

annex h: opportunities for partnership

Opportunities for improving natural resource management processes have been identified by considering the forces shaping the Region, threats from society in stakeholder assessment of threats to assets, and stakeholder critique of current approaches to each of the six Goals.

integration between NRM programs

Responsibilities for natural resource management have developed piece by piece, and are spread across national, state and local levels of government and their various agencies. The sciences that underpin action are also diverse, each with its own way of seeing the world.

Over the last five years, Supporting Strategies have begun to integrate actions to address the interrelated causes of environmental degradation. However, the legacy of programs built around specific threats (for example, weeds or salinity) or around specific assets (for example, native vegetation or waterways) still has to be dealt with. The RCS provides frameworks for integrating assessment and actions:

1. The *Threats to Assets matrix* provides a way to bring together data on asset condition and threat, and to target the highest priorities.
2. The *Investment Framework* provides a way to weigh the merits of options for action across different programs and public and private investment.
3. The *Monitoring and Evaluation Framework* provides a way to track progress against specific threats to assets.

actions

Pursue integrated planning and action through projects in the following areas:

- The Lake Corangamite system.
- Lower Barwon River, wetlands and estuary.
- Gorges in the Leigh and Moorabool catchments.
- Salinity in the Lakes/Plains & Northern Foothills sub-Region, and the Leigh River Catchment.
- Ridge-to-ocean action plans for the Curdies and Gellibrand river systems.⁷²

Ensure the *Corangamite Native Vegetation Plan* is linked closely with the *Victorian Biodiversity Strategy* and exerts much more influence amongst all agencies responsible for land use planning and management.^{73 74}

Improve integration of planning and action between coastal boards and other natural resource management agencies, focussing particularly on the interaction of catchment forces with ecosystems of the intertidal zone - the estuaries of the Region.

Evaluate all possible policy instruments that could provide incentive for protection of native vegetation, including economic incentives and institutional reform.

Consolidate existing efforts into a new Water Quality program to address the related issues of soil deterioration, sediments, turbidity, nutrients and eutrophication across the entire Region. Fully integrate the *Corangamite Regional*



72 COMMENT/ R. Ford, Central Highlands Water. Integrating programs that target the major causes of environmental degradation is supported if the integration includes the acceptance and support of the other relevant agencies and organisations. The CCMA has limited resources and hence any major program will depend heavily for its success of the active support of other agencies and organisations. It will be especially important to gain support of local government as the Planning Authority, otherwise inappropriate land use changes may place the long-term outcome at risk.

73 COMMENT/ T. Overman, CCMA. Note however, that a vegetation strategy should not be confused with a biodiversity strategy. Native vegetation needs protection, but a sustainable system needs the resilience provided by biodiversity in ecosystems, whether natural or human induced.

74 COMMENT/ P. Pegler, Parks Victoria. Within a catchment where parks and reserves occupy 8% of the Region, and are highly fragmented, protection of the core set of biodiversity values within those protected areas requires coordinated action to enhance biodiversity through greater habitat connectivity or through integrated pest management. To achieve this Parks Victoria needs to create and support community partnerships. Parks Victoria would like to engage with the CCMA as a peak community body and ensure that its relationships and responsibilities within the Region are articulated within the Regional Catchment Strategy.

Nutrient Management Plan and the *Corangamite River Health Strategy*, drawing in the surface water hydrology capacity as floodplain management is incorporated into Local Government Planning Schemes. Build on the past successful cooperation with industry groups.

Focus salinity management in areas of highest net benefit, identified in the *Salinity Action Plan 2003* as Lara, Geelong (Lake Connewarre), Modewarre, Gordon – Lal Lal, Murdeduke, Warncoort, Weering, Colac, Corangamite, Derrinallum and Camperdown. Invest in knowledge upgrades, particularly the hydrogeology of areas of greatest salinity risk. Develop decision support systems for assessing where investment in salinity abatement will have the greatest payoff for the public and private sectors. Consolidate hydrogeological capacity with additional research and development on aquifer transport mechanisms and contaminants.

Develop a Corangamite Region Supporting Strategy for sustainable agriculture and farm forestry. These areas are losing influence because they do not have a Supporting Strategy status at present, but are vital to achieving the targets set for the Region, through encouragement of the adoption of best management practices for contaminant control, application of soil conservation principles, and farm planning including woodlots and agroforestry. **75**

Support the Pest Plants Program, integrating effort across different pest plants in different parts of the Region, and across abatement in public lands versus private lands, and with attention to waterways and terrestrial environments.

planning for sustainability at the local level

Each part of the Region has a distinctive 'mix' of three types of landscape;

- *Rural landscapes*, where agriculture, forestry or lifestyle properties are the primary economic activity.
- *Urban landscapes*, where residential, industrial and commercial activities shape the environment, and
- *Natural landscapes*, where the original ecosystems of the coast, forests, lakes and plains dominate.

Each part of the Region needs targets and plans that fit local aspirations and the local landscape. **76** Targets provide the community with a tangible reference point and allow the cumulative effect of restoration and on-going degradation to be measured. Targets and plans together enable planners, regulators and communities to manage development in the Corangamite Region.

