

A history of the development of Sweetwater Creek Nature Reserve

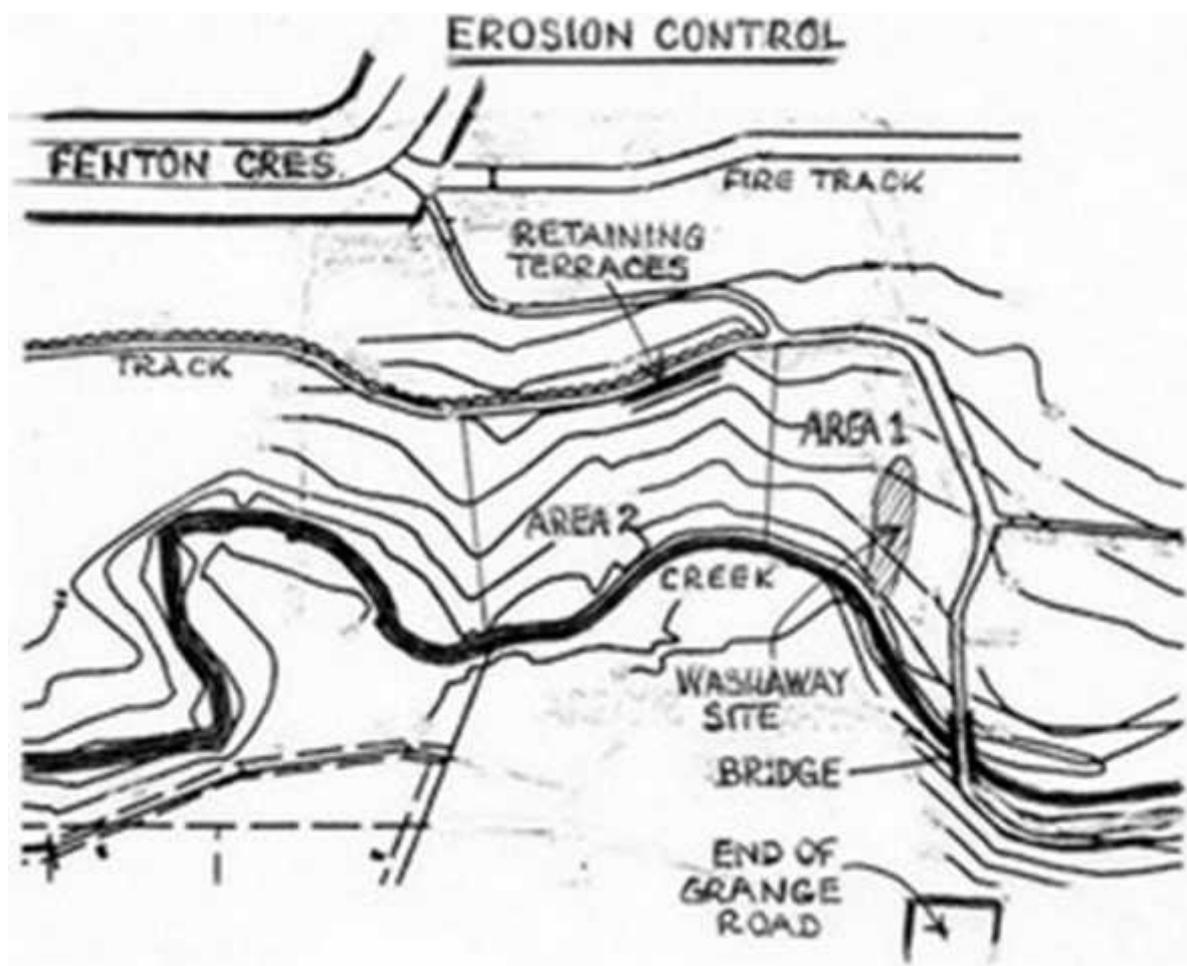
Part 2

Warwick Exton

EROSION CONTROL, WEEDING, AND REGENERATION PROJECT NEAR GRANGE BRIDGE.

