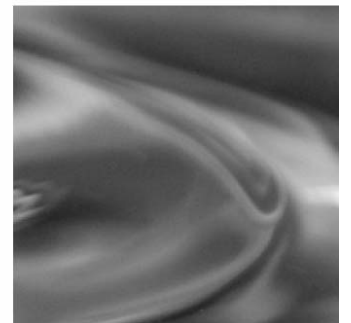
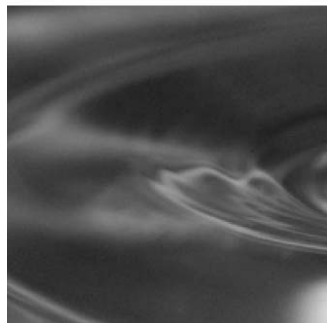
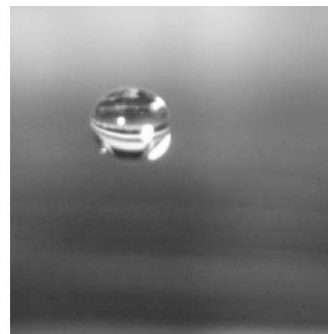
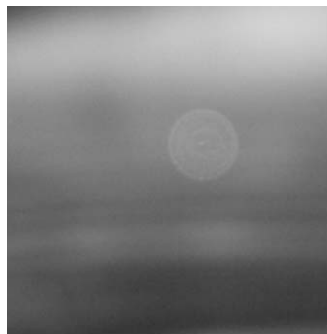




PROJECT REFINEMENT REPORT

SUGARLOAF PIPELINE ALLIANCE
REPORT TO SUGARLOAF INTERCONNECTOR PIPELINE
PROJECT ADVISORY COMMITTEE

28 March 2008





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- Shire of Murrundindi
- Shire of Yarra Ranges
- Shire of Nillumbik
- Department of Sustainability and Environment (DSE)
- Department of Planning and Community Development (DPCD)
- Telstra
- VicRoads
- GasNet
- Goulburn Broken Catchment Management Authority (GBCMA)
- Port Phillip and Westernport Catchment Management Authority (PPWCMA)
- Landowners and occupiers within the Sugarloaf Pipeline corridor



Limitations Statement

This report:

- has been prepared by Melbourne Water, GHD Pty Ltd, Sinclair Knight Merz Pty Ltd, and John Holland, the participants in the Sugarloaf Pipeline Project Alliance ('the Alliance');
- has been based on information provided up to 27 March 2008;
- has been produced in response to the Terms of Reference issued by the Minister for the Advisory Committee, in particular, in response to 3(iii).

This report should not be altered, amended or abbreviated, issues in part or incomplete in any matter whatsoever without prior checking and approval by the Sugarloaf Pipeline Project Alliance. The Alliance expressly disclaims responsibility for any liability which may arise from the issue of this report in part or incomplete or its modification in any way whatsoever.



1. Introduction

1.1 Strategic Context and Refinement Report Rationale

This report has been developed in response to the decision made by the Minister for Planning in relation to the Sugarloaf Pipeline Project. The Minister determined that an Environmental Effects Statement (EES) was not required for the project, subject to a range of conditions as follows:

On 21 December 2007, the Minister for Planning determined that an Environmental Effects Statement (EES) would not be required for the project under the Environment Effect Act 1978, subject to a number of conditions, namely:

1. *A Project Impact Assessment Report (PIA), building on the studies conducted by the proponent to date, is to be completed to the satisfaction of the Department of Planning and Community Development, in consultation with the Department of Sustainability and Environment:*
 - i. *This report is to incorporate studies on the potential environmental effects and environmental management of the project, including with respect to flora and fauna, cultural heritage, land stability, landscape values, waterway environments, land use, social amenity;*
 - ii. *Further, the report is to incorporate a study assessing the environmental implications of transferring water savings from the Goulburn River, through an off-take via the Sugarloaf Interconnector, including:*
 - a. *the environmental implications of the water off-take for downstream environmental values, including any relevant matters of national environmental significance;*
 - b. *the rules for managing the water off-take; and*
 - c. *relevant environmental management measures.*
2. *The PIA report, once completed to the satisfaction of the Department of Planning and Community Development, is to be exhibited for 20 business days public comment.*
3. *An expert Advisory Committee (AC) is to be appointed by the Minister for Planning to review the PIA report, and public submissions received in response to the latter report, and any other relevant information.*



In relation to the second condition above, the completed PIA report is to be exhibited for public comment from 19 February until 18 March 2008. To give effect to the third condition, the Minister for Planning has appointed an Advisory Committee for the project under section 151 of the Planning and Environment Act 1987 to consider public submissions made in response to the report.

On 13 February 2008, a delegate for the Australian Government Minister for the Environment, Heritage and the Arts determined that the Sugarloaf Pipeline Project is a 'controlled action' under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act), and also accredited the Victorian Environmental assessment process as the required assessment process under the Act. The controlling provisions under the EPBC Act are sections 18 and 18A – Listed threatened species and communities.

The Minister for Planning issued Terms of Reference for the Advisory Committee on 15 February 2008 to set out the process and procedures to govern the Advisory Committee inquiry and reporting framework.

At section 3 of the Terms of Reference the following instructions were included:

The Advisory Committee is to consider:

- (i) the exhibited PIA Report;*
- (ii) any submissions received in response to the exhibited PIA Report;*
- (iii) the proponent's response to submissions, including a Project Refinement Report that may put forward minor changes to the proposed project works; and*
- (iv) other relevant information provided to or obtained by the Advisory Committee, at the discretion of the Advisory Committee.*

This report, the Project Refinement Report, has been prepared in response to the above direction to assist the Advisory Committee in its task.



