

Supporting Integration of **Water Resource Planning** & Regional NRM Plans & Arrangements

Guiding Integration

This document supports the planning module 'NRM Plans and other regional planning processes: What are the links?' which in turn supports the *Regional NRM Plan Guidelines, September 2002*¹. The *Regional NRM Plan Guidelines* identify two broad accreditation criteria or requirements for that relate to consistency of NRM plans with water resource related planning activities:

1. **Consistency with other planning processes and legislative requirements** - *Ensure that a logical link is established between the WRPs, ROPs and accredited NRM Plans. [NRM Plans] consider any Moratoria in place [and consider the] need for structural adjustment*

And,

2. **Set regional targets** to be achieved for salinity, water quality, water flows, estuarine/coastal issues and stream and terrestrial biodiversity that are consistent with agreed national standards and relevant planning processes.

This document provides some practical approaches for bodies, which if used, clearly demonstrate the above criteria in NRM plan development have been addressed (see Table 1 over).

This document also identifies some broader integration and coordination opportunities that support longer-term healthy regional arrangements for NRM planning (see Table 2). These go beyond the practical short-term considerations for developing a Regional NRM Plan for accreditation.

Water resource related planning processes to consider

The following planning and implementation activities from the *Water Act 2000* are largely concerned with the sustainable allocation, management and use of water.

- **Water Resource Plans** - these basin or catchment wide plans provide the statutory framework for allocating and managing water for both human use and environmental flow requirements. The WRPs include environmental flow and water allocation security objectives as well as providing the platform for tradeable water allocations in the catchment. WRPs are in different stages of development in different catchments (see Appendix A). Web link.
- **Resource Operations Plans** – ROPs are the 'implementation plan' for the *Water Resource Plans*. They focus on a catchment or sub-catchment basis, and include arrangements for converting existing entitlements to tradeable water allocations, defined water trading rules, infrastructure operating rules and ecosystem and water monitoring.
- **Water Use Plans** – these 'district' scale statutory plans can be declared by the Minister in water use districts in response to a risk in natural resource degradation arising from water use practices in that area. The water use plan may set water use

¹ *Guidelines for Developing a Regional Natural Resource Management plan in Queensland, September 2002.*

practice standards to address issues like rising groundwater, soil erosion in the water use area or soil and water degradation due to contamination/salinisation particularly from irrigation practices.

- **Land and Water Management Plans** – (LWMPs) describe how and where water supplies are to be used for primary production at the property level to minimise on and off-site impacts to land and water resources. These plans, prepared by the property-owner, are required for irrigation use where trading in water allocations occurs or where new water allocations are purchased or leased. The plans might address issues such as water use efficiency, drainage, recycling, cropping practices and biodiversity and cultural heritage conservation. A LWMP may also be required in an area where a *Water Use Plan* is in place.

Some Issues

1. **Timing of WRPs and ROPs** - Appendix 1 shows clearly the status and proposed timing of *Water Resource Plans* and *Resource Operations Plans* in Queensland's catchments. In several NRM planning regions either WRPs or ROPs, are yet to be initiated, drafted or finalised. In other catchments existing WRPs are currently being amended. In these cases regional NRM planners are strongly encouraged to work directly with regional agency water planning teams to determine interim objectives and activities as part of the target setting process.
2. **Age of WRPs** – As a result of the 'staging' of water resource related planning across the State, earlier plans were developed prior to the Water Act 2000. These plans, known as Water Allocation Management Plans (WAMPs) had similar objectives to WRPs, but less emphasis on water quality related management issues.

Key water planning inputs for Regional NRM Plans

The following table (Table 1, over) provides practical approaches, which if used, clearly **demonstrate intent to address the criteria for NRM plan accreditation relating to water planning**. These can be seen as inputs to NRM plan development. **As the timing of water planning processes differs between regions, not all NRM planners will have access to these inputs or they will differ somewhat between regions**. Using some general planning outcomes as a focus, the table lists these key inputs and suggests their likely application in the Regional NRM Plan.