In early 1994, a serious problem of erosion appeared a few meters north of the track on the East side of Grange Bridge. Water being collected by the main sewer line along the rear of Harcourt Ave was surfacing & running downhill into the creek. This water movement had carved a large trench some six meters long and two meters deep leading into the creek and it was slowly spreading uphill.

The map shows the location of the site.



The group applied for a grant from Melbourne Parks and Waterways to attack this problem covering an area of about .15 ha to the north of the track going down to Grange Bridge encompassing the site of the washaway. This area is shown on the map as Areas 1 & 2.. We were given \$4500 to cover the cost of plants, matting and herbicide and also to pay for fencing from the Fenton entrance path down to the bridge.

In January, February, March & April, 1994 the Council Rangers reconstructed the drain along the fire track above the erosion area to catch some of the surface run off and the ASC work group carried out major weeding in the area.

Blackberries were a serious problem in Area 1 and some mature canes were over 3 meters high and had climbed up into the trees. All the woody weeds and blackberry residue were disposed of into the eroded chasm. Ti-tree logs cut from the site were used by the group to construct terraces to spread any surface water flow and retard the speed of the runoff, and then the area was matted, planted out and mulched.



The photo shows the work group weeding and laying matting in Area 1 and the washaway hole in the foreground lined with matting.

In August of the same year, the Council rangers, Mark Doyle & Dave Stewart constructed a drain from the fire track down to the creek to cut down surface erosion.

They then reconstructed the main track below the Hoadley / Fenton corner where about 6 meters had been completely washed away. Red gum sleepers were used to construct a sequence of wired back terraces which the group planted out with Blackwood wattles. The site of the track reconstruction is shown on the map as well.

The ASC work group continued the work of weeding, matting, terracing & planting on the next site, Area 2, covering another .15 ha north of Area 1. In this area, at the instigation of one of our expert helpers, Gidja Walker, the whole site was matted before we built terraces. On the initial site, we had terraced the area before laying matting, and consequently had to content with weeds coming up through the terraces.

As part of the whole project, both sites were fenced on one side starting from where the track had been reconstructed right down to Grange Bridge.

In retrospect, looking back at this project after 10 years, the surface erosion problem appears to have been solved.

WEEDING AND REVEGETATION EDGE OF RESERVE ALONG FENTON CRESCENT

Prior to 1994, the area along the kerb of Fenton Cres, from No.26 south, was a weed paradise kept in check by the Council using a large mowing machine with the blades held up at right angles.

The next photo shows what some of it was like.

