

# A history of the development of Sweetwater Creek Nature Reserve

**Warwick Exton** 

## **SWEETWATER CREEK NATURE RESERVE**

The Bushland Reserve encompassing the land, some 12.8 Ha, covering both sides of the last kilometre of Sweetwater Creek comprises land designated as Open Space – a mixture of land never subdivided for development, subdivided blocks purchased by Frankston Council and parts of freehold blocks adjacent to the creek where owners had requested subdivision.

As the land in South Frankston was taken up for housing, particularly after the Second

World War, unused land on both sides of Sweetwater Creek was subjected to a variety of uses and misuses

It was a "jungle playground" for local children. It was a sporting area for car and motorbike riders and, more unfortunately, it was a dumping ground for garden waste and rubbish.

Then, in 1973, contractors working for Frankston Council commenced installation of main sewer lines in the Reserve as this was the lowest part of the surrounding housing area.

This photo shows some of the work being carried out at the rear of Fleetwood Cres.



This next photo shows debris accumulated at the rear of No. 3 Plummer Ave.



The damage to the environment resulting from this work galvanised local residents to action and they met informally to register their concern, not only about the damage caused by excavation for the sewer line but also about rubbish dumping, vandalism and environmental damage caused by trail bikes and FWDs

A petition to Council was organised containing 800 signatures of residents with supporting letters from academics and members of parliament. This was presented to Council which then set better environmental standards for the laying of the sewers along the creek and arranged better supervision.

As a result of the public concern about the abuse of this unused land and the interest which had been generated, the organisers of the petition saw the need for this concern to be translated into action and decided to set up a permanent community group to work on improving the area for the future.

And so, in 1975, these citizens organised a local public meeting and formed a permanent community group which took the name Action Sweetwater Creek. A committee was duly elected, and a constitution and set of objectives drafted as the basis for future improvement.

Here is part of the first page of the minutes of meeting No. 1 held at Lucy Henty's home at 29 Fenton Crescent.



The next document is part of the Constitution.

THE CONSTITUTION ACTION SMEETWATER CHEEK The aims of Action Sweetwater Creek are: a) To restore the Sweetwater Creek Reserve to indigenous bushlan and to preserve it in that state for the enjoyment of the com b) To take appropriate steps to protect the indigenous flora and To actively oppose any development of the area or schemes whi would be detrimental to the ecology. d) To enlist the support of the community, the local council, an appropriate State or Federal authorities to achieve the above MEMBERSHIP Membership of Action Sweetwater Creek is open to any person w is prepared to actively support its aims. Membership is by subscription, the amount of which is to be determined annually, including a concession rate for pensione: students and juniors. Subscriptions are payable from 1st October each year.

The aim of the founders was to use the active work and support of local residents to help Frankston Council to effectively preserve and maintain an area of land on both sides of the creek between Baden Powell Drive and Nepean Highway as natural bushland and as a passive recreation area.

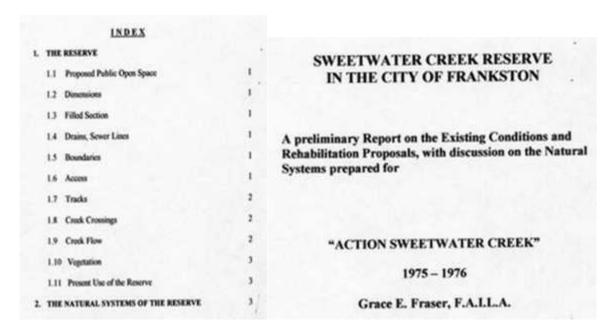
The initial records of the founders and the meeting minutes which have been preserved, show an extraordinary amount of thought and care taken by a group comprising mainly local ladies. Some of these people remained office bearers for many years – notably two sisters, Lucy Henty and Margaret Clark.

After a period of learning and experience, the group found that as a registered community group, it was able to obtain, in partnership with Council as the Reserve manager, substantial financial assistance from State and Federal Government agencies. And so, over years, many thousands of dollars have been granted to the group to help carry out regeneration and erosion control projects.

The first major step the committee took was to gain a Federal grant in 1975 under the RED (Regional Employment Development) Scheme, enabling it to commission a local landscape architect, Grace

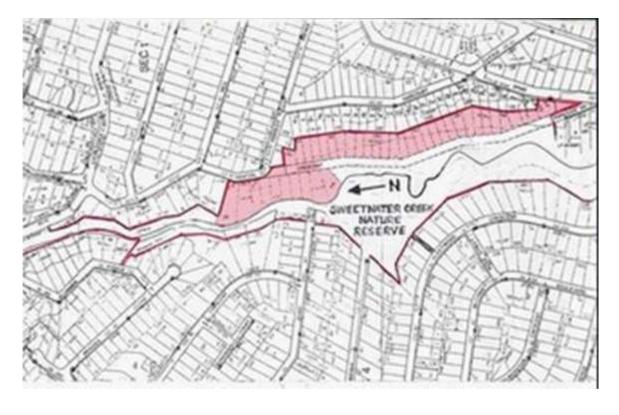
Fraser to prepare a professional report evaluating the area and recommending ways to maintain and improve it.

