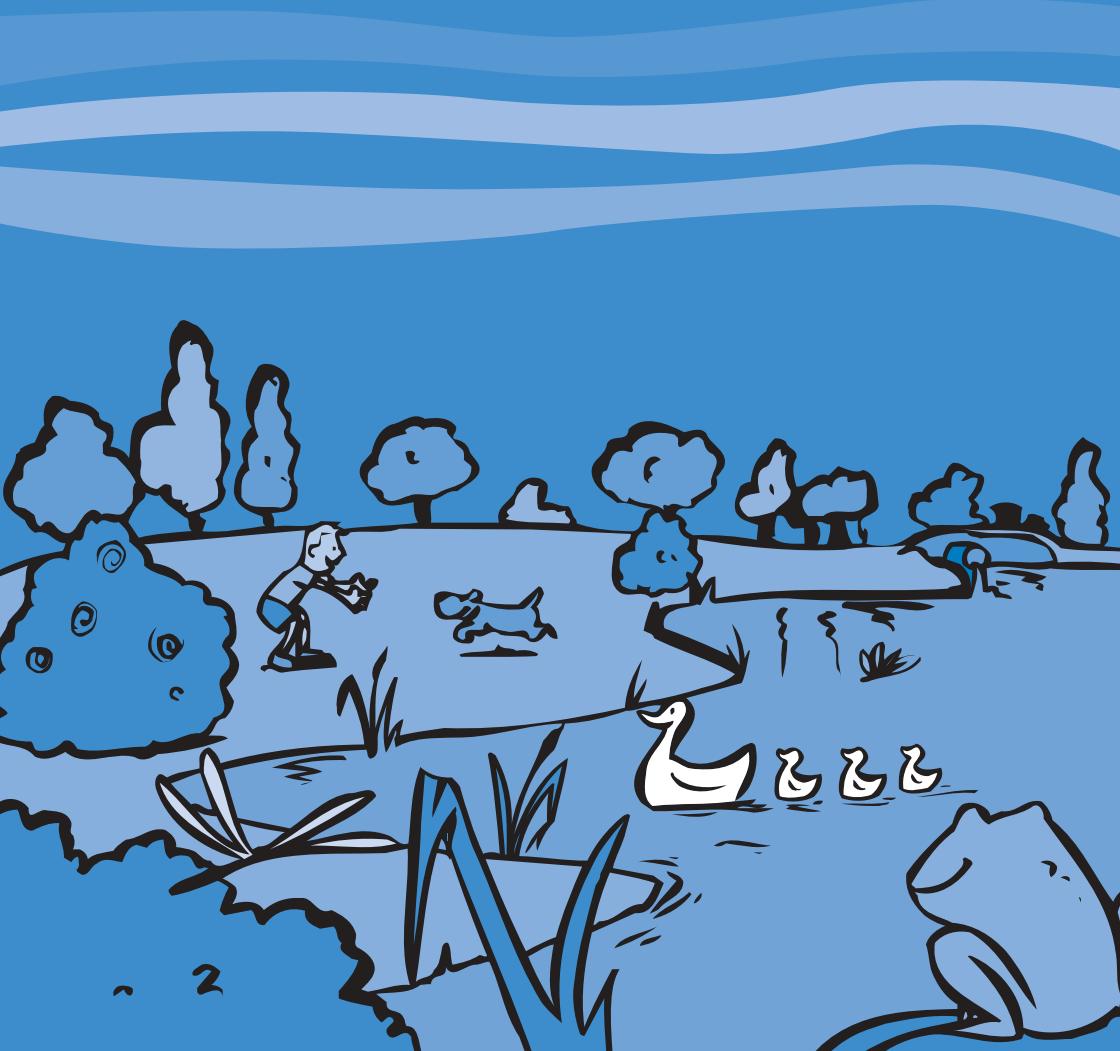


stormwater education manual

industry booklet



stormwater industry booklet

Acknowledgments

This booklet was prepared by Toni Domaschenz, Waterwatch Victoria.

Assistance from Donna Pilgrim and Bronwen Burr, North Central Catchment Management Authority; Andrew Harris, Central Highlands Waterwatch; Matthew Jones, City of Salisbury; Old Joe's Creek Waste Wise Automotive Project Partners; the City of Greater Bendigo; and the VSAP (Victorian Stormwater Action Program) – Waterwatch Stormwater Education Steering Committee are gratefully acknowledged.

VSAP - WATERWATCH STORMWATER EDUCATION STEERING COMMITTEE
Jane Ryan and Paul Puhar, Waterwatch Victoria; Leanne Cini, EPA Victoria;
Jon Leevers, North Central Catchment Management Authority; David Hodgkins, Goulburn Valley Water; Catherine Barnes, Corangamite Catchment Management Authority.

Designed and produced by SASI Marketing.

Funding This project has been assisted by funding from the Victorian Government through EPA Victoria as part of the Victorian Stormwater Action Program.

Copyright This manual has been produced as a resource for Waterwatch Co-ordinators, Waterwatch Facilitators and teachers and may be reproduced and used for educational purposes. Acknowledgement should be given to Waterwatch Victoria. Permission must be obtained to reproduce the material in this manual for any other purposes.

Disclaimer This publication may be of assistance to you, but Waterwatch Victoria, its employees and other contributors do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaim all liability for any error, loss or other consequence that may arise for you relying on any information in this publication.

stormwater industry booklet

Waterwatch Victoria Urban Stormwater Industry Booklet

| | |
|---|----|
| Acknowledgements | |
| About the Booklet | 2 |
| What is Urban Stormwater? | 3 |
| Waterwatch and Urban Stormwater | 3 |
| Why Work with Business? | 4 |
| Promoting Partnerships with Business | 5 |
| "STORM - Urban Stormwater Business Program" | 6 |
| Process Model | 7 |
| The Process | 8 |
| Case Studies | 13 |
| 1. The Ballarat Stormwater Awareness Project 2002 | 14 |
| 2. "Be Stormwater Smart" - The Pollution Prevention Program | 16 |
| 3. Old Joes Creek Waste Wise Automotive Project | 18 |
| Environmental Site Survey Waterwatch / Stormwater Officer | 20 |
| Stormwater Issues and Potential Actions | 28 |
| Site Report Form | 30 |
| Acknowledgement Letter | 31 |
| Environmental Site Survey for Secondary Students | 32 |
| Environmental Site Survey for Primary Students | 38 |

stormwater industry booklet

About the Booklet

Are you ready for a new and exciting relationship? Now is a great time to learn about the benefits of working with commercial and industrial businesses (**thus referred to as “Businesses”**).