Planning Outcomes	Inputs from WRPs/ROPs	Description	Application in NRM Plan
Maintaining Environmental Flows	<ul style="list-style-type: none"> Environmental Flow Limits (EFLs) and Planned Development Limits (PDLs) 	Proportion (%) of mean annual natural flow, allocated to environmental flow and development for maintaining natural flow characteristics eg trigger flows.	Adopt (where available) for catchment and sub-catchments for environmental flow related target setting
	<ul style="list-style-type: none"> Environmental Flow Objectives (EFOs) 	Identified in WRP, State Government is responsible for implementing these management strategies through the ROP	Check consistency of NRM Plan management action or relevant resource condition targets affecting flow with EFOs
	<ul style="list-style-type: none"> EFO assessment criteria in WRP 	Environmental decision-making criteria for flow related activities, works or investment. Includes examples of how criteria might be achieved	Check consistency of any investment criteria applied in NRM plans and related examples as possible management actions
Aquatic Ecosystem / ground water health	<ul style="list-style-type: none"> Monitoring / management framework presented in WRPs / ROPs including proposed broad indicators 	Includes provisions for aquatic ecosystem health, groundwater health, and salinity focus.	Check consistency or complementarity of proposed monitoring and management activities and indicators in NRM plan with WRPs / ROPs. Show where proposed monitoring investments under the NRM plan support and/or complement WRP monitoring outcomes (e.g. Saltwatch, Waterwatch)
Industry viability & Reducing impacts of land use intensification	<ul style="list-style-type: none"> Current moratoria in place Future development Additional Water Allocations 	Location and duration of water harvesting / development moratoria in place; proposed future development sites or projects; location and volume of additional water allocations in catchment for water industry development.	In regional overview identify status of moratoriums; If identifying regional economic assets (available water); evidence of planning for potential pressures on resource assets related to the development of that water resource and locations for investment in industry development, WUE etc.
	<ul style="list-style-type: none"> Water Allocation Security Objectives 	Again, these management strategies are identified in WRP as State Government responsibility to implement through ROP.	Check consistency of NRM Plan targets or proposed investments potentially affecting allocation security.
	<ul style="list-style-type: none"> Structural adjustment considerations 	Where social and economic costs and benefits of different supply strategies are identified (e.g. <i>water supply options studies</i>) or through economic evaluations as part of <i>water release studies</i> for implementing the ROP, NRM plans should recognise these impacts (e.g. pressure for structural adjustment) and consider when developing investment proposals or negotiate complimentary investment with the State.	
Maintaining soil resource condition	<ul style="list-style-type: none"> Water Use Plans 	See page 1.	Identify in regional overview districts in region where WUPs are in place or being proposed and the natural resource degradation issues and risks in that district that led to the declaration of WUP.

Table 1. Key water planning inputs for Regional NRM Plans

Other Links Between Plans

This part of the guideline outlines a number of broader services, relationships or links between water planning and NRM Plan planning activities. These include the plan development and implementation phases of both plans as well as scope for longer-term cooperation. These require discussion and negotiation between the planning groups at a regional scale. These are **not mandatory plan accreditation requirements**, but provide some direction for ongoing improvements of regional arrangements.

