RESPONSE TO PUBLIC SUBMISSIONS



1. RESPONSE TO PUBLIC SUBMISSIONS

1.1. Submission 1

Sycamore Road (also known as Sycamore Street)

1.1.1. Issue

- March 2010 over floor flooding occurred at residence;
- Sycamore Drain overflowed;
- October event caused more severe flooding (ankle deep water);
- In October event water came from Rawlings Park as well as Sycamore Drain Water flowed down both sides of the drain and entered the residence from the front (water from Sycamore Road via Brunskill Road);
- Other places in the locality flooded as well (Jehovah's Witness Church for example);
- Lived there for 12 years, has talked to previous owner, never flooded before (previous owner purchased in 1988);
- Comment is that Draft Report doesn't recognise the severity of flooding at their location. Not enough on mitigation which might aid their location for flood severity;
- Wants deepening and widening of the drain. Dredging and cleaning. Levees along banks to protect property;
- Also he says residents are generally upset they didn't get a visit from Council staff following the March and October events;
- Concerned that debris from events will make subsequent events worse (and wondering if this didn't happen for October event for example); and
- Concerned that upstream development (Gregadoo Road on the south side) might exacerbate their issue.

Subsequent to receipt of the submission, an interview by phone was carried out in order to collect follow up information, specifically in relation to whether or not Sycamore Drain had overflowed during the December events of 2010. The following additional information was collected:

- Trees growing in Sycamore Drain. It requires a clean out;
- Fence at property knocked over during an event. Rain gauge on fence had collected approximately 50 mm during the event prior to being knocked over along with fence;
- Rushing water at rear of property near Sycamore Drain, estimated velocity in the order of 2.5 m/s (fast enough you couldn't stand in it);
- Locals blame blockage of Lake Albert diversion and Rawlings Park inlet, due to debris deposited during March event, on severity of October flooding although severity of event in regard to rainfall also acknowledged; and
- In the October event water ran down Sycamore Road and Brunskill Road and many homes were flood affected. Reluctance amongst locals to identify property as flood liable.

1.1.2. Response

Modelling work carried out clearly identifies the area as being flood liable in the 1% AEP flood event. General area appears flood liable for events larger than approximately the 10-5% AEP. It's likely that the October event was large enough to realise the inherent flood

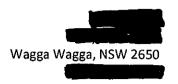
liability of the location although debris, blockage etc as well as poorly maintained drains may have made the flooding more severe also.

Drain maintenance would likely be of some benefit and would certainly be appreciated by residents. Certainly trees growing in the drain should be removed as should excessive quantities of silt etc.

1.1.3. Implications

The area will certainly be highlighted in regard to flood severity when the damages assessment work, which involves floor level survey of flood liable properties and then assessment of flood liability to over floor flooding, is carried out.

As part of the ensuing management study it'll be important to assess the possibility of mitigating flood liability in this area as many properties do appear to be flood liable and indeed some residences may actually lie in floodway areas.



The General Manager Wagga Wagga City Council P.O Box 20 Wagga Wagga, N.S.W 2650

Dear Sir

I have just received a copy of the Wagga Wagga Major Overland Flow Flood Study and wish to provide some feedback.

Firstly, I am a resident of Sycamore Rd and received minor over the floor floodwater inundation in the March rainfall event. The inundation was confined to the rear of the dwelling and was as a direct result of the overflowing of the Sycamore Drain that runs through our property. Then in October we received more severe inundation with ankle deep water throughout the house. This time inundation simultaneously came from the overflow of Sycamore Drain as well as water overflowing from Rawlings Park and travelling down both sides of Sycamore Rd and coming in the front of the house. I and my family have lived at this residence for twelve years and have also consulted the previous owner who lived at this premises from 1988 and neither of us had seen the drain breaks its banks or have Rawlings Park overflow until now. Other residents close by including the Jehovah Witness Church were also inundated in this event. We did not receive any flooding in the February event nor did the Sycamore Drain break its banks.

To me the draft report doesn't seem to clearly recognise inundation to our street and only has one recommendation that might mitigate flooding in our area and therefore, to me, this recommendation should be further strengthened by adding additional wording to include works such as widening and or deepening the Sycamore Drain; Dredging and cleaning the drain; and or providing levees along its banks to protect our properties. None of the residents nearby nor I can ever remember any remedial work ever being done on this drain. The reference point noted from the report is as follows.

"An improved design for diversion into Lake Albert on the eastern side such that flows in excess
of the design capacity of the diverting bund are controlled and accounted for. Formalisation of
the flow path should protect the diversion structure as well as give better flooding outcomes to
the residents downstream of the diversion;"

Further, most affected residents I have spoken to in this street have been very disappointed by the lack of attention paid to us after both the March and the October events. We would have at least expected Council staff to have visited affected residents.