Local government has a key role in planning at the local level. It decides what kind of land use is appropriate in each part of the landscape, whether a specific proposed development is fitting and what conditions must be met. Section 15-01-2 of every planning scheme in the State includes a requirement that: "*Planning Authorities must have regard to relevant aspects of any regional catchment strategies approved under the Catchment and Land Protection Act 1994 and any associated implementation plan or strategy, including regional vegetation plans, regional drainage plans, regional development plans, catchment*



75 NOTE/ The *Ecologically Sustainable Agriculture Initiative*, *Our Forests: Our Future* and the *West Regional Forest Agreement* provide support for integrating sustainable agriculture and farm forestry.



76 NOTE/ For example, at the edge of Geelong or Ballarat, urban settlement gradually gives way to a mix of intensive agriculture, lifestyle lots and broadacre grazing under pressure from rising land values. The people of this landscape will have different aspirations to their neighbours in Geelong or the Otway Coast.



action plans, Landcare plans, and management plans for roadsides, soil, salinity, water quality and nutrients, floodplains, heritage rivers, river frontages and waterways.....”

Planning Tribunals and panels which hear objections to development decisions by local government consistently give strong emphasis to well-based regional strategies, and expert opinion on environmental matters is often secondary in importance to whether or not the proposed use fits what is allowed in the current zoning.⁷⁷ Many Councils have Environmental Plans, Environmental Significance Overlays, Vegetation Protection Overlays and environmental goals written into their strategic plans. ⁷⁸

At the same time, the regional view on sustainable development needs to be articulated.⁷⁹ Communities will have an easier time setting their own goals if long-term regional plans for economic development, environmental management and social development fit together.⁸⁰

actions

1. Set targets for environmental health at local catchment scale that specify levels for the quality of water, soil, air and flora and fauna,⁸¹ in the light of long term development needs, and that define areas that should be protected from inappropriate development by virtue of their environmental importance, for example, areas of fragile soils, wetlands, domestic water supply catchments, unique or special habitat, high quality agricultural land, frontage to streams⁸² and natural lakes.
2. Develop methods by which communities can assess the costs and benefits of alternate futures in a long-term timeframe and balance the trade-offs and complementarities between environmental health, economic prosperity and social well being.^{83 84}
3. Conduct research on the positive and negative impacts of economic development on environmental health.⁸⁵
4. Research land capability and take account of this in local government land use planning. ⁸⁶
5. Develop indicators at the local level consistent with regional scale, and report progress to local communities.
6. Present the Goals, Priorities and Targets of the RCS in a form that allows ready incorporation of these into local government planning documents.^{87 88}
7. Build the capacity of local government to lead and implement planning at the local level, by providing better information on current environmental condition and policies, delegating authority to make decisions against State-level policies where local government has expertise⁸⁹ and providing more resources for planning and service provision in relation to environmental health.^{90 91}
8. Develop discussion processes through which people in communities with diverse and changing social populations can understand each other, find common ground, and have a voice alongside expert and non-local views.

77 QUESTION/ What checks and balances are there within the current land development process to ensure development fits what each piece of land is suitable for?

78 COMMENT/ Municipal Association of Victoria, March 2003. From a planning perspective, the focus within earlier drafts of the Corangamite RCS was on development control via the application of overlay controls within municipal planning schemes. greater recognition should be given to the strategic policy basis, which now underpins local planning decision-making. SEE Annex A: *Comments - integrating local planning and regional planning.*



79 NOTE/ For example, coastal development is booming, the energy industry is expanding, the road network will need to expand and up-grade to meet demand. All will affect property owners and the environment.



80 COMMENT/ Otways Coast RCS Workshop. What tends to happen is that when you get down to the local level, you end up losing the strategic view.



81 NOTE/ To improve our management of natural resources, we need first to have a sound appreciation of the state of our resources, and how they have arrived at their present condition. SEE/ Annex A: *Comments - where we are starting from in the otways.*



82 COMMENT/ Surf Coast Shire Environment Advisory Committee. For example, allowing for adequate stream reserves in new developments.

83 COMMENT/ CCMA NAP Committee. Changing the causes (the drivers of change) may be more effective than ameliorating the symptoms (the impacts of change). This requires an understanding of what changes are being made to land and resource use, why people are making these changes and what impact these changes are having in the very long term on the natural resource base.



84 SEE/ For example, conclusions from RCS Workshops in Annex A: *Comments - setting goals for native forests.*



85 COMMENT/ P. McRae-Williams, University of Ballarat. Major threats to the Region seem to focus heavily on economic development, population changes/ pressures with inadequate strategic management and coordination between stakeholders seen as the main contributing factor. There are considerable research opportunities to explore aspects of sustainable economic development, resource demand management and market research to obtain a better understanding and develop innovative solutions particularly in water quality, water use, reuses, and water conservation patterns in the Region.

86 COMMENT/ DPI SW Region. For example, extractive industry interest areas should be researched and recorded on municipal planning schemes to delineate potential conflict between urban development, catchment zones and stone supply.



87 SEE/ Annex A: *Comments - integrating local planning and regional planning.*



88 COMMENT/ B. Humphries, City of Greater Geelong. All the councils within the catchment need to work much closer in the review of the Municipal Strategic Statements of the each scheme & establish a formal process of close liaison, with the CCMA taking the lead role in establishing this new process.

