

# Establishing Environmental Values and Water Quality Objectives for the Waters of the Fitzroy Basin

Consultation Summary and Response to  
Submissions from Public Consultation

December 2011

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#### Acknowledgement

The contribution of the Fitzroy Basin Association staff in developing the draft environmental values for the waters of the Fitzroy Basin through the initial community consultation processes from November 2009 to March 2010, and subsequently in the finalisation of documents is acknowledged.

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## Contents

<b>1</b>	<b>Purpose of this report</b>	<b>1</b>
1.1	Background	1
1.2	The project scope	2
<b>2</b>	<b>Stakeholder consultation</b>	<b>2</b>
2.1	Round 1: consultation to identify draft EVs, Nov. 2009-March 2010	2
2.2	Round 2: public review of draft EVs consultation documents, December 2010–April 2011	3
2.3	Round 3: post-submission feedback and follow-up meetings, May–July 2011	3
2.4	Round 4: final review of draft EPP Water schedule 1 documents, August 2011	4
<b>3</b>	<b>Stakeholder submissions and responses</b>	<b>4</b>
3.1	Submissions on draft EVs and supporting documents	4
3.2	Review of submissions and associated issues	4
<b>4</b>	<b>Project documents and reports</b>	<b>11</b>
<b>Attachment 1</b>	<b>Ministerial statements</b>	<b>12</b>
<b>Attachment 2</b>	<b>Public notices</b>	<b>15</b>
<b>Attachment 3</b>	<b>Stakeholder information on EVs</b>	<b>17</b>

## List of tables

Table 1	Summary of issues raised in submissions relating to the establishment of EVs and WQOs for waters under the EPP Water (and response to issues)	4
Table 2	Summary of issues raised in submissions outside of the scope of the EPP Water relating to the establishment of EVs and WQOs (and response to issues)	9

# 1 Purpose of this report

This report summarises the consultation processes that the Department of Environment and Resource Management (DERM) undertook in developing environmental values (EVs) and water quality objectives (WQOs) for the waters of the Fitzroy Basin. These were incorporated into legislation when the Environmental Protection (Water) Amendment Policy (No. 1) 2011 was gazetted on 30 September 2011. This gazettal amended schedule 1 of the Environmental Protection (Water) Policy 2009 (EPP Water) to include the EVs and WQOs for waters of the Fitzroy Basin. Scheduled documents and plans are published on the DERM website at <www.derm.qld.gov.au>.

This report also details the key issues raised in submissions from the release of the draft Fitzroy water quality documents (draft EVs consultation documents) for public review from 15 December 2010 to 4 April 2011, and DERM's response to those issues. Issues outside of the legislative scope of the provisions of the EPP Water relating to the establishment of EVs and WQOs for waters are separately considered.

The draft EVs consultation documents included:

- *Establishing Environmental Values, Water Quality Guidelines and Water Quality Objectives for Fitzroy Basin Waters, Draft for Consultation*, DERM, Draft, December 2010 (DERM draft EVs report<sup>1</sup>)
- *Community Consultation Environmental Values for the Fitzroy*, Fitzroy Basin Association, Draft, September 2010
- *The economic and social impacts of protecting the environmental values of the Fitzroy Basin waters*, Marsden Jacob Associates, Draft, October 2010 (MJA draft socio-economic report)
- *Draft groundwater guidelines*, DERM, March 2011, *'Amendment to draft water quality guidelines*, DERM, March 2011 and *Draft event flow water quality guidelines for salinity*, DERM, March 2011.

## 1.1 Background

In 2009, the Queensland Government made a key commitment to improve water quality management within the Fitzroy Basin. This followed prolonged rainfall across the Fitzroy Basin in 2008 that caused the overflow of Fairbairn Dam, inundation of the township of Emerald and flooding of coal mines. The discharge of mine-affected floodwater adversely affected downstream water quality, particularly salinity, from February to September 2008.

In response the Queensland Government commissioned reports to review water quality issues (Hart Report) and the impacts of mining on water quality. Projects subsequently initiated included:

- the development and implementation of new, more stringent environmental authority conditions, agreed to by all coal mines in the Fitzroy Basin
- the development of local WQGs and objectives to protect the EVs and inform the management of the waters of the Fitzroy Basin.

The latter project was the subject of the amendment of the EPP Water to include the EVs and WQOs for the waters of the Fitzroy Basin.

The establishment of EVs and WQOs for Queensland waters is prescribed by legislation and intergovernmental agreements and developed in accordance with Government policy. The water quality management framework includes:

- the EPP Water and the *Environmental Protection Act 1994*
- the Intergovernmental Agreement on the Environment and the Council of Australian Government agreements on water reform agenda, including implementation of the National Water Quality Management Strategy (Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000) (AWQGs), and
- the Queensland Water Quality Guidelines 2009 (QWQGs).

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<sup>1</sup> The DERM draft EVs Report was published as a consultation information report. Updated EVs and WQOs emanating from this report and further work by DERM have been included in relevant EPP Water schedule 1 documents and plans. The water quality guidelines component of the report has been updated as a stand-alone report available on the DERM website at <www.derm.qld.gov.au>.

## 1.2 The project scope

The geographic scope of the project is the Fitzroy Basin boundary (basin number 130) within the north-east coast drainage division. The project area comprises the Isaac (including the Connors catchment), Nogoia, Comet, Mackenzie, Dawson (including the Callide catchment) and Fitzroy River sub-basins. The digital data set of the Queensland drainage divisions and river basins is available from Geoscience Australia, the national mapping agency <[www.ga.gov.au](http://www.ga.gov.au)>.

The waters covered by the project area include all non-tidal waters comprising surface waters including those in streams, groundwaters, wetlands and lakes. The project area also includes mid and upper reaches of the Fitzroy estuary and adjacent tidal waters. Scheduled documents and plans are published on the DERM website at <[www.derm.qld.gov.au](http://www.derm.qld.gov.au)>.

## 2 Stakeholder consultation

Over the period November 2009 to August 2011, DERM in conjunction with the Fitzroy Basin Association (FBA) undertook consultation with stakeholders throughout the Fitzroy Basin and in Brisbane. Stakeholders included agriculture, mining, industry, commerce, natural resource management (NRM), environment, community, Traditional Owners, local governments and state agencies. Details are provided below for each of the main consultation rounds, submissions received and responses.

Examples of government public releases during the project are included in Attachment 1 'Ministerial releases' and Attachment 2 'Public notices about draft EVs'. Examples of stakeholder awareness materials released by the FBA are provided in Attachment 3.

### 2.1 Round 1: consultation to identify draft EVs, Nov. 2009-March 2010

Initial stakeholder meetings were held in late 2009 and early 2010 to explain the background and purpose of the project, and identify draft EVs. Two basin-wide meetings, nine local area meetings and additional meetings with Traditional Owners and members of the Fitzroy Water Quality Advisory Group were held. Details include:

- 25 to 26 November 2009—workshop with representatives from major catchments in the basin to refine consultation process and derive preliminary EVs.
- 4 February to 18 March 2010—catchment workshops in Rockhampton, Emerald, Springsure, Taroom, Injune, Clarke Creek, Dingo, Jambin and Theodore to:
  - identify draft EVs and levels of protection
  - seek comment on other waterway issues.