We are also concerned that debris from the March downpour may have remained in areas such as Rawlings Park and further south where the normal inflows to Lake Albert would go and that this debris may well have had an impact on the subsequent inundation of homes in Sycamore Rd and the lower parts of Brunskill Rd around the end of the 50Kmh zone during the October downpour. We also wonder what affect if any the new sub division to the south of Gregadoo Rd has had on the stormwater in our area as it seems that despite receiving other large rainfall events from 1988 onwards, none have caused the drain to break its banks.

I, along with other residents of Sycamore Rd would, I am sure, welcome a visit from Council's staff to discuss a timeline for any mitigation or rectification work or reassurance that existing work as recommended in the report will lead to preventing any future inundation.

Yours sincerely,



Attached are a number of photos taken from about 2pm on that day. The first few are of the drain before it burst and just after. The last couple is looking west toward Sycamore Rd, one with the Jehovah Witness Church in background.



Looking South along Sycamore Drain at 6 Sycamore Rd. 2pm 15th October



Water from Drain breaks the banks. Looking east from dwelling. 2.17pm



Again, looking east but taken from inside dwelling. Force of water has broken fence. 2.50pm



Ankle deep water inundation in dwelling. 2.50pm



Fence now completely gone. Looking east. 3.10pm Water approximately 500mm in yard. 3.10pm



Looking NW from dwelling. Water at near peak. 3.50pm



Looking west from front of dwelling down driveway. Jehovah Church inbackground. 3.50pm

1.2. Submission 2

Urana Street

1.2.1. Issue

- Surprised they haven't been included in hotspots list;
- 30 years at residence, heavy rainfall causes drains at corner of Macleay and Urana St's to overflow, water moves down Urana St, flowing through yards and damaging gardens;
- 2nd December event (2011) caused damage to water heater;
- Constantly having to fix storm damage;
- Water laps at front entrance in some events and is prevented from entering home only by blocking doorway;
- · Concerned plans for Botanic Gardens will exacerbate the issue; and
- Contacted Council many times but don't feel they are getting the response they need.

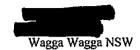
1.2.2. Response

The issue identified is not quite within the scope of a Major Overland Flow Study however modelling does reflect the issue. Significant grade does exist at the site and as such it is a matter of upgrading stormwater assets so that some level of flood protection is afforded residents. It's noted that the bulk of public submissions have been from residents impacted by flooding at this location which seems relatively regularly occurring.

1.2.3. Implications

Council likely need to address mitigation by way of locality specific stormwater study and address undersized assets. Significant grade exists to aid drainage however either conduits or pit inlet capacity is undersized and needs to be assessed. It may also be that some sympathetic road shaping could aid the movement of runoff into the subsurface drainage system.

Council should certainly consider aspects of the proposed Botanic Garden works as such works may provide an opportunity to ease flooding for downstream residents and at the very least matters should not be made worse.



15th January 2011

`The General Manager Wagga Wagga City Council Baylis Street Wagga Wagga NSW

Re:- Wagga Wagga Major Overland Flood Study.

Dear Sir.

The above mentioned report was brought to our attention yesterday and we feel we must comment on the study as we were very surprised to find that the corner of Macleay and Urana Streets have not been listed in the "hotspots" for Wagga Wagga.

We have lived at the above address for over 30 years and during that time when there has been heavy rain the water runs down from the Botanic Gardens, the drains at the corner of Macleay and Urana Streets are not able to cope the amount of water the water floods across the intersection it then pours down Urana Street, flooding through yards and causing damage to gardens and sheds and following the storm on the 2nd, December our water heater was damaged, resulting in having to have a plumber repair it. Over the years we have contacted council to report the flooding.

Each time that we have these floods through our yard we have to replace topsoil, mulch and often plants, over \$100.00 to replace what was damaged from the last storm. As rate payers we feel that this problem should be fixed so we don't have this type of expense every time we have a heavy rain event. We have managed, by packing plastic sheeting and towels under our front door to stop the water from entering our home as the water laps onto our front veranda.

On the 22nd October 2010 we wrote to various members of council regarding the Schematic Concept Plan for the Botanic Gardens as we wanted to lodge our concerns that this plan would bring even more water into a drainage system at the corner of Macleay and Urana Streets that was not able to cope with storm water.

We would appreciate it if our concerns could be taken seriously and the corner of Macleay and Urana Streets be added to the study into the Wagga Wagga Overland Flood Study.

Yours sincerely

1.3. Submission 3

Urana Street

1.3.1. Issue

- As per submission 2 the issue is runoff collecting at the corner of Urana and Macleay Streets. Insufficient pit/conduit capacity then leads to overflow of flood waters into peoples properties and in some cases this water threatens entry to residences;
- · Concerned area not included in hotspot list;
- Flooding regularly occurs up to four times a year;
- Botanic Gardens plans might lead to the situation worsening;
- Heydon Avenue also impacted by flooding;
- Six flood events in 2010;
- Some properties flooded to near floor level in December 2010 event;
- · Numerous photos and other letters relevant attached.

