

Table 1.2: Summary of Pilot Project Monitoring Results(Cont'd)

Site	Project	Environmental Impacts during Construction	Required Mitigation	Physical Monitoring Results	Environmental Monitoring Results
Paynes Bay	berm-type revetment	<ul style="list-style-type: none"> • sediment plume forms 	<ul style="list-style-type: none"> • restrict cliff removal to low tide and remove debris 	<ul style="list-style-type: none"> • no large swell events to test design • no significant reshaping has occurred • sediment regime disturbed for up to 10 months. 	<ul style="list-style-type: none"> • could have impacts on reefs if plume not properly contained.
Asta-Sierra (a)	groyne modification	none	none	<ul style="list-style-type: none"> • 2000-2400 m³ yr⁻¹ transport along beach face at Asta • 2400-2800 m³ yr⁻¹ transport along beach face at outfall pipe 	<ul style="list-style-type: none"> • likely negative impact on turtle nesting
(b)	<p>rubble removal with sill</p>	<ul style="list-style-type: none"> • sediment plume forms with high SPM levels • damage to nearby seagrass beds 	<ul style="list-style-type: none"> • careful construction practices 	<ul style="list-style-type: none"> • beach recession by 4 m • coral rubble has not returned after one year 	<ul style="list-style-type: none"> • 10% seagrass was lost during coral rubble clearing operations • rubble sill does not affect water quality • sill supports different fauna to that supported by coral rubble.
Rockley	submerged-crest breakwater, coral rubble and seagrass clearing, beach nourishment	<ul style="list-style-type: none"> • plume formation during construction 	<ul style="list-style-type: none"> • Use of clean stone, turbidity barrier could not be deployed due to high waves • seagrass transplant to oistins 	<ul style="list-style-type: none"> • sand volume at eastern end increased by 5000 m³ and has remained stable for one year • beach widths in the central and western sections have increased since construction 	<ul style="list-style-type: none"> • nutrient levels are the same inshore and offshore of breakwater • bacteria levels are higher at the eastern end of Rockley (no preconstruction data exists) than at the western end. • coral rubble removal has resulted in a loss of habitat • seagrass transplantation was not successful, although a high proportion of the beds that were transplanted (2% of total) have survived • breakwater is a good habitat for reef life.