Outcomes are included in Appendix 3 of the DERM draft EVs report. (Refer to Attachment 3 of this report for examples of stakeholder awareness materials released by FBA for these meetings).

- 15 February 2010 (and other dates to 7 July 2011)—Fitzroy Water Quality Advisory Group briefings in Rockhampton. The Fitzroy Water Quality Advisory Group was formed by the Queensland Government to ensure co-ordinated management of water quality issues in the Fitzroy Basin. The Group comprises representatives from a range of key stakeholder organisations, Traditional Owners and State agencies. The Fitzroy River website was also established by DERM to ensure information on water quality projects is available to the public.
- 15 March 2010—Traditional Owner workshop in Rockhampton. Meeting held with the Fitzroy Basin Traditional Owners to obtain information on cultural and spiritual values associated with Fitzroy Basin waters. The Fitzroy Basin Traditional Owners include the Darumbal, Ghungulu, Karingbal, Iman, Southern Barada, Kabalbara, Wangan and Jagalingou People and others through Queensland South Native Title Services.
- 19 March 2010—Public and Stakeholder Briefing in Rockhampton. Attendees were briefed on the draft EVs derived from workshops and the next steps in the project.

## 2.2 Round 2: public review of draft EVs consultation documents, December 2010–April 2011

On 15 December 2010, DERM released the draft EVs consultation documents for public review. Ministerial releases and two rounds of public notices published in regional papers (refer Attachments 1 and 2) provided advice about the project background, the availability of draft EVs consultation documents, the upcoming public briefing sessions, and invited written submissions.

A contact telephone number was given in advertisements for parties seeking further information or wishing to attend a briefing session. Copies of the draft EVs consultation documents were made available on the DERM and FBA websites for downloading. The FBA coordinated mail out of compact discs (CDs) to those who had participated in previous workshops and to others who requested CDs. The draft EVs consultation documents were also available as printed copy upon request. Feedback forms were provided to assist in making submissions.

Due to flooding throughout Queensland in late 2010 and early 2011, the due date for receipt of written submissions was extended to 4 April 2011 (from 28 February 2011). The time extension was posted on the DERM website and advised to parties who expressed interest in making a submission.

During the consultation period DERM released additional and updated water quality guidelines for public review. To promote awareness of this information, these updates were published on the DERM website at the top of the 'Fitzroy EVs' web page, and were included in subsequent stakeholder briefings. The materials released were key indicators relevant to Fitzroy water quality, and included draft groundwater quality guidelines, draft event flow guidelines for salinity and minor amendments to base flow salinity water quality guidelines.

### Public briefing sessions

As part of the public review, DERM held meetings throughout the Fitzroy Basin to explain the draft EVs consultation documents. Advice on the meetings was publicly advertised in regional papers (refer Attachment 2). The meetings were conducted jointly with consultation on the draft Fitzroy Basin Water Resource Plan, and are detailed below:

- 16 December 2010—Fitzroy Water Quality Advisory Group
- 14 February 2011—Rockhampton public meeting
- 15 February 2011—Biloela public meeting
- 21 February 2011—Moura public meeting
- 22 February 2011—Rolleston public meeting
- 23 February 2011—Emerald public meeting
- 24 February 2011—Clarke Creek public meeting.

Additionally, DERM held meetings with specific stakeholders (including peak industry, NRM, commerce, local government and conservation groups) at agreed dates and venues in the Fitzroy Basin and in Brisbane.

### Making submissions

Submissions could be made electronically to a dedicated email address, or via mail. Table 1 identifies issues raised in submissions that relate to the development of EVs and WQOs under the EPP Water. Table 2 addresses issues raised that are outside of the legislative scope of the provisions of the EPP Water relating to the establishment of EVs and WQOs.

## 2.3 Round 3: post-submission feedback and follow-up meetings, May–July 2011

During this round DERM held meetings with all major stakeholder groups in the Fitzroy Basin, peak industry and conservation bodies in Brisbane and State agencies. DERM additionally briefed the Fitzroy Water Quality Advisory Group on 7 July 2011. Attendees were advised of the issues raised in submissions, DERM's response and the timetable to finalise the EVs and WQOs for the waters of the Fitzroy Basin.

## 2.4 Round 4: final review of draft EPP Water schedule 1 documents, August 2011

In August 2011, DERM released the draft schedule 1 documents and plans proposed for inclusion in the EPP Water to industry and conservation groups and the regional NRM body, for review and comment.

# 3 Stakeholder submissions and responses

## 3.1 Submissions on draft EVs and supporting documents

A total of eight submissions were received in response to the public review of the draft EVs consultation documents. Additional comments were raised in consultation sessions and in briefings with stakeholders during subsequent consultation rounds.

## 3.2 Review of submissions and associated issues

DERM reviewed and analysed the issues in the submissions received as well as those raised by stakeholders during subsequent discussions. The issues were either:

- directly related to the development of the Fitzroy EVs and WQOs—these issues, and DERM's response, are summarised in Table 1
- or
- not related to the development of the Fitzroy EVs and WQOs—these issues, and DERM's initial response, are summarised in Table 2. These issues generally related to policy, planning and monitoring matters and were noted for separate deliberation by DERM.

Of those issues that directly related to the development of the Fitzroy EVs and WQOs, some stakeholder views resulted in changes to the final project reports and the schedule 1 documents and plans, including the WQOs.

Further details of the final WQO determinations are provided in the report *Developing water quality guidelines for the protection of the freshwater aquatic ecosystems in the Fitzroy Basin*, DERM, September 2011 (DERM WQGs Report), which is available on the DERM website.

**Table 1 Summary of issues raised in submissions relating to the establishment of EVs and WQOs for waters under the EPP Water (and response to issues)**

ISSUES RAISED	RESPONSE TO ISSUES
<b>CONSULTATION</b>	
<ul style="list-style-type: none"> <li>• Inadequate time to fully consider the late amendment in March 2011 to the Isaac sub-basin draft water quality guideline (WQG) for the indicator electrical conductivity (EC).</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholders were advised as soon as practicable of the March 2011 amendment to the Isaac sub-basin draft WQG for EC for consultation purposes. This new information also included draft event flow and groundwater water quality guidelines for review and comment. The documents were published on the DERM website, and included in subsequent stakeholder briefings.</li> </ul> <p>The information that was released in late March 2011 was subject to further stakeholder review in May-June and the reasons for the Isaac EC amendment, the inclusion of draft event flow guidelines and draft groundwater guidelines was fully explained to stakeholders.</p>

