

Fitzroy Basin waterways - Human use Environmental Values (EVs) catchment workshops

Catchment: Upper Nogoia
Champion: Lindsay Black

Process to date

The Fitzroy Basin Association (FBA) and the Department of Environment and Resource Management (DERM) are holding a series of catchment workshops to identify waterway uses and values i.e. Environmental Values (EVs), throughout the Fitzroy Basin. There will also be Traditional Owner and Basin-wide workshops as part of the process.

The champion concept

During the initial stage (Round 1, November 2009) of the process a representative was selected as a knowledge “champion” for their catchment. The champion shared their existing knowledge to help us to prepare draft information for this workshop. The purpose of this workshop is to build upon this information using your local knowledge to develop catchment based Environmental Values (EV's). The champions workshop identified presence/absence (✓/✗) of human use EVs at a broad (eg catchment, sub-catchment) level throughout the Fitzroy Basin. This was completed for both current and known future uses (e.g. already approved developments).

Draft EVs from the champions workshop for your catchment are included in the attached table (Table 2). This table focuses only on human uses and values. A separate session of the workshop will focus on ecological values of aquatic ecosystems. The minimum requirement for aquatic ecosystems is to maintain current condition.

Explanation of table

The different human uses/values are shown across the top of the attached table (e.g. irrigation, stock watering, primary recreation, etc.). The catchment appears in the top grey shaded rows of the table. The top shaded row identifies EVs in ‘undeveloped’ areas throughout the catchment. ‘Undeveloped’ areas are essentially natural/uncleared (e.g. national parks, other forested areas). These are often restricted to upper catchment/hinterland locations. Information on human use EVs in developed areas is shown in the non shaded sub-catchment rows. These sub-catchments are listed down the left hand side of the table (Sample creeks within each sub-catchment are also listed.). ‘Developed’ includes areas that are under irrigation, grazing, urban development or other human uses. To assist in locating these sub-catchments, satellite mapping of your catchment is attached. For more information on what each of the EVs are, refer to Table 1.

What you can start thinking about before the workshop

The draft EVs in Table 2 will be a starting point for more detailed discussions in your catchment workshop, to incorporate your local knowledge and confirm or update the draft EVs. To get the most out of the workshop you can begin to consider two things beforehand.

1) Review the human use EVs results (✓/✗) in Table 2 and identify any areas where, based on your local knowledge, you think the results are inaccurate/incorrect. You can annotate any corrections on a copy of your table and bring them with you to the catchment workshop. There is also some space to record ‘local variations’ for any particular waterways that you wish to highlight as having different human use EVs from the broader sub-catchment EVs, including space to record EVs for dams/weirs.

2) Additionally, for each cell in the table which has a tick (✓), you can mark on the table whether this is High, Medium or Low importance/use. The categories for level of use are:

H – high importance/use (e.g intensive level of use in particular area or extensive use throughout area);

M – moderate importance/use;

L – low importance/use (e.g. small, isolated use in one area);

X – waterway use/value not selected, i.e. no use.













The level of importance/use will be explained further at the workshops and workshop attendees will be given the opportunity to discuss the levels of importance of waterway uses/values together before these are recorded.

During and after the workshops

In your catchment workshop, we will be using your local knowledge to either confirm or update the draft EVs. We will proceed across each row in the table and will record, in turn, waterway uses/values for each row, noting any local variations as we go. Workshop organisers will seek verbal input from workshop attendees, and will record this in a ‘master copy’ table (and, where helpful, also on maps). If participants have differing views from those expressed/agreed at the workshop, they can record these on their own table and hand in their table to organisers at the conclusion of the workshop (and all views will be documented in draft workshop outputs).

Following the workshop, we will prepare draft tables summarising the uses/values identified by participants and will send draft table outputs to workshop attendees for any feedback/correction.

Table 1: Environmental values and questions to be considered at stakeholder workshops

Environmental Value	Supporting Details	Questions
HUMAN USES/VALUES		
Primary Industries	 Irrigating crops such as cotton, citrus, grapes, hay	Where is water used for irrigation? What crops are irrigated?
	 Water for farm use ¹ such as milking sheds, vehicle wash-down, piggeries, feedlots	Where is the water used around farms for washing down areas or fruit packing?
	 Stock watering ²	Where is the water used for watering stock? What type of stock?
	 Water for aquaculture such as prawns, barramundi	Where is the water used in aquaculture operations and what species are cultivated?
	 Human consumption of stocked fish or crustaceans	Where is there consumption of wild or stocked fish or crustaceans?
Recreation & Aesthetics	 Primary recreation with direct contact with water e.g. swimming, snorkelling, skiing	Are there any recreational activities where people are fully immersed in the water? If so, where?
	 Secondary recreation with indirect contact with water e.g. sailing, canoeing, boating, rafting, wading	Are there any recreational activities where people are possibly splashed with water e.g. fishing, boating, sailing? If so, where?
	 Visual appreciation - no contact with water e.g. bushwalking, picnicking, sightseeing	What areas of waterways are regularly used by people who enjoy looking at and being near the waterway?
Drinking Water	 Raw drinking water supplies	Where do people or local governments take water from the river for water supplies?
Industrial uses	 Water for Industrial Use e.g. power generation, manufacturing plants	What are the industries that take water from the river for their operations and where does this occur?
Cultural & Spiritual	 Cultural and Spiritual values	What are the cultural and spiritual values associated with these waterways?
AQUATIC ECOSYSTEMS		
Aquatic ecosystems	 Pristine or modified Aquatic Ecosystems – four possible “Levels of Protection” apply (see Level 1 - HEV systems below)	
High conservation/ecological value systems (HEV)	Systems are largely unmodified. Often found in national parks, conservation reserves or inaccessible locations. Targets aim to maintain no discernable change from this natural condition (i.e. no physical, chemical and biological change)	Are there waterways largely unmodified or changed very little? Where are they?
Environmental management goals for all aquatic ecosystems	Estuarine/Coastal/Marine	What components of these ecosystems do you want to protect e.g. reefs, seagrasses, mangroves, dugongs, turtles, fish, shellfish?
	Freshwater	What components of these ecosystems do you want to protect e.g. turtles, fish, macroinvertebrates, riparian vegetation, in-stream habitats, flows?