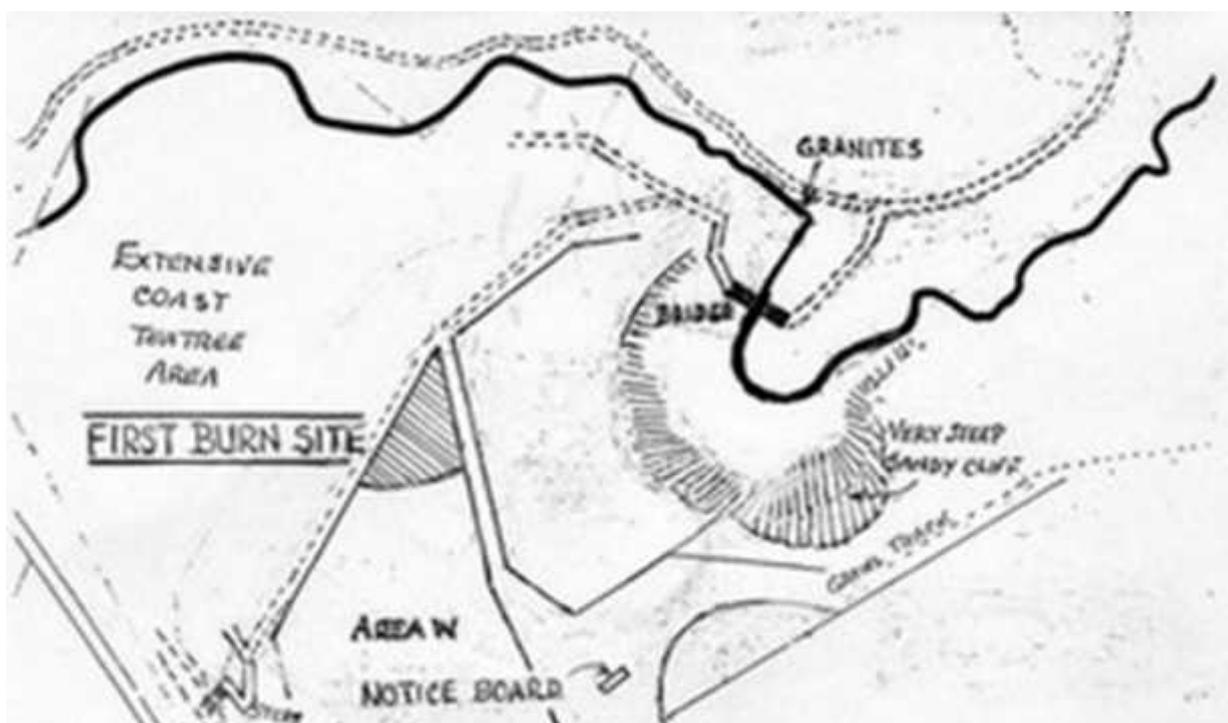


And so, in June and July 1994, the ASC work group got to work clearing out a tangled mass of Tea-tree, Pittosporum, Sallow Wattle and Kikuyu grass along the kerb line. The slope downhill away from the kerb was terraced with Tea-tree logs and stakes, filled to kerb level, matted, and planted out with Blackwoods, Mannas, Goodenias and sedges.

