

# WILSON INLET NUTRIENT REDUCTION ACTION PLAN



## Summary of Achievements

April 2003 – November 2006

*Produced for the Wilson Inlet Catchment Committee  
(November 2006)*

*This document is not designed as an official report on the success of the WINRAP. Rather it should be viewed as an overview of the works undertaken to date. The final report will be done after the 5-year plan is due for review in 2008.*

# Overview of the Wilson Inlet Nutrient Reduction Action Plan

The Wilson Inlet Nutrient Reduction Action Plan (WINRAP) is the guiding plan to protect Wilson Inlet from the effects of excess nutrients. It is the culmination of scientific research, community and stakeholder involvement into how the inlet and catchment functions and where we can make positive improvements.

The WINRAP is a 5-year plan, released in April 2003, whose actions have been agreed to by a variety of organizations; from community to government. These are the:

- Wilson Inlet Catchment Committee (WICC)
- Wilson Inlet Management Advisory Group (WIMAG)
- Department of Agriculture and Food WA (DAFWA)
- Department of Water (DOW) – previously Waters and Rivers Commission/Department of Environment
- Department of Fisheries
- Shire of Denmark
- City of Albany
- Water Corporation

As the name suggests nutrient reduction is the favoured option for improving the condition of Wilson Inlet. By tackling nutrient inputs the cause of the algal growth is being addressed, whereas other options are only tackling the symptoms. Reducing nutrients will not impair but only add to the Inlet's natural beauty. Nutrient reduction also provides the option with the greatest level of community support and involvement. It is the only option that guarantees "action on the ground" in the short term" (WINRAP Summary 2003)

The Action Plan identifies three necessary strategies to improve the condition of Wilson Inlet. These are:

## **A) Reducing nutrients from the catchment**

Nutrient inputs need to be reduced from all sources, urban and rural, with an emphasis on the main sources and where the greatest reductions can be achieved with the available resources. Unless nutrient levels are reduced from all sources there is a real risk excess macro algal growth will continue and phytoplankton blooms may become worse in terms of amount and distribution. Reducing nutrient inputs should bring about a reduction in algae growth.

## **B) Managing the Inlet to maximise nutrient processing and export.**

It is considered that the Inlet's ability to process and export nutrients will be assisted by controlling development in the Inlet's floodplain, encourage revegetation of this floodplain, maximising Inlet water levels, and providing consistent bar opening locations.

## **C) Monitoring and reporting to guide the effectiveness of management.**

Better information is needed to determine the impacts of certain land uses, and to judge the effectiveness of management methods. Monitoring is also needed to determine whether the Inlet's condition is improving or worsening.

Under these three strategies 52 actions have been identified. The details of these actions, which organisations are responsible, the measurable outcomes and time frames are outlined in the plan.

For a copy of the WINRAP Summary contact the Department of Water (Albany) on 98425 760 or download it from the Wilson Inlet Catchment Committee or the WINRAP websites: [www.wicc.hostwa.com.au](http://www.wicc.hostwa.com.au) and [www.scric.org/winrap](http://www.scric.org/winrap).

## **Progress to date.**

Since the WINRAP was released in April 2003 much has been achieved by farmers, community groups, governments and the general community to improve the way we interact with our land and water.

There are still some actions that need to be implemented or completed and more landowners to become involved; however progress to date has been very successful.

This review identifies the actions that have been undertaken under the Wilson Inlet Nutrient Reduction Action Plan. Please note that it does not include every action, individuals and groups who have been involved, either formally or independently from non government or government organizations. We acknowledge and thank all who have and continue to undertake activities to improve the condition of the inlet and its catchment.

The review has been split into the following categories:

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## **1) Intensive rural land uses**

These are classed as agricultural activities that can produce a large amount of nutrients for their size. They include dairies, feedlots and intensive annual horticulture. It is important to ensure that these industries both operate and are located in areas that will minimize their impact on the surrounding environment and Wilson Inlet.

### Planning

The Department of Environment (now Department of Water) and the local government authorities make recommendations or place conditions on the placement and operating licences of many intensive industries. This often includes the use of Best Management Practice guidelines for industry (including cattle feedlots, dairies, vineyards, aquaculture and horticulture) and are designed to minimise the effect of these industries on the surrounding land and waterways.