ISSUES RAISED	RESPONSE TO ISSUES
<ul style="list-style-type: none"> <li>• DERM draft EVs Report needed to:                             <ul style="list-style-type: none"> <li>– identify mining as a key activity in the conceptual diagrams</li> <li>– emphasise the ephemeral nature of Fitzroy Basin waterways</li> <li>– identify the existence of both anthropogenic and natural background contaminant sources</li> <li>– address environmental authority (EA) and compliance matters</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The DERM draft EVs Report was an interim report published only to inform the consultation process, and is not part of the final project documents and plans. Specific omissions in conceptual diagrams are acknowledged. There are both anthropogenic and natural background sources of some contaminants.  EA conditions and compliance matters are not matters for consideration in developing EVs and WQGs under the EPP Water. A separate review of the EA conditions for coal mines has been completed by DERM. The final model conditions for coal mines in the Fitzroy are publicly available.</li> </ul>
<ul style="list-style-type: none"> <li>• DERM needs to ensure the timely finalisation of the current EVs/WQOs process.</li> </ul>	<ul style="list-style-type: none"> <li>• EVs were scheduled in September 2011.</li> </ul>
<b>ENVIRONMENTAL VALUES</b>	
<ul style="list-style-type: none"> <li>• Inadequate extent of aquatic ecosystems protection—need to extend the assessment of High Ecological Value (HEV) waters across all tidal and non-tidal waters, not just within the protected estate.</li> </ul>	<ul style="list-style-type: none"> <li>• Ecological values (including HEV waters) for surface waters will be further assessed for the whole basin, with possible inclusion in future EPP Water schedule 1 amendments. Estuarine and coastal waters will be assessed under the Capricorn and Curtis Coasts EVs project. HEV wetlands, including those adjacent to the lower Fitzroy River, have been addressed.</li> </ul>
<ul style="list-style-type: none"> <li>• Need to recognise mining as a human use EV.</li> </ul>	<ul style="list-style-type: none"> <li>• Mining is already recognised, being part of the industrial use EV.</li> </ul>
<b>WATER QUALITY GUIDELINES (WQGs)</b>	
<ul style="list-style-type: none"> <li>• Use of local biological effects data was inadequate, despite being the preferred approach to WQGs development. Delay guidelines until local biological effects data is available from the Australian Coal Association Research Program (ACARP).</li> </ul>	<ul style="list-style-type: none"> <li>• Both referential and biological effects approaches are important in establishing WQGs for indicators—see QWQGs. Additionally:                             <ul style="list-style-type: none"> <li>– scientific work investigating macroinvertebrates/salinity effects for frequently found taxa has been completed for Queensland stream systems, including for sampling sites in the Fitzroy Basin<sup>2</sup>. Changes to macroinvertebrate communities were observed at relatively low salinities. WQOs for biological indicators have been included in schedule 1 documents for all Fitzroy sub-basins.</li> <li>– biological effects data underpins the WQGs for most indicators: e.g. toxicants, food standards etc.</li> <li>– the results of ACARP research will be considered when available.</li> </ul> </li> </ul>

<sup>2</sup> Response of stream macroinvertebrates to changes in salinity and the development of a salinity index'; Horrigan, Choy, Marshall and Recknagel; *Marine and Freshwater Research*, 2005, 56, 825-833. CSIRO publishing.

ISSUES RAISED	RESPONSE TO ISSUES
<ul style="list-style-type: none"> <li>• Lack of scientific rigour in development of the draft WQGs, and peer reviewed methods ignored.</li> </ul>	<ul style="list-style-type: none"> <li>• The EVs and WQOs were established in accordance with standard methodology as outlined in the DERM Guideline 'Establishing draft environmental values, management goals and water quality objectives' (available on the DERM website). A DERM fact sheet is being prepared to further inform the derivation of local WQGs.</li> <li>• Peer review comments were addressed, as summarised in the DERM WQGs Report.</li> </ul>
<ul style="list-style-type: none"> <li>• Reference site selection and data availability were inadequate because:                             <ul style="list-style-type: none"> <li>– reference sites must reflect predevelopment EVs but selected reference sites are highly modified by existing development and activities, resulting in distorted WQGs</li> <li>– no floodplain reference sites were used. Need to develop WQGs for modified aquatic ecosystems (not in HEV waters). Concern that the WQG for salinity (EC) had derived a conservative guideline value</li> <li>– geographical spread of reference sites inadequate</li> <li>– DERM reference site monitoring data not available—the final report should summarise sampling information.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The reference sites used to determine the draft WQGs are within the DERM Ambient Surface Water Monitoring Network and:                             <ul style="list-style-type: none"> <li>– met the QWQGs criteria for consideration as a reference site, or were the least impacted sites available in the sub-basin to provide the widest geographical coverage—e.g. Yatton, Coolmaringa and Riverslea sites</li> <li>– met the sampled data adequacy criteria and the seasonality requirements of the QWQGs</li> <li>– had a data record for all, or some, of the physico-chemical indicators</li> <li>– all reference sites are in moderately disturbed waters</li> <li>– sampling location, indicators and measures, monitoring frequency and periodicity are published on the department's website and summarised in the DERM WQGs Report.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• The reference site data should be re-analysed to address:                             <ul style="list-style-type: none"> <li>– the lack of inclusion of 2008-2011 flood data, that has biased the draft WQGs</li> <li>– the use 80th / 20th percentiles of reference site data in deriving draft WQGs, as per the AWQGs, in lieu of the 75th / 25th percentiles.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• DERM re-analysed the complete reference site database available at April 2011, and:                             <ul style="list-style-type: none"> <li>– subsequently revised the draft base flow WQGs for physico-chemical indicators (see the DERM WQGs Report). The re-analysis excluded data from the Mackenzie sub-basin over the period February to September 2008 when Ensham mine water was discharged.</li> <li>– adopted the 80th / 20th percentiles for all indicators, except EC, which is consistent with the AWQGs for the moderately disturbed level of ecosystem protection,. The 75th percentile was maintained for EC, consistent with DERM approaches for other regions and the QWQGs. Note that the AWQGs, provides discretion in use of percentiles, recognising that the 80th percentile as 'arbitrary though reasonably conservative'.</li> </ul> </li> </ul>

