**Coastal defence quality survey**

For each of the coastal defences mark a score for each of the categories in the rows. Use the letters of each coastal defence to record the score.

1. Newbiggin sea wall (NSW)
2. Newbiggin beach nourishment (NBN)
3. Blyth sea wall (BSW)
4. Blyth groynes (BG)
5. Meggies Burn sand dune (MB)
6. Natural dunes at Seaton Sluice (SS)\_

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 2 | 1 | 0 | -1 | -2 |  |
| **Effectiveness** – how good is the scheme at reducing coastal erosion? Does it protect lives and property really well? | Effective |  |  |  |  |  | Ineffective |
| **Cost** – Look at the amount of engineering, maintenance and building materials. Look at the size of the defence. Does it look cheap to construct and maintain or not? | Cheap |  |  |  |  |  | Expensive |
| **Aesthetics** – how well does the scheme blend in with the natural or built environment? | Natural |  |  |  |  |  | Unnatural |
| **Impact on residential/commercial/public buildings** – is the coastal defence intrusive to other land uses? | Little impact |  |  |  |  |  | High impact  |
| **Multipurpose?** Can the land at or near to the defence be used for other purposes? | Allows other land uses |  |  |  |  |  | Prevents other land uses |
| **Ecological value** – can other plants, animals and insects (etc.) survive together with the coastal defence?  | High |  |  |  |  |  | Low ecological value |
| **Impact on natural coastal processes –** erosion and deposition | Low impact |  |  |  |  |  | High Impact |

|  |  |
| --- | --- |
|  | Total score |
| 1. Newbiggin (N)
 |  |
| 1. Newbiggin Beach Nourishment (NBN
 |  |
| 1. Blyth sea wall (BSW)
 |  |
| 1. Blyth groynes (BG)
 |  |
| 1. Meggies Burn sand dune (MB)
 |  |
| 1. Natural dunes at Seaton Sluice (SS)\_
 |  |

**SEDIMENT SAMPLE**

LOCATION OF SAMPLE

**Method**

1. Weigh 1 kilogram of sediment
2. Pass the sediment through the sieve
3. Weigh the contents of each of the 10 sieves and record the results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Body Size** | **Aperture** | Sample 1 |  Sample 2 |  Sample 3 |
| 10 | 2 mm |   |   |   |
| 20 | 900 microns |   |   |   |
| 30 | 600 microns |   |   |   |
| 40 | 400 microns |   |   |   |
| 60 | 250 microns |   |   |   |
| 80 | 200 microns |   |   |   |
| 100 | 140 microns |   |   |   |
| 120 | 125 microns |   |   |   |
| 250 | 63 microns |   |   |   |

Data for profile DOWN the beach

LOCATION:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Top of beach | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Sea |
| Distance between ranging poles |   |   |   |   |   |   |   |   |   |   |
| Gradient |   |   |   |   |   |   |   |   |   |   |

Data for profiles across the groynes

Location:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SOUTH | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | NORTH |
| Distance between ranging poles |   |   |   |   |   |   |   |   |   |   |
| Gradient |   |   |   |   |   |   |   |   |   |   |

Location:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SOUTH | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | NORTH |
| Distance between ranging poles |   |   |   |   |   |   |   |   |   |   |
| Gradient |   |   |   |   |   |   |   |   |   |   |

Location:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SOUTH | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | NORTH |
| Distance between ranging poles |   |   |   |   |   |   |   |   |   |   |
| Gradient |   |   |   |   |   |   |   |   |   |   |