Copies of this report may be seen at the Frankston Library. Here is the title page and index of this report.



In 1977 the Council accepted the report in principle and designated the reserve basically as a "nature reserve" instead of "public open space". It couldn't be classified strictly as a nature reserve because of problems and costs of completely fencing it. The Council then took the very important step of buying blocks of freehold land adjacent to the creek & budgeting monies for maintenance works.

Here is a map showing the extent of the properties acquired by the Council for inclusion in the reserve.



In the early 1980"s the group started a program of weeding and planting using an ad hoc working bee approach. It attacked areas of exotic weeds and revegetated areas with purchased and propagated indigenous plants.

.In 1983 Council set up a working party to report on the future maintenance of the reserve. It comprised three councillors, relevant Council officers, two consultants and ASC representatives. This led to the acceptance of a five year plan for maintenance and improvement, and the establishment of an Advisory Committee to advise on the management of the reserve. This committee comprised a Councillor, three Council officers, a Melbourne Water engineer and two ASC reps. It operated till 1995 when it was disbanded by the then State Government appointed Commissioners

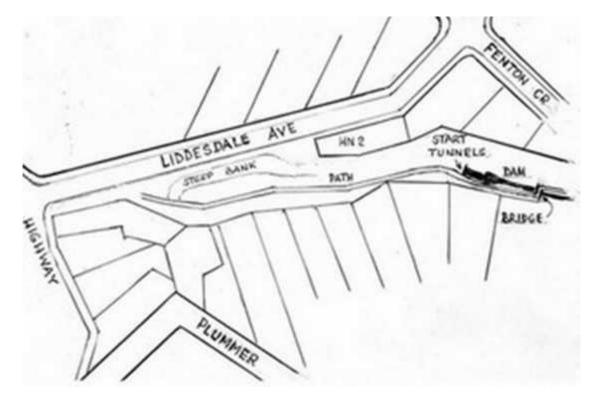
### **MAJOR PROJECTS**

# DESCRIPTION OF MAJOR PROJECTS UNDERTAKEN BY ASC, FRANKSTON CITY COUNCIL AND MELBOURNE WATER

### **LIDDESDALE ENTRANCE - Lower Area**

In December 1993, the ASC committee decided to implement a policy of improving the appearance of Reserve entrance areas and chose the main entrance at Liddesdale Avenue. While the top area, level with Liddesdale Avenue, was certainly in need of major improvement, it was decided to attack the low area between the tunnel entrance and the steep track up to the street.

The next map shows the target area and the position of the two tunnels carrying Sweetwater Creek from the rear of 10 Fenton under the last section of the Reserve, Nepean Highway and the Car Park to the Bay.



On December 6,7, and 8, 1993 an ASC work group assisted by a Green Task Force group under the control of Greening Australia supervisors and a council group led by Rangers Mark Doyle and Dave

Stewart carried out extensive woody weeding. The site, a filled and very muddy area was heavily infested with large Salex (Willow) trees interspersed with Pittosporum and Tobacco Plant. The trees were cut and chipped, and the roots poisoned. The photo shows the Council crew operating a chipper on site.



In May 1994, the ASC group, again assisted by a Green Task Force team continued weeding and planting on the reverse slope of the entrance area and a Council team rebuilt the track between the tunnel entrance and Centenary Bridge. Many of the Salex tree roots were pulled out and a pond established on the Liddesdale side of the track.

The next photo shows what the site looked like after this work



In 1996, after Melbourne Water had provided F.C.C. with \$25000 to build a floodway outlet for the creek at the Liddesdale Avenue entrance, major works were carried out both at street level and on the lower area.

The next photo shows the floodway which was designed to divert flood water away from the house at 579A Nepean Highway out onto Liddesdale Avenue in case the tunnels carrying the creek blocked up with debris during a flood.



The floodway was cut in, the top area and the banks graded & the floodway provided with a road metal base and a granitic sand surface. While really designed as a floodway, it makes an excellent track.

The ASC workgroup matted the steep banks and wired them before planting them out and mulching the plantings.

The next photo shows Ranger Mark Doyle and ASC Committee member Muriel Petersen carrying out this work.



The group also planted out the top garden areas with ground cover, shrubs and trees. This work took place over a six month period.

In April 1997, after obtaining a grant of \$2605 from Melbourne Parks and Waterways, the reverse slope down to the pond, as the next photo shows, was weeded, matted, terraced, and planted, and a seat erected overlooking the pond.



### FIRE CONTROL PROJECT -- REAR OF BRIGHTON STREET

In June 1992, as a result of an approach by Mr Charles Dawson, a resident of Brighton St. who was concerned about the risk of bush fire in the Reserve at the rear of his and other properties, the group and Council rangers decided to commence a weed abatement and native flora regeneration program between the rear fences and the track from Rotaract Bridge to Fleetwood.

