

Implementing SEQ Regional NRM Plan Targets through Planning Schemes:

*A Decision Support Tool
for
South East Queensland
Local Government Planners*



Project Partners

This tool has been commissioned by the Department of Infrastructure and Planning (DIP), Department of Environment and Resource Management (DERM), Burnett Mary Regional Group, Brisbane and Logan City Councils and Lockyer Valley Regional Council, with SEQ Council input facilitated by the Council of Mayors (SEQ), SEQ Catchments and LGAQ. The stakeholders collectively recognise the importance of consistent implementation of NRM requirements through planning schemes to achieving high quality NRM regional outcomes.



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Executive Summary

This document focuses on the South East Queensland Natural Resource Management Plan 2009-2031 (SEQ NRM Plan) and specifically provides a tool to assist with the implementation of the SEQ NRM Plan targets into a local government planning scheme.

Planning schemes have an obligation to reflect the outcomes and policies of the South East Queensland Regional Plan 2009-2031 (SEQRP) which includes programs to implement actions to achieve the SEQ NRM Plan targets. In addition, planning schemes must address the core matters identified in the *Sustainable Planning Act 2009* (SPA), which include the valuable features that constitute a local government's natural resources.

While there is an obligation to address NRM issues under the current planning regime, there is no mandatory or specified level of achievement or response required by either the SEQRP or the SEQ NRM Plan. The level of response to the SEQ NRM Plan targets will be up to each local government to determine. The level of response by each SEQ local government showing their contribution to the achievement of the agreed regional targets should be negotiated through the Council of Mayors (SEQ) with support from SEQ Catchments. Without a process that seeks agreement at the regional level, only a sub-optimal outcome can be reached which will fall short of achieving the regional targets.

Reflecting the SEQ NRM Plan targets in a planning scheme provides local government with an opportunity to more effectively address nature conservation, sustainability and other outcomes which it may have already been seeking to achieve. It also provides an opportunity to coordinate its approach with other local governments and agencies in South East Queensland. The targets can inform strategic policy intentions and assist in establishing more tangible performance standards for development.

The purpose of this tool is to provide a process for decision-making and identifying relevant considerations when integrating SEQ NRM Plan targets into a planning scheme. This process is summarised in the diagram on page 9.

The tool can be used by local governments to:

- identify which SEQ NRM Plan targets should be integrated into their planning scheme;
- determine the level of response that is appropriate for their local government area within the regional context of relevant targets;
- ensure coordination with other local governments and relevant state agencies in the determination of responses; and
- establish appropriate planning responses.

In determining an appropriate local response to the NRM targets, it is recognised that:

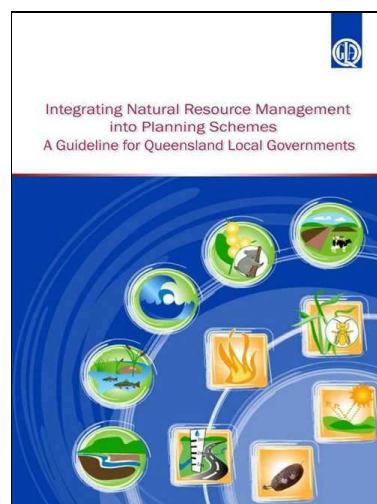
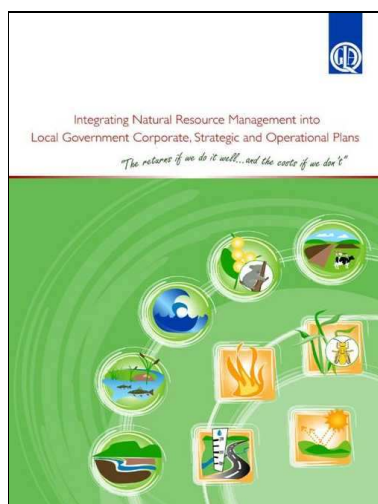
- it is desirable to seek to achieve the target to the maximum extent possible given the nature of local values, community needs and development commitments;
- local governments may need to prioritise their response to the targets, having regard to available data, expertise and resources;
- the targets may be addressed individually or may be best approached within relevant themes and related work programs under which the planning scheme is being prepared; and
- responses to the targets will need to be considered in the context of other statutory obligations which a local government must meet in its planning scheme (for example, the requirements established by state planning policies).

Introduction

This document focuses on the South East Queensland Natural Resource Management Plan 2009-2031 (SEQ NRM Plan) and specifically provides a tool to assist with the implementation of the SEQ NRM Plan targets into a local government planning scheme. Planning schemes have an obligation to reflect the outcomes and policies of the South East Queensland Regional Plan 2009-2031 (SEQRP). In turn, the SEQRP refers to the implementation of the SEQ NRM Plan as a key means of achieving a number of regional NRM policies included in the SEQRP.

This tool builds upon a series of guidelines produced by the Local Government Association of Queensland (LGAQ) to support councils' role in natural resource management. These existing guidelines include:

- Integrating Natural Resource Management into Local Government Corporate, Strategic and Operational Plans;
- Integrating Natural Resource Management into Planning Schemes – A Guideline for Queensland Local Governments; and
- Integrating Natural Resource Management into Planning Schemes – Generic Code Provisions for Queensland Local Governments.



The first guideline provides an overview of obligations, benefits and opportunities to deal with NRM across the broad spectrum of local government business. The second guideline deals more specifically with the opportunities to support and implement NRM aims through planning schemes. The third guideline provides more focused advice for local governments on implementing NRM into planning schemes, through the development of some generic NRM provisions designed for planning scheme codes.

This tool is specifically focused on the implementation of the SEQ NRM Plan targets into SEQ local government planning schemes. However, it may also provide a tool for wider application to assist with interpreting a relevant NRM plan and establishing its applicability to a planning scheme.

Purpose of this Tool

The purpose of this tool is to provide a clear step by step process for decision-making and identifying relevant considerations when integrating SEQ NRM Plan targets into a planning scheme. The guideline can be used by local governments to:

- identify which SEQ NRM Plan targets should be integrated into their planning scheme;
- determine the level of response that is appropriate for their local government area within the regional context of relevant targets;
- ensure coordination with other local governments and relevant State agencies in the determination of responses; and
- establish appropriate planning responses.

