

A background image of the Earth as seen from space, showing the curvature of the planet and a bright sun or light source on the horizon, creating a lens flare effect. The image is in shades of blue and white.

Environmental Issues

Friend or Foe?

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26th September 2008

Traditional Approach

These tree huggers are just a nuisance.
What is the minimum we can do to get rid of them?

Modern Approach

The environment and the community matters. Let us work with the environment to minimise the impact of the project

Environmental Issues

Why should we care?

- **Our own conscience**
- **Effect on the way others see us**
- **Ability to get consent for projects**
- **Ability to finance projects**

There is no such thing as an zero impact port

All major construction damages the environment

Operating any large plant pollutes the environment

The carbon neutral port is a myth

When we build and run this port we will damage the environment.

There are things that we can do to minimise the damage – Some sensible some not.

Do the benefits to the community justify the damage to the environment?

Only those effected can decide whether it is worth it.

We must know what the port is going to achieve and what benefits it is going to bring.

Local Benefits: -

- **Employment**
- **Wealth creation**
- **Better access to goods and services**

National Benefits: -

- **Generates wealth**
- **A catalyst for economic development**

World Benefits: -

- **Access to raw materials**
- **Energy supplies**

The Least Environmentally Damaging Option

Inherent Impacts

- Changes to the coastline
- Changes to flood risk
- Visual impact
- Flora and fauna (birds, fish)

Construction Impacts

- **Silt spread from dredging (fisheries)**
- **Noise**
- **Dust**
- **Light**
- **Traffic**
- **Run off**
- **Disturbing pollution left by others**

Operations Impacts

- Passage of ships
- Noise
- Light
- Air pollution
- Run off
- Road traffic
- Other traffic

Stages in Consents

- 1. Understand the Legislation**
- 2. Other project needs**
- 3. Find local concerns**
- 4. Environmental scoping study**
- 5. Environmental impact assessment**
- 6. Mitigation plan**
- 7. Environmental management plan**
- 8. Publication**
- 9. Public Enquiry**
- 10. Consent**

International regulations and treaties (EU, Pacific Forum, London Convention etc)

National/Federal Regulations

Provincial Regulations

Who has jurisdiction?

What if there is no legislation?

Company rules

Lending Agencies – World Bank rules

Banks – The Equator Principles

International Pressure

Your Conscience

Recruit locals

Find out about local issues

Engage local pressure groups

Use local data

Do deals early

Avoid being accused of “buying” people

LISTEN, BE OPEN, BE HONEST

Consult legislators

Define concerns

Review available data

Define data gathering

Define analysis

Set up programme

First look at mitigation

Consult

Define budgets

Define existing data

Gather new data (flora, fauna, fish, water conditions, currents, silt content.....)

Tabulate data GIS?

Assess Impacts

Document findings

Devise mitigation options

Assess practicality

Compare options and costs

Consult

Produce mitigation plan

How is environmental impact to be measured?

Who does the monitoring?

How is the monitoring to to be recorded?

Transparency

Who holds the big stick?

Printed Documents

Web sites

Displays

Public meetings

Procedure depends on location

Be open

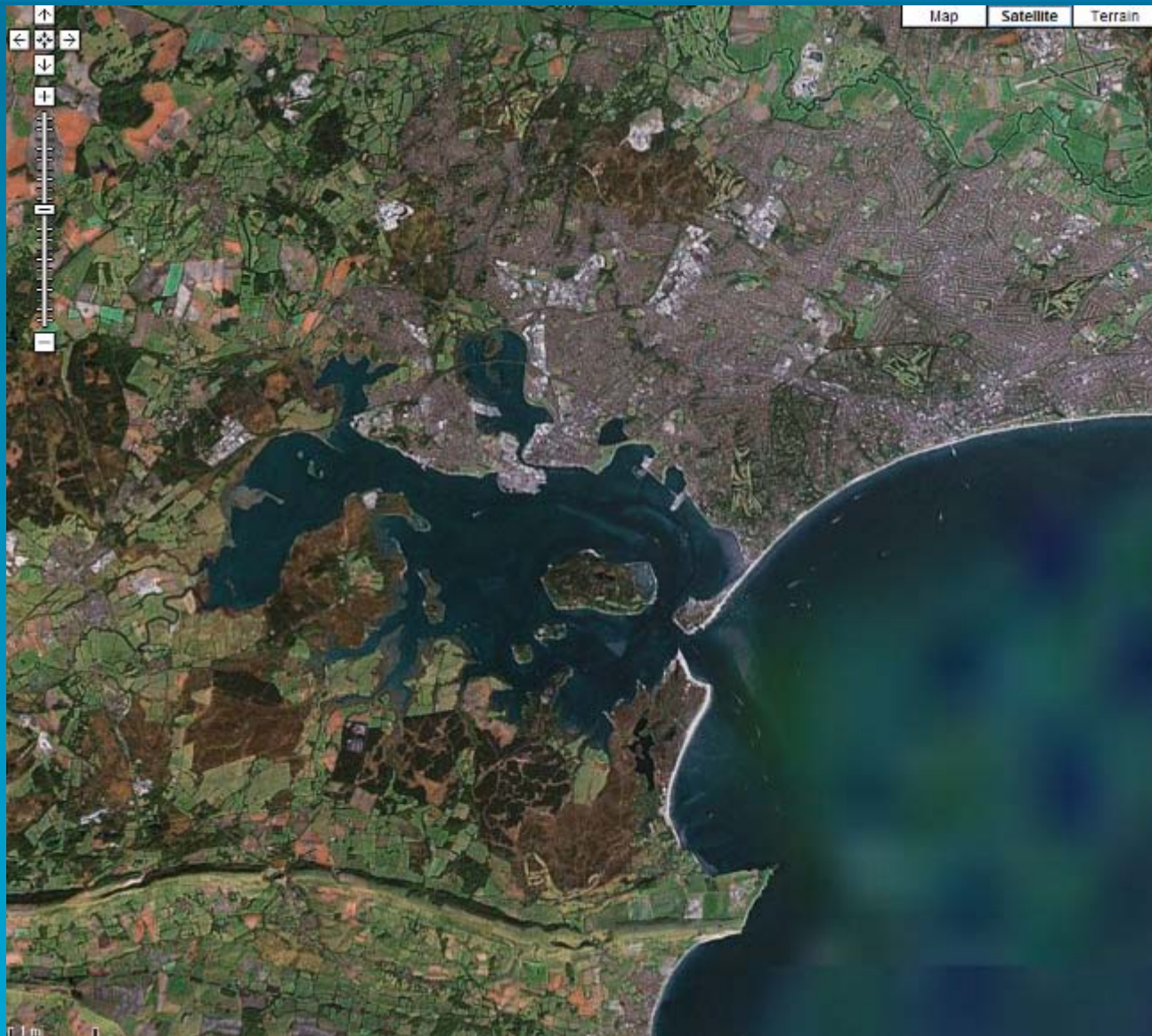
Do not try to rush things

Negotiate terms

Research the principles

Talk to your Banks

Work with the system







The Engineering is easy.

Consents and finance are difficult and unpredictable.

Value for money is more important than cost

The Halcrow Group

Sustaining and improving the quality of people's lives

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