

What have the people of the Southern Region
achieved during the past year?

Achievements yearbook 2006–07



Improving natural resource management in southern Tasmania



Australian Government



Tasmania
Explore the possibilities



Implementing the Southern Natural Resource Management Strategy

During the past year, NRM South has started work on implementing the Natural Resource Management Strategy for Southern Tasmania to improve natural resource management in the Southern Region. The projects featured in this report show that the NRM South programs have already achieved some very good outcomes and that excellent partnerships have emerged through working with Local Government, community groups, organisations and individuals.

This report highlights some of the program achievements for 2006–07 and complements NRM South's Annual Report.

The vision for the Southern NRM Strategy is that:

The Southern Region's natural resources will be protected, sustainably managed and improved for the shared environmental, social and economic benefit of our Region, by a well-informed, well-resourced and actively committed community.



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Working Together to Improve NRM

The *Natural Resource Management Strategy for Southern Tasmania (2005)* was developed by NRM South through extensive consultation with the community of the Southern Region. Over 1,000 people contributed to the Strategy by attending meetings or providing written submissions.

The Strategy has set resource condition targets for the next 10–20 years for improving and managing:

- marine, coastal and estuarine ecosystems and water quality
- freshwater ecosystems and water quality
- native vegetation extent and condition
- threatened species and communities
- weeds, pests and diseases
- soil condition and salinity.



Investing in Natural Resource Management



During 2006–07, NRM South allocated \$5.71 million in program funds (out of a total three-year package of \$12.7 million) to improve the natural resources in the Southern Region. The funds were distributed through 35 projects and also supported other services that meet the Southern NRM Strategy's resource condition targets. In most cases, NRM South's investment is matched on at least a cost-sharing basis. Most projects are administered and managed by NRM South, with a few cross-regional projects administered by another NRM Region.

Working with people, creating partnerships

NRM South has developed some excellent partnerships through working with government, community groups, organisations and individuals.

NRM South works closely with a number of service providers and partners to deliver a wide range of projects. The service providers and partners represent a mix of expertise including:

- Local Government through a number of Councils (often on behalf of community groups or networks) and the Southern Tasmanian Councils Authority
- State Government, including the Department of Primary Industries and Water and the Parks and Wildlife Service
- Community organisations at State and catchment levels including Greening Australia, the Tasmanian

Landcare Association, the Understorey Network and various catchment groups

- Research organisations, including the Tasmanian Aquaculture and Fisheries Institute
- Sub-regional NRM organisations (e.g. the Derwent Catchment NRM Committee, the Huon Valley NRM Committee, the Glamorgan–Spring Bay NRM Committee)
- Industry, including the Tasmanian Fishing Industry Council
- Private consultants.

There were great capacity building outputs across all programs. NRM South supported over 7,000 individuals and 291 groups at the local level with workshops, information and other resources to implement effective natural resource management practices at the local level.

While on-ground works are only just starting to gain momentum, we are starting to see some significant outputs through the programs. For instance, NRM South facilitated significant on-ground outcomes including property management planning covering over 27,800 hectares, and on-ground protection of native vegetation, threatened species and water quality in rivers and wetlands on about 1,000 hectares.

Support for the Community



An action planning kit for care groups was launched in November 2006

The NRM South technical facilitation staff are helping individuals and community groups to achieve their aspirations to sustain and improve our agricultural systems, natural and cultural landscapes and soils, native flora and fauna, freshwater ecosystems and marine, coastal and estuarine values.

Support for community groups

NRM South provided \$80,000 to the Tasmanian Landcare Association to develop and implement a process to ensure that care groups have a shared understanding and consistent strategic approach to addressing NRM priorities in the Southern Region.

Who's involved

Tasmanian Landcare Association, all care groups, NRM South

Work undertaken

The Tasmanian Landcare Association developed a Roadmap to Results action planning booklet and resource kit to help care groups plan their activities and link them to regional NRM priorities and resource condition targets. The action planning model is already used by 10 groups, who developed action plans that have taken into consideration NRM South's targets. A mini-pilot of the Most Significant Change evaluation technique is being conducted to determine the most significant change that has occurred for people involved in Landcare over a set number of years, using a story-telling method. The website was also redeveloped and updated.

Benefits

- The resource kit is a tool that will help groups strategically plan on-ground activities and link these to regional NRM targets.
- This activity will also provide NRM South with 'snapshots' of care group activity to ensure that we are up-to-date with their activities and obtain an indication of the 'health' of the care community.
- The mini-pilot of the Most Significant Change technique is showing good potential for expansion and seems a positive way to collect and present information and data to evaluate non-tangible NRM outcomes.

Support for the Community



Support for the Aboriginal community

NRM South employs an Aboriginal Community Support Officer to ensure that:

- Aboriginal values and cultural heritage are understood and accounted for in NRM practices
- engagement with appropriate Aboriginal organisations and community is more effective
- the capacity of the Aboriginal community is increased to be involved with NRM, and the capacity of the non-Aboriginal community is increased to understand and engage with the Aboriginal community more effectively.

Who's involved

NRM South's Aboriginal NRM Support Officer, the Indigenous Land Management Facilitator, Tasmanian Aboriginal Land and Sea Council (TALSC), South East Tasmanian Aboriginal Corporation (SETAC), Aboriginal Heritage Office, Aboriginal Education Unit, NRM South service providers whose projects have implications for Aboriginal engagement and cultural heritage protection (South East Coast Working Group – Tasman, Sorell, Clarence and Glamorgan Spring Bay Councils, Biolinks – Huon Valley and Kingborough Councils, Aquenal), Parks and Wildlife Service, Department of Primary Industries and Water, NRM South

Work undertaken

Cultural Understandings courses have provided an understanding of Aboriginal values and cultural heritage to NRM practitioners so that these are considered in NRM practices. A draft Aboriginal engagement strategy was developed and capacity building activities were supported, including for the Aboriginal Land Management Team, the Aboriginal Green Corps and an Aboriginal works team at Saltwater River.

