Understanding the Tide
Crucial for joint management of the Scheldt estuary

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The Scheldt has been a source of conflict

After request 3rd deepening:
development Long Term Vision,
Better collaboration since 1998

3 objectives

Accessibility

under one condition

Safety

Naturalness

Preservation of Physical Characteristics

- After request 3rd deepening -> development Long Term Vision, with agreement on:
  * threefold objective: Accessibility, Safety, Nature,
  * preservation physical characteristics
- Measures agreed on in 2005: treaties, also ‘treaty on collaboration in management and policy’, joint monitoring, research and effect-evaluation

!! Collaboration breaks with 300 year tradition of conflict over Scheldt
!! No (or less) delay!, much faster than 2nd deepening

Deltac
Joint Research: analyse, explain, communicate

Tidal Range -> agreement on its importance: ‘system integrity on the large scale’

An attractive indicator / policy objective

Not good for naturalness
- Influence on intertidal areas, more energy upstream
- Tidal assymmetry and mud import tidal river

Not good for accessibility
- dangerous currents during springtide
- lower levels low water

Not good for safety
- High waters -> higher dikes
- Eroding channels -> extra defences

It reflects long term development
- Sustainability…!

Direct response to measures in geometry (next slide)
Development Hansweert – Bath in detail

Management options tidal intrusion?

- sediment management needed anyway, ‘reversible’
- But no easy options…..

Deltalop
Most prominent challenge in the Sea Scheldt

- Hardly any space in the channels upstream Hansweert
- Shipping demands, preservation secondary channel

How to move forward… Dilemma’s

- Tidal intrusion is important (long term objective)
- But costs should also help short term objectives
  - Add sediment for extra safety
  - Improve ecological potential
- Still…… ‘what do we want to preserve’
  After 10 years we still haven’t elaborated it to morphological objectives
What is preservation of physical characteristics?

- Reducing tidal intrusion?
- Preservation multiple channel system Western Scheldt?
  Large ‘ebb’- and ‘flood’ channels, smaller connecting
  channels, intertidal shoals and shallow water areas.
- Morphology and hydrodynamics supporting all user
  functions? This will not be the same along the estuary
- How to link short and long term goals....

Statements and food for thought

- We cannot escape choices from the past,
harbours and embankments are there
- The estuary is in transition anyway, isn’t it all
  about ‘estuarine processes’ and ‘services’???
- Science can’t give the unambiguous answer,
  but it can and must be central in the debate
  on the future of our estuary
- Estuaries with one channel and much intertidal
  area are also regarded valuable?
- Why is loss of secondary channel in Ems-
  Dollard not regarded as similar big issue?