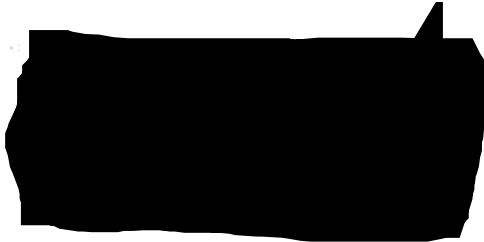


11/05/2021



Dear ratepayer,

Moree Plains Shire Council has been investigating the recommendations of an independent review of the 2017 Flood Plain Risk Management Plan. The key recommendations were to:

- Update the flood model with a more realistic representation of the rural flood levees
- Investigate the feasibility of a town flood levee
- Investigate the cost and feasibility of raising Boonery Rd, Hassell St Causeway and the approach to the Dr Geoffrey Hunter Bridge for improved vehicle mobility during a flood
- Better utilisation of the Voluntary House Raising Scheme
- Updating the flood education plan to better inform town residents about their options during a flood

The attached survey is related to the feasibility of a town levee and is aimed at determining the community's desire for a levee. The results will form part of the levee feasibility report along with construction costs, costs to mitigate the impacts caused by the levee outside of the alignment, social impacts and environmental impacts.

Information about the levee can be found at the following places:

- There are "Frequently Asked Questions" attached to this letter which has answers to common questions about the levee.
- Councils' website has information such as the levee impacts to flooding maps - <https://www.mpssc.nsw.gov.au/hot-topics/floodplain-risk-management>
- The Library has information such as flood maps located in the foyer
- The consultants who are preparing the feasibility report will be in Moree and available to answer questions at the Library at the following times (no bookings required):
  - Tuesday, 1 June - 9.30am to 11am / 12pm to 2pm / 4pm to 6pm
  - Wednesday, 2 June - 9.30am to 11am / 12pm to 2pm / 4pm to 6pm
  - Thursday, 3 June - 9.30am to 11am / 12pm to 2pm / 4pm to 6pm

The survey closes Friday, 18 June 2021 and can be returned via the enclosed self-stamped envelope or dropped at a Council Office.

If you have any questions relating to the floodplain risk management process including this survey please contact Council on 67 573 222 or email council@mpsc.nsw.gov.au or drop into the Moree Community Library on the dates and times listed above to talk to the consultants undertaking the feasibility (Ed & Julian).

Regards,



Ed Henty  
Principal Engineer & Director  
Dryside Engineering

## Moree Town Levee Frequently Asked Questions

**Q - Has the upgrade of the Inland Rail been taken into consideration when assessing the feasibility of the Levee?**

A - Yes, the levee assessment consultants and inland rail have been in regular contact.

**Q - What effect could a levee have made in the recent March 2021 flood event in Moree?**

A - Models indicate that the recent March 2021, (1 in 20-year) flood event the construction of a levee could have likely resulted in the following effects:

- Reduced houses with above floor flooding from 96 to 24
- The bridge would have remained open
- The businesses in the town could have remained open (if staff were available)
- Approximately 70 properties outside the levee could be adversely affected as follows:
  - o Increased flood levels up to 100 to 300mm for approximately 35 properties outside the levee
  - o Increased flood levels up to 300 to 400mm for approximately 21 properties outside the levee
  - o Increased flood levels up to 400 to 500mm for approximately 3 properties outside the levee
  - o Increased flood levels above floor level for approximately 1-2 properties outside the levee

**Q - Would a levee cause downstream damage to infrastructure and cropping from an increase in flows in the Gwydir River?**

A - This is unknown at this stage. Flood levels in the Gwydir River to the north and northwest of Moree will increase with 300mm in a 1% AEP event.

# Moree Town Levee Frequently Asked Questions

Based on Best Practice 2021 Flood Modelling and information obtained during the feasibility process undertaken this year (2021).

## **Q - Why are we even considering a levee?**

A - The NSW Government requires Council, on behalf of the community, to have a policy regarding controlling development on flood prone land. Following Moree's major flood event of 2012, Council was obliged to review its plans to reconsider the flood risks facing Moree and surrounds and re-evaluate the options to reduce future risks. As part of this review process, a levee has been identified as one such measure to be further investigated by Council.

## **Q - Is the levee definitely going to be constructed?**

A - No, Council is gathering additional information to make a decision on whether to apply for funding to construct a levee. Part of this additional information is understanding the community desire for a levee and undertaking an assessment of the impacts outside of a levee and as well as gaining a better understanding of the costs.

## **Q - Will the Moree levee construction affect levee improvement/construction funding for Pallamallawa and Mungindi?**

A - No, this is a separate project and does not affect projects in Pallamallawa and Mungindi.

