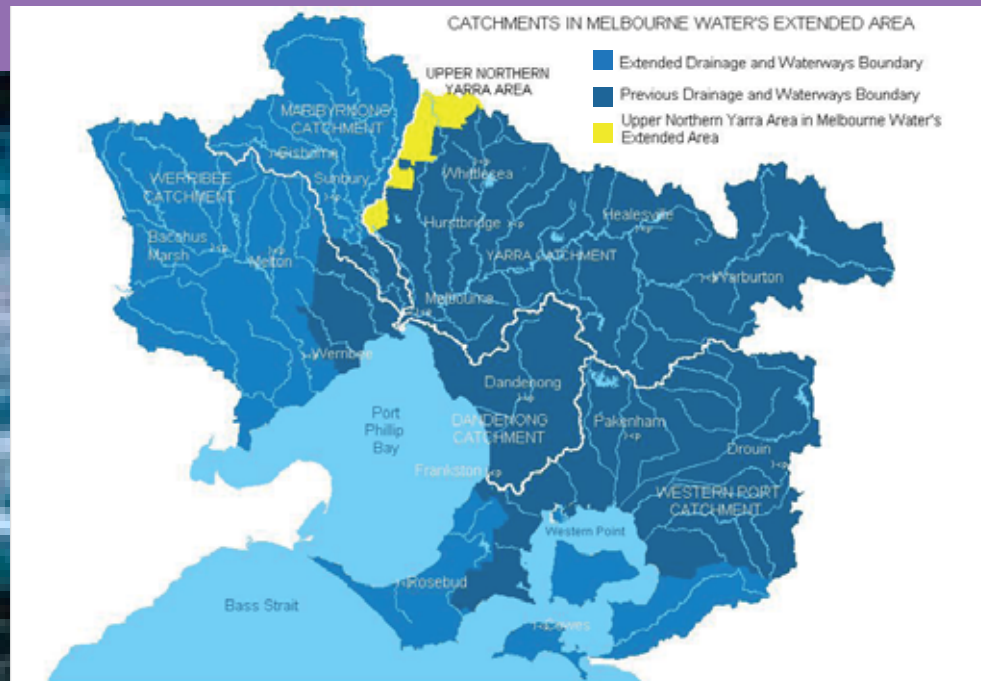


EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

September 2006



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

1.0 SUMMARY

The Victorian Government's *Our Water Our Future* action plan designated Melbourne Water as caretaker of river health and the authority responsible for regional drainage, waterways and floodplain management for the Port Phillip and Westernport region.

This led to the extension of Melbourne Water's waterways boundary by more than 5,000 square kilometres in November 2005, allowing Melbourne Water to take a whole-of-region approach to managing waterways, regional drainage infrastructure and flood protection, and bring about long-term improvements to the condition of rivers in the catchment.

Perhaps one of our greatest challenges in these new areas is ensuring our programs match the expectations of the local communities. This is particularly challenging given that we have had very little interaction with these communities in the past, and as such our knowledge base was limited.

To develop our level of knowledge within these areas we have embarked on an intensive program of investigation, research and information collection with local councils, communities and stakeholders in the extended boundaries. This has allowed us to gain local information, discuss expectations, and to commence the establishment of appropriate levels of service required in our new areas, as we build up to full service provision.

This report provides an outline of information that has been collected during the last year. It also outlines some of the priority works that have either been completed, commenced or are in the planning phase. It is hoped that this report will provide a useful consultation tool to ensure that our proposed levels of service match community expectations within our new boundaries.

To ensure that we are able to discuss community expectations on a local level we have split our new area into five sub catchments: Greater Werribee, Upper Maribyrnong, Upper Northern Yarra, Mornington Peninsula and Bass River Catchment and the Islands. **Importantly, all actions outlined within this report only relate to the portions of these sub catchments that are within our extended boundaries.**



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

2.0 INTRODUCTION

2.1 Our Role and Operating Area

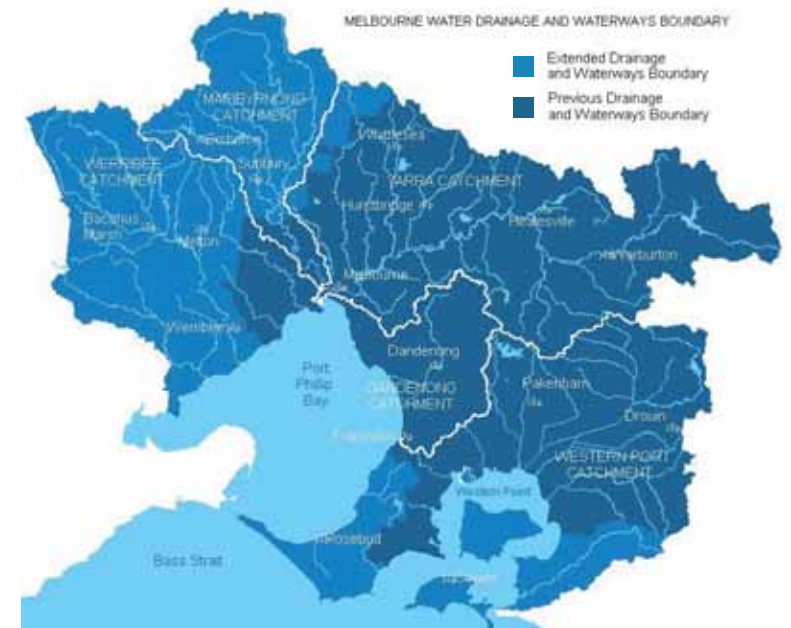
In June 2004, the Victorian Government released its *Our Water Our Future* action plan, which included an initiative to designate Melbourne Water as the caretaker of river health and the authority responsible for waterways, regional drainage and floodplain management for the Port Phillip and Westernport region.

