THE INTEGRATED MANAGEMENT FRAMEWORK

3

This section describes the detailed management framework which will provide:

- protection of high value rivers,
- the maintenance of ecologically healthy rivers, and
- an overall improvement in the environmental condition of the remainder of Victoria's rivers,

through:

- providing special protection for rivers and streams of very high value, and
- establishing regional 5 and 10 year targets for river protection and restoration through community-driven regional planning processes.

The framework builds on the current planning and management arrangements for river health.

5. The Integrated Management Framework

This section describes the detailed management framework which will provide:

- protection of high value rivers;
- the maintenance of ecologically healthy rivers; and
- an overall improvement in the environmental condition of the remainder of Victoria's rivers.

5.1 PROTECTION FOR RIVERS AND STREAMS OF HIGH COMMUNITY VALUE

The protection of rivers and streams of high community value will occur through two mechanisms:

- the provision of special protection for rivers and river systems of very high community value; and
- priority setting within the regional planning and target-setting process.

5.1.1 Special Protection for Rivers and River Systems of Very High Community Value

There are a small number of rivers that are of particularly high value to all Victorians. These include rivers of high conservation, recreational and/or cultural value. These rivers will be preserved as part of our heritage. In 1991, Victoria reviewed the values of all its rivers and put in place a system of Heritage Rivers. Eighteen river reaches were designated as Heritage Rivers because of their very high nature conservation, recreational, social or cultural value or because of a combination of these values. This review also identified 26 Natural Catchment Areas. Heritage Rivers and Natural Catchment Areas are listed in Appendix 2. These rivers and catchments are protected under the *Heritage Rivers Act 1992*. At the same time, it was recognised that the River Murray, whilst technically not a Victorian river, was of very high value to Victorians and should be regarded in a similar way to a designated Heritage River.

In addition to these Heritage Rivers and Natural Catchment Areas, 11 wetlands of very high conservation value have been listed as Ramsar wetlands and are consequently subject to special protection mechanisms under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*. Most of these wetlands are strongly influenced by river health (see Appendix 2).

These special protection mechanisms are aimed at providing special status and protection for the rivers and wetlands that are essentially 'the jewels in the Victorian Crown'.

Of the existing Heritage Rivers, two particularly stand out because of their:

- high level of conservation value;
- high level of naturalness of flows;
- relative intactness of the entire river system; and
- significance for larger systems.

These are the Ovens River and the Mitchell River. These two rivers represent the only two large rivers in Victoria that are in good condition and relatively intact throughout their entire river systems. Because of this, both provide vital inputs to larger scale systems – the Mitchell River to the Gippsland Lakes and the Ovens River to the Murray-Darling system. Deterioration of the Ovens and Mitchell river systems is likely to have major detrimental impacts on these larger scale systems.

Sections of these two rivers are protected as Heritage Rivers but this does not recognise their uniqueness as entire river systems. Management arrangements need to be put in place which recognise the very high value of these two river systems to Victoria and to Australia. These arrangements will need to take an integrated management approach to protect the rivers whilst recognising their significance to their rural communities and their place in regional economies.

The Ovens River and the Mitchell River will be recognised as river systems of very high value and will be managed to protect these values whilst recognising their importance to regional communities.

The Department of Natural Resources and Environment will work with the North East and East Gippsland Catchment Management Authorities to determine options for the management of the Ovens and Mitchell rivers which recognise their value, and will make recommendations to the Minister for Environment and Conservation by December 2003.

5.1.2 Other Rivers of High Value

There are many rivers or sections of rivers which, whilst not designated Heritage Rivers or linked with Ramsar wetlands, also have high community values. The protection of these will be ensured through priority setting and target setting within the regional river health planning process which is discussed in detail in section 5.2.

These rivers include those which have a range of statewide and regional environmental, social and economic value. Within the regional planning process, regional communities will identify their rivers or river reaches of high value and set priorities for protection and/or restoration. To determine the rivers or river reaches of high value, the assets associated with the river and the relative value of these assets will be identified. Assets in this sense represent aspects of the river which hold value for the community and about which the community would be concerned if they were lost or degraded - a different definition to that used solely in a commercial, accounting connotation.