Assistance was provided with funding submissions and project development for on-ground works on Aboriginal Land, including bush tucker revegetation at Saltwater River, developing infrastructure for the Aboriginal heritage materials laboratory at the TALSC, strategic planning for the TALSC, and assessments and on-ground works at the Ballawinne, Kuti Kina and Wargata Mina caves in the South West, managed by the TALSC.

Benefits

- NRM practitioners and NRM South service providers are more aware of how to engage effectively with appropriate Aboriginal organisations and the community.
- Capacity building support and activities are assisting Aboriginal organisations in the Southern Region to undertake Caring for Country/NRM activities.

Participants of a cultural understanding course doing gumnuts to buttons – an Aboriginal perspective of history in Tasmania

Support for the Community



The plants provided by the Understorey Network are essential to the success of many NRM projects

Growing plants for community projects

NRM South provided \$58,630 to the Understorey Network to provide local provenance plants and a technical support service to care groups and catchment groups who are implementing NRM plans.

Who's involved

The Understorey Network care groups, NRM South

Work undertaken

The Understorey Network enlisted 44 growers to propagate 11,000 local provenance plants, which were propagated for NRM South projects and other NRM projects in the Southern Region. Three field days and workshops were also held, with a total of 60 attendees.

The Understorey Network has recently established a Community Nursery at Tolosa Street in Glenorchy, which includes a demonstration urban garden landscaped and planted with native plants.

This year the Understorey Network won the Community Section of the Tasmanian Awards for Environmental Excellence.

Benefits

- The project was very successful in engaging the community and linking growers with local and subregional NRM projects.
- The project assisted many NRM projects by providing plants at a nominal cost.

Support for the Community



Catchment planning for Little Swanport

NRM South provided \$132,000 to support the people of the Little Swanport catchment to implement a whole of catchment and whole of ecosystem planning model.

Who's involved

Glamorgan Spring Bay Council, Southern Midlands Council, local landholders, NRM South

Work undertaken

Glamorgan Spring Bay Council and Southern Midlands Council are building on the Little Swanport catchment planning process to develop a whole of catchment planning model that can be transferred to other Tasmanian catchments.

The draft catchment planning framework is in progress, with ongoing communication and consultation with stakeholders. Four farmer discussion meetings were held, representing 80% of catchment land holdings.

To help implement the catchment management plan, the NRM South Soils and Salinity Technical Facilitator

assisted with field days and salinity trials. In one of the trials, Little Swanport grazier Jim Walters tested different methods of improving saline pastures on land owned by Col and Sue Dyke. The most successful method was deep cultivation and spraying followed by sowing a mix of salt-tolerant pasture plants (puccinellia, strawberry clover, winter and summer active fescues). Salinity management in the Region was promoted through prominent articles in Tasmanian Country.

Benefits

- The Little Swanport Catchment Management Implementation Committee is now stronger because some original committee members, who had disengaged for a variety of reasons, are now participating again in NRM.
- The project is linking well with other NRM activities, including Property Management Planning, Envirofund, Water Smart and the National Landcare Program.

Landholder Sue Dyke at the boundary between untreated saline land and a very successful salt-tolerant pasture trial, with Peter Zund, NRM South.

Support for the Community



*Weedbuster Week
and Environmental
Home Expo (right)*

Community workshops, information and events

In 2006-07, NRM South ran numerous events and activities for community education and skills development, including:

- Weedbuster Week activities
- Coastal and Marine Community Forum
- Coastcare Roadtrip
- Coastcare Poster Competition Sharing the Shoreline for Primary schools
- Climate Change and Coastal Response Public Forum
- Stubble Management and Precision Farming Field Day
- Drought-lotting Workshops
- Vegetation Condition Assessment Training
- MapInfo Training for Local Government NRM Officers (3 workshops)
- Conservation Action Planning Workshop with Biolinks project stakeholders
- Water Sensitive Urban Design Workshops
- Technical information was developed for the Tasmanian NRM website
- Environmental Home Expo.

Support for Landholders



Property management planning

NRM South has allocated \$331,000 to assist 40 landholders develop property management plans in priority catchments. As well as directly investing in property management planning, NRM South invested in the development of a Property Management Systems Framework for Tasmania (together with the other 2 NRM regions), which will ensure the quality and consistency of the plans.

Who's involved

Rural Development Services, Tasmanian Farmers and Graziers Association, Tasmanian Landcare Association, Rod Knight GIS, NRM South

Work undertaken

Already 10 property management plans are completed and an additional 19 are underway, with 9 almost complete. These 29 plans cover an area of 27,801 ha, exceeding our expectations.

Benefits

- The plans will assist in developing profitable and sustainable land management practices.
- The property management planning project has integrated well with related initiatives, such as FarmSAT, SMART water management plans, the NRM Incentives program and the Property Management Systems Framework.

After completing their PMP, Waters Meet landowners Paddy McShane and Steph Brouder will trial salt-tolerant pasture plants

The NRM South technical facilitation staff are helping farmers to plan and implement activities that will make agriculture more sustainable and improve native vegetation and water quality.

Support for Landholders



Support for on-ground works

NRM South provided \$513,000 to the NRM Incentives program to support landholders to do on-ground activities that benefit production and the environment by improving management of soil, water and native vegetation. The program is aimed at landholders, farmers, farmer groups and Landcare groups.

Who's involved

Greening Australia (Tasmania), Agricultural Resource Management (ARM), landholders, NRM South

Work undertaken

Delivery of incentives has started, mainly in 2 target catchments (Coal—Jordan and Swan—Apsley), with 9 management agreements now signed and on-ground works underway at 5 sites. The program is being promoted through meetings with local groups, by working with local government NRM officers and by linking with property management planning, other State programs and non-government organisations. A very successful stubble management field day was held in March in partnership with TopCrop and Southern Farming Systems.

