BURNETT CATCHMENT STRATEGY

SUMMARY OF HIGH PRIORITY STRATEGIES

DATE COMPLIED: MARCH 2002

To coordinate and instigate community awareness and effort to maintain an ecologically and economically sustainable Burnett and associated river systems

CONTENTS

Summary of high priority strategies

Communication.....3

Education and Awareness.....4

Research.....7

Land Use and Management.....9

Biodiversity Management and Enhancement.....12

Riparian Zone Management, Aquatic Vegetation and Habitat.....14

Water Access, Quantity and Environmental Flows.....15

Water Quality.....17

Pest Management.....19

4.1.4 Strategies

Goal	Strategy Actions	Priority	Responsibility	Timeframe	Action	Reference indicator
Develop and Implement a communication plan for the Burnett Catchment	**Research** • Develop a communication plan for the Burnett Catchment to ensure the coordination and management of information and resources.	High	BCCA			
	Extension and Communication • Encourage the adoption of appropriate communication activities and tools identified in the communication plan to share information, resources and research findings	High	BCCA			
	• Encourage ongoing community participation and ownership of the Strategy and encourage the community to be involved in the development of action plans, implementation of the strategies, development of project proposals and projects, etc.	High	BCCA			
	• Promote community groups to be involved in the process of LCMC throughout QLD and encourage the involvement and interaction of the wider stakeholders.	High	BCCA			
	Planning and Implementation • Plan and implement a communication plan for the Burnett Catchment to - identify the use of promotional resources such as brochures and posters - to develop an integrated approach with other programs and projects in the Catchment (Waterwatch, Waterwise, Water Safety, Riparian Restoration, Rivercare, Bushcare, Landcare) - improve the overall media coverage of the Burnett (regional approach) - encourage Sub-catchments or sub committees of BCCA to develop promotional material at local level - seek local sponsorship opportunities to engage in the promotion of natural resource management	High	BCCA			
	• Resource BCCA to undertake actions identified in the sub strategies.	High	Federal & State Govt			
	Monitoring and Reporting • Report on the improved methods and adoption of the communication plan • Report on the use of effective information and extension in the Burnett Catchment	High	BCCA			

4.2.4 Strategies

Goal	Strategy Actions	Priority	Responsibility	Timeframe	Action	Reference Indicator
To enhance the community's knowledge, understanding of, and involvement in sound natural resource management.	**Research** • Identification and documentation of gaps in research and knowledge as they arise in the course of the development of catchment management plans	High	DNR			
	Extension and Communication • Development of educational programs amongst the community to deliver effective training and information which target local needs	High	DNR, DPI, EPA			
	• Develop appropriate strategies which target Australian youth as they will become *tomorrow's natural resource managers*.	High	BCCA			
	• Establish a pattern of forums, field days and information sessions across the catchment to enable the sharing of information among groups, agencies, industry, research institutes, etc.	High	BCCA, Landcare			
	Planning and Implementation • Encourage the reduction of institutional and financial barriers to providing information access with a priority on community access to Geographical Information Systems	High	DNR, DPI, EPA			
	• Plan education and awareness programs and activities such as field days, forums, and information sessions to assist in the implementation of the Burnett Catchment strategies	High	DNR, EPA, DPI			
	• Further development of natural resource management modules in Future Profit courses	High	DPI, DNR, EPA			
	• Resource BCCA to undertake actions identified in the sub-strategies	High	Federal & State Govt			
	Monitoring and Reporting • Publicise information on completed projects with a related summary to encourage the development of future projects and to gauge any operational improvements that may be deemed necessary	High	BCCA, Landcare, G.A			