The major classes of river-related assets to be considered include:

- environmental assets including:
  - the presence of rare species and/or communities and geomorphological features associated with the river;
  - sites of significance;
  - areas with high levels of naturalness of components of the river system including whether the river or a major river reach meets the criteria for ecologically healthy; and
  - representative rivers (this is discussed in more detail below);
- economic assets including:
  - important regional industries that depend on river health;
  - town water supplies that depend on river health; and
  - public infrastructure associated with rivers; and
- social assets including:
  - important recreation sites; and
  - sites that are significant for Indigenous and European culture.

The regional planning process will set targets for the protection and restoration of rivers using a priority setting process which is risk-based and designed to:

- protect existing high value areas or areas in good environmental condition; and
- restore those areas where there are:
  - the highest environmental and/or community gain for the resources invested; and
  - real community commitment towards long term improvement of river health.

Representative rivers

One of the major environmental values to be considered in the regional planning process is the need to have a series of representative rivers across the State; that is, rivers in an ecologically healthy condition that can be used to represent the major river classes that once occurred naturally across Victoria. Maintaining a network of representative rivers will ensure that the natural diversity of river systems in Victoria is maintained for future generations.

In moving towards the vision outlined in Chapter 4, a statewide target has been set to establish a system of representative rivers.

> By 2021, there is at least one major river reach in each of the river regions represented in Victoria that meets the definition of ecologically healthy.

The LCC (1991) *Rivers and Streams Special Investigation* recommended 15 rivers to be managed as representative rivers. These recommendations were endorsed by Government. The representative rivers selected as part of that study were based on a combination of geomorphic units and hydrological regions. As discussed in Chapter 2, there are now considerably more data on riverine and terrestrial biodiversity than existed in 1991. As part of the background work for the VRHS, a new preliminary classification of rivers in Victoria was undertaken to determine the major types of rivers in the State based on river ecology (see Figure 2.3).

A list of rivers that could be considered as representative in this new river classification system is outlined in Table 5.1. The rivers suggested are those which are ecologically healthy or as close as possible in that region. River reaches designated as Heritage, Representative or Essentially Natural Catchments by the LCC special investigation have been used where they were present, such as the Ovens and Mitchell rivers, Mt Vereker Creek (Wilsons Promontory), and the Lerderderg River (east of Ballarat).

In cases where the length of river in good condition was not considered to be sufficiently representative of the region, two reaches have been suggested. In region 4, for example, a reach of the Ovens River has been identified plus one of the tributaries of the Goulburn River upstream of Seymour (the Yea, Murrindindi or Acheron rivers).

Wherever possible, reaches of the same river system have been used across regions. For example, the Mitchell and the Ovens river systems flow through three river regions each and therefore have been suggested as the representative river for all three, forming an almost continuous reach. The Avoca River flows through two regions, and two separate reaches have been suggested – a lowland reach plus a reach upstream of St Arnaud Creek.

The rivers listed in Table 5.1 have been suggested only and the Victorian Environment Assessment Council will be requested to review the original LCC recommendations, taking into account these suggestions, any new knowledge and regional input.

> **The Victorian Environment Assessment Council will be requested to review the LCC recommendations on representative rivers in the light of new knowledge.**

The intention is that these representative rivers, when finalised, will be considered to be of high ecological value and will be managed accordingly. This will be achieved through the regional planning process described below. Where the reaches selected do not currently meet the definition of ecologically healthy, they will be considered as an environmental asset of high value in the regional planning processes and therefore as one of the priorities for restoration.