Commitments have been made to protect and/or enhance 450 hectares, including four hectares of works that have been completed to stabilise soil erosion sites. Two tunnel erosion demonstration sites were established at Penna to showcase 4 different methods for addressing the erosion. Tunnel erosion is an important issue in parts of Southern Tasmania so these sites will be excellent demonstrations of the issues and potential management techniques.

Benefits

- The activities implemented in this program are resulting in more sustainable water use and land management practices, increased protection of threatened species, improved connectivity and quality of habitat at the landscape scale and greater control of weeds, pests and diseases.
- The project complements the State Government's Private Land Conservation Program and the Australian Government's Tasmanian Forest Conservation Fund, which provide incentives to landholders to protect ecologically important native vegetation from clearance and conversion.

Working with Local Government



Improving Councils' information and data systems

NRM South provided \$150,000 to improve Council-based information and data systems.

Who's involved

Southern Tasmanian Councils Authority (12 Councils),
NRM South

Work undertaken

The Southern Tasmanian Councils Authority is using existing Council information systems to develop a framework for more integrated management of and access to NRM information and data within Local Government.

A report identifying drivers and barriers to using GIS data has identified issues with the capacity of some Councils to access and use data owing to lack of GIS resources and skills, as well as a variety of issues with the data sets that are currently used. In response, the Authority is investigating ways of solving these problems. The Authority has decided to look at the

business case for regional or sub-regional resource-sharing GIS options for the Southern Region, as well as structures that will improve communication with other key stakeholders such as the State Government.

Benefits

- This activity will improve Council planning and decision-making, leading to better on-ground NRM outcomes.

Councils are working together with NRM South to improve planning and are involved in all NRM South projects.

Working with Local Government



This project is assisting all 12 Southern Councils to implement the Southern Weed Strategy. It also successfully helped leverage additional funds to address weeds of national significance such as gorse, boneseed and serrated tussock.

Implementing the Southern Weeds Strategy

NRM South provided \$370,000 to southern Tasmanian land managers for coordination, leadership and training to implement the Southern Weeds Strategy in partnership with other stakeholders.

Who's involved

Southern Tasmanian Councils Authority (all southern Councils), Parks and Wildlife Service, Department of Primary Industries and Water, Department of Infrastructure, Energy and Resources, Forestry Tasmania, Hydro Tasmania, Transend Networks, Local Government Association of Tasmania, Tasmanian Farmers and Graziers Association, Tasmanian Museum and Art Gallery, Serve-Ag, NRM South

Work undertaken

The Southern Tasmanian Councils Authority is providing resources to southern Tasmanian land managers to cooperatively implement the Southern Weeds Strategy in partnership with other stakeholders and land managers.

A regional priority weed list was developed and desktop mapping of priority weeds was undertaken. Training materials were developed and 8 training sessions conducted. This project has negotiated with TAFE

Tasmania to deliver on-demand weed and herbicide training,

Benefits

- The project was highly successful in linking and supporting stakeholders to implement strategic weed control.
- The project helped land managers to identify priorities for weed control programs.
- The project was highly successful at linking land managers with funding opportunities.

Other activities supporting implementation of the Southern Weeds Strategy

Four projects are implementing priority actions in agreed plans to manage weeds, resulting in the control of 8 targeted weed species on more than 50 hectares. The areas targeted for these projects include the Huon Valley, Kingborough, Derwent Valley, Southern Midlands and East Coast. The Southern Midlands Council, for instance, has controlled high priority weeds on 10 hectares and the Glamorgan Spring Bay Council has tackled high and medium priority weeds and protected threatened species on roadside verges. A coordinated African feathergrass eradication program was implemented across the Derwent Valley, the Huon Valley and Kingborough. Through the BioLinks project, the Huon Valley and Kingborough Councils treated 300 pampas grass populations. NRM South received \$310,000 for two statewide projects to manage weeds of national significance in Tasmania: boneseed, serrated tussock and Chilean needlegrass.

Community and Government Working Together



The Integrated South East Coastal Management Strategy

NRM South provided \$300,000 to the South East Regional Development Association to undertake three NRM flagship projects to demonstrate cooperation, integration and implementation of local on-ground actions across the south-east region.

Who's involved

The South East Regional Development Association (an economic development partnership between Sorell, Clarence, Tasman and Glamorgan Spring Bay Councils), Parks and Wildlife Service (PWS), Coastal and Marine Branch, Department of Tourism, Arts and the Environment, Southern Coastcare Association of Tasmania (SCAT), Birds Tasmania, Threatened Species Network (TSN) and NRM South

Work undertaken

A South East Coastal Management Strategy Steering Committee was established with representatives of the 4 Councils, PWS, SCAT, TSN and Birds Tasmania to oversee work on the following three projects.

1. Protection and rehabilitation of the Ramsar site at Orielton Lagoon. A Conservation Volunteers Australia

team surveyed and mapped weeds and removed outlying populations of boxthorn, boneseed and gorse on the eastern side as the first steps in a strategic approach to weed management. Protective fencing, to exclude vehicles, walkers and domestic and feral animals, is being erected to protect resident and migratory shorebirds and threatened plant species. An Aboriginal Heritage Officer was engaged to ensure Aboriginal Heritage values are protected.

2. Signage was developed to manage access and promote protection of local and migratory shorebirds and coastal values at 29 priority beach and wetland sites, which are home to threatened birds and plants. An officer is being sought to ensure protection of coastal values.

3. A cross-tenure and cross-municipal weed management program on both public and private land will contribute to weed control in significant areas and improve Council weed management processes in sensitive coastal areas.