## **Q - What are the dimensions of the levee and the proposed alignment?**

A - The levee ranges in height from 2m to 3m with a bottom width of 15-20m (top width 2-3m). This information can be found on the Council website and on display at the Moree Community Library.

## **Q - What will be the construction material of the levee?**

A - The levee would be constructed with clay enriched engineered fill/soil

## **Q - How much will the levee cost to build?**

A - The levee is estimated to cost \$22 to \$24million to construct plus there will be another \$16-\$18million required to purchase or raise houses and compensate affected landowners outside the levee. The total cost estimate is \$38M to \$42Million.

## **Q - Who will benefit from the levee?**

A - 551 properties within Moree township will benefit directly from a levee. This would remove above floor flooding on their properties. The cost to benefit ratio of a levee ranges from 0.75 to 0.83, that is for every dollar spent on a levee there is \$0.65 - \$0.72 of benefits from flood reduction. In a 50-year period \$42M invested in the levee will save \$27M in flood damages. The impacts the proposed levee will have on flooding can be found on the Council website and on display at the Moree Community Library.

## **Q - If constructed, would the levee adversely impact residents who live outside it?**

A - Yes. Flood modelling has been undertaken to assess the impacts outside the levee and is included in the community survey information package. Residents of Gwydirfield would have an increase of flood levels of 400mm to 750mm from current conditions while Yarraman residents would have an increase of up to 300mm and Stomington 200mm. This would require 25 houses to be purchased at market value or raised with those built on slabs required to be demolished and rebuilt at the new flood level.

There would also be a number of outbuildings in these areas that will now be flooded that would not have previously been inundated by flood waters. Residents of Gwydirfield, Stomington and Yarraman understandably have strong concerns that the levee will impact their properties. All costs associated with impacts outside the levee would be covered by Council/State Government as part of the construction budget. Landowners will not have to contribute.

The impacts a levee would have on flooding outside a levee can be found on the Council website and on display at the Moree Community Library.

# Moree Town Levee Frequently Asked Questions

## Q - Who would pay for construction of the levee?

A - If a levee has support from the community and the feasibility investigation deems the cost of construction worthwhile, Moree Plains Shire Council will investigate funding streams for the construction costs. Funding for such projects will require a financial contribution by Council; a typical financial arrangement is for Council to contribute 1/6 of the costs, with the State Government covering the balance.

At this stage it is unknown where Council's share will come from.

## Q - Are there alternative solutions being investigated if the levee option does not proceed?

A - Yes, a number of alternative floodplain measures have been identified, with the following currently being investigated as part of this project:

- Raising the approach to Dr Geoffrey Hunter Bridge and the Hassell Street Causeway to allow access out of town during a flood event. This will allow access to both supermarkets and the hospital.
- Installation of one-way flood gates/valves on a number of drainage outlets in town
- Rezoning of Res1 north of Gwydir Street to Res2 to restrict dense development in a flood prone area
- Better utilisation of the Voluntary House Raising Scheme
- Updating the flood education plan to better inform town residents about their options during a flood.

## Q - If the levee proceeds and the levee is constructed on my land, will I be compensated?

A - Yes, the cost of the levee includes land acquisition and compensation costs. If a levee proceeds, land valuations would be undertaken by specialist rural land valuers.

## Q - If the levee is on my land, will I have access to it?

A - No, the land upon which the levee will be constructed will be owned and maintained by Council. Crossings would be (have been) designed into the levee in certain locations where it dissects paddocks.

## Q - How will the levee be managed so that it is not accessible to the public and will it pose a security risk?

A - The levee would be fenced on either side and have gates at the entrances to maintenance tracks and farm crossings.

## Q - Will the levee affect insurance premiums?

A - Council has no control over insurance premiums; however, if Council constructs the levee there is a possibility that some premiums may reduce. However, you need to contact your insurance company to confirm this as it is not absolute. It is unknown the effect a levee will have on insurance premiums for properties outside of a levee.

## Q - What ongoing maintenance will be required for the levee and will an increase in rates be required to fund this?

A - 3 monthly inspections would be required to check for Hare/Rabbit holes, inspect fencing, sapling growth and other issues that may cause the levee to fail. In addition to this, the levee will also require mowing up to 4 times per year. This will cost approximately \$50,000 annually which would come out of Council's maintenance budget.

## Q - Will the levee affect the volume of water flowing downstream in the Mehi River in a flood?

A - Yes, the levee would divert some flood flows to the Gwydir River which would result in less water flowing in the Mehi River in flood events larger than the 10% AEP Flood Event (1 in 10-year flood). The Mehi Culverts in the levee would be designed to allow 26,000 ML per day to pass.

Figure 1: Proposed Moree Levee Location



Major Highways and roads are denoted in 

Proposed Moree Levee Location 

