

### Minutes of the Floodplain Management Advisory Committee Meeting held Friday 13 December 2024

Venue: Murwillumbah Council Chambers, Murwillumbah Civic & Cultural Centre

Time: 9.15am

### Present:

Voting Members:

Cr Chris Cherry (Mayor, Tweed Shire Council) Cr James Owen (Councillor, Tweed Shire Council) - Online Robert Quirk (Community Representative) Max Boyd (Community Representative) Felicia Cecil (Community Representative) Jennifer Kidd (Community Representative) Thomas Rehfeld (Community Representative) Non-Voting Members: Scott Moffett (Department of Climate Change, Energy, the Environment and Water) - Online Peter Mair (Local Commander, NSW SES) Alternates: Cr Kimberly Hone (Councillor, Tweed Shire Council) - Online **Council Officers:** Danny Rose (Manager Roads and Stormwater) Leon McLean (Engineer Flooding and Stormwater) Denise Galle (Director Planning & Regulation) Stuart Russell (Senior Strategic Planner) Doreen Harwood (Enterprise Risk & Emergency Management Officer) - Online Naomi Kenny (Administration Assistant – Engineering – (Minute Taker) Guests: Geoff Waterhouse (NSW Reconstruction Authority) – Agenda Item 1 David Tetley (Catchment Simulation Solutions) – Agenda Item 3 – Online Mathew Greenwood (Acting Manager of Corporate Governance) Belinda Devine (NSW SES, Planning and Research Officer – North-Eastern Zone) - Online Alex Wilson (NSW Reconstruction Authority – Program Manager for NRRRP) Kyle Sherry (NSW Reconstruction Authority - Manager Reconstruction Delivery, Drainage Reset Program) Will Prentice (NSW Reconstruction Authority - Strategic Team, Resilient Homes) - Online Geoff Provest MP (Member for Tweed)



### **Apologies:**

David Oxenham (Director Engineering) Angie Cousens (Engineer Infrastructure) Michelle Bernabe-Salazer (Councils Community Liaison Officer) Samuel Dawson (Community Representative) Tom Alletson (Councils Coast and Waterways Team Leader) Karen McPaul (NSW Reconstruction Authority)

DR - Welcome to the first meeting of the refreshed Floodplain Management Advisory Committee, following the disbanding of the previous advisory committee with the completion of the last term of Council. The October council meeting confirmed Councillor delegates for the committee. Previously the Terms of Reference provided for one Councillor representative, however Council amended this to include a second member. Our two Councillor reps are the Mayor, Councillor Cherry and Councillor James Owen. Council also voted to have an alternate Councillor delegate being Councillor Kimberly Hone who is attending the meeting as guest.

### Acknowledgement of Country (read by Danny Rose)

Committee Governance: Mathew Greenwood (Acting Manager of Corporate Governance) Updated Terms of Reference

MG advised a letter has been forwarded to all committee members explaining their obligations to comply with Council's Code of Conduct as being part of an advisory committee member. Mat summarised the Terms of Reference (TOR circulated to the committee). Updates (shown as tracked changes) are to update agency names and clarify that DEECCW and SES are non-voting members.

MG and DR to discuss processes for Confidential minutes and their reporting through ELT and Council. Action: Clarification to be provided at the next meeting.

### Action Item – All members of the committee are to sign and return the acknowledgement of the Code of Conduct as soon as possible.

DR - TOR refers to one Councillor member with a voting right. As Council resolved to now have two Councillors voting rights need to be clarified. No objection from committee with providing both Councillor reps with voting rights, and this will be noted as an update to TOR

CC – Requests TOR include clarification of "flying minutes" to be able to resolve committee matters outside of a formal meeting process. Action: MG to review and update TOR along with membership/voting, for Council endorsement.

### **Election of Committee Chair:**

Nominations – Max Boyd nominated Robert Quirk Felicia Cecil seconded

All in favour - unanimous

### Robert Quirk now Chair of Floodplain Management Advisory Committee

Robert moved to Chair the meeting. Thanked the Committee for their confidence in him to Chair the committee for the next four years.