Benefits

- Implementing the Strategy is a landmark project for improving collaboration among State, Local and non-government organisations involved in coastal management.
- The on-ground works at Orielton Lagoon are improving habitat and protecting threatened species at this internationally important Ramsar wetland.
- The project is facilitating regional weed management and building capacity within Local Government works crews.

The South East Coastal Working Group assessed over 30 beaches for fauna and flora values and access issues.

NRM South staff are helping community and government to plan and implement a wide range of natural resource management activities.

Community, Government and Industry Working Together



Native species were planted to stabilise the rivulet banks after willows were removed.

Improving the water quality of New Town Rivulet

NRM South provided \$80,000 to implement the New Town Rivulet Stormwater Management Plan by rehabilitating a section of the rivulet and adjacent natural wetland areas, while incorporating water-sensitive stormwater management.

Who's involved

Hobart and Glenorchy City Councils, Transend Networks Pty Ltd, National Foods Ltd, New Town Rivulet Catchment Care Group and other care Groups, the Tolosa Community Gardens and Nursery, Understorey Network, Derwent Estuary Program, NRM South.

Work undertaken

A remarkable collaboration between 2 Councils, industry and numerous community groups proved to be very successful. Weed removal, bank stabilisation, revegetation and scour protection works (at bridges and stormwater outlets) are well underway. For instance, a 10 metre strip of weeds was cleared along the wetlands, stormwater outlet protection works are underway in 3 locations, and willows were removed

and revegetation established at several sites along the rivulet.

Benefits

- This innovative partnership between Local Government, industry and many community groups provides a model for urban stream and stormwater management.
- The project has significant educational value to the local community about the management and value of urban waterways. Lenah Valley Primary School students are expected to participate in future works, including seed collecting and planting.

NRM South staff are helping to bring together community, government and industry to undertake complex natural resource management projects.

Industry and Local Government Working Together



Reducing pollution from marinas, ports and slipways

In 2006–07, NRM South provided \$162,000 to the Tasmanian Fishing Industry Council to improve boating management practices that degrade water quality in marine coastal and estuarine waters.

Who's involved

Tasmanian Fishing Industry Council, Southern Waste Management Authority, Kingborough Council and Tasman Council, NRM South

Work undertaken

This activity identified priority areas and remediation mechanisms for reducing water pollution from boating activities. The Tasmanian Fishing Industry Council is currently working with the Councils and the Southern Waste Management Authority to clarify what actions are needed and implement remediation methods. The Authority has initiated a waste audit process.

Benefits

- Point source pollution from boating facilities will be reduced.
- This activity is bringing together the fishing industry, two Councils and the Southern Waste Management Authority to implement remediation measures of value to all municipalities in the Southern Region and, potentially, statewide.

NRM South staff are helping to form partnerships between industry and Local Government to reduce water pollution.

Improving Our Region's Landscapes and Biodiversity

The NRM South technical facilitation staff are helping landholders and scientists to plan and implement activities that will improve our natural landscapes and native flora and fauna.

Preliminary outcomes from these programs include:

- 22 conservation covenants covering 780 hectares and 9 management agreements covering 90 hectares
- 11 hectares with threatened species protected by fencing

Assessing the condition of natural vegetation

NRM South, in partnership with the other Tasmanian NRM regions, provided \$92,875 to implement the vegetation condition assessment method developed by the Department of Primary Industries and Water. This activity involves determining baseline information for vegetation communities across a comprehensive network of sites throughout Tasmania and conducting training to increase the ability of NRM stakeholders to assess vegetation condition.

Who's involved

Department of Primary Industries and Water (DPIW), NRM South, NRM North, Cradle Coast NRM

Work undertaken

A very successful training program in the vegetation condition assessment method was conducted across all three NRM regions. The 3 training sessions in the Southern Region produced 23 accredited assessors and 2 trainers.

Collection of baseline data has started, with 15 baseline sites established in the south, building on the sites set up by the DPIW's Private Land Conservation Program. This project has successfully collaborated with the River Condition Index project (see page 23) by providing input into developing the vegetation condition benchmarks for riparian vegetation. This will ensure consistency between the vegetation condition assessment methodology and the Tasmanian River Condition Index.

Benefits

- The activity will improve vegetation management by ensuring it is based on good baseline data.
- The activity will enable trained operators to consistently monitor changes in vegetation condition over time and help them determine the best ways to improve vegetation condition.

Other activities improving vegetation condition across the landscape

- The Huon/Kingborough Biolinks project (\$277,500) is an exciting collaboration between NRM South, Kingborough and Huon Valley Councils to improve landscape connectivity and ecosystem condition across both municipalities. A consistent 'Landscape Linkages' approach is being developed to maintain biodiversity values across the landscape. Threatened species and communities are being protected by dealing with weeds, habitat fragmentation and inappropriate stock access. High priority weeds have been eradicated at over 350 sites and local provenance seed collected for revegetating the priority landscape linkages.
- The Understorey Network is growing plants for community revegetation projects (see page 6).
- The University of Tasmania is developing and implementing a decision support tool for managing rural tree decline in vegetation communities under threat in rural landscapes.

Improving Our Region's Landscapes and Biodiversity



Managing hotspots for flora and fauna diversity

NRM South provided \$930,000 to work with landholders to improve the management of priority natural habitat on private land in the Tasmanian Midlands biodiversity hotspot.

Who's involved

Southern Midlands Council, Northern Midlands Council, Department of Primary Industries and Water, NRM North, NRM South

Work undertaken

50 properties have been assessed since the project began in 2005 and 17 property owners have negotiated conservation covenants or management agreements (with 5 finalised, 6 being processed, 6 in the final negotiations) to receive financial assistance for on-ground works to protect threatened flora and fauna species. The area covered by agreements will be 1541 hectares across the 17 properties (which cover 17,446 ha). The threatened species protected by conservation agreements include 76 Priority 1 species, 38 Priority 2 species and 49 Priority 3 species.