This tool is intended to be used primarily by local government planners, however input from other internal and external stakeholders is critical in the process. This tool will therefore also be of assistance to environmental officers, relevant state agencies and NRM groups to understand and respond to opportunities to contribute to achieving high quality NRM outcomes.

NRM and Planning Schemes – Setting the Context

NRM is the sustainable management of our natural resources (land, water, air, landscapes, coastal and biological systems). NRM is fundamental to protecting our ongoing social, economic and environmental wellbeing.

However, the delivery of NRM is often challenging and complex. It requires a coordinated effort, relying on the cooperation of governments at all levels, as well as that of regional bodies, which have been specifically established to ensure delivery of NRM at the regional level. Many local governments across Queensland are playing an increasingly important role in NRM and the responsibility, and the opportunities, to address NRM run across many of local governments' functions.

NRM is fundamental to good planning, and planning schemes are a key tool for implementing planning policy. They provide statutory strength for the vision for a local government area (through strategic frameworks), enable the regulation of development through the integrated development approval system (IDAS), and establish the standards expected of that development, usually taking a performance based approach. This gives them substantial control over the location, form and impact of new and modified land uses, structures and related infrastructure.

The *Sustainable Planning Act 2009* (SPA) (and previously the *Integrated Planning Act 1997*) provides a clear head-of-power and obligation for local government to deal with NRM issues in planning schemes and its other planning functions:

The **purpose of this Act** is to seek to achieve ecological sustainability by—

- (a) managing the process by which development takes place, including ensuring the process is accountable, effective and efficient and delivers **sustainable outcomes**; and
- (b) **managing the effects of development on the environment**, including managing the use of premises; and
- (c) continuing the **coordination and integration of planning** at the local, regional and State levels.

Sustainable Planning Act, Part 2, Section 3

Planning schemes provide a key means to articulate desired outcomes for a local government area and to manage the impacts of growth or change. In doing this, the SPA requires planning schemes to coordinate and integrate local, regional and State dimensions of “core matters”. SPA defines “core matters” as:

- land use and development;
- infrastructure; and
- valuable features (ecological and economic resources and areas of landscape or cultural heritage value).

Section 5, Part 2 of the SPA outlines that advancing the Act’s purpose includes taking into account the short and long term environmental effects of development at local, regional, State and wider levels, applying the precautionary principle, as well as ensuring the sustainable use of natural resources and avoiding or minimising the adverse environmental effects of development. Achieving the purpose of the Act places a strong emphasis on NRM.

The SPA requires new planning schemes to be prepared in accordance with the Queensland Planning Provisions (QPP). The QPP outlines the structure and required elements of a planning scheme. The QPP require planning schemes to reflect the requirements of a regional plan and as outlined below there are links between the NRM and the SEQ Regional Plan. Further, the QPP requires a strategic element to be included within a planning scheme, which will need to address natural resources.

NRM Plan Linkages to SEQ Regional Plan

The SEQ NRM Plan establishes a collaborative framework to link regional natural resource management planning, investment and activities, to achieve a range of targets. The SEQ NRM Plan is the pre-eminent, non-statutory environment and natural resource management plan for the region. It articulates measurable targets for the condition and extent of environment and natural resources aligned to desired regional outcomes (DROs) and policies in the SEQRP.

The SEQRP establishes the implementation of the SEQ NRM Plan as a key means of achieving Policy 4.1.1 under section 4.1 Natural Resource Management. The SEQ NRM Plan is also recognised in a number of other DROs in the SEQRP.

Appendix A identifies the direct links between the SEQ NRM Plan and the SEQRP, particularly through the relationships between DROs, principles, policies and each of the SEQ NRM targets.

The table further examines the relevance of each SEQ NRM target to planning schemes and identifies other related policy or guidance documents that would assist the analysis of issues. There are a number of other obligations outlined under other legislation or State government policy that local governments need to meet, often through planning schemes, that will also be relevant to the implementation of the SEQ NRM Plan targets.

While there is an obligation to address NRM issues under the current planning regime, there is no mandatory or specified level of achievement for the targets required by either the SEQRP or the SEQ NRM Plan. The level and type of response to the SEQ NRM Plan targets will be up to each local government to determine. The level of response by each SEQ local government showing their contribution to the achievement of the agreed regional targets should be negotiated through the Council of Mayors (SEQ) with support from SEQ Catchments. Without a process that seeks agreement at the regional level, only a sub-optimal outcome can be reached which will fall short of achieving the regional targets.

However, reflecting the SEQ NRM Plan targets in a planning scheme provides local government with an opportunity to more effectively address nature conservation, sustainability and other outcomes which it may already have been seeking to achieve. It also provides an opportunity to coordinate its approach with other local governments and agencies in SEQ. The targets can inform strategic policy intentions and assist in establishing more tangible performance standards for development.

It is acknowledged that there will likely be a number of competing or potentially conflicting interests that will be required to be resolved or managed, that will effect the extent to which a local government will be able to achieve NRM targets in their planning schemes, for example: conflicts between the protection of significant vegetation and corridors and the urban footprint designation of the SEQ Regional Plan, tensions between remnant vegetation and extractive industries and a local governments own growth priorities and pressures.

Relevant Targets for Planning Schemes

In determining the relevance of a target (from any NRM Plan) to a planning scheme there are a number of key considerations:

- does the target affect the local area?
- is the target affected by the impacts of development?
- what other legislation, policy or process addresses the target?
- is the planning scheme an effective contributor to the achievement of the target?

Planning schemes are a key tool for implementing planning policy. Their role, however, is a regulatory one, and their primary effectiveness is in managing the development process and the location, form and impact of new and modified land uses, structures and related infrastructure. The limitations of planning schemes require consideration in determining the level of response for relevant targets, for example:

- planning schemes can only regulate new development, as defined in the SPA;
- planning schemes cannot regulate development that the SPA identifies as exempt (e.g. certain infrastructure projects, mines, and operational works for agriculture);
- planning schemes cannot be retrospectively applied to address the effects of existing development; and
- planning schemes cannot make development or other activities happen.

Given these limitations, the responsibility for the implementation of NRM targets cannot rest with planning schemes alone. The effectiveness of planning schemes will be enhanced if they form part of an integrated suite of statutory and non-statutory measures, discussed in more detail in the later section 'What else? – other implementation options'.

Based upon the analysis of the SEQ NRM Plan and the SEQRP included in **Appendix A**, the SEQ NRM Plan targets in **Table 1** below are identified as being most relevant to a local government planning scheme, in the context of the current Queensland planning system.