### Declaration of interests: Nil

Mat Greenwood left meeting – 9.39am

#### Confirmation of Minutes of Previous Meeting: held on 21 June 2024

MB – Advises he has trouble reading the minutes – still keenly interested in the affairs of the Tweed Shire and wanted to make note of the Motion which he believes was incorrectly written from 22 March 2024 meeting –

Committee made a recommendation which read;

*"That no more rezoning for residential purposes takes place in the Tweed Shire below the PMF (probable maximum flood) level"* 

Max submitted it should have read - *"No more land be zoned for residential use in Tweed Shire which is below the Maximum Probable Flood level"* Issue being 'zoned' and 'rezoned'.

CC sought confirmation from MB that the intent of "no more zoning of land" is new land release areas. MB confirmed that was the case, he doesn't want to see any more land zoned in flood areas, as he believes there is adequate flood free land available for urban use / residential use.

CC proposed that if for some reason a proposal to turn from industrial to residential (e.g. Morton St Chinderah), that MB would likely not be supportive of that change either.

SR confirmed that whether you use the word 'zone' or 'rezoned' it is the same thing from a technical perspective. Intent is the same.

DR explained that the intent of Max's motion is consistent with actions going forward from the March meeting by Council and the Committee. All land has an existing zoning, so all changes through planning proposals and LEP amendment are technically "rezonings".

Anything that would introduce or increase the residential capacity below the PMF is what the committee is concerned about, which is how it was considered by our Executive Leadership Team and the Elected body and then the subsequent workshop with state agencies. Agree to note the clarification in the minutes.

Wording of the recommendation from the March meeting was the interpretation of DR/DG/minute taker, apologies if wording has in anyone's view misconstrued the intent. Recommendation was unanimous, then actioned regardless of the words 'zoning' or 'rezoning'.

#### Councillor Owen left the meeting, 9.57am

MB accepted that explanation and apologised if it his intent was unclear. Has high admiration of staff.

TR stated that as a Committee Member, he understood exactly what the intention was, what was discussed and what was voted on

MB and FC both accept the previous meetings minutes.

JK was happy to confirm the minutes with a note being added that we had the discussion, and clarification was had around the meaning of that section of the minutes and in agreement that we all understood the intention.





**RESOLVED** that the Minutes of the Floodplain Management Committee Meeting held 22 March 2024 be accepted as a true and accurate record of the proceedings of that meeting, subject to noting the clarification and discussion of the use of the terms "zoning" and "rezoning" in the committee recommendation of 22 March 2024.

Moved – Thomas Rehfeld Seconded – Jenny Kidd

This motion was unanimously Carried.

#### **Business Arising:**

1. Land rezonings for residential purposes

Since last meeting from 21 June 2024, in response to Council's consideration of the committee's recommendations, a State Agency workshop was held on 26 July 2024 attended by Councillors and committee members. Refer also to Agenda Item 5 for an update on the Growth Management and Housing Strategy.

2. Flood Risk Management Manual workshop

Since last meeting from 21 June 2024, Council staff Danny Rose, Leon McLean, Angie Cousens & Colleen Forbes (Planning) attended a DEECCW Workshop in Ballina on 2 July 2024 on the new Manual and its tool kit of guidelines.

3. Tweed Valley Flood Study Update and Expansion – adopted by Council 18 July 2024, with resolution to conduct sensitivity testing using CSIRO datasets as part of TVFRMS&P (Refer agenda Item 2).

As recommended by the committee on 21 June 2024 Council adopted the TVFSU&E at the 18 July 2024 meeting, with the additional resolution to conduct sensitivity testing using CSIRO data sets as part of the forthcoming Tweed Valley Flood Risk Management Study and Plan. A very significant milestone for the Council, the community and this committee.

### **Outstanding Actions/Resolutions:**

### Flood Risk Management Manual workshop (Scott Moffett, DCCEEW):

DR - Council officers have attended technical workshop as noted earlier. Hope the State agencies might provide a more tailored workshop for Councillors and/or committee members in the near future.

SM – Confirmed he is happy to arrange an informal workshop with the councillors and/or committee, he has just been waiting on the new committee to settle in before arrangements made. SM will Action, and work with DR & LM, committee preference would be for a separate extraordinary meeting to be held, confirmation on dates times to come in the new year.

### Outcomes of meeting with Rural Industries Stakeholders (DR)

DR – Several letters have been sent to CSIRO and NEMA reiterating council / committee requests for a flood study of the Tweed. No further responses since previous advice that CSIRO cannot resource a parallel study. Follow up letters also on the same topic sent from the Mayor to State and Federal members. No responses to date.



