

WATERSHED Torbay

N E W S

No 5

News of Torbay Catchment Group & the Special Project: Watershed Torbay

Oct 2003

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•Landcare & Perennial Field Day
•Soils & Fertilisers Day

Meeting Dates

Lake Powell

Check out the Watershed Torbay website:

www.torbay.scric.org

Contact: 9842 5760
W&RC or 9845 1081
Torbay Catchment Group

Catchment Chairman's Message- Work on Weeds!



Andrew Marshall receiving the Lotterywest \$5000 grant from MP Monty House for the Lake Powell bird hide. The bird hide was build as part of the Green Corps team efforts.

Congratulations to the Green Corps Team under the leadership of Terry Davey, for all their efforts in the catchment during the six months from February to August. The team developed their skills wonderfully as a group and we all wish them every success for their future. We hope that they will look back proudly on all the work that they achieved in our catchment. They certainly made a difference!

Watsonia spraying time is here again. The City of Albany Bushcarers are doing a fantastic job on the Lower Denmark Road from Torbay to Elleker. Westnet Rail will be spraying 10 metres either side of the railway line from Redmond to Elleker. Organisers of the Torbay bird walk are spraying areas around the Torbay townsite. At Elleker, work is being carried out with community workers organised by Tim Harwood. There is still spray available for use by residents – so please let me know if you would like any (phone 9845 1081 evenings). With all of this activity we should begin to see some marked improve-

ments in the watsonia infestations in the catchment.

Another AGM has been and gone. Very many thanks to Dale Holley, secretary, and Graeme Heighton, treasurer, and all who have been involved, especially Maurice McCormick, for all their support and hard work during the last year.

Andrew Marshall Chairman

The Big Picture - Torbay, SCRIPT and the Regional Strategy

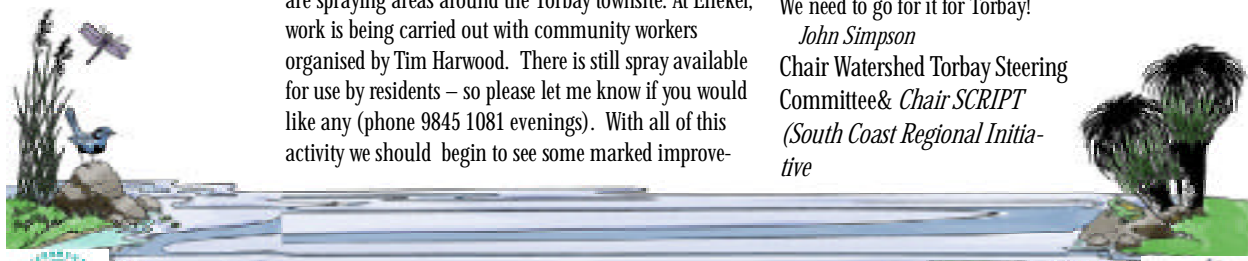
The Watershed Torbay project needs the community of the catchment to put in place those projects that are most important to the health of their land and waterscapes. Commonwealth and State funding opportunities may be available to match the resources committed by locals. Even before the South Coast (SCRIPT) Regional Plan is accredited (expected mid 2004), we need to vigorously pursue funds from the Natural Heritage Trust, National Action Plan for Salinity and Water Quality, and a revitalised National Landcare Program. We only have until November 17 to submit proposals to the NHT



Secretariat for any of these funding sources.

We need to go for it for Torbay!

John Simpson
Chair Watershed Torbay Steering Committee & Chair SCRIPT
(South Coast Regional Initiative)



Algal Blooms: scientific uncertainty no excuse for inaction!

Watershed Torbay has a target of reducing algal blooms by a third of their current incidence within the next 20 years.

The Watershed Torbay Steering Committee has endorsed a suite of actions aimed at achieving this target. These actions include revegetating and fencing streams, converting annual pasture to perennial pasture, encouraging the use of best management practices for treating dairy and piggery effluent, and the adoption of environmentally friendly fertiliser practices. Will the implementation of these very substantial actions result in less blooms?