This booklet is designed to help you start or build on your business relationships.

Anyone undertaking Urban Stormwater Educational Activities will find a benefit in reading this handy guide. This includes urban stormwater officers, school teachers, waterwatch presenters, local government employees, urban water authority officers, EPA Victoria officers or catchment management authority employees.

You will find in this booklet:

- background to urban stormwater and why Waterwatch is now working with industry on stormwater management;
- A process model and information on how to work with industry;
- A variety of ongoing partnership opportunities;
- Case studies;
- Surveys for Waterwatch or schools to use with business;

Welcome to the world of “STORM - Waterwatch and Business Stormwater Program.”

Goodluck and enjoy.

stormwater industry booklet

What is Urban Stormwater?

Urban stormwater is water that runs off impervious surfaces, such as roads, roofs, driveways and footpaths during and after rains. This water flows into a system of gutters, drains and pipes before it enters our waterways.

In some cases, stormwater is filtered through a wetland or litter trap before it flows into a river, however in most cases it flows directly into our rivers, creeks, lakes and oceans **untreated**.

Urban stormwater pollution can come from residential areas, commercial and industrial areas as well as roads, public open spaces and from urban streamsides. This pollution includes rubbish, chemicals, sediment and vegetation.

Waterwatch and Urban Stormwater

Waterwatch Victoria is part of a national community based water quality monitoring network which actively involves community groups and individuals in the protection and management of waterways.

In recent years, the issue of urban stormwater pollution has become a focus for Waterwatch coordinators, facilitators and volunteers. Federal, State and Local government agencies are also investing in strategic water quality improvements.

Through actively encouraging the implementation of awareness and education programs, Waterwatch has promoted pollution prevention with schools, community groups and also Councils. Stormwater education is now a very popular Waterwatch activity throughout Victoria. This education process leads to on ground changes by community groups, and to water quality improvements in urban areas.

Across the state, more and more Waterwatch groups are initiating contact with businesses.

Why Work with Business?

Working with business and industry can have a number of benefits to a local Waterwatch Program including:

- raising awareness of business owners and employees about environmental issues;
- identifying potential pollutant sources;
- identifying and promoting businesses with ‘good’ practices;
- understanding of industry operations and their constraints;
- establishing partnerships for improving water quality;
- sponsorship by businesses and local government;
- improving the image of businesses to the local community;
- businesses involved in water quality monitoring; and
- businesses monitoring their practices and reducing their environmental footprint.

Councils across Victoria are working to reduce urban stormwater pollution. While councils are undertaking enforcement, infrastructure and planning changes, this program gives you the opportunity to assist councils deliver the community education component of their plans. Involving industry with the Waterwatch program assists council in their aim to reduce pollution from urban centres.

The following pages contain a program for promoting onsite improvements to business stormwater management. The program incorporates: making contact; surveys; follow up; and development of an ongoing relationship. A potential marketing slogan is:

“STORM - Urban Stormwater Business Program.”

stormwater industry booklet

Promoting Partnerships with Business

There are a number of additional opportunities for you to work with businesses. When you initiate contact with businesses you are encouraged to discuss opportunities with your steering committee and with the local council.

Businesses involved in the partnership could:

- assess their stormwater impacts and educate managers and staff about how to make changes (STORM program)
- become sponsors of your stormwater Waterwatch program
- encourage their staff to become involved in Waterwatch activities
- undertake water quality monitoring
- donate resources to Waterwatch monitors or schools

While each of these options are discussed in this book to some level of detail, the focus for the partnership opportunity herein is the STORM program.



stormwater industry booklet

"STORM - Urban Stormwater Business Program"

This exciting program offers a survey based assessment tool for businesses to improve their environmental performance. The project officer will need to work with the business owner / manager to:

- identify business environmental performance strengths and weaknesses;
- identify appropriate changes to business practices; and
- develop an ongoing relationship.

Action, Action, Action, the STORM program provides benefits to:

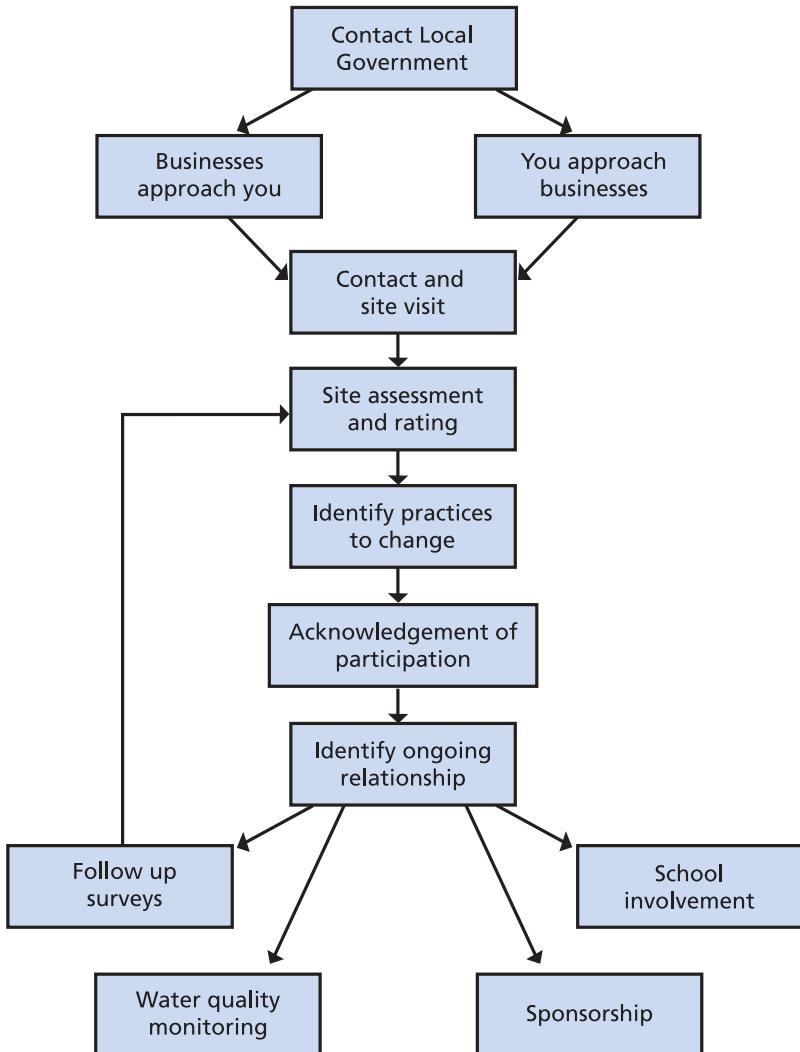
- businesses;
- the environment (especially local waterways);
- local government;
- schools;
- urban communities; and
- Waterwatch.

This program uses onsite visits, surveys, and water quality monitoring to educate businesses about their environmental responsibility for preventing urban stormwater pollution. This can lead to changes in practices, financial savings and long-term improvements in water quality.

The flow chart on page 7 outlines the process for establishing and maintaining your relationship. This relationship need not be linear, as explained on pages 8-12.

stormwater industry booklet

Process Model



stormwater industry booklet

The Process

1. Contact Local Government

When starting the program, it is important to talk to your local council. This will ensure you have their approval and support. Councils are powerful partners and their support is guaranteed to benefit your partnership. They may have a stormwater officer to assist you. You need to be aware of their expectations / restrictions on the program, to ensure this is a positive relationship with business.

2. Initial Contact

Every business involved in the program needs to be aware of how the information from the project will be used. Their results and the degree of their involvement will be kept confidential unless they agree otherwise. If they agree, their results and information about their involvement may be used for public relations purposes.

a. businesses approach you

It is a good idea to establish what the business hopes to achieve and to discuss what you can offer them. They may not be aware of the variety of opportunities that you can offer, and a brief conversation may yield a number of positive options. If the business is not interested in the STORM program, they may be interested in other opportunities eg. sponsorship or water quality monitoring.

b. you approach businesses

After consultation with your local Council, you may approach specific businesses or business districts. These businesses should come from a catchment identified as a potential stormwater pollution hotspot. Target businesses that you think will be enthusiastic and committed to the program. They are likely to encourage other businesses, the media and the community to get involved.

stormwater industry booklet

3. Site Visit and Contact

Before undertaking the survey, you must understand the following components:

- the program (including Occupational Health & Safety issues - see the Waterwatch Victoria Urban Stormwater Occupational Health & Safety Booklet);
- the surveys (pages 20-27); and
- forming strategies (pages 28-30).

After identifying businesses, project officers should make an appointment with the business owner / manager. During the visit, outline the STORM program, and describe the wider Waterwatch program, and the opportunity for developing a great working relationship. Make sure you wear your Waterwatch name badge to each visit.

While the ideal program involves an ongoing survey and evaluation, the business may be more interested in water quality testing or hosting tours (pages 11-12).

4. Site Assessment and Rating

Surveys can be found from page 20-27. (Modified surveys for schools can be found on pages 32-41). You need to work with the manager to make the business assessment. When you have completed the survey, fill in businesses environmental rating and start the report (page 30). If the business wants to complete a more detailed environmental assessment you should recommend they gain assistance from local government.

stormwater industry booklet

5. Identify Practices to Change

Use the results of the site report to work with the manager to identify changes needed. Start by reviewing the list of generic actions in this booklet (pages 28-29). You need to work with the business to establish realistic timelines for change. Feed this information into the site report form (page 30).

You may identify that the business has some activities that are high stormwater risks. In this case the business should be directed to agencies who provide support including EPA Victoria or council. Remember you are running an education program, **not an enforcement program**.

6. Acknowledgement of Participation

It is important to acknowledge the owner / manager's involvement in the program and also to inform them of their performance. This can be carried out with a letter (sample page 31) and a report card (page 30).

The acknowledgement is not limited to just the business. After consultation with the business you may identify opportunities like media releases, newsletter updates or certificates for display onsite.



stormwater industry booklet

7. Identify Ongoing Relationship

After completing the business assessment you need to review the aims of the business for their involvement and identify a positive ongoing relationship.

Multiple opportunities are available for maintaining your relationship with business including:

- follow up surveys;
- water quality monitoring;
- program sponsorship; and
- school participation.

8. Follow up visits

Discuss with the business their current rating, and what they would like to achieve. While the business should be able to undertake their recommended measures independently, your return visit may assist to keep them on track. Even businesses who performed well on their first visit may wish to have follow up (so they can demonstrate even better practices). Follow up visits should not occur more often than six monthly, and most businesses would be happy with yearly reviews.

9. Water Quality Monitoring

A Waterwatch coordinator can promote onsite or instream water quality monitoring opportunities for the business (including staff) and provide them with support for developing their own monitoring programs (e.g. monitoring discharge or waterways downstream of their site). They can use these results to promote their good work. Encourage the business to purchase their own monitoring equipment and to send reports in to you.

stormwater industry booklet

10. Sponsorship

Now that you have them hooked, you have a great opportunity to promote the benefits of sponsoring the Waterwatch program.