Subsequently, the area behind this has been weeded and planted a number of times.

HEATHLAND REDEVELOPMENT

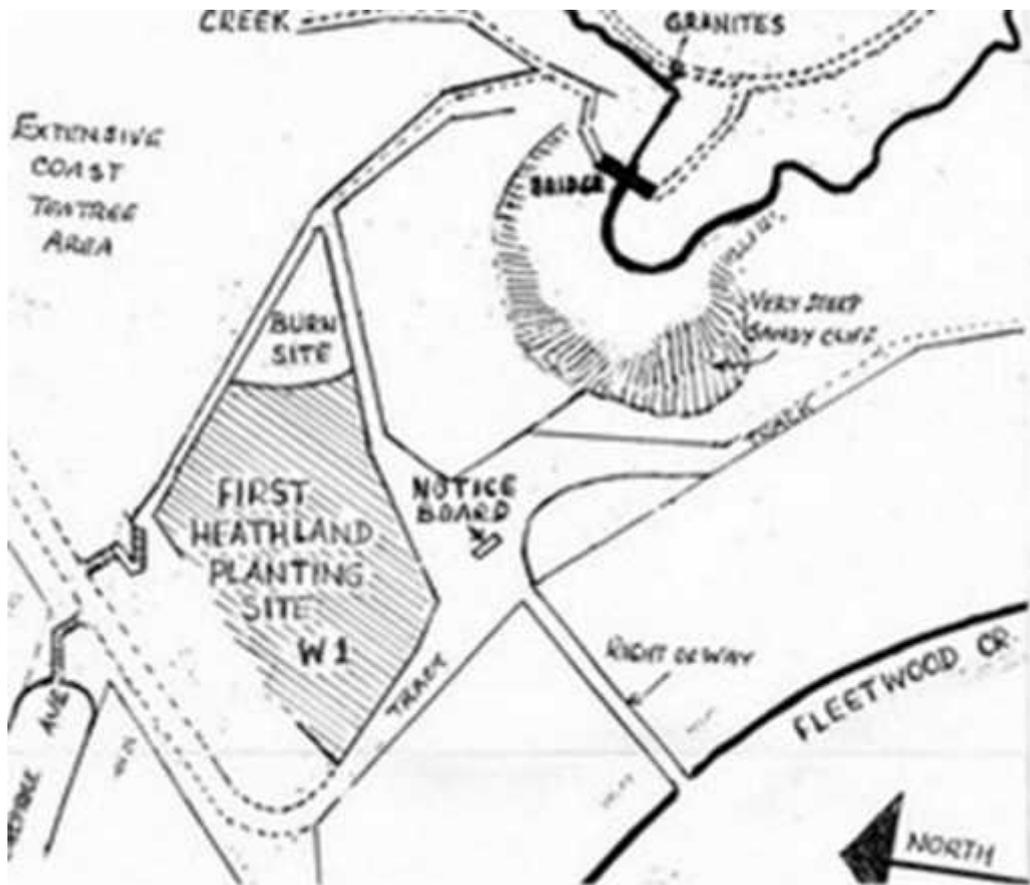
In the early 1980's, a fire must have occurred some 60 meters east from the Fleetwood right of way, because an area of very nice heathland plants had emerged there in the middle of an extensive tea-tree forest. The map shows the position of the very first and unplanned burn site.