### Annual Horticulture

The low lying land around the inlet, especially on the eastern side, has been identified as an area where intensive industries need to be well managed to avoid high levels of nutrient export. Two major projects have been completed to help manage this area. The first was the production of a floodplain map on the eastern side of the inlet, undertaken by the Department of Environment in 2004. This map identified the extent of flooding at different water levels in the inlet. The City of Albany's Local Planning Strategy recognises areas identified in the study as being subject to inundation and restricts development in these areas accordingly.

Another initiative has been the collection of water samples from potato growing areas around Lake Sadie. This was undertaken during periods when water drains from paddocks prior to sowing. The purpose of the study has been to estimate nutrient export from these areas into Wilson Inlet. Analysis of the nutrient data collected will be undertaken soon, after which information obtained as a result of the project will be made available to participating horticulturalists and the wider community. The data will also be used to help landowners and managers make more informed management decisions.

### Animal Industries

The Wilson Inlet Catchment Committee (WICC) has been heavily involved in helping intensive animal industries to reduce their impact on waterways in the catchment.

Working with farmers, industry and DairyCatch approximately \$40 000 has been spent improving nutrient management in the dairy industry. Effluent management plans were undertaken for 5 dairies in the catchment. Funding was provided for the farmers to undertake work outlined in these plans such as trafficable sumps, effluent pumps and traveling irrigators to assist them to manage their effluent by applying it to their pastures 'fertigation'. This enables nutrients to be recycled on the properties rather than viewed as a waste to be disposed of.

WICC is currently assisting the Mt Barker Saleyards to improve their effluent management in a similar manner. For the next point source pollution project WICC will be working with a number of feedlots in the upper catchment.

## 2) Drainage Management and Stream Rehabilitation

Waterways, be they artificial drains or natural streams, transport the majority of the catchments nutrients to the inlet. These nutrients may be dissolved in the water column or attached to sediment. Improving the management of these waterways is a major part of the work that the Wilson Inlet Catchment Committee undertakes in partnerships with landowners. The main aim of this work is to exclude stock from waterways (and thus reduce erosion and nutrient input through effluent) and to create buffers which trap nutrients before entering the waterway. The use of vegetation and instream structures can also have an impact on water quality and habitat value.

### Fencing and Revegetation

Using funding through the South Coast Regional Initiative Planning Team (SCRIPT), the Australian Government Envirofund, NHT/NAP and the Department of Environment the Wilson Inlet Catchment Committee and landowners have or are in the process of fencing 140 km of waterways in this catchment.

Table 1. Completed Drain and Stream Management work funded by the Wilson Inlet Catchment Committee to 2006

<b>Fencing of waterways</b>	<b>Stock crossings</b>	<b>Alternate water points</b>	<b>revegetation</b>	<b>Perennial pasture</b>
87.5km	59	29	94.5ha	120ha

Table 2. In progress Drain and Stream Management work funded by the Wilson Inlet Catchment Committee to 2006

<b>Fencing of waterways</b>	<b>Stock crossings</b>	<b>Alternate water points</b>	<b>revegetation</b>	<b>Perennial pasture</b>
53km	35	10	24.8	155ha

(There is \$65 000 allocated for new waterway protection projects under the Wilson Inlet Nutrient Reduction Action Plan for 2006/7. This funding is provided by SCRIPT *through the Australian and State Government support of the Natural Heritage Trust and National Action Plan for Salinity and Water Quality*)

The plan calls for all Water Corporation drains to have stock excluded by 2007. These drains are in the Albany Drainage District which incorporates all of the Cuppup-Lake Saide and much of the Sleeman sub-catchments. In addition we aim for a 30% increase in the fencing of creeks in these sub-catchments. Fencing and revegetation of riparian zones are also encouraged as best practice for waterways management in the rest of the catchment.

As of 1999 there was approximately 45.5km of fencing recommended along the main channels in the Sleeman River and Cuppup sub-catchments, data for the Lake Saide sub-catchment is not available (Greenskills and Pen, 1999). To date an extra 43.5km of fencing has been funded by WICC along waterways in the priority sub-catchments. This includes both main drains, streams and lower order drains.

### Drain Maintenance

The Water Corporation has a legal responsibility to minimise flooding in the Albany Drainage District. To do this they have a maintenance program to reduce the build up on any materials that may reduce the capacity of drains to move water. To help reduce the impact of erosion (which can carry large amounts of nutrient) the Water Corporation has a program to slash, rather than spray,

vegetation on the sides of drain banks where possible. They also guide landowners who may wish to increase the flow, or create new private drains on how to do this in a way which minimises the erosion potential of the receiving Water Corporation drain. WICC and the DoW will continue to work with the Water Corporation to develop ways to reduce nutrient and sediment export.

