#### Llandudno Beach Management Scheme Appraisal

#### **Draft Brief Content for Discussion at Llandudno Coastal Forum**

A consultant is to be procured to prepare a report on future beach management options in Llandudno. This will include both North and West Shores and final outputs will include presentation materials for public consultation on the findings. There is also the potential for updating the Conwy Tidal Flood Risk Assessment based on different beach and defence conditions in order to assess the flooding consequences of different options and raise awareness of the importance of beach levels.

## Output 1 – Beach Management Scheme Appraisal Report

- Review the history of beach management and coast protection in Llandudno
- Assessment of current and future management options considering flooding, access, amenity, recreation, tourism opportunities and addressing wind blown sand problems at West Shore
- Appraisal of all options produced by Llandudno Coastal Forum based on:
  - Feasibility of the option
  - Capital scheme cost
  - o Future maintenance requirements and predicted costs
  - Standard of protection provided
  - Potential funding sources
  - Sustainability / ability to adapt to climate change
  - Uncertainties in modelling of the option / further modelling requirements
  - Amenity benefits and local characteristics to realise the potential of such benefits
  - Negative impacts of the option Environmental, visual, accessibility etc.
  - Likely public reaction based on an independent review of the public consultation responses
- Modelling of options where required
- Use the Beach Management Plan template to meet best practice guidelines. This includes the following:
  - Introduction
    - Background
    - Location details
    - Issues
    - Consents required
    - Beach management objectives
    - Management responsibilities
    - Links to other plans / strategies
  - Supporting information
    - Physical conditions (tides, waves, erosion, sediments etc.)
    - Climate change risks
    - Environmental characteristics
    - Heritage characteristics
    - Commercial interests, opportunities and threats
  - Scheme design (detail of existing management and appraisal of alternative options)
    - Beach standard of protection, design and trigger levels, grading
    - Structures standard of protection, design profile
  - Monitoring requirements
    - Identify monitoring programme

- Beach monitoring
- Structure monitoring
- Environmental monitoring
- Physical conditions
- Warnings and emergency procedures
- Use and storage of data
- Maintenance
  - Ongoing maintenance requirements
  - Actions when trigger levels are met
  - Methods of maintenance
- Reporting against objectives
  - Frequency of reporting
  - Weather / sea conditions
  - Beach volumes
  - Structure conditions
  - Identify potential management improvements
- Review and feedback
  - Comparison to previous years
  - Identify changes required
  - Responsibility for changes

# Output 2 – Presentation material for public consultation

- Summary of beach management and flooding history
- Updated plans / visualisations of the options as developed for the report;
- Lists of pros, cons and uncertainties regarding all schemes;
- Reasons for considering any options to be infeasible for further study

## Output 3 - Update of Conwy Tidal Flood Risk Assessment

- o A) Update CTFRA based on existing management only
- o B) Update CTFRA based on all feasible options