MITCHELL SHIRE COUNCIL

COUNCIL MEETING

AGENDA

MONDAY 29 JUNE 2020
7:00pm

NOTICE IS HEREBY GIVEN that Council **Meeting** of the Mitchell Shire Council will be held will be held online on **Monday 29 June 2020** commencing at **7:00pm.**

MARY AGOSTINO
ACTING CHIEF EXECUTIVE OFFICER

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1 WELCOME AND GOVERNANCE DECLARATION

The Mayor formally opens the meeting with an acknowledgement of country and welcomes all present.

2 APOLOGIES AND LEAVE OF ABSENCE

3 DISCLOSURE OF CONFLICTS OF INTEREST

In accordance with section 79 of the Local Government Act 1989.

4 DEVELOPMENT AND INFRASTRUCTURE

4.1 SEYMOUR LEVEE CONSULTATION REPORT

Author: *Tim Partridge - Manager Engineering and Major Projects*

File No: *CT/04/146*

Attachments:
1. *Seymour Flood Levee Alignments*
2. *Council Resolution 25 October 2010*
3. *Key Project Milestones*
4. *Geotechnical Investigation Report 2016*
5. *Land Acquisition Plan*
6. *Draft Social Impact Assessment - Seymour Flood Levee*
7. *GBCMA Correspondence*
8. *Economic Impact Assessment - Seymour Flood Levee*
9. *Community Consultation Report - Seymour Flood Levee*
10. *Project Risk Assessment*

SUMMARY

This report

a) Outlines the project background for the development of the Seymour Flood Mitigation (Levee) Project and the current commitments that have been made by Council and its funding partners for the detailed planning and design, acquisition of land and the construction of the Seymour Flood Levee structure.

b) Seeks to recommend Council's future direction for the project.

RECOMMENDATION

THAT Council:

1. Ceases to pursue future planning, development and delivery of the Seymour Flood Levee project, given the scale, complexity and risks involved in the delivery of the Seymour Flood Levee Project.

2. Instructs the Acting Chief Executive Officer to terminate all funding agreements between Council and the Victorian State Government and Federal Government relating to the planning, design, acquisition of land and construction of the flood levee project.

3. Officers prepare a report outlining the implications for the Seymour Structure Plan associated with this resolution.

4. Publicly advises the community of this resolution.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

PURPOSE OF THIS REPORT

A flood protection levee for the Seymour township has been contemplated for many years by the Mitchell Shire Council and its Local Government predecessor as well as the State Rivers and Water Supply Commission (SR&WSC), precursor (in part) to the Goulburn Broken Catchment Management Authority (GBCMA).

The Seymour Flood Levee project has been developed to protect more than 350 properties from a large-scale flood event of the Goulburn River. In addition, a flood levee can also provide flood protection from a large-scale flood event of the Whiteheads Creek for those areas of the Whiteheads Creek floodplain located downstream of the Railway line.

This report outlines the background for the ongoing development of the Seymour Flood Mitigation Levee project and the current commitments that have been made by Council and its funding partners for the detailed planning and design, acquisition of land and the construction of the Seymour Flood Levee structure.

What follows is a detailed history of the project, exploration of key issues that surround the project, and documentation of key risks of the project currently known at this stage of the project.

The intent is to provide clear considerations and a recommendation as to whether this project should continue to proceed or not.

BACKGROUND STUDIES AND RESEARCH

Previous Studies

In 2001 WBM Oceanics Australia (WBM) carried out extensive flood modelling of the Goulburn River and other waterways, provided in the Seymour Floodplain Mapping Study - 2001.

This 2001 report drew from the State Rivers and Water Supply Commission of Victoria (SR&WSC) study ‘Seymour - a report on flooding from the Goulburn River’ - 1981 and the ‘Floodplain Management Study - 1984’.

These two studies were done on behalf of the Eildon to Seymour Flood Warning Group and are the earliest documented records of a comprehensive assessment of a flood levee as a potential flood mitigation solution to Seymour flooding issues.

The 1981 and 1984 studies helped to inform the flood planning controls that exist over parts of Seymour today as a result of flooding caused by the Goulburn River.

The 2001 Floodplain Mapping Study confirmed that there are more than 350 properties in the Seymour Township that are liable to flooding from a large-scale flooding event of the Goulburn River. The findings of this study further support the application of the current floodplain planning controls over parts of Seymour, including the Land Subject to Inundation Overlay (LSIO), Floodway Overlay (FO) and Urban Flood Zone (UFZ), that we can see in place today.

In 2002, a Technical Working Group identified eight (8) structural and non-structural options to mitigate the impacts of flooding from the Goulburn River on a section of the Seymour township. These options were put to the Seymour community via a survey in 2002 to determine whether residents would prefer either structural or non-structural

solutions to combat the possibility of flooding of the township in the future. A total of 34 surveys were completed.

The community identified mainly non-structural options which included 'community education and awareness programs' closely followed by 'land acquisition' and 'land use planning' as the preferred options to mitigate the impacts of a large-scale flood of the Goulburn River impacting on parts of the Seymour township.

At the time the community saw the use of 'non-structural' measures as adequate to provide protection from flooding and perceived it to be better than other structural approaches such as construction of levee banks and enlargement of existing waterways. Also highly ranked in this survey was "flood proofing or raising of individual buildings".

In addition, the survey responses indicated the community was also prepared to live with mitigation measures that protected the township from a 1 in 20-year flood event of the Goulburn River as opposed to a greater level of protection against a 1 in 100-year flood of the Goulburn River.

The survey did not appear to indicate to the respondents the cost of the options nor the effectiveness of each in actually preventing the township from flooding. A summary of these options and ranking are shown in Table 1 below:

Table 1 – 2002 Community Survey - Preferred Mitigation Measures

Rank	Preferred Mitigation Measures	Percentage of Total Reponses
1	Community education and awareness programs	17%
2	Flood proofing or raising of individual buildings	17%
3	Land acquisition	16%
4	Land use planning	14%
5	Floodways	10%
6	Levees or floodwalls	9%
7	Vegetative cleaning of waterways to increase hydraulic capacity	9%
8	Enlargement of existing waterways	8%

A matrix style analysis was then carried out for these eight (8) mitigation measures. This process involved assigning a rank for each of hydraulic and economic benefits along with any adverse environmental and social effects associated with each measure. This analysis was presented and finetuned with the Technical Steering Committee and Community Reference Group to give the ranking of measures in Table 2 below.

The Technical Steering Committee, in conjunction with WBM, concluded that although the construction of a levee bank was one of the least preferred options by the community, protection of the township from flood inundation could only be feasibly provided by a physical flood barrier.

Table 2 – Flood Mitigation Options Screening

Seymour Mitigation Options Screening		Weighting					
		10	10	8	5	2	
Rank	Strategy Elements	Hydraulic Benefit	Economic Benefit	Cost	Environmental Impact	Social Consequence	Weighted Score*
1	Levees	10	10	7	3	4	121
2	Floodplain Modification (lowering of roads etc.)	5	5	4	2	1	56
3	Floodplain Education Programs	0	4	1	0	0	32
4	Floodwalls	4	4	6	3	2	13
5	Individual Property Flood Proofing	0	6	7	0	3	-2
6	Flood Insurance	0	7	8	0	4	-2
7	Purchase and Relocation	0	8	10	0	5	-10
8	Floodways	2	2	5	2	1	-12
9	Channel Improvement	1	1	5	8	7	-74
10	Removal of Obstructions	1	1	5	10	8	-86

*Weighted score represents the weighted sum of Hydraulic and Economic benefits minus the weighted sum of Cost, Environmental and Social consequences.

Table colours represent high (7-10), medium (4-6) and low (0-3) scores relative to positive (green), neutral (orange) and negative (red) benefits, impacts and consequences.

The broad outline of the preferred option was presented to Council in the *Seymour Flood Mitigation Communication Investigation – Final Consultants Report to Council, February 2006*. This report recommended construction of a levee bank along with individualised structural protection for isolated buildings outside of the protected area.