Several attempts have been made to write to the agencies, it seems extremely unlikely that the CSIRO or NEMA will get involved in further flood studies in the Tweed, particularly given we have now adopted our TVFSU&E and are working through the next steps.

LiDAR and Bathymetry data sets have now been received from CSIRO. Council resolved to adopt the TVFSU&E subject to conducting the sensitivity analysis as part of the Tweed Valley Flood Risk Management and Plan (TVFRMS&P) which is still our intent.

TVFRMS&P will include community participation and optioneering, as required.

State Government reports around Rural Floodplain drainage (Culleton and MEMS reports) were deferred to the Northern Rivers Joint Organisation's submissions on those documents.

### a) Receipt of CSIRO LiDAR and Bathymetry data (LM)

### Slideshow shown: CSIRO dataset difference mapping

Preliminary analysis has been done by LM and Council's GIS team, comparing the CSIRO data to older data sets held by Council, used for TVFRMSU&E. No flood modelling has been done on this so far, that will be done with the risk management study. Shows areas where land / riverbed levels have risen or fallen between the 2 x bathymetry surveys (2018 and 2023). LM stressed that the changes depicted cannot be entirely attributed to the 2022 flood. They are a comparison of a 2018 bathymetry and 2021 Lidar datasets to the 2023 CSIRO dataset and include changes across that entire period. No obvious areas of significant concern have been identified from a flood study perspective.

The committee noted receipt of the data and that it will be examined in detailed, including mitigation scenarios, as next steps in the flood risk management process.

### b) Tumbulgum Community Association to write to TSC regarding trees blocking M1 culverts (JK)

Follow up on our request for TfNSW to provide the flood impact review for the M1 – no response as yet.

Tumbulgum Community Residents Association letter regarding the potential blockage of the viaduct under the M1 downstream of Tumbulgum, with the request to have the trees looked at and removed has been received and will be forwarded on – **DR to action**.

JK – Still seeking a response to earlier correspondence sent also to TfNSW on impact of M1 across the floodplain. It has never been answered to the satisfaction of the community.

### Agenda Items:

### 1. NSW Reconstruction Authority Updates

### a) Resilient Homes /Lands programs (GW)

Buy backs status: to date 164 offers have been made in Tweed, predominantly in South Murwillumbah, Burringbar and Bray Park. Over 100 properties in the Tweed Shire LGA have been completed for settlement. Working with homeowners to progress large lots that have been landslide affected.



Resilience measures: 63 homes currently prioritised in Tweed Shire, 33 homes assessments have been undertaken to date in South Murwillumbah, Fingal Head, South Tweed Heads, Tyalgum and Tweed Heads West.

Home relocation and reuse program: 78 buy-back homes have been identified as potentially relocatable by Public Works, 7 buyback homes are being relocated by the homeowners privately, 1 in advanced planning.

Updates on additional Federal and State funding: NSWRA has received an additional \$90M last week now at \$880M for RHP, meaning more homes able to be prioritised for buybacks and resilience measures. The provision of upfront costs for preliminary planning, design, DA development etc, available through this new funding, so homeowners are not out of pocket.

WP - 3 Strategic Projects in the NRRRP Program of Works:

### 1. PP1 – Regional Flood Risk Awareness Campaign

Enhance the general awareness of flood risks across the Northern Rivers and to empower our communities to better understand their exposure and what they can do about it. Currently partnering with the NSW SES as a trusted voice to deliver parts of this campaign. We have conducted 560 of 700 phone interviews of residents across the regions (all 7 LGA's) to better understand the impacts of the 2022 floods on the community. Also working with the Red Cross and Community Resilience Networks on regional flood risks.

### 2. PP2 – Regional Floor Level Survey Program

This program is now complete for the Tweed Shire and includes roughly 2700 floor levels to compliments the existing floor level data Council has previously acquired. Currently in the process of undertaking the data sharing arrangements. Provides an important input to the Flood Risk Management Study to inform decision making. Also incorporating this information into around the Disaster Adaptation Plan with a regional spatial mapping platform.

### 3. PP3 – Regional Evacuation Route and Infrastructure Assessment Project

Partnering with NSW SES to deliver this. One of the actions from Tweed's existing flood risk management study was about detailed evacuation planning for a number of communities, working to incorporate that into a scope of this regional evacuation route project. Will deliver detailed flood evacuation modelling and understanding of the existing deficiencies within the road network or the evacuation infrastructure that exists to support the communities during times of flood. Ultimately delivers a prioritised program for investment in the future as part of the Disaster Adaption Planning across the region.