Relevance to a planning scheme can be at a primary level, where a planning scheme is the most appropriate tool to address the target or at a secondary level where the planning scheme has an indirect role and other tools play the key role. Targets that are not relevant to a planning scheme are still important, however these targets need to be addressed outside the planning framework.

Table 1 – Relevant Targets for Planning Schemes

Relevant Targets	Likely Applicability
Air and Atmosphere	
<p>A1 – Greenhouse Gas Emissions (secondary) By 2031, the region will make an equitable contribution to the national and regional targets for reduction in greenhouse gas emissions.</p>	<p>Primarily relevant to settlement pattern choice and sustainability measures to improve or reduce impacts of development in the planning scheme. However, these targets will also require support and implementation through other means.</p>
<p>A2 – Air quality (secondary) By 2031, the levels of air pollutants in the SEQ air shed will be at or below the quality objective in the appropriate Schedule of the Environmental Protection (Air) Policy 2008.</p>	
<p>A3 – Thermal Pollution (secondary) By 2031, SEQ thermal pollution will be at or below 2003 levels.</p>	
<p>A4 – Noise Pollution (secondary) By 2031, SEQ noise pollution will be at or below 1998 levels.</p>	
<p>A5 – Light Pollution (secondary) By 2031, SEQ light pollution will be at or below 1998 levels.</p>	
Coastal and Marine	
<p>CM1 – Seagrass and Mangroves (secondary) By 2031, the extent and condition of seagrass and mangrove ecosystems (including salt marsh) in bays and estuaries will be greater than or equal to that in 1988 and 2001 respectively.</p>	<p>Primarily relevant to the coastal parts of a local government area. Coastal influences created by inland activities are addressed by other targets.</p>
<p>CM3 – Beaches (secondary) By 2031, the condition of open coastlines (headlands, beaches and dunes) will be at or better than in 2006.</p>	
<p>CM6 – Coastal algal blooms (secondary) By 2031, the extent and frequency of coastal algal blooms will be reduced from the 2002-05 benchmark (five year rolling average).</p>	
<p>CM7 – Coastal Wetlands (primary) By 2031, the condition and extent of SEQ coastal wetlands, particularly those connecting fresh and estuarine/marine habitat (including fish passage), will be equal to or greater than that in 2007.</p>	
Land	
<p>L1 - Salinity By 2031, the area of secondary salinisation in SEQ will be 10% less than in 2008.</p>	<p>Will be relevant in all local government areas.</p>
<p>L2 – Agricultural land (primary) By 2031, >90% (>266 667 ha) of SEQ agricultural land at 2004 will be available for sustainable agriculture.</p>	
<p>L5 – Acid sulfate soils (ASS) (secondary) By 2031, the area of 'severe' acidification caused by the disturbance of ASS will be lower than in 2008.</p>	
<p>L6 – Soil erosion (secondary) By 2031, the extent of erosion from hill slopes and gullies will be reduced by 50% from the 2008 baseline.</p>	
<p>L9 – Extractive resources (primary) By 2031, extractive resources within "key resource area" in SEQ will be available for their highest use with no net loss of other environmental and landscape values.</p>	

Relevant Targets	Likely Applicability
Nature Conservation	
<p>NC1 – Remnant and woody vegetation (primary) By 2031, the 2001 extent of regional vegetation cover – including both remnant vegetation (35%) and additional non-remnant woody vegetation (22%) – will be maintained or increased.</p>	<p>Will be relevant in all local government areas.</p>
<p>NC2 – Vegetation fragmentation and connectivity (primary) By 2031, there will be no net fragmentation of larger tracts (greater than 5000ha), and 20% of priority smaller tracts (less than 5000ha) will be better connected than the 2003 baseline.</p>	
<p>NC3 – Wetlands (primary) By 2031, the 2008 extent and condition of SEQ wetlands will be maintained or increased.</p>	
<p>NC4 – Vulnerable ecosystems (primary) By 2031, at least 4% of the original pre-clearing extents of vulnerable regional ecosystems will be represented in protective measures.</p>	
<p>NC5 – Native species (primary) In 2031, the 2008 conservation status of native species will be maintained or improved.</p>	
<p>NC6 – Habitat for priority species (primary) By 2031, the 2001 extent and condition of habitat for priority taxa will be maintained or increased.</p>	
Regional Landscape Areas	
<p>RLA1 – Landscape heritage (primary) By 2031, at least 90% of the 2011 area of regionally important landscape heritage will be retained within each local government area.</p>	<p>Will be relevant in all local government areas.</p>
<p>RLA2 – Outdoor recreation settings (primary) By 2031, the 2011 extent of regional outdoor recreation settings will be maintained or increased.</p>	
<p>RLA4 – Regionally high scenic amenity (primary) By 2031, the area of regional high-scenic amenity will be maintained or improved from the 2004 baseline.</p>	
<p>RLA5 – Locally important scenic amenity (primary) By 2031, at least 80% of the 2004 area of locally important scenic amenity within each local government area will be retained.</p>	
Water	
<p>W3 – Groundwater quality (secondary) By 2031, groundwater quality (nutrients and EC measurements) in all SEQ groundwater resource units will be within identified acceptable annual ranges.</p>	<p>Will be relevant in all local government areas.</p>
<p>W4 – Groundwater dependent ecosystems (secondary) By 2031, the condition of groundwater ecosystems and groundwater dependant ecosystems will be within identified acceptable annual ranges.</p>	
<p>W5 – High ecological value waterways (secondary) In 2031, high ecological value waterways in SEQ will maintain their 2008 classification.</p>	
<p>W6 – Waterways maintenance and enhancement (primary) In 2031, scheduled water quality objectives for all SEQ waterways will be achieved or exceeded.</p>	
<p>W7 – Waterway restoration (secondary) By 2031, waterways classified as ranging from slightly to moderately disturbed will have ecosystem health and ecological processes restored.</p>	

The Importance of Mapping

Spatial based information is the base for NRM. The effectiveness of NRM policy relies on an understanding of the spatial dimensions of a target and mapping of the target values and risk areas. For a planning scheme to be effective, user friendly and not overly complicated, the particular NRM values addressed by the planning scheme should be mapped as far as possible. Mapping and spatial data is available at a regional scale, however, typically, there is likely to be a need to fill information gaps at a local scale. At a minimum, some local ground truthing or refinement of regional level data is likely to be required.