89 QUESTION/ B. Carraill, CCMA. What authority is proposed to be delegated to local government and from whom?

90 COMMENT/ N. English, Surf Coast Shire. Care should be taken to ensure that sufficient funds accompany the delegation, as a Shire such as Surf Coast has no opportunity to direct additional funds to catchment works, beyond those included in its own programs.



91 SEE/ Annex A: *Comments - local government's role in planning for the environment.*

92 SEE/ Annex A: *Comments - next steps for developing the regional agenda for sustainable development*

9. Develop the regional agenda for sustainable development, so that regional managers and local government understand each other's plans for development, maintain continuity of intent across boundaries, identify regional opportunities and threats, and work within environmental capacity.⁹²

Development of plans at the local level should take account of guidelines and targets developed at regional and state level including:

- The *Victorian Biodiversity Strategy* that describes valuable biodiversity in general terms, gives broad targets and sets out the principle of Net Gain in biodiversity, and provides detailed assessment of the status of vegetation communities through EVC mapping.⁹³
- The *Corangamite Native Vegetation Plan* objectives for native vegetation (1. protecting existing levels of remnant vegetation, 2. enhancing the quality of existing remnants, and 3. targeted revegetation and regeneration of native vegetation) and its proposal for *Biodiversity Action Plans* that set goals and actions for each of 13 vegetation sub-Regions.
- The *Victorian River Health Strategy*, which sets principles, targets and processes for management of rivers and water.
- The *Draft Corangamite River Health Strategy*, which assesses stream and river values and health and identifies areas for protection of streamside vegetation.
- The *Corangamite Nutrient Management Strategy* and its targets, actions and cost benefit assessment for nutrient management.
- The *Victorian Coastal Strategy*, and the *Coastal and Estuaries Action Plans* for the Central West and South West Coastal Regions, which comprehensively set objectives and action plans for coastal areas, and the *Great Ocean Road Development Strategy* (2002).
- Parks Victoria's park management plans.
- Local Government Environment Plans for economic and social development.
- Surf Coast Shire's Rural and Environment Development Policy (incorporating tenement controls) which guards against house permits being issued for small lots forming part of larger farm holdings, thereby ensuring the continued use of the land for farming, and
- Local catchment, lakes and estuary plans developed by local environment groups and supported by DSE, CCMA and local government.

Improvement of planning processes at local level should build on what has been learnt by:

- *Advisory committees* to government agencies and local government.
- *Alliances and joint projects* of government and community organisations.
- *Committees of Management* for public land reserves.
- *Parks Victoria*, in developing natural, cultural and visitor management priorities for individual parks, after an extensive community consultation.
- Priority setting for sub-Regions for the purposes of NHT funding, conducted by the CCMA.



- *Environmental groups* developing local priorities for catchments, estuaries and coast.
- *Local government* developing community plans and environmental plans.
- Surf Coast Shire's *Anglesea Neighbourhood Improvement Program (NEIP)*, which focuses on sustainability and development of a bottom-up community plan, and
- Local planning by *human services agencies*, in particular for health, education, recreation and the arts.

responsibilities

Local government has responsibility for land use planning, and is integrating this with community plans. Together with the CCMA, they work as regional facilitators of natural resource management.

DSE SW Region contributes to the development of Local Government Planning Schemes, the review of Municipal Strategic Statements, provides biodiversity information for use in land use planning, is a referral authority for many local government planning responsibilities, and provides a coordinated assessment and response for local government across a very wide range of land and natural resource management issues.

CCMA is an advocate for the environmental goals of the Region, highlighting the fit with economic and social development goals, and is a referral authority for water issues.

Regional *Coastal Board* have responsibility for coastal issues.

Parks Victoria manages marine and terrestrial National Parks and Reserves in the Region and Ramsar wetlands.

developing sustainable practices

Best Management Practices (BMPs) are now widely used to define good practice for businesses in an industry. They often set minimum standards of practice to ensure an industry meets market standards at least cost. Consumers and shareholders are increasingly demanding that sustainable production be added to demands for quality and profitability.

At present, Best Management Practices are not necessarily sustainable practices, even if the aspirations are there. Assessing the sustainability of practices requires: a) understanding specific risks to environmental health; b) indicators of environmental impact at property and local catchment scale; c) reliable measurement of indicators; and d) targets for environmental health. Putting practices together with a target for environmental health creates an Environmental Management System (EMS). Putting practices together for particular landscapes creates sustainable farming systems.

There are two challenges. One is to integrate the many fields of specialist knowledge about resource condition and environmental process in an

93 QUESTION/ D. Neate, Smythes Creek. Some ecosystems, such as the beech forests in the Otways, have an international biological significance in addition to their Australian ecological value. Does the Ecological Vegetation Classes system recognise that?



94 SEE/ *Implementation Pathways for Best Management Practice*, 1998, James Doak (Land and Water Resources Corporation).



95 QUESTION/ CCMA. We need to know if we are on the right track focussing on Best Management Practices (BMPs) at landholder level? What is needed to support this type of approach? Do we need some large-scale institutional changes to effect the necessary attitudinal changes or increases in understanding? BMPs alone might not be enough. What are the other options? Market changes? Ecosystem services? Climate change and carbon trading?



96 NOTE/ One view is to give the force of law to a Duty of Care for those whose economic activities impact the environment, rather than relying on voluntary adoption or prescribing every possible misdeed. However, Duty of Care would have to be enforced, and enforcement is expensive.