Although it's reasonable to expect some reduction, the status of our scientific knowledge doesn't allow us to confidently predict the degree to which our energy and hard work will pay off.

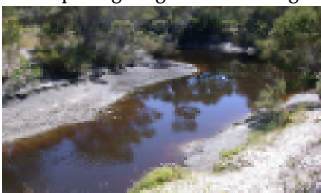
On average, the current number of months per year in which the Marbellup Brook plug, Lake Powell and Torbay Inlet experience algal blooms is 3, 6 and 2, respectively. We know that the main driver of algal blooms is the high nutrient load carried by our streams. However, we don't have a very good grasp on the many complex biological mechanisms that interact to trigger specific blooms at specific times and places.

The suite of actions aimed at reducing blooms assume that if we reduce nutrient loads in our streams by a third we will see the same level of reduction in blooms. This is a naïve assumption that will be the subject of ongoing evaluation as monitoring results are collated under the *Watershed Torbay* project.

To some people, this lack of scientific certainty is an excuse for inaction. What we do know for sure is that the problem is only going to get worse if we don't turn around the fundamental cause of nutrient pollution.

One of Australia's pre-eminent scientists, Peter Cullen puts it this way: *"Yes we'll get better knowledge and more sophisticated knowledge as we go down the track but we certainly know enough to start the journey we should make a start rather than have endless procrastination."*

The communities of the Torbay catchment are committed to the journey of learning by doing. Let's hope we get a good result along the way! Terry



The Marbellup Brook plug in a happy state – no algal bloom!

Nutrient Balance: case studies of intensive agriculture in Torbay

What is Nutrient Balance? Nutrient balance is the difference between nutrient inputs (fertiliser, feed, manures) and outputs (products such as milk, hay, animals etc)

Why should we be interested in nutrient balance? Management actions used to reduce nutrient loss often do not directly affect nutrient balance. It is important to identify ways to improve nutrient balance by targeting both inputs and outputs. Some land uses are understood to have high levels of nutrient export, in particular intensive agriculture, but specific data on levels of nutrient export and particularly nutrient input, which is the critical factor, are often limited.

Recently completed case studies identified nutrient inputs and outputs for some intensive agricultural activities to improve knowledge about the levels of nutrient accumulation and potential loss within the Torbay catchment. The case studies also aimed to account for the finite capacity of soils to store excess nutrients, to provide indications of nutrient breakthrough and accumulation.

What do the case studies say about nutrient balance for intensive agriculture in Torbay? All the case studies indicated that nutrient inputs exceed outputs. This suggests that nutrient stores are increasing leading to a build-up in soil nutrient status and fertility. The ratios of inputs to outputs ranged between 3.7:1 and 5.8:1 for phosphorus and 1.6:1 and 4.9:1 for nitrogen. Initial estimates indicate that it would require about 15 years of current nutrient excesses (which are approx. 20-60kgP/ha/yr and 16-130kgN/ha/yr) to completely saturate the top 10 cm of soil with phosphorus. Standards of maximum allowable phosphorus saturation established in other countries would have been exceeded in the first year for the top 10 cm of soil.

What does this mean for management of nutrients? Deciding on management practices needs to consider how actions address the issue of "nutrient balance". This is important because some actions will delay nutrient loss, or move the problem from one location to another, rather than impacting overall inputs and exports. Actions could include encouraging run down of nutrient stores, increasing product output that takes more nutrients off site, nutrient input

reduction, increasing storage in plants preferable perennials, and replacement of imported nutrient sources.

The January soils and fertilisers field day will address the issue of nutrient balance, see the notice in this newsletter!

David Weaver Department of Agriculture



Cattle can't read worth a damn!

Torbay Treats Albany Sewerage

Torbay Treats Albany Sewerage

All the sewerage from Albany is treated at the Timewell Road Treatment Plant to secondary effluent standard. The wastewater is then pumped into two holding ponds at the Gunn Road treefarm. The wastewater is pumped from the ponds to overland flow grassed areas so that nitrogen can be stripped by attachment to clay particles in the soil.