### Waterways Surveys

Waterway surveys report on the condition of streams and drains, including the existence of native vegetation, erosion, fencing and weeds. Prior to the release of the WINARP three surveys had been completed. They are the:

- Survey of Stream Foreshores in the Scotsdale Brook Catchment, Denmark WA (1998) by the Waters and Rivers Commission
- Restoring the Health of Little River: Riparian Survey and Management Recommendations for the Little River Catchment (1996), a report prepared by the Denmark Environment Centre
- Survey and management Recommendations for foreshores of the Sleeman and Cuppup Creek Catchments (1999), by Greenskills and Dr Luke Pen (waters and Rivers Commission)

These surveys have been used to help guide where special attention should be given and to budget for waterways protection and enhancement.

Additional surveys have since been carried out in accordance with the plan, to add to our base knowledge and guide streamlining works. These surveys are the:

- Denmark to Hay Rivers Sub-catchment Tributaries (2004). A document is a snap shot of stream foreshores in the lower Wilson Inlet catchment (the Shire of Denmark & City of Albany) by Green Skills Inc (with funding through Lotterywest's Gordon Reid Foundation for Conservation and the Department of Environment)
- Waterways – Upper Denmark River Catchment & Springs Catchment (Upper Hay River) – A Snap Shot of Stream Foreshores in the Upper Wilson Inlet Catchment, Shire of Plantaganet, November 2004. By Green Skills Inc (with funding through Lotterywest's Gordon Reid Foundation for Conservation and the Department of Environment)
- In 2006 LotteryWest and the Department of Environment funding has been utilized by the Wilson Inlet Catchment Committee and Greenskills to complete the foreshore conditions surveys in important management areas. This is due for release in the near future

## **3) Fertiliser Management**

Modelling and monitoring suggests that the majority of the nutrients entering Wilson Inlet come from agricultural sources, with grazing being the biggest contributor (due to its size). Improving the use of fertiliser will have a significant impact on nutrient export (from excess fertiliser) to the inlet.

### Soil testing: making it standard practice

The Wilson Inlet Catchment Committee, Department of Water and the Department of Agriculture and Food WA have been working towards improved fertiliser management among the catchments graziers. Together they have held 4 workshops to increase landowner understanding of soil health including: soil biology and chemistry and how this relates to pasture growth and nutrient loss (fertiliser waste). These workshops, and follow up site visits, not only encourage the use of soil testing but are aimed at enabling landowners to interpret the results and decide on the most

appropriate type and amount of fertiliser they require, if any. There have been approximately 100 landowners involved in these workshops.

WICC, DoE and DAFWA have also assisted a number of landowners through subsidised soil testing and liming. This subsidy was an incentive to attend the nutrient management workshops. A similar program of soil and tissue testing workshops and subsidies will continue in 2007.

#### Understanding current fertiliser use

Surveys of fertiliser use in both the upper and lower catchment have been attempted, such as the February 2005 survey in the Sleeman, Lake Saide and Cuppup sub-catchments. Unfortunately the response from these surveys was very poor. The WINRAP partners are aware of the importance of collecting this information and are currently developing a number of strategies to improve on past attempts. These could include one to one surveys when undertaking site visits for other purposes, as part of free input-output analysis (which help manage the financial side of a farm business) or as a condition of soil testing subsidies.

## **4) Perennial pastures**

Perennials are becoming increasingly important in grazing systems as they offer many advantages over pastures that only include annual species. These benefits include better livestock production, improved financial return and a healthier environment.

Perennials can provide feed all year round, as sub tropical varieties are active over summer. They are deeper rooted and active for longer periods of time than annuals hence they utilize more water which reduces the effects of water logging, some varieties are excellent for waterlogged soils. This also makes them an important tool in reducing the threat of salinity, especially in the upper catchment. Perennial pastures have nutrient advantages as well by utilizing fertilizer more effectively as the root zone is deeper hence reducing the leaching of fertilizer beyond the root zone. This is especially true if combined with management of waterlogged soils and allowing split fertiliser applications.

The Department of Agriculture and Food WA and WICC have been actively promoting the establishment of perennial pastures and providing both financial and technical assistance. Regular field days have been held in the upper catchment to promote and inform farmers about perennial selection and management for production. These field days are now being rolled out in the lower catchment with the first planned for the 7<sup>th</sup> of December 2006.