Benefits

- The project has been very successful in assisting landholders to protect high priority vegetation communities and threatened species on their properties.
- A partnership was established with Roaring 40s (a subsidiary of Hydro Tasmania), which is providing sponsorship and assistance to protect wedge-tailed eagle sites.

Other activities improving landscapes

In the cross-regional Soil Condition Evaluation and Monitoring Project (administered by the Cradle Coast Region), 100 monitoring sites were set up around the State to assess soil health.

Farms and cemeteries are the last refuges for some threatened species

Improving Our Region's Landscapes and Biodiversity



The magnificent Tasmanian wedge-tailed eagle is a distinct sub-species

The endangered spotted handfish occurs only in the Derwent Estuary where its habitat is threatened by the invasive Northern Pacific seastar

Implementing threatened species recovery plans

On behalf of the three Tasmanian NRM regions, NRM South is administering contracts valued at \$1.3 million to implement priority actions in Threatened Species Recovery Plans to protect high priority species listed under national and State legislation.

Who's involved

Department of Primary Industries and Water (DPIW) Threatened Species Section, Inland Fisheries Service, Understorey Network, CSIRO, NRM South (lead region), NRM North, Cradle Coast NRM

Work undertaken

Raptors: A new National Recovery Plan was approved and maps produced of potential nesting habitat for wedge-tailed eagles and grey goshawks. Surveys of raptor nesting productivity were continued across the State and nest data made available via the DPIW Natural Values Atlas. Two raptor rehabilitation aviaries were constructed, with 3 wedge-tailed eagles and 1 masked owl rehabilitated and released into the wild, and many more rescued and transferred. Extensive communication, education and consultation activities

included a documentary on eagles to be shown nationally. An eagle training and accreditation program was developed and delivered, in conjunction with the Forest Practices Authority, to 145 Forest Practices Officers, Forest Planners and private consultants. Links were established with other projects: Hollow Nesting Birds, Biodiversity Hotspots (see page 17), the Private Property Conservation Program, Land for Wildlife and the Crown Land Assessment Classification.

Orange-bellied parrots: Significant recovery actions undertaken for this critically endangered species include maintenance of nest boxes at remote sites, a nationally networked captive breeding and release program, monitoring of populations and habitat restoration in priority areas. New activities this year included establishing the Friends of Orange-bellied Parrot Group and conducting expanded winter migration surveys on the west coast and King Island. This program has extensive community and State support for continuing the vast range of complex recovery actions.

Hollow nesting birds: Foraging habitat descriptions and range maps for the swift parrot, masked owl and forty spotted pardalote were updated and are now in use by land managers. New survey techniques to detect and map swift parrot nesting habitat were developed and are now being translated into management prescriptions. Tools were developed to identify potential habitat. The Threatened Fauna Manual, range maps

and the Natural Values Atlas were all updated with habitat descriptions and new foraging records. As a result, 5 key forest types for swift parrots are now under protection or special management agreements. This project has formed strong links with key land managers and other NRM projects and is making good progress on managing these species at the local and landscape scales.

Spotted handfish: A new multi-species handfish national recovery plan was endorsed. All handfish colonies were successfully monitored, their breeding success determined and the data analysed. Monitoring included assessing the success of transplanted marine algae as artificial spawning structures.

Freshwater galaxiids: A new Recovery Plan was endorsed and all monitoring completed by the Inland Fisheries Service. Vital support actions were provided for the critically endangered Pedder galaxias. The golden galaxias was added to the list of threatened species and Forest Practices Plans were reviewed, with appropriate recommendations for Swan and dwarf galaxias areas. Community awareness was greatly increased through training days, poster displays, talks and signage.

Key invertebrate groups: The project is making significant progress in the conservation of these often overlooked animals. Community and stakeholder involvement in the project is strong, with Kingborough Council and Hydro Tasmania involved in the management of threatened butterflies in the south. An extensive awareness program, run in conjunction with the Understorey Network, has drawn great interest from the community.

Flora recovery: Recovery actions include baseline monitoring, fencing, rehabilitation trials and genetic studies. A number of new draft national recovery plans have been progressed (e.g. threatened ferns and forest epacrids) and many new notesheets and listing statements prepared. Notable discoveries include a new population of the nationally endangered heath *Epacris glabella*, a significant increase in the number of the nationally endangered *Epacris exserta* and new populations of the endangered *Pimelea axiflora*.

Negotiation with Forestry Tasmania has resulted in a Special Management Zone for a *Phebalium davisii* site.

Orchids and Euphrasia: Priority populations were identified and the Threatened Orchid Recovery team established to set priorities for recovery actions. New information was entered in the Natural Values Atlas. Recovery actions include fencing 3 critically endangered species, weed removal and ecological burning. Threatened orchids were assessed on Macquarie Island and Three Hummock Island. This project is collaborating with other threatened species projects (NRM South's Incentives program, the Millennium Seed Bank, the Forest Conservation Fund) and Councils and State agencies.

Benefits

- The recovery program will benefit the highest priority threatened species in Tasmania.
- Significant partnerships were established, particularly in the orange-bellied parrot and threatened flora projects, which help to foster programs statewide and nationally.

Other threatened species activities

- A project is well underway to establish signage to raise community awareness about protecting threatened shorebird and flora habitat in the southeast (see page 13).
- The Tasmanian Parks and Wildlife Service is updating its plans for eradicating rats and rabbits from Macquarie Island, which will protect many threatened seabird species.

Understanding Our Coastal and Marine Environment



The NRM South technical facilitation staff are working with coastal communities and scientists to learn more about our coastal and marine environments as a basis for improving their condition.

