Point Arena and Bodega Dune Sheets, California
UTM Sector and Datum (xx/yr), Northing, Easting, Estimated Error (EPE +-m), DEM Altitude (Alt m MSL).
Exposure Type: Active (AC), Trench (TR), Auger (AU), Road Cut (RC), Creek Cut (CC), Sea Cliff (SC), Slope (SL).
Units: Age: Tertiary (T), Pleistocene (P), Holocene (H), Wave-cut Platform (W); Parent Material; Soil Horizon
Parent Material: Eolian Dune (D), Loess (L), Colluvium (U), Peat (P), Alluvial/Fluvial (V), Lagoonal/Estuary (N), Beach Shoreface (S), Basal Conglomerate (M).
Note: Loess (L) is designated where it overlies bedrock, colluvium, or pre-existing Bw/Bt horizons.
Soil Horizon: Organic (A), Leached (E), Accumulation (B), Fe+3 Accumulation (Bw), Incipient Clay Accumulation (Btj), Clay Accumulation (Bt), Humate Accumulation (Bs), Humate Cementation (Bh), Calcrete (Bk), Silcrete (Bq), Reduced Glade Layer (Bg), Subsoil Calcrete (K), Dune Parent (C), Oxidized Parent (Cox).
Subsurface depth (cm); Dominant Grain Size: Silt, Sand, Pebbles, Cobbles (default is sand)
Sand sizes (Coarse U/L, Medium U/L, Fine U/L,VeryFine U/L)
Bedding: Cross Beds (XB,dipxx), Planar Beds (PB), Fluidization (FL), Heavy Mineral Laminae (HM)
Munsel Maximum Color (field condition: moist)
Penetrometer: (P. kg/square cm) unconfined compressive strength.
Structure: loose, very weak blocky, weak blocky, strong blocky, columnar/prismatic.
Diagenesis: Fe-ortstein, Fe-humate, allophane, gibbsite, calcrete, silcrete

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES10	10N/83	4638000	401000	10	10	7/4/02	AU
Site Notes: Very recently stablilized Holocene dunes, patchy vegetation.							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-10						
HDC	10-200	MU			0.5	Loose	

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES1	N10/83	4632650	403340	10	20	12/18/01	RC
Site Notes: Site is on Lake Earle Drive.							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
V	0-100	CU					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES2	N10/83	4628910	405550	10	45	12/18/01	RC
Site Notes: Site is on Elk Creek Valley Road and appears to be alluvium over cobbles over terrace.							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
PU	0-100						
PV	100-150	Cobbles					
T	150-151						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES3	N10/83	4628880	402910	4	9	12/18/01	RC
Site Notes: This site is on Lake Earl Drive, and represents a Pleistocene fluvial? terrace.							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
PV	0-100	CU	Sm. cross-sets				

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES3	N10/83	4627910	398350	8	17	12/18/01	AC
Site Notes: This site is in parabolic dunes (NW-SE) at end of Old Mill Road.							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDC	0-500						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES5	N10/83	4627720	399180	13	9	12/18/01	RC

Site Notes: This site is near the easternmost of the Crescent City Holocene dune sheet.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-10						
HDC	10-800	FU					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES6	N10/83	4627270	405170		31	12/18/01	RC

Site Notes: Site is on Elk Valley Road.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
T							

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES7	N10/83	4626680	395890		12	12/18/01	SL

Site Notes: Site is at Pt. St. George just north of the Light House.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-20	Shells					
HDCox	20-40						
PDBw	40-70			7.5YR3/3			
PDCox	70-200						
PDBg	200-220						
PDCox	220-300						
PDBg	300-375						
PDCox	375-500						
Cover	500-700						
PW	700-701						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES8	N10/83	4626400	400430	15	10	12/18/01	RC

Site Notes: This site is on Lake Earl Drive. Possible reworking of fluvial deposits into local dunes.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
PDBw	0-40			7.5YR4/6	4		
PDCox	40-80				3.75		
PV	80-100						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES9	N10/83	4625050	404090	6	15	12/18/01	RC

Site Notes: Site is a roadcut on west side of road in front of yellow house. House is built on remnant terrace. This is easternmost extent of Pleistocene dune or eolian reworked alluvial plain deposits. No dune cross-bedding.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
PDBw	0-40		Truncated	2.5YR4/3	3	Very Weak B.	
PDCox	40-130		PB		3	Very Weak B.	
PDBh	130-140				3.75	Very Weak B.	
PD/VCox	140-200		PB	2.5Y4/4	2.75	Very Weak B.	
PDBg	200-230				4		
PD/VCox	230-300				4.5		