Surface run off from the grassed areas is collected in the 365 ML main irrigation dam for distribution over the 280ha blue gum plantation. An additional 120 ha of rain fed plantation provides a visual and storm run off buffer.

The treefarm is at the very head of the 7-Mile Creek sub-catchment of the Torbay catchment. Discharge from the treefarm is monitored at the Gunn Road gauging station.

Discharge volumes and nutrient concentrations measured at the Gunn Road gauging station are all less than observed in previous years. Using the annual average nutrient concentrations, the estimated annual loads in Seven-Mile Creek and ground water discharge are 850 kg of Total Nitrogen and 23 kg of Total Phosphorus. These are within the current ministerial limits.

Excerpts from the Water Corporation Albany Effluent Irrigation Treefarm 2002 Annual Report



Time to Fox Bait!

Monty Walker farms near Elleker and is active in the Torbay Catchment Group. He has been fox baiting for several years with great success!

It is important to have as many landholders as possible involved in a collective fox baiting program, particularly those with properties adjoining nature reserves and major waterways where foxes breed and travel.

Anyone interested in undertaking a fox baiting program on their property must get a permit from the Department of Agriculture 444 Albany Hwy Albany or Denmark office. The handling of baits (1080) is potentially harmful so you will need to undertake some simple training to ensure safe handling of baits. Training can be done as a group. Agriculture WA also provides a Farmnote (N059/2001) which contains information about fox baiting.

There are 2 types of baits available:

1. Pre-treated dry meat - ready to lay
2. Rodamine Oat - for insertion into a

bait of your choice

Unfortunately, it takes some time for the 1080 poison to take full effect. This may give the impression that the baiting has been unsuccessful because the fox has time to disappear into the bush or travel considerable distance away from the bait site. On some occasions I have found dead foxes up to 2km from where I lay baits.

I have had considerable success by placing baits at a site where I regularly bury dead stock or offal. I usually wait until I see evidence of disturbance (digging) then bury a bait at this exact location. Baits are usually buried approximately 20-30mm deep. For popular sites, such as the one described, I recommend quick replacement of baits as they are taken. I have had 5 baits taken in consecutive nights from one site.

Care should be taken not to leave too much human scent around the bait site. I use a 4-wheeler motorbike because I am able to lay the baits without touching the ground. Also, care should always be taken when handling the poisoned baits. Rubber gloves should be worn and appropriate utensils, such as a pair of pliers, should be used to pick up the bait. A short-handled shovel is ideal for covering the bait and levelling the area around it so that any tracks left by a fox can be easily seen. As mentioned previously, basic training in the handling of baits will be provided by AgWA prior to commencement of any baiting program.

Don't expect to always see the results of your baiting program. Last year I laid over 50 baits, most of which were taken, and only found 8 dead foxes. I suspect that many baited foxes died in the bush and were never recovered.

Monty Walker 9844 6040

What Landholders Said in the Survey. . . .

Who answered the survey? 173 of the 580 landholders in the Torbay Catchment provided data to the survey sent out in late 2002. The survey was a good sample of landholders although young residents were under represented.

What size are Torbay properties? 38% respondents had residential or small landholding < 10ha
28% had properties between 10ha-100ha in size

27% of respondents had properties > 100ha

What are the key land uses? A high percentage 40%, graze beef cattle on their properties, a further 8% graze sheep. There are a range of other grazing farms with goats, alpacas, 2 dairies, a piggery and miscellaneous poultry.

What are the barriers to landuse change?

The survey showed that key barriers to changing landuse practices are:

- lack of time
- financial resources and
- off property commitments.

Over half of the respondents do not make any income from their properties. Few landholders 11.6% are comfortable with the way things are in the catchment, 61.6% are not comfortable.

How can landholders be assisted to make changes? Over 100 farming landholders responded saying that most effective support would be:

- Provision of independent soil test advice
- Technical assistance and information for pastures and fertiliser management
- Rebates for long term protection and management of drains and waterways

What catchment characteristics are of most importance to landholders?