The SEQ Natural Resource Management Atlas (SEQ NRM Atlas) is a vital component that will assist the implementation of the SEQ NRM Plan. The SEQ NRM Atlas has been prepared by the SEQ Regional Coordination Group and comprises three parts:

- SEQ Natural Resource Management Benchmark Atlas (SEQ NRM Benchmark Atlas);
- SEQ Natural Resource Targets Future State Atlas (SEQ NRM Future State Atlas); and
- SEQ Natural Resource Management Geographical Information System (SEQ NRM GIS).

The SEQ NRM Benchmark Atlas and the SEQ NRM Future State Atlas, depend upon the SEQ NRM GIS.

The SEQ NRM Benchmark Atlas contains regional benchmark maps that set out the best available and most appropriate datasets that describe the current condition and extent of the environment and natural resource assets. This allows the calculation of a benchmark (e.g. number of hectares of remnant vegetation) that the corresponding target will aim for by 2031 and can be used to measure achievement toward the target.

The SEQ NRM Future State Atlas sets out the best available interpretation of the environment and natural resource assets as described by the 2031 target and identify existing conflicts with the SEQ NRM Atlas mapping. A draft of the Future State Atlas is expected for release in 2010, which will require liaison with each SEQ local government in order to understand the spatial implications contained within the Atlas.

The SEQ NRM GIS provides the spatial geographic data.

The SEQ NRM Atlas will be able to be used for the following purposes:

- as a forward planning tool (e.g. to inform preparation of local government planning schemes and State Government policy, corporate plans, property plans and natural resource management program efforts);
- as a decision-making tool for natural resource managers;
- for the monitoring and evaluation of resource conditions and trends; and
- for identification of data compatibility and/or gaps.

Establishing a Process to Implement Regional NRM Targets through Planning Schemes

The following sections of this tool outline a suggested process to implement the identified relevant targets into a planning scheme. The process is not purely linear and there will be a need to revisit earlier steps throughout the process.

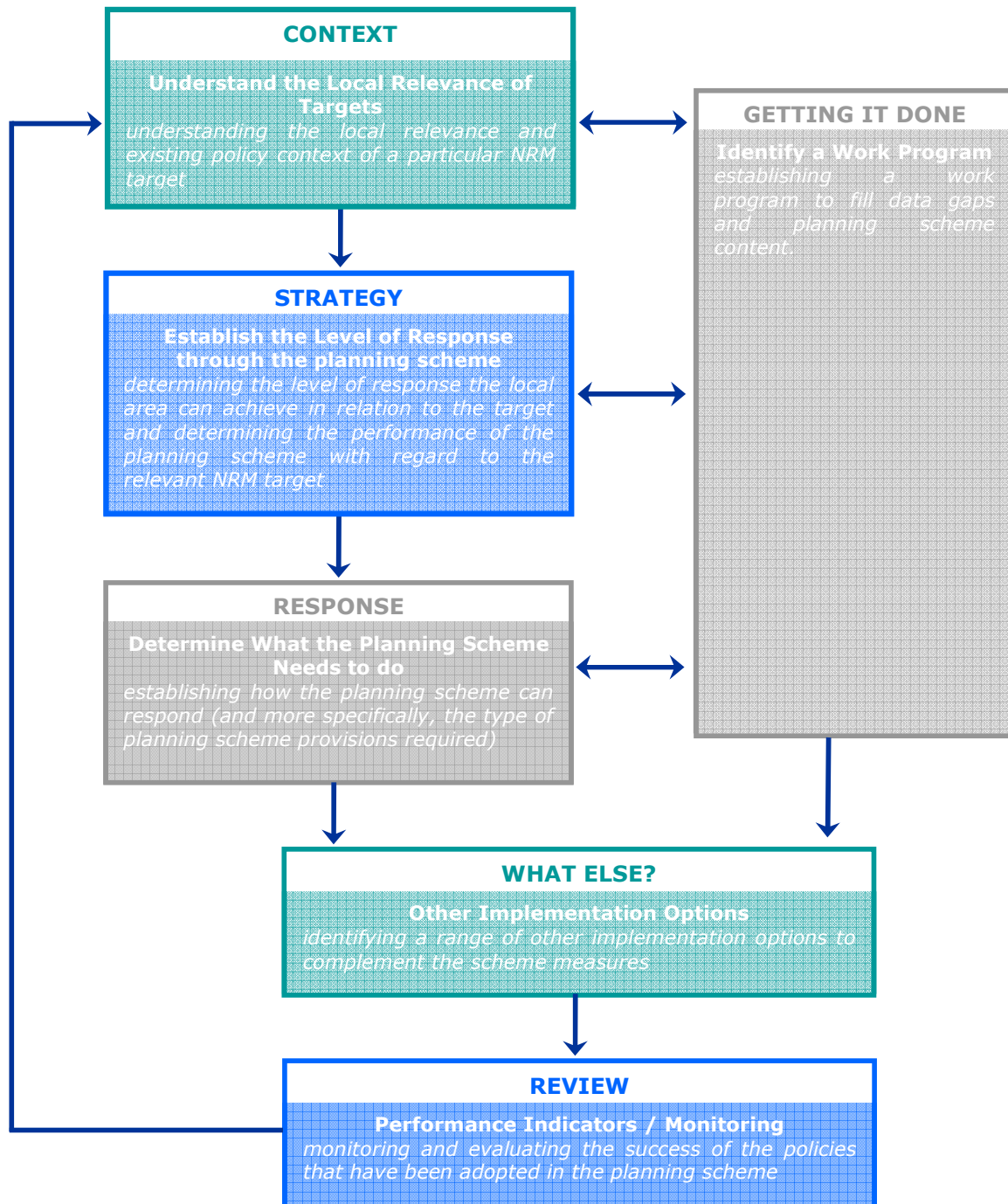


Figure 1: A process to implement NRM targets into planning schemes

CONTEXT: Understand the local relevance of targets

The previous section has identified those targets requiring some level of implementation through planning schemes. However, the relevance of particular targets to different local government areas will vary.

As regional level targets, it is to be expected that they will manifest themselves differently in different localities, due to the nature of values present, particular threats and the land use/development context (for example, a rural versus urban setting).

This step is primarily about:

- understanding the target;
- understanding the existing policy context; and
- establishing priorities and ability to respond.