Assessing the condition of our foreshores

NRM South has committed \$179,000 to establish baseline information on the condition of foreshore habitats (principally the area between high and low water marks) and identify key pressures so that impacts on key marine and coastal ecosystems in the Southern Region can be measured accurately.

Who's involved

Aquenal working with many regional stakeholders, NRM South

Work undertaken

Aquenal developed a comprehensive database of existing papers, reports and tools relevant to foreshore management and completed a report on the existing information, information gaps and data formats to be used. Mapping layers are being produced, assisted by a reference group representing State Government, research institutions and community. The data layers are user friendly and applicable to real coastal management situations.

Benefits

- This project, combined with the Coastal Values Mapping activity (which identified values to 100 metres inland from the high water mark) and the SeaMap activity (which mapped inshore habitat to a depth of 40 metres, see page 22), completes a comprehensive baseline assessment for this part of the coastal zone.
- Aquenal have value-added to the activity in a number of ways including participating in technical consultation workshops, producing media articles for stakeholder newsletters, and coordinating with other NRM South activities to deliver a more integrated approach to natural resource management.

Understanding Our Coastal and Marine Environment



Measuring changes in water quality

NRM South has committed \$250,000 to develop and implement a framework to measure changes in the water quality of marine and estuarine systems. This involves collating existing water quality data, identifying priority estuaries to be monitored and developing water quality monitoring programs for these estuaries. The 6 priority estuaries identified for monitoring are: Port Cygnet, Pitt Water/Orielton Lagoon, Moulting Lagoon/ Great Swanport, North West Bay and Little Swanport.

Who's involved

Tasmanian Aquaculture and Fisheries Institute
(University of Tasmania), NRM South

Work undertaken

A comprehensive report has documented the existing data and information, current management and monitoring programs, gaps and priorities. Monitoring methods were developed and baseline assessments have started with a trial water quality monitoring program.

An agreement was established with the State Government to integrate collected data with existing water quality information systems.

Presentations to the Tasmanian Shellfish Executive Council and the Southern NRM Network met with a positive response. Partnerships are being built with the Department of Primary Industries and Water and the Department of Tourism, Arts and the Environment to explore data storage and management options.

Benefits

- The project will enable us to reliably measure changes in water quality in priority estuaries and marine ecosystems.
- Effective engagement with local groups and Councils led to significant in-kind support for monitoring water quality in priority estuaries.

Understanding Our Coastal and Marine Environment



Port Davey marine pest survey

In 2006–07, NRM South provided \$65,300 to conduct fauna surveys within the near-pristine Bathurst Harbour/ Bathurst Channel and Port Davey estuary.

Who's involved

Tasmanian Aquaculture and Fisheries Institute (University of Tasmania), Parks and Wildlife Service, Tasmanian Museum and Art Gallery, Museum Victoria, Queens University (Canada)

Work undertaken

The survey discovered an unexpectedly diverse invertebrate fauna within the estuary, which is unusual for Australian estuaries. The project is almost complete, with a report due in October 2007. Additional taxonomic expertise was provided by the Tasmanian and Victorian museums.

Value was added to this project by the participation of Dr Reid from Queens University, who analysed the physical and chemical properties of the sea floor sediments and wrote a scientific paper on their geological origin, at no additional cost to the project.

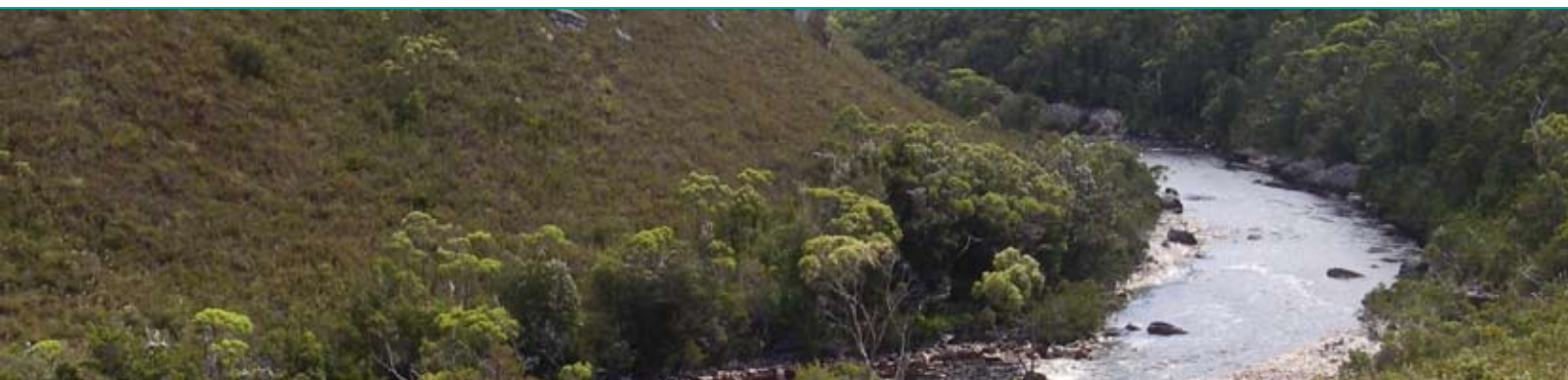
Benefits

The data collected will be used as a baseline to assess the extent of current marine pest incursions and the risk of future incursion

Other coastal and marine activities

- SeaMap, a marine habitat mapping project conducted by the Tasmanian Aquaculture and Fisheries Institute, has completed maps for vulnerable sub-tidal areas of the Southern Region, with mapping from Schouten Island to Bicheno completed in 2006–07. The SeaMap data is being used by Aquenal for another NRM South project (Assessment and Mapping of Foreshore Condition, Values and Pressures, page 20). The SeaMap data is assisting with the assessment of foreshore erosion, for instance in the Clarence City Council study of the sand budget and erosion at Roches Beach. The data is available at the www.utas.edu.au/tafi/seamap/ website.
- The Sediment and Erosion Control in the Derwent Metropolitan Region project, conducted by the Derwent Estuary Program, has produced a sediment and erosion control field guide as well as assessment and compliance tools.
- The North West Bay River Risk Management Works activity has increased the extent of willow removal on the river from 4 to 31 kilometres and established successful revegetation works.

