WILSON INLET NUTRIENT REDUCTION ACTION PLAN (WINRAP)

Update Report for the Wilson Inlet Management Advisory Group, 16th March 2005

- Point Source Project - Nutrient Audit of Dairies and Potato Farms

This initiative constitutes implementation of WINRAP task IR3 which identifies the need for existing intensive rural land use activities to be mapped, waste management methods detailed, plans developed and work implemented to reduce nutrient export from these enterprises.

Site visits of 4 dairies within the Wilson Inlet catchment, O'Farrell, Lindberg, Mostert and the Agricultural College, has resulted in the production of 2 reports to date (O'Farrell, Ag College) with the report for Lindberg and Mostert expected soon. Implementation of recommended works to commence following costing/funding verification. Meeting between DoE, Wilson Inlet Catchment Committee (CLC) and dairy operators to occur in coming weeks to discuss arrangements.

Nutrient audits of potato farms in the Lake Sadie area commenced with distribution of survey forms to relevant landowners. This component of the nutrient audit initiative to progress further following one-on-one meetings with potato farmers in April or May 2005 (after busy harvesting period).

- Fertiliser Workshop and Soil Testing Subsidy Program

Tasks FM1, FM2 and FM3 of the Action Plan strive to undertake assessment of fertiliser use and promote best practice fertiliser management to farmers throughout the Wilson Inlet catchment. In order to progress this initiative a Fertiliser Workshop will be conducted on Wednesday, 30th March 2005 at the Narrikup Hall, commencing at 10am. Landowners can find out about nutrient cycling and leaching processes important in the high rainfall area. The workshop will include practical demonstrations of nutrient leaching from different soils, how to interpret soil tests, soil sampling techniques and alternative labs for soil test analysis. It will also provide recommendations and information about best management practices to reduce nutrient loss.

The Department of Environment will contribute $5,000 towards a soil testing subsidy program for workshop participants, whereby farmers can be reimbursed 50% of their soil test analysis costs.

In February 2005 fertiliser survey forms were distributed to landowners in the Sleeman, Cuppup & Lake Sadie sub-catchments. The results of the survey will be used to compile a database to help understand history of fertiliser application rates and identify future project target areas within the Wilson Inlet catchment.

- Foreshore Surveys

The completion of a number of foreshore condition surveys for waterways within the Wilson Inlet catchment can assist with identifying priority areas for fencing and rehabilitation. Two foreshore surveys were released in November 2004. Denmark to Hay Rivers Sub-catchment Tributaries (Green Skills Inc). This document is a snap shot of stream foreshores in the lower Wilson Inlet catchment; and Waterways – Upper Denmark River Catchment & Springs Catchment (Upper Hay River), a snap shot of stream foreshores in the upper Wilson Inlet catchment.

Two additional foreshore condition surveys exist for other sub-catchments within the wider Wilson Inlet catchment. They are the Survey of Stream Foreshores in the Scotsdale Brook Catchment (1998) and Restoring the Health of Little River: Riparian Survey and Management Recommendations for the Little River Catchment, a report prepared by the Denmark Environment Centre in 1996.

- Waterways Protection and Restoration

Fencing of creek lines, with priority given to Sunny Glen, Sleeman and Cuppup areas, in accordance with tasks SR2 and SR1. Degree of implementation is currently dependent on external funding (eg Envirofunds). Projects west of the Wilson Inlet catchment are funded through the Shire of Denmark grant. To date there has been approximately 42kms of waterways fencing projects completed or in progress. An associated GIS mapping project is also in progress. WIMAG members and the general public will be able to view an updated map at the Denmark office of the Department of Environment from mid April 2005.

- Drains Project

Task DM4 of the Action Plan requires all Water Corporation and private drains subject to stock access to be fenced and revegetated (where necessary) within 5 years of the release of the WINRAP summary. To date only 12 landowners have received funds attributed to this project, contributing to the fencing of 6 kilometres of drain and the construction of 2 stock crossings. However, since February 2005, a contractor has progressed this project significantly. In the coming weeks he will meet with 9 more landowners who have expressed an interest in participating in this project. A database has also been established to highlight target areas.

- Demonstration Sites

Task DM5 identifies the need for a number of sites to be established to demonstrate best management practice (BMP). This may be in the form of man-made riffles, artificial wetlands for bio-filtration or any other exercise that has the purpose of demonstrating the benefit of a particular structure or management approach.

Constructed wetland for urban stormwater bio-filtration – Denmark Townsite Lot 1078 Scotsdale Road (Crown Reserve 41456).

Millars Creek – revegetation is growing well, ongoing weed control required.