On June 2, the site was inspected by a group comprising Carol Sweatman who was in charge of rangers, David Skvor, the Reserve ranger, and Stan Chapman and Warwick Exton, ASC Committee members. After consideration, it was decided to carry out a program of extensive woody weeding, with small burns to dispose of the foliage as it accumulated followed by planting and regeneration.

On June 11, a group of 13 ASC workers started cutting Sallow Wattle, Pittosporum and Coprosma trees, piling the foliage for subsequent burning and on June 18, David Skvor with a group of his people continued the process.

This work continued through July and August and then. On August 16, the ASC group planted 2000 trees on the top half of the site.

After further plantings in November and December and January 1993, the main ASC group moved to another project.

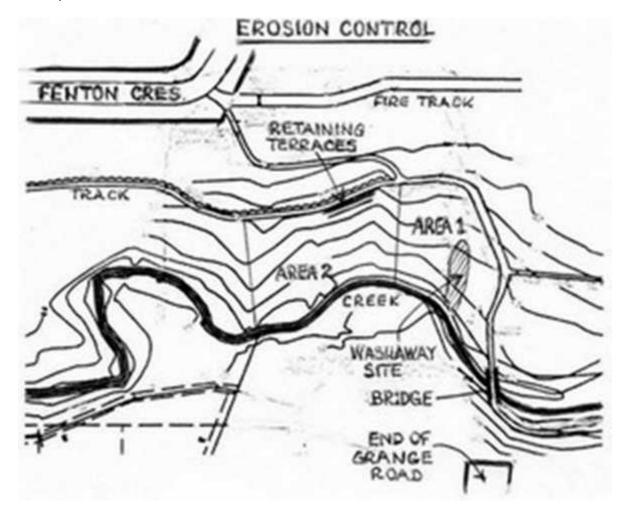
However, there was plenty more work to be done on the site, and when ASC was asked if it would like to make use of Corrective Service offenders with its work in the Reserve, the group decided to start work again on the site. In January 1994, a group of three Corrective Service offenders under the control of a supervisor, Ray Crowley, with the assistance of ASC workers, Doug Sharp and Warwick Exton restarted the program of weeding and planting on every Saturday morning from January to October.

After that date work on this project ceased.

### 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.

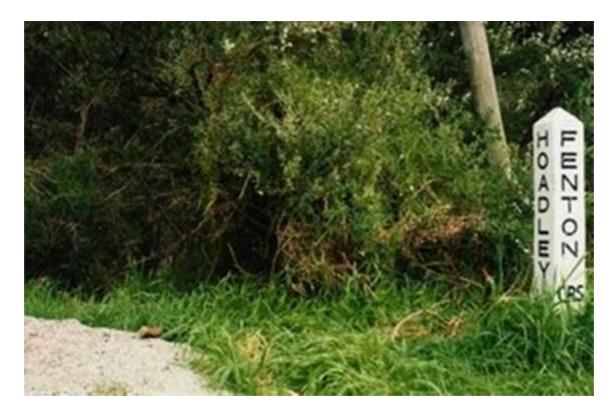
As part of the whole project, both sites were fenced on one side starting from where the track had been reconstructed right down to Grange Bridge.

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.

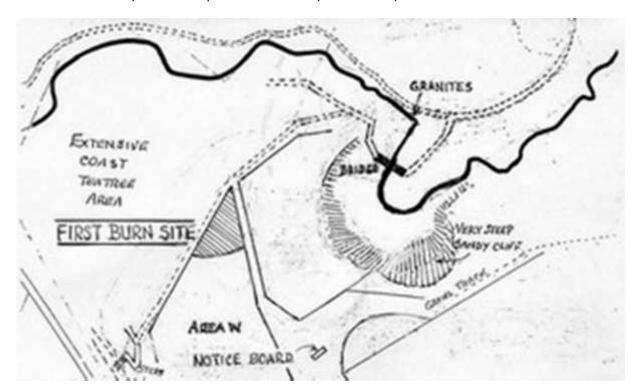


And so, in June and July 1994, the ASC work group got to work clearing out a tangled mass of Teatree, Pittosporum, Sallow Wattle and Kikuyu grass along the kerb line. The slope downhill away from the kerb was terraced with Tea-tree logs and stakes, filled to kerb level, matted, and planted out with Blackwoods,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

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

### **HEATHLAND REDEVELOPMENT**

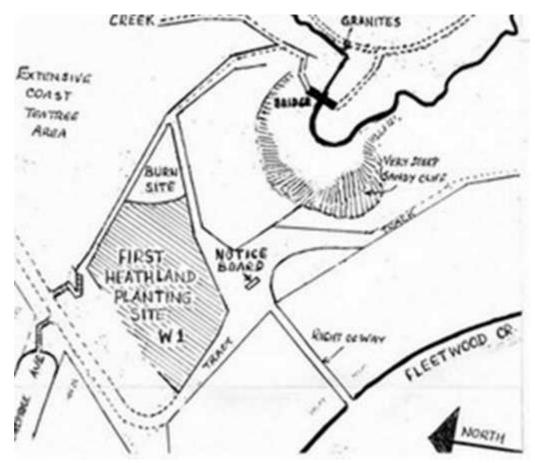
In the early 1980's, a fire must have occurred some 60 meters east from the Fleetwood right of way, because an area of very nice heathland plants had emerged there in the middle of an extensive teatree forest. The map shows the position of the very first and unplanned burn site.