Goal	Strategy Actions	Priority	Responsibility	Timeframe	Action	Reference Indicator
To undertake research to identify methods to improve natural resource management practices within the catchment	**Research** • To identify and investigate the gaps and hotspots of resource information within the Burnett Catchment	High	BCCA			
	• Investigate the socio-economic implications of NRM initiatives specific to the Burnett (whole of the Government responsibility)	High	DPI, DNR, EPA			
	• To collate current information and research of other River Systems identified in the Catchment area.	High	DNR, DPI, EPA			
	Extension and Communication • Encourage researchers to disseminate information to the community, through field days, workshops, environmental forums, etc	High	BCCA			
	• Encourage implementation of the communication plan, to ensure research findings and information is accessible to the community, targets the appropriate audience and ensure information is not mis-interpreted	High	BCCA			
	Planning and Implementation • Encourage stakeholder groups to be involved in the planning and implementation of research projects.	High	DNR, DPI, EPA			
	• Coordinate the development of research projects to ensure they address high priority issues for the catchment and the findings are of relevance to the wider community	High	BCCA			
	• Resource the BCCA to undertake actions identified in the sub-strategies	High	DNR, DPI, EPA			

	Monitoring and Reporting • Report to catchment stakeholders on any change or significant developments as a result of research projects	High	Federal & State Govt.			
	• Report to the catchment stakeholders any change as a result of developing and implementing codes of practice	High	NR,DPI, EPA Industry Groups, DNR,			
	▪ Monitor the socio-economic responses to environmental and natural resource management changes in the Catchment	High	DPI, EPA DNR, DPI, EPA			

4.3.4 Strategies

Goal	Strategy Actions	Priority	Responsibility	Timeframe	Action	Reference Indicator
To undertake research to identify methods to improve natural resource management practices within the catchment	**Research** • To identify and investigate the gaps and hotspots of resource information within the Burnett Catchment	High	BCCA			
	• Investigate the socio-economic implications of NRM initiatives specific to the Burnett (whole of the Government responsibility)	High	DPI, DNR, EPA			
	• To collate current information and research of other River Systems identified in the Catchment area.	High	DNR, DPI, EPA			
	Extension and Communication • Encourage researchers to disseminate information to the community, through field days, workshops, environmental forums, etc	High	BCCA			
	• Encourage implementation of the communication plan, to ensure research findings and information is accessible to the community, targets the appropriate audience and ensure information is not mis-interpreted	High	BCCA			
	Planning and Implementation • Encourage stakeholder groups to be involved in the planning and implementation of research projects.	High	DNR, DPI,			
	• Coordinate the development of research projects to ensure they address high priority issues for the catchment and the findings are of relevance to the wider community	High	EPA BCCA			
	• Resource the BCCA to undertake actions identified in the sub-strategies	High	DNR, DPI, EPA			

	Monitoring and Reporting • Report to catchment stakeholders on any change or significant developments as a result of research projects	High	Federal & State Govt.			
	• Report to the catchment stakeholders any change as a result of developing and implementing codes of practice	High	DNR,DPI, EPA Industry Groups, DNR, DPI, EPA			
	• Monitor the socio-economic responses to environmental and natural resource management changes in the Catchment	High	DNR, DPI, EPA			

4.4.4 Strategy

Goal	Strategy Action	Priority	Responsibility	Timeframe	Action	Reference Indicator
Increase community participation in integrated management of the land, water and vegetation resources in the Catchment	**Research** ▪ Identify the priority issues for landuse management within the Catchment	High	BCCA, Landcare			
	Extension and Communication ▪ Organise and facilitate meetings with Landcare groups, farmer groups, community and stakeholders to develop plans to implement onground measures that address the identified priorities of land management	High	BCCA, Landcare, G.A			
	▪ Organise community awareness programs and activities such as field days, demonstration sites, trial sites, farm walks, and media releases, etc	High	BCCA, Landcare, G.A			
	Planning and Implementation ▪ Formation of a Steering committee to seek funding, plan, implement an integrated program for managing landscapes, soils and vegetation	High	BCCA, DNR, DPI, EPA			
	▪ Encourage community and landholders to collaboratively undertake on-ground improvements such as erosion control in areas identified by State of Rivers survey, Riparian restoration, water recycling, runoff minimisation, conservation cropping, pest control, fencing of riparian areas, cropping along contours, encouraging buffer strips to trap sediments and nutrient run-off, etc	High	BCCA, Landcare			
	▪ Encourage sustainable management of estuarine, coastal fringes and land resources.	High	EPA, DPI, DNR			
	▪ Target assistance and support from DNR, DPI and EPA to ensure technical support, extension and planning occurs for the implementation of identified priority actions of local work plans and are built into their Annual Operational Plans	High	BCCA, Landcare			