Table 5.1 ***Interim river regions and suggested representative rivers***

River Region	Area	Suggested Representative Rivers	LCC
RR1	Alps	Dargo River and Wonnangatta River	C3, A12
RR2	North-east uplands	Snowy Creek	C2
RR3	North-east floodplains	Koetong Creek	
RR4	North-central uplands	Ovens River and a tributary of the Goulburn (Acheron, Yea or Murrindindi)	A2
RR5	North-central midlands	Ovens River	A2
RR6	North-central floodplains	Ovens River	A2
RR7	North-west uplands	Avoca River (upper) or Axe Creek	C9
RR8	North-west floodplains	Avoca River (lower)	
RR9	Grampians	Upper Glenelg River and Jimmy Creek	
RR10	Glenelg catchment	Glenelg River (estuarine section) and Glenelg River between Mathers Creek and Harrow	A17
RR11	Otway Ranges	Aire River	A16
RR12	South-west floodplains	Hopkins River between Blind Creek and Grey Creek	
RR13	South-central	Lerderderg River and Curdies Creek	A15, C10
RR14a	East Gippsland east of the Snowy River - uplands	Thurra River (upper)	C6
RR14b	South-central uplands	LaTrobe River catchment (part of upper catchment)	
RR15	South-eastern slopes	Wonnangatta River	A12
RR16a	East Gippsland east of the Snowy River - lowlands	Thurra River (lower)	C6
RR16b	Strezleckis	Tarra River	C13
RR17	South-eastern plains	Mitchell River	A12
RR18	Wilsons Promontory	Mt. Vereker Creek	B26
RR19	South-central lowlands	LaTrobe River (part of upper) or upper Bunyip catchment	

5.2 ESTABLISHING REGIONAL TARGETS FOR RIVER PROTECTION AND RESTORATION – THE REGIONAL PLANNING PROCESS

Five and ten year regional targets will be set for river protection and restoration through community-driven regional planning processes. These processes will reflect a balance between regional economic, environmental and social imperatives, and will deal with all the issues affecting rivers, such as flow, water quality, riparian and instream habitat, and catchment management. These targets will be the mechanism within regions for:

- protection of high value rivers;
- maintenance of ecologically healthy rivers; and
- achievement of an overall improvement in the environmental condition of the rest.

The framework is based on a system of regional planning processes developed within a State policy context. It builds on the current planning arrangements and represents their next evolutionary phase.

5.2.1 Current Planning Arrangements for the Management of River Health

The current arrangements for the management of river health are undertaken in the ICM context, where the major focus is on regional catchment planning and implementation with overall policy direction and investment provided at the State level.

In Victoria, the primary focus of ICM arrangements is the Regional Catchment Strategies (RCSs). The RCSs were developed in 1997 by the then CALP Boards, together with their regional communities. The RCSs set out a vision for the management of a region's land and water resources, establish long term objectives and identify priorities for action and investment amongst the various natural resource management issues. The RCSs are the over-arching strategy for the development, management and conservation of land and water resources in each region (see Appendix 3 for a map of Victoria's CALP regions). They are currently being reviewed under the auspices of the Catchment Management Authorities (CMAs) and Port Phillip and Westernport CALP Board, and the renewed RCSs will all be completed by June 2003.

Under the broad policy umbrella provided by the RCSs, detailed action plans for priority land and water resource management issues are developed.

All the current RCSs have identified river health and waterway management as one of their priority natural resource management issues. Within this context, there is then a range of action plans which deal with the major specific issues primarily affecting river health, such as flow, water quality, riparian and channel condition, and floodplain management. Table 5.2 details the major objectives of each of these action plans. Many of these have local sub-plans. In addition, there are several other plans which do not have river health as their primary consideration but which do have some implications for river management and need to be linked at some level. These include RCS action plans like the Regional Vegetation Plans, and Coastal Action Plans.

Obviously, there are a number of action plans which affect river health, all of which have been developed separately. This has occurred because each of the issues:

- was perceived by the regional community as a major natural resource management issue for that region and there was a willingness to get involved in its resolution;
- has its own set of stakeholders;
- potentially involves specific trade-off decisions which take into account economic, environmental and social issues;
- requires information from specific disciplines and different modelling bases; and
- is managed by different management authorities, under different legislative instruments, with different funding sources and reporting arrangements.

In addition, different issues became apparent in their regions at different times; for example, salinity became obvious in north-west Victoria long before algal blooms and nutrients were identified as issues.

Therefore, issues have been dealt with individually because of their complexity and because of the need for regional communities to fully understand each issue and all its implications for them as they make trade-off decisions between environmental condition of rivers and economic costs. The outcomes of these planning processes are action plans that set targets for each issue that reflect the best balance of economic, social and environmental benefits for these communities.

