

North Beaches Dune Sheet, Washington

UTM Sector and Datum (xx/yr), Northing, Easting, Estimated Error (EPE +-m), DEM Altitude (Alt m NGVD88).

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 (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)

Munsell Maximum Color (field condition: moist)

Penetrometer: (P. kg/square cm) unconfined compressive strength.

Soil 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
NORT1	10N/83	5218310	410710	10	7	7/11/97	AU

Site Notes: COPA1 Heavy mineral enrichment at 125-175 cm. Shells at 165 cm. (RC Sample).

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDA	0-1						
HDC	1-100	FU					
HS	100-185	ML					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT2	10N/83	5217551	410850	10	6	7/11/97	AU

Site Notes: RVDU1 Heavy mineral placer below 200 cm.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
Fill	0-20						
HDC	20-125	FU	Truncated				
HS	125-200						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT3	10N/83	5217550	410850	10	5	7/12/97	AU

Site Notes: RVDU1V (Woxell, 1998) Heavy mineral placer 150-310 cm depth.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
Disturbed	0-125		Truncated				
HDC	125-150						
HS	150-420						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT4	10N/83	5213510	411340	10	3	7/11/97	AU

Site Notes: CONN1 Overwash plain left behind northward migrating creek mouth.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
Disturbed							
HDC	0-70	FU					
HS	70-175	CU					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT5		5209824	411581	10	3	7/8/97	AU

Site Notes: CASI1

Units HDC	Depth cm 0-150	Grain Size FU	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
Dune Sheet NORT6	Zone/NAD 10N/83	UTM-N 5209820	UTM-E 411580	EPE (m)	Alt (m) 10	Date 3 7/8/97	Exposure AU
Site Notes: CASI1A							
Units HDC	Depth cm 0-10	Grain Size FU	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDC	10-100	FU					
HS	100-150	ML					
Dune Sheet NORT7	Zone/NAD 10N/83	UTM-N 5209780	UTM-E 411870	EPE (m)	Alt (m) 10	Date 5 7/8/97	Exposure AU
Site Notes: CASI2V							
Units HDC	Depth cm 0-100	Grain Size FU	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HDBg	100-125						
HDC	125-150	FU					
Dune Sheet NORT8	Zone/NAD 10N/83	UTM-N 5209830	UTM-E 412010	EPE (m)	Alt (m) 10	Date 7 7/8/97	Exposure AU
Site Notes: CASI3							
Units HDC	Depth cm 0-175	Grain Size FU	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
Dune Sheet NORT9	Zone/NAD 10N/83	UTM-N 5207540	UTM-E 411710	EPE (m)	Alt (m) 10	Date 6 7/11/97	Exposure AU
Site Notes: OYEH1A							
Units HDC	Depth cm 0-100	Grain Size FU/ML	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
HS	100-190	ML					
Dune Sheet NORT10	Zone/NAD 10N/83	UTM-N 5206990	UTM-E 412230	EPE (m)	Alt (m) 10	Date 6 7/8/97	Exposure AU
Site Notes: RAIN1 Heavy mineral placer below 100 cm depth.							
Units HDA	Depth cm 0-3	Grain Size	Bedding	Color	10YR5/8	Structure	Diagenesis
HDBw	3-15			10YR5/3			
HDC	15-75	FU					
HS	75-200	ML					
Dune Sheet NORT11	Zone/NAD 10N/83	UTM-N 5207000	UTM-E 412370	EPE (m)	Alt (m) 10	Date 6 7/8/97	Exposure AU
Site Notes: RAIN2							
Units Fill	Depth cm 0-75	Grain Size Gravel	Bedding	Color	P.kg/cm^2	Structure	Diagenesis
Disturbed	75-100						
HDA	100-125			10YR2/1			
HDBw	125-150			10YR4/3		Very Weak B.	
HDC	150-225	FU		10YR4/2		Loose	
HS	225-250	FU/ML					
Dune Sheet NORT12	Zone/NAD 10N/83	UTM-N 5207010	UTM-E 412640	EPE (m)	Alt (m) 10	Date 6 7/8/97	Exposure AU
Site Notes: RAIN3							

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
HDA	0-3						
HDBw	3-25			10YR5/6		Very Weak B.	
HDC	25-100	FU		10YR4/4			
HS	100-200	ML					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT13	10N/83	5206930	412770		10	7/8/97	AU

Site Notes: RAIN4

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
HDA	0-5						
HDBw	5-25			5YR4/3			
HDC	25-150	FU		10YR4/3			
HS	150-200	ML/MU					
HS	200-225	Pebbles	Overwash				

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT14	10N/83	5206940	412760		10	7/8/97	AU

Site Notes: RAIN5

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
Fill	0-200						

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT15	10N/83	5206444	412240		10	7/8/97	AU

Site Notes: LAME1 Heavy mineral placer below 150 cm.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
Disturbed	0-15						
HD	15-125	FU					
HS	125-250	ML					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT16	10N/83	5206440	412250		10	7/8/97	AU

Site Notes: LAME0A: West side of reactivated foredune ridge, paleosol at 75 cm.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
HDA	0-5						
HDC	5-75	FU					
HDA	75-86						
HDBw	86-102						
HDC	102-200	FU					
HS	200-205	ML					

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT17	10N/83	5206450	412270		10	7/8/97	RC

Site Notes: LAME0 East side of dune ridge (roadcut) no reactivation.

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
HDA	0-10						
HDBw	10-20						
HDC	20-275	FU	XBdipNE				

Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT19	10N/83	5206460	412270		10	7/8/97	AU

Site Notes: LAME2A

Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
Disturbed							
HD	0-125	FU					

HS	125-160	ML					
Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT20		5206460	412290		10	3	7/8/97 AU
Site Notes: LAME2							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
Disturbed			Truncated				
HD	0-100	FU		2.5Y5/3			
Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT21	10N/83	5204950	411500		10	5	7/8/97 AU
Site Notes: PACB1							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
HDA	0-3						
HDC	3-150	FU		2.5Y6/4			
HS	150-155	ML					
Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT22	10N/83	5204950	411700		10	5	7/8/97 AU
Site Notes: PACB2 (Vibrocure) Beach laminae (denser sand) at 125-500 cm.							
Units	Depth cm	Grain Size	Bedding	Color	10YR5/8	Structure	Diagenesis
HD	0-125						
HS	125-500						
Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT23	10N/83	5199040	411220		10	4	7/9/97 AU
Site Notes: SPOR1							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
HDA	0-5						
HDC	5-125	FU		2.YT4/2			
Dune Sheet	Zone/NAD	UTM-N	UTM-E	EPE (m)	Alt (m)	Date	Exposure
NORT24	10N/83	5199030	411230		10	4	7/9/97 AU
Site Notes: SPOR1A							
Units	Depth cm	Grain Size	Bedding	Color	P.kg/cm ²	Structure	Diagenesis
HDA	0-5						
HDC	5-135	FU					