ISSUES RAISED	RESPONSE TO ISSUES
<ul style="list-style-type: none"> <li>For reference sites not meeting the QWQGs data adequacy criteria, DERM should use the relevant indicator measures from the QWQGs and AWQGs, and identify the process to acquire additional reference site data.</li> <li>Additional reference site monitoring required to address gaps in reference site data. Define the timeline and process to update reference site data and amend WQOs.</li> </ul>	<ul style="list-style-type: none"> <li>In accordance with the EPP Water, in the absence of local WQGs, either regional (QWQGs) or national (AWQGs) WQGs were adopted. See next dot point re additional reference site monitoring.</li> <li>DERM has committed to acquire updated reference site data for each sub-basin, over the next two to three years under its Ambient Surface Water Monitoring Network monitoring program. Subsequent amendment of schedule 1 of the EPP Water will be considered, as necessary, following review of the data.</li> </ul>
<ul style="list-style-type: none"> <li>Use EA monitoring data and receiving environment monitoring program (REMP) data in preference to QWQG regional guidelines to address the lack of monitoring data for some reference sites.</li> </ul>	<ul style="list-style-type: none"> <li>EA and REMP monitoring data is not reference site data. A DERM fact sheet is being prepared to further inform the determination of local water quality guidelines from reference sites (based on the QWQGs).</li> </ul>
<ul style="list-style-type: none"> <li>Does the 'aquatic ecosystem' EV require the most stringent WQG?</li> </ul>	<ul style="list-style-type: none"> <li>While the aquatic ecosystem EV can have the most stringent WQG for particular indicators, WQGs for drinking water, or other human use EVs, may be limiting for some indicators.</li> </ul>
<ul style="list-style-type: none"> <li>Unclear what is the role of concentration based vs. load based WQGs.</li> </ul>	<ul style="list-style-type: none"> <li>WQGs for indicators that protect a stated EV may be contaminant concentration measures or (sustainable) load measures, or both.</li> </ul>
<ul style="list-style-type: none"> <li>Unclear if it is intended to separately identify upland and lowland fresh waters at 150m AHD, and derive separate WQGs.</li> </ul>	<ul style="list-style-type: none"> <li>Freshwater WQGs have been developed for lowland fresh waters only. The dataset for the Fitzroy does not support the differentiation of upland and lowland fresh waters using the AWQGs 'default' 150 metres Australian Height Datum (see DERM WQGs Report).</li> </ul>
<ul style="list-style-type: none"> <li>Unclear if the EVs and WQOs will be used as compliance criteria in EAs (and development approvals).</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Management Decisions under the EP Act must consider matters in the Environmental Protection Regulation 2008 (s.51), including under the EPP Water:                         <ul style="list-style-type: none"> <li>the management hierarchy (s.13)</li> <li>environmental values (s.6)</li> <li>water quality objectives (s.10)</li> <li>the management intent (s.14).</li> </ul> </li> <li>A DERM fact sheet is being prepared to further inform this issue.</li> </ul>
<ul style="list-style-type: none"> <li>EC numbers above 500 microsiemens (<math>\mu\text{S}</math>)/cm are of potential concern to power station operation. The EC WQG of 450 <math>\mu\text{S}/\text{cm}</math> is close to this, particularly given that the Fitzroy may start its "low flow" early in the season at around 450 <math>\mu\text{S}/\text{cm}</math>. This will concentrate up during the dry season.</li> </ul>	<ul style="list-style-type: none"> <li>An EC of 445 <math>\mu\text{S}/\text{cm}</math> was adopted to protect the aquatic ecosystem EV, in accordance with the QWQGs. It will also protect the 'industrial use' EV, which includes power station use.</li> </ul>

ISSUES RAISED	RESPONSE TO ISSUES
<ul style="list-style-type: none"> <li>The draft base flow WQG for EC of 450 microsiemens (<math>\mu\text{S}</math>)/cm for Fitzroy sub-basin is higher than historic norms.</li> </ul>	<ul style="list-style-type: none"> <li>The value of 445 <math>\mu\text{S}/\text{cm}</math> is based on the 75th percentile of historic and recent reference site data, in accordance with the QWQGs.</li> </ul>
<ul style="list-style-type: none"> <li>Need to include an explanation of 'base flow' and 'event flow' WQG derivation.</li> </ul>	<ul style="list-style-type: none"> <li>The derivation of base flow and event flow WQGs is explained in the DERM WQGs Report.</li> <li>Further DERM responses on WQGs have been addressed in the DERM WQGs Report.</li> </ul>
<b>ECONOMIC and SOCIAL</b>	
<ul style="list-style-type: none"> <li>The Marsden Jacob Associates (MJA) draft socio-economic report does not address sustainable management options.</li> <li>Further consultation is needed to consider additional implementation options relating to mine waste water management.</li> </ul>	<ul style="list-style-type: none"> <li>MJA is an independent consultant engaged to identify and assess the magnitude and distribution of economic and social impacts (benefits and costs) of protecting the EVs for the Fitzroy Basin waters, in accordance with the EPP Water.</li> <li>The scope of the MJA study was limited to 'consideration of the economic and social impacts of protecting environmental values of the water' and did not specifically address sustainable management options. However, it notes a range of potential intervention options to meet the WQOs.</li> <li>The study was conducted via a desktop analysis of key issues using public domain information augmented with stakeholder information.</li> <li>Also see the response to the issue below.</li> </ul>
<ul style="list-style-type: none"> <li>The MJA draft socio-economic report was inadequate in terms of :                         <ul style="list-style-type: none"> <li>business-as-usual (BAU) assessment</li> <li>the use of old industry and Australian Bureau of Statistics (ABS) data</li> <li>assessing the relative risk of mining and energy point source emissions to water quality degradation.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The report has been updated, noting that:                         <ul style="list-style-type: none"> <li>Coal mine EA conditions were amended under the EP Act by agreement in 2009, to address the effects of the contaminated mine stormwater discharge to receiving waters. The EA conditions amendment was reflected in the BAU case of the draft report, effectively treating compliance as incurred costs and fully accounted in setting the revised EA conditions</li> <li>the discussion on mine site water use and management, mine dewatering and mine waste water discharges to receiving waters was limited to public domain information.</li> <li>2011 ABS data was used to update the socio-economic analysis</li> <li>at a basin-wide scale, the dominant source of sediment and nutrient loads are from rural land use, particularly grazing. However, our analysis also demonstrates that a major source of water quality degradation risk in the Fitzroy Basin stems from point sources in the mining and energy sectors, and the associated flow-on economic activity.</li> </ul> </li> </ul>

**Table 2 Summary of issues raised in submissions outside of the scope of the EPP Water relating to the establishment of EVs and WQOs (and response to issues)**

