

Photo 11: Erosion at eastern end of beach access

The path itself has cut down into the dune and has an active gully. Recent storm surges have resulted in the recent massive damage but illustrates the vulnerability to rising sea levels.

**3.4.3 Dogs**

Dogs will be allowed to be walked along the footpath and around the tourism area provided they are leashed, as per Council statute. Standard signage will be erected at various points including the beach access detailing the requirement and penalties. Dog owners will also be responsible for removal of faeces.

3.4.4 Bushfire

Standard signage will also ban all fires (eg campfires) apart from portable barbeques in designated areas. Prescription burning is never to be undertaken in the Crown reserve or the vegetated screen.

3.4.5 Litter

Council will provide bins along the pathways, at the beach access and at the tourism facility for depositing of litter. Standard signage will indicate fines for littering.

3.4.6 Public Awareness

Public signage will be erected at strategic points advising the public of the high conservation value of the dune vegetation for ocean surge protection and biodiversity, and directed to use the dedicated access, control pets and remove litter. Such signage should also acknowledge efforts of the proponent, Landcare, Dept of Lands and PMHC in enhancing the value of the vegetation. This will encourage stewardship of the area and vigilance of threats.

4.0 REFERENCES

- Bennet, A., Kimber, S., and Ryan, P. (2000). **Revegetation and wildlife: A guide to enhancing revegetated habitats for wildlife conservation in rural environments**. Bushcare – National Projects Research and Development Program. Environment Australia, Canberra.
- Biolink (2005). *Area 14 Structure Planning Area - Koala Plan of Management*. Unpublished report to Port Macquarie-Hastings Council, Port Macquarie.
- Brown, C.L., Hall, F., and Mill, J. (2003). **Plant conservation: approaches and techniques from an Australian perspective**. Australian Network for Plant Conservation, Canberra.
- Buchanan, R.A. (1989). **Bush Regeneration: Rediscovering Australian Landscapes**. TAFE NSW, Sydney.
- Darkheart Eco-Consultancy (2009) *Ecological Survey And Statutory Assessments of Proposed Constructed Wetland And Filling & Concept Plan On Part Lot 123 DP 1106943, & Lot 5 DP 25886, Ocean Drive, Lake Cathie*. Unpublished report to Luke and Co. Pty Ltd. Darkheart Eco-Consultancy, Port Macquarie.
- Darkheart Eco-Consultancy (2005a) *Flora and Fauna Survey and SEPP 44 Assessment of Rainbow Beach Holiday Village, Beach St, Bonny Hills*. Unpublished report to Hopkins Consultants. Darkheart Eco-Consultancy, Port Macquarie.
- Darkheart Eco-Consultancy (2005b) *Flora and Fauna Survey and SEPP 44 Assessment of Lot 192 DP 106102, Beach St, Bonny Hills*. Unpublished report to King and Campbell. Darkheart Eco-Consultancy, Port Macquarie.
- Date, E.M., Recher, H.F and Ford, H. (1992). **Status of Rainforest Pigeons in northern NSW**. Unpublished Report to 123.
- Dept Environment and Climate Change (2009a) Atlas of Wildlife (<http://wildlifeatlas.nationalparks.nsw.gov.au/wildlifeatlas>)
- DECC (2009b) Threatened Species. www.threatenedspecies.environment.nsw.gov.au
- DECC (2007). *Threatened Species Assessment Guidelines: The Assessment of Significance*. NSW DECC, Hurstville.
- Dept of Environment, Water, Heritage and the Arts (2009). *Littoral Rainforest and Coastal Vine Thickets: A Nationally Endangered Community*. www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl
- Dept of Land and Water Conservation (1998a). **Constructed Wetlands Manual – Volume 1**. DLWC, Grafton.
- DLWC (1998b). **Constructed Wetlands Manual – Volume 2**. DLWC, Grafton.
- Dickman, C. (1996). **Overview of the Impacts of Feral Cats on Australian Native Fauna**. Report prepared for the Australian Nature Conservation Agency, Canberra.
- Downy, P. O. (2003). Invasive weeds and plant conservation. In: **Plant conservation: approaches and techniques from an Australian perspective**. Brown, C.L., Hall, F., and Mill, J. (Eds). Australian Network for Plant Conservation, Canberra.
- Eby, P. (2000a). *A Case for Listing Grey-Headed Flying Fox (Pteropus poliocephalus) as Threatened in NSW Under IUCN Criterion A2*. In: **Proceedings of a Workshop to Assess the Status of the Grey-Headed Flying Fox in NSW**. Richards, G. (Ed.). Australasian Bat Society, Sydney.
- Eby, P. (2000b). *Low Reproductive Periods in Grey-Headed Flying Foxes Associated With a Short Period of Food Scarcity*. In: **Proceedings of a Workshop to Assess the Status of the Grey-Headed Flying Fox in NSW**. Richards, G. (Ed.). Australasian Bat Society, Sydney.
- Eby, P. (2002). *Using NSW planning instruments to improve conservation and management of Grey-Headed Flying Fox (Pteropus poliocephalus) camps*. In: **Managing the Grey-Headed Flying Fox as a Threatened Species in NSW**. Eby, P and Lunney, D. (Eds.). Royal Zoological Society of NSW, Sydney.
- ERM (1996). *Lake Cathie SEPP 26 Buffer Assessment*. Report to Hastings Council. ERM Mitchell McCotter Pty Ltd.
- Gill, A.M., Woinarski, J.N.Z., and York, A. (1999). **Australia's Biodiversity – Response to Fire: Plants, Birds and Invertebrates**. Biodiversity Technical Paper No. 1. Dept. of Environment and Heritage, Canberra.
- Goosem, M. (2002). Effects of tropical rainforest roads on small mammals: fragmentation, edge effects and traffic disturbance. *Wildl. Res.* **2**: 1035-3712.
- Hamilton, M.A, Winkler, M.A and Downley, P.O. (2008). **Native Plant Species at Risk from Bitou Bush Infestation: A Field Guide for NSW**. DECC, Hurstville
- Harden, G.J. (Editor). **Flora of NSW**. Vols 1-4. NSW Press, Sydney.
- Harden, G.J, McDonald, B. and Williams, J.B. (2007). **Rainforest Climbing Plants – A field guide to their identification**. Gwen Harden Publishing, Nambucca Heads.
- James Warren and Associates (2001). *Flora and Fauna Assessment for the Proposed Subdivision of Lot 191, 191/1, 191/2 and 191/3, Parish of Warrell, County of Raleigh*. A Report to Lifestyle Homes. James Warren and Associates Pty Ltd.
- Johnson, C., Cogger, H., Dickman, C. and Ford, H. (2007). **Impacts of Land Clearing: The Impacts of Approved**

