2006 Restoration and Rehabilitation State and Local Government Grant *$58,000*

REHABILITATION OF A SECTION OF JAMISON CREEK — HUNTINGTON RESERVE

overview of the project

Huntington Reserve which incorporates Jamison Creek was extremely degraded. Large and small leaved privet had taken over from the native vegetation, was overhanging the creek and dropping copious amounts of fruit into the water. The area was also overgrown with madeira vine and balloon vine, both of which were causing significant shading of the creek.

Penrith City Council has worked to restore the reserve as part of their Plan of Management for the Jamison Creek riparian corridor. Through the use of contract bush regenerators and two Green Corps teams an area of over 1.8 hectares has been rehabilitated along half a kilometre of the creek line. In addition to weed removal, the area was planted with over 8,000 trees, shrubs and sedges. This has resulted in the return of native fauna to what was a dark and inhospitable site.

PHOTO COURTESY: JANET RANNARD

Area rehabilitated by Green Corp team

how the project was carried out

To ensure effective restoration, the reserve area was divided into two distinct zones, the steep creek banks and the upper flat terrain. On the upper slopes, which were away from the creek, broad scale spraying of weeds was undertaken, followed by removal or mulching of the weeds. On the very steep zone adjacent to the creek line, it was essential to consider methods of weed removal that would minimise the risk of erosion and where possible stabilise the slopes. Adjacent to the creek individual weed species were direct drilled with poison, rather than treated through broad scale spraying and removal. The dead weeds were then cut back and the cut material was left insitu to act as silt traps. The roots were also retained by this method and assisted to maintain stability of the creek banks.

PHOTO COURTESY: AMANDA BLAND

Trees planted at Huntington Reserve

Most of the primary weed removal occurred during the winter months when growth was minimal and by springtime any remaining weeds or seeds that germinated could easily and quickly be dealt with. Planting was undertaken when weeds within the area were completely dead, saving the hassle of having to come back to carry out additional weed control around the plantings. There has been a 90 percent survival rate for the plantings, even though the plants endured extreme weather conditions. This can be attributed to the fact that they were not competing with the weeds.

To monitor progress and change throughout the project, a baseline map and five photo points were established across the project area. The photographs were to record changes that took place in the vegetative composition, however more thought as to their location may have provided a clearer picture of the outcomes. In addition, an inventory of weeds and native plants was developed and updated as new species were discovered.

outcomes now and in the future

The use of two Green Corps teams during the project allowed for additional weed removal and planting to occur due to the cost savings. The twenty members of the Green Corps teams have gained valuable skills in bush regeneration techniques that will assist them with future careers in professional bush regeneration.

The work conducted during this project was the first step in restoring, extending and expanding the native vegetation corridors to link the Blue Mountains and the Nepean River. Future work is planned to address rehabilitation of un-worked sections of the Jamison Creek riparian corridor. A strategy is being implemented which focuses on the recovery, long term durability and expansion of fragmented remnant vegetation species and populations.

benefits, challenges & lessons learned

The contractor trialled different chemicals in order to get optimum weed control, particularly with invasive vines. It was found that glyphosate was more effective than fluroxypyr in controlling cats claw creeper and metsulfuron methyl was successful in killing maderia vine tubers.

A challenge for this area was that a Bushcare group could not be established at the reserve because of its severely degraded nature and steep slopes. It was considered unwise to compromise the safety of volunteers. However, contractors have progressed well on the site, making it more accessible and opening up the possibility of a group forming to maintain the area.

Although many photographs were taken, a better record for reporting purposes should include more photopoints to show the optimum changes to the site. It is also important to envisage how the site will change prior to determining locations for photopoints in order to get the best possible record of change.

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