### RQ – What is the floor level set now for NSW? It used to be a 100-year flood level + 30cms?

WP – Clarified the floor level project is about picking up the finished floor levels of the properties, not about setting the flood planning level that is applied during the development assessment process. Finished floor level data enables us to make decisions about exposure and risk and that feeds into decisions for the RA around the resilient homes program. This program won't change the standard.

DR – Setting floor levels is for individual Councils to determine, there is no longer a state standard. That is an upcoming task for this committee to consider in 2025.

### 10.27am Geoff Provest (State Member) and Denise Galle entered meeting

JK – Media releases about the additional funding for the RHP didn't make it clear if homeowners needed to do anything to access the potential funding for 300 more homes. Given the previous



process and large amount of work some homeowners are feeling very traumatised. Is NSWRA going though previous applications that might have been previously denied or is there a priority list. Do homeowners need to advise are they still interested in accessing the new funding?

GW – Advised if any homeowners have been unsuccessful previously to reach out to the RA especially with the new funding, for resubmission or to contact the concierge team to make a lodgement and get some clarity on where they stand.

GP – There are a couple of landowners in Tumbulgum, that are still waiting on results from their appeals, and I have sent some communication through to Mal Lanyon (CEO NSW RA), so it would be good if this could be resolved sooner rather than later.

GW – Will take on that information and pass on through to the team.

GW – Some information regarding announcements have been made around Mount Pleasant and Goonellabah with some new land holdings, especially around Lismore, they are doing some pilots around relocatable homes to those areas. In 2025 there will be a public release on more land holdings especially around Lismore, Goonellabah and Lennox Head.

### b) NRRRP Projects (GW)

GW – Program consists of 36 projects from Grafton to Murwillumbah/Tweed – there is a total of 46 projects with \$152M funded, completion by 2027. 11 projects in pre-construction, 15 in delivery and 10 projects have been completed.

Commonwealth funded program. Supplement funding of \$2M given to Tweed through the NSW State Government towards the Murwillumbah Flood Upgrade Program for our flood pump station upgrades.

In the Tweed LGA;

- Dorothy/William Streets Pump Station is almost complete
- Lavender Creek/Wharf Street/East Murwillumbah Pump Stations all in final stages of tender evaluation
- Lot 4 Quarry Road is still in tender for market, closing 16 January 2025
- Tweed Shire Flood Level Survey complete for Tweed Valley LGA
- 3 Caring for Catchments Projects part of Riparian Program final stages of planning and due to commence in 2025
- EPA approved Acid Sulphate Soil Treatment Area (ASSTA) joint venture with Tweed Valley Cane Growers Association and Drainage Council preparations ongoing

DG – Council is working with the RA on alternative sites to try and help community members affected by the floods (Resilient Lands Program, RLP). Looking at a site in West Murwillumbah, as an extension to Hundred Hills. Currently not zoned for residential development, but the RA are working with the landowners and Council to see if we can work collaboratively on a re-zoning application to boost the supply of housing for the area. This land is not flood affected but there are restrictions regarding the sewer network. The RA has extensive powers, and we are hoping they can help Council get an EPA licence to upgrade the Murwillumbah sewerage treatment plant to be able to accommodate additional homes. A lot is going on behind the scenes, at this master planning stage. Denise thanked the RA for their collaboration to this point.

The committee had further discussion around requiring development above PMF level.

DG – From a planning point of view, the NSW Government issues the planning circulars for how we manage flood planning and the planning circulars have not gone as far as to say that rezoning



of residential land is not to occur below the PMF level. It is not the standard at the moment. The standard approach relies on the flood work that Danny and his team are doing, so Council at this stage is reviewing all of that data. Council can go above what the planning circulars specify, if justified based on risk data. If TSC chooses to make that it's standard that would be above and beyond the existing guidelines issued by the Department of Planning.

MB – Agrees and understand, but still thinks this is what we should be aiming for, anything below the PMF standard is asking for trouble again.