1.3.2. Response

The issue identified is not quite within the scope of a Major Overland Flow Study however modelling does reflect the issue. Significant grade does exist at the site and as such it is a matter of upgrading stormwater assets so that some level of flood protection is afforded residents. It's noted that the bulk of public submissions have been from residents impacted by flooding at this location which seems relatively regularly occurring.

1.3.3. Implications

Council likely need to address mitigation by way of locality specific stormwater study and address undersized assets. Significant grade exists to aid drainage however either conduits or pit inlet capacity is undersized and needs to be assessed. It may also be that some sympathetic road shaping could aid the movement of runoff into the subsurface drainage system.

Council should certainly consider aspects of the proposed Botanic Garden works as such works may provide an opportunity to ease flooding for downstream residents and at the very least matters should not be made worse.



18 January 2011

The General Manager Wagga Wagga City Council Baylis Street WAGGA WAGGA NSW 2650

Dear Mr. Pinyon,

Re: Public comment on "Wagga Wagga Major Overland Flood Study - Draft Final Report"

I have only just become aware of your Study through a recent article in *The Daily Advertiser*. I obtained a copy of the disc with the documents on it only in the last few days. I have read most of it and am now writing to ensure that my letter is included in the feedback by January 19.

I have looked at the list of "Hot Spots" under Item 5.1.3 and find that the Urana & Macleay Street corner is not listed. Nor are there any photos in Appendix B.

I am at a loss to understand why this area is not included in the "Hot Spots". The flooding behaviour at this corner is well known to Council - just ask your "Client's Representative, Bryan Short" (listed at the front of the Final draft). The flood events occur on a regular basis. This flooding problem has existed for more than 50 years and my late mother and myself have sent correspondence to Council on many occasions during the past 45^+ years.

This area was not canvassed by the questionnaire, and we were not aware of the study commencing. If surveyed, I could have provided observational evidence of flood marks and rainfall data for some flood events (even prior to 2010).

On 16th March 2010 I sent a letter to Terry Dodds, then Director of Infrastructure Services, about the flooding situation here and included photographs. You, as General Manager, were also copied with that letter and photographs. Terry responded briefly "...thankyou very much for providing such comprehensive documentation, as all empirical information is very worthwhile. Currently there are thirteen catchments within the City of Wagga Wagga (with more in the villages) and all are being assessed. The information that you have provided will be forwarded to the Council Stormwater Engineer to be included in a 'technical brief' as part of all future investigations". I have not heard from that Stormwater Engineer.

You will also have received in recent months letters from not only myself but also some of my neighbours objecting to the proposed plan for the Botanic Gardens on the grounds that we already suffer flooding and the plan would exacerbate the situation.

The catchment for the western side of Willans Hill, including Willans Hill School, the Botanic Gardens, and especially Macleay Street and the Urana & Macleay Street corner needs to be added to the list of "hotspots" and evaluated for drainage rectification works.

I have insufficient time to detail to you how badly and frequently the residents of the first block of both Urana Street and Heydon Avenue are affected, however I will attach as documentation my letters from just 2010:

- to Terry Dodds (copied to P. Pinyon) dated 16th March 2010. I will not copy the photographs you can search your records for that letter & photos.
- to David Walker (copied to P. Pinyon & all Councillors) dated 20th October 2010 objecting to the proposed Botanic Gardens plan and the reasons why.
- to Phil Pinyon dated 20th October 2010 (to which I've had no response) asking for you to take seriously the flooding that we are affected by.
- an earlier letter (dated 12th October) to David Walker about my concerns about the (at that time unseen) plan for the Botanic Gardens.

Also attached are:

- Copy photo in *The Daily Advertiser* on 3rd December 2010 showing water in Macleay Street looking towards the Urana Street/Macleay Street intersection. This photo was obviously taken after the first storm on the 2nd December and after the peak of the floodwaters. The second storm on 2nd December was worse. Both storms caused damage to house properties in the vicinity of this area (see below).
- 2 photos taken by me after the first storm on 2nd December 1/2hr after the peak when water was no longer over the island and threatening my house and yard. This is typical of the flood events we experience at this corner on a regular basis.
- Photo of water flowing through the pramway in the island on Macleay Street, down the footpath and naturestrip outside my house. This picture shows a drastically reduced volume of water than that which was flowing at the peak of the first storm that night. It is scary to witness the speed, volume and turbulence of the water that flows down the footpath, naturestrip and roadway in Urana Street. Again I emphasise this is after the peak of the first storm and what we experience on a regular basis. The second storm was worse.

This corner experienced <u>six (6) flood events in 2010</u>. Apart from some drought years, we experience flood event/s most years.

As you will see from the letters, I have to put boards in both my front & back gates to try and slow the water entering my property. In the second storm on 2nd December 2010 the floodwaters went over my boards, and almost my entire brick fence. Whatever water enters my property has to go through all my neighbours too. The damage in Urana Street and Heydon Avenue in the storms on 2nd December 2010, to my knowledge, included: damage to a rumpus room, water under an entire house to a depth of just ½" below the floorboards, damage to a hot water system, lots of water damage to garages, sheds and gardens, and a swimming pool filled with floodwater.

