



## Authors



## WHO PAYS FOR COASTAL ADAPTATION?

April 20th 2023

Adaptation to coastal erosion and sea level rise will require significant and ongoing investment in a range of protection measures. The beneficiary pays principle suggests that those who benefit from a project should bear the costs of that project. Many coastal Councils are identifying beneficiaries through benefit distribution analysis (BDA) which helps to identify who will benefit from coastal adaptation measures, and to what extent. This includes in WA and NSW where coastal adaptation guidelines require Councils to apply the beneficiary pays principle. However, clearly identifying benefits and beneficiaries and developing agreed funding models based on this information has been challenging. This challenge must be overcome to enable Councils to more effectively identify options and implement coastal protection measures.

BDA informs the application of the beneficiary pays principle by revealing information that can enable the costs of coastal adaptation to be allocated equitably. For example, by identifying in a particular scenario that beachfront properties are the primary beneficiaries of coastal protection works. This analysis can inform funding models that seek to ensure those property owners are paying for a fair proportion of the works, rather than communities located away from the coast. However, undertaking a BDA to inform the development of future funding approaches can be challenging. These challenges include:

- + **Clearly defining the beneficiaries and separating out individual impacts.** For example, ownership of a public asset does not always correlate with the beneficiary.
- + **Accounting for future developments or changes in use.** For example, how do we account for major changes in the distribution of assets and populations over the next 20, 50 or 100 years?
- + **Transforming findings into an appropriate funding model.** For example, what if charging beneficiaries leads to significant transaction costs or charges lead to unintended outcomes?
- + **Limited guidance available on best practice approaches and methods.** Most guidance references just two examples from NSW, and there is limited detail provided on the approach and methods used in each.

Given these challenges, few BDA and related funding models have been completed to date. Aither is currently working with City of Cockburn to undertake a BDA for coastal protection measures, and to work through some of these challenges. City of Cockburn will be one of the first councils in Western Australia to undertake this type of analysis. This project is therefore a great opportunity to demonstrate the value that this analysis can deliver for local government and

decision-making. It will also provide proof of concept and principles which can be used by other councils.

To inform a sound approach to BDA to develop funding models, and to overcome the challenges identified above, we recommend a focus on:

- + transparent and repeatable analysis that draws on as much local information and knowledge as possible to complete the assessment
- + clear communication of the benefits and approach to ensure community and decision-makers understand the findings
- + pragmatic application of the beneficiary pays principle to inform funding models. This includes consideration of other factors such as transaction costs and equity considerations.

Overall, BDA and the application of the beneficiary pays principle should focus on pragmatic, principles-based decision making, informed by robust economics and good communication.

Look out for a future Aither webinar where we will work through some of the key challenges and solutions for undertaking a robust and useful BDA for coastal adaptation.