Table 5.2 ***Major objectives of existing regional river-related RCS action plans and related planning processes which have implications for river health***

Driver of River Health	Strategy/ Action Plan	Scale	Responsibility	Purpose
Determines the priority of river health within broader regional natural resource management issues	Regional Catchment Strategy	Regional	CMAs	Over-arching strategy for the development, management and conservation of land and water resources; establishes regional vision, goals and priorities. Detail for achievement in the range of component action plans.
Flow	Streamflow Management Plans	Catchment/ Sub-catchment	RWAs	Developed on unregulated rivers to manage diversion licences. They establish environmental objectives, immediate environmental flow provisions, mechanisms to achieve long-term environmental flow objectives, rostering rules, trading rules and rules covering the granting of new licences.
	Bulk Entitlements	Water system	WAs	Property right to water held by water authorities. Specify volume, rate of extraction, security and environmental conditions to be met.
	Stressed River Plans	Catchment/ Sub-catchment	CMAs	Establish clear environmental flow objectives, identify mechanisms to provide additional water and prioritise the use of that water, identify complementary instream and riparian habitat works that will maximise environmental gains or ameliorate flow stress, and establish agreed cost sharing for implementation.
Water Quality	Water Quality/ Nutrient Management Plans	Catchment	CMAs	Establish priority nutrient sources and targets for nutrient reduction, identify priority actions, and establish cost sharing and roles and responsibilities.
	SEPP (Water of Victoria) Schedules	Catchment	EPA	Establish beneficial uses for water quality, environmental quality objectives and indicators. Attainment programs establish actions to achieve targets.

Driver of River Health	Strategy/ Action Plan	Scale	Responsibility	Purpose
Water Quality	Salinity Management Plans/Land & Water Management Plans	Catchment/ Sub-catchment	CMAs	Recommend options and targets for managing and reducing the environmental and socio-economic impacts of salinity.
	Stormwater Management Plans	Local	LG/ CMAs	Establish priority issues and actions to reduce pollutant and nutrient runoff into waterways from urban areas.
	Wastewater Management Plans	Local	WAs	Set out agreed programs for maximising beneficial use of effluent, minimising nutrient impacts and impacts of other contaminants on waterways, and moving towards ecological sustainability.
	Environment Improvement Plans and Licences	Local	EPA	Licences, set by EPA, contain conditions that aim to control the operation of certain premises in order to ensure that there is no adverse impact on the environment. The conditions vary but typically include waste discharge limits, monitoring requirements and reporting requirements. Increasingly, licences include environment improvement plans that aim to continually reduce the impact of the premises on the environment.
Channel and Riparian Zone	Waterway Management Plans	Catchment/ Regional	CMAs	Provide priority issues and actions to halt waterway degradation, to provide protection of environmental values of waterways and where possible to restore lost values and beneficial uses.
	Rural Drainage Plans	Sub-catchment	LG, CMAs	Establish priority issues and actions and role of stakeholders for the effective and sustainable management of rural drainage activities, to reduce the impact on other landowners and areas of environmental importance, such as wetlands and waterways.
	Crown Frontage Management Plans	Regional	NRE, CMAs	Provide condition of Crown frontages, including private and public, and prioritise frontages for action in relation to the protection of their environmental, cultural and aesthetic values.

Driver of River Health	Strategy/ Action Plan	Scale	Responsibility	Purpose
Channel and Riparian Zone	Regional Vegetation Plans	Regional	CMAs	Set priorities and actions for management of native vegetation, including riparian.
Floodplain	Floodplain Management Strategies	Regional	CMAs	Establish improved understanding of flood causes and effects, coordinated action and decision making, the sharing of public and private responsibilities, more effective target and priority setting, equitable investment and cost-sharing, effective performance assessment, and improved ongoing communication with floodplain management stakeholders.
	Floodplain Management Plans	Local	CMAs, LG	In accordance with the regional floodplain strategy, establish management guidelines for development and use of specified areas of a floodplain.
	Ramsar site plans	Local in a whole-of-catchment context	NRE	Establish strategies to maintain ecological character of Ramsar floodplain sites, including maintaining or restoring appropriate water regimes.
Biota	Fisheries Management Plans	Catchment	NRE	Establish management directions for fishing activities, fish stocks and fish habitats in accordance with government policy and the requirements of the community to ensure the sustainability of the base while optimising economic and social benefits.
	Biodiversity Action Plans	Landscape	NRE	Identify priorities and map significance for biodiversity conservation. Using current information on species requirements, they identify the best options for restoring biodiversity.
	FFG Action Statements	Mostly local	NRE	Establish management actions required to manage threatening processes or to protect threatened species or communities.
Estuary/ Terminal Lake	Coastal Action Plans	Regional/local	Coastal Boards	Establish management actions to deal with attributes of coastal regions or specific issues affecting coastal systems.
	Estuary Management Plans	Local	Coastal Boards	Outline management arrangements for specific estuaries.
	Ramsar site plans	Local in a whole-of-catchment context	NRE	Establish strategies to maintain ecological character of Ramsar estuary or terminal lake.

