

Appendix 1

Long List of Options for Consultation

Unit 1 Locked basin at Shoreham Port

| | |
|--|---|
| Option 1 No Active Intervention | No further works or repairs would be undertaken and the defences would be left to deteriorate and fail over time. This option would result in flooding of properties in the harbour area and loss of operations at the port. |
| Option 2 Do Minimum | Only reactive repair works to the lock gates. Flooding of properties in the harbour area would increase and operations in the port would be affected. |
| Option 3 Maintain | Maintain and replace, as necessary, the existing lock gates. The flood risk to properties within the harbour will increase in the mid to long term as sea levels rise |
| Option 4 Sustain | Upgrade the existing lock gates to a higher level to sustain the standard of protection in the long term. The prevailing level of flood risk to the properties in the harbour area would remain constant. |
| Option 5 Improve | Upgrade the existing lock gates to a higher level to improve the standard of protection in the long term. The flood risk to the properties in the harbour area would be reduced. |

Unit 2 Open Coast (Hove Lagoon to Brighton Marina)

| | |
|---|--|
| <p>Option 1 No Active Intervention</p> | <p>No further works or repairs would be undertaken to the defences and the movement of shingle to areas at risk would be stopped. The defences would be left to deteriorate and fail over time.</p> <p>The beaches along the Shoreham frontage would erode, resulting in flooding of the properties along the Shoreham frontage including industries at Shoreham Port. In the longer term, the entire frontage would erode with increasing flood risk to people and property along the seafront.</p> |
| <p>Option 2 Do Minimum</p> | <p>Reactive repair works to the seawalls and some movement of shingle to protect vulnerable seawall sections. The groynes will continue to deteriorate and will eventually fail.</p> <p>The flood risk to properties and amenities along the coast will increase over time as the defences deteriorate and sea levels rise.</p> |
| <p>Option 3 Maintain 1</p> | <p>The existing groynes will be repaired and replaced (with either rock or timber). The movement of shingle from west to east across the river mouth will continue. The seawalls and other defences will be refurbished and repaired as appropriate.</p> <p>The flood risk to properties and amenities along the coast will increase in the long term as sea levels rise</p> |
| <p>Option 4 Maintain 2</p> | <p>As option 3, except beach material will not be moved across the river mouth instead shingle will be taken from the beaches at Kemp Town to recharge the beaches at the west end of Shoreham Port.</p> |
| <p>Option 5 Maintain 3</p> | <p>As Option 3, except shingle will be moved from Kemp Town to Shoreham and also moved across the river mouth.</p> |
| <p>Option 6 Sustain 1</p> | <p>The existing groynes will be repaired and replaced (with timber or rock) with higher and/or longer groynes to increase the size of the beaches. Shingle movement as in option 5 will continue. Seawalls and other defences will be repaired and replaced as appropriate to sustain the same standard of protection in the long term.</p> <p>Flood risk to properties and amenities along the coast would remain constant into the future.</p> |

Unit 2 Open Coast (Hove Lagoon to Brighton Marina)

| | |
|---------------------------------------|---|
| <p>Option 7 Sustain 2</p> | <p>The existing groynes will be repaired and replaced (with timber or rock). Shingle movement would continue as option 5. Seawalls and other defences will be raised where appropriate to sustain the standard of protection in the long term.</p> <p>Flood risk to properties and amenities along the frontage would remain constant.</p> |
| <p>Option 8 Improve 1</p> | <p>Repair and replace the existing groynes (with timber or rock where appropriate) with higher and/or longer groynes to increase the size of the beaches. Shingle movement operations would continue as in option 5. Seawalls and other defences will be raised as appropriate to improve the standard of protection.</p> <p>Flood risk to properties and amenities along the coast would be reduced.</p> |
| <p>Option 9 Improve 2</p> | <p>The existing groynes will be repaired and replaced (with timber or rock). Shingle movement operations will continue as in option 5. Seawalls and other defences will be raised where required to improve the standard of protection.</p> <p>Flood risk to properties and amenities along the coast would be reduced.</p> |
| <p>Option 10 Improve 3</p> | <p>The existing groynes will be removed at the end of their residual life. Offshore breakwaters will be constructed to control sediment transport and maintain the beach. Seawalls and other defences will be repaired and refurbished as appropriate.</p> <p>Flood risk to properties and amenities along the coast would be reduced.</p> |
| <p>Option 11 Improve 4</p> | <p>The existing groynes will be removed at the end of their residual life. Rock revetments will be constructed in front of the seawall to improve the standard of protection. The beach would not be maintained.</p> <p>Flood risk to properties and amenities along the frontage would be reduced.</p> |

Unit 2 Open Coast (Hove Lagoon to Brighton Marina)

| | |
|-------------------------------|---|
| Option 12 Improve 5 | <p>The existing groynes will be removed at the end of their residual life. Raised seawalls will be constructed to improve the standard of protection. The beach would not be maintained.</p> <p>Flood risk to properties and amenities along the frontage would be reduced.</p> |
|-------------------------------|---|

Unit 3 Brighton Marina

| | |
|--|---|
| Option 1 No Active Intervention | <p>No further works or repairs would be undertaken and the breakwaters would be left to deteriorate and eventually fail. The Marina breakwaters would fail, exposing properties and amenities within the Marina to increased flooding.</p> |
| Option 2 Do Minimum | <p>Reactive repair works to the breakwaters and inner harbour walls.</p> <p>The flood risk to properties and amenities within the Marina will increase over time as the defences deteriorate and sea levels rise.</p> |
| Option 3 Maintain | <p>The breakwaters and inner harbour walls would be maintained on an annual basis.</p> <p>The flood risk to properties and amenities within the Marina will increase in the long term as sea levels rise</p> |
| Option 4 Sustain | <p>The breakwaters will be maintained and the height of the inner harbour wall will be increased to sustain the standard of protection in the long term</p> <p>The flood risk to the properties and assets in the inner marina area will remain constant over time.</p> |