A key action from this was the extension of Melbourne Water's waterways boundary by more than 5000 square kilometres to cover the majority of the Port Phillip and Westernport catchment.

This clear and consistent allocation of responsibilities will enable integrated catchment management for the region, leading to improved prospects for river health across the whole catchment.

In undertaking our role, we value the work and knowledge of stakeholders and the community, and we will deliver an extensive array of community involvement, engagement and education activities.

The purpose of this document is to provide an outline of our information gathering efforts that have been undertaken so far. It will also give an overview of some of the priority works that have either been completed, commenced or are in the planning phase. By providing this outline of proposed works it is hoped that this report will act as a useful tool to seek input on our proposed levels of service for the region.



In November 2005, Melbourne Water was designated as the authority responsible for:

- regional drainage
- waterways, and
- floodplain management throughout the entire region.

We are responsible for river health, management and maintenance of regional drains and identifying and maintaining areas subject to flooding.

In our extended boundaries we do not provide sewerage and water supply services.

EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

2.2 How we link in with other agencies

Our major partner in the delivery of services within our extended boundaries is the Port Phillip and Westernport Catchment Management Authority (CMA). The CMA plays an overarching strategic management role in the development, coordination and delivery of the *Regional Catchment Strategy*. This relationship has continued to grow through strong links at a senior management level and with closer alignment of on-ground programs.

Information sessions and updates have also been provided to the other agencies we deal with including other water authorities, councils and government departments. These updates will ensure we continue to align our proposed levels of service with all stakeholders within our new areas.



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

2.3 Our extended boundaries

Our boundary now matches the Port Phillip and Westernport Catchment Management Authority (CMA) area, which is approximately 13,000 square kilometres. The water resources of the region support a population of 3.4 million people as well as irrigation and industry.

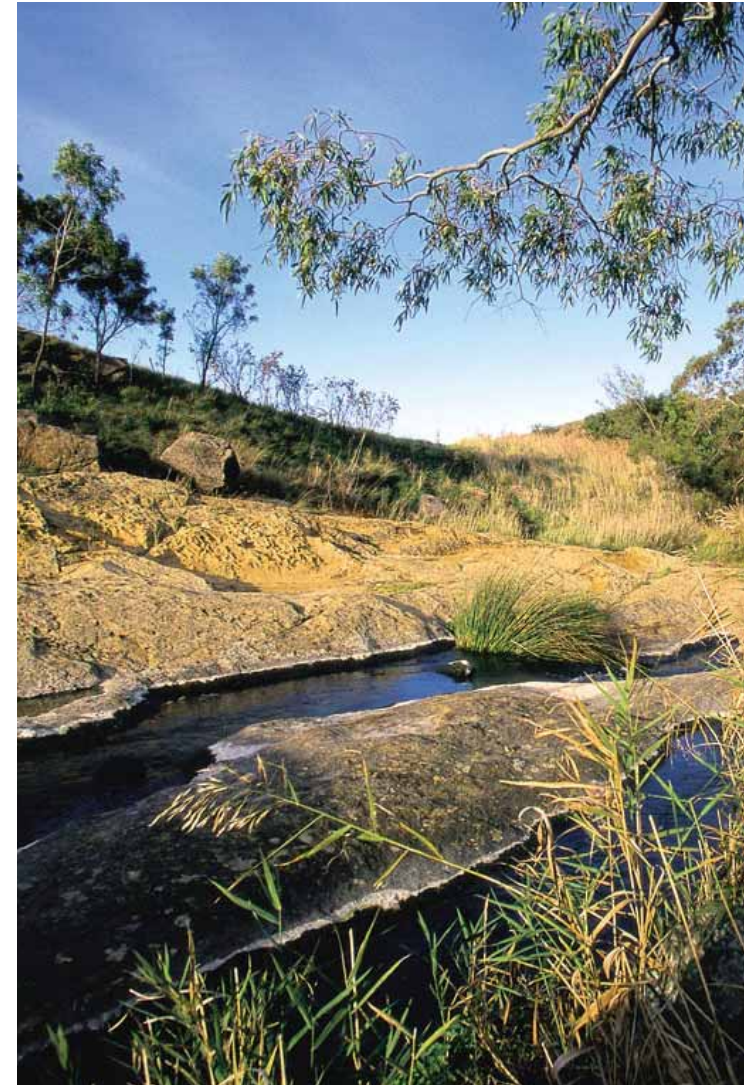
The region is made up of five major catchments – Maribyrnong, Werribee, Yarra, Dandenong and Westernport – containing 1,300 kilometres of regional drains, 8,400 kilometres of rivers and creeks and 109 wetlands, retarding basins and urban lakes. Within our new area we are providing services to the Greater Werribee, Upper Maribyrnong, Upper Northern Yarra, Mornington Peninsula and the Bass River Catchment and the Islands. Our operating area was extended by more than 5,000 square kilometres, and we have assumed responsibility for an additional 4,000 kilometres of rivers and creeks, 21 wetlands, retarding basins and urban lakes, and 80 kilometres of underground drains.

For the first time we are providing services in:

- Moorabool Shire
- Macedon Ranges Shire
- Mitchell Shire
- Greater Geelong City

We have extended our services further into:

- Melton Shire
- Bass Coast Shire
- South Gippsland Shire
- Mornington Peninsula Shire
- Wyndham City
- Hume City



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

3.0 OUR APPROACH UNTIL NOW

3.1 Exploring our new areas

Melbourne Water has been working closely with the 10 councils and numerous stakeholders affected by the boundary change as we prepare to meet the challenges of our new, extended role.