Limitations of the current arrangements

These river-related action plans often recognise the linkages between the issues but do not, at this stage, seek to optimise the linkages between plans, nor recognise cumulative impacts of various issues. They do not formally integrate many of their actions nor focus on an integrated river health outcome. There are no clear mechanisms for setting priorities across plans or to ensure a catchment to coast approach. Integration and priority setting tend to occur somewhat haphazardly at the level of the development of work programs. In addition, the State policy context in which the regional plans are undertaken does not provide clear direction.

5.2.2 Future Planning Arrangements

Given the investment of regional communities in the current planning arrangements, it is important to have a regional planning process which not only builds on the crucial work undertaken to date but also encourages better integration of plans, provides a focus on integrated river health outcomes, facilitates a catchment to coast approach, and is undertaken within a clear State policy context. The planning framework needs to be consistent with policy directions taken at broader scales, such as the goals, objectives and requirements of the National Action Plan for Salinity and Water Quality and the ICM Policy of the MDB Ministerial Council.

Effectively, there needs to be a hierarchy of planning where the national, State, regional and local scales are vertically integrated with the primary focus of decision-making being on regional planning and management.

State policy context

At the State level, policy direction is now provided by this Victorian River Health Strategy, the complementary statutory instrument, the *SEPP (Waters of Victoria)* which is now under review, the State Coastal Strategy and the general policy context in which these operate (section 1.2).

The *SEPP (Waters of Victoria)* is developed under the *Environment Protection Act 1970*. It provides the statutory framework of goals and objectives for environmental quality within which RCSs and their action plans are developed and implemented. It sets beneficial uses, provides policy direction on activities that pose a risk to beneficial uses and establishes statewide objectives for various aspects of river health, particularly water quality. The statewide objectives provide further direction on the conditions necessary to achieve ecologically healthy rivers. They provide guidance to regional planning processes on how to achieve healthy aquatic ecosystems. In developing these statewide objectives, consideration is given to any national guidelines or standards that may be relevant. The general philosophy behind the SEPP is that if any of its objectives are not met within a region, then the following regional management planning process is triggered to establish targets for the improvement of river health in that region.

Given this, the SEPP also provides the statutory framework for the development of regional targets for river protection and restoration via the regional planning processes described below.

Regional planning processes

The regional planning process builds on the existing river-related action plans but includes a clear process for integration. This involves the evolution of the current Waterway Management Plans into regional River Health Strategies (RHSs). The regional RHS will be an umbrella strategy coordinating the other river-related action plans.

The regional River Health Strategy will:

1. Identify environmental, recreational, cultural, social and economic assets.
   This will be undertaken for each river management unit (generally major river reaches or sub-catchment) and will include the comparative value. (See Box 5.1 for indicative set of assets.)
2. Identify river reaches of high value.
3. Identify threats.
   This will involve the identification of any processes which threaten these values and the severity of the risk involved.
4. Identify opportunities for restoration and requirements for restoration.
5. Set broad priorities for protection and restoration using a risk-based approach which includes:
   - a broad analysis of:
     - asset value, the severity of threat and the approximate $ cost of action, and
     - likely increase in environmental condition (i.e. environmental gain) per approximate $ cost of action; and
   - level of community commitment.
6. Identify broad actions/action plans required.
   This step will identify the key specific action plan required and its overall priority (e.g. if flow is a threat, then a Streamflow Management Plan may be required; if the threat is increased incidence of algal blooms, then a nutrient management plan may be needed).
7. Include outcomes of detailed issue-specific action plans, where these have already been undertaken. These action plans identify:
   - detailed options for actions and analyse these using a cost-benefit approach;
   - priority actions;
   - roles and responsibilities;
   - the cost-sharing arrangements;
   - the timetable for implementation; and
   - 5 year implementation targets and 10 year resource condition targets;

