

Technical Extension for Rivercare in Tasmania - CASE STUDIES

CASE STUDY 1

The Dasher River.....

a case study of community success

The Dasher River rises in the foothills of Mt. Claude and winds its way in an east to north easterly direction, joining the Minnow River and eventually becoming part of the extensive Mersey River system, just west of Kimberly. It varies in condition from unspoiled to seriously degraded, with stream bank and bed erosion and willow and other woody weed infestation. In the past there have been misguided attempts to improve stretches of the Dasher by straightening, digging channels, or undertaking earthworks. The Mt. Roland Catchment Rivercare Group wanted to restore the river to a healthy state, concentrating on reducing erosion, establishing natural vegetation, fencing to prevent stock access and encouraging the return of native fauna. The group has adopted a whole of catchment approach and included the whole community, optimising outcomes to river management and rehabilitation.

After extensive stakeholder consultation a Rivercare Plan for the Dasher and Minnow Rivers was completed. The plan establishes a set of priorities for action. The process

of characterising the river and developing priorities is based upon the River Styles[®] approach. Areas in good condition are given the highest priority for protection through to the most degraded areas having the lowest priority. The philosophy behind this approach is that it is more effective to protect healthy areas from degradation than to have to repair them at a later date. Consequently, works were prioritised to protect intact areas, clear them of weeds and manage stock access and then work on more degraded areas by removing willows, managing stock access to the river and stabilising stream channels. This was followed by revegetation were appropriate.



These two pictures show the difference in water quantity on the Dasher River, at low flow (top) and high flow (bottom).



Adding woody debris to the Dasher River

erosion and sediment being deposited in the timber voids rather than being transported further downstream. The timber structures have also become favoured habitat for the native blackfish.

Structural works included rock riffles and the innovative use of timber structures within the river. These were put in place to reduce the throughput of sediment in the river, which was degrading healthier downstream areas that often contain significant conservation values. The structures were designed with input from the Rivercare geomorphologist and engineer. This ensured that important details such as fish passage, bank erosion and head-cutting were addressed. Since the in-stream structures have been put in place there have been a number of bank-full flow events. To date the structures are operating as expected, with reductions in bank

It is expected that not only will changes in stock control improve the health of the river, but also, the health of the stock. The fencing should be effective in promoting natural regeneration of the rich array of native plants, creating a diverse and stable plant community. Special fencing was developed to use in low lying areas which are prone to flooding. Most of the time the fence is left upright with the dropped position used only when the stock are in the riparian paddock.

Revegetation has been undertaken in areas that will not regenerate naturally. It is hoped that over the long term this will increase bank stability, reduce channel marginal flow velocities, trap sediment (this improves water quality) and in the future will provide a source of organic matter for a range of aquatic fauna. Once the plants have established they will also provide shade in the river and this improves conditions for aquatic fauna to flourish.

The Mt. Roland Catchments Rivercare group has received strong support from the local community and worked closely with extension teams from Rivercare and Bushcare. Their success is acknowledged by those who have worked with them and by the broader Landcare Community and has been outstanding example of the community working together to improve the health of their river and not being shy to try new and innovative methods.