97 COMMENT/ H. Stewart, Treecorp Group. There is no mention of legislated, enforceable Codes of Practice for agricultural industries as instruments to regulate and control the environmental impacts of this private land use activity. The forestry sector and the community has, I believe, greatly benefited from the introduction through the Planning Scheme of the Code of Forest Practices for timber production.

98 COMMENT/ D. Brockenshire, Barwon Water. For example, high volume industrial water users have been identified within the Water Resources Development Plans as an opportunity to reduce the demand from existing water users.

understanding of how enterprise practices can damage or improve environmental health, and to continue to strengthen the partnership between R&D focused on sustainability, and R&D focused on profitability.

The second challenge is to implement sustainable practices, through partnership between government and industry that can negotiate an effective mix of industry-driven accreditation and auditing and government standards and regulatory control.⁹⁴ One view is that the pressure of the marketplace and the motivation of business owners will be the most effective drivers for improvement in practices, not government intervention. An alternate view is that voluntary adoption of BMPs will not deliver enough change in environmental health.⁹⁵ There has been slow adoption of practices that lack clear profitability outcomes, and extension capacity in DPI has been steadily reduced over the last 15 years making it difficult to get the message through. Even those farmers who have adopted quality assurance systems won't necessarily rush at the additional workload and cost required by an EMS. Accreditation and auditing of sustainable practices might be a solution, if these provide businesses with competitive advantage in markets.^{96 97}

actions

1. Set and work to local landscape targets for environmental health.
2. Target those industries with high impact on natural resources and high economic contribution to the Region, going beyond agricultural enterprises to industrial⁹⁸ and tourism enterprises, and developing the mix of technical support, financial incentive, regulation and support for innovation that best fits each industry.
3. Integrate work on nutrient management, water quality, soil health and native vegetation management to draw out implications for the Region's industries.
4. Find ways to improve collaboration between different cultures, organisations and information associated with natural resource management and enterprise profitability.
5. Continue Whole Farm Planning, with its focus on integrating profitability and environmental sustainability.
6. Investigate market-based instruments and incentives to promote sustainable land use and innovative production systems, and investigate ways to make payment for environmental services.



Work on sustainable practices should build on:

- The *Environmental Best Management Practices project*, through the Agriculture, Forested and Land Programs of the *Corangamite Regional Nutrient Management Plan*, funded by DSE through the CCMA.
- The CCMA NAP-funded project *Industry Partnerships in NRM*, which explores opportunities for joint action between natural resource management and industry programs.
- Meat and Livestock Australia research into *Sustainable Grazing Systems*, on the basalt plains and foothills of the Otways.⁹⁹
- *South West Dairy Effluent Project*, and at the statewide initiative '*Whole of Government and Dairy Industry Effluent*'.
- *West Vic Dairy's* strategy for improving environmental performance of the industry in the Region (West Vic Dairy is funded in part by the Dairy Research and Development Corporation, DRDC).
- *Target 10*, a joint venture between DPI, DRDC and United Dairyfarmers of Victoria to deliver information on best practice to dairy farmers.
- *Southern Farming Systems*, with backing from Grains Research and Development Corporation (GRDC) and DPI, improving winter cropping on the basalt plain (with doubling of yields) and researching water and nutrient movement in the raised bed system.¹⁰⁰
- *Central Highlands Integrated Production Systems (CHIPS)*, a producer group improving the sustainability and profitability of farming systems in the Central Highlands.
- Agroforestry systems developed by *Otways Agroforestry* and others, which deliver benefits to farm productivity, risk management, biodiversity and salinity mitigation.
- Industry bodies in *tourism*¹⁰¹ looking at BMPs as one way to assure sustainability.¹⁰²
- *National support for EMS*,¹⁰³ which integrate industry activities with regional and state planning for natural resource management.
- Carey, Webb and Barr's *Understanding Landholders' Capacity to Change to Sustainable Practices*, (Bureau of Rural Sciences, 2002).
- *Surf Coast Shire's Biodiversity Incentives Scheme*, which rewards individuals who demonstrate improved environmental outcomes, with a financial rebate at higher levels of outcome, and training and assistance at lower levels, and
- Specific regional Supporting Strategies with implications for BMPs, including:
 - *Corangamite Regional Nutrient Management Plan*, 2000 (CCMA), in particular the Action Programs, which indicate practices for reducing nutrient load.
 - *Restoring the Balance – A Strategy for managing salinity in the Corangamite Salinity Region*, 1992 (CNR), currently being reviewed and renewed, focuses on land salinity impacts on agriculture and infrastructure.



99 NOTE/ For recent conclusions from six years research, *SEE/ SGS Final Report, 2002* (MLA Ltd). Research reports are available on CD.



100 COMMENT/ DPI SW Region. Raised Bed Cropping (RBC) was identified at the South West Soils Summit in 2000 and again in 2001 as one of the most difficult and controversial land use issues in the Region. DPI has been instrumental in ensuring adoption of RBC is done with minimum risk. There remain some unanswered questions that will require ongoing analysis including research gaps and adoption of unsuitable techniques or on high-risk sites.



101 SEE/ *Sustainable Tourism Directions, 2002* (Geelong Otway Tourism Inc)



102 COMMENT/ Geelong Field Naturalists Club. Perhaps the true costs of preserving the environment that are incurred as a result of commercial tourism should be charged to tourism operators.