Clearing of Native Vegetation on Australian Wildlife in New South Wales. WWF -Australia Report. WWF Australia, Sydney.

Keith (2004). *Ocean shores to desert dunes: the native vegetation of New South Wales and the ACT*. NSW Department of Environment and Conservation, Sydney.

King and Campbell (2007). *Preliminary Environmental Assessment for Lot 1 DP 374315 and Lot 4 DP 615261, Lake Cathie, for Part 3A Application MP070010*. King and Campbell Pty Ltd Port Macquarie

Klaphake, V. (2006). **Guide to the Grasses of Sydney**. Van Klaphake, Byabarra.

Klaphake, V. (2004). **Key to the Commoner Species of Sedges and Rushes of the Sydney and Blue Mountains**. Van Klaphake, Byabarra.

Lamb, R. (1982). Some effects of *Lantana camara* on community dynamics of Eucalypt woodland. *Abstracts: Section 12 – Botany*. ANZAAS Congress, Macquarie University, Ryde.

Blossom Bat (*Syconycteris australis*): in southeastern Australia. Australian Journal of Ecology **19**: 425-434.

Law, B.S. (1994b). Climatic limitations of the southern distribution of the Common Blossom Bat (*Syconycteris australis*) in NSW. Australian Journal of Ecology **19**: 366-374.

Law, B.S. (1993). Roosting and foraging ecology of the Queensland Blossom Bat (*Syconycteris australis*) in northeastern NSW: Flexibility in response to seasonal variation. *Wildl. Res.* **20**: 419-431.

May, S.A. and Norton, T.W. (1996). Influence of fragmentation and disturbance on the potential impact of feral predators on native fauna in Australian forest ecosystems. *Aust. Wildl. Res.* **23**: 387-400.