- Quality of water in waterways
- Level of protection of native vegetation and fauna
- Level of rehabilitation of waterways and drains with vegetation and bank stabilisation
- Extent of weed infestation in the catchment
- Whether management of the drainage system meets needs of the environment and landholders
- Extent of native vegetation cover in the catchment
- Status of fisheries in the inlet and waterways
- Degree of satisfaction about living in the catchment area
- Level of community participation local organisations

Copies of survey results are on the website or get them from Louise 9848 1019

Torbay goes to the Royal Show



Maurice McCormick at his favourite place watching over the catchment. Jane Orchard with recently fenced waterway.

An inspiring photographic display of Torbay landholders who have been busy with landcare work is off to the Royal Show. The display was put together by the Torbay Catchment Green Corps team assisted by Green Skills team leader Terry Davey and Louise Duxbury. Very positive feedback has already come back to the team from people who have seen it. The display has already been exhibited at the local stores at Redmond, Cosy Corner, Elleker, and Youngs Siding as well as in the Albany Library. It features long term catchment leaders like Maurice McCormick as well as landholders new to the catchment such as Jane Orchard. Watch out for it at local shops and public places!

A Better Place to Live

I hear the cry of the Catchment Group

'Come on crew pull your weight!'

I hear the cry of the catchment land

'Come on crew do your research!'

Protect my creeks and wetland shores

Remember to super when the weather is right

Plant some trees to soak up the water

Fence the creeks to protect my edges

Control the weeds that threaten my bush

Torbay Catchment Group Committee - 2003

The Torbay Catchment Group AGM in September re-elected the following residents onto the committee:

Chairperson Andrew Marshall 9845 1081

Deputy Maurice McCormick 9845 1044

Secretary Dale Holley 9845 1026

Treasurer Graeme Heighton 9841 4114

Committee Members

Phillip Marshall, Chris Westcott, John Kratochvil, John Blaney-Murphy.

All members express satisfaction with recent activities in the catchment. Input into the Group from all residents is welcome.

Contact:

Torbay Catchment Group
c/-RMB 9055 Albany 6330.

Meetings - all welcome!

Torbay Catchment Group

5 November Wednesday

10th December Wednesday

Watershed Torbay Steering Committee

18th November Tuesday

Upper Catchment Residents Needed

Landholders who would like to represent the upper catchment at the Watershed Torbay Steering Committee meetings on a monthly basis are sought. It is important to have the whole catchment discussing issues, solutions and allocation of funding. Anyone interested please ring David Rushton 9841 0108.

Reed beds filter wastes

Filtering yard washings and silage effluent through constructed reed beds is saving money for British dairy producers in Eire, according to a recent report in the English magazine Farmers Weekly. The producers using them regard them as low cost, low maintenance systems. According to Dr Harrington, a senior conservation scientist for the UK National Parks and Wildlife service, a reed bed of 1 ha is needed to process run off from every 1 ha of concrete yard.

One of Eire's most impressive reed beds is at Kilmeaden Cheese Factory where 10 ha of wetland cleans and re-oxygenates 1300 m³ of dirty water a day. It is estimated that the reed beds save the factory 683,000 pounds per year. Moreover the wetlands turn a farm pollutant into an environmental resource for wildlife and other industry. For example, trout have been introduced into the final pond from one of the reed bed systems.

Thanks to Phillip Marshall for this information.

Coming Up in the Catchment!

INVITATION

Information on wastes wanted

Green Skills is developing projects that turn waste into compost. A project could be developed in the Torbay catchment if there is enough solid waste material available to make it worthwhile. Wastes of interest include animal and vegetable wastes and vineyard prunings. Contact Albert Adams Green Skills Albany office 9842 6259
grskillsalby@greenskills.green.net.au

If you do not want to receive this newsletter ring Louise Duxbury, newsletter editor on 9848 1019. Articles, poems, photos, and other contributions welcomed - mail to: Green Skills PO Box 577 Denmark WA 6333 • louseduxbury@greenskills.green.net.au