As we have now assumed management of regional drainage, those assets with a catchment area greater than 60 hectares have been transferred from councils to Melbourne Water.

The formal introduction of services will take up to two years, while we undertake an extensive information gathering process to acquire an understanding of local needs. This has been our focus to ensure that our works are targeted to achieve the best outcomes.

3.2 Progress to date

- Establishment of a Waterways Group within Melbourne Water to provide a focused delivery of our waterway management functions
- Regional drainage assets transferred across from councils
- Workshops with councils have been held focusing on planning referrals, drainage schemes and waterways
- Community Information Sessions have been held with a range of local stakeholders
- Priority works have been identified and in some cases undertaken
- We have commenced planning for longer term works
- Information gathering and community and stakeholder consultation has been undertaken
- Responsibility for approval of works within the bed and banks of waterways has been handed over from Southern Rural Water
- Area Coordinators have been established in our new catchments
- We have established links with key community groups



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

4.0 LOOKING AHEAD

4.1 Our services

Melbourne Water is accountable for protecting and enhancing the environmental, social and economic values of rivers. As part of our gradual build up to full service provision by 2008, the following key programs will be implemented:

Managing River Health

As the caretaker of river health, we are responsible for maintaining or improving the ecological health of rivers and creeks through erosion control, protecting riverbeds and banks, revegetation, weed control and by ensuring sufficient flows. Councils and communities can get involved by applying for Melbourne Water grants to assist them to undertake work to improve rivers and creeks in their area.

Improving Water Quality

Melbourne Water manages run-off from rural and urban catchments to improve the health of rivers, creeks and the bays. We work with stakeholders and the community to manage practices that impact on water quality, ensure land development is planned to improve stormwater quality and build infrastructure such as wetlands to treat stormwater.

Managing Our Drainage Assets

We are responsible for maintaining and operating the regional drainage system – that is drainage assets generally servicing catchments greater than 60 hectares. Local councils remain responsible for local drains, including roadside gutters and smaller drains.

Key roles:

- Production of the *Regional River Health Strategy*
- Waterway rehabilitation works
- Coordinating our grants programs

Key roles:

- Water quality monitoring programs
- Development of Water Sensitive Urban Design Systems

Key roles:

- Surveys of all drainage assets
- Ongoing maintenance of our assets

EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

Sustainable Development

Melbourne Water develops drainage schemes to ensure new developments are serviced with regional drainage infrastructure. The drainage schemes ensure that planning for urban development is conducted on a catchment basis and that drainage infrastructure meets appropriate standards for flood protection and water quality.

We assess applications for subdivisions and land developments from local councils, provide advice and, where necessary, place conditions on town planning permits. This ensures that new developments meet drainage and water quality standards.

Managing Flooding

Melbourne Water will undertake floodplain mapping to help plan and provide a safe level of flood protection for the community. We will also operate an online 24-hour rainfall and streamflow monitoring network on major rivers, and will provide the Bureau of Meteorology with flood predictions and warnings for major rivers. This has already been incorporated for the Wyndham/Werribee River area.

Community and Stakeholder Interaction

Community engagement is a key part of Melbourne Water's business. The Port Phillip and Westernport region has an active community that has carried out a vast amount of work to improve rivers and creeks. We assist improvement works by running several grant programs that help individuals, community groups and agencies carry out river health projects.

Melbourne Water encourages a high level of community and stakeholder understanding and active participation in programs. Education is an integral part of our community engagement program, with programs such as the Melbourne Water Frog Census, Waterwatch, community information campaigns, curriculum material and interactive and engaging resources relating to drainage, floods and litter.

Key roles:

- Development of Drainage Schemes
- Referral authority
- Development of suitable planning overlays

Key roles:

- Provide an online 24-hour rainfall and streamflow monitoring network
- Floodplain mapping

Key roles:

- Community Information Sessions
- Community Grants program
- Maintain strong relationships with stakeholders and local groups

EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

4.2 What this means for you

Community

Melbourne Water is undertaking a comprehensive consultation program with the community, local councils and other interested organisations to assess what level of service is required and how it would be provided and funded.

Members of the community seeking information on regional drainage (catchment area greater than 60 hectares) and river health should contact Melbourne Water. Councils are responsible for the local drainage system, which feeds into the regional drains and waterways, and local water authorities are responsible for providing water and sewerage services.

Developers

In the case of new developments with drainage impacts, we will act as a referral authority and will collect developer contributions to fund construction of drainage assets.

Landowners

Landowners with rivers or creeks running through their property are eligible to apply for grants to rehabilitate riverbanks and protect streamside vegetation from stock access through fencing and revegetation.

Community Groups

Community groups can apply to Melbourne Water for grants to improve their local waterways.

Councils

Melbourne Water is now the asset owner and manager of regional drainage assets with a catchment greater than 60 hectares. Melbourne Water is also the referral authority and so town planning subdivisions must be referred to us. As the waterway manager Melbourne Water is responsible for maintenance and works within the bed and banks of waterways. Grants for environmental improvements to waterways are available to councils through our Corridors of Green program.



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

5.0 CONSULTATION ON SERVICE LEVELS

5.1 Why we are consulting

Melbourne Water regards community involvement as essential to increasing understanding, changing attitudes and behaviour, clarifying social expectations and improving our priority setting. We will continue to work with the Port Phillip and Westernport CMA to ensure the community is engaged in river, floodplain and drainage management.

Consultation will be a major priority for us over the next two years as we build up to full service provision, and we will continue to build relationships with councils, stakeholders and community groups in these areas. We value the importance of understanding local priorities, and sharing information with the community and other interested parties. We are also investigating opportunities to have a regional presence through local offices.

