



Snapshot

Monitoring and evaluation in the City of Shoalhaven

Summary

Shoalhaven City Council's beaches and assets are at risk of coastal erosion and a significant proportion of the Council's assets are also threatened by coastal hazards such as sea-level rise.

In response to these threats the Council has prepared a development control plan that provides guidance on, and provisions for, the use of land. The Council is carrying out monitoring and evaluation (M&E) activities to assess project outcomes. Here we describe an example of an M&E template used for a specific project.

Keywords

Monitoring, evaluation, infrastructure, Shoalhaven

Many Shoalhaven beaches are threatened by coastal erosion and a significant proportion of public and private assets are already at risk of periodic inundation and undermining of foundations (see Lawless et al. 2014). Sea-level rise linked to climate change will create additional risks for Shoalhaven beaches and coastal assets.

The city has a development control plan in place that has information and development controls needed to prepare and assess development applications in flood prone areas.

In the following M&E template, the focus is on a simple example of a project that aims to create awareness among developers, planners and community members regarding potential risks of sea-level rise to new and expanding developments in risk-prone areas. The M&E template is used to check for resource availability for implementing a plan (through a number of soft adaptation options) to control development in sea-level prone areas. This could be the first step towards preparing a development control plan for areas at risk of sea-level rise in the future.

The data entered in Table 1 includes both hypothetical information as well as information derived from council reports and council personnel consultation.

Table 1: M&E template for a project in Shoalhaven.

Title of project	
Minimise future coastal risk from sea-level rise coastal risk from sea level rise	
Objective of the project	
The objective of the project is to create awareness among developers, planners and community members regarding potential risks to infrastructure	
Purpose of Monitoring and Evaluation	Monitoring frequency
Resource availability check for M&E (financial and personnel) for a project that aims to minimise future coastal risk from sea-level rise in the Shoalhaven area. This template is completed to ensure that dedicated staff and resources will be available for: i) implementing the actions, and ii) monitoring the actions/outcomes and evaluating the actions during/after a storm event.	Monitoring frequency of resources could be compatible with actual monitoring frequency of project actions/outcomes. In this case it may include: <ul style="list-style-type: none"> • Annual monitoring and evaluation for council reports • Regular monitoring that aligns with monitoring requirements for specific actions/outcomes • Monitoring during and after an event.
Evaluation frequency	
<ul style="list-style-type: none"> • After a storm event 	

Adaptation actions	Outcomes	Baseline conditions	Indicators Indicators should reflect the purpose of monitoring and evaluation	Roles & responsibilities of organisations Who monitors? Who evaluates?	Monitoring & evaluation requirements for financial and resource personnel (e.g. what data need to be collected?)
<p>Action 1.1:</p> <p>Consider applications for developments in view of future sea-level rise impacts on coastal erosion</p> <p>Assumptions for action 1.1:</p> <ul style="list-style-type: none"> • Mid range greenhouse gas projections have been assumed to be the right choice • Majority of the community members accept the council's suggestions 	<p>Outcome 1:</p> <p>Vulnerability of development (new constructions and extensions of already existing constructions) to future coastal risk decreased through awareness of potential risks</p>	<p>Personnel:</p> <p>Number of staff currently allotted to monitor sea-level resilient developments & develop guidelines for development in areas at risk of sea-level rise in the future</p> <p>Amount currently dedicated for staff training</p>	<p>Personnel:</p> <p>Number of staff dedicated to the action # - how many staff are required to perform the action?</p> <p>Number of climate change related training activities/ events for staff</p> <p>Funds specifically allotted to the action</p> <p>Amount dedicated to M&E (not for the project actions, but \$ for M&E)</p> <p>How much amount is required for staff to evaluate each application against most current regional sea-level rise projections over the project lifetime?</p> <p>What are the potential sources for the funds?</p>	<p>Staff for regular monitoring (council staff +any other partner staff):</p> <p>Staff dedicated to evaluation of action's success after a storm event</p>	<p>Monitoring:</p> <p>Personnel:</p> <ul style="list-style-type: none"> • Number of staff required to perform duties and responsibilities (M&E) for action 1.1. (e.g. If there are staff changes, project training may be required?) <p>Financial:</p> <ul style="list-style-type: none"> • Are financial resources allocated for staff to conduct M&E (e.g. data collection) and to perform M&E after actions of the project have been implemented? <p>Are there resources for new/additional staff training?</p> <ul style="list-style-type: none"> • M&E is a long term process and hence may require financial resources to electronically record every decision/event relevant to the project for future revisiting. <p>Evaluation (for M&E) during/after storm event:</p> <ul style="list-style-type: none"> • Does the number of staff available match the required number of staff (M&E allotment for evaluation)? • Was the number of staff dedicated to the project enough (a measure of the success of planning used for personnel allocation)? • Were the resources allocated sufficient? • Was monitoring conducted appropriately?
<p>Action 2.1:</p> <p>Request developments to have setbacks or be on piered foundations or relocatable buildings</p> <p>Assumptions for action 2.1:</p> <ul style="list-style-type: none"> • Mid range GHG projections have been assumed to be the right choice • Majority of the community members accept the council's suggestions 	<p>Outcome 2:</p> <p>Resilience of new constructions improved against future coastal risk through awareness of potential ways to reduce vulnerability</p>	<p>Personnel:</p> <p>Number of staff undergoing training & developing guidelines for flexible development on areas at risk to sea-level rise in the future</p>	<p>Personnel:</p> <p>Number of staff undergoing training and assigned specific duties to create awareness</p> <p>Financial: amount dedicated for staff</p> <p>Number of incentives to attract initiatives that promote flexible infrastructure</p>	<p>Staff for regular monitoring (council staff +any other partner staff):</p> <p>Staff dedicated to evaluation of action's success after a storm event</p>	

References

Lawless P., G. Blumberg, I. Ghetto, and R. Massie, 2014: Shoalhaven coastal erosion remediation: The holy grail. Accessed 9 June 2017. [Available online at <http://www.coastalconference.com/2014/papers2014/Patrick%20Lawless%20Full%20Paper.pdf>].

Further reading

Both links accessed 9 June 2017:

Shoalhaven City Council's Development Control Plan:
<http://dcp2014.shoalhaven.nsw.gov.au>.

Shoalhaven City Council's website where planning activities related to climate change are explained:
<https://www.shoalhaven.nsw.gov.au/Environment/Coastal-Landscape/Council-and-climate-change>.

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