millefolium</i>	white yarrow	4	4	16	12	8	8.8	
* <i>Bromus hordaceus</i>	soft chess	8	4	8	<1	<1	6.7	
* <i>Rumex acetosella</i>	sheep sorrel	0	20	8	0	0	5.6	
bare ground	bare ground	0	0	0	0	20	4.0	
<i>Bromus carinatus</i>	California brome	0	0	0	0	20	4.0	
* <i>Sonchus sp.</i>	sonchus	0	4	<1	0	0	3.2	
* <i>Geranium sp.</i>	geranium	0	<1	0	4	0	1.0	
<i>Lupinus chamissonis</i>	silver bush lupine	0	4	0	0	<1	1.0	
* <i>Bromus diandrus</i>	ripgut brome	0	0	0	0	<1	1.0	
* <i>Aira caryophylla</i>	silvery hairgrass	0	0	0	0	<1	0.1	
* <i>Hypochaeris sp.</i>	cat's ear	0	0	0	0	<1	0.1	
<i>Escholzia californica</i>	California poppy	0	0	0	0	<1	0.1	
<i>Lolium multiflorum</i>	Italian ryegrass	0	0	0	<1	0	0.1	
<i>Lotus scoparius</i>	deer weed	<1	0	0	0	0	0.1	
<i>Epilobium sp.</i>	sky lupine	<1	<1	0	0	0	0.1	
<i>Apiastrum angustifolium</i>	wild celery	<1	0	0	0	0	0.1	
<i>Sisyrinchium bellum</i>	blue-eyed grass	0	<1	<1	0	<1	0.1	
* <i>Lactuca serriola</i>	prickly lettuce	0	0	16	0	0	0.1	
<i>Solidago sp.</i>	golden rod	0	0	<1	0	<1	0.1	

* non-native species

Table 2-12a

HA-39/40 remediation site vegetation data summary for Transects 1 through 6 (5-10 quadrats per transect). Species are ranked by percent cover.

TRANSECT 4 (location is shown on Figure 2-13)								
Scientific Name	Common Name							
Shrub Cover							% Herbaceous/Shrub Cover	
Herbaceous species							97.8	
<i>Baccharis pilularis</i>	coyote brush						1.0	
<i>Lupinus chamissonis</i>	silver bush lupine						0.2	
<i>Quercus agrifolia</i>	coast live oak						0.6	
<i>Toxicodendron diversilobum</i>	poison oak						0.8	
Total Shrub Cover							2.2	
Herbaceous Species								
		Quadrat #	4a	4b	4c	4d	4e	Average % Cover of Herbaceous Species
* <i>Bromus diandrus</i>	ripgut brome	48	60	48	40	48		48.8
	thatch	32	24	40	16	36		29.6
	bare ground	4	4	8	24	8		9.6
* <i>Vulpia myurus</i>	rat tail fescue	8	0	0	0	0		8.0
* <i>Bromus hordaceus</i>	soft chess	4	<1	0	0	0		4.0
* <i>Aira caryophylla</i>	silvery hairgrass	<1	4	<1	<1	0		4.0
* <i>Hypochaeris sp.</i>	cat's ear	0	4	0	0	<1		4.0
	California poppy	0	<1	<1	16	4		0.4
	telegraph weed	0	<1	0	0	0		0.1
	sky lupine	<1	0	0	0	0		0.1
* <i>Lolium multiflorum</i>	Italian ryegrass	0	0	<1	<1	0		0.1
	clarkia	0	0	<1	0	0		0.1
	madia	0	0	0	<1	0		0.1
	sky lupine	0	0	0	0	<1		0.1
	white yarrow	<1	0	0	0	0		0.1
* <i>Rumex acetosella</i>	sheep sorrel	0	0	0	<1	<1		0.1
* <i>Avena fatua</i>	wild oat	0	0	0	0	<1		0.1
	Lindley's annual lupine	<1	0	0	0	0		0.1

Table 2-12a

HA-39/40 remediation site vegetation data summary for Transects 1 through 6 (5-10 quadrats per transect). Species are ranked by percent cover.

