

# **Floodplain Risk Management Advisory Committee - Workshop - 4 February 2020**

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Resolution 19/415 in response to Notice of Motion  
Stockpiling materials in the Floodplain

## **NOM-2 NOTICE OF MOTION - STOCKPILING MATERIALS IN THE FLOODPLAIN**

### **RESOLVED:**

**On the Motion of Councillors K Pascoe and P Funnell**

**That Council receive a report:**

- a that outlines current Council stockpiling and levees on the sites within the floodplain as listed in the body of this report**
- b an action plan to remove the stockpiles and levees (if any action required)**
- c an update in relation to vegetation management within the floodplain**
- d in consultation with the Floodplain Risk Management Advisory Committee as part of the development of the reports**
- e back to Council no later than March 2020**

# North Wagga Borrow Pit 1990 to 2018

1990



2001



City of  
Wagga Wagga



2010



March 2012

July 2012



2016





2018



# Fuller Cooradook Stockpile Site 1944



1990





2008



2010



2012



2018





# Hampden Avenue Wilks Park Levees 2006 – 2018

2006



2010



2012



City of  
Wagga Wagga

2016





**Attention: Mr B Short**

**Re: Impact modelling of roadworks between Parken Pregon and Wiradjuri Bridges**



## **INTRODUCTION**

This letter details the work carried out by WMAwater in regards to flood impact assessment and scour analysis of the proposed Hampden Avenue roadworks, between Parken Pregon and Wiradjuri Bridges. The area of interest is depicted in Figure 1.

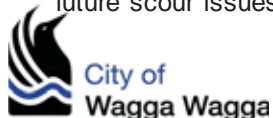
## **BACKGROUND**

Hampden Avenue links Wagga Wagga CBD and North Wagga via Wiradjuri Bridge. During moderate flooding (events greater than 10% AEP) flood waters flow over Hampden Avenue preventing direct travel between North Wagga and Wagga CBD. This occurs prior to the inundation of Wagga CBD (~1% AEP flood event protection) and North Wagga (~5% AEP flood event protection).

During the recent December 2010 flood event (~6.67% AEP event or 15Y ARI event) Wagga Wagga City Council (WWCC) built a temporary earthen levee on either side of Hampden Avenue. The main purpose of this was to maintain the road link between Wagga CBD and North Wagga so as to aid in evacuation and emergency response.

Following the event Council observed that maintaining access to North Wagga via Hampden Avenue was of sufficient benefit that making the levee arrangement permanent was of interest. Of concern, however, were the potential impacts on flood levels upstream of Hampden Avenue. Therefore, Council requested an impact assessment be carried out. The intent of the impact assessment work is to:

1. Examine the impact of the proposed levee on the levee design event (15Y ARI or 6.67% AEP);
2. Examine the impact of the proposed levee on larger floods, such as the flood planning event (1% AEP event) and the 5% AEP event; and
3. Examine the impact of the proposed levee on flow velocities, in particular to the north of the proposed levee as they may indicate likely future scour issues.



## RECOMMENDATIONS:

The impact of the levee, when designed to the 6.67% AEP height (and without freeboard), is small for the 5% AEP event (which is the flood design event for North Wagga). It is recommended that minor height adjustments be undertaken in North Wagga levee in order to assure the same level of freeboard. These adjustments refer to an increase in levee heights of up to 0.03 m in the upstream side of the levee (next to Parken Pregar Lagoon). The impact is even smaller for the 1% AEP event. In order to guarantee the desired level of protection at Hampden Avenue some considerations should be taken into account:

- Freeboard should be incorporated in the levee design; and,
- The levee design could incorporate a spillway, potentially located to the left of Parken Pregar Bridge, to ensure the levee fails in a controlled manner without causing further impacts to North Wagga design flood level and upstream properties as a consequence of the freeboard component.

Overall installing a levee at Hampden Avenue to the height of the 6.67% AEP event produces useful emergency response outcomes without carrying significant off-site impacts. Most notably, required levee heights (in order to maintain current levels of flood protection) for Wagga CBD do not change.

If you require further information do not hesitate to contact the undersigned.

Yours faithfully,

**WMAwater 111016/R20110324 May 2011**



## **Actions:**

### **Borrow Pit**

- Remove 10,000m<sup>3</sup> of waste material to GWMC (Funding source yet to be determined)
- Initiate discussion with EPA regarding placement of some material into the new borrow areas
- Rehabilitate Borrow Pit after Main City Levee material extraction is finalized ensuring directions in REF are followed

### **Fuller and Cooradook Stockpile site**

- Remove small amount of remaining material to GWMC
- Rehabilitate site according to current standards using existing topsoil stockpile and an appropriate seed mix

### **Hampden Avenue Levees**

- Ensure levees comply with recommendations in the letter from WMA Water from 2011

### **Vegetation Management**

- Investigate and develop a comprehensive weed and tree management program for the riparian and floodplain zone
- Grant funding has been sought to facilitate the creation of this program