McDonald, R.C., Isbell, R.F., Speight, J.G., Walker, J. and Hopkins, M.S. (1990). Australian Soil and Land Survey Field Handbook. 2nd Edition. Goanna Printing, Canberra

NPWS (2001). *Threat Abatement Plan: Predation By the Red Fox (*Vulpes vulpes*)*. NSW NPWS, Hurstville.

NPWS (2000a). **Threatened Species of the Lower North Coast**. NSW NPWS, Hurstville.

NPWS (2000b). **Threatened Species of the Upper North Coast**. NSW NPWS, Hurstville.

NSW National Parks and Wildlife Service (1999a). *Integrated Forest Ecosystem Classification And Mapping For Upper And Lower North East CRA Region*. NSW NPWS, Coffs Harbour.

NSW National Parks and Wildlife Service (1999b). *Threatened Species Management – Species Information*. NPWS, Hurstville.

NSW National Parks and Wildlife Service (1995). *Integrated faunal information for public lands in northeastern NSW*. NSW NPWS.

NSW Scientific Committee (2007a). *Loss of hollow-bearing trees: key threatening process declaration. final determination*. www.npws.nsw.gov.au.

NSW Scientific Committee (2006a). *Invasion, establishment and spread of Lantana key threatening process declaration..* www.npws.nsw.gov.au.

NSW Scientific Committee (2006b). *Exotic vines and scramblers - key threatening process declaration*. www.npws.nsw.gov.au.

NSWSC (2004a). *Littoral rainforest in the NSW North Coast, Sydney Basin and South East Corner bioregions - endangered ecological community listing: final determination*. www.npws.nsw.gov.au.

NSWSC (2004b). *Removal of dead wood and dead trees as a Key Threatening Process under Schedule 3 of the TSCA 1995*. www.npws.nsw.gov.au.

NSWSC (2001a) *Final Determination - Clearing of native vegetation” as a Key Threatening Process under Schedule 3 of the TSCA 1995*. www.npws.nsw.gov.au.

NSWSC (2000a). *Predation by feral cats - Key Threatening Process declaration*. www.npws.nsw.gov.au.

NSWSC (2000b). *Predation by the European red fox - Key Threatening Process declaration*. www.npws.nsw.gov.au.

NSWSC (2000c). *Human-caused climate change - key threatening process declaration*. www.npws.nsw.gov.au.

NSWSC (2000d). *Ecological consequences of high frequency fires - key threatening process declaration*. www.npws.nsw.gov.au

NSWSC (1999). *Invasion of Native Plant Communities by *Chrysanthemoides monilifera* - Key Threatening Process declaration*. www.npws.nsw.gov.au.

- Parker, P. (2002). *Flora and Fauna Survey of Lot 1 DP 374315 and Lot 4 DP 615261, Lake Cathie*. Unpublished report to King and Campbell Pty Ltd. Peter Parker Environmental Consultant, Broken Head.
- Radle, A.L. (undated). **The Effect of Noise on Wildlife: A Literature Review**. University of Oregon, Eugene.
- Recher, H.F., Date, E.M. and Ford, H. (1995). **The Biology and Management of Rainforest Pigeons in NSW**. *Species Management Report Number 16*. NSW NPWS, Hurstville.
- Robinson, L. (1994) **Field Guide to the plants Native Plants of Sydney**. 2nd Edition. Kangaroo Press, NSW.
- Royal Botanical Gardens. Plantnet website (www.plantnet.rbgsyd.nsw.gov.au/search)
- Sainty, G.R. and Jacobs, S.W.L. (1994). **Waterplants in Australia**. CSIRO, Collingwood.
- Vallee, L., Hogbin, T., Monks, L., Makinson, B., Matthes, M., and Rossetto, M. (2004). **Guidelines for the Translocation of Threatened Plants in Australia**. Australian Network for Plant Conservation, Canberra.
- Webb, H. (1995). Stormwater: A Threat to Our Urban Bushland. *Waterfall* (1) 21-26.
- Williams, J.B, Harden, G.J, and McDonald. (1984). **Trees and Shrubs in Rainforests of NSW and Southern Qld**. University of New England, Armidale.
- Williams, P., Parsons, M. and Devlin, T. (2006). *Rainforest recruitment and mortality in eucalypt forests of the wet tropics – refining the model for better management*. In: **Australian Bushfire Conference 2006**.
- Woodford, J (1999). How our fences fell our precious birds of prey. *The Age* (15/9/99): 9