5.2 How we plan to consult

In addition to our ongoing interaction with stakeholders, this document will be used as an important tool in our consultation on service levels.

By outlining our past, current and future works in this document and on the accompanying plan, we hope to begin to provide a clear picture of our future levels of service.

To enable us to get a broad cross section of views on our levels of service we will continue to consult widely, using a range of methods such as:

- open community forums
- presentations to Landcare networks and Friends groups
- meetings with councils and stakeholder groups
- use of the local media to inform the broader community.

Landowners
Landcare
"Friends of" groups

Developers
Utility companies
Farmers

DSE
EPA Victoria
DPI
Parks Victoria

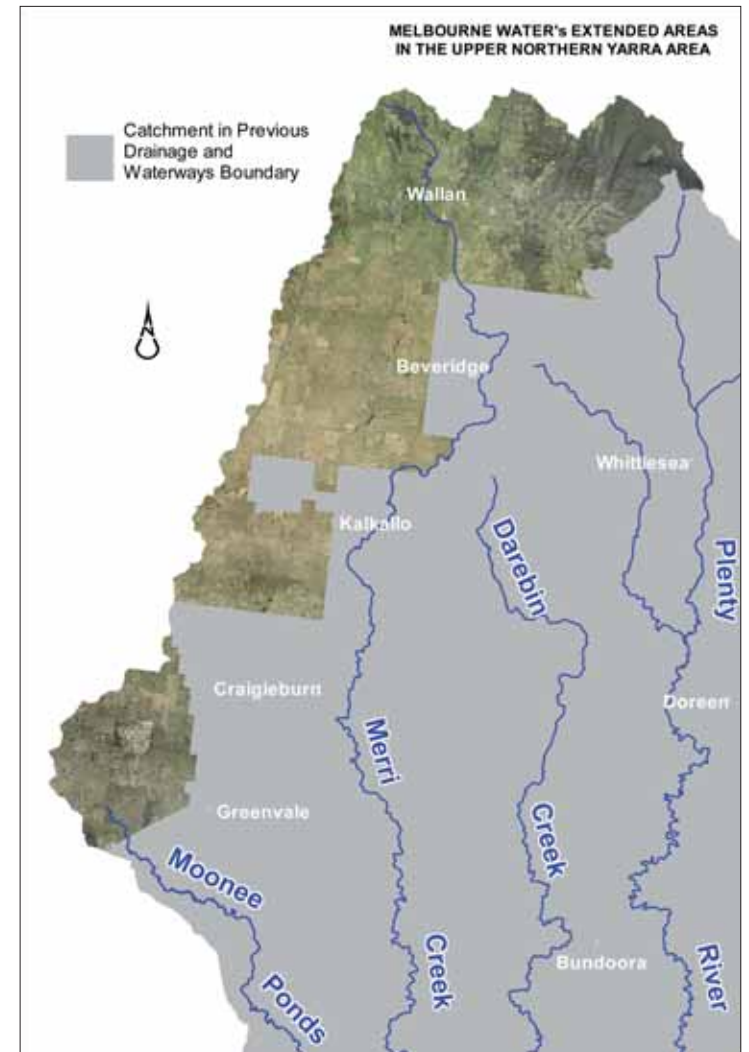
Local Councils
The Port Phillip &
Westernport CMA

EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

6.0 WHAT IS HAPPENING IN YOUR AREA?

6.1 Upper Northern Yarra catchment

The Upper Northern Yarra catchment lies approximately 30 kilometres north of Melbourne. Our new boundaries extend from Wallan in the north to Bald Hill in the south and from Wallan East and Upper Plenty in the east almost across to the Maribyrnong River in the west, covering an area of approximately 216 square kilometres. The Merri Creek is a major tributary of the Yarra River and flows from the foothills of the Great Dividing Range north of Wallan on the Hume Highway. This catchment area covers the southern end of the Mitchell Shire.



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

7.0 OUR PROGRAMS

The following tables give details about all of Melbourne Water's completed, current and future activities across the extended areas. We aim to illustrate what we have been doing since the changes to our boundaries and the variety of projects that are planned for improving river health over the next two years, whilst we build up to full service provision.

7.1 Managing River Health

As the caretaker of river health, Melbourne Water is responsible for maintaining and improving the ecological health of rivers and creeks. In order to achieve this we have a number of key programs undertaking specific projects.

Melbourne Water sets the overall framework for river health and water quality in the Port Phillip and Westernport region by integrating:

- state policy
- catchment activities
- regional river health and water quality objectives.

As part of this role we undertake technical investigations to determine the flows our rivers need and participate in water allocation decisions with water authorities or farmers to help restore environmental health.

As part of our commitment to improving river health we are responsible for the management of Greater Melbourne's waterways and undertake a number of activities, including:

- collection, analysis and reporting of waterway health data
- the development of improvement programs for waterways and wetlands
- the management of various grants programs, to help fund environmental improvement works along waterways.

The extension of our services into the Upper Northern Yarra catchment will enable the upper tributaries of the Yarra River to be included in current strategic planning initiatives. This will enable the planning of future investigations and waterway improvement programmes throughout the catchment.



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

7.2 Improving Water Quality

Melbourne Water manages the run-off from rural and urban catchments to improve the health of rivers, creeks and the bays. We work with a range of stakeholders to develop programs aimed at protecting water quality by managing the quality and quantity of water entering our waterways and bays.

Melbourne Water has recently launched the Living Rivers Stormwater Program, which is a 4-year, \$10 million initiative funded by the Victorian Government. The main objective of this program is to work in partnership with local councils to achieve long-term improvements to the management of stormwater.