This report also recommended the inclusion within the protected area of the urban area between the hospital and Catholic school by constructing the levee along Whiteheads Creek. The levee alignment as it featured in this 2006 report is shown in Attachment 1 of this report.

There is no documented account of Council's formal position on the flood levee project at the time of considering this 2006 report.

Subsequent studies exploring the feasibility of the construction of a flood levee, including the *Seymour Flood Mitigation Project Preliminary Design Report – John Webb, 2009* recommended some amendments be made to the 2006 alignment to make better use of existing 'Crown Land Government Road' reserves in order to minimise the impost of acquiring private land. The amended levee alignment as it featured in the 2009 report is also shown in Attachment 1 of this report.

Previous Decisions of Council

At its meeting on 25 October 2010, Council resolved the following;

> "THAT 'Council adopt and proceed in accordance with the *Seymour Flood Mitigation Project, Preliminary Design Report, October 2009* prepared by John Webb Consulting".

This resolution is considered to be the primary basis for the progression of this project and subsequent funding applications to the various State and Federal grant funding programs. Attachment 2 contains the full resolution of Council in 2010.

In the years following the Council resolution of 25 October 2010, Council has signed several funding agreements with State and Federal Government partners for the continued design, development, land acquisition and execution of a flood levee to protect parts of Seymour from flooding of the Goulburn River. Attachment 3 shows a timeline of the key milestones for the development of the Seymour Levee project.

Council's current commitment towards the ongoing development and execution of the flood levee project is further evident through the Seymour Structure Plan (discussed further below) which makes references in support of the progression of the flood levee project.

At its meeting on 19 September 2016, Council resolved to award the design contract for the detailed design of the Seymour Flood Levee.

The proposed flood levee scheme

The flood levee alignment as proposed in the 2019 Functional Design, has been designed to protect parts of Seymour from the 1% Annual Exceedance Probability (AEP) flood event of the Goulburn River.

The 1% AEP is also known as the 1:100-year flood event.

The alignment generally borders the developed area of the township finding a balance between maximising the protected area of the township and minimising encroachment on the natural floodplains of the Goulburn and Whiteheads Creek waterways.

The focus of this alignment is to protect the urban or potential urban areas of the township, with protection of rural lands to occur generally as a consequential benefit from adopting the most efficient and logical route ensuring the levee can meet its functional intent.

Levee profile

The flood levee is proposed to be a compacted earthen embankment for most of its 4.4km length with temporary flood barriers to be utilised at major road crossings on Emily Street and Wallis Street.

The levee profile will include a 3-5m wide crest with side batters of 1:4 – 1:6 slopes depending on the specific location and desired landscaping outcome at those locations.

The height of the flood levee is set 600mm above the 1% AEP flood heights for the Goulburn and Whiteheads Creek waterways as determined by respective flood modelling studies of both waterways. Overall levee height varies from 1.8m – 2.4m

along the Whiteheads Creek interface, to 3.5m in the vicinity of the Quarry and Railway line south of the Seymour township.

The width of the levee footprint is dependent on the height of the levee and the batter slopes and will vary from 20-30 meters wide.

Internal Drainage

During localised rainfall, stormwater emanating from within the protected zone will be conveyed to waterways via purpose-built stormwater outlets constructed through the levee structure.

During a flood, when riverine flood water levels outside of the levee prevent the free movement of stormwater to waterways, stormwater outlets will be closed using a series of mechanical drainage valves and stormwater will be diverted to a series of stormwater holding storages where it will be pumped over the levee structure.

Natural depressions and low points in the landscape will be utilised as stormwater holding storages along with purpose-built storages at key outlets.

Dedicated pumping locations will be established as part of the project, with temporary pumps deployed to these locations in advance of floodwaters reaching critical levels. These pumps will be placed on standby to deal with localised stormwater runoff from the protection area during a riverine flood event.

Should the project proceed, the final drainage strategy including details of stormwater storages will be determined as part of any detailed design of the Flood Levee scheme.

Properties located outside the protected area

The construction of a physical flood protection system (a levee) on the Goulburn River and Whiteheads Creek floodplains will create a 'narrowing' of the waterway cross-section on both waterway floodplains. This 'narrowing' of the waterway cross section will result in an increase in the maximum flood levels expected to be experienced adjacent to and upstream of the levee structure.

For the Goulburn River, increased flood levels up to 800mm during a 1% AEP event are expected in the areas immediately upstream of the levee structure in the Emily Street area, while properties along the Whiteheads Creek will experience increases to 1% AEP flood levels up to 100mm in the immediate vicinity of the levee structure downstream of the Railway line.

The 2006 WBM report identified seven (7) properties that would be impacted by an increase in flood levels on both the Goulburn River (five properties) and Whiteheads Creek (two properties) floodplains. During the preparation of the 2009 report, the levee alignment was amended to include two additional properties previously not included within the protected area of the levee, therefore reducing the number of habitable buildings impacted by increased flood levels to five.

According to the *Seymour Floodplain Mapping Study - 2001*, all five of these properties are currently impacted by over-floor level flooding during a 1% AEP flood event of either the Goulburn River of the Whiteheads Creek. The construction of a flood levee will likely further increase the depth of inundation to these existing floor levels. These properties are identified on Attachment 1.

Modelling suggests the calculated increase to flood levels from flooding of the Whiteheads Creek are considered minimal and would not result in the flooding of any

floor levels of habitable buildings that are not already impacted by a flood on this waterway.

Similarly, the increase to flood levels from flooding of the Goulburn River would not result in the flooding of any floor levels of habitable buildings that are not already impacted by a flood on this waterway, however the resulting change in flood level is more significant, with at least two properties expected to experience flooding depths up to 800mm higher than existing.

Section 16 of the *Water Act 1989* sets out the liability regime for flows of water from the land of a person on to the land of another. Section 16(2) provides that if a person interferes with a reasonable flow of water onto any land, or negligently interferes with an unreasonable flow of water, and the water causes injury, damage or economic loss, the person who interfered with the flow is liable to pay damages.

By virtue of the fact that the construction of a flood levee will cause a displacement of floodwaters and a subsequent increase to flood levels affecting some properties, the proponent of the Flood Levee project is duty bound, in consultation with affected property owners, to carry out works or implement measures to mitigate against any injury, damage or economic loss caused by the displacement of these floodwaters.

In accordance with the obligations under Section 16 of *The Water Act 1989,* individual solutions would be required for all five buildings to mitigate against this increase in calculated flood levels due to the levee construction and to protect the project proponent from future liability under the *Water Act*.

The possible solutions might include;

- Raising the building floor levels 600mm above the calculated 1% AEP flood level;
- Construction of a physical structure around the perimeter of the affected buildings;
- Negotiation of a one-off compensation payment to the property owner/s in recognition of the change to flooding characteristics of their property caused through the construction of a flood levee. (Property owners could elect to use this compensation payment to implement their own flood mitigation measures appropriate to the individual characteristics of their property and buildings. Alternatively, these property owners may elect to do nothing).

The individual solutions (either structural or other) for each of these buildings will need to be negotiated with the owners during the detail design stage.

Geotechnical Testing

The soil profile is variable along the length with predominantly low plasticity silt, clayey silt or silty clay material overlying cohesionless sands and gravels at various depths. The low-medium plasticity soil types observed are generally suitable for the levee bank construction however the design and construction should include a keyway (or core) that extends thorough any topsoil and any deeper silt fill as encountered (typically 300-500mm deep). It is noted that towards the eastern end of the levee, deeper silt fill materials were observed, in these locations a deeper core construction (up to 1 m will be required). It is recommended that prior to use, the proposed levee material is

inspected by a Geotechnical Engineer and if required, laboratory tests undertaken to confirm the suitability of the material.

A Geotechnical Investigation carried out in April 2016 (report dated Dec. 2016) is shown in Attachment 4 of this report.

There are no currently identified geotechnical reasons why the technical design of the levee bank would be complicated or that unexpected construction difficulties could not be reasonably overcome.