Understanding Our Water Resources



A new river condition index for Tasmania

NRM South provided \$285,000 to Earth Tech Engineering to develop and implement a River Condition Index method for Tasmania.

Who's involved

Earth Tech Engineering, the Department of Primary Industries and Water (DPIW), University of Tasmania, University of Canberra, University of Melbourne, Monash University, private Tasmanian NRM consultancies, NRM South (lead Region), NRM North, Cradle Coast NRM

Work undertaken

A River Condition Index Framework is being developed for assessing the condition of streams in Tasmania. The method assesses the following biophysical aspects of stream health: hydrology, water quality, aquatic life, physical form, streamside vegetation and habitat. A draft method for each of these sub-indices was prepared by scientific working groups. Where possible, proven methods were used or adapted, but entirely new methods were required for physical form and water quality. These new methods are a nationally significant advance in river health assessment. The index will be

field tested in spring 2007 and finalised in December 2007. A statewide baseline assessment program will be conducted in autumn 2008.

Benefits

- The statewide baseline assessment program will enable managers to gain an understanding of the condition of Tasmania's river systems relative to a reference state.
- Subsequent monitoring will help to identify changes in some aspects of stream condition over time.
- The results of the baseline assessment program will provide a solid basis for State and national reporting as well as identifying priorities for management, rehabilitation and investment.
- The method will integrate with other models and concepts currently in use in Tasmania.
- Developing the index puts Tasmania at the leading edge of river condition assessment work in Australia. It is the first method to develop stand-alone sub-indices that provide valuable information in their own right, not just as a complement to biological assessment.
- The close involvement of NRM South (in conjunction with NRM Cradle Coast and NRM North) and DPIW in the project has helped to foster a strong working relationship between these organisations.

The NRM South technical facilitation staff are working with scientists and government to develop and implement activities that will help us understand our freshwater ecosystems to assist with managing our rivers and wetlands.

Understanding Our Water Resources



Conservation of freshwater ecosystem values

NRM South provided \$465,000 to validate the database for the Conservation of Freshwater Ecosystem Values (CFEV) project, a tool for assigning conservation values and management priorities for freshwater ecosystems - rivers, wetlands, waterbodies, estuaries, saltmarshes and karst systems.

Who's involved

Hydro Tasmania Consulting, the Department of Primary Industries and Water (DPIW), NRM South (lead region), NRM North

Work undertaken

This project assessed the ability of the database to inform natural resource management in Tasmania by validating the conservation values and management priorities assigned by the CFEV database developed by DPIW. Field work and desktop analysis examined key data inputs, internal database processes and outputs.

The outputs of the CFEV database are used to (1) rank conservation values for each freshwater ecosystem and (2) identify and prioritise freshwater areas for management and conservation.

The project will assist users understand the strengths and weaknesses of the complex CFEV database. The representativeness, condition and conservation management priorities assigned to the ecosystems proved to be robust at the regional and statewide scales for the ecosystem themes assessed (River, Wetland, Saltmarsh). Some limitations in the Saltmarsh and Wetlands input data were identified, which can be explained to users.

The project also investigated the security provided by land tenure, which was considered when assigning conservation management priorities. Reserves generally protect the land surrounding freshwater ecosystems, but upstream or downstream activities can significantly impact aquatic values. Recommendations were made to assist managers to better understand the threats to freshwater ecosystems on private and publicly owned land.

Benefits

- Until recently, little was known about the location and conservation priority of Tasmania's freshwater resources. The CFEV database is an important new tool that will enable users to identify and prioritise important freshwater ecosystems.
- The CFEV database will aid the assessment of development proposals and planning protection and projects to restore high conservation value ecosystems.
- This project has validated the CFEV database, which can be accessed on the DPIW website: <http://water.dpiw.tas.gov.au/wist>.

Understanding Our Water Resources



Ecological descriptions of Ramsar wetlands

NRM South has commissioned a \$60,000 cross-regional project to provide ecological character descriptions for three Ramsar wetlands in Tasmania, including Moulting Lagoon and Interlaken in the Southern Region. These are sites of international importance for shorebirds and other values.

Who's involved

Helen Dunn, Frances Mowling, local landholders, NRM North, NRM South (lead Region)

Work undertaken

The first draft of the Ecological Character Description for Moulting Lagoon is complete and the descriptions for Cape Barren Island (Northern Region) and Interlaken are well underway. This is the first applied method in Australia using hydro-geomorphologic analysis to describe wetlands. The descriptions include assessments of the climate, hydro-geomorphology, vegetation and fauna.

A rare geomorphological feature, a lunette (an old crescent-shaped dune formed by wind-blown sand),

was identified near Moulting Lagoon and an application submitted for listing on the Tasmanian Geoconservation database.

Moulting Lagoon

Benefits

- A great number of stakeholders were consulted, which has helped to build awareness of wetland values.
- This work provides useful information to assist the management of these Ramsar wetlands and complements the project that is updating the national directory of important wetlands (see page 26).

Understanding Our Water Resources



Identifying Tasmania's important wetlands

NRM South provided \$80,000 to identify Tasmanian wetlands of national significance, which are suitable for nomination to be included in the Australian Government's Directory of Important Wetlands of Australia.