Water quality improvements are also being approached from a town planning perspective. Changes to the planning scheme have introduced Clause 56, which will have implications as to how water quality will be dealt with in residential developments. This is likely to increase the use of Water Sensitive Urban Design (WSUD) to improve water quality by integrating the planning and design of urban areas with the management and protection of the water cycle. The overall goal of WSUD combined with the changes to Clause 56 is to achieve on-site improvements in the quality and quantity of run-off.

Over the next 12 months we will be focusing on providing training and assistance to councils on water quality improvements within the extended boundaries.

Key principles and features of WSUD:

- Protect and enhance rivers and creeks within urban developments
- Improve the quality of water draining from urban developments into rivers, creeks and bays
- Reduce run-off and peak flows from urban developments by creating temporary storage areas e.g. rain gardens and urban forests
- Integrate stormwater quality treatment into the landscape e.g. grassed or landscaped areas and wetlands.

EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

7.3 Managing Our Drainage Assets

Melbourne Water is responsible for maintaining and operating the regional drainage infrastructure – drainage servicing catchments greater than 60 hectares.

To enable us to manage our drainage assets effectively, Melbourne Water undertakes a variety of functions to ensure that:

- our assets are functioning correctly
- our assets are not damaged by construction occurring nearby
- civil assets, such as retarding basins and underground drainage pipes, undergo the necessary risk assessments.

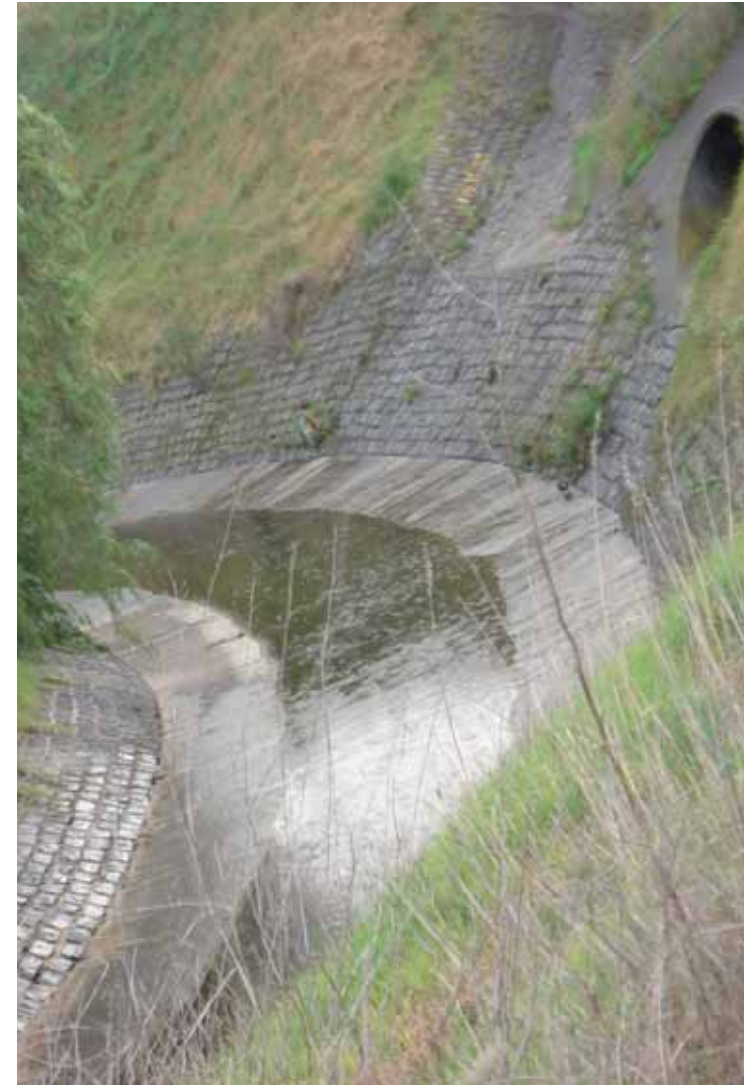
As the asset owner, we are responsible for maintenance of assets to ensure that they are operating correctly and that any possible risks associated with a specific asset is managed. We are currently working to improve the accuracy of the information held on all assets throughout the extended boundaries.

We also ensure that our assets are protected from new development occurring nearby. The types of development that may affect our assets, include:

- new buildings
- utility services installations
- jetties
- bridges and crossings.

Examples of our drainage assets include:

- mains drains
- retarding basins
- wetlands.



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

7.4 Sustainable Development

To assist in ensuring that new development occurs in a sustainable manner, Melbourne Water develops drainage schemes to ensure that new developments are serviced with the appropriate drainage infrastructure. These drainage schemes are designed to provide the most effective and environmentally sound drainage management to service future urban areas within a defined catchment.

Melbourne Water is a referral authority requiring all town planning subdivisions to be referred to us to enable us to assess development applications and ensure that new developments meet drainage and water quality standards.

We are also working to minimise the number of properties at risk of flooding. In order to do this, the development of a number of mapping overlays in priority areas are being planned to identify flood prone areas, including:

1. The Land Subject to Inundation Overlay (LSIO) – is used to identify land in a flood storage area or an area that may be affected by the 1 in 100 year flood.
2. The Special Building Overlay (SBO) - is used to identify land in urban areas subject to flooding from excess flows from the urban drainage system.
3. The Urban Floodway Zone and Floodway Overlay – is used to identify waterways, major floodpaths and high hazard areas that have the greatest risk and frequency of being affected by flooding.



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

7.5 Managing Flooding

Melbourne Water is undertaking a number of floodplain mapping and mitigation activities to help plan and provide a safe level of flood protection in our new areas.