Planning Scheme Considerations

The works to construct the levee bank are exempt from requiring planning permit within the urban floodway zone of the Mitchell Planning Scheme.

Prior to any land acquisition or works associated with the flood levee commencing, a Planning Scheme Amendment is required to introduce a Public Acquisition Overlay (PAO) which will identify the land area to be acquired to facilitate its development. The overlay is required to provide for the future construction of the levee and the acquisition of the privately-owned land required along the route.

The amendment process would also need to be supported by a range of technical assessments, including consideration of matters such as heritage and vegetation/environmental conditions. Should there be clear recommendations from the technical assessments, this would ultimately shape and refine the extent of the proposed levee. This will ensure that all planning, land use and development issues are identified, and appropriate conditions can be put in place at an early stage to enable a more efficient planning and design phase of the project.

A typical Planning Scheme Amendment process, commencing with Authorisation to exhibit an Amendment, through to seeking Ministerial approval through a conventional Amendment process can take in the order of 12 to 18 months.

A key element to this process is the formal exhibition of the Amendment (public consultation) for a period of one month where Council, as Planning Authority, invites feedback via submissions. In this instance, there is likely to be unresolved matters, therefore an Independent Planning Panel would be established by the Minister for Planning who will then consider submissions from parties who have unresolved issues. Once the Panel concludes, they would provide recommendations back to Council to assist with a decision to introduce the Public Acquisition Overlay. Once this step is completed, the final Amendment is submitted to the Minister for Planning for approval.

Land Acquisition

Acquisition of a corridor of land of suitable width will be required along the alignment to provide for the construction of the levee structure, suitable landscaping and vegetation and to enable access along the levee alignment for ongoing management purposes.

The width of this corridor of land required is proportionate to the height of the levee and will vary from 20-30 meters wide.

The flood levee alignment as currently proposed will cause some dissection of land use as it passes through private property, however every attempt has been made to minimise the effects of this through more generous acquisition of land to eliminate or reduce residual ‘left over’ parcels of land parcels that are of diminished ‘value’ once

dissection takes place. Hence land acquisition and compensation are significant aspects of the project costs.

Where dissection of land occurs due to land acquisition, solutions would need to be developed depending on the individual circumstances of the landowner and the land use at the time of acquisition. For example, where a farming operation is impacted by the levee alignment, appropriated measures would need to be developed with the landowner to ensure the continuity of the farming operation. In its most basic form, this would involve crossing points over the levee alignment for the movement of stock and may involve extensions to existing farm infrastructure like the provision of additional watering points.

Up to twenty-three (23) individual properties are affected by acquisition of land required for the levee alignment, including three properties (owned by three separate landowners) that would require complete acquisition.

A land acquisition plan is shown in Attachment 5 of this report. A total of 126,114m^2 of privately-owned land has been identified as requiring acquisition to build a flood levee.

Landscape Design and Open Space Values

The levee would be a prominent physical structure on the generally flat landscape. The typical profile would be an earthen bank ranging between 1.8 and 3.5 meters high above ground level and 3-5 meters across the crest. With potentially a significant impact on the visual amenity of the township, great care will be required to either ensure that it does not create unwanted visual disconnection between the lands on either side or, where appropriate, can be integrated into its setting and used as a feature.

There would be opportunity to use the structure for additional purpose in some sections, such as relocating the walking track along the Goulburn River onto its crest.

The acquisition of land for a levee provides rare opportunities to unlock land surrounding the river which may be used for a range of purposes including new and enhanced parks, linear trails and environmental reserves, as well as the potential development of tourism destinations.

To further reduce the visual impact of the levee bank alignment on key precincts, including impact on heritage overlay areas, temporary barrier systems could be employed along select lengths of the levee alignment. These systems would need to be deployed at predetermined times in advance of rising flood waters.

Due to the cost of these systems being approximately five times more costly to construct than the earthen bank of equivalent height, the use of these temporary systems should be used sparingly and these additional costs should be balanced against the visual impact of a permanent structure and the need to provide an economical flood protection solution to the township.

Ecological Values

The *Terrestrial and Aquatic Assessment for the Proposed Seymour levee- proposed realignment* completed by Ecology & Heritage Partners for Mitchell Shire Council in April 2015 is a comprehensive assessment undertaken by well-regarded flora and fauna assessors. This assessment included both desktop assessments and field assessments undertaken in 2013 and 2014 and a targeted Growling Grass Frog survey and habitat assessment conducted in late 2013.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

Council's Environment Coordinator has confirmed that the targeted Growling Grass Frog surveys undertaken by Ecology Heritage Partners for the proposed Seymour Levee met the Survey guidelines for detecting the Growling Grass Frog outlined in the *Significant impact guidelines for the vulnerable Growling Grass Frog (Litoria raniformis) Nationally threatened species and ecological communities EPBC Act policy statement 3.14 (Commonwealth of Australia 2009).*

While this study did not identify the presence of any Growling Grass Frogs along the proposed levee alignment, given the time that elapsed since this study was conducted and should a decision be made to progress with the project, it is recommended that the Growling Grass Frog Surveys are undertaken again, as this is a federally listed species under the *Environment Protection and Biodiversity Act 1999*. If Growling Grass Frogs are located within the alignment, a referral to the Australian Government Department of the Environment and Energy will be required which may result in a management or relocation plan needing to be developed.

In addition, the Victorian Native Vegetation Removal Guidelines have been reviewed since the assessment was undertaken therefore it will be a requirement to update or verify native vegetation removal information to comply with the requirements of the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017).

Indigenous Cultural Heritage

The proximity of the proposed levee structure being adjacent to both the Goulburn River and Whiteheads Creek over much of its length, and the natural drainage paths through the site require a detailed assessment of the potential for sites of indigenous cultural significance.

In 2008, *Heritage Insight* was engaged to undertake an initial assessment of the potential for sites of heritage significance along the alignment. The findings of this study are documented in the *Preliminary Heritage Assessment*, Heritage Insight - July 2008. The assessment included a visual survey of the proposed alignment.

The preliminary assessment included a visual inspection of the ground surface and found that while there is no obvious evidence of cultural sites that would be disturbed, a number of locations along the route have the potential to contain items of cultural heritage significance that would require additional investigation during detailed design.

Recommendation 6 of this report concluded that the proposed works constitute a high impact activity (in that the works will result in significant ground disturbance), under Regulations 43(1) and 54(1) of the Aboriginal Heritage Act 2006 and would thus trigger a requirement for a Cultural Heritage Management Plan (CHMP) to be prepared.

Following consideration of this report, the *Cultural Heritage Management Plan*, Heritage Insights - July 2015, was prepared.

The 2015 Cultural Heritage Management Plan led to the identification of 86 flaked stone artifacts which were combined into five (5) Victorian Aboriginal Heritage Register (VAHR) registered places. These registered places include three Artifact Scatters and two Low Density Artefact Distributions (LDAD) all with low scientific value.

Despite the low scientific value of these sites, the report noted that presence of Aboriginal cultural material at these sites has aesthetic, historical and social values of importance to the Aboriginal community

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

The CHMP report makes a range of site-specific recommendations for the management of Aboriginal cultural heritage at the five sites described above through the minimisation of harm and the implementation of partial salvage programs.

Non-Indigenous Heritage

The *Preliminary Heritage Assessment*, Heritage Insight - July 2008 did not identify any historical sites within the study area, however this assessment does note that the study area is located within parts of two Heritage Overlays which comprise the center of early Seymour and that there is significant potential for the presence of subsurface historical archaeological sites associated with past structures and river crossings associated with early European settlement in the town.

This report recommended that further historical investigation be undertaken in this area, in order to properly assess the potential impacts of the proposed works.

These additional investigations would form part of the detailed design phase of the project for the levee alignment through the areas included within the Heritage Overlay along with an assessment of those other areas impacted by changes to the levee alignment since this report was conducted.

A 2008 report by the Mitchell Shire Heritage Advisor emphasised the historical significance of the Emily Street section of the township, as one of the main locations of an early river crossing and stopping place on the route between Melbourne and Sydney.