As part of my objection to the proposed five year Botanic Gardens plan, I intend applying to address the Environment & Community Standing Committee on 14th February 2011. As part of that address I propose to hand to those Committee Members some of the photographs I have taken of the flooding and damage so that they get a clearer picture of why I am so anxious to get much better drainage in the Botanic Gardens and surrounds. I suggest you liaise with the Chairman of that Committee after the meeting (or attend it yourself) so that you can see all the photos.

Please ensure that this letter is made part of the feedback to your public exhibition of the 'Wagga Wagga Major Overland Flood Study'. I sincerely hope that the Macleay Street/Urana Street corner and western side of Willans Hill area (including the Botanic Gardens) is added to the list of "Hotspots" for further evaluation so that the drainage infrastructure around here can be improved as soon as possible.

As always, I am happy to discuss this with Council officers and/or Councillors so that I can pass on my knowledge of what happens in storm and flood events so that you get a clearer picture of events here and where the water comes from. I can be contacted on

Yours sincerely

c.c. Acting Infrastructure Manager Councillor Ray Goodlass



16th March 2010

Mr. Terry Dodds
Director of Infrastructure Services
Wagga Wagga City Council
Baylis Street
WAGGA WAGGA NSW 2650

Dear Mr. Dodds,

Re: Drainage infrastructure in Wagga Wagga - Botanic Gardens/ Macleay & Urana Street intersection needs immediate attention

I was interested to read in The Daily Advertiser of 25th February that you are quoted as admitting maintenance of the city's stormwater system is reactive and Council needs to do more to improve its ageing system.

When you are considering aged and insufficient infrastructure around Wagga Wagga you must add the insufficient drainage system for the Wagga Wagga Botanical Gardens and its surrounds.

My family have lived at 2 Urana Street for over 45 years and in all that time we have endured flood after flood - all created due to the totally inadequate drainage systems in place in the Botanic Gardens, Willans Hill School, and other areas. All the rainwater from these areas ends up at my place. Naturally that water then flows downhill and through my neighbours' properties.

In the recent storms I again experienced torrents of floodwaters at my corner. Once again I embarked on my usual regime of putting in board barricades in my gates, cleaning out Council's drains in the gardens (as Council officers who have promised to have this done have again failed to follow up and actually do anything). I ensured that all that I could do to mitigate the floodwaters was done prior to the forecasted storms.

Over the years we (my late mother and I) have consistently advised Council about the shortcomings of the drainage system in this area and the damage sustained as a result of insufficient action being taken on the subject. The latest attempt to try and help was the inclusion of the island in Macleay Street. This was included when the roundabout was built. This has helped a bit, but on two occasions recently my house was an island surrounded by a moat of floodwaters and a raging river down the naturestrip, footpath and Urana Street and water coming into my yard over and under the barricades. Attached is a photo showing the board in my back gate with water lapping at the top and sneaking underneath. This is what happens at this corner time and time again. In this day and age this should not occur. I should not have to protect my yard and property by having to put barricades in gates every time

I think there is a storm approaching - but that's what I do in an effort to try and reduce the amount of water coming into my property and to try and slow the water to reduce damage, erosion and destruction.

The volume of water coming down Macleay Street on the Eastern side - is unbelievable. Attached is a photo I took on Sunday 7th March after a storm of fewer than 80 points (<20mm). The water from Willans Hill School direction also inundated the Urana/Macleay Street roundabout. Also attached is a photo of the naturestrip outside my front gate at around about 1.30 a.m. on Monday 8th March. It is a raging torrent with the drains not coping and water coming up and over the gutters into my property and forming a river of water down the footpath. I have more photos I could show you. The erosion is easy to see on the naturestrip, so come and have a look.

It is high time Council took this issue seriously and did something to rectify this continual problem. I know that you will respond with - "oh well this was a one in a 100 event". Rubbish. This happens every time we have a storm - anything over about 80 points (or 20mm) in a short period of time.

Something has to be done. The time is now. Apply for Grants or whatever it takes, but something has to be done as this problem isn't going away and every time some further work is done on Willans Hill, in the Botanic Gardens, and at Willans Hill School we get more floodwaters as a result. I believe more drainage is required up near the entrance to the Botanic Gardens near Blamey Street, and on the footpath from Willans Hill School (as that water just crosses the road at the roundabout and heads for my front gate).

Maintenance also has to be done - before storm events - to all drains in the vicinity (in the Botanic Gardens and the roads/roadways). This is not being done and I am frustrated by unfulfilled promises by Council staff that it will be done. One authority/section of Council needs to do this. At present there seems to be a demarcation problem on this issue, so nothing ends up being done.

So that you are more fully informed, I could provide previous letters that have been sent to Council on this subject over the years - it is mountainous.

I would be happy to discuss my knowledge of these problems at length with you. Please leave a message on my answering machine and I will get back to you to arrange a suitable time.

