

Q&A Nature-based solutions webinar 9th April 2025

Question #	Question	Answer
1	Typical engineering solutions dont always solve the problem though? Isnt that part of the motivation for alternatives (NbS)?	Precisely! In some cases engineered solutions create new problems or redistribute the problem elsewhere. NBS can have this effect too, but often they are compensate the risks of this outcome through the co-benefits that they provide.
2	Shipping transfers pest plants (marine) and animals around the world. Ballast water is a key source for these pests and other pollutants. Isnt that a threat to nature?	Sure sounds like a threat to ecological stability. As is relevant to the context of todays presentation, NBS might provide an opportunity to improve the resilience of ecosystems so that they can tolerate future disturbances
3	What made you select that definition of NbS? It's not consistent with the global standard, which requires NbS to protect, conserve, or restore nature to solve economic, social, and environmental issues. Mimicking natural processes is nature-inspired not nature-based.	I perhaps too casually explained the origins of the definition. The definition was actually an adaptation of several definitions, some of the context you provide is relevant to that. I've found that the definitions are too verbose. The words protect and conserve, or resolve are redundant in my opinion; they are simply actions. I understand your point on nature-inspired vs nature-based. Practitioners and funding agencies need to converge on a single concept... so it can be counter productive to go too far with definitions. Appreciate the thoughts :D
4	When it comes to funding these projects what are some of the key benefits of nature-based solutions to help decision makers to consider nature-based solutions over engineered solutions other than ecosystem benefits?	Great question, in the Australian context we are fortunate that NbS has become mainstream, and the terminology has become something that wins attention. To get to your question, funding channels have a particular interest in addressing climate change (i.e., carbon sequestration) and biodiversity loss. I would also champion focusing on recreation and well-being outcomes of the residents / users. Final note, fisheries and productive industries are an important point to highlight!!
5	Have the nature-based solution guidelines for implementing storm water management been included in the design standards and practices to be adopted for urban development projects?	Short answer, NBS are involved in WSUD. I would look at these guidelines... grassed swales, bioretention, wetlands :)
		Water Sensitive Urban Design*
		Appreciate your reply Mitchell.NBS guidelines should be included in the design standards to be adopted for the project.
6	Given that funding in govt often relies on political cycles/appetite , how can we better advocate for proactive NBS?	Building in engagement opportunities into our designs is important, e.g., signage, seating and viewing spaces, boardwalks If there is a growing public interest, then the funding will naturally follow
7	what are the associated maintenance for oyster NBS and what is the range for maintenance cost?	Oyster NBS are actually one of the lowest maintenance cost solutions, by virtue of them being set and forget. It's important to consider the ecological conditions that they need to grow before installation... water depth, clarity, temperature, TSS etc. If the parameters are right, they should look after themselves, and grow, and grow, and grow :D
8	Aren't there many opportunities to partner with Traditional Owners? NBS vs. Traditional ecological knowledge?	Yes, and a lot of Australia's regional NRM organisations (catchment councils, landscape boards, CMAs, LLS depending on what state you're in) have been doing this for some time looking at NbS for climate and disaster resilience throughout landscapes
		Absolutely, QLD also really utilises the use of Indigneous rangers quite effectively in this regard.
9	Where does the sand used to reinforce Gold Coast beaches come from?	A variety of sources. Naturally there is a longshore drift to the north where the Tweed Sand Bypass supplies sand at the southern end of the coast. Also, sand from basement excavations are utilised after being cleaned. Furthermore, the dredge being used at the moment is collecting sand from the storm bar that formed off-shore post TC Alfred.
10	Regarding mangroves - thorough planning and consideration of flood water conveyance should be considered (site-specific). Mangroves might not be suitable in situations where this could be possible. If they are unable to be controlled, i.e. creating an EEC or having other restrictions, these barriers to maintenance could mean increases in flood hazard. I guess it really highlights the dynamic environment we are working within, and there seems to be an endless list of things that could lead to unfavourable knock-on effects that we need to manage	Great consideration, its absolutely important that we practice precaution and investigate the outcomes of our actions. Mangroves are not the only solution, grasses can often deliver similar outcomes with less interaction with hydraulics--but this is very case specific isn't it
11	What specific solutions do you want to see implemented over the next few years?	I would really like some more examples that focus on the use of seagrasses. Particularly for the biodiversity outcomes.
12	Any NbS projects going on in WA?	Check out the map on that living shorelines website! https://livingshorelines.com.au/projects/
13	Do you have any examples of Nbs projects used near Ramsar listed locations?	That's an interesting question, with a shockingly simple answer. Fencing and exclusion of livestock from saltmarshes / wetlands. The idea here is, that fencing is allowing for the protection of natural functions.
		There are rock sills in detailed design stage to protect parts of the Western Treatment Plan Ramsar site in Port Phillip Bay (Victoria)
		Thanks Mitchell. I was thinking more along the lines of Nbs remedies for coastal foreshores experiencing erosion.