   or undertake the development of new action plans where required.
8. Provide 5 year implementation targets and 10 year resource condition targets for major river reaches. These targets will be included in a schedule of regional resource condition targets to be included in the RCSs. An indicative set of target areas for which targets could be set in a regional RHS is given in Box 5.2.
9. Set integrated river health objectives for major river management units.
   Targets will be integrated to form river health objectives for the major river reaches. These will be defined in terms of the environmental assets that will be protected or restored and detailed as an environmental condition rating (i.e. as an ISC set of scores).
10. Include a monitoring, reporting and review program.
    This will enable assessment of progress against both resource condition and implementation targets.
11. Include a community awareness program.

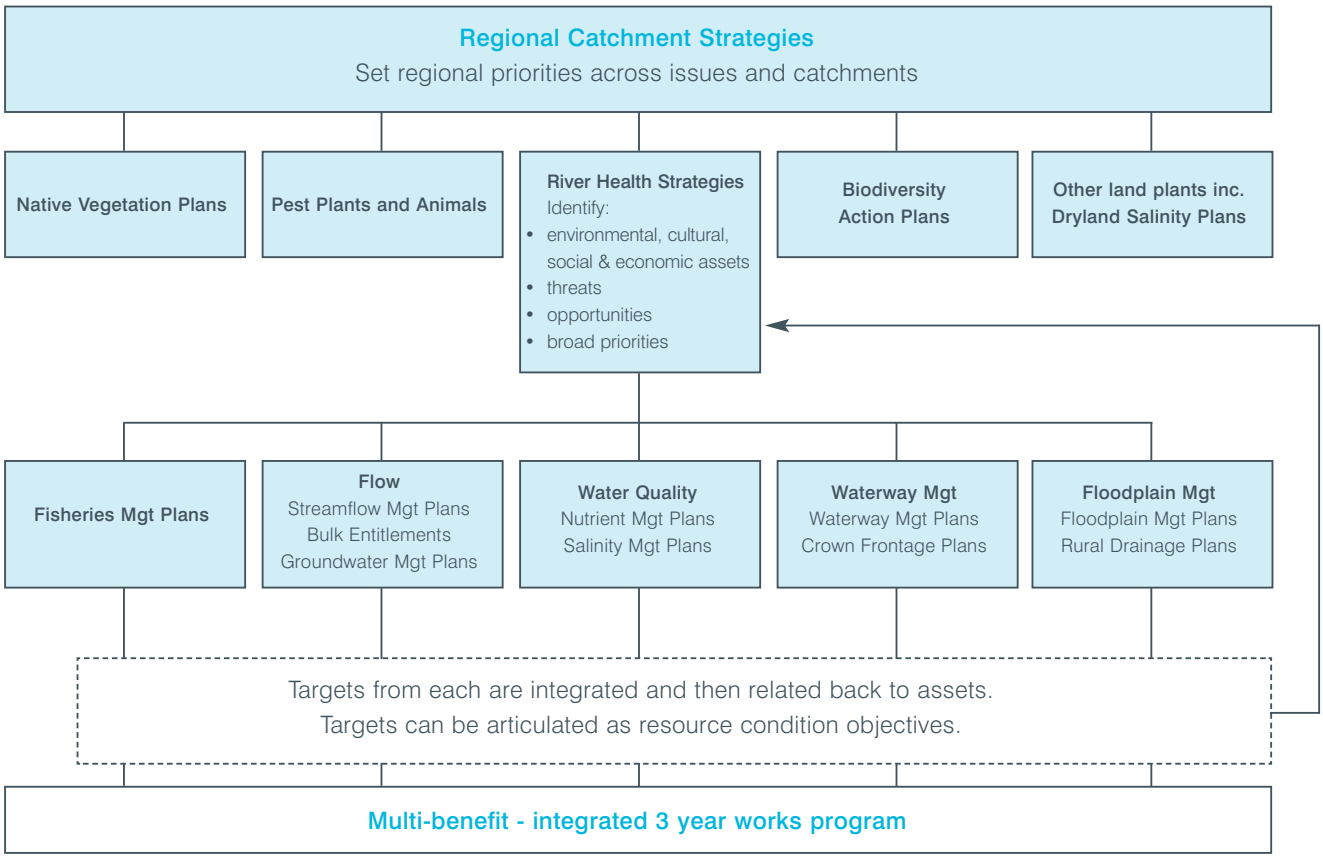
The regional RHS and its specific-issue action plans will be developed in consultation with the community and key stakeholders.