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.

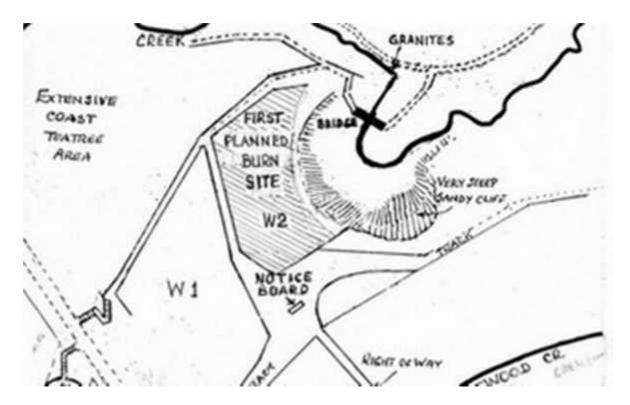


So between February 1996 and October 1998 the group started to weed the site preparatory to planting with local indigenous heathland plants. A variety of weed grass called Briza Maxima was prevalent and the group was advised to hand weed it. To completely eradicate this grass from the site, in the end, 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.



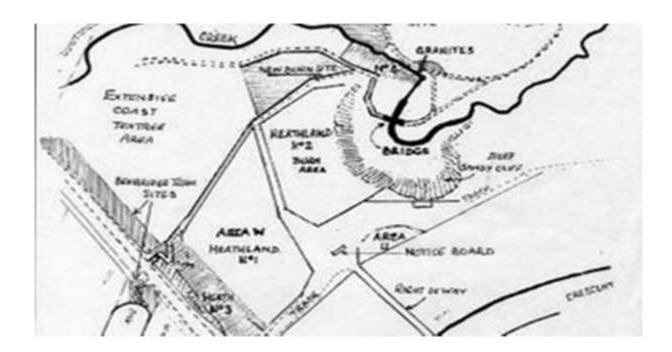
It was subsequently decided to extend the W 1 site to the west edging Bembridge Gully, and ASC applied for and received another National Heritage Trust grant of \$2200 in October 1998 to purchase heathland plants for this area. This work was carried on from April 1999 into 2000.

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.



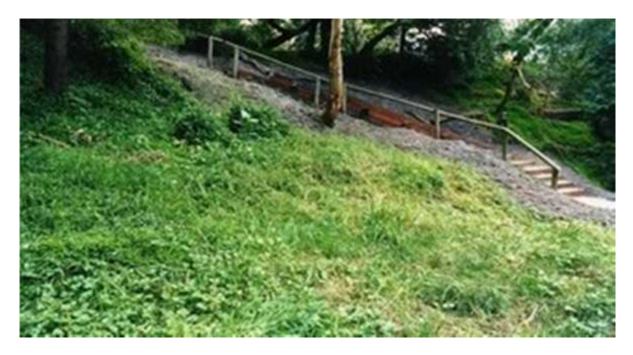
Another small Parks Victoria grant was raised to purchase plants to thicken the edges of the site along the fence lines & \$825 was received in June 2002. Final planting was completed by the end of that month.

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).

### **BEMBRIDGE ENTRANCE & GULLY WEEDING & REGENERATION.**

As part of a group policy to improve the appearance of the entrances of the reserve, ASC had applied for two grants prior to 1999 aimed at beautifying the entrance at the end of Bembridge Ave..

This photo taken in February 1999 shows part of the site with a new set of steps replacing older ones destroyed by severe street flooding two weeks previously.



Because both these applications had not been granted, the group decided to start a project there on its own and consequently in March 1999, weeding of the steep slope was commenced.

Over the rest of the year, the area was cleared of weeds, the slope terraced with tea- tree logs and 500 trees, shrubs, sedges and grasses planted.

The next photo shows the terracing and matting work in progress.



While this was a good start, further work was required, and in 2002, the group applied for a National Heritage grant to improve the entrance site and extend the work further down the gully.

And so, in January 2003, the group received \$3200 to carry out this task and most of the gully below the steps was weeded and terraced to prepare for the planting.

This photo shows some of the terracing and planting work completed at the bottom end of the gully with Mark Doyle inspecting it



This work continued through the rest of the year and into 2004.

In the course of the project, a long spell of hot, dry weather occurred and the group had to use its portable fire equipment on a number of occasions to pump creek water to the site to keep the plantings alive.

While the general area of the gully has been greatly improved, the east bank remains a continuing problem primarily because of the immense Radiata pines that have been there for many years.

### **BRIDGES BUILT IN THE RESERVE**

### **ROTARACT BRIDGE**

The first bridge built in the reserve was the Rotaract Bridge constructed in 1979 near the Melbourne Water sewerage pumping station off Baden Powell Drive near the roundabout at Brighton Street. Finance was provided by the Council and labour by Rotaract. 2005, because the foundations of the old bridge were being undermined by the creek, Council had a completely new structure erected.