There has also been a number of demonstration sites established for perennial pastures. These sites provide an excellent 'classroom' to teach others about perennials, as well as providing an area to experiment with different management techniques and outputs. The main demonstration sites are the:

- The WA College of Agriculture, Denmark has a site along East river Road with trial plots of Tall fescue, Rhodes, Setaria, kikuyu and an Evergreen mix.
- Sustainable Grazing on Saline Land (SGSL) site in the Upper Hay catchment.
- In addition the Department of Agriculture and Food WA have established a comparison site of annual and perennial farming systems at the Mt Barker Research Station,
- WICC has secured funding for works at the Mt Barker saleyards to establish perennials to assist in the better management and recycling of the effluent from the saleyards

The uptake of perennial pasture funding has been slow in the lower catchment probably, because kikuyu is well established in many areas. The upper catchment has established 120 ha through funding. In addition the Upper Hay Catchment Plan, which was approved in October 2006 and

given nearly \$700 000 through SCRIPT, aims to establish approximately 3000ha of permanent perennial pasture systems.

Table 3: The proposed on ground work to be undertaken in the Upper Hay Strategic catchment

On ground work	Proposed
Remnant & riparian vegetation fencing	160 km
Revegetation	130 ha
Deep rooted perennials	3461 ha
Phase farming	150 ha
Farm forestry (private)	125 ha
Earthworks	50 km

## 5) Catchment Support

### Funding and support for catchment groups

The allocation of funds to both employ project officers and to implement on ground and educational works has been a major achievement for the WINRAP. The funds have been made available through the South Coast Regional Initiative Planning Team (SCRIPT), through the Australian and State Government support of the Natural Heritage Trust and National Action Plan for Salinity and Water Quality. SCRIPT funding has enabled two part time Natural Resource Management Officers to be dedicated to the project (one working for the Wilson Inlet Catchment Committee and one for the Department of Water). The staff are supported by the WICC's NRM Officer, the Department of Water and the community that forms the Wilson Inlet Catchment Committee.

Having staff dedicated to implementing the WINRAP provides a better a valuable resource for landowners, a focal point for the various stakeholders involved in the plan and allows for better planning and coordination of actions.

Thanks to funding through SCRIPT \$424 000 has been allocated over 3 years to implement on the ground nutrient reduction works. Prior to receiving this funding smaller grants have been made available to WICC to undertake on ground works. These include:

- In 2004 WICC received \$53,000 in funding from the National Action Plan for Water Quality and Salinity (NAP) to implement Strategic priorities of the Wilson Inlet Nutrient Reduction Plan. This project has several smaller projects within the overarching project: Point Source Pollution, Fencing of Drains in the Lake Sadie/Cuppup drainage district and Flood plain revegetation
- \$48,000 has been contributed by the Department of Environment (Water and Rivers Commission)
- The Water Corporation allocated \$10 000 for management of drains, such as fencing, in 2002 and 2003
- 2003 Australian Government Envirofund. Implementation of the Wilson Inlet Nutrient Reduction Action Plan \$32,000 towards fencing waterways and establishment of perennials.
- 2005 Australian Government Envirofund. Implementation of the Wilson Inlet Nutrient Reduction Action Plan \$92,000 towards fencing and revegetation of waterways
- The Shire of Denmark has provided WICC with approximately \$10,000 pa funding for landholders wishing to fence waterways within the Shire of Denmark which

includes the part of the Shire not in the Wilson Inlet Catchment. This section is referred to as the Western Hinterland such as Owingup Swamp and Parry's Inlet.

- Southern Incentives II and III. approximately \$30,000. A SCRIPT project supported by NHT to encourage sustainable land use and the protection of biodiversity, wetlands, waterways and coastal environments.

While no formal sub-catchment groups have been formed in the WIC area there have been a number of informal groups that have been involved with water quality monitoring, such as landowners in the Lake Saide-Cuppup area. These have been supported by a Ribbons of Blue position, which no longer exists. There are plans to re-erect these groups and to expand them into other areas of interest, especially production based groups. These would allow landowners to share information, experiences and equipment to expand their landcare projects or sustainability.

### Educational activities

The WINRAP highlights a number of activities including field tours, exhibitions and promotional activities to improve community understanding of the inlet, its catchment and nutrient sources. A communication plan was developed in early 2006 which address this part of the plan.