This regional planning process is illustrated in Figure 5.1 which shows the key outputs of each element of the regional RHS hierarchy. The priority-setting steps are clearly those parts of the process where the economic, social and environmental implications are taken into account and any trade-offs are made.

The regional RHS and its specific-issue action plans will direct the development of annual works programs. These are developed by CMAs as part of a three-year rolling regional activity plan which identifies activities to be funded in that period. In identifying these activities, those that have multiple benefits – that is, are a high priority in a number of action plans and therefore address a number of threats – will be clearly identified.

The Department of Natural Resources and Environment will develop detailed 'Guidelines for the Development of Regional River Health Strategies' by September 2002.

Figure 5.1 ***Proposed regional management framework***



NB: This diagram shows the key types of river-related action plans that are currently undertaken. It does not include any of the local management plans referred to in Table 5.2.

A key feature of the regional RHS is the inclusion of a register of all the major environmental, economic and social assets associated with the river. These assets are those attributes of the river which hold value for the community and about which the community would be concerned if they were lost or degraded. In general terms, these river-related assets equate to the beneficial uses protected by the *SEPP (Waters of Victoria)*. Box 5.1 outlines an indicative set of assets to be considered in all regional river health planning processes. This represents the development of a consistent, statewide approach to the identification and valuation of river-related assets. It is the first stage of a major project to develop a risk-based decision-support framework which will assist regional communities and CMAs to set priorities for river protection and restoration in a consistent way at a range of scales, including within the regional RHS, within component waterway management action plans and in the development of annual work programs.

A partnership of the Department of Natural Resources and Environment, CMAs and Melbourne Water will progressively develop a risk-based decision-support framework to assist in setting priorities for river protection and restoration.

The development of the regional river-related asset register within the regional RHS is a fundamental step forward in integrated river management. It provides the focus for the integration of all the activities impacting on rivers by providing the basis for the identification of high value rivers/reaches in a triple bottom line approach. The protection and/or restoration of the high value assets in these rivers/reaches provides the common objectives for all the relevant river-related action plans and ensures the alignment of specific-issue action plans towards achieving these objectives. The inclusion of associated floodplain wetland systems and downstream estuarine or terminal lakes systems ensures that these systems are considered appropriately within the regional river health planning process and that overall an integrated catchment-to-coast approach is being implemented.

Overall, the regional RHS provides a clear focus on integrated river health outcomes, better integration of river-related activities and more effective use of resources by:

- identifying a common, consistent set of environmental, social and economic assets and values to be considered in all river-related action plans;
- identifying all potential threats to these assets to be considered in the planning and priority-setting process;
- developing, aligning and implementing issue-specific action plans in this broader context of river health;
- developing integrated river health objectives and targets for each major river reach;
- providing a clear process for identifying multiple benefits of key activities; and
- providing the basis for the development of multi-benefit annual work programs.

The regional RHS provides for protection of high value areas, the maintenance of ecologically healthy rivers and the achievement of overall improvement in river health by setting river health objectives and targets which:

- clearly identify reaches which will be protected and the activities required to protect them; and
- determine the specific areas for restoration, the restoration activities required and the expected level of improvement to be achieved.

Box 5.1 Indicative Asset Register to be Developed in the Regional River Health Strategy

The following shows the environmental, economic, social and cultural assets to be considered within the development of the regional RHS. This approach ensures a consistent, statewide approach to the identification of assets. It also ensures that any areas considered to be of high value or high priority at the statewide level are clearly identified. It should be noted that this indicative asset register and its use in regional river health planning is subject to further review and refinement in the future, to better meet regional planning requirements.

