

Fieldwork Comparison Table – Human and Physical Enquiries

Step	Human Fieldwork – Regeneration at Salford Quays	Physical Fieldwork – Coastal Management in Colwyn Bay
1. Aim / Title	Has regeneration in Salford Quays improved the local area?	How effective are hard engineering strategies at preventing longshore drift and sediment movement along the North Wales coast?
2. Hypothesis	Areas that have been regenerated will show higher environmental quality and more positive public opinion.	Hard engineering prevents longshore drift moving sediment along the North Wales coast.
3. Suitability	Urban regeneration is a key geographical concept; area is safe, accessible, and measurable using EQS and questionnaires.	Hard engineering and longshore drift are key coastal geography concepts; North Wales has extensive coastal management; data collection uses simple equipment and is achievable in a day trip.
4. Theory / Concepts	Regeneration, urban change, social and economic impacts, environmental quality, deprivation (IMD).	Coastal processes: erosion, deposition, longshore drift; hard vs soft engineering; sediment transport; beach profile; terminal groyne syndrome; attrition and abrasion.
5. Location	Salford Quays, Greater Manchester	Bay of Colwyn, North Wales coast
6. Location Suitability	Regenerated area with varied land use; safe, compact, accessible within 90 mins.	Hard engineering present; longshore drift observable; public access; within 2 hours from school; variety of coastal processes visible along East-West transect.
7. Importance of Risk Assessment	Prevent accidents near water, roads, or when surveying public; allows accurate data collection.	Prevent tripping, drowning, getting lost, heat stroke; ensures safe data collection.
8. Risks & Management	Traffic – crossings, pavements; Falling into water – stay away from edges; Slips – suitable footwear; Crime – stay in groups; Weather –	Drowning – stay 5m from water and face the sea; Heat stroke – suncream, hat; Getting lost – stay in groups and use agreed meeting point; Tripping – wear sensible shoes.

	check forecast; Surveying – be polite.	
9. Methods of Primary Data Collection	EQS (Quantitative), Questionnaires (Qualitative)	Beach profiling (Qt), Sediment size & shape measurement (Qt, limited), Observations (QI)
10. How Data Was Collected	EQS: Scored litter, noise, traffic, safety, buildings, green space at each site. Questionnaires: Asked public about regeneration (e.g., Q15).	Beach profiles: Measured slope at transects West to East. Sediment: Attempted to measure size and roundness; limited by very small particles at Colwyn Bay. Observations: Noted erosion patterns, headlands, and hard engineering.
11. Usefulness of Maps, Photographs, Fieldsketches	Maps identified sites; photos recorded environment; sketches captured layout.	Maps and sketches identified headlands, groynes, and deposition areas; photos helped visualise patterns; allowed links between profile gradient and sediment shape.
12. Justification of Methods	Combined physical (EQS) and social (questionnaire) data to evaluate regeneration comprehensively.	Beach profiling and sediment measurements aimed to test hypothesis; observations provided context; allowed East-West comparison.
13. Sampling Strategy	Systematic – surveys at regular intervals across sites.	Systematic – transects at regular intervals; only 3 sites, 2 with measurable sediment, limiting representativeness.
14. Secondary Research	IMD data to contextualize deprivation.	Historical maps, previous coastal studies, Shoreline Management Plan information to understand coastal processes, nourishment, and human impact.
15. Data Presentation	Bar charts for EQS categories; bar chart for questionnaire responses.	Line graphs for beach profiles; histograms for sediment size (limited); annotated photographs.
16. Effectiveness of Presentation	Bar charts show differences clearly; simple and easy to interpret.	Graphs show gradient trends; sediment histograms limited due to small particle size; photographs illustrate deposition

		and groyne effects; snapshot limitation.
17. Alternative Presentation Methods	Pie charts, scatter plots, spatial maps showing variation.	GIS mapping, 3D beach profiles, longitudinal profile diagrams, time-lapse photography; could compare managed vs unmanaged coastline.
18. Results Analysis	<p>EQS: Overall quality high, though traffic scored poorly.</p> <p>Questionnaires: Public perception mostly positive. IMD: Area less deprived than surrounding areas.</p>	<p>Expectations: Gradient increases Eastwards; sediment smaller and more rounded due to attrition/abrasion.</p> <p>Results: Gradient increased Eastwards (deposition as expected); sediment size larger than expected; could not measure size/roundness at Colwyn Bay due to very small particles. Patterns: Terminal groyne syndrome interrupted deposition in some areas; wider, steeper beaches Eastwards.</p> <p>Quantitative analysis: Mean gradient shows rising slope; sediment data limited. Limitations: Small number of sites; human error; beach nourishment may alter sediment; Shoreline Management Plan prevents unmanaged comparison; one-day sampling; no social/community data.</p>
19. Conclusions	Regeneration has improved waterfront areas; high environmental quality; public perception mostly positive; IMD shows less deprivation than surrounding areas; some areas remain less improved.	Hard engineering modifies sediment transport and beach profiles; hypothesis partially supported. Beach profile gradient increased Eastwards, sediment smaller than expected but trends affected by human intervention; terminal groyne syndrome evident; unable to assess community impact.
20. Limitations of Data Collection	EQS subjectivity; questionnaires small sample; IMD data outdated.	Limited measurable sediment sites; tide/weather effects; human error; beach nourishment alters natural sediment; no unmanaged comparison; community impact not measured.

21. Overcoming Limitations / Additional Data	Increase sample size, multiple times, interviews, historical maps/photos, visitor and crime stats, house prices.	More sites along coastline; repeated sampling across tides and seasons; more sediment samples; drone/GIS mapping; include unmanaged coast comparison; questionnaires for community perception.
22. Reliability of Conclusions	Triangulation improves reliability; sample size and subjectivity limit full confidence.	Reliable for beach gradient trends; sediment data less reliable; human interventions and small sample limit generalisability.
23. Usefulness in Achieving Aims	Allowed evaluation of regeneration and public opinion; aim largely achieved.	Allowed assessment of hard engineering and East-West deposition trends; aim partially achieved due to sediment measurement limitations.
24. Quantitative vs Qualitative Methods	Quantitative (EQS) gave measurable trends; Qualitative (questionnaires) gave social insight; combination most useful.	Quantitative (beach profiles) gave reliable gradient trends; sediment measurements limited; qualitative (observations) added context; quantitative more useful for testing hypothesis.
25. Suggested Improvements	Larger sample size; multiple time periods; additional social and economic data; refine EQS scoring.	Increase transects and sites; repeat sampling at different tides; improve sediment measurement; drone/GIS data; include unmanaged coast; add community questionnaires.
26. Human Impact on Physical Geography	Regeneration changes urban landscape, drainage, and possibly local water courses.	Hard engineering alters sediment transport, modifies beach profile; terminal groyne syndrome affects deposition; beach nourishment changes sediment characteristics; human interventions modify natural coastal processes.