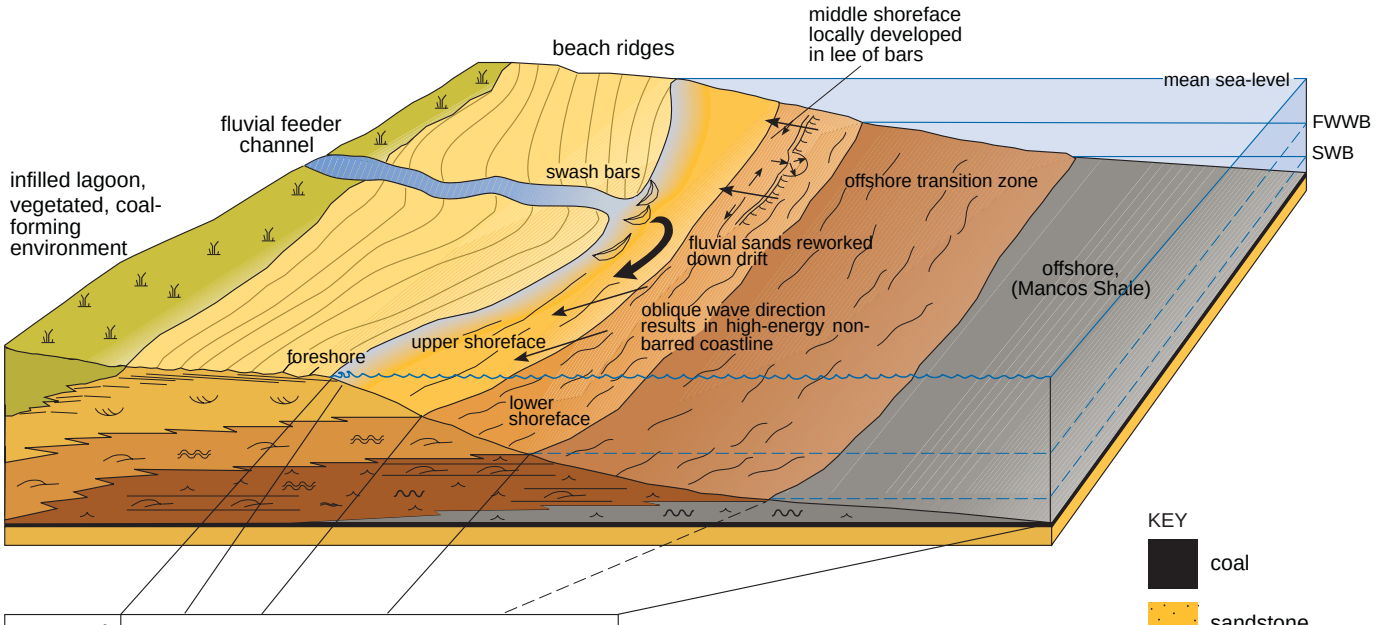

summary of fairweather wave activity					
wave activity	swash	surf	buildup	swell	swell
wave type	bore	bore	solitary	sinusoidal	sinusoidal
structures	planar	planar	lunate mega-ripples -TXS	asym. ripples modify hcs beds	none, wave ripples
grainsize	fine	fine	lower med	upper fine	fine/mud

FWWB

(a)

KEY

- coal
- sandstone
- siltstone
- mudstone
- planar stratification
- trough cross-stratification
- hummocky cross-stratification
- wave ripples
- shoreface bioturbation
- offshore transition zone bioturbation
- chondrites
- rootlets

lithology	graphic log	lithofacies association	genetic elements	trace fossils	bio-index	comments
		tidal inlet/ foreshore	shoreface parasequence	rootlets, rare vertical burrows	<1	forms classic 'whitecaps' due the disaggregation of detrital dolomites and leaching by organic acids
		upper shoreface and barrier island, tidal inlet		simple vertical burrows; *Skolithos*, *Cylidrichnus*, *Ophiomorpha* sp., *Ophiomorpha nodosa*	1	very clean sandstone, cross beds in extremely well-ordered sets
		middle shoreface (only present locally)		*Ophiomorpha nodosa*, *Ophiomorpha* sp., *Thalassinoides* *Palaeophycus*, *Terebellina*	5	planar lamination, low-angle cross-lamination, interbedded at decimetre scale with very bioturbated intervals
		lower shoreface		*Ophiomorpha nodosa*, *Ophiomorpha* sp., *Thalassinoides*, *Chondrites*, *Palaeophycus*, *Planolites* and *Terebellina*	2-3	hummocky cross-stratified, parallel laminated, wave and current rippled, variably bioturbated sandstones and siltstones
		offshore transition zone		intense bioturbation; *Terebellina*	4-5	hummocky cross-stratified sandstone, interbedded with laminated or massive, heavily bioturbated silty mudstones/ mudstones
		offshore		intense bioturbation; species identification uncertain	5-6	grey to pale grey, organic-rich, bioturbated mudstone (Mancos Shale)

clay silt vf f m
sand

(b)

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