### **CENTENARY BRIDGE**

In 1988, as part of the Frankston Centenary celebrations, the Council built a steel bridge over the creek at the rear of 12 Fenton Crescent. This facility gave Reserve users access along the lower section of the creek which had been virtually impassable prior to that time.

The photo below was taken at the official opening by the then Mayor, Cr.Garry Burleigh . He is second from the left on the bridge with the then ASC President David Lambie at far left of the group.



As a result of serious floods in December 1988, the foundations of the bridge on the east bank were almost completely washed away. Fortunately they were able to be repaired before the bridge collapsed. The photo shows the seriousness of the flood damage to the bridge.



### **BEATTIE BRIDGE**

In 1986, ASC received a grant to build a wooden bridge on the site of an early log crossing called Beattie bridge and named after a well-known local family who lived quite near it.

The location was some 100 metres north of the Parkside entrance.



Unfortunately, in December 1988 a massive flood demolished the structure and the group received additional funds to reconstruct the bridge in 1990.

### **GRANGE BRIDGE**

In 1992, ASC applied for a grant from the Victorian Dept. of Planning and Housing to build a bridge over the creek at a well-used crossing spot at the end of Bembridge Gully. The structure was built by David Lambie, son of one of ASC"s founders & was opened by local State member, Jane Hill in October 1992.

This photo shows Jane Hill opening this bridge with Warwick Exton, the then ASC President.



### **GRANITES BRIDGE**

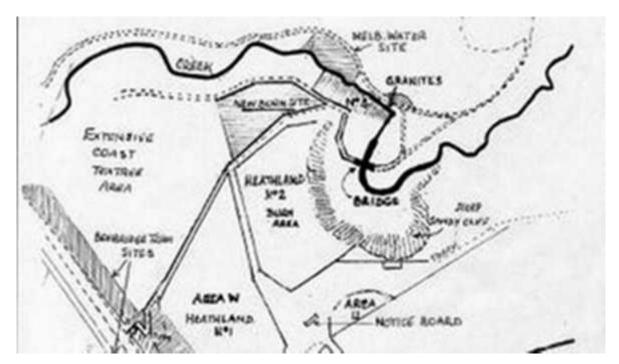
After the major works rerouting the creek west of the Granites in 2000, the Council decided to erect a bridge in place of the old ford crossing. The design was discussed with the ASC committee, which decided to opt for a suspension bridge. So, in 2001, a contractor was employed by Council to erect a steel suspension bridge 30 meters west of the Granites.

Because of the nature of the structure, Melbourne Water required that the footbridge had to meet a 100 year flood level standard, and the height of the pylons had to be increased by an extra foot. This alteration raised the height of the footbridge at its north end to about 4 feet above ground level which necessitated the construction of a

40 meter boardwalk from the bridge to ground at the same level further on.

This new bridge is quite an impressive structure and has become one of the main features in the reserve.

The map at Fig.8 shows the position of the bridge.



The next photo shows the bridge's western aspect.



### **TRACK CONSTRUCTION**

Apart from tracks built by the Council in earlier years, one from the Liddesdale entrance to the entrance of the two tunnels below 10 Fenton Cres., and another called the Fire Track from Hoadley through to Parkside, the tracks in the reserve had been established by people habitually taking the same path over many years and using logs for creek crossings.

In 1990, after Council had completed Centenary Bridge, paths and steps were constructed south of the bridge past the rear of the first few houses in Fenton Crescent as the old track was extremely difficult. The creek bank here was quite precipitous and there was very little space between the back fences and the banks of the creek.

Early in 1991, at the request of the ASC committee, the reserve ranger, David Skvor, built a wide track all the way down Bembridge Gully. The reason for the request was that the lower end of the gully was completely impassable in winter because of deep mud.

This track was ultimately continued down to Grange Bridge when it was completed in 1992.

In June 1991, Council built a retaining wall at the end of the gully to help control sand movement caused by underground water flow, and this made it possible to get rid of holes and improve the track surface.

In the same year, a 30 meter section of new track, including steps & bridgework was constructed at the rear of 22A Fenton on a muddy site subject to extensive clay slippage.

In October & November 1993, a 120 meter section of 1.8 M wide track was constructed some 20 M west of Fenton Cres, following the line of the street and running from No.26 Fenton through to the

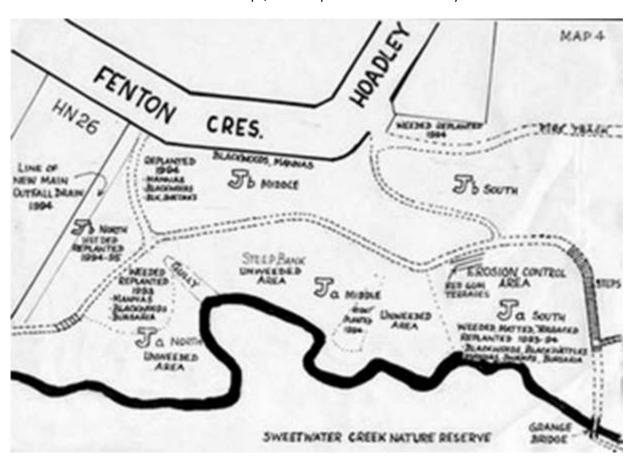
track down from Hoadley. Some 100 M of the track was cut into the sloping bank which was retained with tea-tree logs held up by star pickets wired in place.