The Heritage Advisor noted sufficient concerns relating to the perceived disruption to the connectivity and visual amenity of the heritage area of Emily Street to recommend that the construction of the permanent levee bank should not proceed through the Emily Street heritage overlay area.

The principal concern of the heritage advisor is the proposed permanent earthen bank structure, given its scale would be approximately 2.2 – 2.5m high through the section of the township between Emily Street and the Goulburn River.

It is considered that the principle concerns outlined in this report relating to visual amenity are not insurmountable and could be addressed through an appropriate and well considered landscape design response for key precincts along the levee alignment including the use of temporary barrier systems through these precincts to reduce visual impacts. (See Landscape Design and Open Space values section of this report).

There will be native vegetation clearance required as a result of any alignment adopted. The 2019 alignment was chosen to reduce the vegetation clearance required, particularly in the area of Tierney Street.

Social Impact Assessment

In 2015 Akin Planning undertook a Social Impact Assessment of the Seymour Flood Levee Project.

A Social Impact Study is a tool used to review and asses social impact of a planned intervention such as a policy change, public program or infrastructure development with the goal of influencing a more ecologically, socio-culturally and economically sustainable and equitable environment.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

The impact assessment identifies that the project potentially has considerable social benefit at the township and regional level noting that reducing the risk of flooding would reduce health and safety risks and reduce the cost of planning for these. It would also reduce constraints to the development of Seymour, which could potentially increase economic development and encourage increased population growth.

The report notes the negative impacts in the directly affected area and for landowners in close proximity to the proposed levee bank location. These include property acquisition (either full or partial), impacts to amenity and changes to access.

The key risk as noted in the report is considered to be the perception of a loss of recreation and conservation value, and subsequent drop in amenity, in the areas close to the Goulburn River and Whiteheads Creek. These areas are likely to be highly valued by the local community and there may be strong concerns about impacts in that area. The report notes that future planning for the project should take these impacts into account and should be responded to with thoughtful and considered design.

The impact assessment includes several recommendations on mitigation options for the project. These include:

- Ensuring that the construction management plan includes specific requirements to minimise disruption for residents and businesses affected by construction activities. This should include maintaining access to recreation areas where possible;
- Ensuring that the contractors have a traffic management plan which aims to minimise disruption from heavy vehicle movements and minimise access disruptions;
- Working with landowners affected by acquisition to minimise negative impacts and to potentially aid in assembling severed land parcels for key stakeholders;
- Preparing a landscape masterplan to guide future development of the riverbank and to minimise damage to its recreational and conservation values;
- Investigating options to enhance the economic benefit of the project, including maximising local employment and training opportunities.

The full report is shown in Attachment 6 of this report.

<u>Goulburn Broken Catchment Management Authority (GBCMA)</u>

Catchment Management Authorities (CMA's) were established to undertake catchment management functions described in the *Catchment and Land Protection Act (1994)* and the *Water Act (1989)* for Victoria outside the Melbourne Metropolitan Area. CMAs provide regional environmental guidance, in particular where works impact on waterways and environmental values across multiple local government areas.

The objective of Floodplain Management is to minimise the potential for loss of life, risk to health and damage to property, and the protection of environmental assets. This can be achieved through:

- Coordinated planning control of new development and works within the floodplain environment
- Reducing flood risk through flood mitigation works and effective flood warning systems

- Assist the SES with improved community awareness and flood preparedness
- Preserve and where possible enhance the natural function of a floodplain, which is to convey and (temporarily) store floodwater
- Preserve and enhance environmental values of floodplains including its flora and fauna habitats, wetlands, significant landscapes and areas of archaeological significance.

To achieve these objectives, CMAs develop, update and implement regional and local floodplain management strategies and specific area flood studies.

An important element of such strategies is to recognise floodplains in Councils Planning Schemes as Land Subject to Inundation or Floodway Overlays which enables the CMA to provide binding advice (unconditional, conditional or refusal of planning permits) to Councils on proposed new developments (section 55 of the *Planning and Environment Act*).

The extent of the flood related overlays are often based on historic flood information or flood studies and may require changes over time as, for example, more information or detailed surveys become available. As such it is important that CMAs, as part of flood data management functions, continue to collate data of past and future flood events.

The GBCMA oversaw the development of and endorsed the findings of *Seymour Floodplain Mapping Study – 2001* prepared by WBM. The final findings of this study form the basis of the current flood plain planning controls that exist over parts of Seymour, namely the Land Subject to Inundation Overlay, Floodway Overlay and Urban Flood Zonings. The GBCMA have confirmed that the existing flood planning overlays can be removed from area protected by the proposed Town Levee, should the project proceed. The GBCMA has also confirmed its in-principle support for the replacement of the Urban Floodway Zone with other applicable zone(s). This rezoning work will need to be carried out by Council after further strategic work is undertaken to understand the most appropriate land zoning.

The GBCMA also participated in the Technical Steering Group that oversaw the development and assessment of flood mitigation options detailed in Table 2 of this report.

The Goulburn Broken CMA supports the levee from a technical point of view and the Seymour Town Levee has been identified as high priority in the Goulburn Broken Regional Floodplain Management Strategy (2018). This position is confirmed in the letter in Attachment 7 of this report.

<u>Whiteheads Creek</u>

In 2018 Council, in partnership with the Goulburn Broken Catchment Management Authority, commenced the Whiteheads Creek Flood Mapping and Intelligence Study.

The study mapped the flood behavior of the 100km^2 Whiteheads Creek catchment that lies immediately East of the Seymour in order to gather information relating to flood risk within the urban areas of Seymour and the flood extents in order to inform future flood planning controls to ensure future development along the waterway is carried out in a manner that is sympathetic to predicted flooding behavior.

This study confirmed much of what was already well understood about flooding along the Whiteheads Creek including the fact that there are many properties within the

Seymour urban area that are liable to flooding of a large-scale flood event of the Whiteheads Creek.

Most notable is the flood inundation to the areas located upstream of the Oak Street and Railway line bridges around Wimble Street, Oak Street and to those areas located downstream of the Oak Street and Railway line bridges around Wallis Street and High Street.

Whilst the construction of a flood levee (as depicted in Attachment A, 2019 alignment) will provide relief to those areas located downstream of the Oak Street and Railway line bridges from flooding of the Whiteheads Creek, i.e. areas around Wallis Street and High Street, those areas that are inundated from Whiteheads Creek flooding located upstream of these bridges will not receive flood protection from the proposed flood levee.

The resolution of these upstream flooding issues, along with other issues associated with the Whiteheads Creek, identified by the community through the recent engagement strategy, will require separate solutions to resolve these issues.

Using the flood model created as part of the Whiteheads Creek Flood Mapping Project, the impacts of the construction of a flood levee along the floodplain of the Whiteheads Creek have also been mapped. This mapping reveals that the construction of a flood levee along the Whiteheads Creek floodplain will have a minimal impact on flood waters in the Whiteheads Creek.

The flood model calculates a maximum depth increase during the 1% AEP Whiteheads Creek flood event. This additional depth in waterway flows is unlikely to impact any additional habitable dwellings on the floodplain that are not already impacted by floodwaters and the flooding extents (the wetted area) is only increased in very isolated areas.

ISSUES AND DISCUSSION

Planning Scheme Controls

There are several different planning controls which currently exist over flood prone land in Seymour which can inhibit the way new developments can occur. These planning controls include Land Subject to Inundation Overlay (LSIO), Flood Overlays (FO) and the Urban Floodway Zone (UFZ). Attachment 8, Fig.2 shows how these planning controls are applied to land in Seymour.

These three types of planning controls are among the most restrictive planning controls that govern land use in the planning scheme. They have different impacts on the way land can be used and developed in Seymour, are restrictive and result in limitations for land use and can inevitably result in more costly development outcomes.

- Land Subject to Inundation Overlay (LSIO)
  This overlay applies to land affected by flood water inundation associated with waterways and open drainage systems. This overlay generally represents areas with a lower flood risk hazard. Such areas are commonly known as floodplains.