▪ **Understanding the Target**

This involves developing a high level appreciation of the target, which will allow local government planners and environmental officers to develop an understanding of how the target more specifically relates to the local context. The SEQ NRM Future State Atlas will be an important tool in developing an understanding of the targets.

▪ **Understanding the Existing Policy Context**

Understanding the target also involves gaining an understanding of the existing policy context affecting the target. Many targets are addressed by existing policy at the State level (refer to **Appendix A**) or may already be addressed by the local government, providing an existing framework for a response.

It is also important planning scheme provisions do not conflict with or duplicate functions already administered at the State level.

Key questions to address by local government planners, in conjunction with environmental officers, in understanding the target include:

- ☑ Do we understand what the target means and how might it relate to the local area?¹
- ☑ For each target (and the relevant areas, places or values) what data is available?²

Key questions to address by local government planners, in conjunction with environmental officers, in understanding the existing policy context include:

- ☑ What position does the local government take on this target already?
 - What does the corporate plan, community plan, planning scheme(s) already say?
- ☑ What are the basic obligations that must be met in any event (e.g. under SEQRP, SPPs, EPPs)?

¹ Discussions with officers at SEQ Catchments, the Department of Environment and Resource Management and the Department of Infrastructure and Planning, as well as local environmental groups may assist in developing this understanding.

² Relevant data may be sourced from SEQ Regional Coordination Group (including the SEQ NRM Atlas); SEQ Catchments, local government; SEQRP and relevant State agencies. **Appendix B** provides more specific guidance in this regard.

▪ **Establishing Priorities and Ability to Respond**

A local government's resources and capacity may influence the priorities for responding to targets.

In determining which targets to give priority to, considerations could include:

- understanding which targets are related or complement each other and are likely to be addressed in combination;
- understanding how the targets may relate to existing programs or studies already undertaken or underway; and
- understanding which targets are most relevant or important to the local area or which targets are subject to the most amount of development related risk in the local area.

Appendix B provides some guidance on the types of threats and opportunities for managing growth and development that may be relevant.

Key questions to address by local government planners, in conjunction with environmental officers, in establishing priorities include:

- Which targets are related or complement each other? Can these targets be addressed in a similar way?
- Are programs already underway which address the target(s)?
- How is the target(s) relevant to the protection of the resource or to managing growth and development in the local government area?
- What are specific development related threats to the resource or to the achievement of the target(s)?
- What resources are available to address the target(s)? What are the priorities and ability to respond?

STRATEGY: Establish the level of response through the planning scheme

Having developed a clearer understanding of the targets, attention should then move to determining the relationship of the targets to the planning scheme and the appropriate level of response to each target.

The nature of NRM issues is such that there is rarely a one-off, quick fix solution. Considerable effort may be involved in interpreting the science to develop effective policy responses, in balancing the competing obligations and interests in the local government planning process and in monitoring and refining the effectiveness of implemented policies.

It would be desirable for each local government to maximise its contribution to the achievement of a specific target. However, it is recognised that barriers may exist in meeting this aspiration. In particular, the following may affect the degree to which a target may be reflected in a planning scheme:

- competing regional planning intentions;
- overarching community needs which dictate loss of some values in some locations;
- a lack of data or regionally consistent standards which reduce the ability to identify robust development requirements; and
- resource limitations and local priorities.

The level of response may be dependent upon the level of data available. Where local scale data is available, a detailed response is more likely to be able to be prepared. However, regional scale data is available for most targets, enabling at least a high level policy response.

In determining an appropriate level of response to each target, key decision making criteria to be considered by local government planners, in conjunction with environmental officers, include:

- Can the specific areas to which the regional target relates be mapped at a local level?
- What is the likely role, contribution or significance of those areas, places or values to the target? How well understood is this?³
- Can the regional target be translated to a quantifiable local level of protection (e.g. percentage or area of land) or development standard (e.g. specific water quality objectives for particular waterways)?
- Is there an overriding need for certain development or a development commitment that prevents protection of certain values?⁴
- What are the relationships/ linkages with adjoining local government areas?
- What best practice principles are available to guide development that are in alignment with the target?
- How does the target influence overarching settlement pattern considerations? (i.e. where development is directed to)
- Should the target be used to inform the setting of specific development standards/requirements? (i.e. managing the effects of development)
- What is best dealt with under the planning scheme and what is best left to other relevant legislation/statutory requirements or other implementation programs?

³ Refer to the SEQ Natural Resource Management Plan Atlas for some guidance.

⁴ Relevant data may be sourced from the SEQ Regional Coordination Group which includes target mapping (expected for release in 2010), which identifies existing conflicts with the SEQ NRM Atlas mapping.

Appendix B provides some guidance on particular barriers which may apply to certain target groups as well as possible data sources and other relevant statutory documents which may influence how a target is to be addressed.

Having regard to the role and function of a planning scheme as discussed earlier, **Table 2** below provides an overview of the likely focus for the planning scheme response to the relevant SEQ targets.

Table 2 – Likely Focus for Planning Scheme Response

Relevant Targets	Likely Focus of Planning Scheme Response
Air and Atmosphere	
A1 – Greenhouse gas emissions	Achievement of these targets will primarily relate to ensuring settlement patterns, land use allocation (zoning) decisions and development standards promote efficient energy use and minimise the risk of pollution and that development seeks to promote sustainable travel patterns (i.e. walking, cycling, public transport use, and reduced car dependency). <i>Draft SEQ Climate Management Plan, EPP (Air), EPP (Noise) Draft Connecting SEQ 2031: An Integrated Regional Transport Plan for South East Queensland apply.</i>
A2 – Air quality	
A3 – Thermal pollution	
A4 – Noise pollution	
A5 – Light pollution	
Coastal and Marine	
CM1 – Seagrass and mangroves	Achievement of these targets will primarily relate to avoiding or minimising development in or near specific areas, and setting appropriate development standards to protect water quality. <i>Coastal plan obligations, EPP (Water), SEQ WSUD guidelines and Draft Queensland Coastal Plan apply.</i>
CM3 - Beaches	
CM6 – Coastal algal blooms	
CM7 – Coastal wetlands	
Land	
L1 - Salinity	Achievement of L1 requires protection of the ground water system and surface water flow dynamics outside the urban footprint. Achievement of L2 requires protection of the productive capacity of rural land outside the urban footprint and rural living areas. Achievement of L5 and L6 primarily requires establishment of appropriate development / constructions standards. Achievement of L9 requires protection of KRAs and establishing appropriate standards for their utilisation. <i>State Planning Policy 1/92 (Development and the Conservation of Agricultural Land), Guideline 1 for SPP 1/92 The Identification of Good Quality Agricultural Land 1.0, Guideline 2 for SPP 1/92 Separating agricultural and residential land uses 1.0, SPP 2/02 Planning and Managing Development Involving Acid Sulfate Soils, Guideline for SPP 2/02: Planning and Managing Development Involving Acid Sulfate Soils, SPP 2/07 Protection of Extractive Resources and Guideline Discussion paper— Strategic Cropping Land policy and guidelines, SEQ WSUD guidelines, SEQ Rural Futures Strategy apply.</i>
L2 – Agricultural land	
L5 – Acid sulfate soils	
L6 – Soil erosion	
L9 – Extractive resources	