About one year later, as a result of serious surface erosion, about 10 M of this track south of the Fire track collapsed and Mark Doyle and Dave Stewart built a series of red gum terraces to retain a new section of track. They also ran a section of 150 mm plastic pipe under the track right down to the creek to alleviate surface run off and the ASC work group planted the whole area below this new track, including the terraces, as part of its anti-erosion program mentioned previously. The information in this paragraph has been mentioned previously in the section on erosion.

In 1997, as part of a Melbourne Parks and Waterways grant, a 50 meter section of track and steps was built by Mark Doyle's group on the west side of the knoll going down to the Granites. The last 20 meters of this track was subsequently closed off when the Granites ford crossing was discontinued in 2000.

In 1998, a group of men working under a Work for Dole program, completed a 50 meter section of excellent steps leading down to the east end of Grange bridge during May and June.

Below is shown the location of these steps, and the photo shows what they look like.





In 2000, a major track reconstruction was carried by contractors for the Council along the rear of Fleetwood south from the top of the track up from Beattie Bridge along to last house before the playground, No.91.

The new track some 300 meters long followed the rear fence line of the properties & in one section, because of an eroded gully around a major street drain and pits, the contractor had to repair the site with anchored gabbion baskets to retain the fill for the base for the new section of track.

At the rear of No. 91, a set of steps took the path along the fence up to Fleetwood enabling discontinuation of a dangerous section in the steep gully where a number of Fleetwood Street drains discharge.

In 2003, the section of tracks, steps and bridgework behind Nos. 12 and 14 Fenton Cres was completely rebuilt by Council. One long run of 36 steps had not met the planning guidelines, & the next photo shows the very poor condition of these steps.



The new track used bridgework to avoid the need for such a long flight of steps. The next photo shows what this section of the track looks like today,

### **BOARDWALK**

In 2005, in conjunction with a major wetlands project financed by a number of Melbourne Water grants, a long 1.8 M wide boardwalk was built by Frankston City Council running basically along the creek line from Rotaract Bridge to Beattie Bridge. This was completed in May 2006. This photo shows what it looked like in March 2007.

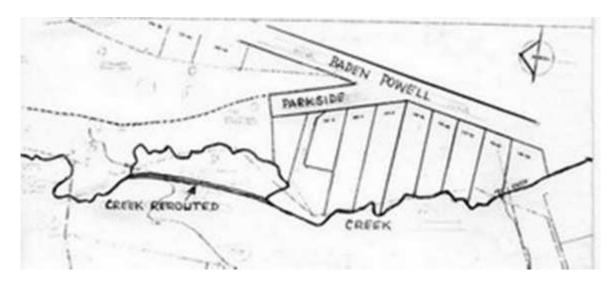


The completion of this boardwalk along the creek gave Reserve walkers something they had requested for many years – the opportunity to use a creek side track right through the reserve instead of having to cross the creek at Rotoract Bridge and use the footpath along Baden Powell & Parkside to the Fire track.

### **MAJOR EROSION CONTROL WORKS**

In 1988, as a result of complaints by residents of Parkside Grove about their Properties being undermined by the creek, Frankston Council approached Dandenong Valley Authority, the body then responsible for the management of the bed and banks of the stream, about dealing with this problem. A decision was made to reroute the creek and a new, straighter bed some 150 meters long was cut to the east of the old bed. This was lined with lava boulders and continued to a point some 50 meters north of Beattie Bridge.

Here is a map of the area, followed by a photo showing the site immediately after completion of the works.





The next project dealt with erosion of the bed and banks more generally.

At the prompting of ASC, which was very concerned about what was happening to the creek at the end of Grange Road and how close the creek had moved to the sewer line, in 1993, Melbourne Water began a major erosion control program. This program involved the construction of seven small dams with rock outfalls to help reduce erosion by cutting down the kinetic energy of the stream, and major repair of the bed and banks between Whale Rock and the end of Grange Road.

The extent of this particular project may be gauged from this next photo taken below the end of Grange Road.



This photo shows the last and largest of these dams being built close to the tunnels north of Centenary Bridge.

.