2. Table of Responses to Submissions (including proposed refinements)

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
1	Bruce Nixon	351 Glenview Rd, Yarra Glen, Vic, 3775	Communications	A copy of the PIA was sent out.	No further refinement required.
2	(unreadable)	4565 Midland Highway, Tatura, Vic, 3616	Not Applicable	No Response required as submission outside the scope of the terms of reference.	
3	Jim and Joyce Kay	780 Muliely Rd, Gilleston, 3616	Not Applicable	No Response required as submission outside the scope of the terms of reference.	
4	Maggie Anderson	P.O. Box 250 Eildon, Vic, 3713	Socio-Economic Flora and Fauna Communications	Please refer to submission 5 for response to PIA consideration of Farming needs.	The Alliance is working with landowners where appropriate to consider environmental issues as they relate to flora and fauna and landowner requirements.
5	Sue Devereaux	RMB 6108, Wilhelmina Falls Road, Murrindindi, VIC 3717	Environmental Implications of Transferring Water Hydrogeology	The preferred pipeline corridor will not cross the Yea/Killingworth wetlands. The preferred corridor crosses the Yea River upstream of the Yea/Killingworth wetlands. Construction activities will be carried out in accordance with Environmental Management Plan, including statutory requirements, to minimise impacts on the environment. There is the potential along some parts of the pipeline corridor, for example, wetlands at Yea and Killingworth (where trenching will be within saturated groundwater conditions), that the construction of a pipeline may require the control of groundwater ingress. This could be achieved by the trenching methodology or dewatering (via spear points, sump pumping or groundwater bores). This would consider the protection of other groundwater users (for example, neighbouring bores), groundwater dependent ecosystems (GDEs) works, environmental flows in surface water systems, but also appropriate management of recovered groundwater. Following the construction of the pipeline, ground conditions that maintain the pre-construction groundwater flow (and quality) conditions would be achieved. Trench cut-offs are one identified mitigation method that could be implemented to achieve.	The amount of dewatering works is yet to be finally determined. A number of mitigation methods have been documented in the PIA. Site specific investigations may be required to first understand the potential extent of impact, but also to identify the most appropriate management measure that needs to be implemented, when the pipeline location and construction details are finalised.
			Social Impact Socio-Economic	Community effects are covered in the <i>PIA Report</i> - Table 5 – “Environmental, Assets, Impacts and Mitigation for the Broader Region”. If Glenburn Community Hall is impacted suitable repairs/replacements will be implemented in agreement with the council and community. Access will be maintained on the Melba Highway. The Socio-economic and tourism report addresses the issue of impacts on tourism and events and proposes mitigation and management measures.	No further refinement required.
			Flora and Fauna	The preferred corridor through Toolangi State Forest will construct a pipeline corridor that runs parallel to Melba Hwy. Construction widths will be reduced to whatever is feasible to minimise the loss of native vegetation and wildlife habitat. A variety of other measures will be implemented to reduce the impact from the loss of habitat through this area, including vegetation offsets and the management of open trenches during construction. The Alliance is working closely with DSE to ensure the impacts are managed within statutory guidelines. They are also ensuring that the impacts are managed in accordance with EPBC Act conditions for the project.	The Offset Management Plan is being (OMP) prepared in consultation with DSE
			Traffic	Access along the Melba Hwy will be maintained at all times. During certain construction times the highway may be reduced to a single lane. Section 3.1 of the <i>Traffic Impact Assessment</i> contains details including queuing and delay assessment procedures. Yes, at least one lane of the Melba Highway is to remain open to traffic at all times. (TIA Section 3.1, including queuing and delay assessment).	No further refinement required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
6	Alan Cassell	5318 Goulburn Valley Highway, Yea, VIC, 3717	Flora and Fauna	<p>Page 41 of the <i>Flora and Fauna Assessment</i> details the 3,200 survey hours spent by surveying teams in the field. Figure 3 (p. 43) indicates only one fauna survey site. However, this does not take account of the multiple trap sites for reptiles and mammals also undertaken in sections A, B and C that are also shown in this Figure. . It is notable that this figure is now dated, and a significant amount of further survey work has been undertaken in this and other areas of the corridors.</p> <p>Flora surveys were undertaken throughout the corridors, as indicated by the coverage of vegetation mapping (Appendix A). Section 3.3.4 (p. 38) mentions the 24 quadrats undertaken to date. It is noted that once the final construction foot print is established a habitat hectare assessment will be undertaken throughout the entire alignment for the purposes of the offset management plan finalisation.</p> <p>It has been noted that Map 3 was erroneously omitted from the report, the flora and Alliance team apologise for this omission.</p> <p>A comprehensive weed management program will be undertaken as part of the EMP, which will include the mapping of all weed management issues within the alignment. It is noted that, to date, Chilean Needle Grass has not been identified in the study area (either by the Alliance or in records held by DSE). Specific management plans will need to be endorsed by DSE and/or DEHWA, so will therefore need to be developed in a clear and effective manner. The Alliance is currently working with the Victorian Legless Lizard Working Group to ensure an effective management plan is produced for this species.</p> <p>The future management of the pumping station site (Sheoak) is currently being determined. The development of pumping infrastructure will involve the development of approximately 5% of the property. The remaining area presents an opportunity to manage the conservation values to assist with the offset requirements of the project, although at this stage this has not been confirmed.</p> <p>Please refer to the Alliance response to submission 26 for further information relating to noise and vibration interferences with fauna.</p>	Environment Management Strategy and associated Environment Management Plans are being prepared
			All Specialists	<p>The exact monitoring programs are still to be developed. It is anticipated that Construction Dust monitoring will not be required post construction, however Geotechnical specialists will require monitoring to occur both during and post construction for an appropriate period of time.</p> <p>The PIA report provides a clear indication of 3,200 man hours of field work alone undertaken in by flora and fauna teams alone. Most studies are a mixture of desktop investigations, preliminary field investigations and site visits and detailed field investigations. The depth of study is appropriate to the complexity of the issues being managed and the potential impacts.</p>	No further refinement required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Aquatic Ecology	<p>Aquatic Ecology specialists have identified turbidity as an issue with construction as the biggest threat to the riparian ecosystems. This will be managed to acceptable statutory levels with the application of specific construction and management practices. These mitigation and management measures to minimise impact of construction of pipeline across waterways have been discussed in Section 4.6.2 of the report Hydrology, Water Resources and Waterway Crossings Impact Assessment. These are also being addressed as part of the Environmental Management Strategy, which includes mitigation measures and habitat reinstatement.</p> <p>Approval is being negotiated with Goulburn Broken CMA and Melbourne Water for works on waterways for all locations where the pipeline intersects a 'designated waterway'. The pipeline will not cross "thousands of gullies". Indeed, our studies identified only one partially stabilised gully system within the preferred alignment. Erosion control works will ensure that impacts are minimised.</p> <p>The preferred corridor will cross a number of waterways and the processes occurring at each crossing in terms of surface water and groundwater needs more clarification at this time. The geology suggests that crossings are likely to comprise a thin alluvial aquifer system overlying a fractured bedrock aquifer and that the two would be interconnected from a regional perspective. The crossing construction methodology would determine the amount of dewatering (and thus potential for impact) to occur, as would the timing of the construction, particularly in relation to ephemeral streams. Following pipeline construction, ground conditions that maintain the pre-construction groundwater flow (and quality) conditions would be achieved, but would also prevent scour and erosion. Trench cut-offs are one identified mitigation measure that could be implemented to achieve this in terms of preventing lateral migration of groundwater (or hydraulically connected surface water) along permeable pipeline backfill materials.</p> <p>Methods of desktop study used to determine fish species have been outlined in section 2.3.4(p. 36) of the <i>Aquatic Ecology Impact Assessment</i> and the results follow in s. 2.3.5 (pp. 38-40). Methods for current survey are outlined in s. 3.1.1(pp. 49-51). The summary of survey results are outlined in s. 3.2 (pp. 52-64). Discussion of results from current survey are outlined in s. 3.3.1 (p. 65)</p>	The amount of dewatering works is yet to be finally determined and needs to be considered in parallel with the construction crossing methodology. A number of mitigation methods have been documented in the PIA. Site specific investigations may be required to first understand the potential impact, but also to identify the most appropriate management measure that needs to be implemented, when the pipeline location and construction details are finalised.
			Environmental Implications of Transferring Water	<p>During high flow periods that typically occur during the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions is not likely to have any detrimental effect on environmental values and will not significantly reduce habitat availability. If extractions occur at other times of the year then specific releases may need to be made from Lake Eildon and will be subject to a Bulk Entitlement, further information is provided in Section 6 of the report entitled <i>Environmental Implications of Transferring Water Savings from the Goulburn River</i>.</p> <p>Water savings achieved through the Food Bowl Modernisation Project will be stored in Lake Eildon and shared equally between irrigators, the environment and Melbourne Water.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Design	The preliminary proposal for power supply includes a zone substation east of Yea, with two 22 kV high voltage power cables extending from the substation to the pipeline easement. One set of 22 KV power supply cables then follows the pipeline easement to the Goulburn River Pumping Station near Killingworth Reserve and the other follows the pipeline easement to the High Lift Pumping Station site south of Yea. The method of construction may be above ground on poles or buried in a trench. The construction method has not been decided to date.	No further action required.
			Contaminated Land	The issue regarding concern about farms containing arsenic and organophosphates has been addressed in the <i>Strategic Contaminated Land Assessment (CLA)</i> (Appendix F). Section 3.2 of the report states 'Once the final alignment of the pipeline has been confirmed a final detailed review of these sites may be required to check for potential localised sources of contamination such as machinery sheds or stock dips, which were not identified in the study to date. Metals (including arsenic) and pesticide analysis has been undertaken on samples collected to date, however, these samples have only been collected from 'accessible' areas (not including private property). Appropriate EHS measures will be in place to ensure potentially contaminated soils are appropriately managed to required guidelines.	Further studies of potential localised areas of contamination will occur after the detailed alignment is confirmed. In the short term studies will be dependent on access to private property.
7	Jan Nitsos (McLeish)	13 Aranga Crescent, Donvale, VIC, 3111	Social Impact Socio-Economic Environmental Implications of Transferring Water Design	<p>This submission reflects the concerns of a number of submitters that the pipeline construction will destroy assets and restrict access to properties for extended periods. There is a degree of flexibility with the final specific alignment site and even with the width of the construction corridor in some cases.</p> <p>Specific requirements for each property will continue to be negotiated with each property owner. Due to this available flexibility it is unlikely that key farming infrastructure will be knocked down. Where removal or relocation is essential the infrastructure will be replaced with agreed facilities to provide a similar or better farming service. Compensation will be available for temporary economic loss including 'rental' of the corridor during construction and for the on-going easement.</p> <p>While property specific issues need to be taken into account, the allegation that one-third of grazing land will be taken seems to be based on the erroneous assumption that the easement will not be usable for grazing, when it in fact <i>will</i> be usable for grazing. All disturbed land will be reinstated and will be useable within a reasonable time. Compensation will be available for genuine production loss.</p>	No further action required.
			Traffic	The Sugarloaf Pipeline Alliance is committed to ensuring that access to private property is retained at all times as far as is possible, in one form or another. Where access is impacted, this may include the provision of an alternate access or safe access through/around the construction corridor. Any altered access should allow sufficient provision for heavy vehicle access where required (e.g. cattle carrying vehicles). This will be considered as part of a construction management plan.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
8	Trudy Birchall	RMB 6197 Yea Vic 3717 or Nashs Rd Yea	Traffic	<p>The proposed construction of the pipeline and associated facilities will result in an increase in traffic, including heavy vehicles, over the 18-24 month period of construction activity. This traffic (including heavy vehicles) can be safely and efficiently managed, which will be facilitated by appropriately prepared Traffic Management Plans that will be independently audited (for further information refer to the <i>Traffic Impact Assessment (TIA)</i>, Section 3.4).</p> <p>The increase in traffic will be well within the traffic-carrying capacity of Melba Hwy (TIA Section 3.2.4). Access along the Melba Highway will be maintained at all times (TIA Section 3.1, including queuing and delay assessment). In the case where a 500m section of the Melba Hwy is reduced to one lane (say, within the Forest) on a day with high peak traffic (say, queens birthday long weekend) queues of up to 18 cars, with delays of up 6.5 minutes, may occur - however it is noted that this is a highly conservative estimate and in reality it is expected that the impact will typically be much less significant.</p> <p>Please refer to Alliance response to submission 7 regarding loss of farm land.</p>	No further action required.
			Social Impact	Health Implications and other social issues are covered in the <i>PIA Report</i> - Table 5 – “Environmental, Assets, Impacts and Mitigation for the Broader Region”.	No further action required.
			Flora and Fauna	<p>A comprehensive Environmental Management Plan (EMP) framework has been developed for the project (EMS, EMP, WAP) to appropriately protect environmental values.</p> <p>Approximately 30 metre construction corridor will be required for installation of the pipeline, which will involve the loss of native vegetation and habitat. Following that, the construction corridor will be revegetated with suitable species depending upon the surrounding land use. Unavoidable native vegetation loss will be offset in accordance with Victoria's Native Vegetation Management Framework. Grazing lands can be reinstated over the pipeline; however an easement of up to 15 metres will be required.</p>	Environment Management Strategy (EMS) and associated Environment Management Plans (EMP) and Work Activity Plans (WAP) are being developed.
			Noise and Vibration	<p>The pipeline construction work is of relatively short time duration. The noise levels generated during construction will be kept to a level within EPA guidelines.</p> <p>Construction of the pump stations will be of a longer duration but noise levels will be kept within EPA guidelines.</p> <p>Pump station operation - Noise limits have been derived based on existing background noise levels using the <i>SEPP EPA N-3 (Draft) Noise Policy</i>. Acoustic impact to the environment will be minimal.</p> <p>Noise will be contained within EPA guidelines.</p>	No further action required.
			Design Social Impact	Social and economic issues are covered in the <i>PIA Report</i> - Table 5 - Environmental, Assets, Impacts and Mitigation for the Broader Region.	The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Communications	The local water authorities and government agencies have been involved with the project at a very early state and are represented on the Agency Reference Group (AGR).	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
9	Kevin Reid	196 Waranga Dr, Kialla, Vic, 3631	Environmental Implications of Transferring Water	<p>The report entitled <i>Environmental Implications of Transferring Water Savings from the Goulburn River</i> indicated that flow and river level changes downstream of the extraction point will be minimal and would not represent a risk to environmental values, threatened species or water quality. Extractions are not expected to contribute to blue green algal blooms because flow in the Goulburn River will be sufficient to prevent blooms forming.</p> <p>The Barmah Forest is located downstream of the Goulburn weir, the extent of the study area.</p>	No further action required.
			Flora and Fauna	A separate referral was made to DEHWA discussing all relevant issues covered by the EPBC Act, including all of the potential threatened species and migratory species relevant to the project.	No further action required.
10	Helen Hauser	67 Myles Rd, Murrindindi, Vic, 3717	Social Impact Socio-Economic Landscape and Visual	<p>The precise Goulburn River pump site has not yet been determined - it may be on private land. In any case, the importance of Killingworth Reserve to the local community is recognised in the <i>Social Impact Assessment Report</i> (Chapter 5).</p> <p>Mitigation measures will ensure that the structure's design is suitable to blend in with the existing environment i.e. colour of the pump station and landscaping</p>	No further action required.
			Traffic Socio-Economic Social Impact	<p>Assessments have been made within the PIA to better understand the social and environmental impacts of this project. Social issues are addressed within the PIA report, as a Noise, Traffic, Construction etc. The interruption to country life is limited in duration and the strategy to minimise the impacts to the community have been outlined within the PIA.</p> <p>Construction traffic will not exceed the traffic carrying capacity of the adjoining road network and can be effectively managed.</p>	No further action required.
			Traffic	<p>Killingworth Road is of suitable standard and geometry to accommodate the expected construction traffic. Traffic management measures will be required to safely manage the additional traffic (for example, at intersections; speed limits; etc).</p> <p>The Traffic Management Plan will be subject to VicRoads and Council approval and will cover operations in the Killingworth Road area.</p> <p>Please refer to the Alliance response to submission 7 for further information regarding access.</p>	No further action required.
			Social Impact	Social issues are covered in the <i>PIA Report</i> - Table 5 – "Environmental , Assets, Impacts and Mitigation for the Broader Region".	No further action required.
			Noise and Vibration	Please refer to Submission 7 regarding Noise of the Pump stations.	No further action required.
11	Debra Bertalli	5384 Melba Highway, Yea, Vic, 3717	Socio-Economic Social Impact Traffic	<p>Impact on properties will be limited to an approximate 30m construction corridor unless otherwise agreed with individual landowners/occupiers. Access to check stock, crops and other assets will be maintained by agreement.</p> <p>The issue of the cattle sales is noted in a number of submissions. As these are broadly monthly at scheduled times, at present access to the sales will be able to be retained with pipeline work scheduled to facilitate this.</p> <p>Please refer to Alliance response to submission 7 for further information.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Geomorphology Hydrogeology	<p>Erosion and other impacts will be minimised with mitigation and management measures for construction of the pipeline across waterways to statutory requirements. These have been discussed in Section 4.6.2 of the report entitled <i>Hydrology, Water Resources and Waterway Crossings Impact Assessment</i>. These are also being addressed as part of the Environmental Management Strategy and approval will be sought from the CMA and Melbourne Water for works on waterways for all locations where the pipeline intersects a 'designated waterway'.</p> <p>The Pipeline does not cross Yea River Wetlands, and is anticipated to have minimal impact on the wetlands.</p> <p>Please refer to Alliance response to submission 5 for further information.</p>	No further action required
			Social Impact	<p>Social issues are covered in the <i>PIA Report</i> - Table 5 - Environmental , Assets, Impacts and Mitigation for the Broader Region.</p> <p>Landowner agreements, temporary fencing and dedicated contact representatives will reduce any need for landowner monitoring of works. Based on experience, the Alliance anticipates that the pipeline and easement will have very low landowner involvement or interest following construction.</p>	No further action required.
			Traffic Design Construction	<p>Property access will be maintained in consultation with landowner/occupier requirements.</p> <p>The closure of local roads will be minimised and, where possible, side roads or detours will be provided to minimise the disruption to local traffic, including the school bus. This will be considered as part of the traffic management plan. Landowners, land managers and occupiers will be fully informed on all arrangements including emergency vehicle access.</p> <p>Please refer to Alliance response to submission 7 for information regarding access.</p>	No further action required.
12	N.D. Reid	33 Eastfield Rd, Croydon, Vic, 3136	Not Applicable	No response required. Submission outside the Terms of Reference.	
13	Robert McGregor	"Alva Downs" RMB 204 Killingworth Road, Yea, Vic, 3717	Socio-Economic Design Social Impact	<p>A 500 metre buffer zone around the easement is not required.</p> <p>Following construction development can occur in very close proximity to the 15 metre easement.</p> <p>The issues raised in this submission would appear resolvable through negotiation with reasonable economic loss subject to compensation.</p>	The Alliance is in the process of visiting and discussing with each landowner to minimise impacts.
			Landscape and Visual	Vegetation will only be removed if there is no practical alternative.	No further action required.
			Social Impact	Social issues are covered in the <i>PIA Report</i> - Table 5 – "Environmental , Assets, Impacts and Mitigation for the Broader Region". Specifically, refer to the Social Impact Assessment section of the table which recommends the provision of counselling if so required. The <i>Social Impact Assessment Report</i> (Appendix K to the <i>PIA Report</i>) acknowledges the range of social impacts associated with pipeline construction.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Construction	Construction will require a cleared width of around 30 metres. This may be reduced to avoid isolated obstacles such as large trees or buildings.	No further action required.
			Construction Dust Noise and Vibration Traffic	<p>The pipeline construction work is of relatively short time duration. The noise levels generated during construction will be within EPA guideline levels. It is proposed that construction will be performed during the day time period only.</p> <p>Construction of the pump stations will be of a longer duration but noise levels will be kept within EPA guideline levels. Please refer to submission 10 for further information regarding noise impacts from the pump station.</p> <p>If stock handling facilities are affected, agreed temporary arrangements will be made with landowners. Provided that any 'stock crossing' activities are undertaken safely and in accordance with road rules and VicRoads guidelines, these can continue to occur within Killingworth Road (note that 'stock crossing' is inappropriate for Melba Hwy).</p> <p>The potential for Dust impacts on amenity have been assessed as part of the <i>Construction Dust Assessment</i> (see Section 5 of report). To protect amenity during construction, a number of dust mitigation and management measures (see Section 6) have been identified. These measures will be the basis of an Air Quality and Dust Management Plan, which will form part of an overall Environment Management Strategy for the project.</p> <p>Please refer to the Alliance response to submission 7 for further information regarding access.</p>	No further action required.
			Design	Please refer to the Alliance response to submission 6 regarding electricity supply for the pipeline.	No further action required.
			Construction	<p>Access points will be discussed with landowners for mutual agreement where possible and safe to do so.</p> <p>Power supply is dedicated HV supply and unsuitable for domestic supply. Particular plantings may be negotiable for landowners as part of the reinstatement. Disturbed areas will be reinstated including planting and removal of construction debris.</p> <p>Facilities for Alliance workers will comply with the <i>Building and Construction Workplaces (Code of Practice No. 13)</i>.</p>	No further action required.
14	Alan and Sonia Manzoori	203 Steels Creek Road, Yarra Glen, Vic, 3775	Socio-Economic	<p>Preference of the Alliance is to use Maroondah Aqueduct Steels Creek Siphon pipe track, which would bypass this property. This decision is not finalised at this stage.</p> <p>This property is located in Steels Creek Road and therefore not on the preferred route at present. It is apparently a small nine acre vineyard that has just reached the commercial fruit stage. The actual impact on the vineyard will depend on the ability to route the pipeline away from productive parts of the property and key farming and residential facilities.</p>	No further action required.
			Design	As above.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
15	Richard McGrath	15 Sellick Dr, Croydon, Vic, 3136	Environmental Implications of Transferring Water	The <i>Environmental Implications of Transferring Water Savings from the Goulburn River</i> report has assessed the environmental implications of water extractions between Yea and Goulburn Weir, including effects on floodplains and wetlands. During the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions at the off-take site is not likely to have any detrimental effect on environmental values, nor would it influence flood levels that would contribute flows to wetlands. Unrestricted stock access, clearing of vegetation and seasonal reversal of flow regimes due to current irrigation releases has a greater impact on floodplain and wetland health.	No further action required.
			Design Traffic Social Impact	Social and economic issues are covered in the <i>PIA Report - Table 5 – “Environmental , Assets, Impacts and Mitigation for the Broader Region”</i> . Following construction access to the easement will be limited. Please refer to the Alliance response to submission 8 for further information regarding construction traffic.	The Alliance is in the process of visiting and discussing with each landowner to minimise impacts.
			Design	Assessment of the exact number of houses affected is not possible as a 100m corridor has been investigated, until the approximate 30m construction alignment detailed design is completed these figures will not be available. The Alliance is in the process of visiting and discussing with each landowner to minimise impacts.	No further action required.
16	Robert Gilmore	23 Hazeldene Rd, Gladysdale, Vic, 3797	Not Applicable	No response required as submission outside the scope of the Terms of Reference	
17	Rebecca McGrath	15 Sellick Dr, Croydon, Vic, 3136	Social Impact Traffic Design	The pipeline construction work is of relatively short time duration. The noise levels generated during construction will be within EPA guideline levels. It is proposed that construction will be performed during the day time period only. Construction of the pump stations will be of a longer duration but noise levels will be kept within EPA guideline levels. The <i>Social Impact Assessment Report</i> acknowledges the range of social impacts associated with the project. The <i>Social Impact Assessment</i> component of Table 5 – “Environmental , Assets, Impacts and Mitigation” in the <i>PIA Report</i> recommends counselling service wherever stress is experienced . Please refer to Alliance response to submission 7 for further information regarding access and land use issues.	The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Flora and Fauna	Please refer to Alliance response to submission 5 for further information.	No further action required.
			Greenhouse	For the energy required for the operational phase of the project (i.e. pumping water from the Goulburn River to Sugarloaf Reservoir), Melbourne Water has made a commitment to obtain the energy from renewable sources.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
18	D.J Forrester (Balgownie Estate)	PO Box 308, Yarra Glen, Vic, 3775	Traffic Noise and Vibration	<p>The pipeline construction work is of relatively short time duration. The noise levels generated during construction will be within EPA guideline levels. It is proposed that construction will be performed during the day time period only.</p> <p>Construction of the pump stations will be of a longer duration but noise levels will be kept within EPA guideline levels. Please refer to submission 10 for further information regarding noise impacts from the pump station. Regarding the pump station operation, noise limits have been derived based on existing background noise levels using the <i>SEPP EPA N-3 (Draft) Noise Policy</i>. Acoustic impact to the environment will be minimal.</p>	No further action required.
			Design		The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Socio-economic Design Construction	<p>A side track will be constructed in Gulf Road for the duration of works to allow access to properties.</p> <p>This submission is from Balgownie, a substantial wine and tourism operation. Construction of the pipeline along two sides of the property will impact on visitation. The extent will depend on the length of time that the construction takes, the time of year and the limitations on access. Use of the current aqueduct from before Balgownie would obviate this issue if technically feasible.</p> <p>The report suggests possible mitigation measures including local promotion, relevant information and access signage together with post construction marketing to assist in restoring and extending visitation. Lastly, as noted in the submission the company would be seeking compensation.</p>	The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Construction Dust	<p>Vineyards (and other agricultural practices) have been considered as sensitive locations in regards to health and amenity impacts due to dust (see Sections 2 and 5.1.3 of the <i>Construction Dust</i> report). Dust management measures have been recommended where construction activities are within close range of sensitive receiver sites (see Section 6 of report). These dust management measures will form part of Environment Management Plans for the project.</p>	No further action required.
19	Wendy and Malcom Warnock	183 Gulf Road, Yarra Glen, Vic, 3775	Aquatic Ecology Flora and Fauna	<p>The design of the infrastructure is intended to result in the lowest possibility of biological material being transported from the Goulburn to Sugarloaf. Details of these features have been discussed in s. 3.3.3 (p. 67 of the Aquatic Ecology report).</p> <p>A biosecurity management protocol is being developed with DPI. DPI guidelines will be employed as a minimum requirement.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Hydrology Flora and Fauna	<p>Unclear whether this submission is referring to the scour of the bed and banks at waterway crossings, or the operation of scour valves as part of routine maintenance.</p> <p>Scour at waterway crossings will be managed as part of the EMP and all disturbed areas reinstated.</p> <p>The <i>Flora and Fauna Report</i> has identified the potential impacts of the project in section 5.1 (Appendix H of PIA, page 133-149). Both directly and indirectly, many of these address the potential impacts of the project upon the flora and fauna in waterway (riparian) habitats. A range of mitigation measures have been developed to avoid and minimise each of these potential impacts (see section 5.2 of the FF report, Appendix H of the PIA, page 149-156).</p> <p>Please refer to the Alliance response to submission 6 for further information regarding waterway crossings.</p> <p>A biosecurity management protocol is being developed with DPI. DPI guidelines will be employed as a minimum requirement.</p> <p>Please refer to Alliance response to submission 35 for further information.</p>	<p>Location of scour valves along pipeline being determined by design group. Their location and outfall works required to transfer water to adjacent waterways have been considered by the Alliance team. They will also be considered as part of works on waterways approval process.</p> <p>The impacts on waterways of operating scours has not been addressed in the PIA and is currently being addressed.</p> <p>Environment Management Strategy and associated Environment Management Plans are being developed.</p>
			Hydrology	<p>Based on the land subject to inundation overlay for the Yarra River and Steels Creek, the pipeline does not impinge on the flood inundation zone. All works at crossing will be subject to approval of Works on Waterways with Goulburn Broken CMA and Melbourne Water. This will ensure that appropriate reinstatement works are carried out and minimise sediment runoff to waterways.</p>	No further action required.
			Hydrogeology Design/Construction	<p>The intersection of a saturated aquifer may require temporary dewatering activities to be undertaken to enable pipeline construction (please refer to submission No.5 and No.6). A concern exists that the pipeline may act as a preferential pathway for groundwater recharge or migration. Management options are available to mitigate these impacts should the aquifer be intersected.</p> <p>Please refer to the Alliance response to submission 6 for further information regarding waterway crossings and groundwater interception.</p>	No further action required.
			Aquatic Ecology Flora and Fauna	<p>A targeted assessment of the burrowing crayfish was undertaken by specialist zoologists. No EPBC/FFG species were located in the aquatic easement. Should any crayfish be identified a recovery plan to translocate borrows may be considered in line with DSE requirements.</p>	No further action required.
			Construction Dust Noise and Vibration	<p>Due to the distance at which the residences are located from the preferred pipeline corridor, the construction works will have minimal impact. Where buildings are located close to the construction works, ground vibration monitoring will be conducted to ensure that the ground vibration levels are below the recommended levels and are presented in the appropriate standards.</p> <p>Dust mitigation and management measures specific to the use of roads during construction have been recommended (see s. 6 of the <i>Construction Dust</i> report). These measures will form part of Environment Management Plans for the project. It was also recommended that consideration be given to sealing of local roads, if the project requires many months of vehicle movements over these roads (see s. 5.2 of the <i>Construction Dust</i> report).</p>	<p>Further assessment will be undertaken that will identify unsealed roads which may be frequently traversed by vehicles during the construction period and determine appropriate control measures.</p> <p>Where typical dust mitigation and management measures will not be sufficient, the possibility of sealing roads should be considered</p> <p>Compensation strategies within this project are Currently under development.</p>