We are currently obtaining survey information in our extended areas to enable us to complete our flood mapping and mitigation projects. We are also upgrading and extending our Hydrologic Data Collection equipment to monitor how much rain is falling and what flows are occurring in key waterways. This will enable us to expand our flood prediction and warning service for major rivers into our new areas.

Other key flood management activities include:

- floodplain investigations to evaluate the impact of development proposals
- management of a 24-hour flood warning service for the Greater Melbourne area
- provision of specialist advice and information to councils to assist with the development of their Flood Sub Plans
- preparation and provision of storm and flood reports.

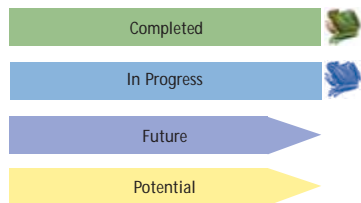
7.6 Community and Stakeholder Interaction

Community and stakeholder interaction is a significant part of our programs for improving river health. The key to successful waterway management in our new areas will depend on having a good understanding of local issues. We have recently developed a dedicated team to develop effective methods of stakeholder engagement and consultation across our extended areas.

Key projects include:

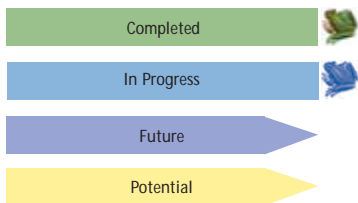
- producing factsheets to explain the changes to our boundaries and how this may affect different stakeholder groups
- the Making Connections event to bring together all people who have an interest in the future management and protection of waterways
- the co-ordination of Melbourne Waterwatch to engage schools, community groups and councils in Waterwatch activities.





EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

MANAGING RIVER HEALTH									
Title	Description	January-June 2005	July-December 2005	January-June 2006	July-December 2006	January-June 2007	July-December 2007	January-June 2008	July-December 2008
Regional River Health Strategy	Finalise the draft Regional River Health Strategy for the whole of the Port Phillip & Westernport region. The strategy provides a 5-year blueprint for agencies and communities to work together to improve rivers and creeks.								
Desilting of Wallan Drain	Working in partnership with Mitchell Shire Council, desilting of the Wallan Drain in the Wallan Town Centre, near the Northern Hwy and Queen Street.								
Central Region Sustainable Water Strategy	Government proposals to establish environmental water reserves for major rivers.								
Better Bays and Waterways - a water quality improvement plan for the Port Phillip and Westernport region	EPA and Melbourne Water in partnership with the Department of Environment and Heritage is developing the Better Bays and Waterways - a water quality improvement plan. The plan will integrate current water quality activities with new ideas to create a water quality plan for our major bays, rivers, creeks and estuaries.								
Taylor's Creek Corridors of Green	Corridors of Green funding for the Shire of Mitchell for waterway rehabilitation works on Taylor's Creek.								
Wallan Creek Community Grant funding	Community Grant funding for the Friends of Wallan Creek for mulching and revegetation of Wallan Creek.								
Moonee Ponds Creek	One Stream Frontage Management Program project funded on Moonee Ponds Creek.								
Wallan	Willow and general woody weed removal in the Wallan township.								
Willow removal in Wallan	Removal of willows and other woody weeds along 500m near King Street in the township of Wallan. This project will be followed up with revegetation works.								



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

IMPROVING WATER QUALITY									
Title	Description	January-June 2005	July-December 2005	January-June 2006	July-December 2006	January-June 2007	July-December 2007	January-June 2008	July-December 2008
Review of Stormwater Management Plans	All council Stormwater Management Plans have been reviewed and Melbourne Water actions identified and recorded from each. Most projects will be reviewed as part of a future project "Identification of regional water quality improvement opportunities."								
Clause 56 council information Meetings	Information sessions for council to discuss the implications of the new residential subdivision provisions in Clause 56 of planning schemes.								
Living Rivers Stormwater Program - council engagement	The aim of this 4-year initiative is to achieve long-term improvements in the management of stormwater entering our waterways and bays. Meetings will be held with councils to identify their needs and potential partnership projects.								
WSUD training sessions	Five 1-day training programs will be held to assist with the rollout of Clause 56. The sessions will focus on integrating WSUD into residential subdivisions. A workshop will be held in South Morang in September 2006.								
Identification of regional water quality improvement opportunities	A desk and field study of sites suitable for regional wetlands or bio-retention systems. The project will designate a number of priority projects and will cover many of the actions identified as part of the review of council Stormwater Management Plans.								
Living Rivers Stormwater Program - targeted workshops	Targeted workshops with councils that will identify council specific projects for funding.								

CASE STUDY

COMMUNITY GRANTS PROGRAM

Volunteer community groups play an important role in protecting and improving local rivers and creeks. Melbourne Water's Community Grants Program began in 1999 to support the immense effort that community groups commit to the rehabilitation of their local waterways.

The program is aimed at providing financial assistance to community groups to sustain and support their works and efforts. These incentives have been made available for the funding of materials, equipment, administrative support and newsletter production.

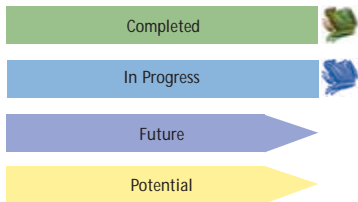
Since 1999, Melbourne Water has distributed more than \$600,000 in grants to assist community groups in their work

to improve and revegetate Melbourne's rivers and creeks and their surroundings.

In 2005-06 the program extended into Melbourne Water's expanded operating area. Over \$56,000 in grant was allocated to 12 community groups to assist in them in undertaking environmental improvement works. Over 110,000 plants were provided and six kilometres of waterway were revegetated and treated for weeds throughout the extended areas.