Environmental Assets

Rarity

- Significant fauna and/or flora, i.e. regarded as rare or threatened species
- Significant Ecological Vegetation Classes
- Wetland/estuary significance
- Wetland rarity
- Sites of significance

Representativeness

- Representative river

Naturalness

- Natural macro-invertebrate communities
- Natural riparian vegetation:
  - Width
  - Structural intactness
  - Longitudinal continuity
- Natural fish populations
  - Observed:expected
  - Proportion of introduced fish
- Fish migration
- Ecologically healthy river

Large Scale Significance

- Heritage River
- Ramsar wetland

Social Assets

Recreation

- Fishing
- Non motor boats
- Motor boats
- Camping
- Swimming
- Passive recreation

Cultural

- Sites of cultural significance
  - Indigenous culture
  - Historical sites
- Native title claim
- Listed landscape

Flagship Species

Economic Assets

- Irrigation water supply
- Proclaimed water supply catchments
- Public infrastructure
- Agricultural land
- Tourism
- Power generation
- Commercial fisheries
- Supply of water for industry
- Ecosystem services

Box 5.2 Indicative Set of Target Areas to be included in the Regional River Health Strategy and Related Action Plans

Targets in these areas will be set through the regional RHS and its component action plans, and will be included in the schedule of targets in the RCS.

Five Year Implementation Target Areas

- Number of rivers with negotiated environmental flow regimes
- Number of rivers with improvements made to environmental flow regimes
- Level of reduction in nutrient loads from priority sources within catchment
- Area of riparian land under management agreements
- Area of riparian land vegetated
- Length of river subjected to riparian weed control
- Number of barriers where fish passage restored
- Number of plans developed for areas of high social value
- Specific action plans to be developed

Ten Year Resource Condition Target Areas

- Length of river in excellent or good condition
- Number of high value river reaches with adequate environmental flows
- Reduction in nutrients at key monitoring sites within catchments
- Reduction in salinity at key monitoring sites within catchments
- Reduction in sediment loads at key monitoring sites within catchments
- % of monitoring sites meeting *SEPP (Waters of Victoria)* objectives
- Length of river with improvement of one rating in the measurement of riparian condition
- Length of river with improvement of one rating in physical form subindex
- Length of river where instream habitat has been reinstated
- Increase in river length made accessible for fish movement
- Improved floodplain linkages
- Number of high value public assets with appropriate level of protection from flooding and erosion
- Number of high value environmental assets protected
- Representative rivers in good or excellent condition
- Value of Heritage Rivers maintained

Community Involvement

- Number of people involved in community monitoring
- Number of people participating in river health management programs

5.2.3 Transition

Whilst the proposed future arrangements are a logical extension of where we are now, the transition towards them needs to be carefully managed. The regional RHSs and issue-specific action plans are at different stages of development across the State. There has been considerable commitment and investment in these plans from the various regional communities. It is important that this impetus and goodwill is not lost and that the proposed arrangements are not seen as 'another planning exercise where nothing ever happens'. CMAs will be responsible for managing the transition in their regions. This will involve completing the issue-specific action plans currently under development, developing the umbrella regional RHS and identifying any further action plans likely to be required.

Regional RHSs will be completed in all regions by June 2003.

The approach outlined above enables communities to make decisions on priorities and trade-offs between environmental, social and economic benefits in an informed, transparent way. However, these decisions could be further assisted if it were possible to compare the relative values of economic, social and environmental assets. Currently, this cannot be undertaken in any consistent way and will therefore require considerable thought and innovation in the future.

5.2.4 Review Process

Once the proposed arrangements are in place, there will be a process of regular review. This will occur as part of the regular review of the RCSs. The regional RHSs together with their action plans will be reviewed on a five yearly basis, and implementation and resource condition targets revised if necessary. As the action plans are implemented and reviewed, regional communities may choose to integrate some of these plans under the umbrella of the regional RHS.

5.2.5 Community–Government Partnership

The regional RHSs will represent the long-term plan for the management and restoration of the rivers in a particular region. The task can only be undertaken as a partnership between Government and regional communities. The formalisation of this partnership will occur through the process of government endorsement of the regional RHSs and their action plans.

Government endorsement will be required for the regional RHSs and for the specific issue action plans as they are developed.

This step of government endorsement is an important one. It signals that the regional strategy/action plans are consistent with government policy, eligible for State Government funding for particular activities, and consistent with Commonwealth accreditation criteria.