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Construction	The anticipated normal working hours in Gulf Road are during the day Monday to Saturday. Actual working hours will be subject to seasonal adjustment (i.e. later starting time and earlier finish time in Winter months). Pipe laying in Gulf Road may average 120 metres per day, however, the total time from erection of temporary fences to reinstatement of property could several weeks (as reinstatement is dependent on suitable conditions).	No further action required.
			Construction Design Flora and Fauna	<p>The preference of the Alliance is to use Maroondah Aqueduct Steels Creek Siphon pipe track which would bypass this property, however this decision not finalised as yet.</p> <p>Road reserves have generally not been considered for construction, particularly where native vegetation occurs. However, if Gulf Road is selected as the final alignment, mitigation measures will be employed (in the Vegetation Management Plan) to avoid or minimise impact to Matted Flax Lily.</p> <p>It is noted that no EPBC listed Burrowing Crayfishes have been located in the study area.</p>	No further action required.
			Traffic	A side track will be constructed in Gulf Road for the duration of works to allow access to properties. Vehicular access to Gulf Road (or other local roads or accesses) and the adjoining properties will be retained to minimise impact to property owners, local traffic and any school bus route. This may include the provision of a side road or detour.	No further action required.
			Socio-economic	There is a plan to compensate loss of income as a result of construction works.	No further action required.
20	Margaret Taylor (Glenburn Hall and Progress Association Inc.)	PO Box 221, Yea, Vic, 3717	Social Impact Cultural Heritage	<p>If Glenburn Community Hall is impacted suitable repairs/replacements will be agreed with the council and the community. Any temporary access restrictions (for example, during construction) will be restored when construction is complete. Permanent buildings will not be permitted over the final easement (15 metres wide).</p> <p>This submission notes concern about possible loss of a heritage swimming hole at Devlins Creek. The protection of this community and potential tourism asset will be considered.</p>	No further action required.
			Traffic	<p>The <i>Traffic Impact Assessment</i> (TIA) indicates that the Melba Hwy can adequately accommodate the additional construction traffic (for more information, please refer to the TIA, Section 3.2.4). The TIA is based on the traffic volume estimate provided by VicRoads (dated 10 September 2007). However, this information is a VicRoads estimate only. The data also quoted in the TIA is based on actual traffic volume data collected by VicRoads, however this data provided slightly lower traffic volumes than the estimate. Accordingly, the estimated traffic volumes were adopted to provide a more conservative assessment of the existing traffic volume. The two-way traffic capacity of Melba Highway is 1,209 vph. This is the maximum traffic volume that the Melba Hwy could accommodate before traffic flow breakdown starts to occur (i.e. unacceptable delays and congestion).</p> <p>A Traffic Management Strategy is being developed that sets up the overarching framework within which site specific Traffic Management Plans (TMPs) will be prepared. The TMPs will each be independently audited. (TIA s. 3.4) <i>See to submission 7 for information regarding access to private property.</i></p>	A Traffic Management Strategy and Plan will be agreed between VicRoads and local Council and will include contributions from transport operators. Provision will be made at all worksites to allow emergency vehicle access.
21	Terry Court	PO Box 454, Tatura 3616	Not Applicable	No response required. Submission outside Terms of Reference	
22		566 Killingworth Road, Yea	Not Applicable	No response required. Submission outside the Terms of Reference	

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
23	L.Hughes	786 Fuzzards Road, Waaia, Vic, 3637	Not Applicable	No response required. Submission outside the Terms of Reference	
24	Mrs Helen Doolan	1920 Henderson Rd Girgarre, Vic, 3624	Not Applicable	No response required. Submission outside the Terms of Reference	
25	Steels Creek Landscape Group	719 Steels Creek Rd, Steels Creek, Vic, 3775	Design Flora and Fauna Social Impact	Final decisions on the pipeline route will follow the Advisory Committee process. The <i>Social Impact Assessment Report</i> acknowledges the community significance of vegetation in Glenview Road.	No further action required.
26	Peter and Marianne Murry	13 Moony Drive, Wodonga, Vic, 3690	Environmental Implications of Transferring Water	Please refer to the Alliance response to submission 8 for further information.	DSE as project proponent to respond to issue regarding implications to the MDB and federal water plan.
			Hydrology	All waterway crossing inspections have not been completed, approximately 20 crossings are yet to be inspected. Upon agreement of the final pipeline alignment these crossings will be inspected.	Some 20 crossings to be inspected. If the alignment changes and if additional crossings are introduced to allow access for construction, this will require further work.
			Flora and Fauna	<p>Fourteen fauna habitats have been identified for the study area, one of which is "scattered indigenous trees and shrubs" (see Appendix F of PIA, page 269 for description). Five woodland and forest habitat types have also been identified within the project area, which includes remnants on roadsides and in private land (see Appendix F of PIA, pages 264 to 269). The occurrence of these habitat types within each of the landscape units is also discussed (see Appendix F of PIA, section 4.7, pages 76 to 132).</p> <p>An detailed assessment of the exact loss of isolated trees will be undertaken once exact alignment is known. Isolated tree assessments are required as part of the Net Gain Approval process. Where possible, isolated trees and other small patches and narrow strips of native vegetation will be avoided. Where this is not possible, they will be offset in accordance with the Native Vegetation Management Framework.</p> <p>The mitigation measures preferred in the Flora and Fauna report (section 5.2) cover the range of potential ecological impacts that have been identified for the project. These mitigation measures are being developed in greater detail within the EMP and WAP documents once the final alignment has been determined.</p>	<p>Environment Management Strategy and associated Environment Management Plans and Work activity Packs are being developed.</p> <p>The Offset Management Plan (OMP) is being prepared in consultation with DSE</p> <p>Exact losses of scattered individual trees and other smaller patches of native vegetation will be determined once final alignment is known. The possibility for micro-realignments to minimise and avoid losses will be undertaken during this phase.</p>
			Greenhouse	The greenhouse gas emissions resulting from vegetation clearance were calculated in the <i>Greenhouse Gas Report</i> . The calculated figure was based on the estimated removal of vegetation and included all vegetation (not just trees) to be removed.	No further action required.
27	Iain McPherson	50 Break O'Day Road, Glenburn Vic, 3717	Social Impact	<p>Representatives of DSE have attended Community Meetings to explain the reasoning and policy considerations behind the pipeline project. The Melba Highway route has been shown to be the least impact route and is considered to have less severe impacts on private property.</p> <p>The <i>Social Impact Assessment Report</i> recognised community anxiety and recommended counselling where appropriate.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Hydrology	<p>Construction techniques will be subject to Works on Waterways Approval Process with Goulburn Broken CMA and Melbourne Water. The main water quality indicator of concern is turbidity and suspended solids during construction. Construction techniques will aim to maintain turbidity within the natural range experienced in the river and will be the subject of the EMP.</p> <p>Please refer to the Alliance response to submission 26 for further information.</p>	<p>Some waterway crossings to be inspected, the Alliance plans to complete these surveys by end of April. If the alignment changes and if additional crossings are introduced to allow access for construction, this will require further work.</p> <p>Environment Management Strategy and associated Environment Management Plans are being developed.</p>
			Socio-economic	<p>Discussion between Alliance members and Hall Committee members at the last Glenburn Information Session indicated that the issue regarding the Glenburn Hall could be addressed. The submission suggests that the report only considers the construction effects. This is untrue. The longer term impacts are considered but are considered to be less significant than the effects during construction. Similar mitigation issues have been proposed and, where the longer term impacts have a significant adverse economic outcome, should be subject to appropriate compensation.</p> <p>The submission suggests that the pipeline will leave a permanent scar along the Highway. The proposed reinstatement process should address this issue. The submission also suggests that the pipeline will affect the whole of the paddocks it crosses unless the construction corridor is fenced. The corridor will be fenced where required and this was indicated by Alliance representatives at information sessions.</p> <p>The submission suggests the short term losses during construction could bankrupt some operators. This should not happen as a result of the pipeline as real and demonstrable losses caused by pipeline construction should be eligible for appropriate compensation. However, if farmers are already experiencing financial difficulties due to drought or other issues, they may need additional assistance.</p> <p>Consideration was given to tourism operators on the Goulburn including direct discussions which suggested that the proposal was unlikely to have negative impacts. This was commented on in one or more of the progressive reports prepared for the PIA.</p>	No further action required.
			Flora and Fauna Cultural Heritage	<p>The Alliance is committed to preservation of landmarks and heritage assets. English Oaks have been included in the flora species list, however, English Oaks are not native flora and are therefore not protected as such by EPBC/FFG Acts.</p> <p>Fauna movement through Toolangi will be carefully considered as part of the EMP once the final alignment has been determined.</p>	<p>Environment Management Strategy and associated Environment Management Plans are being developed.</p> <p>The community value of the English Oaks is acknowledged and the Alliance is in the process of discussing individual landowner requirements with all landowners.</p>
			Traffic	<p>Please refer to the Alliance response to submission 19 for further information regarding the potential closure of local roads.</p> <p>Please refer to the Alliance response to submission 8 for further information regarding traffic impacts to Melba Hwy. Note that this applies to all sections of Melba Hwy, including sections E and F.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Design Construction	<p>The transfer of mud onto sealed roads will be managed by the use of wheel washes and other means. Sealed roads will be cleaned regularly, particularly at property exit locations.</p> <p>The scour valves are only operated for maintenance and for short periods - water is discharged to local streams - it is the same water pumped from the Goulburn and unchanged in quality.</p>	Scour releases not addressed in PIA. And are currently under consideration.
			Environmental Implications of Transferring Water	<p>The <i>Environmental Implications of Transferring Water Savings from the Goulburn River Report</i> assessed the environmental implications of water extractions between Yea and Goulburn Weir. During the irrigation season the predicted reduction in water levels is ~5 cm, this is equivalent to 50mm or 0.05m. It appears that the author of this submission has misinterpreted this when referring to a 5mm change. The standard units used to describe volume in reservoirs is ML or sometimes GL (1GL = 1000ML). Units of river height (i.e. m, cm, mm) are not comparable to storage volume in Lake Eildon.</p>	No further action required.
			Hydrogeology	<p>Please refer to submission 5 for further information relating to hydrogeological aspects of the pipeline project.</p>	No further action required.
			Geomorphology	<p>Removal of vegetation will essentially be limited to the construction corridor. Erosion mitigation measures will be in place to minimise the impact vegetation clearance has on potential erosion.</p>	No further action required.
			Landscape and Visual	<p>Vegetation will only be removed if there is no practical alternative option that would result in minimal destruction of the existing landscape value. Within Toolangi State Forest, part of the preferred corridor is within an existing easement. Also, the buffer distance between the Melba Hwy and the preferred pipeline corridor ranges from 100-300 metres. This distance will provide a mitigating buffer to sensitive receptors along the Melba Hwy by the retainment of existing vegetation. The longer term visual impact of views from the Melba Hwy will be low. Vegetation located within the corridor will be removed, however mid and background views will remain consistent.</p>	Where the selected corridor traverses the Toolangi State Forest, Management Guidelines for Areas of High Scenic Quality identified within the Forest Management Plan for Central Highlands will be considered.
			Contaminated Land	<p>To date the assessments have covered the broader corridor and the outputs have been used for route selection and pipeline design. There will be further geotechnical investigations to refine mitigation measures, inform the final design and identify management of the final alignment.</p> <p>Further characterisation to be undertaken (as part of geotechnical investigations), will determine if potential acid sulphate producing soil/rock (ASS) is likely to be intercepted. Detailed ASS environmental and OHS management measures will not be produced until the likelihood of intercepting ASS is determined.</p> <p>Potential ASS would be managed in accordance with a suitable industry-recognised practise and appropriate environmental and OHS measures will be implemented.</p>	Further soil/rock characterisation to be undertaken (to determine if potential acid sulphate producing soil/rock (ASS) is likely be intercepted) before detailed ASS environmental and OHS management measures will be produced.
			Geotechnical	<p>The Project's Environmental Management Strategy, Environmental Management Plans and associated works packages will be approved by the relevant government departments (Department of Sustainability and Environment and Department of Planning and Community Development) prior to works commencing.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
28	The Hon Dr Sharman Stone	426 Wyndham Street, Shepparton, Vic, 3630	Flora and Fauna Aquatic Ecology	<p>The study only investigated impacts on the section of Goulburn River from off take to Goulburn Weir as agreed required by the state and federal government. During the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions at the off-take site is not likely to have any detrimental effect on environmental values. It is unlikely that altered water stage arising from extractions will result in measurable impact on water stage further downstream. Any impacts downstream of Goulburn Weir will be due to other Foodbowl Modernisation activities and not the sugarloaf pipeline.</p> <p>Under current conditions the majority of water released from Lake Eildon to the Goulburn River is then extracted from the river at Goulburn Weir to provide irrigators, so there is unlikely to be any change in the flow pattern downstream of the Goulburn Weir. Between Lake Eildon and Yea impacts will be minimal because the volume of water is already being released.</p> <p>Broad impacts that could occur on threatened species (and non-threatened species) have been identified in the FF report (see Appendix H of the PIA, section 5.1, pages 134-149). Specific impacts could not be identified with confidence due to the uncertainty about the final route alignment. Within the legislation section of the FF report (Appendix H of the PIA, section 6.1.1 and 6.2.1, pages 157 to 167), it is acknowledged that the project will have impacts upon threatened species - the uncertainty remained about whether the impacts would be considered 'significant' or not. Actions to minimise potential impacts have been identified as part of the EMS. Impacts on EPBC listed species will be considered by the federal government. Section 5 of the <i>Flora and Fauna Report</i> details regarding impacts and mitigation measures.</p> <p>The Alliance acknowledges that we have only sighted two EPBC listed threatened species and that there were a number of limitations to our study (See Appendix H of the PIA, pages 12-13 and 44-45). Because of these limitations, a conservative approach has been used in the FF report. However, more than 3000 hours of survey effort have been undertaken for flora and fauna assessments, and these surveys are on-going. Some properties have not been formally assessed. Information from other sources (e.g. viewing from roadsides, aerial photography, databases etc), which provides us with an indication of their ecological values.</p> <p>For any EPBC listed species known or suspected to occur within the project area, in the absence of complete information, we have not concluded that a significant impact is unlikely. We have also concluded overall for the EPBC Act that a significant impact is likely without any mitigation measures implemented, and that it is uncertain if a significant impact will occur with mitigation measures implemented. (See Appendix H of the PIA report, page 164).</p> <p>Weed and diseases risks have been identified in the FF report (see Appendix H of the PIA report, section 5.1). Transport of weeds will be managed as part of the project and details are outlined in the EMS and will include management of weeds prior to construction beginning and follow up action after construction is complete.</p> <p>The Alliance has acknowledged in the report that non-native predators could benefit from the project if mitigation measures are not implemented (Appendix H in PIA, section 5.1, pages 148-149). The mitigation measures do not specify that a predator control program would be developed and implemented. However, this will be incorporated as part of EMP/EMS.</p>	Development of non-native predator control program as part of EMS/EMP.
29	Ms Gillian Neil	10 Pinkerton Court, Wodonga, Vic, 3690	Not Applicable	No response required. Submission outside the Terms of Reference	

