

CILT NZ Northern Region
Webinar

A Port on the Manukau - The Environmental Challenge

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The Bigger Picture

- “Any greenfield port is likely to present *considerable consenting challenges*”
 - But so is port expansion in Auckland, Tauranga, Northport, in fact almost anywhere
 - Therefore, it is ‘better’ to first determine what the best option is vis-à-vis economics and supply chain / shipping logistics
 - and seek to overcome the environmental and consenting challenges (within reason)
- It is not necessarily the case that obtaining consent for a new port will be more challenging than for an existing port because *the right site can be selected*
- Mana Whenua’s focus on protection of customary interests, net environmental benefits and commercial investment opportunities is acknowledged, but not discussed here

Expectations of the NZCPS (AUP)

- ‘Enabling’ policies & policies for the ‘avoidance’ of adverse effects on significant coastal values
 - *Policy 9 - a sustainable effective national transport system requires an efficient network of safe ports*
 - Avoidance of significant adverse effects on biodiversity and natural land/seascape – management of environmental effects – *of course, why not?*
 - Requires finer grained analysis
 - Requires appropriate design and assessment
 - May require offsetting
- This is the job of planners – **to consider the ‘planning balance’**
 - The Mitchell Daysh evaluation provides a very good starting point



Challenges not unique

- Bathside Bay Container Port, Freeport East
 - Reclamation and dredging
 - Adverse effect on the integrity of a Special Protection Area (SPA)

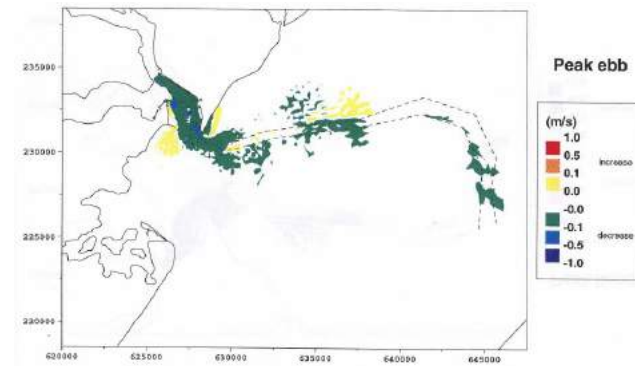


- Compensation – intertidal habitat creation
 - To address in comparable proportions the habitats and species negatively affected
 - To provide comparable functions – undisturbed, shallow water characteristics, feeding exposure times
 - Creating a range of habitats to support an equivalent assemblage of feeding and roosting waterfowl



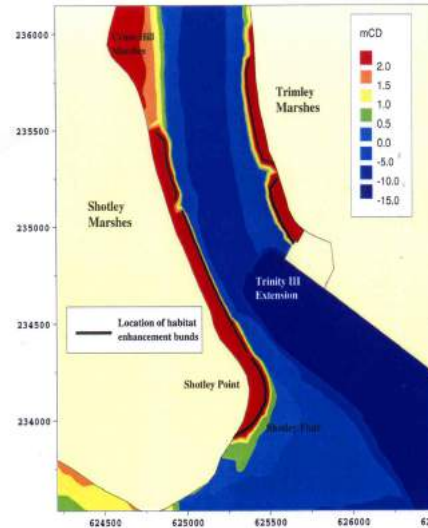
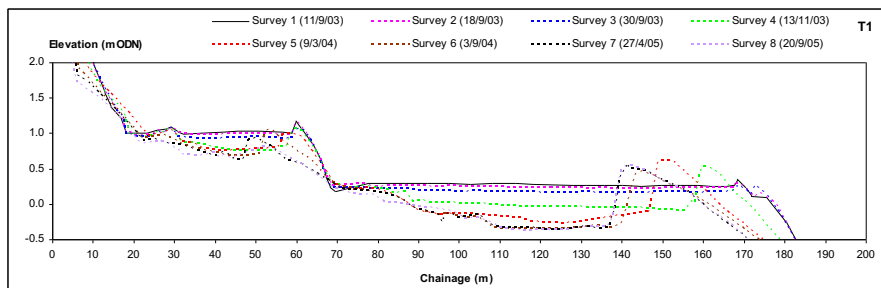
Challenges not unique

- Approach channel deepening, Harwich Haven
 - Reduction in the tidal range
 - Year on year erosion of the intertidal
 - Mitigation
 - Sediment recycling (water column recharge)
 - Reversed the erosion trend
 - Compensation
 - Managed retreat
 - Monitored since 2001 – rapid invertebrate colonisation and pioneer saltmarsh, use by 22 bird species
 - By 2005, designed site
 - By 2011, stable site



Challenges not unique

- Quay extension, Port of Felixstowe
 - Wave refraction enhancing intertidal erosion / attacking seawall
 - Foreshore habitat enhancement
 - Designed to erode and evolve
 - Significant bird use longer into the tidal cycle



Challenges not unique

- London Gateway
 - Reclamation of 25ha of intertidal and 68ha of subtidal habitats, adjacent to European nature conservation site
 - ‘Change in function’ of 60ha of intertidal
 - Loss of 9ha of feeding habitat
 - Reduced exposure of 5ha of intertidal
 - Increased pressure on waterbirds for resources / displacement
 - Mitigation
 - Recovering of the subtidal
 - Relocation of 1000s of reptiles, newts and water voles
 - Compensation
 - Managed retreat of two sites (equating to 82ha), with the RSPB
 - Mucking Flats ⇨ Stanford Wharf Nature Reserve
 - ⇨ Salt Fleet Flats



Challenges not unique

- Port Mole, Gabon

- Waterfront development

- Reclamation of 45ha & dredging 1.6Mm³
- Sands - Turtle feeding and nesting
- Mangroves & seagrass - migratory Palearctic waders
- Noise, light, water quality changes, potential for smothering and removal of habitats

- Mitigation ⇔ Management Plan

- Use of directional lighting
- Use of tickler chains on the suction heads
- Species observers
- Borrow site selection and avoidance of overspill
- Relationship established with NGOs
- Monitoring seabird responses and seagrass beds + triggers for action



How to progress...

- Through the acceptance of some measured risk, to deal with uncertainty in natural systems
 - Needs good data and information exchange
 - Needs adaptive management plans
- Through shared responsibility and decision-making
 - but a single point of responsibility for delivery
- Through participatory forums
- Through the acceptance of an iterative, flexible approach
 - Monitoring, reporting and response