Planning Outcomes	Other links between plans
<p>Effective and coordinated consultation and participation approaches</p>	<ul style="list-style-type: none"> Water planners incorporate regional bodies & subregional networks into design of consultation process for WRP / ROP development and review (e.g. exploring new approaches to advisory structures & processes in the Burdekin); Regional Bodies provide networks for sector-based and sub-regional consultation on proposed WUPs; Explore sharing or merging existing technical or scientific advisory groups (e.g. TAP) beyond WRP development; Explore cooperation on communication activities, Bodies are supported to make detailed submissions on draft WRPs, draft ROPs and WUPs
<p>Adequate information base for planning and decision-making</p>	<ul style="list-style-type: none"> Research priorities identified in WRPs. Shared research priorities are negotiated and funded e.g. NAPSQ planning / research can provide the link between instream health and land management practices absent in some WRP assessments. Contributions of different regional WQ monitoring frameworks identified, shared indicators developed. Some WRPs (e.g. Burnett-Mary, Condamine) provide for community-based monitoring programs (e.g. Waterwatch) to form part of this monitoring framework. Information derived from monitoring programs such as Waterwatch or Saltwatch can contribute to ministerial decisions to review water resource plans. Annual assessment (report) to be released by NR&M on monitoring outputs for aquatic ecosystems and flow and ROP implementation progress. Data collection standards for monitoring WQ and flow presented in ROPs (e.g. Attachment 3.3 of Fitzroy ROP) – may provide guidance for Regional bodies. In preparing the draft WUP the Minister must consider ‘changes to water use practices that will reduce the risk to land and water resources’ and ‘existing industry codes of practice for water use’. NRM plan investments, policies, projects or monitoring on practice use/industry codes could inform this process. Process used in Burdekin water supply options for prioritising structural (water infrastructure) and non-structural investment options (e.g. WUE) useful model for regional bodies prioritising complimentary investment (criteria based approach)
<p>Social and economic impacts addressed</p>	<ul style="list-style-type: none"> Regional NRM plans and planners may partner the State or contribute to providing conflict resolution processes or fora, identifying and actioning cost-sharing and equity considerations relating to water planning. In ROP implementation, economic evaluations are undertaken that include alternative combinations of infrastructure development, economic costs and benefits relating to unallocated water available for future release. Regional NRM planners and plans may be able to support or participate in scenario development or evaluation of impacts and investments to support mitigation of those impacts (infrastructure, industry/sector impacts, environmental impacts including WQ, salinity, terrestrial biodiversity, riverine health, cumulative impacts on instream habitat, cultural heritage and social impacts, recreational and tourism impacts).

Planning Outcomes	Other links between plans
<p>Coordinated property scale / on-ground investment</p>	<ul style="list-style-type: none"> • Performance requirement in LWMPs to ‘monitor water resource condition’ including salinity of tail water, water runoff, salinity of shallow water tables, ground water table levels and general water quality. NRM planners support landholders in on-property implementation of LWMPs and monitoring activities e.g. directing Saltwatch and Waterwatch resources to key areas) where there are complimentary objectives or priority resource degradation issues. • Negotiate a partnership between NRM planners, government and industry to direct these individual property-based monitoring outputs into a catchment / sub-catchment wide framework. • NRM planners be conscious of management practice standards and local planning requirements (LWMPs) in developing practice related strategies and targets.
<p>Common policy basis</p>	<ul style="list-style-type: none"> • The <i>Water Act 2000</i> states that the Minister must consider ‘the sustainable resource management strategies and policies for the catchment’ in preparing a water resource plan (includes catchment management strategies) i.e. in drafting or reviewing WRPs relevant policies and strategies developed by Regional Bodies, RSGs, catchment groups (e.g. CQ Water Quality Policy, NRM plans, catchment plans, regional community values) can legitimately inform the development and review of these Plans.

Important contacts, support and further information

Key regional contacts for delivery of water resource-related planning processes are:

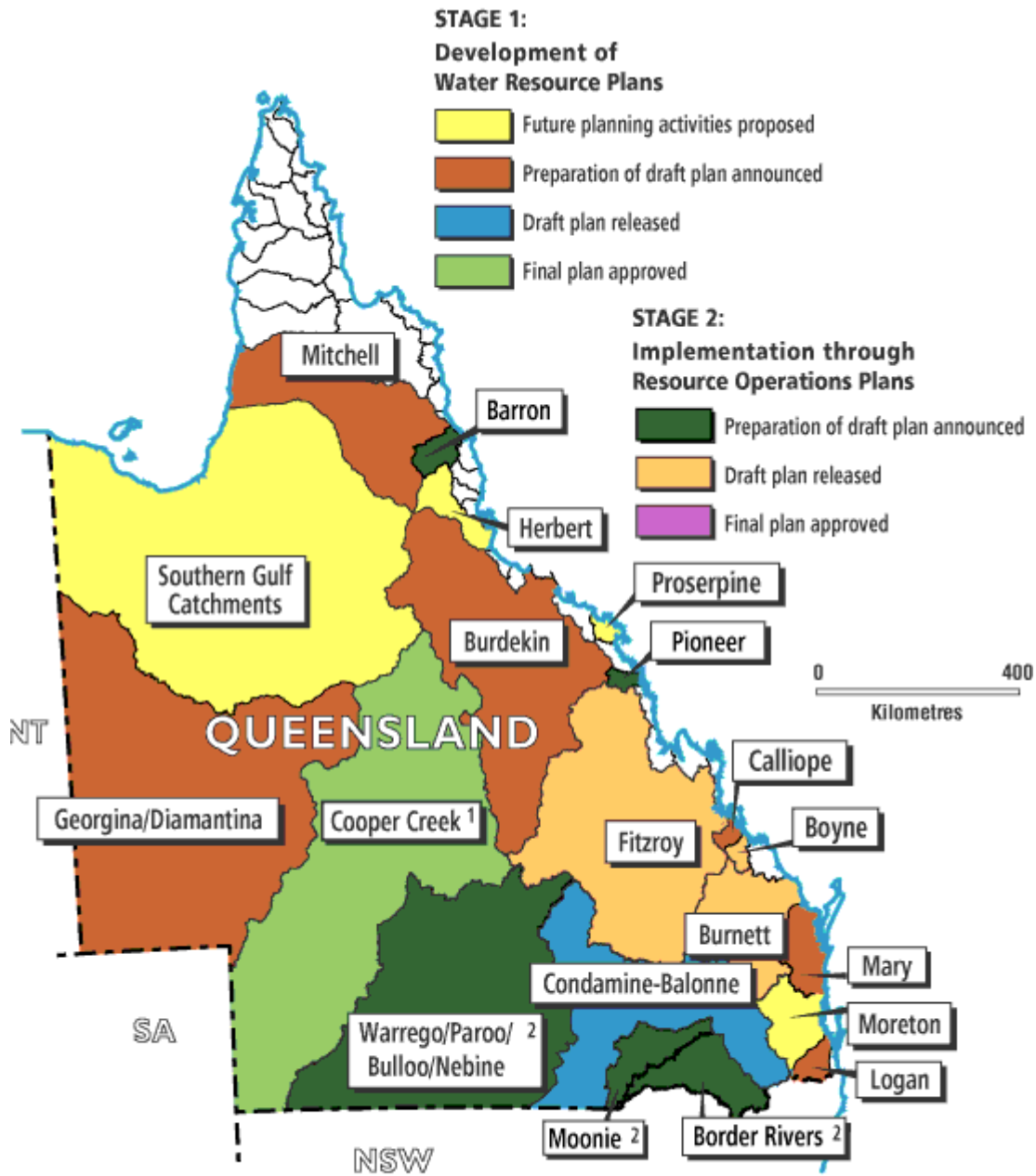
	Regional water planning (WRPs, ROPs)	Land and Water Plans
South East		
Central-West		
North-West		
South-West		
Brisbane		

Follow this link to the NR&M water planning webpages for further information on the above plans and processes <http://nrm.dnr.qld.gov.au/wrp/index.html>

This module is one in a series of guidance products linked to the Regional NRM Plan Guidelines. Related modules (under development) include, Coastal management planning; Regional Growth management Frameworks; and others.

For a full list of **guidance materials** as they become available visit the Queensland NAP website at <http://nrm.dnr.qld.gov.au/salinity/framework.html>

Appendix A - Status of Water Resource Plans and Resource Operations Plans in Qld's catchments.



Note 1: A Resource Operations Plan is not required for Cooper Creek.
 Note 2: Final Water Resource Plans have not yet been approved for the Border Rivers, Moonie and Warrego/Paroo/Bulloo/Nebine