Funding for Community Grants will increase in the coming years to assist community groups undertake waterway works in line with the priorities of the *Port Phillip and Westernport Regional River Health Strategy*.





EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

MANAGING OUR DRAINAGE ASSETS

Title	Description	January-June 2005	July-December 2005	January-June 2006	July-December 2006	January-June 2007	July-December 2007	January-June 2008	July-December 2008
Retarding basin inspection program	Inspection of all retarding basins within our extended boundaries. Maintenance requirements and other issues are being identified and programmed.								
Underground asset data capture	Collation of the transferred underground assets from councils. A field survey has been undertaken to check details and locations and the resultant data is being loaded into our internal systems.								
Structural assessment of drainage assets	This assessment includes evaluating what condition assets are in and determine the likelihood and impacts of a failure. Assessments of all underground drains is to be undertaken within our extended boundaries.								
Provision of underground asset data for councils	Once all data has been captured and verified it will be provided back to the councils for inclusion in their internal systems.								

CASE STUDY

MELBOURNE WATERWATCH

Melbourne Waterwatch is part of the Waterwatch Australia network. It is a free river health education and monitoring program, which aims to increase community understanding and participation in local river health issues through a broad range of activities that encourage the community to become involved in monitoring the health of rivers, creeks and wetlands.

The overall objective of the Melbourne Waterwatch program is to provide the expertise and support required to enable students and community members to:

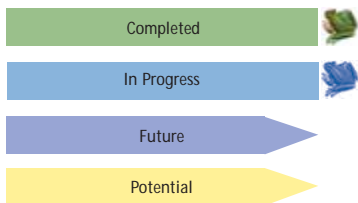
- gain an understanding of river health issues
- learn how to collect river health information from their local creek, river, or wetland

- discuss their findings with Melbourne Waterwatch coordinators to identify what can be done at a local level to improve the health of Melbourne's waterways
- become involved in on-ground works to help address local river health issues.

In 2005-06 over 31,000 people were involved in the program.

Melbourne Waterwatch is sponsored by Melbourne Water, the Natural Heritage Trust, and every local council across Greater Melbourne. Other supporters include the Department of Sustainability and Environment, the Merri Creek Management Committee, the Department of Primary Industries, and Southern Rural Water.





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SUSTAINABLE DEVELOPMENT									
Title	Description	January-June 2005	July-December 2005	January-June 2006	July-December 2006	January-June 2007	July-December 2007	January-June 2008	July-December 2008
Consultation with councils on the development of drainage schemes	Meetings were held across all of our new councils to obtain an understanding of local issues. Reports were collected and reviewed to gain information to feed into our decision making process.								
Identification and prioritising of potential drainage schemes	Catchments with substantial areas of land zoned for development were identified. The catchment boundaries were determined and drainage schemes were prioritised.								
Wallan Creek Drainage Scheme	Located in Wallan, the catchment is approx 450 hectares, and is bounded by Old Sydney Road to the northwest and the Hume Fwy to the southeast. Survey is currently being undertaken.								
Taylor's Creek Drainage Scheme	Located southwest of Wallan, the catchment is approx 1650 hectares and is bounded by Old Sydney Road to the west, Wallan Heights Road to the north, Northern Hwy to the east and Hadfield Road to the south. Survey is currently being undertaken.								
Kalkallo Creek Drainage Scheme	Located in Kalkallo on the boundary of the City of Hume and the Shire of Mitchell, the catchment is approx 6640 hectares, with a small area in the southwest corner (south of Cameron St. and west of Hume Fwy) within the Urban Growth Boundary. Survey is currently being undertaken.								
Clause 56 - implementing the provisions from the Sustainable Neighbourhoods Planning Scheme	Meetings and workshops with councils to examine the planning implications of Clause 56 and how they are to implement it.								

CASE STUDY

CORRIDORS OF GREEN PROGRAM

The Melbourne Water Corridors of Green Program began in 1999 to help fund councils to undertake environmental improvements works along waterways. Since then, the program has distributed more than \$1.6 million to councils and funded 193 projects to improve rivers and creeks in the Port Phillip and Westernport region.

In order to receive funding, councils are required to contribute 50 per cent to the cost of a project by either a direct financial, or in-kind contribution.

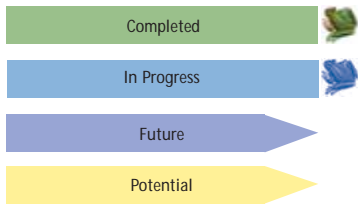
The objectives of the Corridors of Green program are to:

- assist councils to enhance habitat corridors and improve amenity of open space

- foster an understanding and appreciation of river health within the community
- improve the quality and quantity of indigenous riparian vegetation
- reduce the impact of threatening processes
- return native fauna to urban parklands.

The program was extended in 2005-06 when Melbourne Water assumed responsibility for managing waterways across the whole region. Around \$120,000 was provided for 10 Corridors of Green projects for environmental improvements along waterways in our extended areas. Over 30,000 plants were provided and eight kilometres of waterways were revegetated and treated for weeds.





EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

SUSTAINABLE DEVELOPMENT

Title	Description	January-June 2005	July-December 2005	January-June 2006	July-December 2006	January-June 2007	July-December 2007	January-June 2008	July-December 2008
Survey of Kalkallo Creek and Tributaries in Beveridge	Detailed survey of a tributary of Kalkallo Creek in Beveridge. This survey is part of the preliminary investigation being undertaken for the development of a drainage scheme in this area.								
Survey of a tributary of Kalkallo Creek in Beveridge	Detailed survey of Kalkallo Creek and tributaries within Beveridge. This survey is part of the preliminary investigation being undertaken for the development of a drainage scheme in this area.								
Survey of a tributary of Merri Creek in Beveridge	Detailed survey of a tributary of the Merri Creek in Beveridge. This survey is part of the preliminary investigation being undertaken for the development of a drainage scheme in this area.								
Survey of Upper Merri Creek and Taylors Creek in Wallan	Detailed survey of a tributary of the Upper Merri Creek and Taylors Creek in Wallan. This survey is part of the preliminary investigation being undertaken for the development of a drainage scheme in this area.								
Council Planning Workshops - "How We Work Together"	A series of workshops with council planning departments to discuss opportunities for improving the planning referral process.								