TRANSECT 5 (location is shown on Figure 2-13)									
Scientific Name		Common Name							% Herbaceous/Shrub Cover
Shrub Cover									
herbaceous species									69
<i>Baccharis pilularis</i>		coyote brush							27.1
bare ground									0.2
				Total Shrub Cover					27.1
Herbaceous Species		Quadrat #	1a	1b	1c	1d	1e	0	Average % Cover of Herbaceous Species
thatch			64	56	44	40	56	0	43.3
<i>Carex praegracilis</i>			36	40	40	20	0	0	22.7
*	<i>Bromus diandrus</i>		0	4	12	8	36	0	10.0
bare ground			0	0	4	16	8	0	4.7
*	<i>Vulpia myurus</i>		0	0	0	12	0	0	2.0
*	<i>Rumex acetosella</i>		0	<1	<1	0	0	0	0.1
*	<i>Erodium sp</i>		0	0	0	<1	<1	0	0.1
*	<i>Hypochaeris sp.</i>		0	0	0	<1	0	0	0.1

Table 2-12a

HA-39/40 remediation site vegetation data summary for Transects 1 through 6 (5-10 quadrats per transect). Species are ranked by percent cover.

TRANSECT 6 (location is shown on Figure 2-13)							
Scientific Name	Common Name						
Shrub Cover							% Herbaceous/Shrub Cover
herbaceous species							98.2
<i>Baccharis pilularis</i>	coyote brush						0.8
Total Shrub Cover							0.8
							Average
							% Cover of Herbaceous
Herbaceous Species	Quadrat #	1a	1b	1c	1d	1e	Species
thatch	thatch	44	48	24	20	44	36.0
<i>Carex praegracilis</i>	clustered field sedge	12	0	0	80	0	18.4
* <i>Vulpia myurus</i>	rat tail fescue	12	48	20	0	0	16.0
bare ground	bare ground	16	4	48	0	12	16.0
* <i>Bromus diandrus</i>	ripgut brome	4	0	0	0	20	4.8
<i>Juncus sp</i>	rush	0	0	0	0	20	4.0
* <i>Rumex acetosella</i>	sheep sorrel	12	0	0	0	0	2.4
<i>Heterotheca grandiflora</i>	telegraph weed	0	0	8	0	0	1.6
* <i>Bromus hordaceus</i>	soft chess	0	0	0	0	4	0.8
* <i>Erodium sp.</i>	filaree	<1	<1	0	0	0	0.1
<i>Distichlis spicata</i>	salt grass	0	<1	<1	0	0	0.1
* <i>Hypochaeris sp.</i>	cat's ear	0	<1	<1	0	0	0.1

Table 2-12b
List of plant species encountered in HA-39/40 remediation area.

	Scientific Name	Common Name
Shrub species		
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Baccharis pilularis</i>	coyote brush
	<i>Horkelia cuneata</i> spp. <i>cuneata</i>	wedge-leaved Horkelia
	<i>Lupinus arborius</i>	yellow bush lupine
	<i>Lupinus chamissonis</i>	silver bush lupine
	<i>Mimulus aurantiacus</i>	sticky monkey flower
	<i>Quercus agrifolia</i>	coast live oak
	<i>Ribes speciosum</i>	fuchsia-flowered gooseberry
	<i>Symphoricarphus mollis</i>	creeping snowberry
	<i>Toxicodendron diversilobum</i>	poison oak
Herbaceous species		
	<i>Achillea millefolium</i>	white yarrow
	<i>Agoseris grandiflora</i>	large-flowered dandelion
*	<i>Aira careophyllea</i>	silvery hairgrass
	<i>Apiastrum angustifolium</i>	wild celery
	<i>Artemisia douglasiana</i>	mugwort
*	<i>Avena barbata</i>	slender wild oat
	<i>Bromus carinatus</i>	California brome
*	<i>Bromus diandrus</i>	ripgut brome
*	<i>Bromus hordaceus</i>	soft chess
	<i>Calindrinia ciliata</i>	red maids
	<i>Cardionema ramosissimum</i>	sand mat
	<i>Carex</i> sp.	sedge
	<i>Castilleja foliolosa</i>	owl's clover
*	<i>Cerastium glomeratum</i>	mouse-ear chickweed
	<i>Chorizanthe pungens</i> var. <i>pungens</i>	Monterey spineflower
	<i>Cirsium occidentale</i> var. <i>occidentale</i>	cobweb thistle
	<i>Claytonia perfoliata</i>	miner's lettuce
	<i>Collinsia heterophylla</i>	chinese houses
	<i>Croton californicus</i>	California croton
	<i>Danthonia californica</i>	California oat-grass
	<i>Delphinium</i> sp.	larkspur
	<i>Distichlis spicata</i>	salt grass
	<i>Dodecatheon clevelandii</i> ssp. <i>sanctarum</i>	Padres shooting star
	<i>Elymus glaucus</i>	blue wild rye
	<i>Epilobium</i> sp.	willow-herb
*	<i>Erodium botrys</i>	long-beaked filaree
*	<i>Erodium cicutarium</i>	red-stemmed filaree
	<i>Eschscholzia californica</i>	California poppy
	<i>Galium porrigens</i>	climbing dedstraw
*	<i>Geranium dissectum</i>	dove's foot geranium
	<i>Geranium</i> sp.	geranium
*	<i>Gnaphalium albo-luteum</i>	weedy cudweed
	<i>Gnaphalium californicum</i>	California cudweed
	<i>Heterotheca grandiflora</i>	telegraph weed