	▪ Seek assistance and technical support from DNR, DPI and EPA to organise the delivery of field days, information sessions, shed workshops/meetings, environmental forums etc on soil, water, vegetation management, day to day management for sustainable use, and linkages between resource attributes and limitations	High	BCCA, Landcare			
	▪ Resource the BCCA to undertake actions identified in the sub-strategies	High	Federal & State Govt			
	Monitoring and Reporting Nil					
Promote greater collaboration between research, development and extension activities to achieve a more integrated delivery of information to Catchment groups and Landholders	**Research** ▪ Identify gaps in technical knowledge, or service delivery that are constraining the implementation of 'on-ground' works.	High	DNR			
	Extension and Communication ▪ Encourage key agencies and other stakeholders to facilitate and exchange the information on research findings, objectives of future plans which support the implementation of on-ground works to address the priority issues for Landuse management	High	BCCA, Landcare			
	▪ Develop a communication plan to actively promote the content, accessibility and benefits of the BCCA Resource Inventory in objective resource management decision making	High	BCCA			
	Planning and Implementation ▪ Encourage community and stakeholders to have input intoIPA planning schemes and the development of industry codes of practice	High	BCCA, Local Govt.			
	▪ Encourage protection of cultural heritage (European and Indigenous cultures) through IPA planning schemes	High	BCCA, Local Govt			
	▪ Promote community involvement in the development of extension activities that deliver information on improved practices for landuse management through field days, environmental forums, information sessions and static displays, workshops, etc	High	BCCA			

	environmental forums, information sessions and static displays, workshops, etc ▪ Develop action plans at sub-catchment levels to address the identified gaps of technical knowledge and service delivery to landholders ▪ Deliver the key components of the communication plan **Monitoring and Reporting** Nil	 High High	 BCCA BCCA			
Encourage the use of adult learning techniques in skilling land users for the planning and implementation of best management practices across the Catchment	**Research** • Investigate and identify appropriate adult learning mechanisms that will effectively deliver desired understanding and activity in the Catchment **Extension and Communication** Nil **Planning and Implementation** ▪ Encourage the funding and delivery of adult training activities, such as Future Profit, to address high priority issues such as livestock grazing pressures, irrigation water use efficiency, property management planning for the land's capability, land degradation issues, and efficient vegetation management **Monitoring and Reporting** Nil	High High	DPI DNR,DPI, EPA Edu & Res Inst			

4.5.5 Strategy

Goal	Actions	Priority	Responsibility	Temieframes	Action	Reference Indicator
Implement an effective and efficient program of Biodiversity Management in the Catchment	**Research** • Develop a metadata base of information relevant to biodiversity management within the catchment with the objective of improving public access to relevant information using technologies such as GIS and the internet	High	PA, DNR, DPI			
	• Encourage and support research programs, which target gaps in the existing information/ knowledge base within the Burnett Catchment - Investigations of the adequacy of the existing reserve system to protect biodiversity values at the ecosystem, community and species/subspecies level - studies to develop efficient and effective remnant vegetation management/ habitat restoration techniques - studies associated with the recovery of threatened species of flora and fauna - Studies of 'keynote' special interest flora and fauna and poorly known taxonomic groups, eg habits of fruit bats, species with commercial value (medicines, bushfoods, timber or fibre production, etc.)	High	BCCA			
	• Establish a database for capture of the Catchment's natural gene base attributes for use and development of future generations.	High	EPA			
	Extension and Communication • Promote initiatives targeting community participation in conservation of biodiversity on privately managed land (on all other lands)	High	BCCA			
	• Organise, encourage and facilitate community participation in environmental forums, workshops and field days to demonstrate and increase awareness of the importance of and need to retain biodiversity alongside sustainable production systems	High	BCCA			
	• Encourage and facilitate landholder participation in various forms of natural resource management plans at the property level e.g. property management plans (Future Profits), land and water management plans (LWMP), vegetation management plans (VMP)	High	EPA, DNR, DPI			

