

CASE STUDY MONETISED IMPLEMENTATION COST ANALYSIS

This appendix provides detail on the approach used to determine indicative cost ranges for council to implement selected provisions of the NPSIB to help inform the indicative CBA. These implementation costs cover the provisions requiring SNAs to be mapped (Policy 6, Part 3.8, Appendix 1 and 2), regional biodiversity strategies (Policy 14, Part 3.18, Appendix 5), monitoring plans to be prepared (Policy 15, Part 3.20), and regional policy statements and district plans to be changed (numerous provisions). It also provides estimates of costs to central government to support the implementation of the NPSIB through guidance and targeted support.

SNA Mapping Costs – Methodology

To estimate the costs to implement the provisions in the NPSIB to identify SNAs using a national consistent process and ecological significance criteria, approximate SNA mapping costs were collected and assessed from both Auckland Council (which excludes the Hauraki Gulf Islands) and Waikato District Council. The Waikato District Council costs took account of the regional council costs to do preliminary SNA mapping, which have been apportioned to Waikato District Council. These two councils applied slightly different approaches to identify SNAs (as discussed in **Section 9**) but both approaches are reasonably aligned with the NPSIB requirements to identify SNAs. The two districts have the least amount of indigenous land cover within the six case studies.

Cost estimates for SNA mapping were also sourced from Tasman District Council and Far North District Council. Tasman District Council are part way through their SNA mapping process. Far North District Council are in the early stages of their SNA mapping process (collaborating with Whangarei and Kaipara District Councils) but have some estimates for external consulting costs. Far North District Council had anticipated replicating the Waikato District process, although this is unlikely to provide the level of ground-truthing that the NPSIB will require.

For the purpose of the CBA, Auckland SNA mapping costs were determined to be the most accurate and indicative estimates of what might be anticipated to identify SNAs in accordance with the NPSIB requirements. To apply this cost to the other case studies, a ratio of Auckland costs per ha of terrestrial indigenous land cover (excluding the Gulf Islands) was calculated and multiplied by the current indigenous biodiversity cover (ha) in each of the case study councils. The cost estimate for SNA mapping captures the following broad components:

- Desktop analysis / data management / overlay production;
- Internal staff time (ecologists/planners)
- External ecologist costs / site visits; and
- Engagement and communication with landowners.

Applying the Auckland cost ratio to total indigenous land cover provides an indication of what additional cost Auckland Council might face (for example) to roll out their current SNA mapping process for the Hauraki Gulf Islands and also what additional costs Waikato District might face to carry out some additional ground-truthing to meet the NPSIB requirements. These net additional costs were considered to show a reasonable order of magnitude of costs to give effect to the provisions in the NPSIB relating to SNA identification relative to costs already incurred by each council to map SNAs.

However, applying the Auckland ratio to the indigenous land cover in Tasman, Westland, Southland and Far North districts generated significant cost estimates that were not considered reasonable and far exceeded the estimates provided by Far North District Council and Tasman District Council. The reason that the simple cost ratio generated such high (and unpractical) costs is because these four case studies have considerably more indigenous land cover than Auckland, and a significant share of that cover is administered by DOC. Some broad assumptions are therefore required to provide an indicative range of costs that can be expected to give effect to the NPSIB provisions to identify SNAs.

One area that has a significant impact on the results is whether SNA identification on the DOC administered land is required to follow the standard process in the NPSIB or a different process/timeframe is provided for. This is discussed in more details in relation to assessment of the NPSIB provisions to identify SNAs in **section 7** of this report. The indicative cost range for SNA identification below assumes, for the purpose of the indicative CBA, that a different and more simple process will be applied to identify SNAs on DOC administered land, such as desktop identification without ground-truthing. However, it is important to note that the approach to identify SNAs on DOC administered land has yet to be confirmed by officials and may change as a result of feedback through public consultation.

As such, the indicative range of one-off costs to carry out SNA mapping in accordance with the NPSIB provisions (where no schedule exists) is estimated at between:

- Lower end - \$700,000: this assumes a collaborative process with small amounts of indigenous land cover relative to the average of all districts/unitary authorities; and
- Higher end - \$1,300,000: this assumes non-collaborative process (i.e. no resource/expert sharing or sharing of funding between councils within a region)) with large amounts of indigenous land cover relative to the average of all districts/unitary authorities).

These costs are assumed to be wholly borne by district councils, although it is acknowledged that regional councils are likely to provide some support for this process (e.g. technical input and/or assistance with funding).

Requirement under NPSIB	Impacted Party	Low (\$)	Notes	High (\$)	Notes	Year Applicable (nb. 2020 estimated Year 1)	Present Value 2020-2050 (6% Discount Rate)
SNA Mapping with Schedule	District Councils	\$ 700,000	Assumes collaborative approach within Region and relatively small amount of indigenous cover. Full process, not amendments.	\$ 1,300,000	Assumes non-collaborative approach and large amount of indigenous cover. Assumes no groundtruthing of DOC managed land. Full process, not amendments.	Spread over Yr 1-5	\$590,000-\$1,095,000

Indicative estimates only, to be confirmed/refined following public consultation.

For clarity, these one-off costs are to carry out SNA mapping when no SNA mapping has previously been completed (i.e. they are gross costs to give effect to the NPSIB). The actual costs that will be incurred by councils to give effect to the NPSIB will vary significantly based on whether they have identified SNAs, the completeness of their SNA schedule, and how aligned that SNA identification and mapping process is with the NPSIB requirements. The review of district plan schedules combined with further evidence on the costs of SNA identification though consultation may allow these costs to be estimated at a national (aggregate) level.

Feedback from case study councils has confirmed that the effort and cost to undertake SNA mapping was spread over several years (including up to 10 years so far for Tasman District). For the purpose of the CBA, it has been assumed that SNA mapping costs above would be spread evenly over four years (i.e. years 1-5 after the NPSIB comes into force) to meet the timeframes in the NPSIB (Part 3.8(3)). This would then allow the plan change that includes the SNA mapping to be notified in year six in accordance with Part 3.8(6). In present value terms, the cost per district council is indicatively between \$606,000-\$1,126,000 (6% discount rate).