ISSUES RAISED	RESPONSE TO ISSUES
<b>POLICY and PLANNING: MINING / EXTRACTIVE</b>	
<ul style="list-style-type: none"> <li>• DERM should consult and be more transparent in developing Transitional Environmental Programs (TEPs) and allow landholders to view TEPs.</li> <li>• There should be community consultation during the TEP application phase.</li> </ul>	<ul style="list-style-type: none"> <li>• The DERM TEP Guideline, published on the DERM website, outlines the TEP preparation process. TEPs can be inspected and copies made available (at a reasonable cost) at DERM offices.</li> <li>• A public notice, inviting submissions, is required if the TEP extends greater than three years.</li> </ul>
<ul style="list-style-type: none"> <li>• There should be greater landholder access to DERM staff (e.g. after hours telephone numbers) to allow urgent issues to be raised by landholders.</li> </ul>	<ul style="list-style-type: none"> <li>• DERM has a 24/7 contact phone number which is linked to on-call staff.</li> </ul>
<ul style="list-style-type: none"> <li>• DERM should notify landholders of local mine water discharges across landholder's property.</li> </ul>	<ul style="list-style-type: none"> <li>• Issue will be considered on a case-by-case basis.</li> </ul>
<ul style="list-style-type: none"> <li>• Feedback should be provided to landholders of any elevated indicators in monitoring samples.</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly monitoring updates are published on the DERM website &lt;<a href="http://www.fitzroyriver.qld.gov.au">www.fitzroyriver.qld.gov.au</a>&gt;.</li> </ul>
<ul style="list-style-type: none"> <li>• There should be no further increases to releases of contaminated mine water to waterways under EAs or TEPs.</li> </ul>	<ul style="list-style-type: none"> <li>• The release of contaminants to the environment is addressed under EP Act sections 290, 290 (a) and 292, which state the provisions under which DERM may amend an EA. See also the DERM TEP Guideline about matters for decision under a TEP.</li> </ul>
<ul style="list-style-type: none"> <li>• There should be no release of untreated CSG water to waterways.</li> </ul>	<ul style="list-style-type: none"> <li>• The DERM CSG Water Management Policy, June 2010, requires treatment of CSG water to a standard defined by DERM, before disposal to the environment or supply to other users.</li> </ul>
<ul style="list-style-type: none"> <li>• DERM needs to improve standards and conditions for managing mine site (clean and dirty) water.</li> </ul>	<ul style="list-style-type: none"> <li>• Considered as part of the EA conditions review for all coal mines.</li> </ul>
<ul style="list-style-type: none"> <li>• Matters pertaining to mine release conditions need to be considered.</li> </ul>	<ul style="list-style-type: none"> <li>• Mine release conditions have been separately considered under the review of EA conditions for all coal mines.</li> </ul>
<b>POLICY and PLANNING: OTHER</b>	
<ul style="list-style-type: none"> <li>• DERM needs to ensure the Fitzroy Basin Water Resource Plan reflects the EVs.</li> </ul>	<ul style="list-style-type: none"> <li>• Under s.47 of the Water Act 2000, matters the Minister must consider when preparing a draft water resource plan include environmental values established under the EPP Water.</li> </ul>
<ul style="list-style-type: none"> <li>• The Government should introduce new legislation to give an integrated approach to planning, management and regulation to protect EVs from:                         <ul style="list-style-type: none"> <li>– TEP/EA contaminant water release</li> <li>– disturbance and take of overland flow</li> <li>– release of un-treated CSG water</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Issues will continue to be addressed as follows:                         <ul style="list-style-type: none"> <li>– TEP/EA: addressed under the EP Act (see above)</li> <li>– Flow: addressed under <i>Water Act 2000</i>. Note: the Fitzroy Basin Water Resource Plan addresses the take of overland flow</li> <li>– CSG: see DERM CSG Water Management</li> </ul> </li> </ul>

ISSUES RAISED	RESPONSE TO ISSUES
<ul style="list-style-type: none"> <li>- point source pollution of waterways</li> <li>- diffuse source pollution from rural areas.</li> </ul>	<p>Policy</p> <ul style="list-style-type: none"> <li>- point source water pollution: addressed under EP Act and the EPP Water</li> <li>- rural diffuse pollution: addressed under the Reef Water Quality Protection Plan—a collaborative program to improve reef water quality through improved land management. 2013 end-of-catchments WQ targets are:                             <ul style="list-style-type: none"> <li>▪ 50 per cent reduction in nitrogen and phosphorus loads</li> <li>▪ 50 per cent reduction in pesticides</li> <li>▪ 20 per cent reduction in sediment loads</li> <li>▪ 50 per cent late dry season groundcover on dry tropical grazing land.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• No management options proposed for implementing EVs.</li> </ul>	<ul style="list-style-type: none"> <li>• EVs/WQOs are primarily implemented through planning and development decisions under the EP Act, the <i>Sustainable Planning Act 2009</i> and the <i>Water Act 2000</i>. Over the next 12 months the Fitzroy Basin Association will update its Central Queensland Sustainability Study in consideration of the scheduled EVs and WQOs. This will include management options.</li> </ul>
<ul style="list-style-type: none"> <li>• Unclear how the WQOs for highly disturbed waters are used.</li> </ul>	<ul style="list-style-type: none"> <li>• Highly disturbed waters are significantly degraded by human activity and are of lower ecological value but might still be used or valued by the community. Under the EPP Water (section 14) the management intent for highly disturbed waters is that the measures for indicators of all EVs are progressively improved to achieve the WQOs for the waters (over time).</li> </ul>
<b>MONITORING</b>	
<ul style="list-style-type: none"> <li>• Mine site discharge to receiving waters (waterways) should be monitored.</li> </ul>	<ul style="list-style-type: none"> <li>• Mine site monitoring of contaminants released to the environment is required under EA conditions for all coal mines and other activities (subject to EAs and DAs). For example, mine water discharge to waterways, dust emissions to the atmosphere and noise and vibration emissions.</li> </ul>
<ul style="list-style-type: none"> <li>• New mines should be subject to discharge monitoring of wastewater to waterways.</li> </ul>	<ul style="list-style-type: none"> <li>• Water quality monitoring is a requirement of EAs</li> </ul>
<ul style="list-style-type: none"> <li>• DERM's Monitoring and Sampling Manual should be used by mining industry as the protocol.</li> </ul>	<ul style="list-style-type: none"> <li>• The Manual, which is the relevant protocol under the EP Act, is specified in EA and DA conditions.</li> </ul>
<ul style="list-style-type: none"> <li>• Feedback should be provided to landholders of any elevated indicators in monitoring samples.</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly monitoring updates are published on the DERM website &lt;<a href="http://www.fitzroyriver.qld.gov.au">www.fitzroyriver.qld.gov.au</a>&gt;.</li> </ul>
<ul style="list-style-type: none"> <li>• Groundwater monitoring sites should be relevant to the water system and use of system, include bore monitoring on or close to mining activities,</li> </ul>	<ul style="list-style-type: none"> <li>• Groundwater monitoring is constrained by the location of existing monitoring bores. Monitoring data is available through the DERM website.</li> </ul>

ISSUES RAISED	RESPONSE TO ISSUES
and be independent.	
<ul style="list-style-type: none"> <li>Need to introduce a basin-wide Ecological Health Monitoring Program.</li> </ul>	<ul style="list-style-type: none"> <li>Fitzroy Basin stakeholders are considering the introduction of a basin-wide program. The Fitzroy Basin Association has been funded by DERM to develop a proposal on this matter.</li> </ul>

## 4 Project documents and reports

The project documents and reports that are published on the DERM website at <[www.derm.qld.gov.au](http://www.derm.qld.gov.au)>, include:

- EPP Water Schedule 1 documents and plans, DERM, September 2011
- Environmental values for the Fitzroy, community consultation*, Fitzroy Basin Association, July 2011
- Developing water quality guidelines for the protection of the freshwater aquatic ecosystems in the Fitzroy Basin*, DERM, September 2011
- Derivation of water quality guidelines for the Fitzroy River estuary*, DERM, September 2011
- Fish water quality guidelines for Fitzroy Basin freshwaters*, DERM, September 2011
- Regional chemistry of the Fitzroy Basin groundwater*, DERM, September 2011
- The economic and social impacts of protecting the environmental values of the Fitzroy Basin waters*, Marsden Jacob Associates, May 2011
- Consultation summary and response to submissions from public consultation* (this report), DERM, December 2011.