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
30	Phil Masters	5361 Melba Highway, Glenburn, Vic, 3717	Hydrology	Potential transport of weeds will be managed as part of the project and details are outlined in the Environmental Management Strategy, and will include management of weeds prior to construction beginning and follow up action after construction is complete. Actions to limit sediment transport to waterways include silt fences, minimal vegetation clearance and rapid reinstatement of disturbed areas. Appropriate monitoring of construction activities will take place.	No further action required.
			Traffic	Regarding delays to Melba Hwy traffic, closure of the Melba Hwy to one lane will only be required in sections where the pipeline will be pipe-jacked within the road reserve (i.e. predominantly in the vicinity of the Toolangi Forest). It is not envisaged that there would be more than one location where the Melba Hwy is reduced to one lane only. Regarding the Traffic Impact Assessments (TIA), the TIA is based on the information available at the time of distribution. A detailed assessment of the impact, safety and efficiency of individual construction accesses cannot be undertaken at this stage. However, the TIA does provide recommendations for the safe siting of construction access (TIA sections 3.3 & 3.4) Please refer to the Alliance response to submissions 8 and 20 for further information regarding traffic safety during construction.	No further action required.
			Hydrogeology	All required staff will complete Melbourne Water's recipient training and will have a letter/certificate to indicate completion of training.	No further action required.
			Hydrology	Mitigation and Management Measures to minimise impact of construction of pipeline across waterways have been discussed in s. 4.6.2 of the report entitled <i>Hydrology, Water Resources and Waterway Crossings Impact Assessment</i> .	No further action required.
			Aquatic Ecology Flora and Fauna	Transport of weeds will be managed as part of the project. Details are outlined in the EMP and will include management of weeds prior to construction beginning and follow up action after construction is complete. Refer to EMP and Weed Management Plan. Gorse is already present within the study area and will be managed within the construction corridor as part of the environmental management of the project. Gorse will not be increasing in distribution as a result of the project. Weed management, particularly of noxious weeds, will be required for the easement as long as the pipeline is operational. Melbourne Water will have management responsibility for the easement post construction. Please refer to the Alliance response to submissions 6 and 30 for further information.	Environment Management Strategy and associated Environment Management Plans are being developed.
31	Yarra Valley Tree Group	P.O. Box 119 Yarra Glen, Vic, 3775	Flora and Fauna	Cleared land would be the preference for construction, given the commitment to sustainability and the requirements of the Vegetation Management Framework. Project, following a 3-step process wherever possible (avoid, minimise, offset). Please refer to the Alliance response to submission 26 for further information. Offsets are required to replace any native vegetation that must be unavoidably removed.	No further action required.
32	Ellen Hubble	7 Mizmaze Road, Sherbrooke, 3798	Not Applicable	No response required. Submission outside the Terms of Reference	
33	Peter Tjepkema	24 Wills Road, Dixons Creek, Vic, 3775	Not Applicable	No response required. Submission outside the Terms of Reference	

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34	Louise Costa (president of The Goulburn Valley Environment Group)	P.O. Box 2073 Shepparton, Vic, 3632	Design	The detailed designs for the pump stations take into account environmental considerations, and will be reviewed prior to commencement of works. Post construction assessments will also be undertaken.	No further action required.
			Environmental Implications of Transferring Water	GBCMA and G-MW undertake environmental monitoring of the Goulburn River.	An environmental monitoring program is being developed.
35	James and Jenny Noonan	1910 Melba Highway, Dixons Creek, Vic, 3775	Socio-economic Design Construction	Significant disruption can be readily avoided, the Alliance willing to cooperate to achieve this. The issues raised tend to put a worst case situation. If the final route does impact on the orchard, the issue of road side sales may be able to be addressed by the timing of the construction and reinstatement of the sales facility and access area. If this is not possible appropriate compensation should be negotiated. Post-construction a road side stall should not be incompatible with any necessary easement. As noted above the construction area should be fenced and normal farm protocols such as closing gates complied with so that farm activities can continue safely during construction. If for any reason this is not possible, and stock have to be removed additional costs should be eligible for compensation. Access to the property for normal farm and domestic purposes would be discussed to minimise any disruption. Access to the property for seasonal delivery of wine and grape vines to the property for cool storage may be able to be addressed by planning any construction out of season. The submission also notes concerns related to impacts on the dam and its catchment which will need to be considered and about biosecurity issues. As noted in the report and other specialist reports the Alliance will implement and follow all required biosecurity protocols.	The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Cultural Heritage	Local Heritage values will be protected wherever possible. Pipeline construction will attempt to protect all local heritage values and therefore not impact directly on the old dairy. At this stage it is anticipated that the structure will remain standing.	The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Traffic	Please see Alliance response to submission 7 for further information regarding access to property. Please see submissions 8 and 20 for further information regarding traffic safety during construction.	No further action required.
			Construction	The EMP will detail necessary methods such as silt fencing to minimise sediment run-off.	No further action required.
			Social Impact	Social issues are covered in the PIA <i>Report</i> - Table 5 – “Environmental , Assets, Impacts and Mitigation for the Broader Region” - especially the <i>Social Impact Assessment</i> section of the table which recommends the provision of counselling if needed. Increased road accidents are not anticipated.	No further action required.
			Construction	Please refer to Alliance response to submission 6 for further information regarding biosecurity during construction.	No further action required.
36	Mr Ronald Doolan	1920 Henderson Road, Girarre, Vic, 3624	Flora and Fauna	The PIA and EPBC report should be considered together. The PIA general refers to species covered by state legislation i.e. FFG Act, and the EPBC report refers to federal issues.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
37	Ann Jelinek	379 Cathedral Lane, Taggerty, Vic, 3714	Flora and Fauna	<p>The PIA was submitted after the decision of the EPBC referrals.</p> <p>The Yea Fossil Site was considered a major issue for the B2 option, resulting in its reduction to non-preferred option. The fossil site is a place of National Heritage under the EPBC.</p> <p>The potential presence of the Golden Sun Moth is acknowledged (Appendix H of the PIA, Table 10 page 70 and also sections 6.1.1.1 page 161 and 6.2.1, page 166). It is identified in section 6.1.1.1 that it occurs in habitats with an understorey dominated by Austrodanthonia, which would include grassy woodland habitats near Yea. Surveys for the Golden Sun Moth were not undertaken due to timing constraints and site access issues. Surveys for the Golden Sun Moth are proposed to be undertaken in late winter early spring. Suitable mitigation strategies are being developed for the areas retaining potential Golden Sun Moth habitat to minimise the impact upon this species (based upon an assumption that the species is present).</p> <p>Quantifiable assessments of species considered "likely" and "possible" could not be achieved within the timeframe, which was an acknowledged limitation of our study. Targeted surveys were undertaken for most threatened fauna and flora. However, due to the short timeframe of the project and the prevailing drought conditions, it was determined that many species were "likely" or "possible" to be present on the basis of suitable habitat even if we did not find them (i.e. even if no individuals of a threatened species were found, we still predicted that it was likely or probable based on habitat in the study area).</p> <p>The project is consistent with the aims and objectives of the FFG Act. Wherever possible, the Alliance will be implementing measures to avoid or minimise impacts upon FFG listed items, but some impacts will be unavoidable. Most of the list of Potentially Threatening Processes provided in the submission were also identified in the FF report (Appendix H in PIA, pages 166-167). Some of the additional ones are related to aquatic biota, which were not addressed by the FF report (instead they were addressed in the Aquatic Ecology Report). It could be argued that the additional ones provided in this submission could be relevant to the project, although the links may be fairly remote (e.g. reduced native vegetation resulting from Sambar deer, high fire frequency).</p> <p>Trenchless techniques tend to have lower ecological impacts than trenching techniques (although not always). We agree that if the pipe were bored under all waterways or areas of ecological significance that the impacts upon these species would probably be lower. However, the potential habitat for Striped legless lizard and Golden Sun Moth extends over large areas (i.e. many kms). The damage caused by the bore holes, and the potential risks from having to dig up pipes and equipment if there was a problem, could cause substantial damage and would need to be compared against the known losses from open trenching.</p>	No further action required.
			Hydrogeology	<p>If tunnelling technology is to be applied, an understanding of the hydrogeology at the crossing site must be clarified in order to protect aquifers, i.e. tunnelling may penetrate confining beds. In some situations, tunnelling may have a larger impact to groundwater owing to the requirement to dewater input and receiving shafts required for the tunnelling technology.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Greenhouse	Melbourne Water has made a commitment to obtain the energy required for the operational phase from renewable sources. Regarding management of emissions from the construction phase of the project, measures for emissions reduction are currently being incorporated into the Environmental Management Strategy and Environmental Management Plan.	Environment Management Strategy and associated Environment Management Plans are being developed.
38	Bruce Mitchell	39 Oswald Street, Kyabram, Vic, 3620	Not applicable	No response required. Submission outside the Terms of Reference	No further action required.
40	Brian F. Mullens (Director of Mullens Pastoral Company Pty. Ltd.)	1528 Melba Highway, Dixons Creek, Vic, 3775	Dust	Please see Alliance response to submission 18 for further information regarding dust impacts. Also note that management measures will be based upon intervention levels for particulates presented in the SEPP(AQM) - PEM for Mining and Extractive Industries, which aims to protect beneficial uses of the environment (including the health and amenity of humans, fauna and some flora).	No further action required.
			Cultural Heritage	Cypress trees are not considered highly significant heritage, however if impacts can be minimised it is preferable to keep the trees. Current preferred alignment is on Western side of Melba hwy and will not impact the trees or this property.	The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Socio-economic	Please refer to Alliance response to submission 19 for further information regarding biosecurity. Regarding the marketability of product, visitor access, stress to livestock due to construction machinery and loss of productive capacity on the pipeline easement and associated land: As noted in earlier comments a process for managing visitor access could be determined through discussion particularly given the relatively short duration of the construction activity; similarly reinstatement of the corridor to minimise any loss of production.	No further information required.
			Social Impact	Regular information sessions have aimed to update the community. Issues such as community anxiety are covered in the <i>Social Impact Assessment (SIA) Report</i> . Table 5 in the <i>PIA Report</i> – “Environmental, Assets, Impacts and Mitigation for the Broader Region” - especially the SIA section of the table recommends the provision of counselling if needed.	No further action required.
41	Colin Gow (Commodore of Sugarloaf Sailing and Boating Club)	PO. Box 220, Kangaroo Ground, Vic, 3097	Design Socio-economic	The current preferred inlet location to the reservoir will have an impact on the activities of the sailing club during the pipeline's construction and operational phases. The reasons behind the selection of this inlet location can be found in section 5.10 of the <i>Design Assessment Report</i> . Melbourne Water representatives have arranged to meet with representatives of the sailing club to discuss the impacts of the pipeline and how they can be mitigated. Mitigation options may include permission to relocate sailing club facilities and revision of the current lease arrangements.	No further action required.
42	Gail and Gordon Davis	4013 Melba Highway, Glenburn, Vic, 3717	Social Impact Assessment	Regular information sessions have occurred to date, and are anticipated to occur into the future to update the community. Training and induction is required for all.	No further action required.
43	Ian R.P. Scott	2 Grieve Street, North Balwyn, Vic, 3104	Environmental Implications of Transferring Water	Regarding the environmental implications of the pipeline, study only investigated impacts on the section of Goulburn River from off take to Goulburn Weir with state and federal government. During the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions at the off-take site is not likely to have any detrimental effect on environmental values. Unlikely altered water stage arising from extractions will result in measurable impact on water stage further downstream.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Design Construction	At intermittent points along the pipeline, air valves and scour (drain) points are installed. Melbourne Water requires 15 metres width to accommodate these facilities and associated access.	No further action required.
			Geomorphology	Refer to the section on Mitigation and Management Measures in <i>Geomorphological Assessment Report</i> . Further information provided in Environmental Management Strategy.	No further action required.
44	John Flynn	P.O. Box 476 Yarra Glen, Vic, 3775	Contaminated Land	<p>Any contaminated soils intercepted during excavation will be separated from 'clean' soils. These soils will be managed in accordance with applicable EPA guidelines and will not be transferred to another property. Any imported soils (i.e. topsoil) will be appropriately validated in accordance with relevant EPA guidelines. Applicable EPA guidelines are listed in Section 2 of Strategic <i>Contaminated Land Assessment (CLA)</i> Report. Please refer to response for Submission 6 and 27 for further information regarding contaminated land management.</p> <p>To date, only a limited amount of samples have exhibited concentrations marginally above background levels. Further assessment of these areas will be undertaken to ensure that appropriate characterisation, handling and disposal measures are in place.</p>	Further assessment will be undertaken in areas where samples exhibited elevated concentrations marginally above background levels, to ensure appropriate management and disposal measures are in place.
			Design	Detailed contour plans and aerial photographs have been used in assessing alternative pipeline routes. This included comprehensive aerial survey that provided complete terrain survey coverage to +/- 250 mm level of accuracy over the entire alignment. Field survey have supplemented the aerial survey and some title verification surveys have been undertaken to confirm property boundary locations. Further field survey will be undertaken as the detailed design develops. The multi-criteria assessment used to evaluate alternatives considered both social, economic and environmental impacts.	No further action required.
			Flora and Fauna	Location of 'pine plantation' is not specified. The planted trees within a plantation have a commercial value, but are generally of a low value for flora and fauna (with the possible exception as its use for foraging by Yellow-tailed Black-cockatoos - a non-threatened native species). As a 'plantation' the area would be considered as a commercial enterprise and any impacts would be compensated accordingly.	No further action required.
			Social Impact	More detailed information on compensation on a case by case basis will be available when the detailed route alignment is finalised.	No further action required.
			Socio Economic	The submission is concerned about the impacts on his land at present and on future plans to build a retirement home on the property. The submission has concerns about access to the property for farming activities suggests that up to 50% of the property could be alienated from farming. These concerns are addressed above, in the Alliance response to submission 7. The concern about being able to build a house later is a site specific issue and possible house designs and location on site would need to be reviewed.	No further action required.
			Contaminated Land	Please refer to Alliance response to submission 41 for further information regarding contaminated land.	No further action required.
45	Michelle And Ron Harper	1790 Melba Highway, Dixons Creek, Vic, 3775	Landscape and Visual	Revegetation will occur where possible adjacent to the Melba Highway.	No further action required.
			Cultural heritage	While the pine trees have been assessed as low historical significance, the aesthetic significance is moderate. If possible the removal of trees should be avoided by narrowing the easement. It may also be possible to remove the last tree in the line to reduce loss of aesthetic values. Alliance Team will need to assess if this is viable.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Socio-Economic	The submission indicates a plan to open a bed and breakfast, and to use the land to breed Aberdeen Angus on retirement in five to seven years. It is difficult to predict the actual impact on the property in five or more year's time but it is likely to be limited and not put significant constraints on the proposed development. Discussions would be held to ensure minimum impact. They also suggest that the route should follow the Highway on the opposite (western) side to them. This western route is quite possible and would avoid this property.	No further action required.
46	Rick Miles (Manager of Gauri international Corporation Pty. Ltd	11 Koornang Road, Scorsby, Vic, 3179	Flora and Fauna	Please refer to Alliance response to submission 19 for further information regarding biosecurity protocol.	No further action required.
			Design	The corridor is parallel to the Gasnet easement on the north side of that easement and will cross the easement near Skyline Road. In Yarraview Road this will place the pipeline in the road pavement.	No further action required.
			Socio-Economic	<p>The submission makes a case for the H4 option which avoids the property. If the H2 option is chosen it suggests that some 10% of the productive land would be disrupted comprising mature vines and associated trellising, irrigation system and frost mitigation system imposing a direct immediate cost with on-going implications. Other facilities adjacent to or close to the construction corridor will or may be lost or compromised.</p> <p>The reduction in productive land for some time will also impact on the vineyard's ability to provide grapes of the quality required under its contracts due to less supply to choose from. While there will be some scope to mitigate the impacts by fine tuning the H2 route and possibly reducing the construction corridor width to avoid selected facilities, the size of the property and intensive nature of activity suggests that there could be significant economic impacts which would need consideration for compensation. The precise impacts of the H2 route would need specific inspection and discussion on site.</p> <p>Please refer to Alliance response to submission 19 for further information regarding biosecurity protocol.</p>	No further action required.
			Landscape and Visual	Revegetation will occur where possible adjacent to the Melba Highway.	No further action required.
			Flora and Fauna	<p>As Elm trees are neither Native nor Threatened, they is not protected under and Flora or Fauna Legislation. Based on the photograph the individuals would be considered sub mature as they have yet to reach their full growth potential. An arborist should be contacted to gauge the potential to transplant the individuals, and if this could be achieved without damage, likely during winter senescence.</p> <p>Rabbit management could be included within the Property management plan if this alignment was pursued.</p>	The Alliance is in the process of discussing individual landowner requirements with all landowners.
47	Mary J. Chandler	P.O. Box 284, Red Cliffs, Vic, 3496	Social Impact Flora and Fauna Landscape and visual Hydrogeology Greenhouse	Regular Information sessions are planned to update the community. There have also been numerous individual discussions with land holders and community groups.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
				<p>Offsetting the loss of native vegetation is the last management option considered in the three step hierarchy of Victoria's Native Vegetation Management Framework.</p> <p>Offsetting is undertaken with the approval of DSE and/or the Minister, where threatened vegetation communities are encountered. Weeds, diseases and pest species will be managed according to guidelines and liaison with DPI and the subsequent development of appropriate biosecurity management protocols.</p>	The Offset Management Plan (OMP) is being prepared in consultation with DSE.
				There are a range of renewable energy sources available and one mechanism under investigation is the purchase of Renewable Energy Certificates (RECs). RECs are created under a strict Commonwealth Government accreditation scheme that ensures that the energy comes from a renewable source. The market supply of RECs is sufficient for Melbourne Water for the operation of the pipeline.	No further action required.
48	Malcolm Towt	1379 Melba Highway, Yarra Glen, Vic, 3775	Geomorphology	Refer to the section on Mitigation and Management Measures in <i>Geomorphological Assessment Report</i> . Further information provided in Environmental Management Strategy.	No further action required.
			Cultural Heritage	The reference to indigenous trees in this case does not refer to scarred trees, rather native eucalypts. The trees do not have a heritage value other than the intrinsic value as a mature, native gum tree. One of the trees appears to be dead or dying, this tree should be selected for removal and the others in the windbreak line avoided.	No further action required.
			Social Impact	<p>There is not likely to be any ongoing effect on Hunt's Club's usage of the property.</p> <p>Please refer to the Alliance response to submission 19 for further information regarding access to property.</p>	No further action required.
			Socio-economic	The submission sets out the economic issues and requirements. All these are consistent with the proposed construction and reinstatement processes discussed by Alliance representatives at information sessions. The submission notes that the Alliance has already agreed to a minor adjustment to enable continued vehicular access and turning circle.	No further action required.
			Contaminated Land	<p>Any imported soils (i.e. topsoil) will be validated (in relation to contaminant concentrations) with applicable EPA guidelines. Guidelines are outlined in s. 2 of Strategic <i>Contaminated Land Assessment</i> (CLA) (Appendix K) Report.</p> <p>Please refer to the Alliance response to submission 19 for further information relating to biosecurity measures.</p>	No further action required.
49	Richard and Barbra Holland	478 Glendale Lane, Taggerty, Vic, 3714	Not applicable	No response required. Submission outside the Terms of Reference	