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
CRES10	N10/83	4624620	403920	6	14	12/18/01	RC

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
PUBtj	0-50						
T	50-100						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
ARCA1	N10/83	4527500	403560	10	15	7/4/02	AU

Site Notes: This site is on the north spit a couple km north of Manila.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-5						
HDC	5-200				1	Loose	

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
ARCA2	N10/83	4523100	402010	10	7	7/4/02	AU

Site Notes: This site is located in Manila, just west of the highway.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-5						
HDBw	5-15				1.75	Very Weak B.	
HDC	15-175	FU					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
ARCA3	N10/83	4518850	400020	8	8	7/4/02	AU

Site Notes: This site is west of the highway, just south of the bridge.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-10						
HDBw	10-35						
HDC	35-150	FU			2.25	Very Weak B.	

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
TENM1	10S/83	4377620	434510	4	23	6/30/02	AC

Site Notes: This site is located near the northern end of the Tenmile dunes.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDC	0-150	ML		5Y6/2	0	Loose	

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
TENM2	10S/83	4377550	434650	5	29	6/30/02	RC

Site Notes: This site is at the northeastern backedge of very-thin Pleistocene dunes over Pleistocene shoreface.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
LBw	0-10	Silt			1.5	Very Weak B.	
PDBW	10-45	FU		10YR5/6	4.5	Weak Blocky	
PDCox	45-150	FU		10YR6/6	3.75		
PSE	150-175			10YR8/3	4.5		
PSBw	175-200	CL		10YR5/8	4.5	Strong Blocky	
PM	200-220	Pebbles					
PW	220-221						
T	221-300						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
TENM3	10S/83	4373670	434270	10	27	6/30/02	RC

Site Notes: This site is located near the south end of the Tenmile dunes, i.e. backedge of old Holocene dunes.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-20				0		
HDBw	20-35			10YR6/6	1		
HDCox	35-50				0.5		
PDBw	50-85			10YR5/6	3.5		
PDCox	85-150				4		
TBt	150-200						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
PTAR1	10S/83	4316170	439170	5	7	7/5/02	SC

Site Notes: This site is located in a creek cut through the foredune in the northern part of the Point Arena dunes. Sawn drift logs in Foredune.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis

HDC	0-700	ML	Planar	2.5Y4/2	0	Loose	

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
PTAR2	10S/83	4315070	438750	7	8	7/5/02	SC

Site Notes: This site is from the middle of the Pt.Arena dune field.
This profile shows a thin loess between the Holocene dunes and the Pleistocene shoreface.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDC	0-200	ML			0	Loose	
HDBw	200-250	ML		7.5YR3/2	0	Loose	
HDCox	250-300	ML			0	Loose	
LBw	300-310	Silt		7.5YR4/3	0.75	Very-Weak B.	
PSA	310-350				2.5	Weak Blocky	
PSBw	350-400	CU		7.5YR4/4	3.5	Weak Blocky	
PM	400-450	pebbles		7.5YR6/8	4.5		

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
PTAR3	10S/83	4315000	439000	10	12	7/6/02	SC

Site Notes: This site is at the easternmost extent of the Holocene dunes over the marine terrace.
There is no evidence of Pleistocene dunes at this profile site.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-10						
HDCox	10-100	FU					
PSA	90-110						
PSBw	110-155	CU			4	Weak Blocky	

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
PTAR4	10S/83	4314900	439100	10	15	7/6/02	SC

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
PSA	0-15					Very Weak B.	
PSBw	15-40	CU				Weak Blocky	
PSC	40-100	Pebbles					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
BODE1	10S/83	4244020	495210	4	27	6/31/02	AU

Site Notes: This site is at the backedge of the Holcene dunes over marine terrace. No Pleistocene dunes.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDC	0-200	ML		10YR5/2	0	Loose	
PS/LA	200-220	Silt					
PSBw	220-240						
PM	240-250						
PW	250-251						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
BODE2	10S/83	4244000	495300	4	31	6/31/02	AU

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
PSBw	0-30						
PM	30-60						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
BODE3	10S/83	4243060	495560	10	9	6/31/02	AU

Site Notes: This is the backedge of Holocene dune on NE Bodega Bay shoreline.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-5				0	Loose	
HDC	5-400	FU		10YR4/2	0.5	Loose	
PUA	400-430						

PUBw	430-470
PM	470-475