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**THAMES-COROMANDEL DISTRICT COUNCIL**  
**PROPOSED DISTRICT PLAN HEARING – 10-12 February 2015**  
**BIODIVERSITY**

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**ROYAL FOREST AND BIRD PROTECTION SOCIETY INC**  
**– MERCURY BAY BRANCH**

**STATEMENT OF EVIDENCE OF LINDSAY MEGAN GRAEME**  
**2/02/15**

## INTRODUCTION

- 1.1. My full name is Lindsay Megan Graeme. I hold Bachelor of Science degree in Biology from Waikato University (1992) and a Master of Science in Marine Science from Otago University (1995).
- 1.2. I have over 13 years' experience as a consultant ecologist and am a Director of Natural Solutions – Marine & Terrestrial Ecologists Ltd. I have lived on the Coromandel Peninsula for 13 years but have recently moved and am now based in Tauranga.
- 1.3. The projects that I have been involved with that relate to this biodiversity topic include:
  - Kendal, H., Graeme, M. & Dahm, J. 2011: Biodiversity Restoration Corridors: Thames-Coromandel District.
  - Graeme, M., Dahm, J., & Kendal, H. 2010: Coromandel Peninsula - Ecological Assessment of Natural Character.
  - Kendal, H. & Stewart, P. 2010: Are covenants working? Biodiversity protection through the Thames-Coromandel District Council District Plan.
- 1.4. The above reports aim to inform ways to maintain and enhance our local biodiversity.
- 1.5. My evidence relates to the proposed measures within the District Plan aimed at protecting biodiversity in the District.

## BIODIVERSITY VALUES IN THE DISTRICT

- 1.6. Significant Natural Areas have been identified in the District. These are significant areas of vegetation and provide habitat for threatened species and deserve to be protected. However it is important to emphasise that these are remnant areas we have inherited mainly due to their low 'productive' value. They have not been specifically planned to address biodiversity needs. If the District Plan relies solely on protecting SNA's to protect a full range of biodiversity values it will fail.
- 1.7. Species diversity is severely affected once an ecosystem is reduced to less than 20% of its natural extent (Rosenweig 1995), which is why there is a disproportionate number of threatened flora and fauna species associated with 'Threatened Environments'. Therefore there needs to be a focus on biodiversity restoration in areas of Threatened Environments as

a priority, as this is where a District Plan can drive the greatest positive benefit.

- 1.8. Threatened Environments are generally within the Coastal Environment where there has been/is the greatest development pressure. I am not confident that the current provisions for Conservation Lots in the Proposed District Plan (Rule 8) will actively encourage the restoration of 'Threatened Environments' and achieve the desired outcomes. The implementation methods are inconsistent with the Council's biodiversity objectives. The proposed implementation methods will have the perverse outcome of fragmenting existing large threatened ecosystems (e.g. coastal forest) and not promoting the protection and/or restoration of other naturally smaller/restricted threatened environments such as wetlands and back-dune areas. The National Priorities for Protecting Rare and Threatened Indigenous biodiversity on Private Land (DoC & MfE, 2007) are not well enough promoted by the proposed policy in the DP.
- 1.9. Apart from increasing the level of 'Threatened Environment' protection as outlined above, we need to strengthen the health of our existing natural ecosystems to cope with the added pressures of climate change into the future. A warming climate with increasing localised storm events is going to increase the pressure of forest and soil disturbance and pests. Weed and animal pest control will help strengthen ecosystems' health and therefore their ability to withstand and adapt to these pressures.
- 1.10. In summary, a district plan will achieve a high level of biodiversity benefit if it:
  - i. does not permit the destruction of SNA's;
  - ii. works with regional councils to encourage weed and animal pest control by the community and landowners; and
  - iii. rewards through incentives (Conservation Lots) those landowners who restore Threatened Environments (1-3 and including wetlands and duneland).

## REFERENCES

- Department of Conservation & Ministry for the Environment, 2007: Protecting Our Places: Information about the Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land. Ministry for the Environment, Publication number ME 805, Wellington.
- Graeme, M., Dahm, J., & Kendal, H. 2010: Coromandel Peninsula - Ecological Assessment of Natural Character. Focus Group report prepared for Thames-Coromandel District Council. Natural Solutions Contract Report 09/087.
- Kendal, H., Graeme, M. & Dahm, J. 2011: Biodiversity Restoration Corridors: Thames-Coromandel District. Focus Group report prepared for Environment Waikato. Natural Solutions Contract Report 10/101. March 2011
- Kendal, H. & Stewart, P. 2010: Are covenants working? Biodiversity protection through the Thames-Coromandel District Council District Plan. Report for Thames-Coromandel District Council. Natural Solutions Contract Report 10/093
- Rosenweig, M.L., 1995: Pattern in space: species area curves. In: Rosenweig, M.L. (ed) Species Diversity in Space and Time. Cambridge University Press, United Kingdom.