

SUBMISSION ON WCC DRAFT BIODIVERSITY STRATEGY AND ACTION PLAN 2014

Name and contact details

Jennifer Boshier
68 Creswick Terrace
Wellington 6012
Phone 022 037 0136

Making a submission

I am making a submission on behalf of the Creswick Valley Residents Association, which has both a practical and a strategic interest in the city's biodiversity.

I would like to make an oral submission on the morning of 19 March 2015.

Submission

1 Assessment of the success of the previous biodiversity action plan is not mentioned in this document.

There is no section in this strategy document where results of the success or progress of the 2007 biodiversity action plan are mentioned. It therefore is somewhat difficult to assess whether the priorities in the current draft plan and the related actions are relevant to the ongoing need to mitigate current and future threats to biodiversity in the Wellington City area.

2 Comments on the goals and outcomes

2.1 Goal 1 Protect biodiversity

The document states that most of the indigenous biodiversity has been lost over time, ie

- less than 5 per cent remains of the podocarp-broadleaved forest which once was the dominant land cover within the Wellington City area
- about 2 per cent of original sand dunes remain
- about 1 per cent of wetlands are left today.

Therefore the identification of ecologically significant sites (at a scale much greater than Map 1 in the document) is essential. These areas should include critical locations to maintain connectivity in the landscape. The sites identified by the Wellington Regional Council as regionally significant should be added into the list of ecologically significant sites. It is not clear whether this has been done.

The focus of this draft Biodiversity Strategy and action plan should be to identify both the ecologically significant areas and those areas that have potential to be restored to provide functioning ecosystems, and protecting them from inappropriate land development.

Once these areas have been identified and made public, they should be listed in the District Plan as areas to protect, with no ability for land development to remove significant areas of vegetation.

2.2 Restore biodiversity

The first goal (page 18):

“The loss or decline of our indigenous biodiversity is reversed and self-sustaining and resilient ecosystems created”.

This seemingly laudable statement requires further thought and some careful definitions eg what is a “resilient ecosystem” and why does an ecosystem need to be resilient? How do we reverse a loss? How do we demonstrate that decline in our indigenous biodiversity has been reversed?

Resilience is the capacity of a system to absorb disturbance and still retain its basic function and structure (Walker and Salt 2006). Resilience science identifies two kinds of resilience: general resilience and specified resilience. General resilience refers to a system’s preparedness and capacity to cope with a wide range of known and unknown disturbances. Specified resilience refers to the ability of a particular part of a system to respond to a particular kind of disturbance. Resilience management should aim to address both general and specified resilience to ensure both predictable and unpredictable or sudden changes are catered for.

The biodiversity strategy should be clear about what is meant by resilient ecosystems.

The related outcome statement (page 18) needs a more careful description – “All known original ecosystems within Wellington are well-represented and are self-sustaining...” This statement is meaningless and needs to be re-worked. What does “well-represented” mean and what does a self-sustaining ecosystem mean? Without clear definitions, relevant outcomes and actions cannot be devised and monitoring to achieve these outcomes cannot be detailed.

The Greater Wellington Regional Council (GWRC) identifies and prioritises sites with the highest biodiversity values for management. These sites are managed as Key Native Ecosystem (KNE) sites to maintain or enhance the biodiversity values present. It would be useful for the Wellington City Council to liaise with the GWRC to ensure there are no gaps or dual identification of sites between the two councils’ biodiversity strategies.

There is an underlying assumption in the draft Biodiversity Strategy that restoration of habitats and ecosystems will produce habitat of good condition and functionality. Restoration of habitats is a long term goal and requires careful monitoring to ascertain that the condition and functionality of habitats has improved. Substituting new plantings for a mature stand of vegetation does reduce the functionality of the vegetation; it takes many years to create mature vegetation as habitat for species.

There seems a risk too, that the focus will be on selected, but disconnected, habitats of “good” condition. CVRA values open spaces for their undeveloped character and ability to provide connectivity through the surrounding urban landscape. That attribute should be an important part of biodiversity and

landscape values in a biodiversity strategy. The retention of open spaces can coincide with the concept of creating “stepping stones” to areas of established biodiversity habitat, biodiversity corridors for indigenous fauna and flora and buffers for habitats of higher value or at greater risk.

2.3 Outcome to connect people to biodiversity

There may be a tendency for the Council to focus its efforts on this set of goals and outcomes, as it is “easier” than attempting the more difficult task of achieving biodiversity outcomes. However, this tendency should be resisted and the amount of effort allocated to the outcome should be commensurate with its value to the biodiversity outcomes.

This aspirational goal is notoriously difficult to assess whether it is being achieved. There is a tendency to rely on input and output measures to demonstrate that people are more “connected” to biodiversity (although it is not clear what is actually meant by the term “connected” in this context).

A robust way of assessing change in the “connection” of people to biodiversity could be to conduct five-yearly surveys of a sample of the Wellington city population to see if attitudes to the value of biodiversity to the city, and participation in biodiversity-related activities is changing over time. Contextual information is also required to be able to interpret the data in a sensible fashion.

2.4 Outcome to research biodiversity

This section is particularly opaque and not at all clear why research is needed, what needs to be researched, how the research will assist in the management of some aspect of biodiversity and who will do the research.

2.4.1 To be world leaders in urban biodiversity

This goal, and its associated outcome (page 18), is not at all requires further clarity. The outcome “We are leaders in managing indigenous biodiversity in an urban context” seems to be aspirational and, in CVRA’s view, requires much more definition to make this a workable outcome.

There is no indication as to how this outcome might be achieved and why this is seen to be a goal for research. If one wants to be a world leader in managing biodiversity in an urban context, surely the focus should be on innovative management of biodiversity.