### c) Drainage Reset Program (KS)

KS – Northern Rivers Agricultural Drainage Reset Program is a \$5M pilot program to clean and repair agricultural drainage throughout the Northern Rivers region. Currently there are 77 drainage sites across the region and 43 are within Tweed Shire. As of today, 20 drains have been completed within the Tweed and we are actively working on the others. Making excellent progress with really good feedback from the community and drainage unions, positive outcomes with lots of benefits. A lot of stakeholders, it has been a collective effort, authorities and drainage unions working together has helped with this program.

### 2. Flood Mitigation Projects (LM)

### a) Dorothy / Williams Street Pump Station

Almost finished, pumps are installed and have been tested. A small delay to the connection to power supply network, so they will be run off a generator until early next year, when the electricity can be connected to the site.

KH – Asked about the use of generators on the new Dorothy & William Street pumps, in the future once connected to power and if a natural disaster occurs, can the generators be plugged back in?

LM – Dorothy Street and Wharf Street Pump Station (to still be built), will possibly share a generator. Water and Wastewater Unit has some generator assets, and we can share these generators for backup, currently not enough funding for all pumps to all have a backup. Whilst the NRRRP program may not have the funding capacity for all stations to install generators, does not mean that the addition of backup generators cannot be done in the future - intend to apply for funding in the future to acquire a generator for each pump station when a suitable source of funding becomes available.

### b) Mooball Creek Training Walls at Pottsville

Finished earlier this month. Collaborative project, funded by State, Federal and Council.

### c) Coastal Creeks FRMS&P

Advise we have recently started the Coastal Creeks Flood Risk Management Study and Plan and have engaged our consultant WMA Water, who recently assisted us on the Tweed Valley Flood Study Update and Expansion. NSW DEECCW have done bathymetry survey which is now complete. A stakeholder meeting was held on the 3 December in Pottsville and representatives from drainage unions, local resident's groups, community resilience teams etc, were briefed on the project. Initial consultation now open under "Your Say Tweed" for community input. Complete a survey and add data, stories and videos for use in the flood study to calibrate our models and to just generally inform our knowledge of flood risk.



### d) Murwillumbah CBD Spillway Upgrade

Funded by NSW Flood Recovery and Resilience Grants, for a levee safety project. A lot has changed and we have learnt a lot since the levee was built in its current form in the 90's with no spillway. Nearly completed the procurement process for a levee design specialist, should be awarded before Christmas.

MB - Asked for clarification of the scope of the levee works?

LM – This project was started as a recommendation of the 2018 Murwillumbah CBD levee and drainage study, which recommended that investigate a designated spillway for when the levee overtops. Then that overtopping is controlled and is safe, rather than the current situation where we get overtopping over the unprotected earth embankment, which is not safe. It is about making sure that when floods like 2022, or something bigger, comes along and the river overtops the levee and starts to fill the town basin, that this happens safely, rather than having a risk that the levee will breach / collapse. Potentially the spillway may be concreted, detailed design is underway, too early to pre-empt the outcome. It could be a reinforced spillway, it could be an alternative configuration, rocks and re-enforced turf, the design process will determine the preferred approach and the cost.

MB – Concerned that the levee changes may impact on the Murwillumbah Hockey fields, synthetic turf fields cost around \$1M each. Committee needs to be aware that this is a change to what was intended originally, recollection that the levee was originally constructed in a way that if there was a flood to enter Murwillumbah it would come from out the front of the Civic Centre instead of near the high school, so it is a complete reversal of original plan and obviously impacts will be quite different.

LM – Agreed and this is precisely why this project has been launched. The levee was designed for 'uniform over topping' water would come over the entire length of the levee all at once. 2017 and 2022 floods have shown us that is not the case, and when it does come over the top, we need to ensure it does so in a safe manner. This is only a planning stage for detailed design and then will have to find funding for the construction stage.so in a safe manner. This is only a planning stage for detailed design and then will have to find funding and then will have to find funding for the construction stage.so in a safe manner.

### e) Tweed Valley FRMS&P

As mentioned a few times during this meeting, we will do a sensitivity analysis of the CSIRO data and then move into looking at options for what we can do to better manage flood risk. Have been awarded grant funding under the DEECCW Floodplain Management Program, we are on the reserve list as when assessments were done the TVFSU&E was still being finalised. That has now been completed, adopted and acquitted so should just be a formality for funding to be released in the new year so we can start the project.