Table 2-12b
List of plant species encountered in HA-39/40 remediation area.

*	<i>Hypochaeris glabra</i>	smooth cat's ear
*	<i>Hypochaeris radicata</i>	hairy cat's ear
	<i>Juncus patens</i>	spreading rush
*	<i>Lactuca serriola</i>	prickly lettuce
	<i>Layia platyglossa</i>	tidy tips
	<i>Lithophragma affine</i>	woodland star
*	<i>Lolium multiflorum</i>	Italian ryegrass
	<i>Lupinus bicolor</i>	Lindley's annual lupine
	<i>Lupinus nanus</i>	sky lupine
	<i>Luzula comosa</i>	wood rush
	<i>Madia exigua</i>	small tarweed
	<i>Madia gracilis</i>	slender tarweed
	<i>Navarretia attractyloides</i>	holly-leaved Navarretia
*	<i>Plantago coronopus</i>	cut-leaved plantain
	<i>Plantago erecta</i>	California plantain
	<i>Platystemon californicus</i>	cream cups
	<i>Plectritis sp.</i>	valerian
	<i>Potentilla glandulosa</i>	sticky cinquefoil
	<i>Pteridium aquilinum var. pubescens</i>	bracken fern
	<i>Ranunculus californicus</i>	California buttercup
	<i>Rubus ursinus</i>	California blackberry
*	<i>Rumex acetosella</i>	sheep sorrel
	<i>Sanicula crassicaulis</i>	gambleweed
	<i>Satureja douglasii</i>	yerba buena
	<i>Sisyrinchium bellum</i>	blue-eyed grass
	<i>Solidago sp.</i>	golden rod
	<i>Stachys bullata</i>	hedge nettle
*	<i>Stellaria media</i>	common chickweed
*	<i>Thysanocarpus curvipes</i>	fringe pod
*	<i>Trifolium campestre</i>	hop clover
	<i>Trifolium wildenovii</i>	tomcat clover
	<i>Triphysaria pusilla</i>	dwarf owl's clover
	<i>Vicia sp.</i>	spring vetch
*	<i>Vulpia myuros</i>	rattail fescue

* non-native species

Table 2-13a

HA-44 Soil remediation site: Vegetation transect data summary, showing shrub species cover in 2 transects.

Sp. Code	Scientific Name	Common Name	Percent Cover		Range % Cover	Average % Cover
			T1	T2		
B.g.		bare ground	55.8	48.2	48.2 - 55.8	52.0
ADFA	<i>Adenostoma fasciculatum</i>	chamise	17.4	5.2	5.2 - 17.4	11.3
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	5.2	13.8	5.2 - 13.8	9.5
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita	1.8	15.8	1.8 - 15.8	8.8
CEDE	<i>Ceanothus dentatus</i>	dwarf Ceanothus	10.2	6.2	6.2 - 10.2	8.2
Herb		herbaceous species	8.6	6.8	6.8 - 8.6	7.7
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	2.6	2.0		2.3
ERER	<i>Ericameria ericameria</i>	mock heather	0.6	3.0	0.6 - 3.0	1.8
GAEL	<i>Garrya elliptica</i>	silk tassel		1.4	1.4	1.4
RHCA	<i>Rhamnus californica</i>	coffee berry	0.6	0.2	0.2 - 0.6	0.4
TODI	<i>Toxicodendron diversilobum</i>	poison oak		0.2	0.2	0.2
		Tot Vegetation Cover	84.8	54.4		

Table 2-13b
List of plant species encountered in HA-44 remediation area.