Education is a crucial part of behavioural change and different methods will be used for various target audiences. Some examples of actions undertaken to date include:

- Providing water quality and macro-invertebrate sampling lessons at the Denmark Primary School.
- Articles and advertisements in the Denmark Bulletin and the Plantagenet News
- Displays at community events, such as the Albany Agricultural Show, the Mt Barker Wildflower Show, the WA College of Agriculture, Denmark and Farming for the Future conference
- Provision of a variety of educational material and advice.
- River behaviour and protection lessons (using the River Model) at the Mt Barker High School, Mt Barker Primary School, Kendenup Primary School and the Denmark Primary School.

The plan also aims to use signage on major transport routes to identify the WIC area. 3 interpretive signs have been erected in strategic locations around the catchment. Other forms of signage, such as temporary signs at project sites have and continue to be used.



Note: education or capacity building activities associated with sustainable farming practices, such as soil testing, have been discussed in their sections above.

## **6) Urban Sources of Nutrients**

The urban areas of the catchment are very small compared to the amount of agricultural land, with the largest town Denmark only occupying 0.1% of the catchment. However, nutrient export per unit area is often higher in urban areas and with much of Denmark located close to the inlet the nutrient risk should be managed.

### Groundwater monitoring and urban sewerage

Currently, there is little measured information pertaining to nutrient export into Wilson Inlet from urban sources, particularly on-site effluent disposal. A preliminary investigation on nutrient discharge to Wilson Inlet from groundwater was conducted in 1998, which identified some potential nutrient sources and recommended site-specific investigations. Subsequently, the need to monitor groundwater flow and nutrients discharged into Wilson Inlet from urban sources, in particular the residential areas of Weedon Hill, Little River and Minsterly Road, is identified in the WINRAP as a priority action.

In May 2006 a series of monitoring bores were established along the Wilson Inlet foreshore down gradient from the target residential areas. Groundwater samples are collected monthly from the bores and analysed for Nitrogen (N) and Phosphorous (P). Furthermore, because the focus is on groundwater impact from septic systems, this project will also incorporate testing of relevant microbiological parameters, namely *Presumptive Thermotolerant Coliforms* and a bacteria called *enterococci*.

In addition to coordinating this initiative and providing technical expertise, the DoW is contributing \$5000 towards the cost of water sample analysis. The Shire of Denmark also contributed \$5000 to cover the cost of bore installation and the Wilson Inlet Catchment Committee provide additional funding as well as administrative support. Monitoring will continue until at least 2008.

The Water Corporation has released a plan to connect the Weedon Hill and Little River area to deep sewerage through a pressure main along Campbell and Ocean Beach Roads. The main will connect with the wastewater treatment plant in Zimmerman Street. It is hoped the findings of this project will help provide the impetus for these areas to be considered for the Water Corporation's Sewer Infill Program.

### Stormwater

A drain stencilling program was initiated by the Department of Environment to highlight the link between urban stormwater and the inlet and ocean. This project involved artwork from primary school students being painting on drains along Strickland Street. The Shire of Denmark played a crucial role in the provision of equipment and in ensuring the safety of the young artists. The importance of allowing only clean rainwater to enter drains has and will continue to be re-enforced through newspaper articles and other mediums.



## 7) Protecting and re-establishing the floodplain

The WINRAP identifies that nutrient removal will be assisted by controlling development in the inlets floodplain, encouraging revegetation in and protecting the floodplains vegetation, maximising water levels and providing consistent bar opening locations.

### Floodplain mapping and water level management

Management of water levels in the inlet is the sole responsibility of the Water Corporation, which makes the decision on when the bar opening is to occur. This is a statutory obligation in accordance with its operating licence which seeks to reduce the risk of flooding in the Albany Drainage District. With the increasing need to manage estuaries for multiple purposes, and with the added impacts of climate change, authorities are aware of the need to review the current management system. Preliminary discussions have taken place on this issue.

With the constraints of the current operating system in mind options to increase the functioning of the floodplain have been considered. A major work on this section of the plan was the Department of Environments 'Report on findings of Eastern Wilson Inlet Landholder Survey and Floodplain Mapping'. This report including mapping of the eastern floodplain and a survey of landowners to 'identify impediments to maintaining and increasing water levels in the Wilson Inlet, and provide costs and benefits to removing these impediments'. The reports objectives were to:

- Quantify the costs/benefits of increasing the water level in the Wilson Inlet before the bar is opened.
- Identify landuses on the floodplain.
- To map the extent of floodplain now (1.1m above AHD) and at higher levels (1.2-1.5m above AHD)
- Identify landholders who would be willing to undertake works
- Identify community attitude to Inlet water level change.