# Attachment 1 Ministerial statements

Minister for Climate Change and Sustainability  
The Honourable Kate Jones

Wednesday, August 12, 2009

## Inaugural meeting for Fitzroy Water Quality Advisory Group

A new State Government website has been launched to give central Queenslanders publicly available information on water quality in the Fitzroy River Basin, Climate Change and Sustainability Minister Kate Jones said today.

Ms Jones said the website coincided with the first meeting yesterday of the new Fitzroy Water Quality Advisory Group to tackle the region's water quality issues and proactively plan future management of water quality of the waterway.

She said the group would provide advice to the State Government and ensure information on water quality projects was available to the public.

"The group brings together representatives from a range of organisations, Traditional Owners and State Government departments to ensure co-ordinated management of water quality issues in the Fitzroy River catchment area," Ms Jones said.

"One of the Advisory Group's first tasks is to review and comment on processes already in place to address water quality issues in the Fitzroy River Basin.

"Advice will also be provided on implementation of recommendations of Professor Barry Hart's report on 'Review of the Fitzroy Water Quality Issues' and the Department of Environment and Resource Management's (DERM) report on 'Cumulative Impacts on Water Quality Mining Activities in the Fitzroy Basin'.

"Anyone interested in following up on the issues and outcomes discussed by the group and at future meetings can access the minutes at <[www.fitzroyriver.qld.gov.au](http://www.fitzroyriver.qld.gov.au)>"

Member for Rockhampton Robert Swarten said the new website would provide up-to-date information to the public on water quality projects being undertaken and progress by the Advisory Group.

"It will also include updates on the Queensland Government's response to the recommendations outlined in Professor Hart's and DERM's reports," Mr Swarten said.

"Nearly all the recommendations made are being fully supported with many already undertaken or in the process of being implemented."

Ms Jones said DERM was working with the Fitzroy Basin Association to develop environmental values and water quality objectives for the Fitzroy catchment.

"This is a comprehensive project that will include extensive community and stakeholder consultation and input," she said.

"DERM is also working closely with the Queensland Resources Council and mines in the region to review current discharge arrangements in the Fitzroy catchment."

Ms Jones said the amalgamation of the former Environmental Protection Agency and Department of Natural Resources and Water into the newly created DERM meant there was now one lead agency responsible for providing advice and overseeing management of water quality in the Fitzroy Region as well as elsewhere in Queensland.

"This is one of the many recommendations made by Professor Hart which have now been addressed," she said.

"The combined expertise brought together under the one department, allows DERM to undertake additional water quality monitoring across the catchment and share this information with the community."

Ms Jones said DERM would continue to work in conjunction with local communities and the Advisory Group to deliver programs and initiatives that meet the community's expectations related to water quality in the Fitzroy Basin.

12 August, 2009 MEDIA CONTACT: Joshua Cooney 3336 8004 or 0409 069 056

## Joint Statement:

**Minister for Natural Resources, Mines and Energy and Minister for Trade**  
**The Honourable Stephen Robertson**

**Minister for Climate Change and Sustainability**  
**The Honourable Kate Jones**

**Thursday, December 16, 2010**

### Public input invited on Fitzroy Basin future

Fitzroy Basin residents are invited to have their say on new water management plans for the region.

Natural Resources Minister Stephen Robertson and Climate Change and Sustainability Minister Kate Jones today jointly called for public input into the new draft Fitzroy Basin Water Resource Plan and draft water quality targets for the Fitzroy Basin.

Minister Robertson said the basin's new draft water resource plan would continue to provide a framework for the sustainable allocation and management of surface water, including overland flow water.

"The new draft plan will build on the success of the existing plan and will now include the management of groundwater," Mr Robertson said.

Mr Robertson said when the plan is finalised, it will replace the Water Resource (Fitzroy Basin) Plan 1999 and provide greater certainty and flexibility for water users.

"The draft plan provides for more sustainable use of groundwater in the over allocated Callide Valley alluviums. This will be achieved through the establishment of tradeable water allocations and provision for improved water sharing arrangements," he said.

Water allocations will also be established in the Nogoia River, Theresa Creek, Retreat Creek, Comet River and Dawson River, Mr Robertson said.

"The draft plan allows for the continued use of existing water entitlements and existing overland flow storages. Unallocated water reserves will provide for major infrastructure projects as well as for future State, Indigenous and general purposes."

Mr Robertson said the new draft water resource plan was prepared following significant community input. Further feedback from the community is crucial to the finalisation of the plan.

Public information meetings will be held between 17 January and 21 January 2011. An overview report has been prepared to explain the plan's provisions and to assist with the making of submissions.

Comments and submissions will be accepted until 28 February 2011.

"I encourage anyone with an interest to make a submission," Mr Robertson said.

Climate Change and Sustainability Minister Kate Jones said the plan is an opportunity for the Fitzroy basin community to have its say on important water quality issues.

She said the government, with support from the Fitzroy Basin Association and the Fitzroy basin community, had established draft environmental values and water quality targets for all waters and groundwaters in the basin.

"Water quality targets will support priority management actions to protect and improve water quality," Ms Jones said.

"They will also be a major consideration in setting conditions for releases of waste water from mining operations and sewage treatment plants to the waters of the Fitzroy basin and will be used to monitor progress on actions to improve water quality.

Ms Jones said that after public comments were received the final documents would support the establishment of water quality targets for the waters of the Fitzroy basin under environmental legislation in 2011.

The water quality consultation documents are available through the departmental website at <[www.derm.qld.gov.au](http://www.derm.qld.gov.au)>, or by phoning 137 468.

The new draft Fitzroy Basin Water Resource Plan, the overview report and supporting technical reports can be

obtained by going to the departmental website <[www.derm.qld.gov.au/wrp/fitzroy](http://www.derm.qld.gov.au/wrp/fitzroy)> or by phoning 1800 822 100.

Public information sessions covering the draft Fitzroy Basin Water Resource Plan will be held at:

·Rockhampton: 17 January 2011 (9am – 12pm), DEEDI Conference Centre, cnr of Yeppoon Road and Bruce Highway.

·Biloela: 18 January 2011 (9am – 12pm), DEEDI Research Station Conference Room, 98-102 State Farm Road.

·Theodore: 18 January 2011 (2:30pm – 5:00pm), Theodore Hotel, The Boulevard.

·Rolleston: 19 January 2011 (1pm – 4pm), Rolleston Community Hall, Planet Street.

·Emerald: 20 January 2011 (9am – 12:30pm), DERM Conference Room, 99 Hospital Road.

·Clarke Creek: 21 January 2011 (10am – 12pm), Clarke Creek Community Hall.

Departmental officers will also be available at these sessions to discuss the draft environmental values for the Fitzroy Basin.