Stock watering hole trial (Wolfe) – the latest WQ monitoring was conducted on the 15th February 2005 (3 monthly). The results continuing to indicate that the rocked watering hole is the most effective means of keeping stock out of the water and therefore reducing stock impact on water quality.

Proposed constructed wetland on Cuppup Creek (Plantagenet Location 4559 Stanley Road, Youngs Siding) – subject to funding availability and verification of site suitability.

Perennial Pastures – This year the WA College of Agriculture in Denmark will be seeded with alternate deep rooted perennial pasture species.

- Perennial Pastures

Action PP1 aims to establish perennial pastures in priority areas of the catchment identified by Department of Agriculture research on nutrient 'hot spots'. To date, approximately 80 hectares of new perennials have been sown as part of this initiative.

- Funding

To date, implementation of the WINRAP has primarily relied upon funding from the Department of Environment and external sources such as NHT Envirofund (see Action CP2). There is currently a strong focus on obtaining significant funding for future on-ground works in the Wilson Inlet catchment through the South Coast Regional Strategy and associated Investment Plan. The Investment Plan is progressing well and the results of this process will be reported as soon as they are available.

- Education/Communication

While implementation of many of the initiatives in the Action Plan will indirectly lead to better community understanding of the Wilson Inlet catchment, nutrient sources and their management, Action CP3 is centred on this objective.

The Fertiliser Workshop at the Narrikup Hall on Wednesday 30th March is an event that hopes to educate landowners regarding best fertiliser management practices and the benefit of soil testing.

In addition, a perennial pastures field day has been organised for Tuesday 5th April 2005 at Forest Hill as part of the Sustainable Grazing on Saline Land (SGSL) program. Contact Lynn Heppell from the Wilson Inlet Catchment Committee on 98512697 for more information.

Display at the Mount Barker Machinery and Field Day on Wednesday 23rd March 2005.

A number of landowners in the lower catchment participate in regular (quarterly) monitoring of water quality and collection of macroinvertebrate data for waterways traversing their properties.

Stencilling of drain grates along Strickland Street as a means of communicating the impact of urban stormwater on Wilson Inlet.

A recent meeting of the Chairman of WIMAG, officers from the DoE and Community Landcare Coordinators working in the Wilson Inlet catchment resolved to introduce a regular component of WIMAG meetings whereby a brief update on the progress of the Wilson Inlet Action Plan is provided. This report will also be made available to the general public from the DoE office in Denmark.

Also, newspaper articles highlighting achievements of the Wilson Inlet Catchment Committee, in relation to the WINRAP, will appear in the Denmark Bulletin, Plantagenet News and/or the Albany Advertiser when appropriate.

- Monitoring

In response to public concern about the state of Wilson Inlet a number of studies have been done in recent years in an attempt to determine whether the condition of the Inlet is improving or worsening. These studies include, water quality sampling of Wilson Inlet; monitoring nutrient losses from the catchment; surveying the quantity and distribution of algae and seagrass (*Ruppia*); and studying the rate nutrients are released from sediment. The information provided through such research projects also help us judge the effectiveness of management methods.

A number of reports resulting from monitoring of the Wilson Inlet and its catchment waterways are available from the DoE Denmark office. These reports are listed below.

Summary of Wilson Inlet Studies from 1994 to 1997 (July 1998)
Summary of the Estuarine Monitoring Program Conducted in Wilson Inlet 1995 to 1998 (September 1999)
Summary of Wilson Inlet Catchment Monitoring Program (October 2000)
Managing the bar and the Inlet (June 2002)
Water Quality in Wilson Inlet from 1995 to 2002 (August 2002)
Ruppia in Wilson Inlet (November 2003)

Water quality in the Inlet and monitoring of catchment waterways continues to be undertaken by the Department of Environment. **The availability of monitoring reports will be advertised as soon as possible after their release.**

In addition, as part of the National Eutrophication Management Program (NEMP), the following studies have been completed:

Nutrient Cycling by Seagrasses & Epiphytes in Wilson Inlet (D Walker & B Dudley, UWA);
A Study of the Phytoplankton Ecology of Wilson Inlet (L Twomey, Curtin University & P Thompson, University of Tasmania); and
Are Sediments a Major Source of Nutrients in Wilson Inlet? (D Heggie & D Fredericks, Australian Geological Survey Organisation, Canberra).

A recent initiative involves regular (monthly) monitoring of 'health indicators' at various locations around the inlet. A series of observations, including water clarity and odour are recorded at sites such as Poddyshot boat ramp and Rudgyard Beach.