	• Encourage community participation in strategic projects funded under relevant programs of the *Natural Heritage Trust* e.g. Bushcare, Wetlands, Endangered Species	High	BCCA, DNR,			
	Planning and Implementation					
	• Seek funding support for community 'on ground' actions and funding incentives for landholders seeking to protect strategic remnant bushland (riparian and non-riparian) and critical habitats in the catchment	High	BCCA, Landcare			
	• Incorporate protection of biodiversity values within and across individual Shires in the catchment through IPA planning schemes	High	Local Govt			
	• Resource BCCA to undertake actions identified in the sub strategies.	High	Federal & State Govt.			
	Monitoring and Reporting					
	Nil					

4.6.4 Strategy

Goal	Strategy Actions	Priority	Responsibility	Timeframe	Action	Reference Indicator
To improve Riparian Zone Management and consequently enhance the condition of existing riparian zones	**Research** • Determine (list and map) priority locations requiring protection as outlined in the State of Rivers Report, Fisheries Resource Assessment, Catchment Overview, BCCA Issues Management Database and community knowledge **Extension and Communication** • Undertake community participatory activities to demonstrate and increase awareness of the importance of and need to maintain riparian areas • Develop and implement relevant Riparian Zone Management guidelines **Planning and Implementation** Nil **Monitoring and Reporting** Nil	High High High	BCCA , BCCA, DNR EPA			

4.7.1 Strategy

Goal	Strategy Action	Priority	Responsibility	Timeframe	Action	Reference Indicator
Access to assured supplies of water for the Burnett Catchment within the capabilities of the system and maintenance of environmental values.	**Research**					
	▪ Encourage onground research of groundwater supplies throughout the Catchment	High	DNR			
	▪ Research and monitor the impact of current landuse and management practices on the limited ground water resources of the catchment	High	DNR			
	▪ Research the development of better water use efficiency techniques and distribution systems	High	DNR, Industry groups			
	▪ Research options for Wastewater reuse and the impacts on the land	High	DNR			
	▪ Research the needs and management of migratory fish species	High	DPI, Industry Groups			
	Extension and Communication					
	▪ Develop and implement a mechanism for community awareness and ongoing involvement in the Burnett Catchment Water Allocation Management Plan.	High	DNR			
	▪ Encourage communication and awareness of long term water needs to meet within sustainable capacity	High	BCCA, Edu & Res Inst			
	Planning and Implementation					
	▪ Ensure community input into the development of ROP's and ROL's for the Burnett WAMP	High	DNR			
	▪ Encourage and adopt best management practices for efficient water use by Local government, industry and landholders	High	BCCA, Local Govt			
	▪ Encourage the adoption of improved technologies for better water use efficiency	High	DNR			
	▪ Encourage partnership approach between community and Govt agencies to develop and implement infrastructure proposals and plans	High	BCCA			
	▪ Encourage urban residents to adopt other water efficiency measures such as installing rainwater tanks and water wise garden systems	High	DNR BCCA, Loval Govt.			

	▪ Pressure DNR Regional Infrastructure Development to investigate, assess and plan to maintain and enhance riparian systems above water storage impediments, and to similarly address downstream impacts of water storages.	High	BCCA			
	▪ Resource BCCA to undertake actions identified in the sub strategies.	High	Federal & State Govt			
	Monitoring and Reporting ▪ Undertake action to be part of the consultation phase for the WAMP	High	BCCA			