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
50	Dr. John P. Warren	46, Holmes Crescent, Campbell, ACT, 2612	Noise and Vibration	<p>The pipeline construction work is of relatively short time duration. The noise levels generated during construction will be within EPA guideline levels. It is proposed that construction will be performed during the day time period only.</p> <p>Construction of the pump stations will be of a longer duration but noise levels will be kept within EPA guideline levels.</p> <p>Please refer to submission 10 for further information regarding noise impacts from the pump station.</p> <p>Regarding the pump station operation, noise limits have been derived based on existing background noise levels using the SEPP EPA N-3 (Draft) Noise Policy. Acoustic impact to the environment will be minimal.</p>	No further action required.
			Design	There is no expected impact on earthen basin construction or operation.	The Alliance is in the process of discussing individual landowner requirements with all landowners.
			Flora and Fauna	<p>Construction crews will be subject to strict weed control protocols as identified through DSE/DPI. Weed management will be a major concern for the project. Paddock trees will be avoided where possible, including damage to their roots.</p> <p>Please refer to the Alliance response to submission 19 for further information.</p>	No further action required.
			Geomorphology	Refer to section on Mitigation and Management Measures in <i>Geomorphological Assessment Report</i> for issues relating to erosion. Further information provided in Environmental Management Strategy (EMS).	No further action required.
			Landscape and Visual	<p>For a significant distance of the corridor, the pipeline is adjacent to the Melba Hwy.</p> <p>The mid and background vistas will only be visually impacted during the construction activities i.e. vehicles and stockpiles.</p>	No further action required.
51	(Mrs) Dale Cassell	5318 Goulburn Valley Highway, Yea, Vic, 3717	Flora and Fauna	<p>The impact of declared weeds on native species will be addressed in the Weed, Vermin and Biosecurity Management Plan. The Flora and Fauna report describes the habitat types present within the study area (see Appendix H of PIA, pages 264-276). There had been no surveys on Sheoak at the time of the PIA submission. Pitfall surveys have since been undertaken at Sheoak. A single Striped Legless Lizard was found at the site.</p> <p>Appendix F of the <i>Flora and Fauna Report</i> describes the habitat types present within the study area. The habitat descriptions acknowledge that large hollow-bearing trees are present within the woodland and forest habitats. Old growth trees, including dead hollow-bearing trees, are to be mapped at the detailed design phase. Scattered trees will be avoided where possible and offset in accordance with Victoria's Native vegetation Management Strategy.</p> <p>Monitoring time periods will be developed as part of the EMP process. Where appropriate, this may include pre-construction monitoring.</p>	The Offset Management Plan (OMP) is being prepared in consultation with DSE.
			Social Impact	Community Information Sessions have been planned to provide the best information available at the time. Information sessions will continue to be held to update the community.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Hydrology Hydrogeology	<p>The <i>Aquatic Ecology Report</i> listed fish species previously recorded in the Yea River (see s. 2.3.5 pp. 38-40) and also those recorded as part of surveys conducted specifically for this project (see s. 3.1.1 pp. 49-51). Survey methods used are clearly described in s. 2.3.4 (p. 36). Study only investigated impacts on the section of Goulburn River from off take to Goulburn Weir. During the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions at the off-take site is not likely to have any detrimental effect on environmental values. Unlikely altered water stage arising from extractions will result in measurable impact on water stage further downstream.</p> <p>Investigation boreholes that are surplus are to be decommissioned in accordance with the <i>Water Act</i> (1989). Where the groundwater table is intersected by the pipeline, groundwater could migrate along the permeable pipeline backfill materials. Management actions (for example, cut-offs) are proposed to prevent this. Where the pipeline route intersects an existing bore, the existing bore will have to be relocated (i.e. moved 20 m) to prevent being damaged by construction. Management of flushed material in low points of the pipeline is a design issue - disposal to groundwater would require EPA approval before it could occur.</p>	No further action required.
			Contaminated Land	Please refer to the Alliance response to submission 6 for further information regarding contaminated land.	No further action required.
			Design	<p>The pipe size has been selected to optimise the lifecycle cost of the project, considering both the capital cost of the pipe and the ongoing operating costs of pumping. A smaller pipe may have been cheaper to build initially, but cost more to operate due to higher power requirements to overcome increased friction in the pipeline.</p> <p>Justification of the pipeline against alternative supply options is outside the terms of reference of the panel.</p> <p>The preliminary proposal for power supply includes a zone substation east of Yea fronting the Goulburn Valley Highway with two 22 kV high voltage power cables extending from the substation to the pipeline easement. One set of 22 kV power supply cables then follows the pipeline easement to the Goulburn River Pumping Station near Killingworth Reserve and the other follows the pipeline easement to the High Lift Pumping Station site south of Yea. The method of construction may be above ground on poles or buried in a trench. The construction method has not been decided to date.</p>	No further action required.
			Noise and Vibration	The vibration levels generated by pipe movement will be insignificant to reptiles due to the pipe being on a sand base and buried below the ground. The energy would be dissipated relatively quickly. Ground vibration generated by passing road traffic would generate higher ground vibration levels than by the pipeline.	No further action required.
52		RMB 6325, Glenburn, Vic, 3717	Design		The Alliance is in the process of discussing individual landowner requirements with all landowners.
53	Rob Cranston		Not Applicable	No response required. Submission outside the Terms of Reference.	
54	Ivan L. Waters (behalf of Dilkusha Park Stud Pty Ltd B.E. Waters Property 473)	1314 Melba Highway, Yarra Glen, Vic, 3775	Not Applicable	No response required. Submission outside the Terms of Reference.	