Internationally, there are some resources that may be helpful to the Council. For example the Curitiba Meeting on Cities and Biodiversity: Achieving the 2010 Target

http://www.unep.org/urban_environment/events/citiesbiodiversity.asp

(accessed 25 February 2015).

UNEP noted “ However, there are common aspects to successful interventions which indicate that, in order to manage biodiversity successfully, cities have to mainstream biodiversity into planning; establish functioning governance structures that are able to enforce legislation; involve citizens and especially

poor communities from the start; invest in education and awareness; and cooperate with other levels of government.” (ibid)

2.5 Research on biodiversity assets

Research should be conducted on Wellington’s little-known biodiversity assets eg there are several glowworm colonies present in the Wellington area but there is little research on their environmental needs to maintain the glowworm populations, how the populations fluctuate over time, and what management actions would be required to ensure their survival. Anecdotal information from some of our members is that part of the previously extensive glow-worm colony near the Curtis Street end of the Old Karori Road pathway has not been seen since security lighting was installed for an adjacent childcare centre. Planning documents that stipulate a maximum of 8 Lux fail to appreciate that this is the light level of twilight; at 8 Lux ambient lighting there is simply no nightfall for nocturnal fauna.

The concept of citizen science to assist in gathering information could be useful in some situations but requires careful planning and management to ensure that consistent methodologies are used by all participants and that relevant locations are well represented in any research design. Otherwise the data can be quite variable in quality and there may be insufficient data points to draw robust conclusions.

If the concept of resilience thinking is to be adopted (refer to earlier comments in section 2.2), then research would be needed to identify the critical biodiversity assets for Wellington and also identify the critical thresholds for each of the assets. For example, the amount of vegetation present in a sub-catchment may be a critical asset. The critical threshold may be retaining more than 70% of this vegetation in the sub-catchment.

3 Threats to biodiversity

The draft Biodiversity Strategy covers some of the threats to biodiversity but not all. In CVRA’s view, the significant threats to Wellington’s biodiversity are:

- The spread of environmental pest plants and animals
- The loss of habitat through inappropriate land development and through vegetation clearance
- Fragmentation and loss of connectivity due to land development and significant vegetation clearance
- The cumulative loss of habitat and vegetation where land is developed in stages, or land uses change over time
- Invasive diseases or new pest insects becoming established in Wellington

The draft Biodiversity Strategy rightly points out that sustained pest control eg for possums over time is critical to the continued regeneration of vegetation both in reserves and in surrounding land. Where pest animals have been excluded from a block of land eg in Zealandia’s 225 hectares, the resulting change in indigenous vegetation since 1999 is dramatic and positive.

The spread of native birds from Zealandia into other areas of the city will ultimately not be successful in the long term if pest control outside the sanctuary reduces over time.

4 Actions

The actions in the draft Biodiversity Strategy should focus on mitigating or eliminating these threats, and giving effect to the actions through developing relevant rules in the District Plan. Otherwise, all these laudable aspirations will not translate into effective management of the city's remaining diminished, fractured and therefore increasingly important areas for biodiversity.

Where actions do mention the inclusion of mechanisms in the District Plan to better protect significant ecological areas (see page 21), the time frame suggested is medium (3 to 5 years). This timeframe fails to recognize the importance of getting actions reflected in the District Plan as soon as possible, otherwise this Strategy will be reviewed in 5 years with the distinct possibility that these actions haven't been achieved and implemented.

5 Monitoring and indicators

This area of the draft Biodiversity Strategy requires much more careful thought as to what might be monitored and why. Just because UNEP and the CBD have created a set of indicators is not a great reason to follow them.

The purpose of using indicators is to demonstrate change in the outcomes in the Biodiversity Strategy. A test might be to use the SMART acronym, ie indicators should be: Simple, Measurable, Attainable, Relevant and Time-bound.

A useful technique to assess change in condition of vegetation is the establishment of photo points in key areas using a consistent methodology each time. Photos taken yearly and made accessible to the Wellington community could both add value to the city's monitoring effort and tell the biodiversity story of investment in biodiversity actions and what has changed over time.

In our view, it would be best to use a few relevant indicators that would enable the community to see progress against the outcome statements rather than to struggle with a larger set of "nice to have " indicators.

We recommend that the outcome statements are reviewed to ensure that they are capable of demonstrating change in a biodiversity outcome over time (taking into account that some changes will take 10 to 20 years).

6 Need for baseline information

One of the major gaps in this draft Biodiversity Strategy is the lack of any baseline measurements of biodiversity from the previous action plan. Without a baseline, change over the period of this strategy and action plan cannot be properly assessed. Contextual information should also be collected so that data interpretation takes account of variability in the climate over the five years that could affect the condition of vegetation or of ecological habitats.

7 Summary

The CVRA supports the aspirations of this draft Biodiversity Strategy, but there are several issues to be addressed to make this a useful Strategy and action plan.

Several of the goals and outcomes are ill-defined or overly aspirational and need further clarification to ensure they are practical and achievable.

CVRA considers that the issue of cumulative habitat loss, and fragmentation of vegetation due to inappropriate land development are the major threats to biodiversity in Wellington.

The priorities in the draft Biodiversity Strategy do not recognize the value of undeveloped or natural open spaces as potential “stepping stones” for biodiversity.

The proposed set of indicators to assess progress against the outcomes should be reduced and only those that meet the SMART test should be used.

The lack of baseline biodiversity information on progress towards the goals and outcomes of the 2007 action plan is a significant information gap for this draft strategy.

The means by which the goals and outcomes of this biodiversity strategy will be given effect to ensure they are taken into account in future decision-making are not given sufficient weight or urgency.