Media contact: 0417 154 660

# Attachment 2 Public notices

January 2011

**Department of Environment and Resource Management**

**Public Notice**

**Updated public notice of availability of the draft report  
 Establishing Environmental Values, Water Quality Guidelines and  
 Water Quality Objectives for Fitzroy Basin Waters**

This public notice provides updated information about the draft environmental values and water quality targets for Fitzroy Basin waters under the Environmental Protection (Water) Policy 2009. The project covers the Fitzroy Basin fresh waters, estuaries and groundwater within the Callide, Comet, Connors, Dawson, Fitzroy, Isaac, Mackenzie and Nogoa catchments.

In December 2010, the Department of Environment and Resource Management provided a public notice about the availability of the draft Fitzroy Basin environmental values and water quality targets for public review. Following flooding in the Fitzroy Basin, public consultation sessions and submission closing dates have been revised as follows:

- The closing date for submissions has been extended to 5pm on the 4 April 2011 (previously 28 February)
- Public information sessions on the Fitzroy draft environmental values and water quality targets will be held as part of the community sessions for the draft Fitzroy Water Resource Plan. Updated details are provided below.

Location	Date	Time	Venue
Rockhampton	14 February 2011	9.00 am – 12.00 pm	Department of Employment, Economic Development and Innovation Conference Centre, corner Yeppoon Road and Bruce Highway, North Rockhampton
Biloela	15 February 2011	9.00 am – 12.00 pm	Department of Employment, Economic Development and Innovation Research Station, Conference Room, 98-102 State Farm Road, Biloela
Moura	21 February 2011	9.00 am – 12.00 pm	Kianga Hall, McArthur Street, Moura
Rolleston	22 February 2011	1.00 pm – 4.00 pm	Rolleston Community Hall, Planet Street, Rolleston
Emerald	23 February 2011	1.00 pm – 4.00 pm	Department of Environment and Resource Management Conference Room, 99 Hospital Road, Emerald
Clarke Creek	24 February 2011	1.00 pm – 4.00 pm	Clarke Creek Community Hall, Clarke Creek

To register your interest for a session, or to arrange for you or a group of stakeholders to meet separately with an officer please contact the department on 1800 822 100.

The draft environmental values report and associated documents are available on the department's website at <[www.derm.qld.gov.au](http://www.derm.qld.gov.au)>, and can be accessed via the Fitzroy River website at <[www.fitzroyriver.qld.gov.au](http://www.fitzroyriver.qld.gov.au)> and the Fitzroy Basin Association's website at <[www.fba.org.au](http://www.fba.org.au)>.

**Submissions**

Submissions are invited on the draft report and associated documents.

Submissions must be received by 4 April 2011 and can be made by:

email: [evinfo@derm.qld.gov.au](mailto:evinfo@derm.qld.gov.au)  
 post: General Manager Water Quality and Accounting  
 Department of Environment and Resource Management  
 GPO Box 2454, Brisbane 4001.  
 fax: 07 3406 2190.

[www.derm.qld.gov.au](http://www.derm.qld.gov.au)

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 Rockhampton Bulletin  
 Mackay Daily Mercury  
 Central Queensland News  
 Biloela Central Telegraph  
 Black Water Herald

December 2010

**Department of Environment and Resource Management**

**Public Notice**

**Public notice of availability of the draft report  
Establishing Environmental Values, Water Quality Guidelines and  
Water Quality Objectives for Fitzroy Basin Waters**

The Department of Environment and Resource Management, in collaboration with the Fitzroy Basin Association, other state agencies, local government, industry groups and the community, seeks your comments on the draft report and associated documents on the project to develop environmental values and water quality objectives for the waters of the Fitzroy Basin, under the Environmental Protection (Water) Policy 2009.

The project covers the Fitzroy Basin fresh waters, estuaries and groundwater within the Callide, Comet, Connors, Dawson, Fitzroy, Isaac, Mackenzie and Nogo catchments.

The draft report and associated documents include:

- background information and community consultation
- draft environmental values, water quality guidelines and objectives
- economic and social impacts of protecting the environmental values
- details on how to make a submission.

The environmental values and water quality objectives support implementation of water quality management actions in the Fitzroy Basin and they will be used in a number of supporting ways, including:

- developing sustainable pollutant loads and actions to achieve environmental values and water quality objectives in a healthy waters management plan for the basin
- providing a key consideration in managing environmentally relevant activities
- being a consideration in water resource planning for the basin
- providing a benchmark for comparison with the results of monitoring programs.

The draft report and associated documents are available on the department's website at <[www.derm.qld.gov.au](http://www.derm.qld.gov.au)>, the Fitzroy River website at <[www.fitzroyriver.qld.gov.au](http://www.fitzroyriver.qld.gov.au)> and the Fitzroy Basin Association's website at <[www.fba.org.au](http://www.fba.org.au)>.

**Submissions**

Submissions are invited on the draft report and associated documents.

Submissions must be received by 28 February 2011.

Submissions may be made by:

- email: [evinfo@derm.qld.gov.au](mailto:evinfo@derm.qld.gov.au)
- post: General Manager Water Quality and Accounting  
Department of Environment and Resource Management  
GPO Box 2454, Brisbane 4001.
- fax: 07 3406 2190.

For more information, please contact the EVs Project Manager on 13 QGOV (137468).

[www.derm.qld.gov.au](http://www.derm.qld.gov.au)

 **Queensland Government**

# Attachment 3 Stakeholder information on EVs

The following information was released by FBA to stakeholders as part of the EVs consultation process.

Invitation to attend catchment workshops - FBA

## Care about water quality? Put this your diary!

Community workshops in February - March 2010



The Fitzroy Basin Association invites you to attend a local workshop to share local knowledge of your land and catchment. Your input will help us to identify local Environmental Values that support setting of Water Quality Objectives.

We call on interested persons with knowledge of uses of land and water in your sub-catchment area to attend. It is important that all interested parties provide input as this information will be used to develop a Fitzroy Environmental Values and Water Quality Objectives report.

Workshops details are:

Sub-Catchment	Workshop location	Venue	Date 2010
Fitzroy	Rockhampton	DPI Centre	4 Feb
Traditional Owners	Rockhampton	Fitzroy Motor Boat Club	5 Feb
Lower Nogoia	Emerald	Prichard Country Resort	9 Feb
Comet	Orion	Local Hall	10 Feb
Upper Nogoia	Springsure	Springsure Town hall	11 Feb
Upper Dawson	Taroom	Taroom hotel	16 Feb
Upper Dawson	Injune	Injune Hotel	18 Feb
Isaacs/Connors	Clarke Creek	Community Hall	3 March
Mackenzie	Dingo	Dingo Hotel	4 March
Callide	Jambin	Jambin Pub	17 March
Lower Dawson	Theodore	Hotel Theodore	18 March
Basin scale	Rockhampton	The Heritage Hotel	19 March

Workshops will be all day events

Morning tea, lunch and afternoon tea will be provided.

**REGISTRATION IS ESSENTIAL - PLACES ARE LIMITED!**

Contact Jacqueline Dupavillon, FBA Healthy Waterways Officer -  
 Ph: (07) 4999 2823  
 E-mail: [jacqueline.dupavillon@fba.org.au](mailto:jacqueline.dupavillon@fba.org.au)  
 Further details will be provided closer to the date for those registering interest.