I hope your reported comments in the newspaper are correct and that you are going to look at areas like this very seriously. Please add this area to your list of infrastructure requiring immediate attention, and please contact me for further information. I will be away for a while from mid-April so please contact me soon.

Yours faithfully



20th October 2010

Mr. David Walker Wagga Wagga City Council Baylis Street WAGGA WAGGA NSW 2650

Councillors - would you be kind enough to read this letter & attachment

Re: Proposed plan for Wagga Wagga Botanic Gardens - feedback
The proposed plan will only add to our flooding woes

On 14th September there was an article in *The Daily Advertiser* about a proposed fiveyear plan for the Botanic Gardens. For a few weeks I have been endeavouring to inspect such a plan. I have now finally received a copy of that plan and am aghast and very worried about some aspects of the plan.

I am copying this letter, and my letter of 12th October, to all elected Councillors of the City as you need to be aware of this situation, or have the situation refreshed in your minds.

Council's consultants - Landscape Architects.... and dreamers - are in dreamland if they don't think this plan will have adverse implications for the flooding problem that I encounter at the corner of Macleay & Urana Streets. I am not talking about a one in one hundred year event - I am talking about 4 times this year alone, and countless times since inception of the Botanic Gardens. Last Wednesday night (13th October) I had to stop traffic travelling along Macleay Street in a southerly direction from the Urana Street corner (at 9.50pm). The area was totally flooded - water overflowing the island at the entrance to the Botanic Gardens and pouring down Urana Street, the footpath, and towards my gates (both of which were boarded). I asked for SES help, but Police didn't arrive for 50 minutes, so I had no alternative than to 'stick to my post' and stop people driving through - for two reasons: to avoid them stalling in the water; and to prevent car-wash which exacerbates the flooding situation for my yard and my neighbours' yards. Please note the island was put in for a reason - to try and help with the flooding situation, so please don't contemplate getting rid of the island.

This is not just a small recent problem - this is a problem that has been around since the Botanic Gardens' inception. I have a folder of letters sent to Council during that time both by my late mother and myself. One such letter was to Mr. Terry Dodds in March 2010 (to which I have not had a satisfactory response - it was delegated to the Stormwater Engineer and I haven't had any communication from him/her).

With regard to this particular Botanic Gardens plan:

- the proposed creek from the native garden area ('redirect water into the landscape from Willans hill and link to the lagoon area') to the lagoon (known locally as a lake), and
- the 'Wetland overflow to Macleay Street'

must not be part of the final plan for the Botanic Gardens. The lake was designed to take stormwater. It must not become any more burdened than it currently is in storms and wet weather situations, and no more water must end up on Macleay Street.

I can't imagine what flooding I would get if your proposals go ahead - it would be worse than horrendous.

No additional water must be taken off Willans Hill and put into the gardens. The whole purpose of the current drainage is to get water onto Lord Baden Powell Drive so that it can enter the drainage system in a semi-controlled manner. Please walk through the new native garden section and see the water pathways that have developed since last week's rain, and also the springs that have also appeared. They are always there after rain. We don't need any additional water being brought into the Botanic Gardens from higher up the hill.

Obviously the consultants have not taken into account any of the flooding problems created by the Botanic Gardens. Obviously no consultation with people who actually work in the gardens was undertaken as the workers in the gardens are fully aware of the situation here, and so are other Council officers.

I reiterate my comments in my letter of 12th October "Whatever is done in the way of works in the Gardens must not make this situation (flooding at the corner of Macleay & Urana Streets) worse. In fact it is essential that drainage in the Botanic Gardens be improved dramatically. The drainage in the Botanic Gardens has been woefully inadequate since the Gardens' inception. Within your plan should also be a management plan for the cleaning of all drains, particularly the intakes, to ensure optimum capacity of water in storms - and the maintenance program must be undertaken on a very regular basis."

As mentioned in my letter of 12th October, every time more flat areas are made within the Gardens, Willans Hill School and Museum areas, more floodwaters end up at this corner. I notice that there are two proposed new carparks. They would both add to more water flows over-ground. The location of the proposed 22 carparks near the Toilet Block is where a new rivulet formed in last week's downpours - go and have a look.

Removing the lower part of Tom Woods Drive would add to my flooding woes. There are 2 critical drains in that area, plus the roadway and gutters themselves - they'd probably just be covered over if this plan goes ahead. Where would that water end up? My contention is it would all end up on Macleay Street.

What overflow plans are there for the Rainforest gully when it gets full? Or does it just overflow into Macleay Street too?

On a positive note, I like the idea of it becoming the "Other Botanic Gardens" with plantings from the region, but a system of naming plants should be included. There is currently no way of knowing the names of plants in the Native Garden area, for instance.

I need someone with authority within Council to take control of this issue and put forward a plan to improve the drainage system within the Botanic Gardens. I again reiterate that less water needs to end up in Macleay Street, particularly from the Blamey Street entrance.

