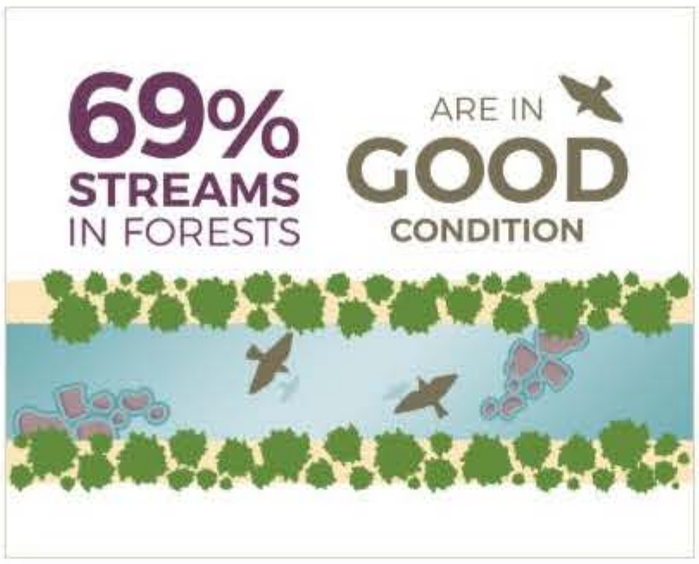
Aquatic invertebrates in forests



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Index 1: 69% of 29 stream sites within conservation reserves or state forest across the SWCC NRM region between 2005 and 2011 received an average AusRivAS rating indicating they were in good condition.

Index 2: Condition stable. 82% of 11 stream sites monitored between 2005 and 2016, had the same average AusRivAS condition rating for the 2009-2016 period as they did for the 2005-2008 period. 73% of streams received an average AusRivAS rating indicating they were in reference condition in both periods.

These indexes use aquatic invertebrate diversity as a measure of stream integrity. It does not use other measures of stream non-biological condition such as sedimentation, water chemistry, flow etc., but the assumption is that these factors will have influenced the stream fauna.

Aquatic invertebrates inhabit a wide range of habitats, have diverse biological traits and vary in their susceptibility to a range of disturbances. This means that the composition of stream invertebrate communities changes in response to changes in the condition of the stream. This index is based on good data dating back to 2006 (mostly annual sampling of invertebrates).

Case Studies

Data Source

- Invertebrate data collected by DBCA **[link]** Consistent data dating back to 2006 (sampled every 1 to 3 years) all analysed to give aquatic invertebrate biodiversity metrics, including AusRivAS scores used for this index.
- Department of Biodiversity, Conservation and Attractions **[link]**

Further Reading

- Pennifold, M. (2013). Ecological condition of streams in south-west forest. Information sheet 63. Science division. Department of Environment and Conservation. **[link]**. [Accessed 19 Feb. 2018]