## Background information on EVs project and purpose of catchment workshops - FBA

### Identification of waterway values and uses (Environmental values) for the Fitzroy Basin



#### Background information

The Fitzroy Basin Association (FBA) has been funded by the Queensland Government to assist with the identification of environmental values (EVs) and establishment of water quality objectives (WQOs) for the Fitzroy Basin. This process builds on water quality components of the [Central Queensland Strategy for Sustainability – 2004 and beyond](#) and extends objectives of FBA's [Water Quality Improvement Report](#) into freshwaters and estuarine reaches of the Fitzroy Basin.

#### Q: Why is this important to me?

A: This process will result in community-endorsed EVs and WQOs for your catchment being included in state legislation with the goal of better managing water quality in the region. These values and objectives will apply to urban, mining, industrial and agricultural enterprises that release water into the natural environment. In other words, the process will establish benchmarks to protect the community's values for the waters of the Fitzroy Basin and in doing so will improve decisions about matters that affect water quality within the basin.

This also relates to recommendations of the [Barry Hart report](#)<sup>1</sup>, Coastal and Great Barrier Reef Marine Park (GBRMP) management, Fitzroy Basin Water Resource Plan (currently undergoing a 10 year review), Integrated Planning Act instruments (e.g. regional plans and planning schemes), and catchment management programs.

#### Q: So why is FBA supporting the Queensland Government in this initiative?

A: We want to ensure all interested parties throughout the Fitzroy Basin have the opportunity to shape these water values into something realistic whilst meeting all users' needs.

#### Q: How are the values and uses of the waterways identified?

A: The process of setting environmental values draws together all parties with an interest in waterways to capture knowledge of the values and uses (including the environment) at a sub-catchment scale, as well as basin-wide. It is a three stage process as explained below. These EVs are combined with technical water quality guidelines to define the water quality objectives (targets) that are required to protect the EVs.

#### Q: How can I provide input?

A: A first stage (basin-wide) workshop was held on the 25<sup>th</sup> and 26<sup>th</sup> of November 2009 in Rockhampton with selected catchment representatives providing initial broad-level advice on the EVs and their ideas ready for a second round of workshops held in the 10 main sub-catchments of the Fitzroy Basin (Figure 1). This will now be followed by these 10 catchment workshops hosted in each catchment from February to March 2010. These workshops are open to interested parties and are designed to capture the collective knowledge of all stakeholders for each sub-catchment. For parties interested in the basin-scale approach a basin-wide workshop will also be held. Your input is requested for the second stage workshop being held in your area. Workshops are aimed at providing further local knowledge on the environmental values of the freshwater and estuarine reaches of the Fitzroy Basin.

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<sup>1</sup> Hart (2008). Report to the Queensland Premier. Review of the Fitzroy River Water Quality Issues. Professor Barry Hart. November 2008.  
Page 1 of 2

**The low-down on EVs and WQOs:  
cutting through the jargon.**

**EVs**

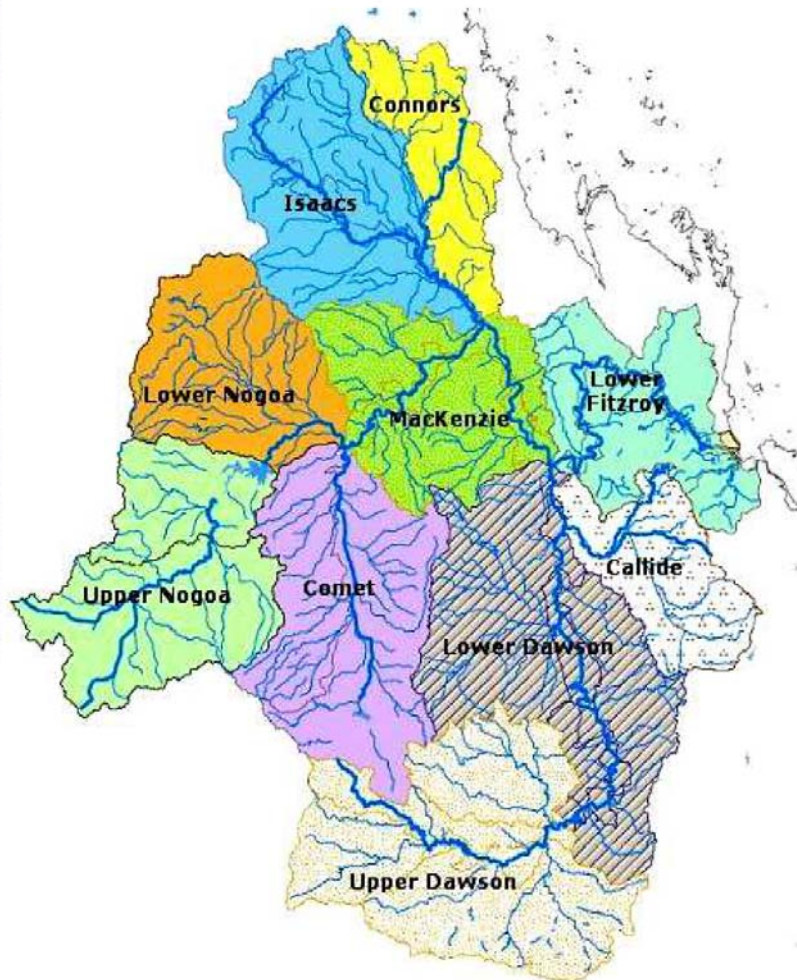
These are the uses of water and waterways. They include:

- water for farm use (stock, irrigating, etc.)
- for mining and industrial use
- for boating, fishing, and swimming
- for enjoyment and appreciation
- for drinking, and
- making sure there's healthy waterways for fish and other water creatures.

**WQOs**

These are targets for water quality, to make sure that the water is good enough for all of the users.

**Figure 1: Consultation areas for the Fitzroy Basin EVs and WQOs project**



**Q: What happens after the catchment workshops?**

A: With support from the FBA, the Queensland Government will include input from all interested parties and incorporate it into a final draft report.

There will then be a further opportunity for your input during the public review of this final draft Fitzroy EVs and WQOs report. The Queensland Government is then proposing to finalise the report and schedule EVs and WQOs in the Environmental Protection (Water) Policy (EPP Water).

**Q: Has this happened elsewhere?**

A: Yes. Examples include:

[Reef Water Quality Improvement Plans](#)

Including Mackay Whitsundays Region: [Reef Catchments Mackay Whitsunday Inc](#)

South East Queensland Catchments: [SEQ Healthy Waterways Strategy](#)

For more information on the process, visit the Queensland Government's Environmental Management website:

[http://www.epa.qld.gov.au/environmental\\_management/water/environmental\\_values\\_environmental\\_protection\\_water\\_policy/index.html](http://www.epa.qld.gov.au/environmental_management/water/environmental_values_environmental_protection_water_policy/index.html)