Why should I have to put boards in my gates every time a storm is forecast? Why should I have to become a lone person on a corner in a storm stopping traffic entering floodwaters? Why can't Council fix this problem once and for all?

I am not the only one who is affected by these floodwaters, but I can assure you that if this proposed Botanic Gardens plan is put in place the number of people affected will increase.

Please can someone respond to this letter and advise me that you are taking this matter seriously; that the proposals for a creek and wetland overflow to Macleay Street will never become a part of a plan for the Botanic Gardens; that the other issues re carparks and removal of the lower part of Tom Woods Drive will also be reconsidered; and that someone will take this issue seriously and plan for better drainage to solve the problems of flooding created by the Botanic Gardens.

Yours sincerely

c.c. The Mayor of Wagga Wagga
All other Councillors of the City of Wagga Wagga
Mr. Phil Pinyon, General Manager
Infrastructure Manager



20th October 2010

Mr. Phil Pinyon General Manager Wagga Wagga City Council Baylis Street WAGGA WAGGA NSW 2650

Dear Mr. Pinyon,

Re: Masterplan for Wagga Wagga Botanic Gardens

I am attaching herewith a copy of my letter today to Mr. David Walker regarding the Masterplan for the Botanic Gardens, together with a copy of my letter to Mr. Walker of 12th October. I have copied both letters to the Mayor and all Councillors.

I have now had an opportunity to look at the plan and digest what is proposed.

I am shocked and scared. If this proposal goes ahead my current flooding problems will pale into insignificance.

I need someone to take this flooding situation at my corner seriously, and I'm asking you to do so.

I wrote to Terry Dodds in March 2010 about the problem, inclusive of photographs. I copied you on that letter too, inclusive of the photographs.

Apart from a letter from Mr. Dodds advising he had referred it to the Stormwater Engineer I have had no further communication. From the tone of Mr. Dodds' letter I think he understood the significance of the problem. I now understand that Mr. Dodds no longer works for Council.

I am not the only one who is affected by this water, and I can assure you that if this proposed Botanic Gardens plan is put in place the number of people affected will only increase. I know my new neighbour has also been in contact with Council since March on this issue too.

I need to know that this plan will not go ahead in its current form, and that any new or future proposals for the Botanic Gardens will have <u>drainage</u> as the number one item for attention.

Please feel free to ring and discuss these issues with me, or better still visit the location. I look forward to your response.

Yours sincerely,



12th October 2010

Mr. David Walker Wagga Wagga City Council Baylis Street WAGGA WAGGA NSW 2650

Dear Mr. Walker

Re: Plans for Wagga Wagga Botanic Gardens

I was interested to read the article in *The Daily Advertiser* of Tuesday September 14, 2010 about your plans for a "minor facelift over the next five years ahead of the development of a 20-year masterplan that might increase the size of the facility". The article indicated you'd like feedback.

On 28th September I attended the Council Chambers hoping to look at the Plans. They were not available then, but someone kindly telephoned a few days later and advised that the plans would be on display from 11th October. I went to the Council Chambers yesterday and they weren't on display. So without actually seeing the Plans (and relying on the newspaper article) I am writing this letter now to ensure that I don't miss any deadline for comments. If possible, I would like a copy of the masterplan sent to me when it is available.

The main purpose for writing is to ensure that when considering, planning and implementing changes and developments in the Botanic Gardens that you keep at the forefront of your thinking, planning and implementation that the area at the corner of Macleay & Urana Streets is prone to flooding during storms. Whatever is done in the way of works in the Gardens must not make this situation worse. In fact it is essential that drainage in the Botanic Gardens be improved dramatically. The drainage in the Botanic Gardens has been woefully inadequate since the Gardens' inception. Within your plan should also be a management plan for the cleaning of all drains, particularly the intakes, to ensure optimum capacity of water in storms - and the maintenance program must be undertaken on a very regular basis.

I read that you want to more effectively use storm water run-off better. It is essential that this be done, as the flooding situation at my corner has not improved over time, only worsened. Whenever more concrete, flat areas or other changes are made in the Gardens and around Willans Hill School and all other amenities on Willans Hill more flood waters reach the corner.

Mention is made in the article of the "lagoon near Macleay Street". I presume you (or the writer of the article) are referring to the small lake.

In discussions with Council officers in the past over the flooding issue at my corner, it was made clear to me that the lake was designed so that it could capture as much water as possible during storm events. I noticed this year, following our wet winter, that the lake was at capacity and I wonder what happens if the lake gets too high. Is

there a way of getting water out of the lake into the stormwater system - well before any storms could make matters worse?

I hope that any future works in the Gardens include a major increase in the capacity of all drains and underground pipes.

I wrote to Terry Dodds on 16 March 2010, following the March storms, and included some photographs to give a bit of an indication of what happens here. I received his response dated 25 March indicating that he had delegated my letter to "the Council Stormwater Engineer". I have had no further communication from Terry or that "Stormwater Engineer". I subsequently contacted Council independently re the blocked drains at the entrance to the Gardens and in this vicinity, and two Council workers came up in a big truck/machinery and cleaned out many of the drains.