103 SEE/ *Towards a National Framework for the Development of Environmental Management Systems in Agriculture, 2001* (Environmental Management Systems Working Group, AFFA) www.affa.gov.au/ems



104 COMMENT/ For example, the Catchment and Land Protection Act, 1994, makes care of the environment one of the “general duties of landowners”.



105 SEE/ *Victorian River Health Strategy* (2002) NRE, for a good exposition of these.



106 NOTE/ Substantial change is possible. For example, household consumption across Barwon Water’s users has fallen 30% over the last 20 years.

- *Corangamite Waterway Health Strategy, Draft, 2001* (CCMA), describes practices for reducing impacts of industries on waterways health.
- *Corangamite Native Vegetation Plan, Working Draft, 2002*, (CCMA), recommends BMPs to enhance the quality of native vegetation remnants.
- *Corangamite Weed Action Plan 2001-2004, 2000* (CCMA) recommends adoption of preventative measures at property and local catchment scale.
- *Corangamite Rabbit Action Plan 2001-2006, 2000* (CCMA) sets targets for control and recommends inclusion of rabbit management planning as part of whole farm planning.
- *Draft Central West Victoria Regional Coastal Action Plan, 2001* (Western Coastal Board) calls for best practice in agriculture, forestry and fire management to protect sensitive estuarine vegetation communities.
- *South West Victoria Regional Coastal Action Plan, 2002* (Western Coastal Board).
- *Victorian Mineral Water 3-Year Business Plan 2002 – 2005*.

responsibilities

DSE is responsible for developing best management practices on public land, which it directly manages, and both *DPI* and *DSE* are responsible for influencing agricultural industries towards sustainability, including the dairy, beef, lamb and forestry industries.

Landholders have responsibility for complying with State and Federal laws and regulations in relation to the environment and natural resource management.¹⁰⁴ Local government also directly manages a significant area of Crown land.

Industry bodies and producer groups have taken on responsibility for improving standard practices within their industries.

The *CCMA* are responsible for understanding risks to assets, setting targets for assets, coordinating bids for Australian Government program funds, and brokering action to improve practices where there are gaps.

innovation in the use and management of water

The Region faces rising demand for water and limited supply. The allocation process and the approach to environmental flows are not well understood by the community,¹⁰⁵ and policy in relation to water has changed a great deal in the last decade.

Water use puts consumers’ use of natural resources in the spotlight and provides an opportunity for public agencies to help users reconsider their habits, technologies and values, and reduce their use of natural resources.¹⁰⁶

Amongst rural users, there is increased understanding that water captured where it falls or water extracted from groundwater is still part of total supply, and should therefore be part of supply management and pricing. However, the dominant attitude is that urban users have cheap and secure access to water, while rural users often do not.



actions

1. Assess available water across surface and groundwater systems, and with a changing climate, to enable better informed decisions on sustainable use.¹⁰⁷
2. Assess whether allocations for environmental flows are adequate in the light of future stream flow and pollutant loads. Complete Stream Flow Management Plans, progressing to action on Stressed Rivers where necessary.
3. Make the water allocation process more transparent to all water users,¹⁰⁸ and consider further institutional reform and policy development. Improve arrangements between CCMA, DPI, DSE and Southern Rural Water to ensure that a water management regime appropriate to the conditions of Southern Victoria is implemented, with clear goals communicated to users.
4. Identify water users with the greatest potential for improved efficiency, develop best practices for water use,¹⁰⁹ communicate best practice and innovation in water use efficiency to each segment,^{110 111} and ensure public policy,¹¹² regulation and administration support innovation.
5. Support cooperation between water authorities and local government in planning for reduced water use and increased use.^{113 114}
6. Develop and communicate regional targets for reducing water use and increasing water re-use.
7. Increase cooperation between the technical groups in CCMA, DPI, DSE and water authorities concerned with sediments, nutrients, salinity, groundwater and surface water (including flood) hydrology.

Work on these actions should build on:

- *Stream Flow Management* planning for the Gellibrand, the Moorabool and the Barwon, and action underway to deal with stressed rivers, in particular the Moorabool, which with current use cannot provide environmental flows.
- DSE/DPI's work at State and regional levels and the work of the CCMA and Southern Rural Water in the *Sustainable Diversions Limit Project*.
- Long-term planning by water authorities, such as Barwon Water's *Water Resources Development Plan* and *Water Recycling Strategy*.
- *Current work by Barwon Water*, including Apollo Bay Water Resource Development (new Bulk Entitlement, water storage and changes to Special Water Supply Catchment Area) extension of the principles of the Moorabool Catchment Policy across other Barwon Water Special Water Supply Catchment Areas, installation of fishways and preparation of waterway management plans in partnership with CCMA, Water Quality Improvement Projects (to support landowners undertaking works to improve water quality).

responsibilities

- *Southern Rural Water* is responsible for surface and groundwater licensing, major dams and irrigation districts across southern Victoria.
- *South West Water*, *Barwon Water* and *Central Highlands Water* provide drinking water supplies to the community, are key participants in the water

107 COMMENT / D. Brockenshire, Barwon Water. The security of existing bulk water entitlements held by water authorities is critical in the provision of affordable water services for our customers. Strategic planning for water authorities is and must continue to be based upon this certainty, and any changes would need to be considered very carefully to achieve a balanced triple bottom line outcome.

