Coleambally Irrigation Co-operative Limited

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27th February 2006

Mr Bill Booth PO Box 1458 GRIFFITH NSW 2680 By email: admin@boothassociates.com.au

Dear Bill,

4 Arrows Ethanol / Dairy Water Budget

Thank you for you email of the 23^{rd} February in relation to the above matter. As you are no doubt aware CICL has undertaken feasibility work to examine a 5-7,000ML Balancing Storage adjacent to the Main Canal (west of the Main) on Tubbo (F2023). 4 Arrows have suggested a preference for a site to the immediate east over which we will commence soils investigation shortly. It is our hope to commence construction of such a storage within the next 12 - 18 months. As such it is in line with 4 Arrows' plans for the ethanol and dairy facility. It is our expectation that the proposed Tubbo Balancing storage would be filled to the necessary level to meet water needs during any shutdown period. This sized storage is more than adequate to meet water needs for our high security water customers and the ethanol/dairy facility. However this storage is approximately 20km upstream of the potential supply point to the ethanol and dairy facility, and I expect your client would be looking for a closer guaranteed supply.

The approximate channel storage capacity of the various pools upstream of the proposed facility are shown below.

CHANNEL	REACH	APPROX STORAGE CAPACITY (ML)
Main Canal	River offtake to Tubbo wells	1,010
Main Canal	Tubbo Wells to Hrticulture Regulator	250
Tubbo Main Channel	Offtake to supply point to ethanol/dairy facility	360
Total Available Channel Storage		1,620

I have also had very preliminary and confidential discussions with Mr Mike Witham of Farm 2018. Mike's property is immediately to the North-West of the proposed project area. Farm 2018 has a production bore that produces 30ML/day or approximately 900ML/month. This bore remains largely unused during the winter shutdown period. Mike is very keen to see the ethanol / dairy project progressed and envisages no problem in entering into a contractual arrangement with either CICL or your client to supply water during the shutdown period or any emergency. The bore is located approximately 4 km from the proposed ethanol/dairy facility supply point. It should be noted that there are other bores a similar distance from the site, but these are generally of a lesser capacity. CICL has a groundwater licence and allocation which could be temporarily transferred to Mike's bore and meet your client's needs under a commercial arrangement.



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As mentioned in my previous email, there is a real possibility for your client to acquire Lands Department Lease blocks in the immediate environs of the project site. I understand that these blocks are currently being reconfigured (to exclude remnant vegetation) prior to public auction later this year i.e. Block 6 Lot 53 on DP 750896, Lot 54 DP 750896, Lot 33 DP 750896 and Lot 34 DP 750896. A storage developed on one of these blocks could simply guarantee year round water supply to the project. This would have the additional benefit of your client having greater control over this aspect of the project and provide additional area for disposal of effluent water.

Similarly CICL or your client could look to acquire a property such as Farm 5 (Additional Area) where a relatively small balancing storage could be built. At this location the regulating structure may provide significant capacity for a gravity in – gravity out arrangement. This could be advantageous to CICL in terms of re-regulating supplies down the Tubbo Main Channel and holding up water for additional winter crops.

I believe the combination of channel storage, and balancing storage options when coupled with the on-site storage capacity and the fall-back bore water supply should provide your client with the comfort he desires at this stage of the project. Of course development of a bore supplying a storage on-site could be yet another back-up option.

As mentioned during our meeting last week, it may well be advantageous for you to draw linkages between this project and the Coleanablly Land and Water Management Plan (LWMP). The LWMP has been developed by the Coleanablly community in consultation with State Agencies and overview from the Federal Government. This may be useful in smoothing the way with the agencies. Some suggested wording is offered below for your consideration.

Biodiversity

Protection and enhancement of existing native vegetation is a very high priority for the implementation of the LWMP over the next five years. The CIA Landscape Strategy includes annual targets for the Coleambally LWMP of:

- * 50 ha p.a. native vegetation protected, enhanced and managed primarily for conservation.
 - * 20 ha p.a. Black Box & River Red Gum depressions & streams protected and enhanced plus strategic watering.
 - * 50 ha p.a. strategic replanting, reseeding, and natural regeneration of locally native vegetation to enhance connectivity.

There is potential within the project area to contribute significantly to each of these targets as outlined below:

1. Protecting, enhancing and managing for conservation the area of Cypress Pine in the centre of the project area will contribute to LWMP targets BT1&3. By excluding grazing (including rabbits) and planting some locally native understorey and groundcover species, the site would become an important link between the very significant State Forests to the north-west (Bretts) and east (Boona).



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- 2. There are areas of Boree in the project area, including on Farm 641 (*Note: even though F641 is not officially in the LWMP area, adjoining land is included in LWMP targets and actions)*, that have the potential to be quite significant in a regional context. Boree is a major feeding species for the endangered Superb Parrot which frequents the area. Boree itself has been listed as an endangered ecological community so its protection and enhancement is of importance (LWMP Targets BT1&3).
- 3. Drainage Channel 400 has been identified as an important corridor of riparian vegetation. There are some good stands of Black Box timber in the project area adjoining DC400 that will contribute to LWMP targets if they are enhanced and managed for conservation (LWMP Targets BT2&3). Enhancement would include some planting of locally native understorey shrubs and groundcover plants. Some strategic watering would also be beneficial to restore a more natural wetting and drying regime that has been lacking since the construction of channels and drains in the irrigation area.
- 4. Perimeter plantings around the project area would contribute to LMWP target BT3 if they were comprised of locally native species and were a minimum of 30 metres wide. They would have the potential to provide good connectivity to adjoining areas as well as the other sites in the project area.

Net Recharge

The net recharge objective of the Coleambally LWMP is to maintain groundwater quality and groundwater pressure within acceptable limits. A primary target (NT1) of the LWMP is to keep the area of the CIA with watertables 2m from the surface to less than 10,000ha.

The following activities will assist with meeting LWMP net recharge objective and targets:

- * Minimal irrigation of suitable areas.
- Locating storages on impermeable clay soils.

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* Strategic planting of suitable deep-rooted species to increase groundwater extractions.

Do not hesitate to call if you require clarification on aspects outlined above or if CICL can be of further assistance.

Yours sincerely,

Murray Smith Chief Executive Officer

This message has been sent to you by email because you have previously provided us with your email address. If you do not wish to receive information from us via email, please contact our office to nominate your preferred method of contact.

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Bill Boot	
From: To: Cc: Sent: Subject:	"Murray W. Smith" <msmith@colyirr.com.au> "Bill Booth" <billbooth@dragnet.com.au> "Associates Booth" <enviro@boothassociates.com.au>; "Simon Lee" <s.lee@boothassociates.com.au>; "Jack Byrnes" <jbyrnes@4arrows.com>; <ahayes@4arrows.com> Tuesday, 28 February 2006 7:48 AM RE: 4 Arrows ethanol water budgets</ahayes@4arrows.com></jbyrnes@4arrows.com></s.lee@boothassociates.com.au></enviro@boothassociates.com.au></billbooth@dragnet.com.au></msmith@colyirr.com.au>
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Bill response att Regards Murray	tached.
<i>Murray Sm</i> Chief Executi	
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Dear Murray	¥
	IN CONFIDENCE
♦ in ad o o	he following parameters decile 9 or 1:10 wet year the project requires 5 350 ML/mth aug to April with balloon of 800 to 900 in may for winter needs 5 pls note NO site drainage except for storm events from area outside bunded area 5 even rest of site will have some bunding so only last of storm can run off if needed

7/03/2006