	Scientific Name	Common Name
Shrub Species		
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
	<i>Ericameria ericameria</i>	mock heather
	<i>Lupinus chamissonis</i>	silver bush lupine
	<i>Rhamnus californica</i>	coffee berry
	<i>Salvia mellifera</i>	black sage
	<i>Solanum umbelliferum</i>	blue witch
Herbaceous Species		
	<i>Achillea millefolium</i>	white yarrow
	<i>Apiastrum angustifolium</i>	wild celery
	<i>Cardionema ramosissimum</i>	sand mat
	<i>Centaurea melitensis</i>	tocalote
	<i>Chorizanthe pungens var. pungens</i>	Monterey spineflower
	<i>Cordylanthus rigidus ssp. littoralis</i>	Seaside bird's beak
	<i>Corythogyne (Lessingia) filaginifolia</i>	California aster
	<i>Eriophyllum confertiflorum</i>	golden yarrow
	<i>Gilia tenuiflora ssp arenaria</i>	sand gilia
	<i>Gnaphalium beneolens</i>	scented cudweed
	<i>Helianthemum scoparius</i>	rush rose
	<i>Koeleria macrantha</i>	June grass
	<i>Lotus scoparius var. scoparius</i>	deer weed
	<i>Monardella undulata</i>	wavy-leaved mint
	<i>Navarretia hamata</i>	hooked Navarretia
	<i>Plagiobothrys sp.</i>	popcorn flower
	<i>Plantago erecta</i>	California plantain

Table 2-14a

HA-48 remediation site: Vegetation transect data summary, showing shrub species percent cover in one transect. (Additional data has been collected previously on this range.)

Sp. Code	Scientific Name	Common Name	Percent Cover
B.G		bare ground	53.0
ADFA	<i>Adenostoma fasciculatum</i>	chamise	18.2
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita	10.6
HOCU	<i>Horkelia cuneata spp. cuneata</i>	wedge-leaved Horkelia	6.0
LUCH	<i>Lupinus chamissonis</i>	silver bush lupine	5.0
CEDE	<i>Ceanothus dentatus</i>	dwarf Ceanothus	4.8
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	4.4
HESC	<i>Helianthemum scoparium</i>	rush rose	1.2
Herb		herbaceous species	1.0
SAME	<i>Salvia mellifera</i>	black sage	1.0
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	0.2
		Total Vegetation Cover	52.4

Table 2-14b
List of plant species encountered in HA-48 remediation area near transect.

	Scientific Name	Common Name
Shrub Species		
	<i>Arctostaphylos pumila</i>	sandmat manzanita
	<i>Adenostoma fasciculatum</i>	chamise
	<i>Arctostaphylos t. tomentosa</i>	shaggy barked manzanita
	<i>Baccharis pilularis</i>	coyote brush
	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus
	<i>Ceanothus dentatus</i>	dwarf Ceanothus
	<i>Ericameria ericameria</i>	mock heather
	<i>Helianthemum scoparium</i>	rush rose
	<i>Horkelia cuneata</i> spp. <i>cuneata</i>	wedge-leaved Horkelia
	<i>Lupinus arboreus</i>	yellow bush lupine
	<i>Lupinus arboreus</i>	yellow bush lupine
	<i>Salvia mellifera</i>	black sage
Herbaceous Species		
	<i>Achillea millefolium</i>	white yarrow
	<i>Carex brevicaulis</i>	short-stemmed sedge
	<i>Castilleja densiflora</i>	owl's clover
	<i>Chorizanthe pungens</i> spp. <i>pungens</i>	Monterey spineflower
	<i>Corythogyne filaginifolia</i>	California aster
	<i>Croton californicus</i>	California croton
*	<i>Erodium</i> spp.	filaree
	<i>Gilia tenuiflora arenaria</i> ¹	sand gilia
	<i>Heterotheca grandiflora</i>	telegraph weed
*	<i>Hypochaeris</i> spp.	cat's ears
	<i>Lessingia glandulifera</i> var. <i>pectinata</i>	valley Lessingia
	<i>Plantago erecta</i>	California plantain
*	<i>Rumex acetosella</i>	sheep sorrel

* non-native species

¹ Presence known from 2005 surveys (USACE, 2005)

Table 4-1.

Burn Units 18 and 22: Vegetation transect data summary, showing range and average percent cover for 36 transects. Species are ranked by percent cover.