Ensure that you offer a package that is comfortable for both yourself and the business. They may be interested in purchasing their monitoring equipment, hosting school visits or becoming a major program sponsor. Remember that you need to ensure the obligations with the sponsorship do not outweigh the benefits to you and your overall Waterwatch program. The sponsorship dollars should provide money for your time and servicing of the sponsors.

11. School Involvement

Working with schools benefits both students and businesses alike. Visiting businesses can provide students with an appreciation for the operating environment which business make decisions. The program also allows businesses to promote their activities as environmentally friendly and to show how they have improved their stormwater management.

Teachers need to contact their local Waterwatch co-ordinator for information on the STORM program. Find out which businesses are willing to allow school groups to undertake site assessments (see the Waterwatch Victoria Urban StormwaterOccupational Health & Safety Booklet).

As well as the full Waterwatch survey, modified surveys have been developed for grades 5 to 6 and years 7 to 8. Students will be given the opportunity to carry out a survey with the proprietor and then respond with a letter and recommendations for improvements. Depending on the businessss, an ongoing partnership may be arranged with the school. Students can also continue to work with Waterwatch by monitoring the waterways in the area.

stormwater industry booklet

Case Studies

The following industry education case studies have been developed to highlight the importance of monitoring stormwater management practices for particular industry sectors.

These examples provide Waterwatch Co-ordinators, Local Government, Water Authority or EPA Victoria representatives with information on current industry partnership projects. These projects have established and carried out assessments, recommendations and follow up monitoring for improving stormwater management with industries and businesses.

Case studies present details of how councils and education programs like Waterwatch have set up pollution prevention programs and the methods they used for approaching businesses and conducting site assessments.

Each case study details:

- Partners;
- Aim;
- Background;
- Making contact;
- Activities;
- Results;
- Acknowledgement of participation; and
- Future.

stormwater industry booklet

Case Study 1

The Ballarat Stormwater Awareness Project 2002

Partners

The City of Ballarat, Central Highlands Water, Glenelg-Hopkins Catchment Management Authority and Corangamite Catchment Management Authority jointly funded the Ballarat Stormwater Awareness Project.

Aim

To establish an education program targeted at industries and commercial businesses in the Ballarat region, which will improve quality and management of discharges to both stormwater and sewer.



Background

In 1999 observations on the running of businesses revealed a low understanding and awareness of stormwater issues. The Ballarat Stormwater Awareness Project was put into action with the assistance of a Stormwater Awareness Officer in 2002 in order to address this issue and to ultimately improve water quality and waterway health.

Making Contacts

The industries and businesses targeted for the project were identified using council rates lists and the Central Highlands Water trade waste customer database.

Activities

Initially, 2700 businesses were targeted for the program. Of these, only 10% had Trade Waste agreements with Central Highlands Water. Approximately thirty different types of premises were inspected, ranging from engine repair workshops, metal machining workshops, car yards and food premises. A total of 352 inspections were undertaken in high risk areas. The results encouraged

Image source: City of Greater Bendigo

stormwater industry booklet

businesses to make changes through the introduction of simple / cheap onsite measures. The recommendations included addressing the management of waste oils from food and machinery, sediments, vehicle washing, food wastes, chemical and general litter.

Results

After 12 months the study revealed that the businesses that were aware of their environmental responsibilities. Some (16%) of businesses were already highly aware of the stormwater and waste management and were found to be undertaking appropriate management steps. About one third were unaware of the issues, however were keen to improve the site and management priorities. The remaining 45% of proprietors remained unconvinced that they were polluting the stormwater system, or did not believe that their contributions would do any harm. The data collected during the program was used to form strategies for the future management of stormwater and the protection of waterways.

Acknowledgement of Participation

A letter and series of recommendations for site improvement was sent to each participating business. After the site visits were conducted, 211 letters were sent out to premises highlighting problem areas and requesting changes be made to improve waste management and environment protection.

Future

Recommendations highlight areas for improvement in industries and businesses. Developing industry based education programs and training workshops, litter prevention methods and management systems for tracking trade waste compliance and protocol were some of the key recommendations made after the completion of the project. A stormwater awareness officer will be reappointed to continue the good work.

stormwater industry booklet

Case Study 2

"Be Stormwater Smart" - The Pollution Prevention Program

Partners

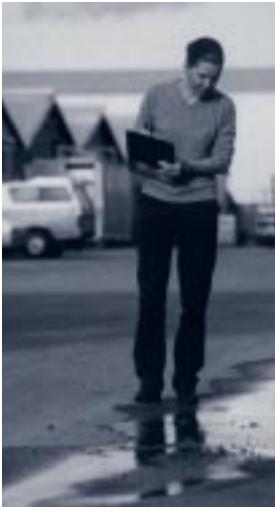
"Be Stormwater Smart" is a partnership program between the Northern Adelaide and Barossa Water Management Board and the Cities of Salisbury and Tee Tree Gully.

Aim

To improve the stormwater management practises of commercial businesses, industries and the community within the Cities. To develop a close working relationship with both profit and non-profit organisations operating in the City of Salisbury.

Background

In the City of Salisbury increased urbanisation and industrialisation has lead to a decline in stormwater quality and waterway health. The Council identified stormwater pollutants such as nutrients, oil, grease, heavy metals and sediments as having a detrimental effect on the Barker Inlet by reducing



seagrass and mangrove populations and increasing toxic algal blooms. Tracing the source of these pollutants to the industrial, commercial businesses, shopping centres, mobile contractors and the community, has lead to a program to improve management strategies. The Pollution Prevention Program was established as an important element of the educational program.

Making Contact

Initial contact is made by the Pollution Prevention Officer in person with the business, whereby the Project Officer introduces the project and conducts a brief assessment of the business.

Image source: City of Salisbury

stormwater industry booklet

Activities

The Project Officer carries out a site survey. The survey establishes the business' performance and identifies areas that need improvement. The business is assessed on the potential / actual, impacts it has on urban stormwater. A site assessment record is distributed to the owner, highlighting the activities of concern and recommendations for change. The changes can range from simple cost effective methods for improvement to extensive modifications to stormwater and waste management. Follow up visits are carried out according to how well the business performed after their first site assessment. Workshops and educational tools for business owners also form part of the project.