In my letter to Terry Dodds I pointed out that the amount of water coming out of the Botanic Gardens from the Blamey Street entrance and flowing down the eastern side of Macleay Street - ending up at my corner - is unbelievable. Surely you've seen it for yourself. I believe the volume has increased in recent years. There is a drain on that eastern side of Macleay Street between Blamey Street and Heydon Avenue. Is there any way that drain's capacity could be increased? Is there any way you could capture water well within the Gardens and divert it in such a way that it doesn't end up in Macleay Street at all?

Why should I have to put boards in my gateways every time a storm is threatening? If I hadn't done so this year on at least three occasions I would have been inundated with floodwaters. As it was I was able to reduce the amount of water coming into my backyard, and then on through neighbours' yards. I fear that a storm will occur when I am away from the house and haven't put the boards in the gates.

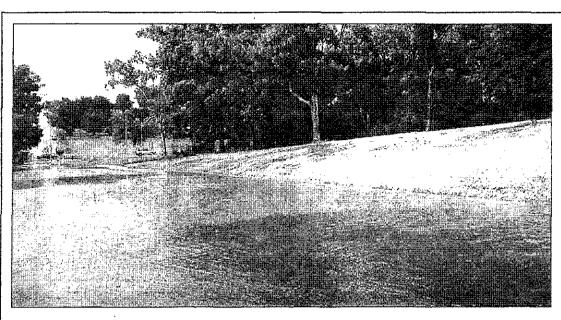
Surely in this day and age Council should be able to do whatever is required to ensure that this corner doesn't flood every time there is a storm. Which other residents in Wagga Wagga have to go to such precautions each time there is a storm in the vicinity?

I would be happy to discuss these issues with you, or any other Council officer.

The article mentions new signage. I think that might be a good idea. The number of people entering (and sometimes existing) the main entrance to the Botanic Gardens in an illegal manner (i.e. on the wrong side of the island) is a daily occurrence. As for a sculpture - I believe it would only be vandalised, and the money should be put into more and better drainage.

I am copying this letter to the General Manager and the Director of Infrastructure in the hope that I receive some feedback on what the "Stormwater Engineer" might have come up with following my letter in March 2010.

Yours faithfully



IMPASSABLE: Macleay Street by the Botanic Gardens is under water after the heavy rainfall yesterday.

Picture: Greg Vidler

Flooding causes city-wide chaos

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By Tim Rowe and Daisy Huntly

WAGGA City Library was last night being sandbagged by emergency services personnel in a bid to minimise flood damage as torrential rain lashed the city.

With reports of up to 80mm of rain yesterday — nearly twice the December average — the heavy downpour caused cars to become stuck, roads closed and homes inundated with water.

Lake Albert residents appeared to bear the brunt of the localised rain, with homes, backyards and roundabouts all flooding.

The channel near Bunnings and McDonald's in Glenfield was struggling to cope with the surge of water flooding in.

However, SES region controller James McTavish last night said his organisation had mobilised personnel to focus on the flooding in the city's CBD, particularly the library.

"In central Wagga the issue is

"In central Wagga the issue is the amount of water which is inundating around the library. We're sandbagging the library, but there is a significant amount of water in the CBD," Mr McTavish said.

"There's also been significant rain to the east of Lake Albert. It's only anecdotal but we've had reports of 80mm of rain at Lake



TAKING CARE: Cars plough through water at The Esplanade in central Wagga during the heavy rain yesterday. Picture: Les Smith

Street, near the Farmer's Home Hotel.

Witnesses said the male driver was forced to stop and free children from the car after water enguised his vehicle while travelling along Edward Street.

This is the third flood emergency this year, with the latest bringing bad news for farmers who were banking on bumper crops.

Some businesses were affected by the deluge, with water seen leaking from light fittings at the Victoria Hotel on Baylis Street. The power was also cut momentarily at Romano's Hotel on Fitzmaurice Street.

The lagoon was also overflowing, while drivers were forced to switch lanes in Kincaid Street

the next few days, Mr McTavish said he was concerned more damage was to come, with the excess water having nowhere to drain away.

drain away.

"Our major concern is with regards to the weather that's due next week — the Bureau (of Meteorology) has put out a flood watch next week for a portion of the state," he said.

The SES chief said Canberra had also been hit by heavy rain, and with catchment areas already at capacity, the water would make its way down the Murrumbidgee during the next week, causing more problems.

The water coming down the river is making its way from Burrinjuck and Blowering dams, as well as from creeks entering

viewers can now wate shows such as Masterchef Australia. Neighbours, Australia Idol and Good News Week.



1.4. Submission 4

Forsyth Street

1.4.1. Issue

Flooding at Forsyth St during December 2nd 2010 event noted as worst in "35 years".

1.4.2. Response

The December 2nd event was poorly picked up by rainfall gauges but indications are it approached a 1% AEP event and flooding was likely exacerbated by the fact that the event occurred in conjunction with elevated river levels. Modelling indicates that Forsyth Street is flood liable from approximately the 5Y ARI event onwards.