Who's involved

GHD Pty Ltd, NRM North, Cradle Coast NRM, NRM South (lead region)

Work undertaken

The project report documents a desktop analysis that used the Conservation of Freshwater Ecosystems Database (CFEV) and the National Land and Water Resources Audit's report on Tasmanian wetlands to identify sites that meet the criteria for national significance.

The report identifies 180 Tasmanian wetlands (including waterbodies, estuaries, saltmarshes, karst and riverine wetlands) as having outstanding conservation values that correspond to the criteria of the national directory,

and thus are recommended for listing. Of these 180 wetlands, 42 had exceptionally high values.

A number of steps still need to be undertaken, such as ground-truthing of the wetlands and community consultation, particularly with landowners. The process for undertaking these steps is currently being discussed by the Australian and Tasmanian governments, and there will also be consultations with the NRM regions regarding future steps and investment to take the report's findings forward.

Benefits

- The report provides a useful desktop tool for NRM professionals to identify potentially nationally significant wetlands relevant to their work.
- This very successful project provides valuable information for the nomination of suitable wetlands to the Directory of Important Wetlands in Australia. It provides an important step towards listing more Tasmanian wetlands as part of the national directory.

Improving Our Water Resources



Dew Rivulet project

NRM South provided \$250,162 to work with landholders to implement priority NRM actions in the Derwent Catchment through the River Recovery program. This project aimed to develop and implement a Rivercare Plan for the Dew Rivulet and also to eradicate African feathergrass in the Derwent catchment.

Who's involved

Greening Australia (Tasmania), Derwent Catchment Natural Resource Management Committee, landholders, Norske Skog, NRM South

Work undertaken

A draft Rivercare plan was completed following geomorphological, vegetation and weed surveys and consultation with local landowners. All landowners in the catchment are conducting works to reduce sediments and nutrients entering the waterway and improve riparian habitat. The works include fencing the rivulet from stock access, providing off-stream watering points, controlling erosion, controlling and revegetating priority weed infestations, and creating vegetated filter strips.

Community support for the feathergrass project is equally impressive, with 46 landowners helping to eradicate this weed. After surveying 2500 hectares and identifying 212 sites along the Plenty and

Derwent Rivers, 20 kilometres of riparian weeds and 5 kilometres of roadside weeds were successfully controlled. Follow up work in 2008 will ensure the success of the project.

Benefits

- The project gained the overwhelming support of landholders and other agencies. It provides a model for other projects within the Derwent River Recovery initiative.
- Protection and restoration of the priority areas will aid the health of the Dew Rivulet and the quality of Hobart's drinking water, and improve agricultural sustainability and the environmental integrity of the Derwent catchment.

Other activities improving our water resources

- Numerous on-ground works are progressing well, including rehabilitation and stormwater management works on the Allens, Coombe, Cooke, Snug and Nichols rivulets, the Mountain and North West Bay rivers and a water supply intake education site at St Crispins Well (see page 14 for works on the New Town Rivulet).
- DPIW developed a framework for recommending environmental flows for Tasmanian catchments. It is being tested in the Little Swanport (and in 2 catchments in the other NRM regions).
- A water quality monitoring status report will be a valuable resource by providing a framework for monitoring in the Southern Region.

Removing African feathergrass from the streambed will improve flows in the rivulet

The NRM South technical facilitation staff are helping landholders and the community to implement many activities that will help to improve our freshwater ecosystems. Overall, 32 kilometres of riparian fencing were erected and 30 hectares of riparian vegetation enhanced in these activities.

NRM South staff

as at 31 August, 2007



Director

Vanessa Elwell-Gavins

The Director is responsible for ensuring NRM South meets all obligations under the Natural Resource Management Act 2002 and governance responsibilities, provides executive support to the NRM South committee and the Southern Regional NRM Association Inc. and provides leadership to the NRM South staff team.

Programs staff

Programs Manager: **Alistair Kay**

Water Management Coordinator: **Aniela Grun**

Flora & Fauna Coordinator: **Nikki den Exter**

Land Management Coordinator: **Barry Hardwick**

Program Evaluation Officer: **Ruth Temple-Smith**

The Programs team is responsible for all aspects of program development and management to implement the Southern NRM Strategy, including contract development and management, technical support, liaison with service providers and partners, and monitoring, evaluation and reporting.

Communications and Community Engagement staff

Communications & Partnerships Manager: **Natasha Stapleton**

Water Technical Facilitator: **Kaylene Allan**

Marine, Coastal & Estuarine Technical Facilitator: **Fleur Gedamke**

Industry and Landcare Liaison Officer: **Natalie Holman**

Aboriginal Community Support Officer: **Paul Dawson**

Communications Officer: appointment pending

The Communications and Community Engagement team is responsible for stakeholder and community engagement, and administration of NRM South's communications and skills development and community education programs. The team also provides technical support to service providers and partners and assists the community to access grants from various programs.

Corporate Services staff

Office Manager: **Ellayne Wiles**

Finance Officer: **Noeleen Caplice**

Administrative Support Officer: **Ben Bailey**

The Corporate Services staff provide financial, executive, corporate and human resource management support to the staff team and the NRM South committee.



NRM South Contacts

If you would like to discuss natural management resource issues or projects, please contact the NRM South Office on (03) 6208 6111.

About NRM South

The Southern Regional Committee for Natural Resource Management (NRM South) was set up to develop and implement a NRM strategy for the Southern Region of Tasmania. NRM South represents 7 key stakeholder groups: State Government, Local Government, public land managers, industries in the region, the conservation sector, the Aboriginal community and other community members. NRM South supports the community and stakeholders in implementing the Southern NRM Strategy.

NRM South is grateful to the Australian and Tasmanian governments for funding its projects through the Australian Government's Natural Heritage Trust Extension and the National Action Plan for Salinity and Water Quality.

More information about the Southern NRM Strategy and NRM South projects, staff and committee is at www.nrmsouth.org.au

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