Acknowledgement of Participation

A letter of acknowledgement is sent to each business along with the site assessment report. Businesses often feature in the local papers or Council newsletters highlighting their involvement and performance.

Results

This program has seen some great success stories evolve and has promoted effective environmental management for businesses right across the City of Salisbury. It has been well received in the wider community and lead to an improvement in water quality. Through the careful management of stormwater systems, environmental harm caused by stormwater pollution has been reduced in the Little Para and Dry Creek Catchments and the Barker Inlet.

Future

Through the initial success of this program, Councils across Adelaide have employed similar programs to help businesses prevent stormwater pollution and generate community wide awareness for stormwater and environmental management. The City of Salisbury is now investigating an official recognition scheme for businesses that are compliant and for those performing to best practice.

stormwater industry booklet

Case Study 3

Old Joes Creek Waste Wise Automotive Project

Partners

The Old Joe's Creek Waste Wise Automotive Project is a partnership, established in 1996, between Knox Council, Maroondah City Council, Least Waste, EPA Victoria, Melbourne Waterwatch, Knox Environment Society, EcoRecycle Victoria and Parsons Brinckerhoff.



Aim

To raise awareness and assist businesses to adopt cleaner production practises and ultimately, improve the water quality in Old Joe's Creek in the Bayswater industrial area.

Background

In 1996, EPA Victoria identified Old Joe's Creek as one of the most polluted and degraded waterways in Melbourne with the main contaminants being associated with the automotive industry. Complaints and reports of illegal discharges from industries had been made to EPA Victoria and the Council. Initial tests indicated high concentrations of oil, coolants, detergents, paints and solvents, typically associated with the automotive industry.

Making Contact

All 607 automotive businesses in Knox were invited to participate in the program, however the invitations and subsequent phone calls generated limited interest. Committee members and PPK representatives decided that the most effective way to engage participants was to meet with

stormwater industry booklet

businesses and discuss the program in person. Two project officers visited 60 businesses to promote the program highlighting the benefits and objectives. Of the 60 businesses approached, 45 joined the program.

Activities

Least Waste undertook a survey of businesses in 2001. Parsons Brinckerhoff conducted audits of the businesses by assessing environmental performance and opportunities for reducing waste and more appropriate disposal and / or recycling of waste products. The project also included running five workshops for businesses, which covered '*Good Practise Guidelines*', demonstrations of correct equipment use, spill management procedures and a discussion of the audit results. A bi-monthly newsletter was sent out to all businesses.

Results

The key outcome of the project was the development of the '*Good Practise Guidelines*', which provide simple and practical suggestions for improving operations.

Acknowledgement of Participation

Businesses who participated in the program were congratulated at a presentation evening hosted by Knox City Council. Peter Brock presented certificates of participation. Some businesses were also presented a "Waste Wise" certificate after signing a letter of commitment to develop an action plan.

Future

The program is likely to include some maintenance of the contacts established as well as the implementation of the key policy recommendations and findings. The relationship will be maintained primarily between the Councils and businesses.

stormwater industry booklet

Environmental Site Survey - Waterwatch / Stormwater Officer

Survey officer: Date:

Company name: _____

Address:

Street number: _____ Street: _____

Suburb: Postcode:

Postal Address (if different): _____

Contact Person: _____

Position: _____

Phone: _____

Email: _____

On site activity notes: _____

stormwater industry booklet

Score

Only questions with Yes / No answer contribute to the score. Where a question is N/A for this business, the maximum possible score is reduced (e.g. from 27 to 26)

| | |
|-----------------------------------|----|
| A. Score (Total number of YES) | |
| B. Maximum possible score | 27 |
| C. Percentage (A / B X 100) | |

Results (circle)

| Towards Best Practice | Above Average |
|-------------------------|---------------------------|
| Score: 22-27 | Score: 16-21 |
| 80%+ | 61-79% |
| Follow up not required | Follow up within 2 years |
| Average | Poor |
| Score: 14-16 | Score: Less than 13 |
| 51-60% | <50% |
| Follow up within a year | Follow up within 6 months |
| Environmental Risk: | Yes No |
| Follow Up Required: | Yes No |
| Follow Up Date: | _____ |

stormwater industry booklet

Circle the correct response.

N/A means this question is 'not applicable' to this business

Stormwater

Can the person correctly define urban stormwater?

Yes

No

N/A

Have you implemented any features / procedures to prevent polluting stormwater runoff?

Yes

No

N/A

Can you identify ALL stormwater drains on the premises? (Sketch premises in space provided)

Yes

No

N/A

Are all of the stormwater drains around your business free of pollution (rubbish, sediments, oil, grease and paint)?

Yes

No

N/A

Is there any evidence of stormwater contamination from work place practices?

Yes

No

N/A

Do you do all of your work indoors (including spray painting, blasting, washing, repair and servicing work)?

Yes

No

N/A

If no, can pollutants be contained in the outdoors area?

Yes

No

N/A

Do you store equipment and machinery so that pollutants cannot leak or spill into the stormwater system?

Yes

No

N/A

stormwater industry booklet

Is workplace cleaning carried out in a way that does not contaminate stormwater? (Please indicate cleaning type)

| | | |
|---------|----------|-----------|
| Yes | No | N/A |
| Mopping | Sweeping | Vacuuming |
| | | Other |

Wastewater

Is the premises connected to sewer or septic?

| | | |
|-------|--------|-----|
| Sewer | Septic | N/A |
|-------|--------|-----|

Do you know where the septic system is?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

If yes, is your septic system regularly checked and desludged (cleaned)?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

Water Use

Do you monitor your business use of water?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

Have you installed any water-efficient devices?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

Does your site use hand-trigger hoses to prevent wasting water?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

Notes:

stormwater industry booklet

Hazardous Materials

Is your business free of potentially hazardous chemicals? (If No Please indicate)

Yes

No

N/A

| Chemical | Quantity | Comments |
|----------|----------|----------|
| | | |
| | | |
| | | |
| | | |
| | | |

Are all hazardous materials (chemicals, solvents, diesel and coolants) stored in a contained, covered area to prevent materials being washed into the stormwater drains? (Please indicate)

Yes

No

N/A

Roofed

Shelved

Cabinet / shed

Bunded

Waste Management

Do you store all of your wastes in a contained area to prevent pollution of the stormwater drains?