Relevant Targets	Likely Focus of Planning Scheme Response
Nature Conservation	
NC1 – Remnant and woody vegetation	Achievement of these targets requires identification and protection of key areas from development and promoting new linkages. Also requires some interpretation of regional target % at a local level. <i>Vegetation Management Act, Nature Conservation Act, Coastal Management Act, South East Queensland Koala State Planning Regulatory Provisions and SEQ Nature Conservation Strategy will be relevant.</i>
NC2 – Vegetation fragmentation and connectivity	
NC3 – Wetlands	
NC4 – Vulnerable ecosystems	
NC5 – Native species	
NC6 – Habitat for priority species	
Regional Landscape Areas	
RLA1 – Landscape heritage	Achievement of these targets require design and management of development to ensure protection of regionally important landscape and green space values identified in the SEQRP, as well as identification (and protection) of local values. <i>SEQ regional guidelines, SEQ Regional Outdoor Recreation Strategy and local government Priority Infrastructure Plans (which include new sites for future acquisitions for outdoor recreation) apply.</i>
RLA2 – Outdoor recreation settings	
RLA4 – Regionally high-scenic amenity	
RLA5 – Locally important scenic amenity	
Water	
W3 – Groundwater quality	Achievement of these targets require setting appropriate development standards to protect water quality (based on identified water quality objectives for each waterway). Also requires some interpretation of regional target % at a local level. <i>EPP(Water), Draft SPP for Healthy Waters and Draft Queensland Coastal Plan will apply.</i>
W4 – Groundwater dependent ecosystems	
W5 – High ecological value waterways	
W6 – Waterways maintenance and enhancement	
W7 – Waterway restoration	

RESPONSE: Determine what the planning scheme needs to do

Planning schemes play an important role in protecting natural resources and achieving the relevant NRM targets. They can prevent or minimise the impacts of development on natural resources by identifying:

- strategic intentions or desired outcomes in respect of natural resources;
- settlement patterns that promote better efficiencies and protection of resources;
- particular values and locations that require protection from the effects of development or rehabilitation and land that is suitable or not suitable for certain types of development;
- assessment levels that reflect the suitability for, and potential risks of particular types of development in certain areas;
- assessment criteria (codes) that ensure relevant matters are taken into consideration when assessing a proposal and that appropriate standards are applied to development; and
- the type of information an applicant should submit in order for a proposal to be properly assessed (in planning scheme policies).

Many existing planning schemes already address NRM related issues in response to the obligations established by IPA/SPA (and consistent with good planning practice). With a number of new strategic planning and scheme making processes now underway, an opportunity exists to more directly address the SEQ NRM plan targets and to improve the effectiveness of planning schemes in dealing with NRM issues generally.

In determining how to implement an appropriate response to the SEQ NRM targets through the planning scheme, key decision making criteria to be considered by local government planners, in conjunction with environmental officers, include:

- Where does the response to the target fit under the local planning scheme's strategic framework themes and elements?
- Where does the response to the target fit under the mandatory Queensland Planning Provisions (v1.0) strategic framework headings and principles?
 - As SEQ has a regional plan, strategic framework themes for SEQ local governments are to be based on SEQ Regional Plan Desired Regional Outcomes, as relevant to the local government.
- How should the response to the targets best be reflected in zoning and overlays?
- Are development / protection intentions for key areas clear, or are there conflicts or ambiguities between the intentions of underlying zones and those of NRM related overlays?
- Are assessment levels set to reflect the likely level of threat, and cognisant of a risk management approach?
- Can performance outcomes / criteria and acceptable solutions in scheme codes reflect more specific development requirements, supported by available data?
- What are the overall implications for the usability and clarity of the planning scheme?

Whilst high level strategic / desired outcome statements exist in many schemes, there is often a lack of effectively drafted code provisions (including performance outcomes and acceptable solutions), that are based on available science and an understanding of local environmental issues, and which provide a greater level of development control.

There is also a need to keep in mind the objective for planning schemes to optimise effectiveness and usability. Managing complexity and risk is a particular challenge when dealing with NRM issues. There is a need to balance the desire to deal comprehensively with these issues and the overall effectiveness of the planning scheme.

Appendix B provides some examples of how targets may be built into planning schemes.

GETTING IT DONE: Identify a work program

Incorporating NRM into planning schemes requires a range of stakeholders, both internal and external, to collaborate, as well as follow a process that results in ownership, understanding and rigour, in order to incorporate relevant NRM aspects effectively. A suggested work plan might involve:

▪ Identifying relevant stakeholders

Council's environmental officers, SEQ Catchment officers, staff within State agencies will all provide sources of data and expertise, particularly to assist in understanding how relevant targets relate to the local context, interpreting mapping and existing datasets and translating the natural resource science into workable planning scheme provisions.

Collaboration and coordination between adjoining local governments would also be critical in the process. In SEQ, the Council of Mayors (SEQ) assists regional collaboration of councils.

▪ Understanding data gaps

Typically, there is likely to be a need to fill information gaps at a local scale. At a minimum, some local ground truthing or refinement of regional level data is likely to be required. Depending on the nature of the issue, guidance on how to do this may be available from various sources, including the SEQ Regional Coordination Group, SEQ Catchments, State planning policies and other programs of the State government (for example, DERM's biodiversity assessment and mapping methodology (BAMM)).