108 COMMENT / M. Kent, Southern Rural Water. SRW agrees that the allocation process and approach to environmental flows are not well understood by the community, and that this is a reflection of the lack of communication by all agencies involved in water and water allocation. The functions of the various authorities have altered over the years and we have all been unable to convey these effectively to the public.

109 COMMENT / R. Ford, Central Highlands Water. An initiative that could be implemented immediately is the introduction of assistance for retrofitting of homes with appropriate water saving devices such as showerheads, front-loading washing machines, and irrigation systems. As these appliances are used almost daily they are likely to reduce water consumption all year round. A financial analysis shows that this is likely to be more cost effective than rainwater tanks which are quite expensive per kilolitre of water saved. Reducing appliance water consumption also reduces sewerage flows and where hot water is used reduces energy consumption (and hence greenhouse gas emissions).



110 SEE / For example, the *Watersmart Strategy* in the Greater Melbourne Metro Area.



111 COMMENT / R. Ford, Central Highlands Water. Irrigators need to move to more water efficient systems. In most of the upper catchment irrigation is still by inefficient "rain guns".



112 NOTE / For example, pricing of water, incentives, water efficiency ratings systems for residences and commercial property, ecological footprint measures for communities.



113 COMMENT/ Barwon Water. Barwon Water has recently introduced 'developer charges' that reflect the cost of servicing new developments that provide incentives for efficient urban form and water efficiency innovations. Councils should be supportive of such reforms and encouraged to undertake similar strategic initiatives to minimise the impact of development on the environment.

114 COMMENT/ P. Bollen, Surf Coast Shire. Significant potential exists for reuse of treated sewerage water.

115 QUESTION/ How do we engage the 60% of rural communities not involved in Landcare groups? Do negative messages work? Do local champions work? What's the psychology of change in attitude and behaviour? SEE/ Annex A: *Comments - cohesive communities influence through unwritten rules.*



116 SEE/ *Draft Community Engagement Strategy* (2002), CCMA.



117 NOTE/ The problem is emphatically not lack of information, but lack of specific communication designed for a purpose.

allocation process, and have responsibility for education of their users, water efficiency and innovation.

- *Corangamite Catchment Management Authority* has responsibility for waterways health and for assisting in improving planning processes in NRM.
- *DSE*, through its Catchment and Water Division and Parks Flora and Fauna Division, and *DPI* through its Agriculture Division and Regional Services Divisions have collectively a major role and responsibility in policies and processes related to the use and management of water resources.

engaging the whole region

Cohesive, innovative communities appreciate the urgency and complexity of the natural resource management task, tackle the differing values and views within the community, agree on goals and means, lobby effectively for their goals and take action locally. At present, a small percentage of volunteers, backed by a relatively small number of public servants,¹¹⁵ are the foot soldiers of NRM. More are needed.

Second, natural resource management organisations have good connections with agriculture and with rural communities, and it is now time to build on engaging the rest of the community, such as urban dwellers, the new settlers moving into the coast and rural areas, townspeople.

There are plenty of positives to build on. Success stories and the growing ethic of environmental responsibility provide an opportunity to show what is being done to shift behaviour, but there must be a much sharper understanding of whom to engage, and what they are being asked to do.¹¹⁶ Urging people to "do something" or "get involved" is worse than useless. Concerns for the environment have to be understood in the context of people's economic and social concerns so that specific, compelling invitations to action and interaction can be designed. The NRM community has to be primed at specific points to respond to people who seek more information or want to get involved.

NRM communication is conducted by many different organisations, each with their own particular focus and their own identity to build. There's a risk that the many different appeals for attention may confuse or numb the average citizen. Integration of communications effort around related issues will reduce this risk.

The approach to communication needs to be broadened. Communication in NRM is sometimes a one-way transmission of messages to target audiences, but very often two-way interaction about issues is important, requiring solid information, a clear purpose, and sometimes facilitation. Currently, even people active in NRM, let alone those with a curiosity about what is going on, find it difficult to find the information they need and the people they want to talk with. They will be much more potent communicators in their local communities and in planning processes with better access to information designed for communication.¹¹⁷ People need to be invited into interactions where NRM issues are discussed and decisions and plans made.

actions

1. Engage more with urban populations by identifying their concerns for the present (liveability) and future (sustainability), designing information on condition and actions to fit these concerns, and using this information in joint ventures between local groups and government agencies. **118**
2. Consult systematically with indigenous Australians in the Region.
3. Design communication on landscape condition, environmental process, management responsibilities and options for action for use in specific consultation and planning events, particularly at the local level where community members and local government are thinking about the future.
4. Increase support for environmental education of children, using on-going NRM work as a teaching tool, and develop visitor education programs jointly with the tourism industry. **119**
5. Pull together information across government agencies and levels of government to target specific groups, saying why issues are important and what people can do.
6. Make regional knowledge more accessible by developing local nodes and points of personal contact that function as a network of individuals and agencies.
7. Develop the Regional Catchment Strategy as a primary point of reference for information on condition, plans and current activity.
8. Research, design and test communication activity, and share learning between those responsible for NRM communication in the Region.