### f) Condong Creek Drainage Management Plan

As per NSWRA update Lot 4 Quarry Road works are proceeding which includes one component of the Condong Creek works under current approved scope

Preceding the remaining works on the remainder of Condong Creek, TSC has commenced environmental assessments and soil contaminating investigations along the Pentarch/Boral Timber frontage. Council is working with colleagues at RA to look at options to fund the actual construction.

RQ - There are impediments downstream of the floodgate, is that part included in the works?



LM – Yes, the section between Tweed Valley Way and the floodgate is part of the Condong Creek works. The idea is we do earthworks in the creek bank to install a bench so that maintenance of the Creek becomes possible, plus augmenting the creek channel to improve flood flows.

Geoff Provest left 10.55am

Break for Morning Tea – 11am to 11.05am

Scott Moffett left the meeting 11.08am

### 2. Tweed Heads South Levee and Drainage Management Plan (DT/LM)

LM - Consultant David Tetley from Catchment Simulation Solutions – Project is a high-resolution localised flooding and drainage study for South Tweed Heads and Banora Point.

DT – Slides shown to provide a quick update on works completed so far and to outline the works to come in a draft report for the project. Study area for this project is about 15sq kms, covering Tweed River, Ocean entrance, Terranora Broadwater and Ukerebah Passage. Multiple potential flooding mechanisms can impact on this area - we can experience inundation during elevated ocean level conditions, various other channels can overtop their banks and spill, and there is the potential for overland or stormwater inundation when the system is exceeded.

The 2014 Tweed Valley Floodplain Risk Management study included x4 recommendations that focused on this area which included x2 levee options, a Local Drainage Study and a Levee Overtopping Study, so are the genesis for this project. This project comprises 8 stages:

- 1. Data review
- 2. Community consultation
- 3. Computer model development
- 4. Computer model calibration & sensitivity analysis
- 5. Design flood simulations and mapping
- 6. Consequences of flooding on the community
- 7. Options identification & assessment
- 8. Reporting

We are currently up to stage 7.

Far more detailed computer flood models than we have ever had across this area. Draws on information provided by the community. Have run a range of design simulations and prepared flood maps and have looked at the impacts of flooding on the community (e.g. identify where the roads are cut and for how long, financial impacts to the community). Where there is significant flood risk, we will be looking at different risk mitigation options.

Once we've got that initial list of options, we'll complete the qualitative assessment to rule out those options that are clearly not going to be viable and that will result in a short list for detailed assessment. We will look at ways to improve management of the flooding risk in this area, not only from river flooding but to also for stormwater management behind the levee. Assessment includes the hydraulic performance of each option and how effective these are at reducing levels and extents. We are looking at the economics, expected reduction in flood damage costs, also if there are any technical, environmental, or similar hurdles which may prevent implementation. We will score and rank each option on their merits and then draw all the information together into a draft report. We are open to committee suggestions or options for consideration.

General discussion on levees, elevated ocean levels and the prevention of water draining out, which is quite complicated given the multiple ways water can flow in this catchment. Levees are the least favoured option based on initial community feedback due to visual amenity impacts.



Hydraulic impacts will look at the benefits and/or negative impacts, would it divert water elsewhere and will it make the situation worse for others. This information will be available to the public in March-April 25.

No immediate options were provided by the committee to DT, however committee members were encouraged to forward any ideas to the project team.

### 3. Interim Planning Controls Initial Discussion (LM)

Tweed Valley Flood Study was updated earlier in the year, which gave us different levels than the 2009 flood study on which our DCP controls are based. So, we now have the task to update our planning levels and planning controls. We also have 2017 and 2022 flood levels, which is some areas were higher than the flood planning level. This exercise will focus on the Tweed Valley but will also take in the Coastal Creeks as much as possible while the new flood study is being prepared.

Council's process for setting planning levels must follow the Flood Risk Management Manual and toolkit, which requires a risk-based process informed by our flood study. Typically, our flood planning levels have been set based on design levels e.g. 1% AEP. However the Manual does give us the ability to vary this standard where justified.

To be clear on the terms, the 'defined flood event' (DFE) is the event itself, i.e. until now we have been using the 1% AEP. Sometimes we call it the design flood. The 'flood planning level' (FPL) is the DFE plus a freeboard (typically we have used 0.5m).

Leon displayed slides with a few examples of historic flood levels and modelled flood events versus our existing planning levels at different locations throughout the Shire and what the impacts of our decisions may look like.