Shrub Sp Code	Scientific Name	Common Name	Percent Cover									
			T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
ADFA	<i>Adenostoma fasciculatum</i>	chamise	15.0		1.0	2.0	10.8	4.2	2.6		18.2	16.6
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	16.8	66.0	76.2	59.8	52.0	43.4	59.8	35.8	9.0	22.0
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy-barked manzanita	36.0	2.6	0.8		4.8	31.0	12.6	49.4	46.0	5.0
BAPI	<i>Baccharis pilularis</i>	coyote brush					0.2				2.0	
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	2.4		0.4	14.6			0.4	0.4		
CEDE	<i>Ceanothus dentatus</i>	dwarf Ceanothus										
ERFA	<i>Ericameria fasciculata</i>	Eastwood's golden bush		0.2								
ERER	<i>Ericameria ericoides</i>	mock heather									1.0	1.2
GAEL	<i>Garrya elliptica</i>	silk tassel							0.2	4.2	10.8	
HEAR	<i>Heteromeles arbutifolia</i>	toyon										
LECA	<i>Lepechinia calycina</i>	pitcher sage										
LUCH	<i>Lupinus chamissonis</i>	silver beach lupine										
MIAU	<i>Mimulus aurantiacus</i>	sticky monkey flower					0.2					
QUAG	<i>Quercus agrifolia</i>	coast live oak									1.6	2.6
RHCA	<i>Rhamnus californica</i>	coffee berry				6.2				2.0		
SAME	<i>Salvia mellifera</i>	black sage			2.0							17.4
TODI	<i>Toxicodendron diversilobum</i>	poison oak	1.0		0.2							7.0
B.G.	B.G.	bare ground	29.8	34.0	18.6	19.0	30.6	13.0	23.0	7.8	21.6	29.0
	Herbaceous total	herbaceous cover	0.6		1.4	1.0	2.4				0.2	
		Total Cover	101.6	102.8	100.6	102.6	101	91.6	98.6	99.6	110.4	100.8

Table 4-1.

Burn Units 18 and 22: Vegetation transect data summary, showing range and average percent cover for 36 transects. Species are ranked by percent cover.

Shrub Sp Code	Scientific Name	Common Name	Percent Cover									
			T11	T12	T13	T14	T15	T16	T17	T18	T19	T20
ADFA	<i>Adenostoma fasciculatum</i>	chamise	7.6	0.2	14.4	4.6	5.8	64.8	12.0	62.4	7.0	6.8
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	22.7	35.4	7.0	44.8	27.0	2.8	6.2		51.6	44.2
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy-barked manzanita	29.6	30.4	22.2	20.4	22.6	14.8	69.8	10.6	31.0	31.6
BAPI	<i>Baccharis pilularis</i>	coyote brush								0.6		
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	5.4	1.4				11.2	6.4	24.4		
CEDE	<i>Ceanothus dentatus</i>	dwarf Ceanothus										
ERFA	<i>Ericameria fasciculata</i>	Eastwood's golden bush										
ERER	<i>Ericameria ericoides</i>	mock heather										
GAEL	<i>Garrya elliptica</i>	silk tassel				0.2		4.6				
HEAR	<i>Heteromeles arbutifolia</i>	toyon									1.0	
LECA	<i>Lepechinia calycina</i>	pitcher sage						0.8				
LUCH	<i>Lupinus chamissonis</i>	silver beach lupine					0.2					
MIAU	<i>Mimulus aurantiacus</i>	sticky monkey flower		2.2	0.6		0.6			0.4		0.4
QUAG	<i>Quercus agrifolia</i>	coast live oak	4.0									
RHCA	<i>Rhamnus californica</i>	coffee berry									1.8	
SAME	<i>Salvia mellifera</i>	black sage	8.0		16.0		0.2		9.4		2.8	
TODI	<i>Toxicodendron diversilobum</i>	poison oak		0.2	10.2							
B.G.	B.G.	bare ground	22.0	31.8	29.8	30.2	36.0	7.0	8.0	8.0	10.8	20.6
	Herbaceous total	herbaceous cover		1.4	1.6	0.8	2.4					
		Total Cover	99.3	103	101.8	101	94.8	106	111.8	106.4	106	103.6

Table 4-1.

Burn Units 18 and 22: Vegetation transect data summary, showing range and average percent cover for 36 transects. Species are ranked by percent cover.