Work on these tasks should take account of and build on:

- DSE's coordination of communication across SW Region; DPI's communication on sustainable practices; Fisheries Victoria *Community Communications*; Parks Victoria *Visitor Education Programs*; EPA's *Ecological Footprints* project; and the CCMA's *Community Awareness* programs.
- Waterwatch in Geelong, Colac and Ballarat; communication, community education and water management groups conducted by Barwon Water, Central Highlands Water and South West Water.
- CCMA's *Communications Strategy and Plans 2002-2007*, and *Urban Community Education and Awareness Project*.
- recent research by CCMA, Water Authorities and DSE/ DPI on attitudes of the Corangamite population to NRM.
- community education by Coast Action/ Coastcare Geelong and Anglesea, Warramben Landcare Education Centre, Victorian Landcare Centre, Conservation Volunteers Australia, Sovereign Hill, Greening Australia, Trust for Nature, the Marine Discovery Centre, the Living Systems Project, Landlearn, and the Victorian Association of Environmental Education.



118 NOTE/ This and other actions here draw on ideas from the second round of RCS workshops (SEE/ Annex A: *Comments - three levels of engagement with the wider community*) and *CCMA Communications Strategy and Plans 2002-07*.



119 COMMENT/ D. Neate, Ross Creek Landcare. CCMA needs to grasp the importance placed on the internet as an educational resource in today's (particularly secondary) schools. The challenge is to make information on or through its website, so that its website is a "first port of call" for secondary students doing local environmental studies.



120 NOTE/ *Community Participation and Planning in Surf Coast* (2001) found that the five most important 'public issues' over the past five years were: balancing tourism and development, retaining special character of district (91%); involving all citizens in planning Surf Coast's future (social, economic, environment 88%); providing opportunities for young people (e.g. employment, education, transport); helping small, rural communities regain confidence, improve local economies, services (77%); balancing needs and interests of rural communities and seaside towns (72%).



121 COMMENT/ Curdies-Gellibrand Strategy Workshop. There used to be 20 DPI/ DSE staff in the Heytesbury. As the years have gone by, more and more of those staff have been taken out, to the point where there is only one person. It's just not sustainable. We're kidding ourselves if we keep going this way.

122 COMMENT/ D. Neate, Smythes Creek. Across the Western World, centralisation and downsizing of government agencies has contributed in a big way to the gap forming between rural communities and the decision-makers. As the number of specialists in public service becomes smaller, so the vast knowledge of those specialists becomes even more precious. Better job security for these specialists is an urgent need, both to enable them to focus fully on their task, rather than repeatedly having to justify their employment, and so that other bright minds will be encouraged to seek employment in these fields.



123 NOTE/ For an overview of the aspects of regional Supporting Strategies that address this, SEE/ the categories of 'capacity building' and 'information and education' in *Management Options for addressing threats to natural assets in the Corangamite Region*, RCS Report 9, 2002 (CCMA)



124 COMMENT/ D. Lean, Geelong Landcare Groups. Disagree strongly. Not one of our Landcare Groups has submitted a NHT or major funding application since 1998 by themselves! (i.e. without department/ coordinator assistance). Truth is-where groups are not supported they struggle.

- programs such as the *Re-Igniting Community Project* that focus on building community identity.
- Surf Coast Shire's *Anglesea Neighbourhood Improvement Program* (NEIP), which focuses on sustainability and development of a bottom-up community plan.
- the *Swan Bay Integrated Catchment Management Project*, which has been working on a broad range of issues with rural and urban communities and with non-government and government organisations to stimulate community activity to protect Swan Bay and its catchment, and
- national communication campaigns by NHT and NAP.

responsibilities

At this stage, no single agency has lead responsibility for communication and community education. Actions will need to be pursued through partnerships in specific projects, by all parties building common data on values and behaviours of each segment of the community and by parties being well informed about each other's goals in relation to communications.

investing more in the community-government partnership

Consultation is becoming part of regular business in government, and consultation is what the community now expect.¹²⁰ The heart of partnerships is not a document, but trust between people. Trust takes time and care, but Government staff have less and less time. Community members and agency staff both report gradual loss of human beings in the interface between agencies and community¹²¹ and risks of staff burnout and holes in the knowledge network.¹²² There is a gradual build up of investment in community capacity,¹²³ and individuals and community groups are becoming more skilled in finding and making sense of complex technical information and administrative processes,¹²⁴ but access to information on landscape condition, management options and government responsibilities is still difficult to obtain.

Partnerships have sometimes been treated too simplistically by agencies and communities: it is not just a matter of agreeing on goals, but of parties understanding their differing needs and working out how their different capabilities can fit together to deliver a result.

Payment for environmental services is one contentious issue in the relationship between rural landholders and government, and needs more attention. The community at large has the benefit of environmental services provided by landholders, for example, clean water and conservation of remnant vegetation. As more is expected of landholders, the question of who should pay for such services becomes more acute.^{125 126}

actions

1. Resolve fragmentation of responsibilities in relation to protection and management of native vegetation, water frontages,¹²⁷ lakes and estuaries, surface water management, weed control¹²⁸ and biophysical information.