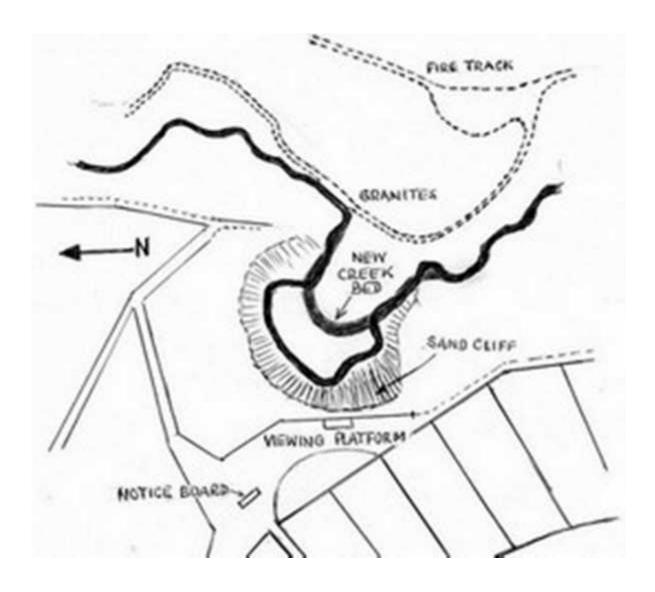
At the site, between Whale Rock and Grange bridge, where the bottom and banks had been severely eroded, the engineers built the bed up with half a meter of granite boulders as well as lining the banks particularly on the west side.

Unfortunately this work had to be repeated the next year because the rockwork on the Grange side had not been extended far enough to sufficiently protect the sewer line.

In 1988, Melbourne Water again carried out a major project by rerouting and straightening the creek between the pipes under Baden Powell Drive and the end of the 1988 DVA works.

Here we see a map of this construction site. In 2000, Melbourne Water decided to carry out a very large engineering project rerouting the creek near the rear of No. 49 Fleetwood Cres.

As the following map shows, about 100 meters of creek bed was completely rebuilt and a large irregular bend modified to take the creek away from a dangerous sand cliff.



The purpose here was twofold, first to protect the main sewer line situated near the top of the cliff, and to alter the cliff face to deter children from digging dangerous holes in it. This picture shows what the sand cliff looked like.



The next photo shows what the stream looked like some 40 meters south of the cliff

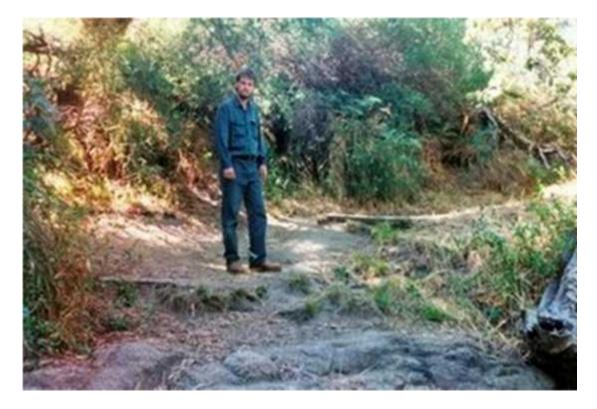


Next one shows what that area and the cliff looked like after the project had been completed.



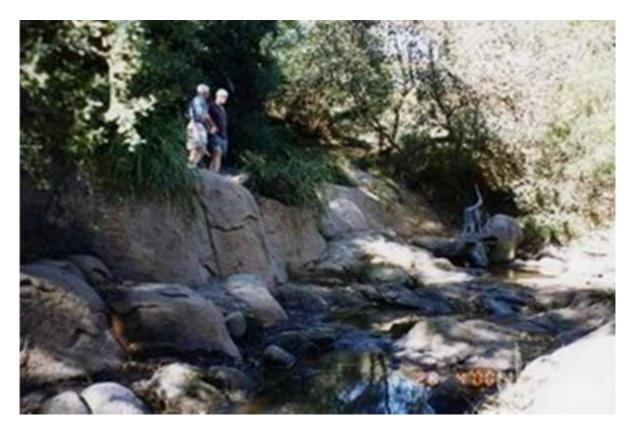
As part of this project, Melbourne Water kindly rebuilt some 15 meters of the east bank of the Granites which, over the years had been badly eroded by the stream when in flood.

The next photo shows the parlous state of this path prior to the Granites repair and Mark Doyle in the foreground.



A specialist concrete engineer pumped in a base and then, using crushed granodiorite from the site, crafted the surface of the concrete so that it closely resembled the rocks in the area.

This photo shows the completed work on the site.



### **SWEETWATERCREEK MANAGEMENT PLANS**

As stated previously, the first management plan developed for the area was prepared by local landscape architect, Grace Fraser` F.A.I.L.A. in association with Plant Ecologist, Winty Calder, M.Sc. and assisted by Paule Jardine.

In 1975, the group was able to employ Grace to carry out his task using a Federal

Government grant obtained under the Regional Employment Development Scheme.

Grace's report covered four main areas:-

- 1. A general statement on the existing uses, features & infrastructure of the area,.
- 2. A description of the natural systems of the area,
- 3. Proposals for the development of the site,
- 4. Recommendations for rehabilitation works

Council maps were used by Winty Calder to identify plant community areas

In 1991, the group applied for another Federal grant from Australian Parks & Wildlife- Save the Bush organization and this was grant was used to employ a botanist – Kathie Strickland, B.Sc.Hons (Botany) – to prepare a detailed vegetation management plan.