Yes

No

N/A

How does your business dispose of your solid waste?

Contractor

Recycle

DIY

Has your business tried to reduce Solid Wastes?

Yes

No

N/A

How does your business dispose of your liquid waste?

Contractor

Recycle

DIY

stormwater industry booklet

Has your business tried to reduce liquid wastes?

Yes

No

N/A

What types of wastes do your business activities produce?

(Please tick) Do you recycle any? (Please tick)

Solids:

Drums

Steel

Batteries

Plastics

Glass

Paper

Cardboard

Timber

Tyres

Produce

Recycle

Liquids:

Chemical in manufacture

Oil

Oil contaminated water

Solvents

Paints

Thinners

Acids

Coolants

Sludges

Grease

Is the site clean and well maintained? (Visual assessment)

Yes

No

N/A

stormwater industry booklet

Management of the Premises

Have you made any changes to your business for environmental reasons?

Yes No N/A

Do you have an environmental plan or policy?

Yes No N/A

Are there any laws that you are aware of pertaining to your operations?

Yes No N/A

Are all staff aware of their environmental responsibilities?

Yes No N/A

Do staff receive environmental management training?

Yes No N/A

Are all of your staff aware of your commitment to improving the environment?

Yes No N/A

Are all of your customers aware of your commitment to improving the environment?

Yes No N/A

Notes:

stormwater industry booklet

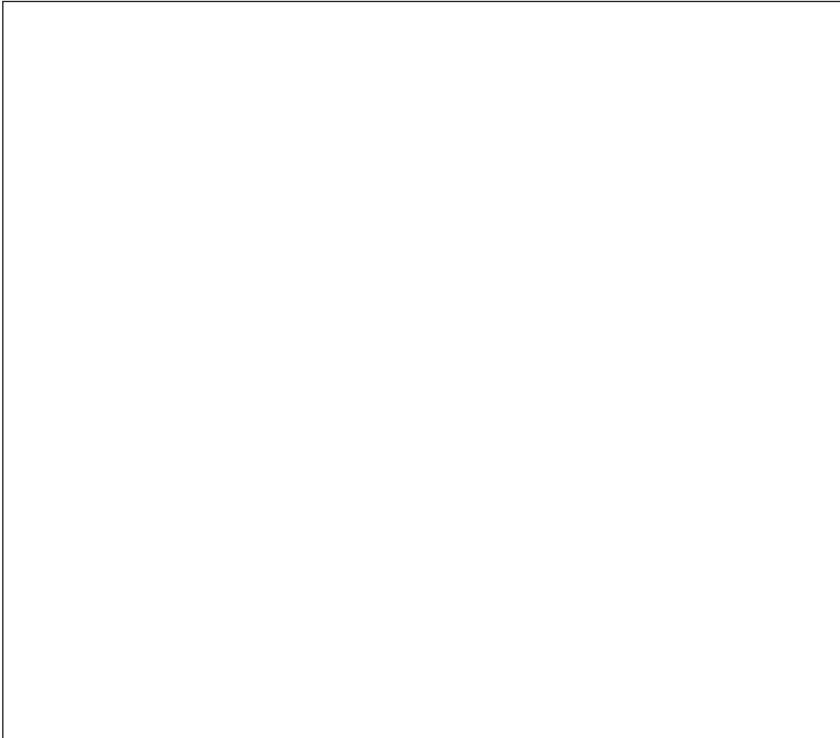
Site Sketch

Note

Include location of stormwater drains, buildings, loading and unloading areas, storage tanks, wash bays, grease traps, oil-water separators, waste bins etc)

| Map Key | | | |
|------------------------------|---|------------------------|---|
| Stormwater drains | 1 | Gardens / lawned areas | 5 |
| Stormwater litter separators | 2 | Open channels | 6 |
| Collection tanks | 3 | Other | 7 |
| Street gutters | 4 | | |

Please sketch site here:



stormwater industry booklet

Stormwater Issues and Potential Actions

| Stormwater Issue | Potential Actions |
|--|--|
| Manager unable to correctly define stormwater. | Manager seek out accurate definition and display in premises for all staff. |
| Lack of features/ procedures to prevent stormwater pollution. | Identify what features / procedures are needed, their cost and work out a prioritised timetable to install |
| Manager unable to identify all drains. | Complete a site review. Label stormwater drainage system on a site map. Then mark drains with educational messages. |
| Stormwater drains with (visible) pollution including litter, oil, sediments, grease or paint or contamination. | Carefully clean drains to prevent pollution to stormwater drains. Use brooms or sweepers instead of hoses. Educate staff to continue maintenance program. |
| Equipment and machinery not stored indoors or undercover and in contained areas. All work is not carried out in contained areas. | Designate and design areas for all machinery, equipment and activities that may cause pollution, so they are stored appropriately undercover and in contained areas where spills and leaks can be prevented. |
| Hoses are used for general cleaning up of oil, grease, paint or chemicals and for spills. Pollutants are washed down drains. | Use brooms, sweepers, mopping or vacuuming instead of hoses to clean up work area. |
| Wastewater Issue | Potential Actions |
| Blockage and / or overflow of the septic system into the stormwater drains. | Ensure that septic system is cleaned out on regular basis. Investigate options to access a sewage system. |
| Water Use Issue | Potential Actions |
| No monitoring of water usage. | Monitor water bills and aim to cut them. |
| Hoses and taps not turned off when not in use or dripping. | Inform staff of their responsibility to turn off taps when not needed. Use hand trigger hoses to reduce use |