Shrub Sp Code	Scientific Name	Common Name	Percent Cover									
			T21	T22	T23	T24	T25	T26	T27	T28	T29	T30
ADFA	<i>Adenostoma fasciculatum</i>	chamise	8.0	4.0	37.6	15.4	27.0	30.4	53.4	45.0	16.0	15.4
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	9.2	59.4	7.6	64.4	51.2	0.4			4.2	13.8
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy-barked manzanita	43.0	12.8	16.2	5.2		41.4	32.8	41.6	62.0	39.2
BAPI	<i>Baccharis pilularis</i>	coyote brush	1.0					6.6				
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus	3.8	2.4		0.2		13.6	4.8	5.8	1.4	
CEDE	<i>Ceanothus dentatus</i>	dwarf Ceanothus		0.6								
ERFA	<i>Ericameria fasciculata</i>	Eastwood's golden bush										
ERER	<i>Ericameria ericoides</i>	mock heather									0.4	
GAEL	<i>Garrya elliptica</i>	silk tassel										6.6
HEAR	<i>Heteromeles arbutifolia</i>	toyon										
LECA	<i>Lepechinia calycina</i>	pitcher sage						0.4		1.4		
LUCH	<i>Lupinus chamissonis</i>	silver beach lupine										
MIAU	<i>Mimulus aurantiacus</i>	sticky monkey flower						0.4	0.2	0.4		0.2
QUAG	<i>Quercus agrifolia</i>	coast live oak	3.4		0.2		0.4					13.6
RHCA	<i>Rhamnus californica</i>	coffee berry										
SAME	<i>Salvia mellifera</i>	black sage		5.8	4.8						2.2	
TODI	<i>Toxicodendron diversilobum</i>	poison oak		0.4							4.0	1.4
B.G.	B.G.	bare ground	32.0	16.8	33.6	14.2	25.2	16.6	13.2	10.2	11.4	8.8
	Herbaceous total	herbaceous cover			1.4			0.2			0.2	9.2
		Total Cover	100.4	102.2	101.4	99.4	103.8	110	104.4	104.4	101.8	108.2

Table 4-1.

Burn Units 18 and 22: Vegetation transect data summary, showing range and average percent cover for 36 transects. Species are ranked by percent cover.

Shrub Sp Code	Scientific Name	Common Name	T31	T32	T33	T34	T35	T36	% Cover	Average
									Range	% Cover
ADFA	<i>Adenostoma fasciculatum</i>	chamise	24.8	1.2	5.2	41.8	11.4	25.4	0.2-64.8	18.2
ARPU	<i>Arctostaphylos pumila</i>	sandmat manzanita	12.2	56.4	45.2	9.2	24.4	17.4	0.4-76.2	32.0
ARTO	<i>Arctostaphylos t. tomentosa</i>	shaggy-barked manzanita	33.0	20.2	33.2	24.0	1.0		0.8-69.8	26.6
BAPI	<i>Baccharis pilularis</i>	coyote brush							0.2-6.6	2.1
CERI	<i>Ceanothus cuneatus rigidus</i>	Monterey Ceanothus		0.2		3.2	13.0	19.6	0.2-24.4	6.4
CEDE	<i>Ceanothus dentatus</i>	dwarf Ceanothus					1.4		0.6-1.4	1.0
ERFA	<i>Ericameria fasciculata</i>	Eastwood's golden bush							0.2	0.2
ERER	<i>Ericameria ericoides</i>	mock heather				0.2			0.2-1.2	0.7
GAEL	<i>Garrya elliptica</i>	silk tassel	0.4						0.2-10.8	3.9
HEAR	<i>Heteromeles arbutifolia</i>	toyon						10.0	1.0-10.0	5.5
LECA	<i>Lepechinia calycina</i>	pitcher sage							0.4-1.4	0.9
LUCH	<i>Lupinus chamissonis</i>	silver beach lupine							0.2	0.2
MIAU	<i>Mimulus aurantiacus</i>	sticky monkey flower							0.2-2.2	0.6
QUAG	<i>Quercus agrifolia</i>	coast live oak	1.4						0.2-13.6	3.4
RHCA	<i>Rhamnus californica</i>	coffee berry							1.8-6.2	3.3
SAME	<i>Salvia mellifera</i>	black sage					13.8		0.2-17.4	7.5
TODI	<i>Toxicodendron diversilobum</i>	poison oak	0.2			0.8		1.6	0.2-10.2	2.5
B.G.	B.G.	bare ground	28.8	24.0	22.4	21.2	36.8	27.0	7.0-36.8	21.5
	Herbaceous total	herbaceous cover	0.8			0.6	0.8		0.2-9.2	1.6
		Total Cover	101.6	102	106	101	102.6	101		102.6