

CEDA-IADC CONFERENCE

Dredging for SUSTAINABLE INFRASTRUCTURE



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Workshop 3: Adaptive Management

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APPLYING ADAPTIVE MANAGEMENT

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Adaptive.....management.....

What do the words mean?

- Managing in a way that changes or flexes in response to new conditions or information



Why might adaptation, change, flexing be needed?

UNCERTAINTY



Gaia hypothesis

Thinks of the Earth as a complex, self regulating, self perpetuating, living system

If a dredging project was thought of as a complex system, trying to self perpetuate, then adaptive management would be the mechanism by which it would stay alive!

Constant monitoring, evaluating and adapting to the situation



Adaptive management helps to make dredging projects strong

It's well known that flexible structures cope better with stresses and strains than rigid, brittle designs

Without adaptive management, when conditions change projects risk pausing or stopping



Adaptive management

- Is a formal process with specifically agreed steps to deal with uncertainty
- Can best applied by producing an Adaptive Management Plan which documents what has been agreed and will be done



Benefits

- Careful monitoring & effective protection of receptors (particularly when tiered approach, Caution, Stop)
- Blanket application of the Precautionary Principle doesn't occur – more efficient project
- Projects with uncertainties still have the potential to proceed



Challenges

- Costs, schedules and contracts all need to include flexibility
- May not be compatible with prevailing regulatory framework
- Stakeholder perception



What enables the enabler?

- Monitoring



- The future's bright!