When determining new DFLs, the simplest thing would be to adopt the 2024 flood study levels. However, in some cases this will be below the flood of record – meaning we would be allowing new homes to be built at a floor level that the 2022 flood would have inundated, which appears to be a backward step. Is that acceptable to the committee and the community? We are trying to set an appropriate level for development to comply with, without increasing flood risk or stifling growth.

### Cr Hone left meeting – 11.33am

DR – We need to develop an interim policy that we can implement quickly, while we look at climate change and whole lot of other factors that play into our planning decisions in more detail through the Risk Management Study. Our Planning team need something sooner rather than later so we are not relying on the old 2009 levels, which may now be inadequate. At this stage we are trying to get a feel from the committee on what they feel is an acceptable approach.

LM – Our task is to make some decisions on an interim policy for the Defined Flood Event & Flood Planning Levels until we complete a more detailed flood risk study in the near future. Given concerns about simply adopting the 2024 levels 1% AEP, the suggested approach is:

Adopt as DFE the higher of:

- a) 2024 Tweed Valley Flood Study Update and Expansion 1% AEP Level
- b) 2009 Tweed Valley Flood Study 1% AEP Level
- c) "Flood of Record" Level (i.e. 2017 or 2022)

As measured at the subject land parcel.

Or does the committee suggest an alternative approach for DFE/FPL?



Committee had discussions on the 2024 1% AEP level, as well as historical planning decisions and approvals.

DG – We have to honour existing consents in the NSW planning system. Historical development e.g. caravan parks in Chinderah, have existing use rights and consent to stay there. This is about forward planning for new development. Note that Leon flagged that the 2024 1% AEP is lower than the current 2009 1% AEP in some areas, and asked did we want to lower the 1% AEP? It would not be advisable from a planning point of view to drop the 1% AEP to the 2024 level in those areas indicated by new mapping.

DR – Agreed it is not our intent to go backwards. There are 3 options that we can pick based on existing information, do we just pick the worst case and put that forward as an interim policy and then go from there through the risk management study?

MB – Hesitant to make a comment, all different levels for different areas. Confusing to comprehend.

TR – For clarification a level + free board (another 500mm) is proposed, but not looking at any climate change at this stage? What would it be to account for climate change?

LM – Under our current policy settings we only apply climate change levels for large green field developments e.g. Cobaki and Kings Forest. Recently Australian Rainfall and Runoff updated their climate change guidance to bring it into line with contemporary science and DEECCW is intending to release some NSW specific guidance in early 2025. The Tweed Valley Study that we recently completed used previous AR&R guidance, whilst the mapping and scenarios that run are still of value, they are not quite in line with the best practice anymore. The Coastal Creek Study will be, and the Risk Management Study for the Tweed Valley will update the previous work so that both of our Climate Change analyses will be contemporary. As we are only talking about an interim policy here, Danny and I have been focusing on the flood planning levels so we are suggesting, subject to committee feedback, that we maintain the current policy settings for climate change in the interim because it is so complex and has quite large implications on development settings. It really needs a quite detailed community consultation process. We are suggesting that it be part of the bigger risk management study process rather than this interim policy.

LM – The TVFSU&E modelled 2 scenarios, "high" and "low" climate change. The "high" scenario used a 20% increase in rainfall intensity and a 900mm increase in sea level for CC parameters.

TR – I think we adopt the highest of either 2009, 2024 or the highest flood and then add another 10% on top for best practice climate change, because we know we are not best practice now. This will be incredibly risk adverse, but I think that is what the community wants. I know it has huge impacts for constructions, renovations and for insurance. Our committee is representing the community, and we are showing that we are being extremely risk adverse.

DR – Agreed it is something we can look at. Might not be as simple as adding a blanket percentage. It will be conservative as we are already applying an extra 500mm freeboard to the floor level. If we pick the worse of the 3 scenarios and then add an extra  $\frac{1}{2}$  metre this accounts for uncertainty and future changes to a certain extent. We will investigate and come back to the committee.

Discussion had around the adoption of the PMF level and additions to homes with floor levels below the FPL, where only minor additions are permitted.

DG – From a current planning point of view, the reality of the decision affects new people coming in but also affects exiting people who may want to do renovations and additions to their homes. We have to think of the practicalities of how you can add to that house with an extra level above FPL, if



it doesn't work, it means people are confined to the existing shape of their home. The committee needs to recognise the restriction of the footprint of those homes in those areas.