4.8.1 Strategy

Goal	Strategy Actions	Priority	Responsibility	Contributor
Accept the importance of improved management plans and landuse practices to deliver quality water of accepted industry and health standards.	**Research**			
	• Document effective and efficient management practices of urban, industrial and rural land to enhance good quality water in the Burnett Catchment	High	DNR	
	• Determine future water storage requirements for Local Government	High	DNR, Local Govt	
	• Encourage ongoing research and development of strategies for managing water sources in the Burnett Catchment that are already stressed through uncontrolled demands of water	High	BCCA	
	• Continue ongoing research and investigation of major sources (point ordispersed) of pollution that causes/affect water quality	High	DNR, EPA	
	• Research into the solutions and best method of managing water quality in the Burnett Catchment	High	DNR, Industry groups	Industry groups, Local Govt.
	• Encourage ongoing research into the impacts of landuse on river systems and water quality	High	BCCA, Local Govt	Industry groups, Local Govt. Industry groups, BCCA
	Extension and Communication			
	• Promote and adopt best management and improved land management practices for all land and water uses through environmental forums, field days, catchment tours, etc	High	BCCA,Industry Groups	
	• Encourage community to be involved in rehabilitation and management of degraded areas in the Catchment and undertake programs to target causes of degraded water quality	High	BCCA Local Govt.	
	Planning and Implementation			
	• Analyse the consistency of data collected and existing data patterns/records to enhance planning and management of supplying good quality water.	High	DNR	
	• Promote monitoring of water quality to establish ANZECC water quality standards are being met and maintained	High	DNR, EPA	
	• Encourage riparian landholders to maintain appropriate landuse systems such as riparian buffer zones, develop off stream water points, limit overgrazing of stream banks, development of appropriate contour banking, soil conservation practices, reduce run-off, safe fertiliser and chemical application, etc	High	BCCA	
	• Encourage the promotion and participation of field days, catchment and farm tours, trial sites etc to address community awareness and understanding of water quality	High	BCCA, Landcare	

	• Ensure the findings from groundwater research is incorporated in future management plans to ensure long term use and supply of good quality water • Ensure WAMP actions are carried out to ensure the return of good quality water to the Catchment river systems • Ensure effective fishways are installed on all in stream-barriers. • Resource BCCA to undertake actions identified in the sub strategies. **Monitoring and Reporting** Nil	High High High High	DNR DNR, EPA DNR, DPI Federal & State Govt.	

4.9.2 Strategy

Goal	Strategy Actions	Priority	Responsibility	Timeframe	Action	Reference Indicator
To implement pest management plans to minimise impact on the Catchment	**Research** • Undertake research into the human health risk associated with weeds • Undertake research into the audit and mapping of feral animals within the catchment and their associated impacts • Undertake research into the consequences of new plants becoming potential environmental weeds for the Catchment such as paulownia, *hymenachne*, honey locust, etc • Develop a pest impact assessment of economic and environmental cost to the environment and catchment • Target ongoing research into biological control of declared and environmental weeds **Extension and Communication** • Develop an education tool kit for community and schools to be used for identifying weeds, control methods, health risks, and general awareness **Planning and Implementation** • Lobby industry, Local Govt and Govt Agencies to use technical advice and services provided through research stations, universities, CSIRO to provide information and advice for groups undertaking pest management programs or trials • Develop alternative method through licences or permits to regulate or monitor the movement and transportation of machinery, fodder and livestock from infested areas to clean areas • Access information on international and national pest management programs and strategies ie importation of grain into the country. Research the potential pests entering Australia that may have impact on the Burnett Catchment and its agricultural production systems	High High High High High High High High High High High	Edu & Res Inst DNR, EPA DNR, AQIS DNR Edu & Res Inst Local GOvt Edu & Res Inst DNR BCCA, Landcare DNR, DPI AQIS Educ & Res Inst BCCA			

	impact on the Burnett Catchment and its agricultural production systems • Form links with industry and Local Govt to help support planning opportunities to address new pests entering catchment or monitoring of existing noxious weeds, such as Parthenium, Giants Rats Tail Grass, etc • Resource BCCA to undertake actions identified in the sub strategies. **Monitoring and Reporting** Nil		Federal & State Govt			