- Flood Overlay (FO)

This overlay applies to land that's identified as carrying active flood flows associated with waterways and open drainage systems. This overlay is generally categorised by flood depths in excess of one meter in depth.

- Urban Flood Zone (UFZ)
  This is the strongest form of flood planning control. Unlike the overlays, the UFZ controls land use as well as development, with land use being restricted to low intensity uses such as recreation and agriculture. The UFZ is typically used in areas of high flood hazard and provides limited opportunity for most forms of development. The UFZ restricts the use of such land, as the risk associated with flooding renders it unsuitable for any further intensification of use or development. The land use is therefore restricted to activities such as recreational activities and grazing.

These planning scheme controls have been applied to the planning scheme under the direction of the GBCMA in an effort to mitigate future flooding risk to land use and development within the area under which they cover.The removal of any or all of these planning controls is only possible through the elimination of the physical flood risk that exists over this land.

If the levee project proceeds and once construction is completed, the flood overlays that currently exist throughout the proposed protected area (FO and LSIO) could be removed and replaced with different development controls which will be far less restrictive on future development. i.e. No requirement to build new buildings above the current flood level. The resulting easing of planning controls has been confirmed by the Goulburn Broken Catchment Management Authority.

The construction of a flood levee will also provide opportunities to re-zone land (the Urban Floodway Zone) that is currently unable to be developed due to flooding conditions as described above. The re-zoning of UFZ land will need to be further explored if a decision is made to proceed with a flood levee.

It is important to note that in order to undertake a future re-zoning of land, there needs to be a complete understanding of what ‘new zoning’ of land is required for this precinct of Seymour. If the levee was to proceed and resulted in a review of the land use, there would need to be strategic justification to zone land to a particular use, such as residential or commercial. This would need to occur through a Planning Scheme Amendment to rezone land. Until this additional work is undertaken, it is not appropriate for this report to speculate on which zone would replace the existing Urban Flood Zone, other than to say that the UFZ land zoning can be reviewed if a flood levee were to proceed.

Economic Impact Assessment

An Economic Impact Assessment (Assessment) of the Seymour Levee project has been completed, Refer to Attachment 8. The purpose of the Economic Impact Assessment was to identify and quantify the range of economic benefits that could be delivered, both during construction and once the flood levee is complete.

Importantly, the assessment report recognises that the Seymour Levee may catalyse some of the economic objectives of the Seymour Structure Plan, in particular, generating new investment within the town center and creation of increased tourism opportunities along the Goulburn River. While the assessment focused on quantifying

the economic (financial and jobs) impacts, the report recognition that other less quantifiable benefits of the levee could be expected and would include:

- Potential reduction in insurance premiums for affected properties, due to a reduction of flood-related risks.
- Strengthening the tourism appeal of Seymour through long term development of tourism product and attractions.
- Potential to attract more residents to live in Seymour by developing more housing and providing more local employment options
- Potential to provide more tracks and trails along the riverfront.

The Assessment developed a framework for assessing economic impact; the framework recognised the following six economic impact areas:

- Construction Industry
- Maintenance
- Cost savings for at-risk properties
- Increased investment interest and development activity
- Tourism industry
- Property values (uplift)

While cost savings and property value uplift do not result in the direct creation of employment, improved financial capacity (i.e. investor/landowner cash flow) needs to first be achieved before employment generating investment (e.g. new houses or commercial premises) is likely to occur. Low property values, limited market certainty and strenuous planning controls are known barriers to private sector investment within flood affected areas of Seymour. The removal or lessening of these barriers will assist in facilitating further investment within Seymour.

While the levee will not directly cause the development of new houses or commercial premises, it will significantly assist in de-risking private sector development within some areas of Seymour. It is considered that the levee will act as a catalyst for improving the development feasibility of land that is currently identified as being either zoned Urban Floodway or subject to the Floodway Overlay or Land Subject to Inundation Overlay. As mentioned above in this report, land that is subject to these types of planning controls has limited development opportunities.

<u>Benefit to Cost Ratio</u>

The Assessment has determined a benefit to cost ratio for the Seymour levee of 8:1 and is reflective of significant economic benefit to the local economy relative to the incurred financial costs.

The benefit to cost ratio determines the overall benefits that a project or investment is likely to generate, relative to its costs. If a project has a benefit cost ratio greater than 1, this suggests that the project will generate a positive financial impact, as the present value of the project benefits will exceed the present value of total costs.

It is noted that previous cost benefit analysis' have been completed in 2001, with subsequent reviews in 2006, 2009, 2014 and 2018. Early cost benefit analysis'

iterations were primarily restricted to considering the financial impact (including indirect) of damage to residential and commercial buildings which occurs from flooding. If the levee proceeds, this damage would not occur (assuming any flood did not exceed the design capacity of the levee), therefore these costs would not be incurred.

A summary of the historical calculated BCR's associated with the levee project are shown in Table 3 below.

Table 3 – Historical Calculated BCR's

Date	BCR	Prepared by	Project Cost	Assumptions / Inclusions
2001	2.41	WBM	$2.64M	Flood damages. 30 years
2006	1.54	WBM	$3.91M	Flood damages. 30 years
2009	1.03	John Webb	$6.35	Flood damages. 40 years
2014	1.8	Aither	$9.8M	Flood damages, property uplift, no rezoning. 50 years
2018	1.3	Aither	$18.5M	Flood damages, property uplift, no rezoning. 50 years

The assessment completed by Urban Enterprise considered matters not previously considered, including increase in developable land area (resulting from removal of restrictive planning controls), decreased development risk, change in land values, jobs growth and overall input into the local economy (e.g. construction works spending money locally).

As described in section 3.3 of the Assessment, the previous benefit to ratio has been included within the attached Assessment report and the identified benefit to cost ratio of 8:1.

Seymour Revitalisation – Investment Business Case

In October 2018, the Victorian Government announced the Seymour Revitalisation funding package, this provided close to $1million in funding for a variety of activities, including the Seymour Revitalisation Business Case.

The Seymour Revitalisation Business Case has resulted in the identification of 10 proposed investment interventions. These investment interventions will be considered by the State Government as part of the annual budget process. The State Budget is a competitive process where all investment needs of Victoria will be considered and debated. At this point in time there is no certainty regarding if the Seymour Revitalisation Business Case will be funded in whole, part or at all.

Identifying appropriate investment interventions was a detailed process which occurred over the majority of 2019. The process was led by a whole of Government Technical Working Group with oversight from a Project Control Group and regular input from a Community Working Group.

The Seymour Revitalisation – Investment Business Case recommended the following investment interventions:

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

- Anzac Avenue Improvement Works
- Integrated Health and Community Wellbeing Precinct
- Promotion and Investment Attraction
- Creek and waterway trail design and commencement
- Feasibility study for alternative truck route
- Floodwater levee
- Government services building
- Cultural Interpretative Centre/Welcome to Country/Visitor Services
- Seymour Skills and Training Needs and Workforce Development Plan
- Town Centre (including Railway Station) Urban Improvement Design and Works

At the Ordinary Meeting of Council on the 21 October 2019, Council resolved to support the inclusion of the above investment interventions within the Seymour Revitalisation Business Case. However, the October 2019 Council resolution (and report) recognises the (then future) community engagement process for the levee project and that future Council reports would specifically consider and make recommendations in relation to the future of the levee project.

The governance structure for the development of the Seymour Revitalisation Business Case included a Community Working Group with 34 local community members. The primary purpose of this group was to test the concepts, investment ideas and documents as they emerged from the Technical Working Group. At their final meeting, the Community Working Group undertook a process of ranking the top 10 priority investment projects for Seymour, this ranked list did not include the Seymour levee.

While the floodwater levee is identified as a potential investment intervention, there is currently no certainty regarding forthcoming funding from State Government for the Seymour Revitalisation Investment Business Case.

The Seymour Revitalisation Investment Business Case recognised the realisation of the Seymour levee as being necessary to achieving the overall vision of revitalisation. Given current planning controls and building requirements, it is considered that the Seymour levee would have a direct impact on the cost and complexity of some recommended investment interventions, including; creek and waterway trail networks, Cultural Interpretative Centre/Visitor Services and town center investment. As such, the development of the Seymour levee will likely assist in making some of the revitalisation initiative less complex and potentially more viable.