This plan, published in May 1992, laid out a detailed record of the indigenous plants and weed species then in the Reserve, split into alphabetically designated areas.

It then set forth steps to return the vegetation to a condition as close its original as possible.

This plan has been used since then as the basis for remedial works carried out in the Reserve.

In 1999, Council employed a Land Management Planning consultant - Terra Forma Pty.Ltd. to carry out an even more detailed description of the areas of both the Upper and Lower reaches of the creek, although most of the report, in fact, refers to the Lower section of the Reserve.

This plan covers the following items:-

- 1. Reserve description
- 2. Management directions uses, goals, works programs
- 3. Resource Conservation -hydrology, erosion control, vegetation management, etc. Including detailed statements of goals, objectives, and action plans

An appendix covers detailed budgeting of the action plans. Copies of this plan may be seen at Frankston City Library.

### **THE RESERVE AND COOPERATIVE EFFORT AND PERFORMANCE**

The current condition of this reserve as a passive recreation area reviewed against the way in which it was established and its original objectives, could be

Considered a credit to the joint efforts and the excellent cooperation of :-

- 1. Action Sweetwater Creek Inc.
- 2. Frankston City Council, --- particularly the Natural Reserve rangers, and
- 3. Melbourne Water Corporation..

Site work, apart from infrastructure such as major tracks, steps, bridges, and the boardwalk, has been carried out over the years by the ASC work group and FCC parks and recreation people in the friendliest manner possible, and the Council itself has been generous in budgeting for the capital and the maintenance works.

Melbourne Water Corporation must also take great credit for the extensive anti- erosion works carried out on the bed and banks of the creek between Baden Powell Drive and the

Nepean Highway. Not only were the works carried out to a very high standard professionally, but the engineers always paid particular attention to making sure that the natural beauty of the area was not impaired in order perhaps to simplify engineering design.

At this point of time, to conclude this short history of this Reserve, and keeping in mind that a great deal more work needs to be done, I feel we should reflect for a moment about the beginning of this association.

Looking back and I quote from the words of one of the early members "Action Sweetwater Creek has benefitted from long-serving, committed and sometimes visionary members including in the early years:-

Lucy Henty, Keith Henderson, Margaret Clark, Charles Losewitz, Andrew and Anthea Gooding, Gladys Buckland, Judd and Flora Douglas, Brian and Lois Dixon-Ward, Robert Lambie, John Tadish, Ailsa Spicer, Brian Murphy, Peg Thompson, Alan Good and Alison Walker."

There are other members who have made long term and valuable contributions whose names should be inscribed:-

Stan Chapman, Ole and Muriel Petersen,

Some of these founders are no longer with us, but I hope that they, in particulars would have been well pleased with the way in which their hopes and aspirations have been put into effect, and that the others are.

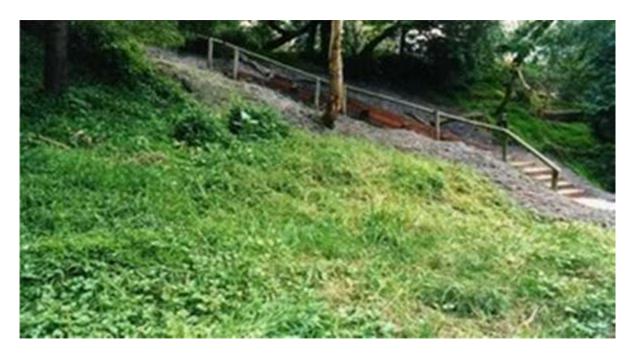
I sincerely hope so.

### Warwick Exton

### **BEMBRIDGE ENTRANCE & GULLY WEEDING & REGENERATION.**

As part of a group policy to improve the appearance of the entrances of the reserve, ASC had applied for two grants prior to 1999 aimed at beautifying the entrance at the end of Bembridge Ave..

This photo taken in February 1999 shows part of the site with a new set of steps replacing older ones destroyed by severe street flooding two weeks previously.



Because both these applications had not been granted, the group decided to start a project there on its own and consequently in March 1999, weeding of the steep slope was commenced.

Over the rest of the year, the area was cleared of weeds, the slope terraced with tea- tree logs and 500 trees, shrubs, sedges and grasses planted.

The next photo shows the terracing and matting work in progress.



While this was a good start, further work was required, and in 2002, the group applied for a National Heritage grant to improve the entrance site and extend the work further down the gully.

And so, in January 2003, the group received \$3200 to carry out this task and most of the gully below the steps was weeded and terraced to prepare for the planting.

This photo shows some of the terracing and planting work completed at the bottom end of the gully with Mark Doyle inspecting it



This work continued through the rest of the year and into 2004.

In the course of the project, a long spell of hot, dry weather occurred and the group had to use its portable fire equipment on a number of occasions to pump creek water to the site to keep the plantings alive.

While the general area of the gully has been greatly improved, the east bank remains a continuing problem primarily because of the immense Radiata pines that have been there for many years.