stormwater industry booklet

| Hazardous Chemicals Issue | Potential Actions |
|--|--|
| Hazardous chemicals stored out in the open. | Move hazardous chemicals to a covered / contained area. |
| Waste Management Issue | Potential Actions |
| Wastes stored out in the open. | Move wastes to an area that is undercover and have them regularly disposed of to prevent build up. |
| Solid and liquid waste not disposed of adequately and regularly. | Ensure wastes are disposed of through appropriate means. Get a contractor to recycle the wastes or dispose of it. |
| Site is generally very untidy and poorly maintained (eg evidence of spills, leaks, litter, equipment and parts not stored etc.). | Recommend staff take the time to tidy the work site. Use suitable methods for cleaning that will not release pollutants. Outline that untidy workplaces lead to waste and thus lost resources. |
| Management of Premises Issue | Potential Actions |
| No changes made to benefit environment. No obvious environmental policies. | Make sure survey actions are prioritised and implemented. Review your achievements and celebrate the successes annually. |
| No set spill procedures, spill kits or signs visible in the work area. | Develop spill response procedures (includes methods for clean up and safe disposal). Ensure staff are aware of clean up methods and have signs and appropriate resources for clean ups placed around the workshop. |
| No emergency response procedures observed. | Develop emergency response procedures and have signs placed around workshop. |
| Staff unaware of stormwater prevention issues and commitment to preserving the environment and have no environmental training. | Develop training (formal and informal) for staff to further their understanding of stormwater issues. Include business responsibility to stormwater pollution prevention in training. |
| Customers unaware of business commitment to preserving the environment. | Erect signage and / or use promotional material to display commitment to a clean workplace. Promote your commitment to the environment. |

stormwater industry booklet

Site Report Form

Environmental Site Review Report

Occurred on: _____ Time: _____

Assessor: _____

Business Contact: _____

Further Visit Required: Yes No

Next Visit: _____

Environmental Site Review – Key Areas (*in order of priority*)

| Activity of Concern | Brief Description | Recommendation | Timetable for Completion |
|---------------------|-------------------|----------------|--------------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Your efforts to address these areas will be much appreciated and will lead to a considerable reduction in the potential impacts your business may have in relation to safety and the environment.

stormwater industry booklet

Acknowledgement Letter

Dear _____,

Thank-you for your time in undertaking the “STORM” – Waterwatch and Business Stormwater Program. The results from your survey have provided the basis for your Environmental Site Review Report (attached).

Your enthusiasm and support to this program conducted jointly by local businesses and industry, Waterwatch Victoria, local government and the Catchment Management Authority are greatly appreciated.

The STORM community education program relies on ongoing support by businesses such as yourself, both in undertaking the site surveys, and in implementing the recommendations from your Environmental Site Review Report.

As the site assessment involved a brief look at your workplace activities there may be other issues that were not identified. We seek your co-operation to address those practices and help us to improve water quality.

If at any time you think that a practice or activity may be contributing to pollution of the stormwater system and you need assistance, please feel free to contact me or your local council to discuss the problem.

Yours sincerely,

Enc/ Site Report

Should you have any queries regarding this letter please do not hesitate to contact me.

stormwater industry booklet

Environmental Site Survey - for Secondary Students (Years 7-9)

Survey officer: Date:

Company name: _____

Address:

Street number: _____ Street: _____

Suburb: Postcode:

Postal Address (if different): _____

Contact Person: _____

Position: _____

Phone: _____

Email: _____

On site activity notes: _____

stormwater industry booklet

Score

Only questions with Yes / No answer contribute to the score. Where a question is N/A for this business, the maximum possible score is reduced (e.g. from 20 to 19)

| | |
|-----------------------------------|----|
| A. Score (Total number of YES) | |
| B. Maximum possible score | 20 |
| C. Percentage (A / B X 100) | |

Results (circle)

| Towards Best Practice | Above Average |
|-------------------------|---------------------------|
| Score: 16-20 | Score: 13-15 |
| 80%+ | 61-79% |
| Follow up not required | Follow up within 2 years |
| Average | Poor |
| Score: 10-20 | Score: Less than 10 |
| 51-60% | <50% |
| Follow up within a year | Follow up within 6 months |
| Environmental Risk: | Yes No |
| Follow Up Required: | Yes No |
| Follow Up Date : | _____ |

stormwater industry booklet

Circle the correct response.

N/A means this question is 'not applicable' to this business

Stormwater

Have you implemented any features or procedures to prevent polluting stormwater runoff?

Yes

No

N/A

Can you identify ALL stormwater drains on the premises? (Sketch premises in space provided overleaf)

Yes

No

N/A

Are all of the stormwater drains around your business free of pollution (rubbish, sediments, oil, grease and paint)?

Yes

No

N/A

Do you store equipment and machinery so that pollutants cannot leak or spill into the stormwater system?

Yes

No

N/A

Is workplace cleaning carried out in a way that does not contaminate stormwater? (please indicate).

Yes

No

N/A

Mopping / Sweeping / Vacuuming / Other

Water Use

Do you monitor your use of water?

Yes

No

N/A

Have you installed any water-efficient devices?

Yes

No

N/A

Does your site use hand-trigger hoses to prevent wasting water?

Yes

No

N/A

stormwater industry booklet

Wastewater

Is the premises connected to sewer or septic?

| | | |
|-------|--------|-----|
| Sewer | Septic | N/A |
|-------|--------|-----|

If septic, is the septic system regularly checked and desludged (cleaned)?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

Hazardous Materials

Do you store all of your hazardous materials (chemicals, solvents, diesel and coolants) in a contained, covered area to prevent materials being washed into the stormwater drains?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

Waste Management

Do you store all of your wastes in a contained area to prevent pollution of the stormwater drains?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

How do you dispose of your solid waste?

| | | |
|------------|---------|-----|
| Contractor | Recycle | DIY |
|------------|---------|-----|

How do you dispose of your liquid waste?

| | | |
|------------|---------|-----|
| Contractor | Recycle | DIY |
|------------|---------|-----|

Have you tried to reduce liquid wastes?