In establishing an appropriate work program to incorporate SEQ NRM targets through the planning scheme, key decision making criteria to be considered by local government planners, in conjunction with environmental officers, include:

- Who are the stakeholders that might assist with developing and refining local policy? What role might they play in the process?
 - Regional NRM Body (e.g. SEQ Catchments);
 - Department of Environment and Resource Management;
 - Department of Infrastructure and Planning;
 - Other state agencies;
 - Adjoining local governments; and
 - Local environmental groups.
- What science/data is available to support the development of more detailed scheme provisions (especially codes)?
 - Existing or programmed local/regional studies;
 - Accurate mapping at local scale; and
 - Similar example codes prepared by other SEQ Councils and LGAQ.
- Where are the data gaps? Can they be addressed during the planning scheme preparation process? What projects/studies need to be undertaken?
- What internal sections of Council will have an interest or role in implementation? Are there existing reporting processes between these sections?
- What ongoing support/ education is needed to implement the identified response?
- What external stakeholders would need to be consulted? What level or frequency of consultation may be required?

However, filling data gaps may take considerable time and funding. It therefore requires the development of an ongoing program to set priorities and build an integrated body of knowledge over time. Funding to address data requirements may also be available under the auspices of regional NRM implementation.

- **Establishing internal reporting arrangements**

A number of sections within a council are likely to have interests in NRM issues, for example, environmental, parks and recreation, water management and engineering branches. It will be critical to foster cooperation and joint commitment to outcomes between these sections. Importantly, councillors and management sections will need to be informed and kept involved in planning processes if successful outcomes are to be achieved.

- **Confirming level of community involvement**

Community consultation is a required aspect of the planning scheme preparation process. However, input from the community, particularly those that might be affected as a result of incorporating NRM measures into a planning scheme, may provide additional local level information, (for example identification of locally important scenic or landscape values).

WHAT ELSE: Other implementation options

Planning schemes have certain limitations which need to be acknowledged. Whilst they provide important control, they cannot make development or other activities happen. Their regulatory power arises when a development proposal is put forward by another party. In addition, the requirements embodied in planning schemes cannot be retrospectively applied to address the effects of existing development. For these reasons, it is important to recognise that planning schemes are one of a suite of implementation tools to address NRM targets. Planning schemes need to support, and be supported by, other non statutory implementation tools.

There are a range of non-statutory measures available that are also effective in responding to NRM, these are illustrated in the **Figure 2** below.

In determining the appropriate response of the SEQ NRM targets through other implementation measures, key decision making criteria to be considered by local government planners, in conjunction with environmental officers, include:

- What existing environmental programs are established within Council or other agencies?
- What are the non planning scheme opportunities to address relevant targets to further enhance the level of response?

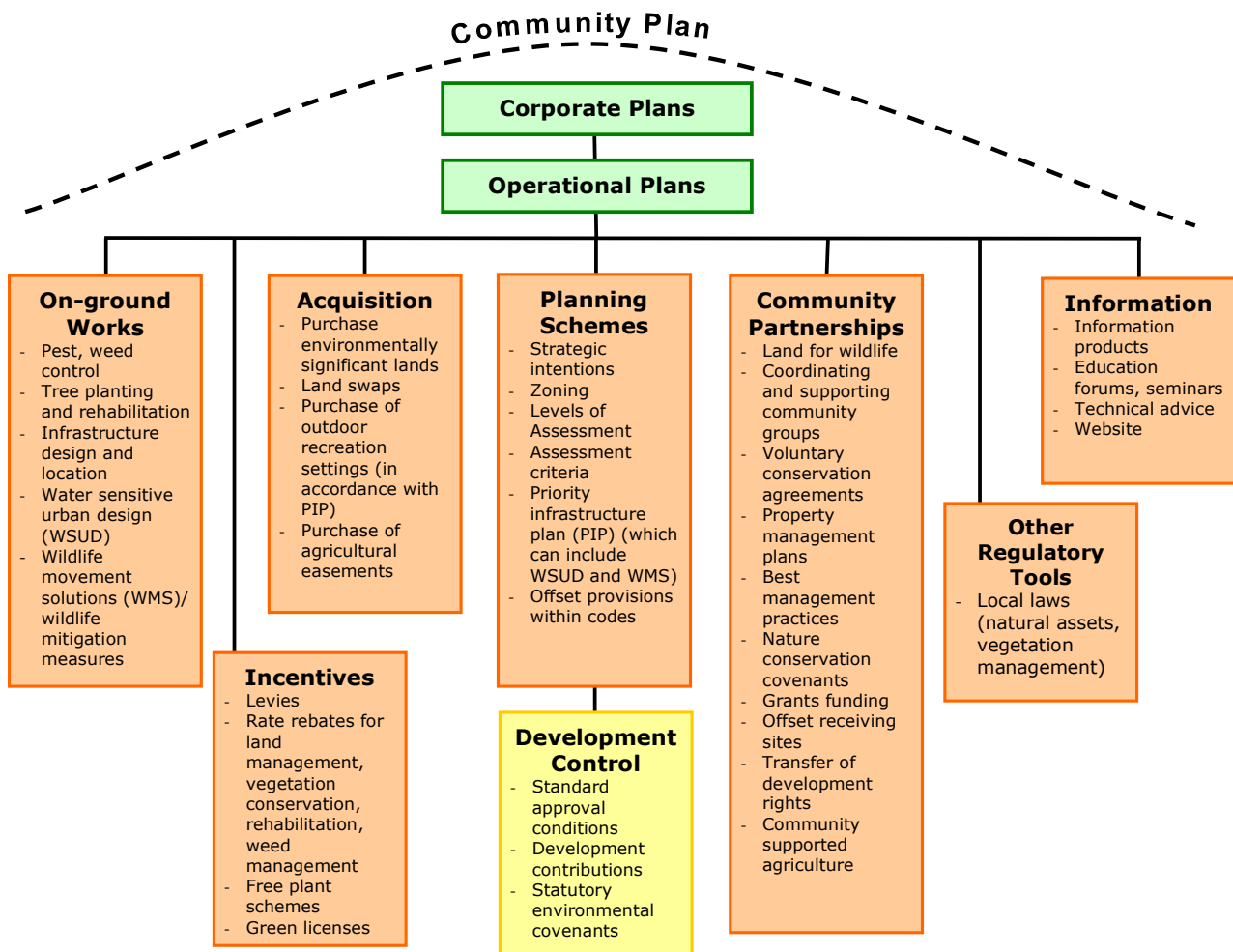


Figure 2: NRM Implementation Tools

Table 3 below provides an overview of the range of other implementation tools in addition to the planning scheme for the relevant SEQ targets, these are examples intended to highlight the range of options available to Council's and do not attempt to provide an exhaustive list. The targets and vision for a particular region or local area may be achieved by all these mechanisms working in concert.