Action: the committee advised they generally wanted to adopt the highest of the three options plus an allowance for climate change in the interim policy and not wait until the more detailed risk management process. A further briefing with Climate Change levels included to be delivered to next FMAC meeting

### 4. Growth Management and Housing Strategy Update (DG)

The GMHS Options Paper identifies potential residential development for the Tweed for the next 20 years. Over 500 pages of material based on 650 public submissions, provided to the elected body at the December 24 meeting. Flooding received the greatest number of comments as a topic.

Unanimous decision that the matter be deferred to allow a multi criteria analysis to be undertaken to look at a total 78 development options. Criteria includes flood inundation, tidal inundation, ecology and public sentiment though submissions. Staff are now working on the analysis and when complete that report will then go back to council with any further recommendations.

Committee was encouraged to go to the business paper agenda for 11 December, to read the report and 13 attachments which are very important. There is some flooding data in attachment 4 which this committee may be interested in.

CC – From decision maker's perspective the idea was to get more information to base a decision on, a multi criteria analysis to help work out which options make the most sense to go forward. Council has asked for flooding vulnerability to be assessed strategically, the worst outcome on the flooding issue would be if impacts were considered on an adhoc individual basis. Can the committee give some guidance and information in terms of examining flood vulnerability?

DG – Reinforce that the GMHS is a strategic document, it is not a development control plan or LEP control, it is a very high order strategic planning. It is valid for this committee to ask and think about this. I suggest you download the Ballina Residential Land Strategy. If this flood committee wants to set a development control standard upfront at the hierarchical level, we need to understand the implications as we work down through the details.

MB – Has anyone noticed the number of times that Bray Park Weir has been overtopped by salt water? It is a fairly significant point. As time has progressed it has happened a lot more. Council is in a position to determine how much we put on top of the weir, that speaks volumes. Down Tweed Valley Way, the bank of the river between Tumbulgum and Stotts Island, how long will it be before that goes under in a high tide? I think about what I have learnt and where the sea levels used to go, the whole valley floor used to be covered in salt water. The amount of sand that is deposited between Stotts Island and Chinderah to me is a pretty good indication of where the sea used to go. So many things come into play here. This is the time to raise all of those issues and tell the people possibly what they have to face up to.

FC – Question raised earlier today about the GMHS for Chinderah as I have been trying for many years to have the village boundaries defined. Is there going to be any intent to leave as is or as proposed to look at changing these properties from rural to residential around Phillip Street and Waugh Street?

DG – The first version of the options paper that went out on public exhibition did have a lot of changes proposed in Chinderah. There were objections because of flooding risks, they didn't think that changing from rural to residential made sense because of the risk, which this committee is aware of. Version 2 of the document that went to council last week reduced those 83 options down to 27 options. These options have some amalgamations/grouping of options. Chinderah dropped



out of the current version. This GMHS won't change suburb boundaries and won't immediately result in re-zonings. Some LEP anomalies need to be rectified. Happy to discuss after the meeting.

JK – Question how strategic are we being on housing development? This document we are referring to is based around 20 years, and yet the challenges we are facing are escalating beyond those 20 years particularly with climate change. The document is too short term because the investment that people are making in their houses are 60 and 80-year investments. We are doing a disservice to the residents in our area with this document.

RQ – Need to take into account health risks of sea level rise, very clear a lot more disease and a lady that heads up the CRC in Adelaide, Professor Donna (?), maybe in the future we can get her online to give a talk on the issue.

#### **General Business:**

### 1. Cudgen Lake Gauges (TR)

TR – Cudgen Lake flood gauge has gone out of commission on 2 October 2024. There is no current information, only some from Clothiers Creek. CBBRA have sent letters to Manly Hydraulics Lab with no reply. Now as a matter of urgency as we are coming into the flood season, we have a lot of very nervous residents. This is now request for Council / Mayor to write to Manly Hydraulics Labas a matter of urgency.

Action - Request for Council / Mayor to write to Manly Hydraulics

LM – Update this morning from colleague at MHL advising that our contractor has managed to remove the legacy water level structure, which was the hold up for the installation for the new station which is fully funded.

CC – Maybe the letter should say to ask for the installation of the new station asap.

#### **Next Meeting:**

To be confirmed, proposed March, June, September and December 2025. Dates to be advised

The meeting closed at 12.28pm