



A Consultants Perspective to Construction EMPs

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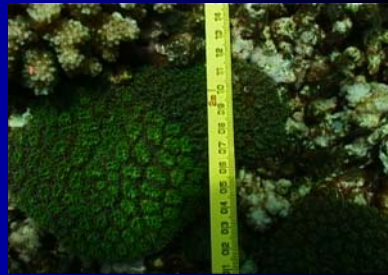
Themes

- Consultants Perspective
- Focus on Marine Construction
- Global Trends
- Integrating Science, Engineering & Management
- Habitat tolerance
- Site-Specific Objectives
- IMMP's



How are the impacts of large marine projects managed?

- Many international projects not publicly reported.
- There is a trend towards:
 - Designation of Habitats
 - Site-Specific Indicators/Objectives
 - Predictive Monitoring
 - Monitoring construction processes, habitats, physicochemical indicators
- Response (! or ?)



Where do EMPs get it wrong?

- Exhibit **poor Integration** between engineering, science and management;
- Use **Generic** guidelines;
- **Not Specific** to Operation or Site
- Fail to recognise **Habitat Values and Tolerance**;
- Do not measure **Operational Processes**
- Have monitoring **without purpose**
- **Impractical** responses or mitigation measures

An effective construction EMP ...

- Identifies and protects designated values;
 - Simple;
 - Effective;
 - Site or Operation Specific;
 - Dynamic;
- Provides monitoring to:
 - Predict impacts;
 - Measure and enhance the effectiveness of the EMP.
- Steps out the actions/procedures for mitigating potential impacts.
- Contains an IMMPP

KG
Kohala Group

Site-Specific Habitat Tolerance

- Communities experience natural disturbance, such as high sedimentation.
- Communities have a tolerance to mobilised sediments according to their **Natural Regime of Exposure**.
- This tolerance can be expressed in terms of:
 - **Intensity**;
 - **Frequency**; and
 - **Duration**.



Site-Specific Environmental Objectives

- **Intensity, Frequency and Duration** become the basis for developing site-specific objectives,
- Site-specific objectives can be developed for **construction processes** as well as receiving environment,
- Site-specific objectives recognise the contribution of **buffer zones**.

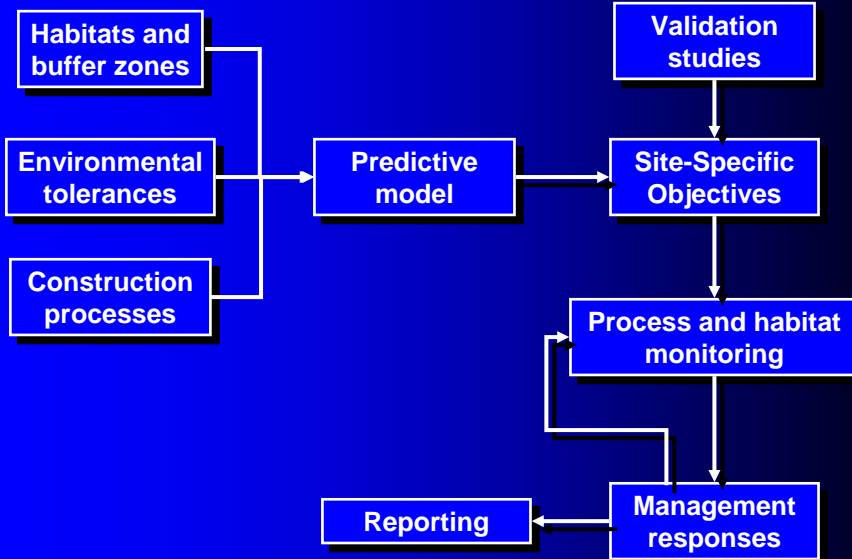


Integrated Monitoring and Management Programs (IMMP's)

- **Measure the performance** of relevant construction activities by monitoring processes that mediate environmental impacts;
- **Compare results to threshold values**, thus predicting impact; and
- Provide the framework by which pre-designated **Management Responses** are implemented.
- This results in **enhanced** responsiveness during construction;



Generic IMMP



Questions?