This photo, although taken at a much later time, shows what the original unplanned burn site looked like.



This led to a decision by the group to apply for a grant to extend this heathland area, and in February 1996, ASC applied for and received a grant under the National Landcare Program to help regenerate the area south of the original burn site and the map shows the position of this project site.



As a track in the middle of this area had been used as a short cut between Bembridge and the Fleetwood right of way, Council provided some 250 meters of fencing to prevent further damage to the site, and this photo , taken in 1995 shows part of the fence being constructed.

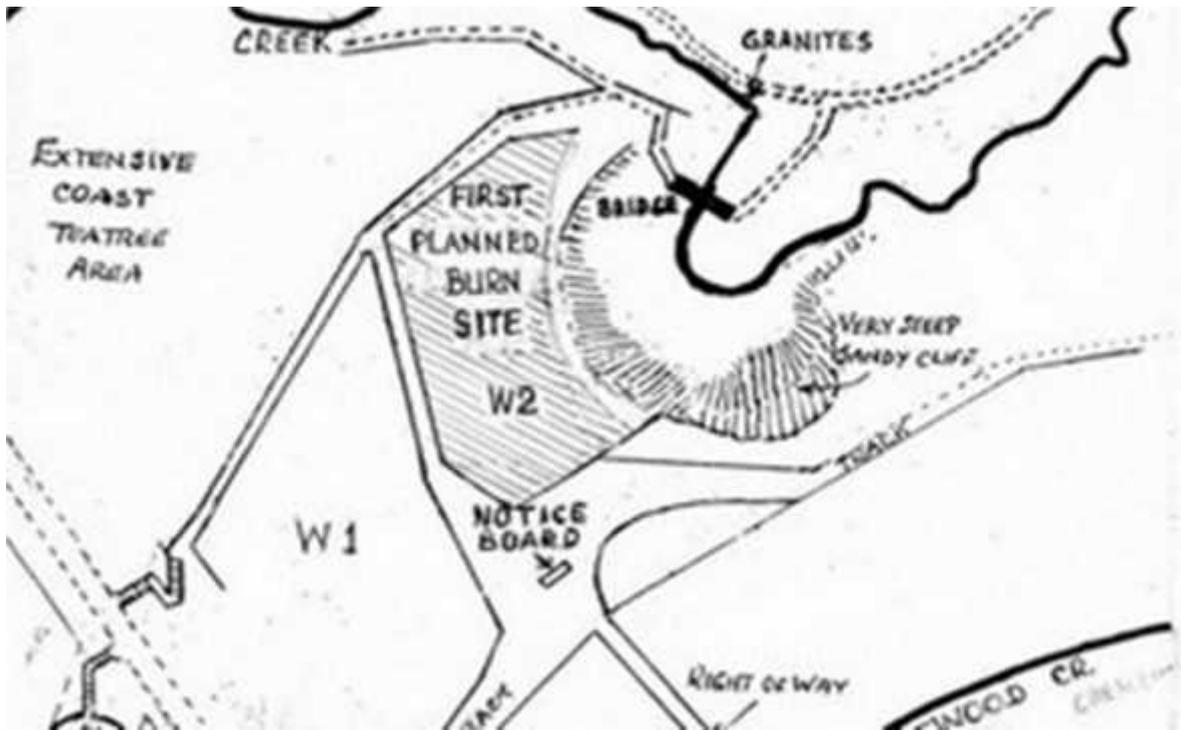


So between February 1996 and October 1998 the group started to weed the site preparatory to planting with local indigenous heathland plants. A variety of weed grass called Briza Maxima was prevalent and the group was advised to hand weed it. To completely eradicate this grass from the site, in the end, took over 3 years work. This site was referred to by the group as W 1.

FIRST CONTROLLED BURN

In October 1998, the group received an unsolicited grant from the National Heritage Trust of \$ 3750 and, after discussion with the Council officers, it was decided to use these funds to experiment with a regenerative burn in an area of .2 Ha adjacent to the east of W 1 to see if it's original cover had been heathland plants as well.

The next map shows the position of the site.



The next picture shows what part of this site was prior to the burn.



So in May 1999, the woody weeds were cut and stacked, and a pile of logs and branches some 60 meters long, 8 meters wide and 4 meters high was set alight under CFA & Council supervision. This photo shows the stack prior to being set alight.



This picture shows part of the site after the fire abated.



After the burn, the Council fenced the site for protection and the group used reclaimed and purchased heathland plants to thicken the site along the fence lines.

The next shot shows the site after the fire was well and truly out.