Notes:

1. For the “domestic” component of a “stock and domestic” water licence, a number of EVs may be relevant depending on the use e.g. “**irrigating**” if used to water lawns, etc; “**farm use**” if used to wash down sheds, fruit, etc.; “**drinking water**” if used for drinking; “**primary recreation**” if used for showers (with a similar risk of ingestion of water).
2. This is typically the “**stock**” component of a “stock and domestic” licence.

Points raised during Round 1 EVs champions workshop

At the Round 1 champions workshop a number of additional points were raised by champions. The points of interest for your workshop area are listed below. They may assist you in reviewing/updating the EVs table and in related discussions at your catchment workshop, and can also be expanded with your input during the day.

Note: number in brackets refers to the sub-catchment/creek/tributary number in Table 2.

Upper Nogoa discussion (number in brackets refers to the creek/tributary number on the table)

Siltation of water holes

Fishing restrictions in National Parks (Yellow-belly, Murray cod, Barramundi)

Identification of Cultural values areas

Value of water from upper Nogoa into Fairburn Down

Fairbairn Dam Catchment (21) - Presence of mining in area and possibility of aquaculture

Sources of water for Minerva mine

Feed lots in lower Nogoa north of Capella

Aquaculture

Identify high risk areas for future development especially mine contamination (Rocky drinking water included).

Cotton spray risk, mines and gas

Cotton, citrus, grapes, rice and cereal grain coming in bridge flats (swimming)

Recreation groups need to identify WQ minimum for activities- Skiing in dam, Selma weir Kayaking, fishing at road crossings-consumer, secondary recreation












Visual recreation and cultural values in underdeveloped areas.

Applications for coal development

Upper Dawson- Upper Tributaries (38) - Drinking water

Other comments:

Table 2: Human uses/values of waterways in the Upper Nogoa catchment

Waterway	Human uses/values for Fitzroy Basin waterways (✓ = present x = absent) H = High M = Medium L = Low										
	Irrigation  (e.g. cotton irrigation)	Farm supply  (e.g. fruit packing, milking sheds)	Stock watering  (e.g. cattle)	Aquaculture  (e.g. barramundi, red claw farm)	Human consumer  (e.g. of wild or stocked fish, shellfish)	Primary recreation  (fully immersed in water e.g. swimming, snorkelling)	Secondary recreation  (possibly splashed with water, e.g. sailing, fishing)	Visual appreciation  (no contact with water, e.g. picnic, bush walking)	Drinking water  (raw water supplies taken from river for drinking)	Industrial use  (e.g. power generation, manufacturing)	Cultural and spiritual values  (e.g. traditional lore and customs)
	Now / future	Now / future	Now / future	Now / future	Now / future	Now / future	Now / future	Now / future	Now / future	Now / future	Now / future
UPPER NOGOA - undeveloped	x/	x/	✓/	x/	x/	✓/	✓/	✓/	✓/	x/	✓/
UPPER NOGOA - developed	See sub-catchment rows below										
19 – Southern tributaries (incl. Acheron, Balmy, Box, Buckland, Cona, Dry, Ducabrook, Echo, Freitag, Juanita, Police, Policeman, Reedy, Sandy, Vandyke, Wharton Cks and Claude River).	x/	✓/	✓/	x/	✓/	✓/	✓/	✓/	x/	✓/	✓/
20 – Northern tributaries (incl. Acheron, Back, Borilla, Branch, Ducabrook, Echo, Gum, Joe Joe, Jumbuck, Policeman, Borilla, Sandy, Separation, Spring, Box, Medway, North, Rocky Cks) – excl. Fairbairn Dam.	x/	✓/	✓/	x/	✓/	✓/	✓/	✓/	✓/	✓/	✓/
21 – Fairbairn Dam Catchment (incl. Gindy, Stoney, Spring Cks)	✓/	✓/	✓/	x/	✓/	✓/	✓/	✓/	✓/	✓x?/	✓/
Check dams/weirs: Fairbairn Dam	/	/	/	/	/	/	/	/	/	/	/
19 & 20 - Nogoa main channel (adopted same as 21)	✓/	✓/	✓/	x/	✓/	✓/	✓/	✓/	✓/	✓?/	✓/
Local variations	/	/	/	/	/	/	/	/	/	/	/
Any other dams/weirs	/	/	/	/	/	/	/	/	/	/	/