In addition, the Seymour Revitalisation Investment Business Case recognised the Victorian State Government 2019 commitment of $2.5million towards the redevelopment of the community and health teaching facilities at the Seymour campus of GOTAFE. As a result of current flood controls, this redevelopment will likely require design compromises to ensure that minimum floor levels are above flood levels.

<u>The Seymour Structure Plan</u>

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The Seymour Structure Plan was adopted by Council in May 2018 and is Council's primary policy to guide future use and development of the Seymour township.

The Seymour Structure Plan helps identify what types of changes are required to strategically position Seymour in the region, including a set of strategies and actions within the plan that assist with implementing the ideas within the document. Importantly, the plan will guide future planning and development decisions and provide a framework that will facilitate future investment in the township.

Seymour is also identified in the Hume Regional Growth Plan as a town that has the potential to accommodate significant change and develop into a major regional centre over the next 30 years. Plan Melbourne (2017-2050) also support jobs and economic growth in regional Victoria, including Seymour.

The Structure Plan identifies the proposed flood levee and within the implementation section of the structure plan, one of the 'Priority Projects' is to finalise the design and ultimately construct the flood levee.

The Seymour Structure Plan acknowledges that the proposed levee project and related land acquisition program cannot be seen simply as a flood protection device.

It provides rare opportunities to unlock land surrounding the river which may be used for a range of purposes including new and enhanced parks, linear trails and environmental reserves, as well as the potential development of tourism destinations. It will act as the biggest single change factor within the town and was a key consideration in the development of the Structure Plan.

The Structure Plan offers an opportunity to help shape and inform the final design of the proposed levee to ensure the community's 'Vision for Seymour' is achieved by:

- Identifying opportunities to enhance Seymour's connection with the Goulburn River.

Improving the public realm and improve activation of the riverfront with improved connections between the town center, Emily Street and the Goulburn River. The Structure Plan identifies areas for change including some strategic sites that may be capable of land use change in the future. Should the flood levee be realised, it will introduce additional land within the immediate walkable catchment of the town center and have access to education, retail, employment and public transport. As a result, there is a significant opportunity for Council to investigate a viable land use, particularly west of the Kings Park precinct, in line with the objectives of the Seymour Structure Plan.

Given the significance of the Seymour Flood Levee project on the realisation of several key objectives of the Structure Plan, if it is decided that the levee is no longer a supported project of Council, the implications for the Seymour Structure Plan will need to be further assessed.

<u>Community Engagement 2019 Summary</u>

In July 2019, Council resolved to appoint an independent community engagement consultant to engage the Seymour community about a proposed flood levee to protect parts of Seymour from flooding of the Goulburn River. Council sought feedback to understand the level of community support for the flood levee and to gauge community views on the fairest way to fund the proposed project. The engagement process

targeted those landowners who would receive a benefit as the result of a levee being constructed as well as the wider community sentiment towards the proposed levee.

The Nation Partners report (Attachment 9) has a range of community views and comments regarding the proposed flood levee. The Nation Partners approach to this project work delivered an effective and transparent engagement process and report that has provided extensive community and stakeholder input. It has provided Council with an understanding of community sentiment towards the flood levee to assist future decision-making on the proposed Seymour Flood Levee.

Council engaged Nation Partners to understand the reasons behind people's views on the proposed levee including potential issues and concerns and, for landholders who would benefit, whether there was a willingness to help to contribute to the construction of a levee through a special charge scheme.

The survey was designed with the above principles in mind to understand if there was support for the levee based on whether the community believed there was sound reasons to build a flood levee. This approach also allowed Council to understand the reasons why community members may not support the levee proposal.

Between 16 September and 25 October 2019, people across the community participated in the consultation program by attending one of three community drop-in sessions, calling a dedicated Seymour Levee hotline to talk with a member of the engagement team, having one-on-one meetings with the project team and providing feedback via the two surveys.

Across the community there were 278 completed surveys. It was clear from the engagement results that overall (84%) the community does not feel there are good reasons to build a flood levee for the Goulburn River.

The landholder survey attracted 97 completed surveys and while a larger percentage of landowners (40%) believe there were good reasons to build the levee compared to the community results, overall the majority of landowners (60%) did not believe there was good reasons to build it.

In conclusion, Nation Partners found most respondents involved in the engagement believed that the project was too expensive or unnecessary.

Nation Partners found the community perceived the flood risk was lower than projected flood modelling data showed. These perceptions were influenced by lived experience of previous flooding and local discourse about flooding and its impacts more generally. Many engagement participants also took the opportunity to express concern about flooding from Whiteheads Creek and the management of this waterway more broadly.

Protecting properties and unlocking the potential for Seymour to continue to grow and develop were the main reasons for support for building the levee. This was evidenced by some sentiment towards developing infrastructure for the town that would enable future development and opportunities.

If Council was to proceed with a flood levee, the community of Seymour expressed the fairest way to fund the construction of the levee was via State or Federal Government (or both) contribution and not using ratepayer funds.

LEGAL, STATUTORY AND RISK CONSIDERATIONS

During the preparation of this report, a legal review has been undertaken on;

- A draft version of this report;
- All documents referenced in this report;
- Documents relevant to the history of the flood levee project that helped to inform the contents of this report;

This review was undertaken to give an appraisal of the legal risks and liabilities that Council may be exposed to if a decision is made to pursue the ongoing development of the Seymour Flood Levee project, or not.

The recommendations of this legal review are summarised in Table 4 below:

Table 4 – Legal Considerations

Legal recommendations	**MSC officer comments**
a) Commission an external consultant report to update and confirm that the Project is the preferred approach compared to other flood mitigation interventions, in due course by the entity that has responsibility for further developing the Project;	Agree. If the project proceeds to a Planning Scheme Amendment process, it would be prudent to update relevant documentation that confirms the flood levee as being the preferred flood mitigation intervention.
b) ensure future community engagement in relation to the Project focusses on: i) the Project as an economic enablement mechanism which provides rare opportunities to unlock land surrounding the river which may be used for a range of purposes including new and enhanced parks, linear trails and environmental reserves, as well as the potential development of tourism destinations, in addition to being a flood mitigation mechanism; and ii) the outcomes of the study undertaken into whether the Project is the preferred intervention; and	Agree. If the project proceeds it will be prudent to explore whether the community is prepared to accept the identified impacts of the project in order to realise the benefits of the project (primarily in relation enabling revitalisation of the town centre and flood protection)
c) ensure detailed design of the Project is based on the best available data, including the studies that are being undertaken as referenced in the GBCMA Letter and climate change considerations where they are appropriate.	Agree.

FINANCIAL, RESOURCE AND ASSET MANAGEMENT IMPLICATIONS

Funding spent to date.

A total of **$1,203,653** has been spent to date on background work, expert studies, planning and functional design work. This total expenditure is made up of a combination of Council and State Government grant funds as detailed in Table 5 below.

Table 5 – Funding spent to date

Funding source	Expenditure to date
Council cash	$765,655
State Government Regional Growth Fund grants	$437,998

Project Costs

The Seymour Flood Levee as it is currently proposed is expected to cost approximately $20,000,000 inclusive of land acquisition.

A basic summary of these costs is shown in Table 6 below.

Table 6 – Summary of estimated costs for the Seymour Flood Levee scheme

Phase	Cost
Detailed Design	$ 500,000
Planning Scheme Amendment	$ 500,000
Land Acquisition	$ 6,000,000
Construction	$ 10,500,000
Landscaping	$ 2,500,000
TOTAL	**$ 20,000,000**
Funding Sources	
Mitchell Shire Council *	$ 5,783,000
Seymour Revitalisation Fund	$ 14,217,000
TOTAL	$ 20,000,000

* Funding already secured from State and Federal Government sources. This funding is at risk at being withdrawn if a decision confirming Council's support is not made in the near future.