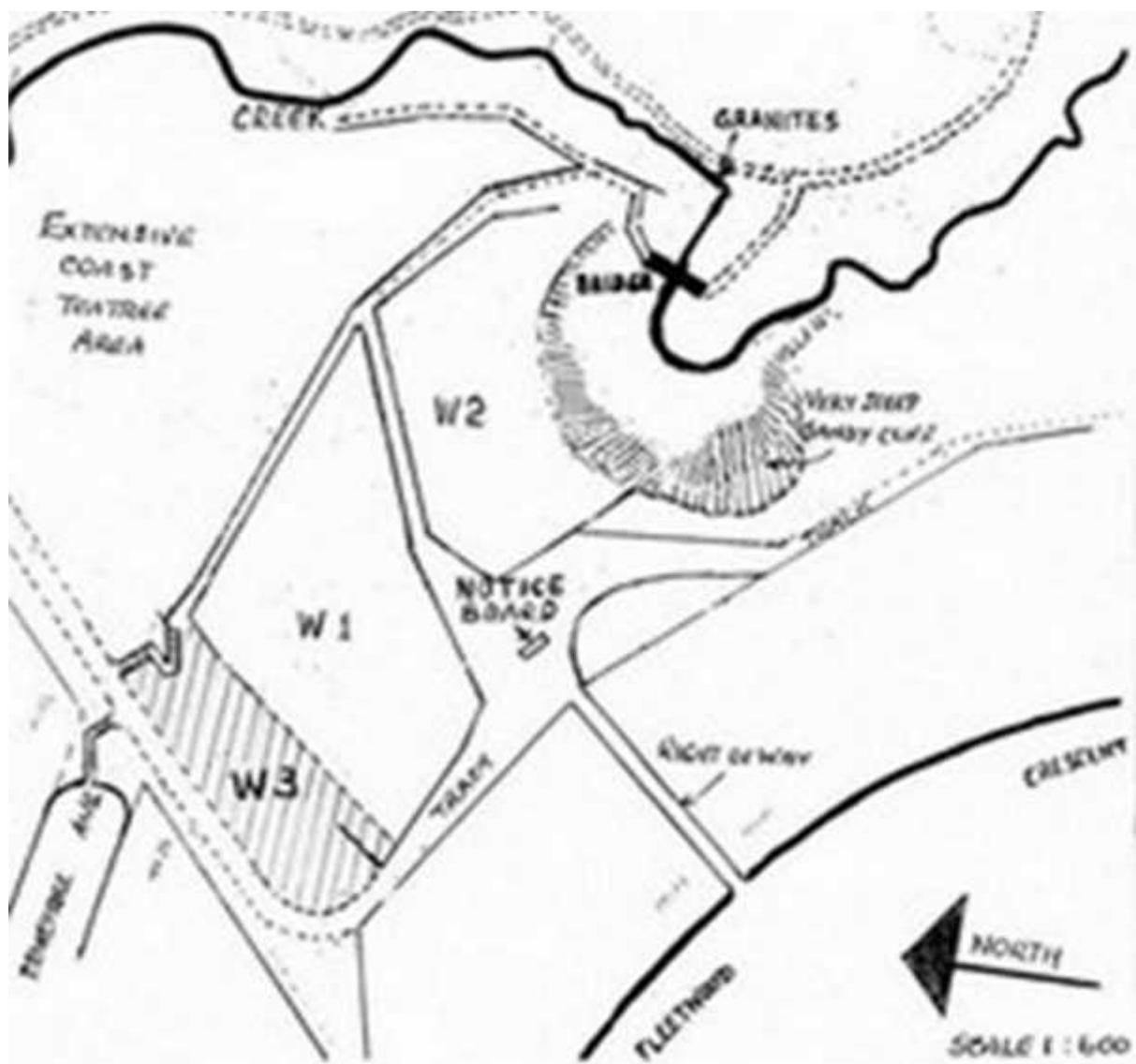
This area, known by the group as W 2 is now covered with thousands of fully grown indigenous heathland species, and the next photo, taken in April 2002, gives some idea of the extent of this regrowth.

This next photo shows what the site looked like in April 2002 and the extent and density of the regeneration.



It was subsequently decided to extend the W 1 site to the west edging Bembridge Gully, and ASC applied for and received another National Heritage Trust grant of \$2200 in October 1998 to purchase heathland plants for this area. This work was carried on from April 1999 into 2000.

This site, shown on the next map is known as W 3.



Having seen the evidence of the extent of the original heathland area and looking for possibilities of extending it, the group found another site containing many good quality specimens on the knoll along the creek opposite the Granites.

So it was decided to apply for a grant from the National Heritage Trust to weed and regenerate this area. This site, known as W 4 is shown on the next map.



In January 2000, the group received \$2600 to purchase plants for this project which was completed in January 2001.

Taking the heathland development further, after discussions with Mark Doyle, it was decided to apply for further grant to carry out another regenerative burn on a .2Ha site immediately north of the first burn area. The same map shows the position of the new burn site which we designated as W5. This application was approved and the group received a grant of grant of \$5005 from Parks Victoria in September 2001 for the project.

In April 2002, after extensive weeding and site preparation, the burn took place and the Council rangers erected fences around two-thirds of the site to prevent entry and damage.

This photo shows the burn being supervised on April 24, 2002



The next shot shows the site after the fire was out.



And this one shows the extent of the regeneration after six months in December.



Another small Parks Victoria grant was raised to purchase plants to thicken the edges of the site along the fence lines & \$825 was received in June 2002. Final planting was completed by the end of that month.

Reviewing all these heathland projects, it is interesting to note that from the few square meters of heathland plants which had appeared by accident in 1982, the heathland area now covers some .9 Ha.(9000 m²).