

# Monitoring fauna structures

February 2018

As part of the Pacific Highway upgrade Roads and Maritime has been building and monitoring fauna connectivity structures to protect wildlife and allow them to move freely through habitats to access food, water and mates. When highways are built, we must provide opportunities that allow wildlife to safely cross the highway to minimise impacts on access to foraging and breeding habitat.

As part of our connectivity strategy we have been monitoring and collecting data for more than 16 years to understand what species are using the crossing structures. This research informs the measures used in our current and future highway upgrade projects.

The road crossing structures that have been implemented and continue to be monitored are being used by a variety of threatened species right along the Pacific Highway corridor. Monitoring of fauna connectivity structures to date have shown that they are used by a wide variety of native fauna including threatened species such as the Long-nosed potoroo at Tugun Bypass, the brush tailed phascogale at Glenugie, Squirrel gliders and Yellow-bellied gliders north of Coffs Harbour and koala populations at various locations along the highway between Karuah and Chinderah. The crossing structures have been specifically designed and built to suit the range of wildlife living in habitats either side of the road, or under bridges in the case of fish and amphibians. Our monitoring program is showing the success of glider poles, rope crossings, dedicated fauna culverts fitted with climbing logs, fish underpasses and fauna overpasses.

We also have developed and implemented various threatened species management plans and a biodiversity mitigation framework to ensure biodiversity impacts of the Pacific Highway upgrade are minimised, and the project's conditions of approval are met. The management

plans include monitoring the connectivity structures to show how we are managing and mitigating impacts on threatened species before, during and after building the upgrade.

In 2017, in an Australian-first, the ecological monitoring program for the Sapphire to Woolgoolga project captured an image of a Giant Barred Frog using a dedicated underpass to pass under the highway. These frogs are very difficult to detect and can be seen using the structure made of a pipe culvert with a mulch bed.

We are building highways that are safer for animals and people by separating traffic and wildlife with fauna crossings and fences.



Koala on biodiversity offset property



Giant Barred Frog on biodiversity offset property (January 2018)