Special Charge Scheme

A possible option that Council could consider to help fund some or all the current project shortfall is a Special Charge Scheme.

A Special Charge Scheme (under the *Local Government Act 2019*) allows Councils to defer / recover the cost of works from landowners who will gain special benefit from that work. In the context of the flood levee project, the provision of flood protection would constitute one type of 'benefit' to landowners.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

Consistent with the provisions of the *Local Government Act 2019,* the total amount to be charged to benefitting landowners must be proportionate to the benefit they receive relevant to the total benefits received by all beneficiaries of the scheme.

In the broader context of a flood levee scheme, it is possible to identify two distinct categories of benefit. These being direct benefits and indirect benefits.

Direct benefits can be described as those benefits to landowners of flood prone land that would be protected from flooding if the levee project was to proceed. In this case, the benefit could be;

- the removal of the risk of flood inundation to these properties
- the removal of prohibitive flood planning controls from these properties

Indirect benefits are more difficult to quantify but can be collectively described as those benefits to the wider Seymour community that could be realised through the removal of the risks of flooding to key areas of the town that contain essential services that support the town and the wider region. The removal of restrictive planning controls from flood prone land could also lead to indirect benefits for the wider township through future redevelopment and economic uplift.

In order to develop a compliant scheme and cost apportionment model, both direct and indirect beneficiaries must be identified, along with the assignment of appropriate and defensible weightings that justify contributions from beneficiaries.

To date, no specific cost apportionment model has been developed or proposed to Council or the community.

The legislation governing the implementation of a Special Charge Scheme requires specific levels of landowner support, depending on a) the total value of project and, b) the percentage of total costs to be apportioned to benefitting landowners.

Under the Act, Council could recover the full costs of the scheme, provided greater than 51% of those landowners to be charged, give their support to the scheme.

Similarly, under the Act, where less than 51% of property owners give their support to the scheme, the amount to be recovered cannot exceed 2/3 of the total scheme costs.

As part of the 2019 Community Engagement process, a specific survey question was developed to establish the views of landowners and their willingness to contribute towards a Special Charge Scheme to help fund the flood levee project. From the 97 landowner surveys completed, 75% of respondents indicated that they would not be willing to contribute towards a Special Charge Scheme to help fund the levee project. Further reading on these results can be found in the Community Engagement Summary in Attachment 8.

<u>Capacity to fund using own source funds</u>

If Council proceeds with the project without full external funding this could only be achieved through borrowings. An option of a Special Charge Scheme could be canvassed however borrowings would still be required up front as any funding scheme would allow ratepayers to pay off the charge over 10 years.

The project would meet the requirements of our Borrowings Policy due to the intergenerational benefit that the project would provide to the community, however a project of this financial value would see Council exceed the upper limit of our

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

borrowings KPIs assuming borrowings of $20m. Table 7 below shows our current planned borrowing ratios and what those ratios would be following additional borrowings of up to $20m assuming the worst-case scenario of existing grant funds not being available.

Table 7 – Forecast of borrowings including levee project

		Current Forecast	Projected Years				
Scenario: 2020-2021 LTFP		2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Financial Performance Indicators (Current Modelling)							
Loans and Borrowings (compared to Rates)	20-60%	27.22%	34.51%	39.44%	41.60%	42.06%	34.12%
Loans and Borrowings Repayments (compared to Rates)	0-10%	5.49%	6.26%	6.66%	14.61%	7.76%	6.38%
Indebtedness	10-40%	24.17%	34.00%	28.85%	32.93%	33.70%	24.21%
Financial Performance Indicators (added project)							
Loans and Borrowings (compared to Rates)	20-60%	27.22%	34.51%	39.44%	41.60%	73.51%	60.67%
Loans and Borrowings Repayments (compared to Rates)	0-10%	5.49%	6.26%	6.66%	14.61%	11.80%	10.16%
Indebtedness	10-40%	24.17%	34.00%	28.85%	32.93%	57.38%	42.93%

When reviewing the table above it must be noted that although the long term financial plan includes planned borrowings for key projects as identified within the Strategic Resource Plan is does not include borrowings for unquantified future priorities which could include a Super Call payment, Strategic Land Acquisition, a Southern Aquatic Facility and other worthy projects.

Borrowing to this value would limit our ability for future borrowings and would require operational savings of around $2.3M per year to make the repayments.

Secured grant funding

As previously identified in this report, Council has already secured $5,783,000 ($500,000 already received) in funding from various State and Federal Government sources, however, due to the passage of time since this grant funding was confirmed, the Federal Government contribution of $2,850,000 secured through the National Stronger Regions Fund is at direct risk of being withdrawn should a direction on the future of the Seymour Flood Levee not be confirmed in the near future. Council officers are in regular contact with the administrators of this grant funding to update them on Council's progress on this project.

A summary of the grant funding sources is shown in Table 8 below;

Table 8 – External grant funding secured to date.

Grant Funding Source	**Land Acquisition**	**Levee Construction**	**Total**
State Government Regional Growth Fund	$833,000	$1,600,000	$2,433,000
Federal Government National Stronger Regions Fund (NSRF)	-	$2,850,000	$2,850,000
State Government Natural Disaster Resilience Grant Scheme (NDRGS)	$500,000*	-	$500,000
Totals	**$1,333,000**	**$4,450,000**	**$5,783,000**

* Funding received and being held by Council.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

Termination of existing funding agreements.

Should a decision be made to cease any further development of the flood levee project, officers will explore opportunities with the relevant State and Federal Government partners for these funds to be allocated to alternative projects in the area that generally meet the original funding criteria. Should alternative options for the funding be refused it would be necessary to commence a process to mutually terminate those existing funding agreements with State and Federal Government funding partners.

In addition, the funds already received ($500,000) would need to be returned to State Government funding partners.

Ongoing operational and maintenance costs

Under the current levee scheme proposal, Council will inherit all operational and maintenance costs for the proposed levee structure and the land upon which it is built. Table 9 below summarises the annual costs that can be expected to be borne by Council for the future care and management of the levee scheme.

Table 9 – Annual operation and maintenance costs

Maintenance and Operational Items	**Estimate of annual costs**
Monitoring and surveillance (bi-annual Engineers inspection)	$5,000
Maintenance grading of levee crest access road	$10,000
Grass cutting/slashing	$60,000
Pest animal management	$5,000
Pest plant species management	$5,000
Drainage culvert maintenance	$5,000
Offsite storage of temporary levee components in purpose-built facility	$40,000
Fencing repairs	$5,000
TOTAL	**$135,000**

Emergency Operation Costs

In the event that predetermined emergency protocols trigger the enactment of the Flood Levee Emergency Plan, Table 10 below details the costs that can be expected to be encountered associated with the operation of the levee structure. For estimating purposes, the length of the flood emergency is assumed to be 10 days duration.

Table 10 – Emergency operation costs

Operational Items	**Estimate of costs per flood emergency event**
Monitoring and surveillance (Engineer on standby)	$20,000
Transportation of temporary levee components to and from site(s)	$3,000
Erection and dismantling of temporary flood barriers	$10,000

Deployment of mobile pumps x 7	$50,000
Machinery Standby Costs	$10,000
Inspection and cleaning of drainage components	$5,000
Emergency staff overheads	$50,000
Structural report	$5,000
TOTAL	**$153,000**

PROJECT RISKS

Despite the documented benefits associated with the establishment of a flood levee for Seymour, the delivery and operation of a project of this type and scale is not without risk.

The total value of the flood levee project in 2019 is estimated at $20 million. This estimate is based on functional designs of the levee structure along its 4.4km alignment, allowances for land acquisition and compensation (where applicable), drainage within the protected zone and various location-based landscaping treatments.

Until the project progresses to the detailed design phase, total project costs cannot be fully and reliably quantified.

While any infrastructure project is not without its risks, those costs associated with the physical construction of the flood levee can be managed and mitigated with further progression of the detailed design works for the physical structure. There are however other project risks that are far more difficult to reliably quantify at this time.