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

Is the site clean and well maintained? (Visual assessment)

| | | |
|-----|----|-----|
| Yes | No | N/A |
|-----|----|-----|

stormwater industry booklet

Management of the Premises

Have you made any changes to your business for environmental reasons?

Yes

No

N/A

Do you have an environmental plan or policy and response procedures for dealing with spills (developed methods, erected signs etc)?

Yes

No

N/A

Are all staff aware of their environmental responsibilities?

Yes

No

N/A

Are all of your staff aware of your commitment to improving the environment?

Yes

No

N/A

Are all of your customers aware your commitment to improving the environment?

Yes

No

N/A

Notes:

stormwater industry booklet

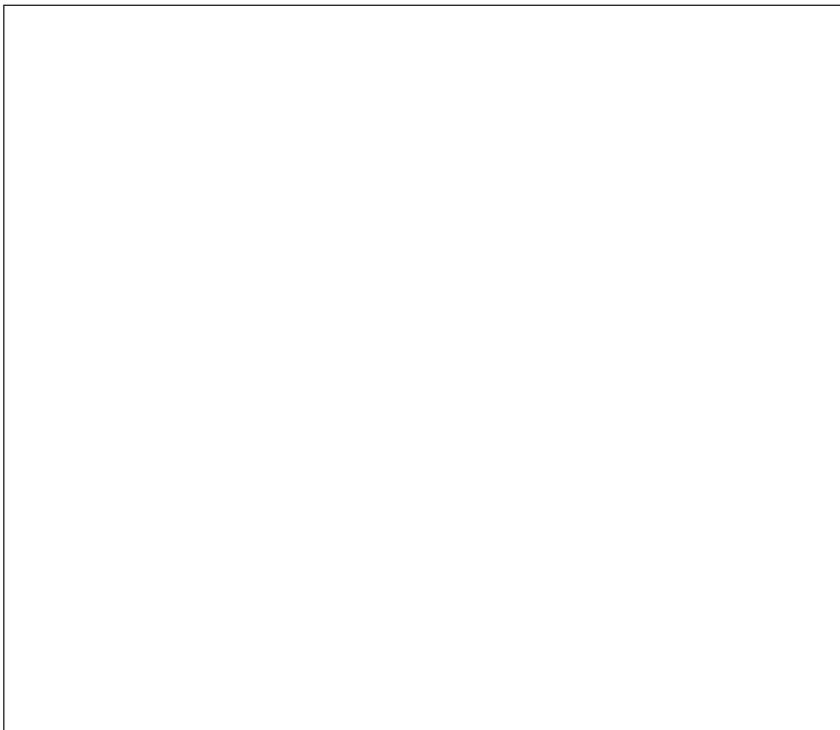
Site Sketch

Note

Include location of stormwater drains, buildings, loading and unloading areas, storage tanks, wash bays, grease traps, oil-water separators, waste bins etc)

| Map Key | | | |
|------------------------------|---|------------------------|---|
| Stormwater drains | 1 | Gardens / lawned areas | 5 |
| Stormwater litter separators | 2 | Open channels | 6 |
| Collection tanks | 3 | Other | 7 |
| Street gutters | 4 | | |

Please sketch site here:



stormwater industry booklet

Environmental Site Survey - for Primary Students (Grades 5-6)

Survey by: Date:

Company name: _____

Address:

Street number: _____ Street: _____

Suburb: Postcode:

Postal Address (if different): _____

Contact Person: _____

Position: _____

Phone: _____

Notes: _____

stormwater industry booklet

Score

Only questions with Yes / No answer contribute to the score.
Where a question is N/A for this business, the maximum possible score is reduced (e.g. from 10 to 9)

| | |
|-----------------------------------|----|
| A. Score (Total number of YES) | |
| B. Maximum possible score | 10 |
| C. Percentage (A / B X 100) | |

Results (circle)

| Towards Best Practice | Above Average |
|---------------------------------|--------------------------------|
| Score: 8-10 out of 10 80%+ | Score: 6-8 out of 10 61-80% |
| Follow up not required | Follow up within 2 years |
| Average | Poor |
| Score: 5-10 out of 10 51-60% | Score: 0-4 out of 10 <50% |
| Follow up within a year | Follow up within 6 months |
| Environmental Risk: | Yes No |
| Follow Up Required: | Yes No |
| Follow Up Date: | _____ |

stormwater industry booklet

Circle the correct response.

N/A means this question is 'not applicable' to this business

Stormwater

Are all of the stormwater drains around your business free of pollution (rubbish, sediments, oil, grease and paint)?

Yes

No

N/A

Do you use a broom or a sweeper, instead of using a hose to clean up the surfaces in and around your business?

Yes

No

N/A

Do you do all your work inside (spray painting, blasting, repair and servicing)?

Yes

No

N/A

Wastewater

Are you connected to sewer or septic?

Sewer

Septic

N/A

If you are connected to a septic system, is it regularly checked and cleaned when necessary?

Yes

No

N/A

Waste Management

Do you store all of your wastes in an area built to stop pollution of the stormwater drains?

Yes

No

N/A

stormwater industry booklet

Water Use

Do you monitor how much water you use?

Yes No N/A

Does your site use hand-trigger hoses to stop water being wasted?

Yes No N/A

Hazardous Materials

Do you store all of your hazardous (dangerous) materials (chemicals, solvents, diesel and coolants) in a contained, covered area to prevent materials being washed into the stormwater drains?

Yes No N/A

Management of the Premises

Do you have signs and procedures for managing the site (including spill and cleaning methods and emergency response procedures)?

Yes No N/A

Are all of your staff aware of how your business protects the environment?

Yes No N/A

Are all of your customers aware of how your business protects the environment?

Yes No N/A



This project has been assisted by funding from the Victorian Government through EPA Victoria as part of the Victorian Stormwater Action Program.



Designed and produced by SASI Marketing