Whitley Bay Sand Loss Study

Environment Sub-committee 8th March 2017

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Contents

- Recap on issues discussed at last meeting
- Highlights from Sand Loss Study
- Questions and answer session



Recap from 7th Sept Meeting

- Cullercoats Bay sand levels
- Whitley Bay sand levels



Whitley Bay Study - Scope

- •Commissioned December 2016 and recently completed
- Can anecdotal evidence of sand loss be verified
- Options for recovery should a problem exist
- Estimated costs



Previous Outfalls





Available Data

- Sediment Transport Study
- Regional Coastal Monitoring Programme:
 - Beach profile surveys
 - Beach topographic surveys
 - 2 yearly walkover surveys



What the data tells us

- Wave action is mainly at right angles to beach
- No signficant longshore drift
- Long term trends cannot be determined from available data but sand loss expected
- No data prior to removal of storm outfalls
- Groyne like measures would likely have limited success.



Beach Recovery Options

- Offshore breakwaters
- Groynes timber or concrete
- Beach Recharge
- Combination of the above



Estimated Costs

- Concrete Groynes:
 - 2 would cost £527,000
 - 4 would cost £934,000
- Timber Groynes:
 - 2 would cost £280,000
 - 4 would cost £456,000



Possible Next Steps

- Proceed with a trial installation of groynes to replicate former outfalls
- Look further at beach recharge feasibility
- Regeneration Team would need to lead if this was deemed of interest.



Thank you

Questions?