The findings will help with future natural resource management and landuse planning. For example, the City of Albany excludes future development within the floodplain defined by the DoE mapping (under 2.5m AHD).

Copies of the 'Report on findings of Eastern Wilson Inlet Landholder Survey and Floodplain Mapping' are available from the Department of Water (Albany).

### Revegetation

A number of groups and individuals have been working to protect and enhance native vegetation within the floodplain. The Wilson Inlet Catchment Committee continues to work with landowners in the floodplain to protect and revegetate both waterways and native vegetation. This has been outlined in "Section b) Drainage Management and Stream Rehabilitation".

Both the Shire of Denmark and the Denmark Weed Action Group have also been involved with restoration of areas along the inlets floodplain. This includes planting at sites along Inlet Drive and Ocean Beach Road as well as weed control to assist native regeneration.

There is currently a proposal to revegetate an expired horticultural lease within the Lake Saide area. The project is in the early stages of discussions with the landowner, the Department of Planning and Infrastructure and will also require consultation with adjacent landowners. However, due to the location and size, approximately 19ha, this will be a significant project with both nutrient management and habitat benefits.

### Wilson Inlet sandbar

A survey of sand deposition behind the sand bar at the mouth of Wilson Inlet in the years 2003 to 2006 has been carried out by Neville Boughton. A report of these findings was presented to WIMAG in July 2006. Copies of this are available from the Department of Water (Albany).

## **8) Monitoring and reporting to guide the effectiveness of management.**

### Nutrient input to the inlet

Water quality monitoring continues to be carried out by the Department of Water on a regular basis, with samples taken in the inlet and at sites along the major waterways of the catchment. The results from these surveys are analysed by the Aquatic Science Branch and will be reported to the public through 'Reports to the Community (with number 8 due for release in November 2006) and through public information nights. The Department of Water also has a State Water Quality and Assessment website. The website is intended to provide an indication of the quality of the water in a stream or river, for those who do not require the actual dataset. The site is available at [http://portal.water.wa.gov.au/portal/page/portal/dow/information/DATA/river\\_water\\_quality\\_assessment](http://portal.water.wa.gov.au/portal/page/portal/dow/information/DATA/river_water_quality_assessment) .

Some community monitoring of water quality and macro invertebrates has also been carried out as part of the Ribbons of Blue project. This process needs to be formalised again and the data collated and presented to the community as part of the ongoing reporting.

### Land use Mapping and nutrient auditing

The Department of Water and WICC are currently planning a project to map land use and then provide nutrient audits and management tools for industries in the catchment, both intensive and extensive, that have not yet been involved in nutrient management works. WICC and DoW will take advantage of the skills and tools of the Department of Agriculture and Food WA to help with this project.

### Monitoring the success of WINRAP activities

Measuring the performance of the plan will involve a mixture of ongoing research and measuring performance targets set against each action. While the WINRAP is a 5-year plan many of the actions will be ongoing and results may not be seen straight away. For example while projects that reduce fertiliser input will, if successful, have an immediate benefit creating vegetated buffers involves allowing for the plants to establish themselves. As such the benefits will increase over time.

The Department of Water will continue to monitor water quality in the inlet and catchment, giving them greater certainty of trends in nutrient export as data is collected over a longer period. Streamlining will be monitored through collecting data on the length of waterways fenced and the growth at revegetation sites (through the use of photo-monitoring).

Projects by external bodies will also be supported where they demonstrate an ability to improve or expand knowledge of the inlet or catchment. For example a project managed by the department of Fisheries to look at sea-grass growth and use in the inlet has been allocated funds and staff time through the WINRAP.

An evaluation of the WINRAP will be made following the completion of the 5 year project (in 2008).

## **9) Feedback, ideas or to become involved**

For more information on the Wilson Inlet Nutrient Reduction Action Plan or to play your part in its implementation please contact either

The Wilson Inlet Catchment Committee  
9848 2955 or [wicc@westnet.com.au](mailto:wicc@westnet.com.au)

The Department of Water  
98425 760 or [steve.may@water.wa.gov.au](mailto:steve.may@water.wa.gov.au)