Attachment 10 contains a matrix of the key risks identified throughout the remaining project phases.

Planning, Design and Delivery Risks

The most notable of these project risks are those associated with the implementation of a land acquisition overlay in the Mitchell Shire Planning Scheme and the subsequent compulsory purchase of the required land and any compensation that may be payable to landowners impacted by acquisition.

The costs associated with the legislated requirements of the Land Acquisition and Compensation Act 1986 to compensate those landowners who are impacted by land acquisition will only be fully understood and quantified once a detailed examination of each landowners circumstances is undertaken and the impacts of land acquisition on the individual landowner is given due consideration.

While the magnitude of these risks is not considered to be unmanageable from a project management and project budgeting perspective, they do present as significant risk for a Council with limited financial resources and project management capacity.

It is noted that other levels of Government have specific powers that make the acquisition of land process more streamlined, which could assist in the reduction of project risks.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

Operational Risks

Council's exposure to these risks arise through its future responsibilities for the ongoing management and maintenance of the levee structure, should it be constructed.

The most significant of these risks include risks associated with the catastrophic failure of the levee in the event of poor management, surveillance and maintenance practices, or from overtopping of the levee during a flood event with a magnitude greater than the design intent of the structure.

In the case of the former, a comprehensive levee management regime including but not limited to; a periodical engineering and maintenance surveillance regime, pest control regime and appropriate maintenance practices, should mitigate this risk within acceptable levels throughout the life of the levee. In addition, with the levee forming a prominent component in a future off-road trail and walking network, public passive surveillance will also serve to further mitigate the likelihood of damage to the integrity of the structure going unnoticed or unattended to.

In the case of the latter risks associated with the overtopping of the flood levee (during a flood event with a magnitude greater than the design intent of the structure), it is not considered that Council, as an entity, has any significant exposure to liability as this event would be beyond the design intent of the levee. However, the consequences of such a failure could be devastating for the community and its public and private assets.

While the likelihood of occurrence is very rare, if the levee was overtopped, it would therefore be reasonable and appropriate to assume that overtopping would continue until either;

- Catastrophic failure of the levee occurs due to scour to the crest and downstream (to direction of overtopping flows) side of the levee leading to complete inundation of the protected zone, or
- The flood water level on the protected side of the levee rises to a point where it equalises with floodwater levels outside the levee. i.e. complete inundation of the protected zone.

Any attempts to prevent such overtopping would be limited significantly by a) the availability of 'on-the-ground' resources to safely and effectively implement emergency contingencies, and b) the length of the levee requiring such emergency action.

In either case, while it would be expected that evacuation of the protected zone would have been carried out well in advance of floodwaters reaching critical levels, this scenario would have catastrophic consequences for property and assets that had been developed with limited or no regard for the inherent flood risk that existed before a levee was constructed. For example, those newer buildings constructed with lower floor levels.

Project Risk summary

The culmination of these risk factors would likely significantly challenge the skills, knowledge and financial resourcing of the Mitchell Shire Council and in consideration of this, it is the opinion of officers that the delivery of major flood mitigation infrastructure project of this type, financial value and risk profile should be approached with a high degree of appreciation for these risks.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

Despite the obvious economic development benefits associated with the construction of a flood levee, if the risks outlined above, (particularly those risks associated with the occurrence of flood waters overtopping the levee during a flood with a magnitude greater than the 1% AEP) irrespective of how rare, are considered to be unacceptable to a Council or its community, then a flood levee scheme should not be pursued.

POLICY AND LEGISLATIVE IMPLICATIONS

At its meeting on 25 October 2010, Council resolved the following;

> THAT 'Council adopt and proceed in accordance with the *Seymour Flood Mitigation Project, Preliminary Design Report, October 2009* prepared by John Webb Consulting.

This resolution is considered to be the basis for the progression of this project and subsequent funding applications to the various State and Federal grant funding programs.

Despite this resolution, there is no legislated obligation on Council for the provision of large-scale riverine flood mitigation infrastructure like that proposed as part of the Seymour Flood Levee project. The pursual of a flood mitigation project of this type and scale and for the realisation of the benefits outlined in this report, is at the complete discretion of Council, on behalf of its community.

Therefore, the recommendation outlined in this report is not considered to have significant legislative implications.

From a policy perspective, as outlined above, the flood levee project has been identified as a significant infrastructure project to unlock future economic development opportunities for Seymour within the Seymour Structure Plan. The recommendation within this report is at odds with the current direction of the Structure Plan which should be further investigated to asses these implications.

OFFICER DECLARATION OF CONFLICT OF INTEREST

No officers involved in the preparation of this report have any direct or indirect interest in this matter.

CONCLUSION

The Seymour Flood Levee is a committed project of Council by virtue of the Council resolution on 25 October 2010, to proceed with the development of the Seymour Flood Mitigation Project in accordance with the Preliminary Design Report, October 2009.

Since this time, this delivery commitment has been confirmed through the signing of several funding agreements with the State and Federal Governments for the various elements of the flood levee project including design, construction and land acquisition.

Council's further commitment towards the delivery of a flood levee for Seymour is evident in the Seymour Structure Plan where the flood levee is identified as a 'Priority Project'.

The strategic framework for Seymour's future prosperity and its strategic role in a regional context has been well established and supported through the Hume Regional Growth Plan, Plan Melbourne and the Seymour Structure Plan.

SEYMOUR LEVEE CONSULTATION REPORT (CONT.)

In a regional context, the Hume Regional Growth Plan identifies Seymour as a location for significant change. This statement acknowledges the role Seymour can play in the future prosperity or the region as a hub for employment and its geographical position as a peri-urban town with potential to attract housing and population growth out of Melbourne.

This plan also acknowledges that development opportunities will arise when the flood risk to Seymour's central area is substantially reduced, with the construction of a levee.

While community sentiment towards the flood levee project is overwhelmingly negative as evident in the recent community engagement process, it must be acknowledged that projects of this type and scale have multi-generational benefits and these must hold similar weighting the debate as to whether to proceed with the development of this project.

Seymour is a flood-prone town. This flooding status has been confirmed by numerous flood studies of the Goulburn River and the Whiteheads Creek.

The protection of the township from flooding caused by a 1% AEP event of the Goulburn River would have a positive net cost benefit outcome when the cumulative long-term costs of flood damages to existing buildings are quantified over a long period of time.

The planning controls associated with the flood-prone nature of Seymour are restrictive and result in limitations for land use and result in more costly development outcomes. These limitations arguably make Seymour less desirable for development investment. The removal of these planning controls is only possible only through the elimination of the flood risk.

The elimination of this flood risk has been determined to be physically practical and economically viable through the construction of a physical barrier that eliminates flood inundation to these areas up to the 1% AEP event.

The project provides rare opportunities to unlock land surrounding the river which may be used for a range of purposes including new and enhanced parks, linear trails and environmental reserves, as well as the potential development of tourism destinations.

The elimination of flood risks to the central business area of Seymour will allow the existing restrictive flood planning controls to be relaxed and will promote the development of previously under utilised parcels of land that will help to promote and define Seymour's next phase of economic growth.

With improvements to the development and redevelopment prospects of all land within the protected zone, the levee could act as the single biggest change factor for a more prosperous economic future for Seymour. An opportunity for such holistic change may not readily present otherwise.

Notwithstanding the above, clearly the implementation of a flood mitigation scheme of this scale on a major waterway like the Goulburn River is a complex undertaking not without significant risk including; financially, in its planning and delivery complexities and operationally for the life of the asset.

The removal of flood planning controls will likely permit increased development densities within the protected zone and if higher development densities are achieved, this will raise the risk profile of this area and a flood with a magnitude greater than the

design flood event (1% AEP) could overtop the flood levee leading to potentially devastating consequences.

The project is of regional significance with clear potential benefits to the long term prosperity of Seymour, but given the scale, complexity and risks involved in the delivery of the Seymour Flood Levee Project, it is the officer's recommendation that Council cease the planning of this project until such time that these risks can be either accepted by Council or can be appropriately mitigated by Council or another level of government.