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Social impact	The <i>Social Impact Assessment</i> report recognises social impacts of pipeline construction. Compensation will be available to directly affected landholders. Counselling has been recommended as required.	No further action required.
55	Ellen Hogan	P.O. Box 658 Mansfield, Vic	All	<p>The study only investigated impacts on the section of Goulburn River from off take to Goulburn Weir as agreed with State and Federal Government.</p> <p>The greatest potential impact for Aquatic Ecology will arise from increased turbidity as a result of the construction process and potential impacts on habitat if trenching is used to cross waterways, appropriate BMP construction processes should minimise any environmental impacts. Follow up monitoring has been specified to measure and assess any impacts on aquatic ecology as a result of construction activities. Hydrology - Study only investigated impacts on the section of Goulburn River from off take to Goulburn Weir. During the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions at the off-take site is not likely to have any detrimental effect on environmental values.</p> <p>The flora and fauna assessment initially focused on 'constraints' i.e. where <i>not</i> to put the pipe, and as design information has been made available, this information has subsequently been assessed. This assessment is also ongoing, with final assessment of the alignment to be undertaken once established. Through wider investigation of the study area known threatened species locations can ideally be designed around where possible, rather than fixing a location and then discovering threatened species. Downstream effects were not within the terms of reference.</p>	DSE response regarding climate change impacts on water yields.
56	Maureen Bond (secretary of Healesville Environment Watch Inc.)	P.O. Box 444 Healesville, Vic, 3777	Environmental Implications of Transferring Water	Regarding the environmental implications of the pipeline, study only investigated impacts on the section of Goulburn River from off take to Goulburn Weir. During the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions at the off-take site is not likely to have any detrimental effect on environmental values. Unlikely altered water stage arising from extractions will result in measurable impact on water stage further downstream.	No further action required.
			Flora and Fauna	Field studies are ongoing, seasonal variation will be included in the assessment. However, due to the timelines of the project, it is agreed that surveys across all seasons have not been undertaken to date. The use of existing data will help guide this process. Also, where there has been uncertainty about a species presence due to limited survey effort, it has been assumed to be present if suitable habitat is present. Quantification of native vegetation loss will be in accordance with <i>Victoria's Native Vegetation Management: A Framework for Action</i> .	The Offset Management Plan (OMP) is being prepared in consultation with DSE.
			Greenhouse	There are a range of measures under consideration for reducing the greenhouse emissions from the construction phase of the project including the use of solar panels for site offices, the use of biofuels for plant and equipment operation, minimising the amount of vehicular trips and potential for purchase of offsets. There are a range of renewable energy sources available and one mechanism under investigation is the purchase of Renewable Energy Certificates (RECs). The market supply of RECs is sufficient for Melbourne Water for the operation of the pipeline.	No further action required.
			Social Impact Communications	Community Information Sessions have aimed to provide the best information available at the time. Information sessions will continue to be held to update the community.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
57	Jeff Spencer and Sue Geeson	Steuarts Road Glenburn, Vic 3117	Communications Flora and Fauna Social Impact Design	From black and white photos attached to this submission, it is difficult to orientate where the pipeline is proposed through their property. Based on the information provided in their submission, it appears likely that gully vegetation in their property is used to some extent as a wildlife corridor by native fauna species. It also appears likely that the construction of the pipe through this vegetation would cause a gap in the vegetation corridor. For some species this gap could hinder movements along the corridor. It is not possible to determine, based on available information, whether this gap would cause a complete barrier to the movements of any fauna species along this corridor.	The Alliance is in the process of discussing individual landowner requirements with all landowners. A flora and fauna assessment will be undertaken within this property if the landholder is agreeable.
58	Diana M. Oldfield	1866 Melba Highway, Dixions Creek, Vic, 3775	Social Impact Socio - Economic Design Flora and Fauna	The pipeline alignment doesn't go into the areas indicated in this submission. It does not appear to be the current preferred alignment. If however it were to go into the property it is necessary to discuss the impact of the easement on the proposed house site and on the ongoing business activities on site. It is possible that the construction timing could fit in with hay harvesting and normal construction processes would ensure safety and security of stock. Any reduction in production during and post construction should be subject to fair and reasonable compensation.	No further action required.
			Flora and Fauna	Pine trees are not native and therefore not covered by FFG/EPBC, and therefore not assessed for 'value' in this regard. The value of the trees is in terms of there services (noise/dust suppression), not natural values.	No further action required.
59	L. Puscell (for Yea River Catchment Landscape Group)	85 Limestone Road, Yea, Vic 3717	Aquatic Ecology Flora and Fauna Construction Groundwater	Please refer to the Alliance response to submission 6 for further information regarding hydrology and hydrogeology.	No further action required.
			Greenhouse	The greenhouse gas emissions resulting from vegetation clearance were calculated in the <i>Greenhouse Gas Report</i> . The calculated figure was based removal of vegetation estimates.	No further action required.
			Flora and Fauna	Cleared native vegetation will be offset according to Victoria's Native Vegetation management Strategy. The compounding factor will result in a greater area of native vegetation than currently exists which will also 'offset' carbon load. Remnant vegetation outside the construction corridor will be untouched, protective fencing will delineate construction corridor, plus other mitigation measures to be put in place. Weed management will be undertaken according to effective protocols established by DSE/DPI.	No further action required.
60	Chris Healy	2 Gridwood Parade, Eildon, Vic, 3713	Flora and Fauna Landscape and Visual Design	The Environmental Implications of transferring water report investigated impacts on the section of Goulburn River from off take to Goulburn Weir as agreed with State and Federal Government.	No further action required.
61	Communities Combating Climate Crisis	P.O. Box 250 Healesville, 3777	Not Applicable	No response required. Submission outside the Terms of Reference	
			Greenhouse	There are a range of renewable energy sources available and one mechanism under investigation is the purchase of Renewable Energy Certificates (RECs). RECs are created under a strict Commonwealth Government accreditation scheme that ensures that the energy comes from a renewable source. The market supply of RECs is sufficient for Melbourne Water for the operation of the pipeline. The greenhouse gas emissions resulting from vegetation clearance were calculated in the <i>Greenhouse Gas Report</i> . The calculated figure was removal of vegetation estimates.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
62	Melcolm Calder (President of Yarra Glen and District Township Group)	P.O. Box 232, Yarra Glen, Vic, 3775	Socio-economic	The <i>Socio-economic and Tourism Report</i> covers the overall economic impact of the works, noting site specific assessments will be carried out. No detailed assessments by property were made pending firming up on the alignment. The assessments indicate the risks, potential consequences and the principles for assessment in sufficient detail to inform the route selection. The assessment has not neglected the value of grazing land but has reflected that the impact on large grazing properties is likely to be proportionately less than on smaller intensively developed properties with potential to manage stock during construction to reduce the impacts.	No further action required.
			Construction	Replanting programs will be established in agreement with landowners.	No further action required.
			Flora and Fauna	Construction crews will be subject to strict weed/pathogen control protocols as identified through DSE/DPI. Weed/disease management will be a major concern for the project. Please refer to the Alliance response to submission 19 for further information.	No further action required.
			Landscape and Visual	The pipeline corridor traverses predominately cleared land in the Dixon Creek Valley.	No further action required.
			Design	A section of the aqueduct alignment is proposed for use but no final decision yet: the Steels Creek siphon section. It is not practical or possible to use the aqueduct channel alignment without closing the aqueduct, this and repair of the aqueduct leakage is not within the scope of this project. There are also significant environmental values along the channel sections of the aqueduct.	No further action required.
63	Maria Concetta O'Dea	124 Arcadia- Two Chain Road, Arcadia South, Vic, 3631	Not applicable	No response required. Submission outside the Terms of Reference	
64	Jo Knorr	661 Killingworth Road, West Yea, Vic, 3717	Not applicable	No response required. Submission outside the Terms of Reference	
65	Bruce M. Bassed	88 Osment Road, Colbinabbin, Vic, 3559	Not applicable	No response required. Submission outside the Terms of Reference.	
66	3775 Pipeline Group	375 Pinnacle Lane, Steels Creek, Vic, 3775		Please refer to the Alliance response to submission 62 for further information.	No further action required.
67	Jan Beer (Plug the Pipe)	Cheviot Hills, Limestone Road, Yea, Vic, 3717	Construction Design	Construction vehicle access tracks and haul roads will be returned to near original state and will be subject to acceptance by property owners. Reinstatement of fencing, re-grading and reinstatement of topsoil will follow pipe laying as soon as is practicable. Re-establishment of pasture will need to be seasonal to ensure an acceptable level of success. Air valves will be installed at each high point, and scour valves at low points where adequate waterway exists. The scour valves are only operated for maintenance and for short periods - water is discharged to local streams - it is the same water pumped from the Goulburn and unchanged in quality.	No further action required.
			Construction Dust	A number of Work Activity Packs are being developed by the Alliance team as part of the overarching Environmental Management Strategy for the project, which will provide detailed instruction on implementation of specific Environment Management Plans (including the Air Quality and Dust Management Plan) to construction crews.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Greenhouse	<p>For the energy required for the operational phase of the project (i.e. pumping water from the Goulburn River to Sugarloaf Reservoir), Melbourne Water has made a commitment to obtain the energy from renewable sources.</p> <p>There are a range of renewable energy sources available and one mechanism under investigation is the purchase of Renewable Energy Certificates (RECs). RECs are created under a strict Commonwealth Government accreditation scheme that ensures that the energy comes from a renewable source. The market supply of RECs is sufficient for Melbourne Water for the operation of the pipeline.</p>	No further action required.
			Socio-economic	<i>See Submission 62 for comments regarding longer term socio-economic impacts.</i>	No further action required.
			Social impact	<p>The <i>Social Impact Assessment (SIA)</i> Report acknowledges the range of social impacts associated with the project and describes the social context and social climate prevailing in the study corridor. The SIA component of Table 5 – “Environmental , Assets, Impacts and Mitigation” in the <i>PIA Report</i> recommends ways to manage impacts both short and long term.</p>	No further action required.
			Aquatic Ecology	<p>Error on page 13 noted - Goulburn river is 557km long. The greatest impact is the potential increase in turbidity. Appropriate construction processes should ensure that this impact is minimised. Water quality in the Yea river has been reviewed in both the desktop study and during survey activities carried out during field work. Conclusions about the Yea water quality have been based on Waterwatch samples (13 sites), water quality analysis from the monitoring station at Devlins Bridges (1 site) and as part of the current field investigations 3 locations on the Yea River were surveyed for water quality.</p>	Need to amend error on page 13 - Goulburn River is in fact 557km long. No action required on impacts of disturbance or water quality in the Yea.
			Flora and Fauna	<p>The location of wetlands, billabongs etc. will be a key factor in the final alignment selection across the Yea River. The preferred corridors have reduced potential disturbance to the Yea wetlands compared to non-preferred options.</p>	No further action required.
			Hydrology Hydrogeology	<p>It has been acknowledged in the reports that there are many wetlands along the Yea floodplain (see section 2.5 pages 44-46 of Aquatic Ecology report). Vegetation disturbance will be limited to waterway crossings and revegetated with appropriate species</p> <p>The pipeline will cross a number of waterways. The processes occurring at each crossing in terms of surface water and groundwater interaction are unclear at this time. The geology suggests that crossings are likely to comprise a thin alluvial aquifer system overlying a fractured bedrock aquifer and that the two would be interconnected from a regional perspective. The crossing construction methodology would determine the amount of dewatering (and thus potential for impact) to occur, as would the timing of the construction, particularly in relation to ephemeral streams. Following pipeline construction, ground conditions that maintain the pre-construction groundwater flow (and quality) conditions would be achieved, but would also to prevent scour and erosion. Trench cutoffs are one identified mitigation measure that could be implemented to achieve this in terms of preventing lateral migration of groundwater (or hydraulically connected surface water) along permeable pipeline backfill materials.</p> <p>Please refer to Alliance response to submission 6 for further information regarding waterway crossings.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
68	Pamela L. McKenzie (Secretary for 3717 Watch Inc.)	C/o RMB 6475, Break O' Day Road, Glenburn, Vic, 3717	Flora and Fauna	Mature Paddock trees will be avoided where possible. Any loss will be offset in accordance with Victoria's <i>Native vegetation Management Strategy</i> . Compensation will be available where there is a demonstrable loss of income / assets.	No further action required.
			Land contamination	Contaminated land soil testing (including sampling frequency) will be undertaken in accordance with applicable EPA guidelines and agreed EPA requirements. Any imported soils (i.e. topsoil) will be validated with applicable EPA guidelines. Guidelines are outlined in Section 2 of Strategic Contaminated Land Assessment (CLA) (Appendix K) Report.	No further action required.
69	Kimberley Drippes (Executive Director for Biodiversity and Ecosystem Services)	8 Nicholson Street P.O Box 500 East Melbourne, Vic, 3002	Aquatic Ecology Hydrology Hydrogeology Contaminated Land	<p>Targeted survey of Ancient Greenling (Damselfly) have been completed and mitigation measures suggested.</p> <p>Habitat will be restored as much as is feasible, while acknowledging that it will not be sufficient or possible to entirely replace or reinstate the habitat values which are being removed. It is a measure to reduce the longer term impact, but not compensate for it entirely. The range of other mitigation measures provided in the report will also reduce and compensate for the loss of habitat (e.g. Net gain).</p> <p>Flora and fauna surveys have been continuing since the submission of the PIA document, and the relevant information will be presented in the form of addendum reports. Further surveys are proposed to continue, including targeted surveys for threatened species and detailed assessments of the final pipeline alignment.</p> <p>Please refer to the Alliance response to submission 28 for further information regarding Flora and Fauna issues.</p> <p>Potential contaminated land sites are identified in the Land Contamination report which accompanied the PIA.</p> <p>The EMP will undergo considerable refinement prior to construction commencing, including identifying the precise environmental controls to be implemented.</p>	<p>Damselfly report will be completed and mitigation measures included in EMP, this may include offsets.</p> <p>The mitigation measures provided by DSE appear reasonable and should be considered and/or included as part of the development of the EMP/EMS documentation.</p>
			Flora and Fauna	<p>In the list of Potentially Threatening Processes under the FFG Act, "Wetland loss and degradation as a result of change in water regime, dredging, draining, filling and grazing" is one of these. We have identified in the FF report (section 6.2.1.) that this is potentially relevant to the project. We agree that the FFG Act does not have a list of wetlands, and to my understanding we have not stated this in our report.</p> <p>Our mitigation strategy in the FF report (section 5.2.) agrees that native vegetation loss should be avoided and minimised wherever possible, including the use of the Victorias <i>Native Vegetation Management Framework</i>.</p>	No further action required.
			Sustainability Design	The design options report contains assessment matrices and the assessment process is described in the <i>Sustainability Report</i> .	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Landscape and Visual	Adhere to the Forest Management Plan for Central Highlands. Refer to Table 4 in the <i>Landscape and Visual Impact Assessment</i> Report.	Recommendation of Visual Impact Assessments for the high and low lift pump stations and balance storage.
			Hydrogeology	Available salinity information has been documented in the <i>Groundwater Report</i> , however it is acknowledged that more information is required regarding groundwater chemistry (i.e. salinity and other chemical constituents) along the corridor. Groundwater sampling will continue into final design to confirm appropriate management.	No further action required.
70	Cr Tim Heenan (Mayor for Shire of Yarra Ranges)	P.O. Box 105, Lilydale 3140	General	The Terms of Reference have set out the process for assessment.	
			Design	All design will be undertaken to minimise environmental and social impacts where possible. Beyond this strategies such as the Environmental Management Strategy will be used in the guiding document to manage and mitigate impacts.	No further action required.
			Landscape and Visual	Management and mitigations strategies will be put in place to protect environmental values of the area. Monitoring pre and post-construction will be undertaken to ensure the impacts of the construction are managed within required guidelines. Video monitoring may be a method adopted as part of this process.	No further action required.
			Socio-economic	The submission indicates that the basis of compensation should be available more generally as well as to the individual property owners. It seems reasonable that the principles for compensation should be publicly available although individual property compensation may need to be confidential. The submission also notes that there should be a detailed assessment of the actual properties affected as noted in the report. It also proposes a range of mitigation measures that are in line with those proposed in the report.	No further action required.
			Flora and Fauna	A final figure of vegetation loss will need to be determined so that approval can be finalised (DSE) and offsets be put in place. No incremental loss beyond that figure should occur or relevant litigation. Flora and fauna assessments are ongoing, with final assessment of the final alignment to be undertaken once alignment set. Project is following Victoria's <i>Native Vegetation Management - A Framework for Action</i> . Phytophthora cinnamomi issues will be covered in the Weed, Vermin and Biosecurity Management Plan.	The Offset Management Plan (OMP) is being prepared in consultation with DSE.
			Traffic	Regarding traffic management, a Communications Strategy will be developed as part of the Traffic Management Strategy. This will include liaison with the relevant stakeholders and authorities, including Yarra Ranges, Murrindindi and VicRoads.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Social Impact	A regional benefits program is proposed which will be guided by a regional benefits committee. This committee will have broad community representation, including representation from the three Shires involved in the pipeline and other community groups, for example Landcare, education, business and indigenous groups. In this way broad community involvement will be established in addition to the consultation with directly affected individual landowners on a case by case basis.	No further action required.
71	Malcolm Calder (president for Yarra Glen and District Township Group)	P.O Box 232, Yarra Glen, Vic 3775		Please refer to the Alliance response to submission 62 for further information.	No further action required.
72	Georgia Aikman	P.O Box 541 Collins Street, West Melbourne, Vic 8007	Design Construction	<p>Areas disturbed by the Works will be appropriately reinstated. Any damage to property that is determined to be caused by construction activities will be remedied. Services to properties will be maintained for the duration of the Works (this may require temporary bypass arrangements).</p> <p>All construction activities will be fenced.</p> <p>Significant leaks and blowouts are not anticipated. The pipe will be fully tested and inspected prior to commissioning.</p>	No further action required.
			Socio-economic Social Impact	<p>These issues are covered in the <i>PIA Report</i> - Table 5 – “Environmental , Assets, Impacts and Mitigation for the Broader Region”.</p> <p>More detailed information on compensation on a case by case basis will be available when the detailed alignment is finalised.</p>	No further action required.
			Hydrology	Please refer to the Alliance response to submission 5 for further information regarding erosion management.	No further action required.
			Construction Dust	See response to submission no. 19	No further action required.
			Flora and Fauna	Please refer to the Alliance response to submission 19 for further information.	No further action required.
			Traffic	<p>Please see the Alliance response to submission 10 for further information regarding amenity impact of construction traffic.</p> <p>Please see the Alliance response to submission 19 for further information regarding potential closure of Gulf Road:</p> <p>Please see the Alliance response to submission 20 for further information regarding traffic safety at intersection. Note that intersections will be managed as part of the Traffic Management Plans.</p>	No further action required.
			Noise and Vibration	The vibration levels generated by pipe movement will be insignificant to crops due to the pipe being on a sand base and buried approximately 3 metres below the ground. The energy would be dissipated relatively quickly. Ground vibration generated by passing road traffic would generate higher ground vibration levels than the pipeline.	No further action required.
			Landscape and Visual	Vegetation will only be removed if there is no practical alternative option that would result in minimal destruction of the existing landscape value. Revegetation will occur where possible.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
73	Acheron Valley Watch Inc	P.O. Box 246 Alexandra, 3714	Environmental Implications of Transferring Water	<p>Golden Sun Moth Survey could not be undertaken due to restrictive property access. Will need to occur in late winter early spring in relevant areas. Mapping of danthonia dominated grasslands may help guide this assessment.</p> <p>The EMP will contain measures to help reduce the effects of fragmentation. In some cases they will effectively mitigate against localised fragmentation. Wildlife crossing structures could be considered once the final alignment is determined. However, they are not necessarily effectively, and can in some cases be detrimental if the fauna using them are targeted by predators.</p> <p>Although not always specifically referenced in the report, action statements and recovery plans were considered for many of the threatened species and will be considered further with development of EMP. Impacts could not always be specific due to the uncertainty in the final alignment.</p> <p>All clearance of native vegetation will be undertaken in accordance with Victoria's Native Vegetation Management Framework. The Framework provides the mechanisms for how offsets are achieved. Any issue with the philosophy of the Framework should be taken up with DSE.</p> <p>Flora and fauna assessment methods were agreed upon by DSE.</p> <p>Please refer to the Alliance response to submission 28 for further information regarding Flora and Fauna issues.</p>	Action statements will be incorporated into the EMP where appropriate.
			Design	Operation of the pipeline once completed will be in line Melbourne Water's standard operating procedures and the commitments made by the Victorian Government regarding maximum allowable transfers for the Goulburn River system.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Flora and fauna	<p>Action statements will be incorporated into the Environmental Management Plan (EMP) where appropriate.</p> <p>The Golden Sun Moth Survey could not be undertaken due to restrictive property access. This will need to occur in late winter early spring in relevant areas. Mapping of danthonia dominated grasslands may help guide this assessment.</p> <p>Each of the measures B, C, E, I, J and N will reduce the effects of fragmentation. In some cases they will effectively mitigate against localised fragmentation (for example, tunnelling under patch of native vegetation or waterway).</p> <p>Wildlife crossing structures could be considered once the final alignment is determined. However, they are not necessarily always effectively, and can in some cases be detrimental if the fauna using them are targeted by predators. Assessments have been made based upon current level of surveys, therefore used a conservative approach in our reporting (e.g. where there has been uncertainty, the assumption has been made that the species could be present). Flora and fauna surveys are on going, with a detailed assessment of the final alignment to be undertaken once corridor established.</p> <p>The <i>Flora and Fauna Report</i> states that there could be significant impacts, particularly if particular options are chosen and/or mitigation measures are not implemented. The <i>PIA Report</i> is required to take into account the broader issues across the whole project.</p> <p>Although not always specifically referenced in the report, Action statements and recovery plans were considered for many of the threatened species and will be considered further with development of EMP. Impacts could not always be specific due to the uncertainty in the final alignment.</p> <p>All clearance of native vegetation will be undertaken in accordance with Victoria's Native Vegetation Management Framework.</p>	<p>Environment Management Strategy and associated Environment Management Plans are being determined.</p> <p>Action statements will be incorporated into the EMP where appropriate.</p> <p>All clearance of native vegetation will be undertaken in accordance with Victoria's Native Vegetation Management Framework. The Framework provides the mechanisms for how offsets are achieved and an Off set management Plan is currently being constructed.</p> <p>The use of measures to further mitigation the effects of habitat fragmentation (e.g. wildlife crossing structures) are being investigated.</p>
			Aquatic ecology Design	<p>With reference to the Goulburn River Health Strategy, the essence and significance of the Yea River in the catchment was highlighted with the use of a number of other sources e.g. Yea flows study. The targeted survey has been completed for the Ancient Greenling and the potential habitats that may be disturbed during the construction process have been highlighted.</p> <p>No targeted survey was conducted for Macquarie Perch, however, sampling was conducted at Devlins Bridge which is the last recorded location of Macquarie Perch being collected. No Macquarie Perch were collected during these efforts or at any other site on the Yea River, the last reported record was from 1995, although new documentation indicates that they were identified in 2006 downstream of Devlins Bridge. Again greatest potential impacts are expected to be increased turbidity and potential habitat impacts if trenching is used, construction techniques will ensure that turbidity does not exceed the SEPP guidelines.</p> <p>The other potential impact is disruption of spawning activities if fish migration is required. The timing of waterway crossing will be considered and should not be conducted in Spring. Any impacts on fish species are expected to be localised to the waterway crossing locations and it is anticipated that fish species will migrate out of these areas if they are a disturbance to the fish in that local area. Post construction monitoring plans and activities are still being determined and will be determined in consultation with the relevant authorities.</p>	<p>Monitoring of assessment activities post construction will be outlined. This will occur via consultation with the GBCMA and Melbourne Water. With respect to the more recent recording of Macquarie Perch downstream of Devlins Bridge, a detailed environmental management plan is being developed to mitigate potential impacts on this species. They have already been listed on the EPBC referral as being potentially present in the system.</p>