CASE STUDY

STREAM FRONTAGE MANAGEMENT PROGRAM (SFMP)

Waterways add considerably to the quality of urban and rural environments and often contain significant vegetation that provides important habitat for native fauna. Melbourne Water's Stream Frontage Management Program (SFMP) aims to improve the environmental, social and economic values of rivers and creeks by protecting and improving streamside vegetation and minimising erosion and stock access.

The SFMP provides grants to landowners to manage their stream frontage land. Funded works include fencing, weed control and revegetation, as well as training and

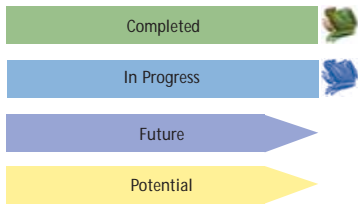
advice. The program targets degraded rural waterway frontages across the Port Phillip and Westernport region.

The benefits of the program to the landowner and the environment include:

- increased land value through improved landscapes and stable land
- improved water quality and bed and bank stability
- increased aquatic and terrestrial fauna.

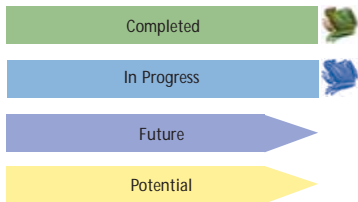
During 2005-06, over \$260,000 of funding was allocated to Stream Frontage Management Programs across our extended areas. The program provided over 34,000 indigenous plants and over 16 kilometres of fencing among 89 participants.





EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

MANAGING FLOODING									
Title	Description	January-June 2005	July-December 2005	January-June 2006	July-December 2006	January-June 2007	July-December 2007	January-June 2008	July-December 2008
Addition of known flood "shapes" onto our system	Updating of Melbourne Water's systems with known flood shapes from the Department of Sustainability and Environment.								
Identify priority catchments for mapping	An assessment of catchments has been undertaken to prioritize flood mapping projects. Assessments are based on a number of factors including flood extents and levels.								
Upper Merri Creek hydrologic study	Additional hydrologic modelling to improve current model of the Upper Merri Creek.								
Port Phillip & Western Port Flooding and Drainage Strategy	A flood management and drainage strategy that will provide options and recommendations to improve flood management and reduce the impacts of flooding on the community.								
Waterway asset data capture	Collection of available waterway data for our new areas that is then being realigned with further contour data to improve accuracy.								
Acquisition of one metre contours	Acquisition of one-metre contours covering non-growth areas in conjunction with the Department of Sustainability and Environment.								
Floodmapping for priority catchments	Floodmapping has commenced for those catchments identified as being a high priority.								
Existing floor survey information	Existing information obtained from floor surveys will be placed on our systems to assist in identifying problem areas and the prioritisation of flood mitigation studies.								
Implementation of Land Subject to Inundation Overlays (LSIO) or Special Building Overlays (SBO)	Discussions with Mitchell Shire Council on implementing LSIO/SBOs to provide information on areas or buildings that may be subject to flooding.								
Aerial survey for mapping projects	Data from the aerial surveys will be processed to enable mapping for priority areas to commence.								
Undertake new floor surveys	Obtain further floor levels to assist in identifying problem areas and prioritisation of flood mitigation studies.								



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

COMMUNITY AND STAKEHOLDER INTERACTION

Title	Description	January-June 2005	July-December 2005	January-June 2006	July-December 2006	January-June 2007	July-December 2007	January-June 2008	July-December 2008
Local Government CEO briefings	The senior management team from Melbourne Water have given a presentation to senior council staff on projects and work within their area.								
Community Engagement Plans	Consultation to ensure the community is adequately advised for drainage and floodplain services in their region.								
Managing Rivers & Drainage In The Wider Area fact sheet	Fact sheet produced to ensure the community is informed on drainage, waterways and floodplain services for their region.								



CASE STUDY

DRAINAGE SCHEMES

Melbourne Water is responsible for maintaining and operating the regional drainage system (drainage within catchments of greater than 60 hectares). A drainage scheme is a plan of the drainage works that are required to provide the most effective and environmentally sound drainage management to service future urban areas within a defined catchment.

It identifies all the works required to provide an integrated drainage system, for the development of properties within a catchment, and estimates the cost of constructing those works. The scheme recovers the costs of these works from landowners when they subdivide or develop their land.

The core objectives of drainage systems are to:

- protect people and property from unacceptable flooding impacts
- ensure that local and downstream rivers and creeks are stable and ecologically healthy
- ensure that minimal pollution in run-off from new urban areas reaches rivers, creeks and bays.

There is no formal limit to the size of the scheme area. It will vary from scheme to scheme and is closely related to the drainage characteristics of the land. Within the Upper Northern Yarra catchment there are three drainage schemes underway including Wallan Creek Drainage Scheme, Taylors Creek Drainage Scheme and Kalkallo Creek Drainage Scheme. These vary from up to approximately 6,600 hectares down to 450 hectares.



EXTENSION OF WATERWAY SERVICES PROGRESS REPORT: UPPER NORTHERN YARRA AREA

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