2. Rationalise catchment planning and technical support roles between CCMA and DSE/ DPI.
3. Make it easier for people at the local level (landholders, developers, businesses and householders) to get the information they want, when they want and need it. **129**
4. Dedicate more time and expertise to consultation with communities, and consult in ways that capture broad community interest. **130**
5. Increase the facilitators at the interface between government and community, so that communities can do more. **131**
6. Implement regulations in the context of the partnerships that develop them. **132**
7. Clarify and communicate to the community the responsibilities and standards for management of public lands, in particular water frontages, where landholders are critical of management. **133 134 135**
8. Delegate decision-making authority and provide resources to local government to match the responsibilities it has been given for implementation of natural resource management policies and regulations.
9. Understand the Aboriginal land estate, integrate Aboriginal cultural heritage into land and resource management processes and develop real and appropriate indigenous involvement, using local facilitators where necessary.
10. Bring a wider set of industries into NRM planning, including tourism and manufacturing.
11. Use new knowledge from projects, such as those funded by NAP, as a catalyst for creating new partnerships around biodiversity protection, water management and use and planning at the local level.
12. Between parties considering partnership, take time to build understanding of each other's responsibilities and expertise, agree on principles to guide action by both parties, and regularly reflect on the effectiveness of the partnership as it proceeds, using the lessons of experience to improve the working relationship.
13. Communicate examples of effective partnerships to communities and agencies. **136**
14. Develop and sign-off Stakeholder Agreements.

responsibilities

All parties have responsibility for developing partnerships with those with common goals.

The CCMA and Regional Coastal Boards have particular responsibility for integration of planning for natural resources, and have been facilitating links between communities and government agencies.

125 NOTE/ Cost sharing arrangements are in place for environmental works in relation to salinity, waterways, soil conservation, pest plant and animal control, and nutrient control. For a review of cost-sharing, SEE/ *A Framework for Integrating Investment Across Natural Resource Supporting Strategies for the Corangamite RCS 2003-2008*, RCS Report 11, (CCMA, 2002).



126 COMMENT/ Landholder, Otway Foothills Strategy Workshop. If you want to provide incentives to retain native forests on private land, that's fine, or else the government should buy it and retain it. But to say you can't log your private forest is just laughable.



127 SEE/ Annex A: *Comments - issues facing public land management*

128 SEE/ Annex A: *Comments - responsibilities for weeds on roads.*



129 NOTE/ So that, for example, if you ask local government about developing a poultry shed, they will tell you 1) that you will need a licence for water from Southern Rural Water, and 2) that if all water is allocated, you should locate where you can buy water from Barwon Water.



130 SEE/ Annex A: *Comments - recommendations for improving the partnerships with communities* for details of five recommendations.



131 NOTE/ The Landcare model has co-ordinators employed by clusters of local groups (anywhere from 4 to 12 groups). The Coasts model uses facilitators coordinating regions of groups, with one facilitator for up to 30 groups. Both processes are delivering benefits.



132 SEE/ Annex A: *Comments - implementing regulations in partnership.*

annex i: RCS reports

These reports are all available on the enclosed RCS CD.

www.ccma.vic.gov.au/rcs



133 QUESTION/ What legislation and policies are relevant to streamsides? What are the gaps and conflicts?

134 COMMENT/ L. Avery. Leased streamsides means lessees seeking profit, and that means pressure on a fragile environment. Streamsides in public ownership should not be leased.

135 COMMENT/ DSE SW Region. There is no intent to move water frontages from public to private ownership. SEE/ Annex A: *Comments - issues facing public land management.*

136 COMMENT/ RCS CCMA Workshop. There are excellent examples of partnerships in the Serrated Tussock and Ragwort Strategies, in the dairy industry, Southern Farming Systems, the EPA's stormwater management work with local government, and NHT funding processes.

RCS REPORT NO.	RCS REPORT TITLE	RESOURCE ECONOMICS UNIT CONSULTANTS
1	Review of the 1997 Corangamite Regional Catchment Strategy	Thomas, Bennett, Colliver, Gomboso, Johnston, Sadler & Syme
5	Existing Strategies for Natural Resource Management in the Corangamite Region, 2002	Thomas
6	A Process for Supporting NRM Strategy and Plan Development by Regional and sub-Regional Stakeholders using the 2003-2008 Regional Catchment Strategy	Colliver
7	A Guide to Using the 2003-2008 Regional Catchment Strategy	Thomas
8	An Assessment of Natural Assets, Threats and Risks in the Corangamite Region in 2002	Thomas, Syme, Colliver & Gomboso
9	Management Options for Addressing Threats to Natural Assets in the Corangamite Region	Thomas
10	Targets for Natural Resource Management used in the 2003-2008 Regional Catchment Strategy	Thomas
11	A Framework for Integrating Investment Across Natural Resource Supporting Strategies of the Corangamite Regional Catchment Strategy 2003-2008	Thomas & Lumley
12	Resource Condition Targets, Investment Plan and Cost Sharing Arrangements for the Corangamite Regional Catchment Strategy 2003-2008	Thomas
13	Monitoring and Evaluation Approaches for Natural Resource & Catchment Management in the Corangamite Region, 2003-2008	Gomboso & Thomas
14	Corangamite Regional Catchment Strategy 2002-2007 Working Draft August 2002	Thomas & Colliver
15	A review of feedback and lessons learned in developing the Corangamite Regional Strategy, 2003-2008	Thomas & Colliver
17	Corangamite Regional Catchment Strategy 2002-2007 Community Draft December 2002	Thomas & Colliver
18	Corangamite Regional Catchment Strategy 2002-2007 Summary December 2002	Thomas