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
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			Hydrology	Please refer to Alliance response to submission 67 for information regarding wetlands.	No further action required.
			Landscape and Visual	Moderate impact due to the corridor located partially within an existing easement and distanced from sensitive receptors along the Melba Highway. Vegetation within the SLO will only be removed if there is no practical alternative option that would result in minimal destruction of the existing vegetation. Refer to Table 3 of the <i>Landscape and Visual Impact Assessment</i> Report, SLO considerations.	Where the selected alignment traverses the Toolangi State Forest, Management Guidelines for Areas of High Scenic Quality identified within the Forest Management Plan for Central Highlands will be considered.
			Socio-economic	The exact number of landowners affected and the extent will be determined when the alignment is finalised. As noted above, the detail is designed to aid in alignment selection (see comments on submission 62). A cost benefit study is outside the scope of this project. If there are clear reductions in land values attributed to the project they would be addressed through compensation. The issues of full employment, resource shortages and potential price escalation while usually relevant in regional analysis are less so in the case of the current project where local input will be a matter of choice and where the project will have access to the broader metropolitan market.	No further action required.
			Greenhouse	<p>The greenhouse gas emissions resulting from vegetation clearance were calculated in the Greenhouse Gas Report. The calculated figure was based on removal of vegetation estimates.</p> <p>Melbourne Water will identify opportunities for measures under the EEO Act in conjunction with the entirety of Melbourne Water's operations.</p> <p>The cost implications of using renewable energy compared to non-renewable energy is subject to market conditions at the time of purchase for the required energy. Melbourne Water is considering long-term renewable energy supply options with renewable energy suppliers.</p> <p>For the energy required for the operational phase of the project (i.e. pumping water from the Goulburn River to Sugarloaf Reservoir), Melbourne Water has made a commitment to obtain the energy from renewable sources.</p> <p>There are a range of renewable energy sources available and one mechanism under investigation is the purchase of Renewable Energy Certificates (RECs). RECs are created under a strict Commonwealth Government accreditation scheme that ensures that the energy comes from a renewable source. The market supply of RECs is sufficient for Melbourne Water for the operation of the pipeline.</p>	No further action required.
			Social Impact	The <i>Social Impact Assessment</i> Report acknowledges the range of social impacts associated with the project and describes the social context and social climate prevailing in the study corridor. The SIA component of Table 5 - Environmental , Assets, Impacts and Mitigation in the PIA Report recommends ways to manage impacts both short and long term. Counselling services are recommended.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
74	Juliet Le Feuvre (Environment Victoria)	PO Box 12575, A'Beckett Street, Melbourne, Vic, 8006	Aquatic ecology	<p>The Environmental Implications of transferring water study investigated impacts on the section of Goulburn River from off take to Goulburn Weir as agreed with State and Federal Government. Any impacts downstream of Goulburn Weir will be due to other Foodbowl Modernisation activities and not the sugarloaf pipeline. The terms of reference set out the process and scope of work to be undertaken set by State and Federal referrals.</p> <p>Potential impacts and possibility of fish being translocated from the Goulburn have been addressed in section 3.3.3. (p. 67) and have identified the design features that will minimise the possibility of fish entering the pipeline. The Murray Cod transferred from Lake Mokoan were large stocked fish and the intention is to make them available to anglers in the Goulburn River. Current water temperatures in the Goulburn River downstream of Lake Eildon are too low for Murray Cod to spawn and limit opportunities to establish a self sustaining population. It is true that trout cod larvae have been detected in the Goulburn River downstream of Goulburn Weir.</p>	No further action required.
75	Christine Fyffe	143 Main Street, Lilydale, Vic, 3140	Socio-economic	Please refer to the Alliance response to submission 19 for further information.	No further action required.
			Hydrology	Construction activities will be carried out in accordance with statutory requirements within the Environmental Management Plans to minimise impacts on the environment.	No further action required.
76	Ray Jenson (C/- Peter Walsh MP)	C/- 274 Campbell Street, Swan Hill, Vic 3585	Not Applicable	No response required. Submission outside the Terms of Reference	No further action required.
77	Sally Abbott Smith (President 3717 Watch Inc)	RMB 6475, Break O'Day Road, Glenburn, Vic, 3717	Traffic	<p>It is not anticipated that any general widening of Melba Hwy. Access into the site(s) may require local widening to allow for safe braking and acceleration distances - these will be determined in the Traffic Management Plan.</p> <p>Regarding possible Melba Hwy road widening, some localised widening of the Melba Highway may be required in separate locations. The purpose of this may be to, for example, accommodate through traffic within the outer shoulder (to maintain two lanes of through traffic) or to enable the required swept paths of the design vehicle at intersections. The entire length of the Melba Hwy will not require widening.</p> <p>The existing capacity (and lanes) of the Melba Highway is sufficient to accommodate the existing traffic plus the expected construction traffic (TIA Section 3.2.4). Within Sections E and F the Melba Hwy may require some lanes/shoulders to be closed. In these instances Traffic Management Plans will be prepared, and independently audited, to safely manage traffic. The analysis undertaken as part of the <i>Traffic Impact Assessment</i> (TIA) Report indicates that where the Melba Hwy requires closure down to one lane that this impact is manageable.</p> <p>Please see the Alliance response to submission 20 and the TIA s. 3.1 for further information.</p>	No further action required.
			Geomorphology Hydrology	Removal of vegetation will generally be limited to the construction corridor. Erosion mitigation measures will be in place to minimise the impact vegetation clearance has on potential erosion.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Design	<p>The pipeline will cross a number of waterways. The processes occurring at each crossing in terms of surface water and groundwater interaction need clarification at this time. The geology suggests that crossings are likely to comprise a thin alluvial aquifer system overlying a fractured bedrock aquifer and that the two would be interconnected from a regional perspective. The crossing construction methodology would determine the amount of dewatering (and thus potential for impact) to occur, as would the timing of the construction, particularly in relation to ephemeral streams. Following pipeline construction, ground conditions that maintain the pre-construction groundwater flow (and quality) conditions would be achieved, but would also to prevent scour and erosion. Trench cutoffs are one identified mitigation measure that could be implemented to achieve this in terms of preventing lateral migration of groundwater (or hydraulically connected surface water) along permeable pipeline backfill materials.</p> <p>Please refer to the Alliance response to submission 26 for further information.</p>	No further action required.
			Greenhouse	<p>There are a range of renewable energy sources available and one mechanism under investigation is the purchase of Renewable Energy Certificates (RECs). RECs are created under a strict Commonwealth Government accreditation scheme that ensures that the energy comes from a renewable source. The market supply of RECs is sufficient for Melbourne Water for the operation of the pipeline.</p> <p>The greenhouse gas emissions resulting from vegetation clearance were calculated in the Greenhouse Gas Report. The calculated figure was based removal of vegetation estimates.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
78	Richard Hunter (Bird Observation & Conservation Australia)	183-185 Springvale Road, Nunawading	Flora and Fauna	<p>A detailed assessment of hollow bearing trees is to be undertaken for the final alignment. Presence of hollow-bearing trees is acknowledged in the Flora and Fauna report (see habitat descriptions in Appendix H of the PIA, page 264 to 276). Loss of habitat, which includes hollow-bearing trees, is acknowledged in FF report (see Appendix H in the PIA, page 142). Through the mitigation measures outlined in the FF report (Appendix H in the PIA, section 5.2), and to be further developed once the final alignment is determined, the loss of habitat is to be minimised</p> <p>The habitat loss will result in the loss of known and potential habitat for some owls, including FFG-listed species. The habitat loss will result in the loss of habitat for some owls. Known nest trees have been avoided through discussion with local specialists, but others may also occur on final alignment. Full impact on owls cannot be determined with confidence until final alignment is determined (including the extent of tunnelling). Micro-alignments at detailed assessment stage to avoid hollow-bearing trees wherever possible.</p> <p>Road reserves have been mostly avoided. Mitigation measures to revegetate disturbance zones as much as possible. Mitigation measure N (section 5.2 of <i>Flora and Fauna Report</i>) also recommends revegetating existing patchy vegetation as a potential mitigation measure.</p> <p>In accordance with Net Gain principles, loss of scattered trees will be avoided and minimised wherever feasible. There could be short-term loss in stepping stone effect for birds in landscape from loss of isolated trees and shrubs. All vegetation loss to be offset, therefore 'stepping stone' habitat could increase as a result of restoration works in the medium to long term. Avoidance and minimisation undertaken, several areas of intact native vegetation have been avoided in the initial design phase.</p> <p>There could be disturbance to birdlife during construction. Mitigation measures in section 5.2 of Flora and Fauna report recommends preferred times of year for construction through sensitive areas to minimise disturbance impacts upon fauna, particularly nesting activity.</p> <p>The alliance is following principles of the Net gain process in consultation with DSE</p> <p>Please refer to the Alliance response to submission 19 for further information.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
79	W.J. O'Kane (Goulburn Broken Catchment Management Authority)		Flora and Fauna	<p>The Net Gain Assessment is to be finalised once construction foot print established. This is currently in working draft.</p> <p>Vegetation was a scoring parameter for the matrix developed, but not all scores recorded as 1. i.e. Hunt Lane scored a 4. Habitat Hectare Assessment will be undertaken on final alignment</p> <p>Surveys are on-going. More than 70% of preferred alignment has been assessed for fauna habitat values.</p> <p>Flora quadrants can be provided upon request.</p> <p>Vegetation mapping uses EVCs as this is the current standard in Victoria.</p> <p>Surveys for Striped Legless Lizard have been ongoing through summer and early autumn. Golden Sun Moth surveys cannot be undertaken until late spring-early summer. Many bird surveys undertaken within Toolangi. In all cases, due to the incomplete survey effort, species has been assumed to be present where suitable habitat is also present.</p> <p>Floodplain EVCs were not sampled when the PIA was released. Subsequent sampling has indicated the presence of EVC 56 Floodplain Riparian Woodland along the Goulburn and Yea River floodplains, and EVC 125 Plains Grassy Wetland on the Yea River floodplain.</p> <p>Fern Swamp EVC occurs in property 116.</p> <p>In the fauna habitat descriptions (Appendix F of <i>Flora and Fauna Report</i>), the presence of hollow-bearing trees is acknowledged within woodland and forest habitats. The value of hollow-bearing trees is acknowledged. The full extent of hollow-bearing tree loss cannot be determined until detailed assessment of final alignment. Micro-alignment to avoid hollow-bearing trees will be undertaken where possible.</p> <p>Regarding the impact of vegetation to be cleared, this will be addressed in the Offset Management Plan</p> <p>It is agreed that foxes, cats and rabbits are feral species issues that need to be addressed in Environmental Management Plan process.</p> <p>The development of trench management protocols have been recommended in the <i>Flora and Fauna Report</i> (s. 5.2). This will include regularly checking of trenches for fauna.</p>	<p>Environment Management Strategy and associated Environment Management Plans are being developed.</p> <p>Feral predator management actions should be developed as part of the EMP process.</p> <p>EMP/EMS mitigation measures for Striped Legless Lizard will consider checking open trenches prior to filling.</p> <p>Use of fallen trees to augment terrestrial and aquatic habitats will be considered as part of EMS/EMP process.</p>
			Design	The Alliance is communicating with the CMA and working to agree on design solutions and approvals.	No further action required.
			Hydrology	Preferred pipeline corridor will not cross Fern Swamp. Preferred pipeline corridor crosses Yea River upstream of Yea/Killingworth wetlands. Construction activities will be carried out in accordance with legislative requirements within the Environmental Management Plan to minimise impacts on the environment.	Environment Management Strategy and associated Environment Management Plans are being.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Greenhouse	<p>The greenhouse gas emissions resulting from vegetation clearance were calculated in the Greenhouse Gas Report. The calculated figure was based on removal of vegetation estimates. Currently there is no standard generally accepted methodology for calculating greenhouse gas emissions due to soil disturbance. Regarding management of emissions from the construction phase of the project, measures for emissions reduction are currently being incorporated into the Environmental Management Strategy and Environmental Management Plan.</p>	No further action required.
80	Councillor Leanne Pleash	Murrindindi Shire Council	Traffic	<p>The State Groundwater Database has been interrogated to identify bores within the pipeline corridor. Impacts to these bores by dewatering works would be addressed through the EMP, with potential mitigation measures including the provision of alternate water supplies during the construction period. Trench dewatering impacts are expected to be temporary and localised.</p> <p>A Traffic Management Strategy (TMS) is being prepared as part of the project. This will include a Communications Strategy to liaise with the relevant stakeholders and authorities, including Murrindindi. Elements of a TMS were included as part of the <i>Traffic Impact Assessment (TIA)</i> s. 3.4.</p> <p>Please refer to the Alliance response to submission 10 for further information regarding Killingworth Road.</p> <p>Regarding heavy vehicle impact to Yea, the TIA assumed that the bulk of all equipment and workers trips would be to/from the south (i.e. 90%, with 10% to/from the north (i.e. via Yea)), while any material trips will be split 50/50 to from the north and south because the origin and destination of these materials is unknown (TIA s. 3.3). The use of the Goulburn Valley Highway is an appropriate route for HVs (including construction traffic), including through the township of Yea. However, where possible the volume of trucks that travel via Yea should be minimised.</p> <p>The TIA was based on highly conservative estimates of traffic volumes provided by VicRoads.</p> <p>Please refer to the Alliance response to submissions 20 and 30 for further information regarding the TIA.</p> <p>Regarding commuters with boats, by ensuring that the Melba Highway remains open and delays to through traffic are minimised, it is expected that commuters with boats will continue to use Melba Highway in preference for more circuitous routes.</p> <p>Regarding the safety of lane closures and traffic management works, Traffic Management Plans (TMPs) will be prepared for all traffic management works. Each TMP will be audited by an independent road safety auditor.</p>	Environment Management Strategy and associated Environment Management Plans are being created.
			Hydrology	<p>Please refer to Alliance response to submission number 67 regarding wetlands.</p> <p>Potential impacts on groundwater have been addressed in the Groundwater Management Plan in the EMP that accompanies the PIA. A refined Groundwater Management Plan will form part of the overall Environmental Management Plan for the project and will include consideration of bores and local utilisation of groundwater.</p> <p>Township water supplies will be protected through the control in place on waterway crossing works as described in the Alliances response to submission number 6.</p>	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
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			Not Applicable	Response not required. Submission outside the Terms of Reference.	No further action required.
			Geotechnical	See Geotechnical and Geomorphological management Plan. Preliminary ground excavation assessment has been completed, and this has been used as input for alignment selection. Final investigations are in progress. Blasting will be conducted to industry standards of safety, vibration and noise.	No further action required.
			Social Impacts	<p>The <i>Social Impact Assessment</i> Report acknowledges the range of social impacts associated with the project and describes the social context and social climate prevailing in the study corridor.</p> <p>The <i>Social Impact Assessment</i> component of Table 5 – “- Environmental , Assets, Impacts and Mitigation” in the PIA Report recommends ways to manage impacts both short and long term. Counselling services are recommended.</p> <p>Please refer to the Alliances response to submission number 7 regarding the impact of the pipeline on farming.</p> <p>A Wildfire Management Plan will be one of many plans the form the overall Environmental Management Plan for the project. Representatives from the relevant CFA regions are being consulted regarding this plan and other matters relating to pipeline construction and ongoing operation.</p>	Noise management is being included in the design of the pump station building envelope to ensure that the final building design as per wall and roof construction configuration will comply with EPA guidelines.
			Noise and Vibration	<p>The pipeline construction work is of relatively short time duration). The noise levels generated during construction will be kept to a level within EPA guidelines.</p> <p>Construction of the pump stations will be of a longer duration but noise levels will be kept within EPA guidelines.</p> <p>Pump station operation - Noise limits have been derived based on existing background noise levels using the <i>SEPP EPA N-3 (Draft) Noise Policy</i>. Acoustic impact to the environment will be minimal.</p> <p>Noise will be contained within EPA guidelines.</p> <p>Due to the distance in which the residences are located from the proposed pump stations, the construction works and pump station operation will have minimal impact. Ground vibration monitoring can be provided to ensure that the ground vibration levels are in accordance with the recommended levels presented in the appropriate Standards.</p>	Noise management is being included in the design of the pump station building envelope to ensure that the final building design as per wall and roof construction configuration will comply with EPA guidelines.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Socio-economic	The statement on the Glenburn Hall is in Appendix D not in the Socio-economic and Tourism report Appendix K. See earlier for comments on the Hall. The submission also notes that the list of festivals and events is not complete. However, the addition of a few additional festivals does not invalidate the principles set out in the report. It also notes planned expansion of the Yea Saleyards to include additional sales per annum. As this is currently at the planning stage the pipeline project may not impact on the proposal. The submission notes that there are tourism outlets in the region that are not directly affected but could be affected by substantial impacts to the Melba Highway. A number of tourism venues were identified and considered in the progressive development of the report. Lastly the submission notes the growing maturity of the regional tourism industry and the Murrindindi Regional Tourism Association. The project timing and proposed post construction regional promotion could assist in developing an invigorated tourism sector in the Shire.	No further action required.
			Planning	Significant Landscape Overlays were considered under Planning Provisions.	No further action required.
81	James and Beverly Veale (Glengerry Pastoral Company)	3965 Melba Highway, Glenburn, VIC 3717	Social Impact	Please refer to the Alliances response to submission number 7 regarding the impact of pipeline construction and operation on land holders.	No further action required.
			Flora and Fauna Hydrology	Please refer to the Alliances response to submission number 7 regarding the impact of pipeline construction and operation on land holders.	A flora and fauna assessment will be undertaken within this property if the landholder is agreeable.
82	Geoff Bayliss	61 Ti Tree Creek Road, Yea, VIC 3717	Not Applicable	No response required within the Terms of Reference	
83	Mrs Joanne Pyke	758 Gillies Road, Girgarre, VIC, 3624	Not Applicable	No response required within the Terms of Reference	
84	Philip J Mollison	32 Pleasant Road, Hawthorn East, VIC 3123	Design	The inlet from the River is being designed now. The pipeline will pass over the Great Dividing Range with several small tunnel sections anticipated.	No further action required.
85	Russell Picton	735 Goughs Bay Road, Goughs Bay, VIC 3723	Not Applicable	No response required within the Terms of Reference	
86	Mr D. McCauley	P.O Box 643, Benalla, VIC 3672	Social Impacts	The <i>Social Impact Assessment</i> Report acknowledges the range of social impacts associated with the project and describes the social context and social climate prevailing in the study corridor. The SIA component of Table 5 - Environmental , Assets, Impacts and Mitigation in the PIA Report recommends ways to manage impacts both short and long term. Counselling services are recommended. The terms of reference set out the process in which current work it to be completed and scope of work to be undertaken set by State and Federal referrals..	No further action required.
87	Micheal Lea-Whyte	945 Kiota Road, Dhurringile, VIC 3610	Aquatic Ecology	Potential loss of fish as a result of the off take structure have been minimised by design features discussed in section 3.3.3 (p 67). Targeted survey of Ancient Greenling (Damsselfly) have been completed and mitigation measures suggested. Significant declines in the Murray cod, trout cod and Macquarie perch populations in the Goulburn River between Lake Eildon and Goulburn Weir occurred from the mid 1900s	Damsselfly report will be completed and mitigation measures included in EMP, this may include offsets.
88	Richard Oldfield	15 Durham Road, Surrey Hills	Social Impacts	Social issues are covered in the <i>PIA Report</i> - Table 5 – “Environmental , Assets, Impacts and Mitigation for the Broader Region”.	Discussions with landholder during detailed alignment design will seek to minimise impacts during and post construction. Reasons for alignment location either inside or outside property will require careful explanation.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
89	Jean Shannon	170 Dry Creek Road, Bonnie Doon, 3720	Greenhouse	For the energy required for the operational phase of the project (i.e. pumping water from the Goulburn River to Sugarloaf Reservoir), Melbourne Water has made a commitment to obtain the energy from renewable sources.	No further action required.
90	Liz Burton	PO Box 4069, Melbourne University, VIC 3052	Environmental Implications of Transferring Water	Independent survey of environmental Impacts of Goulburn river agreed to be undertaken	No further action required.
			Flora and Fauna	<p>A monitoring program is expected to form part of the detailed Environmental Management Plan (EMP) procedures for some relevant threatened species. Mitigation measures are being developed and implemented for all relevant threatened species.</p> <p>Where appropriate, fauna salvage may be undertaken during vegetation and habitat removal. It is likely that methods for health check and suitable relocation be developed with WIRES or similar specialist fauna welfare group. Protocols are being developed to address any injured animals in accordance with animal ethics principles.</p>	Environment Management Strategy and associated Environment Management Plans are being developed.
91	Olivia Lawson (Paringa Livestock Pty Ltd)	RMB 6054 Creeds Road, Yea, VIC 3717	Not Applicable	No response required within the Terms of Reference	No further action required
92	Gavin Cator (Moirra Shire Council)	44 Station Street, Cobram, VIC, 3644	Not Applicable	No response required within the Terms of Reference	No further action required.
93	Gerald Bleasdale	50 Tulloh Street, Kyabram, VIC 3620	socio-economic	Please refer to the Alliance response to submission 7 for further information regarding farming and business impacts.	No further action required.
94	Russell Wealands (Yea Wetlands Committee of Management)	PO Box 231, Yea, Vic 3717	Flora and Fauna	Presence of the Damselfly in the Yea wetlands has been acknowledged and the Yea Wetland was avoided partly due to concerns over the Damsel Fly. Known sites are not in the preferred corridor however suitable habitat sites have been identified in a targeted survey of the yea floodplain around Yea. A report is being prepared that will include appropriate mitigation measures, including avoiding billabongs, lagoons and scattered trees in the relevant areas. An offset plan may be appropriate and would need to be discussed with the stakeholders. There is scope to involve the Yea Wetlands Committee in habitat reinstatement activities.	Environment Management Strategy and associated Environment Management Plans are being created. Report/memo regarding the Damselfly and appropriate mitigation measures in the EMP will be prepared. Offsets may need to be considered
			Design Construction	The preferred method of crossing waterways is by trenching. A properly planned and executed trench provides more certainty of maintaining environmental controls and there is less impact on adjacent properties. Photographic surveys allow for reinstatement of disturbed areas to near pre-existing condition.	No further action required.
			Hydrology	The preferred pipeline corridor will not cross Yea/Killingworth wetlands, instead it crosses Yea River upstream of the Yea/Killingworth wetlands. Construction activities will be carried out in accordance with statutory requirements within the Environmental Management Plan to minimise impacts on the environment.	No further action required.
			socio-economic	The report recognises the importance of the Yea Wetlands and activities associated with them. The information on the Womindjeka Day has been reviewed but it was considered that the pipeline project would not impact on it or other activities provided the pipeline does not affect the environmental integrity of the wetlands.	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
			Geomorphology	Issues relating to geomorphic processes and disruption to flow are addressed in the Mitigation and Management Measures sections in the <i>Geomorphological Assessment Report</i> and the Hydrology, <i>Water Resources and Waterway Crossings Impact Assessment Report</i> .	No further action required.
95	Jan Beer	"Cheviot Hills" Yea	Hydrology	Error on page 13 noted - the Goulburn river is 557km long.	Report to be amended to 557km.
96	TWJ Shelton (North East Province Pty Ltd)	12/2 Claremont Street, South Yarra VIC 3141	Design Socio-economic		The Alliance is in the process of discussing individual landowner requirements with all landowners.
97	Victorian National Parks Association Inc.	Level 3, 60 Leicester Street, Carlton, VIC 3053	Aquatic Ecology	Regarding the environmental implications of the pipeline, study only investigated impacts on the section of Goulburn River from off take to Goulburn Weir as agreed with state and federal government. During the irrigation season the predicted reduction in water levels (~5 cm) as a result of extractions at the off-take site is not likely to have any detrimental effect on environmental values. Unlikely altered water stage arising from extractions will result in measurable impact on water stage further downstream.	No further action required.
			Flora and Fauna	The Alliance agrees that the project will have ecological impacts, including the loss of vegetation through Toolangi State Forest with high to very high conservation value. The loss of vegetation per se does not constitute a 'significant impact' with respect to the EPBC Act. However, the loss of vegetation could be considered a 'significant impact' if it has significant affect on matters of NES listed under the EPBC Act. The project was considered to be a "controlled action" by the EPBC Unit, which means that the project was considered to have a significant impact upon matters of NES. The presence of listed species within Toolangi may have contributed to this decision. Roadside vegetation will generally be avoided as a design criterion..	The EPBC Act Key Threatening Processes will be incorporated into the development of EMP and EMS documentation.
98	Don Lawson	53 Hunter Street, Mansfield, VIC 3722	Social Impact	The <i>Social Impact Assessment Report</i> acknowledges the range of social impacts associated with the project and describes the social context and social climate prevailing in the study corridor. The SIA component of Table 5 - Environmental , Assets, Impacts and Mitigation in the PIA Report recommends ways to manage impacts both short and long term. Counselling services are recommended. The terms of reference set out the process in which current work it to be completed and scope of work to be undertaken set by State and Federal referrals..	No further action required.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
99	Joy McCauley	PO Box 643, Benalla, VIC 3672	Flora and Fauna	<p>In the part of the FF report addressing for the EPBC Act (see Appendix H of PIA report, pages 157 to 164), the report uses this precautionary principle. That is, for any EPBC listed species where they are known or suspected to occur within the project area, in the absence of complete information we have not concluded that a significant impact is unlikely. We have also concluded overall for the EPBC Act that a significant impact is likely without any mitigation measures implemented, and that it is uncertain if a significant impact will occur with mitigation measures implemented. Irrespective, EPBC Unit has concluded that the project is having a significant impact (i.e. a controlled action). It is acknowledged that the EPBC Act Key Threatening Processes were not addressed in the PIA report. These will be incorporated, where relevant, into the development of the EMS/EMP documentation.</p> <p>Methods employed were developed with DSE. Since completion of the PIA a great deal more field survey has been undertaken, with a specific target for the threatened species already identified. The preliminary survey was aimed at collating potential issues, to establish if any major constraints were apparent. A detailed survey is currently underway to assess in detail the final alignment and record all management issues that need to be dealt with. Species numbers are not estimates, but results from survey. It has been clearly documented where databases have been used to identify additional species that could potentially also occur with the project area.</p> <p>Mosses liverworts and Fungi are generally not apparent on threatened species lists, therefore have not been targeted for compliance studies. The OMP/EMP currently being developed will provide detail in the near future.</p> <p>Please refer to the Alliance response to submission 28 for further information regarding Flora and Fauna issues.</p>	Environment Management Strategy and associated Environment Management Plans are being developed. Report/memo regarding the Damselfly and appropriate mitigation measures will be included in the EMP. Offsets may need to be considered
			Social impact	<p>Perts Reserve will be included in consideration as part of the community benefits program and evaluated along with other projects and ideas.</p> <p>Every effort was made to respond to enquiries as early as possible and to distribute information to all interested parties. Any omissions are regretted and were certainly not intentional'.</p> <p>A comprehensive program of consulting landholders is now underway and community input has been encouraged throughout the projects at community information sessions and in direct discussions with landholders.</p>	Perts Reserve will be included in consideration as part of the community benefits program and evaluated along with other projects and ideas.
100	Jo Wormald	9 Mary Street, Hawthorn VIC 3122	Design	Section 4 of the <i>PIA Report</i> contains information regarding pipeline diameter and depth of construction.	No further action required.
			Flora and Fauna	<p>Assessment of flora and fauna impacts is being finalised in line with methods developed by the Department of Sustainability and Environment DSE). Flora and Fauna experts continue to provide input into the design process.</p> <p>Toolangi is a managed state forest, there will be biodiversity impacts associated with the development, but these will be carefully managed. All clearance of native vegetation will be offset in accordance with Victoria's <i>Native Vegetation Management Framework</i>.</p>	The Offset Management Plan (OMP) is being prepared in consultation with DSE.