1.4.3. Implications

Management measures need to be examined in regard to the flood liability of such locations however solutions will be problematic, particularly for scenarios where elevated river levels impede the outflow of water.

Printed By: jeffreyb OATES AVE BOANAJ923 BHI

Comment:

Legend:

Road Names Cadastre

1:16000 Aerial Image (2008) Water Features

Scale = 1:2,636

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City of Wagga Wagga

Date: 25/01/2011 14:15:47

1.5. Submission 5

No location given.

1.5.1. Issue

In regard to Lake Albert the submission states the following:

- Problem area downstream of Lake Albert;
- Lake shouldn't be used for flood mitigation, don't lower normal operating level;
- Risk of overtopping road in large events;
- O'Halloran Park flow paths could be widened, but perhaps should not be lowered;
- Outlet at Lake Albert road could be widened;
- In the long term Lake Albert Road could be raised, from Kooringal Road to Eastlake Drive, to give better flood protection.

In regard to Glenfield Drain the submission states the following:

- Overtopping has occurred recently, problem exists downstream of the Rules Club:
- As suburb of Llyod grows and Glenfield Park is completed the drain will receive more water;
- Detention basins are not the solution;
- Three issues are with the drains size, changes in direction and vegetation growing in it;
- Drain should have vegetation removed from the Rules Club to Flowerdale Lagoon;
- · Outlets under the highway (Edward St) should be enlarged;
- · Pipes under railway also should be enlarged;
- Capacity of enlargements at least 100Y ARI event;
- Redesign of drain in area of Bunnings, corners lead to overtopping;
- If realignment not possible then additional drain should be implemented;
- Direct runoff from Lloyd down Red Hill Rd toward Bourke St and the Olympic Way.

1.5.2. Response

Much of the submission is considered opinion by a concerned resident in regard to future mitigation works required to alleviate well known drainage trouble spots. The purpose of the flood study is to identify areas with flooding problems whilst subsequent stages of the floodplain risk management process will address management measures. It may well be that some of the writer's opinions will be worth contemplating at the time of the management study however relevance to the study currently being undertaken is less.

1.5.3. Implications

Not applicable.

Wagga Wagga 2650

The General Manager Wagga Wagga City Council P.O. Box 20 Wagga wagga

Dear Sir

Flood Study

I am writing in response to a call for comment on the Wagga Flood Study. I examined the document in the Wagga Wagga library.

Whilst the document is very extensive and no doubt has a great deal of technical information, I don't think it makes useful recommendations in at least two areas. Wagga City has just seen at least two storm events (in 2010) and one major river flood. It is the storm events that I want to comment, particularly the cities ability to mitigate against serious storm water damage.

The first problem area that I see is downstream of Lake Albert. There is no doubt that the residents of our city are pleased to have the lake full of water. There is no reason to reduce the capacity of the lake to meet storm flows, or to use the lake for flood mitigation. I think that the level of the water should be held at least where it is today, and not lowered through engineering works. There is a risk of over topping the road in times of significant inflows, but I would prefer that the outflows near O'halloran Park be widened to take extra flows, but not lowered. Also the outflow under Lake Albert road could be widened to take more capacity. As a long term project, I think Lake Albert Road could be raised in height from Kooringal Road to Eastlake Drive, therefore improving the risk of flood water crossing the road.

My second area of concern is the Glenfield storm water canal. In last years storm events there was some damage from overtopping of this channel. The problem exists downstream of the Rules club. It is my view that this channel will carry significantly more water when the suburb of Lloyd grows, and Glenfield Park is completed. Detention basins are not a solution to seeing more water travel down this drain. The three problems with this drain is its size, its changes of direction and particularly the vegetation that grows in it. The first thing that should happen, and it is urgent, is that the drain should be cleaned of all vegetation from the Rules club to Flowerdale Lagoon. The second need is for the outlets under the highway (Edward St), should be enlarged, and probably the pipes under the railway line. Both of these culverts should be calculated for at least 100 year flood, and in my view, larger than that. The drain also needs (if possible) re-design in the area of Bunnings particularly. The corners in the direction of flow will mean serious overtopping in strong flows at this point. If it is not possible to change the design, then council should look to putting another storm water drain in addition to what is there at present. In any case, I think it would be good planning to direct storm water from new subdivision of Lloyd down

Red Hill road towards both Bourke St, and the Olympic Way, not leaving all flow to go down the Glenfield channel.

Failure by Council to make changes to this storm water flow will, I believe ensure that all the businesses between the Rules Club and the Sturt Highway particularly along Pearson street will at some stage be inundated. Not only that but as we have seen recently in Toowoomba, Pearson Street, Dobney Avenue and most worryingly, the Sturt Highway could see such water flow that cars will be washed off the roads in major storm events.

I hope council looks at this issue and takes appropriate action urgently.

Yours Seriously