Table 3 – Other Implementation Tools Need

Relevant Targets	Other Implementation Options
Air and Atmosphere	
A1 – Greenhouse gas emissions	<ul style="list-style-type: none"> ▪ Incentives (free plant schemes, rate rebates for vegetation conservation, solar hot water rebates, free compact fluorescent globes, insulation rebates) ▪ On Ground Works (tree planting) ▪ Information (education programs, website) ▪ Sustainable Travel Behavior programs (e.g. active school travel) ▪ Waste minimisation / resource recovery programs
A2 – Air quality	
A3 – Thermal pollution	
A4 – Noise pollution	
A5 – Light pollution	
Coastal and Marine	
CM1 – Seagrass and mangroves	<ul style="list-style-type: none"> ▪ On-ground works (pest, weed control, tree planting and rehabilitation) ▪ Acquisition (purchase environmentally significant lands, land swaps) ▪ Community Partnerships (coordinating and supporting community groups, voluntary conservation agreements, best management practices) ▪ Information (information products, website)
CM3 – Beaches	
CM6 – Coastal algal blooms	
CM7 – Coastal wetlands	
Land	
L1 – Salinity	<ul style="list-style-type: none"> ▪ Incentives (rate rebates for land management, rehabilitation, weed management) ▪ Acquisition (purchase of agricultural easement) ▪ On-ground Works (pest, weed control, tree planting and rehabilitation) ▪ Community Partnerships (land for wildlife, voluntary conservation agreements, property management plans, best management practices, transfer of development rights, community supported agriculture, farmers' markets) ▪ Information (information products, education forums, seminars, technical advice, website) ▪ Waste minimisation / resource recovery programs.
L2 – Agricultural land	
L5 – Acid sulfate soils	
L6 – Soil erosion	
L9 – Extractive resources	
Nature Conservation	
NC1 – Remnant and woody vegetation	<ul style="list-style-type: none"> ▪ Incentives (levies, rate rebates for land management, vegetation conservation, rehabilitation, weed management) ▪ On-ground Works (pest, weed control, tree planting and rehabilitation, Wildlife Movement Solutions / Wildlife Mitigation Measures) ▪ Acquisition (purchase environmentally significant lands, land swaps) ▪ Development Control (statutory environmental covenants) ▪ Community Partnerships (land for wildlife, coordinating and supporting community groups, voluntary conservation agreements, property management plans, best management practices, nature conservation covenants, recovery plans, community monitoring) <p>Information (information products, education forums, website)</p>
NC2 – Vegetation fragmentation and connectivity	
NC3 – Wetlands	
NC4 – Vulnerable ecosystems	
NC5 – Native species	
NC6 – Habitat for priority species	

Regional Landscape Areas	
RLA1 – Landscape heritage	<ul style="list-style-type: none"> ▪ Incentives (levies, vegetation conservation, rehabilitation) ▪ On-ground Works (pest, weed control, tree planting and rehabilitation) ▪ Acquisition (purchase outdoor recreation lands, land swaps) ▪ Community Partnerships (land for wildlife, coordinating and supporting community groups, voluntary conservation agreements, property management plans, nature conservation covenants, transfer of development rights) ▪ Land Management Practices (increasing opportunities for outdoor recreation)
RLA2 – Outdoor recreation settings	
RLA4 – Regionally high-scenic amenity	
RLA5 – Locally important scenic amenity	
Water	
W3 – Groundwater quality	<ul style="list-style-type: none"> ▪ Incentives (levies, rate rebates for land management, vegetation conservation, rehabilitation, weed management) ▪ On-ground Works (pest, weed control, tree planting and rehabilitation, water sensitive urban design initiatives) ▪ Acquisition (purchase water allocations, purchase groundwater recharge areas, land swaps) ▪ Community Partnerships (coordinating and supporting community groups, best management practices, community monitoring program (e.g. WaterWatch)) ▪ Information (education programs, website)
W4 – Groundwater dependent ecosystems	
W5 – High ecological value waterways	
W6 – Waterways maintenance and enhancement	
W7 – Waterway restoration	

REVIEW: Performance indicators / monitoring

Whilst it is not a requirement of the QPP for planning schemes include a performance indicator section, best practice planning involves continual monitoring and evaluation of the performance of policies and strategies that have been adopted. A process of ongoing refinement in light of such evaluation can then be undertaken. NRM needs to respond to changes in the availability and sophistication of information, and community needs, values and expectations. This is critical to achieving better outcomes and building the body of knowledge in relation to the various NRM issues.

The monitoring program attached to both the SEQ Regional Plan (State of Region Reporting) and the SEQ NRM Plan (Monitoring, Evaluation, Reporting and Improvement Framework), will provide an opportunity and imperative for local government reporting to measure the achievement of the regional targets.

For the SEQ NRM Plan, reporting will be undertaken using the enQuire system, which is the central point of NRM information and project management tools for regional bodies, agencies and individuals.

Separate to any formal reporting requirements, it is recommended that local government investigate the establishment of a consistent data capture mechanism including recording the outcomes of development applications involving NRM requirements and applications that have provided environmental offsets. Alternatively, investigations could be undertaken to determine if this task could be undertaken using enQuire. It is also recommended that local governments consult with stakeholders (State government departments, SEQ Catchments etc.) when undertaking monitoring to ensure consistency can be achieved where possible.

In determining the appropriate monitoring frameworks to evaluate the effectiveness of the appropriate response to the SEQ NRM targets through the planning scheme, key decision making criteria to be considered by local government planners, in conjunction with environmental officers, include:

- How could the planning scheme(s) address the SEQ NRM target more directly and effectively?
- How should the planning scheme's performance in relation to a particular NRM target be measured?
- What reporting arrangements exist in the region? What are the local government's obligations under those arrangements?

APPENDIX A

Identifying the Linkages between the SEQ NRM Plan and the SEQ Regional Plan

APPENDIX B

Possible Threats, Responses, Constraints and Data