Sub No.	Objectors Names	Objectors Addresses	Specialist Field	Alliance Response	Further Refinement Required
101	Katie Smith	The University of Melbourne, Department of Zoology, Parkville, VIC 3010	Flora and Fauna	<p>Both of the frog species mentioned in this submission are native, but not listed as threatened species. We do not know exactly how the construction and operation of the pipeline would affect the local distribution of these species. The project is not expected to lead to a local decline or extinction of these relatively adaptable species, however, the possibility that it may lead to localised increases or decreases in the rate of hybridisation cannot be discounted.</p> <p>For most of the length of the Melba Highway the pipeline is to be placed in adjacent private agricultural land and not in the roadside vegetation. The Alliance agrees that roadside vegetation is important as a wildlife corridor and that habitat in road side drainage lines could be used for amphibian breeding. Roadside drains not expected to be greatly disturbed except in small sections where the pipeline crosses the Melba Highway.</p>	No further action required.
102	Joy L Purell	85 Limestone Road Yea 3717	Not Applicable	No response required. Submission outside the Terms of Reference	
103	Louis Delacretaz	Country Greens Network PO Box 658 Sassafras 3787	Flora and Fauna	Assessment of flora and fauna impacts is ongoing and in line with methods developed by the Department of Sustainability and Environment. Flora and Fauna experts continue to provide input into the design process.	No further action required.
104	Maria I E Riedl	PO Box 1984 Mildura Vic 3502	Not Applicable	No response required within the Terms of Reference	



3. Other Refinements

Further work has been undertaken to assist in pipeline alignment and associated asset location selection. This section summarises the activities undertaken since 8 February 2008 (the cut off for information included in the PIA Report) and up until 27 March 2008.

3.1 Consultation

Consultation with the community and landowners along the preferred corridor has been ongoing and has included a further round of community information sessions along the corridor in the towns of Yarra Glen, Toolangi, Yea, and Glenburn.

In relation to the further refinement within the preferred pipeline alignment, 'Design/Construct' meetings commenced in late January with individual landowners, Council, VicRoads and Telstra to identify the potential alignment of the pipe through private properties within the preferred pipeline corridors. These meetings have included a member of the Sugarloaf design, construction, and stakeholder relations teams and included a walkover of the property with a number of landowners and occupiers to identify and discuss particular issues. These meetings have resulted in an indicative 30m wide construction corridor, and 15m wide future easement being marked on a map of individual properties. Some landowners have not allowed the Alliance to access their properties, so this "micro-siting" process has not been able to be done with those landowners.

All landowners and occupiers have been made aware that the preferred corridor is indicative only and that the final alignment is subject to further investigations and the decision of the Minister for Planning.

To date, Design/Construct meetings have been undertaken on 71 properties, representing a significant proportion of the total number of properties in the preferred corridors likely to be impacted by the pipeline.

3.2 Construction Techniques

Further development of construction methodologies including a tunnel (approximately 800m length) option to traverse the very steep crossfall and narrow road cutting section on the Melba Highway near Castella have been undertaken in consultation with landowners and Stakeholders.

Constructability advice has been provided to the design team to ensure that the pipeline designed to date is physically constructible.



Suppliers of local quarry products and bedding sand have been identified and sites for the disposal of surplus spoil investigated.

The construction team have commenced discussions with:

- Murrindindi Shire, Yarra Ranges Shire and Nillumbik Shire Council officers to discuss the likely affect on Council assets such as roads, drains etc;
- Telstra regarding working alongside their assets;
- Port Phillip and Westernport CMA, GBCMA and DSE with respect to vegetation offsets;
- VicRoads regarding placement of the pipe within the road reserve and other traffic issues;
- GBCMA and Melbourne Water Waterways regarding crossing waterways; and
- Preliminary discussions with subcontractors, material suppliers and plant & equipment suppliers

3.3 Refinements to Corridors and siting infrastructure

A refined indicative pipeline alignment within the preferred corridor has been identified as a basis for focused field investigations and discussions with affected landowners and stakeholders. 71 properties have been inspected 'on site' by a team of designers, constructors and communications representatives. A preliminary individual property plan for each of these sites has been made. Detailed draft longitudinal plans have been created based on the preliminary alignment.

Negotiation continues with the supply agency SPAusNet regarding the supply of technical information on power supply requirements for the project. Investigation of power supply options for power lines and substation location are being undertaken.

At Devlins Bridge and to the north of the Great Dividing Range, options for a pipeline alignment outside the preferred corridor has been identified suggested by some landowners, but are within a non-preferred corridor. This is being examined as a result of consultation with Landowners and is currently being reviewed with respect to the sustainability framework and technical considerations.

3.4 Design Infrastructure

Preliminary design of the temporary works for construction have commenced at the Goulburn River pump station and inlet site. This includes the pump station, inlet, storage and power supply. Finalisation of these plans will be in Target Out-turn Cost (TOC), upon which this project is approved by the relevant authorities. In addition, within the property at Goulburn River a refinement to the existing corridor has been identified. This follows discussions with the landowner and further assessment of potential cost, environmental and cultural heritage (scar trees) impacts.



Further detailed design has resulted in identification of a tank near the highest point of the pipeline as being the preferred solution to provide protection against pipeline surge and improve pipeline operation. The tank could also serve as an emergency supply for the CFA. The tank is likely to be partially below ground and partially above ground and would be located within the pipeline construction corridor.

Additional Site Emergency considerations have taken into account made at the request of the CFA. This may be in the form of fire fighting fill points along the pipeline. Further discussions with CFA will be ongoing.

Preliminary design of the Sugarloaf Reservoir inlet structure has been made and LIDAR survey, geotechnical other environmental investigations is currently being integrated into the design.

3.5 Environmental Mitigation and Management Measures

All work within this section has been focused on specific areas and target species identified within the 'preferred' corridors to inform appropriate management and mitigation measures of the project. All investigations are being undertaken where access to sites has been allowed.

3.5.1 Geotechnical

More detailed geotechnical investigations of the Goulburn River pump station, inlet sites and along the alignment are currently underway. None of the further work to date necessitates any changes to the proposed corridors.

3.5.2 Contaminated Land

Additional soils samples have been collected and tested along the 'preferred' corridors since the PIA was submitted. None of the sites have identified any issues of note that differ from those contained in the PIA Report.

3.5.3 Aquatic Ecology

Since submission of the PIA a survey has been completed of all relevant waterways within the preferred corridors. It is considered that further survey will only be required if significant changes occur to the pipeline corridor.

Suitable habitat for the Ancient Greenling has been surveyed and identified around the proposed crossing point of the Yea floodplain. This will inform the Environmental Management Plan (EMP) for that section with appropriate consideration of the statutory Action Statement.

The EPBC listed Macquarie Perch, was identified as a species that has been identified within the Yea River in the PIA. Additional information since the submission of the PIA has confirmed the presence of Macquarie Perch at a location down Stream of Devlins Bridge. This will require



additional consideration within the EMP for that section, in accordance with the EPBC Act and will require the further pre and post monitoring works to be conducted. The EMP is currently being prepared. None of the further work to date necessitates any changes to the proposed corridors.

3.5.4 Cultural Heritage

Additional survey has continued since the submission of the PIA where a total of 100 extra test pits have been undertaken and a further 25-30 test pit excavations. From this 5 artefact scatter sites have been recorded and further definition has been obtained for a number of unknown heritage sites. None of the further work to date necessitates any changes to the proposed corridors. Further discussions have also been undertaken with Aboriginal Affairs Victoria (AAV) related to development of the Cultural Heritage Management Plan (CHMP). A draft CHMP is currently being developed for AAV review.

3.5.5 Flora and Fauna

Investigations have continued after the submission of the PIA to identify additional information to assist the Advisory Committee and Minister for Planning in determining the final pipeline alignment selection. Significant work has been undertaken including documentation of additional populations of five already recorded threatened flora species (*Dianella amoena* Matted Flax-lily, *Desmodium varians* Slender Tick-trefoil, *Eucalyptus fulgens* Green Scentbark, *E. yarraensis* Yarra Gum and *Pomaderris vacciniifolia* Round-leaf Pomaderris), three previously unrecorded threatened Ecological Vegetation Classes (EVCs), and the occurrence of the nationally vulnerable species, *Delmar impar* (Striped Legless Lizard) at two additional properties. Despite the additional threatened species and EVC records, none of the further work to date has identified any issues that would result in changes to the conclusions of the PIA. Investigations remain ongoing, and findings will be communicated via an addendum report and incorporated into the detailed EMPs being developed.