



# Emergency Flood Plan

## Moutoa Flood Action Plan

Version 2.0  
June 2023

## DOCUMENT REVISION HISTORY

Version Number	Date	Who	Why
1.0	November 2014	Evan Lloyd	Moutoa related information from the old ERM included here. Reviewed and updated by Allan Cook and Graham Doull.
1.1	30 November 2015	Evan Lloyd	Operations to River Management. Addition of Moutoa Floodway Manual Dial-Out list to the plan (Annex B)
1.2	23 May 2017	Evan Lloyd	Manual Dial-out List updated. Leaseholders map added as Annex C. Minor changes.
1.3	12 December 2018	Ross Brannigan	Updated Manual Dial List and Gate Operators contacts
1.4	November 2019	Ross Brannigan	Annual Review – minor changes
1.5	May 2021	Jeanie Boost-Turner	Annual Review – minor changes
1.6	February 2023	Jeanie Ferry	Annual Review - minor changes
2.0	June 2023	Jeanie Ferry/David Rei Miller	Major Review

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### Cover Photo

Moutoa Gates Control Room  
David Rei Miller, Operations Manager  
17 Mar 2023

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<b>SERVICE CENTRES</b>	<b>Kairanga</b> Cnr Rongotea & Kairanga-Bunnythorpe Rds Palmerston North	<b>REGIONAL HOUSES</b>	<b>DEPOTS</b>	<b>Levin</b> 11 Bruce Road
	<b>Marton</b> Cnr Hammond & Hair Sts			<b>Palmerston North</b> 11-15 Victoria Avenue
	<b>Taumarunui</b> 34 Maata Street			<b>Whanganui</b> 181 Guyton Street
	<b>Woodville</b> Cnr Vogel (SH2) & Tay Sts			<b>Taihape</b> Torere Road Ohotu

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# 1 Introduction

The channel capacity of the Manawatū River below Moutoa is limited to 1300 m<sup>3</sup>/s. The purpose of the floodway is to divert floodwaters when the flow in the river at the gates rises above the channel capacity. The gates must be operated within certain constraints described in this section. These constraints are particularly important when the gates are first opened, and when they are closed. They include:

- The river level below the gates has an upper limit, to avoid overtopping of the stop banks.
- The river flow at the gates has a lower limit, to avoid silting up the river channel downstream and scouring due to excessive velocities in the river upstream of the gates.
- The floodway velocity has an upper limit to avoid scouring, achieved by limiting the increase in gate opening allowed at any one time.

## 2 Preparation for Operation

The decision to open the gates is made by the Horizons Regional Council (Horizons or HRC) Incident Controller (IC). It is likely that a Level 3 activation of the EOC will already be in place, however the IC should declare a Level 3 event as soon as staff are taken away from BAU duties and assigned to carry out duties related to the operation of the gates. As soon as it has been decided that the floodway will be used, a 'Special Event' should be declared.

Preparation and operation of the Moutoa Gates involves a number of different groups of staff with various responsibilities. They should ensure they report to their appropriate manager, but also liaise with one another as a matter of courtesy and efficiency.

Refer to the Moutoa Gates Activation Checklist on Page 8 of this Plan.

A generator is on site at the gates and if assistance is required for anything relating to this please advise the Works team based in Kairanga depot.

### 2.1 Advising Stakeholders of Impending Floodway Operation

Leaseholders of spillway land should be advised at least four hours prior to the predicted gate opening to allow them time to remove all stock from the floodway. If at all possible this should include some daylight time.

Contacts for the Moutoa Floodway Manual Dial-out List are held in Herman and can be accessed by the Emergency Management Office. The Senior Emergency Management Advisor is responsible for maintaining the dial-out list. This is the most up-to-date version so refer to this at all times.

This list is to be reviewed and updated at the same time the plan is reviewed, and after each operation of the gates. It is best achieved by calling each person on the list and

checking details. The Assets Team Leader should also be involved in the review to ensure all current leaseholders are on the list.

A map of the Moutoa Spillway identifying lease areas is attached at Annex C.

## 2.2 Field Staff

To prepare the spillway for operation, the Works Team based out of Kairanga Depot work under the supervision of the Works Supervisor to carry out the following tasks:

- Check that the power is on in the control tower and report to the Horizons Incident Controller. Also report status of the generator and fuel supply.
- Move down each bank of the floodway to ensure that all stock are removed, all collapsible fences are removed or lowered, and to check all floodgates on culverts through the floodway stop banks to ensure that they will close properly.
- Open the dry gates at the Foxton Loop.
- Unpin the gravity gates on Moutoa Main Drain.
- On completion of the check of the floodway, the River Works Supervisor or their deputy must report to the Horizons Incident Controller.
- Check the operation of the Whirokino Scheme main outlet floodgate (Duck Creek) into the Foxton Loop.
- Check operation of the Foxton East Drainage Scheme main outlet floodgate into the Foxton Loop.
- Check that the road closure signs have been erected at Kere Kere Road and advise Horizons Incident Controller that this has or has not been completed (responsibility of Horowhenua DC).

## 2.3 Gate Supervisor

The Moutoa Gate Supervisor is appointed by the Horizons Incident Controller following the decision that the gates will need to be operated. The supervisor and their assigned 2IC will be advised of the time they are required to be established at the gates.

The Supervisor is in charge at the gates and is responsible for the actual operation of them.

The prior planning and calculation needed to predict the opening may be completed by another person or the Horizons Incident Controller personally.

The Supervisor will be given a prediction of the flood profile, including an estimate of when the gates will need to operate. The decision on when to operate each gate and by how much is that of the Supervisor. The Supervisor should report regularly to the Horizons Incident Controller and in particular should report immediately when the

gates are first opened. A radio unit is located in the Moutoa Control Room and can be used to communicate with the EOC.

### 3 Gate Operation Team Instructions

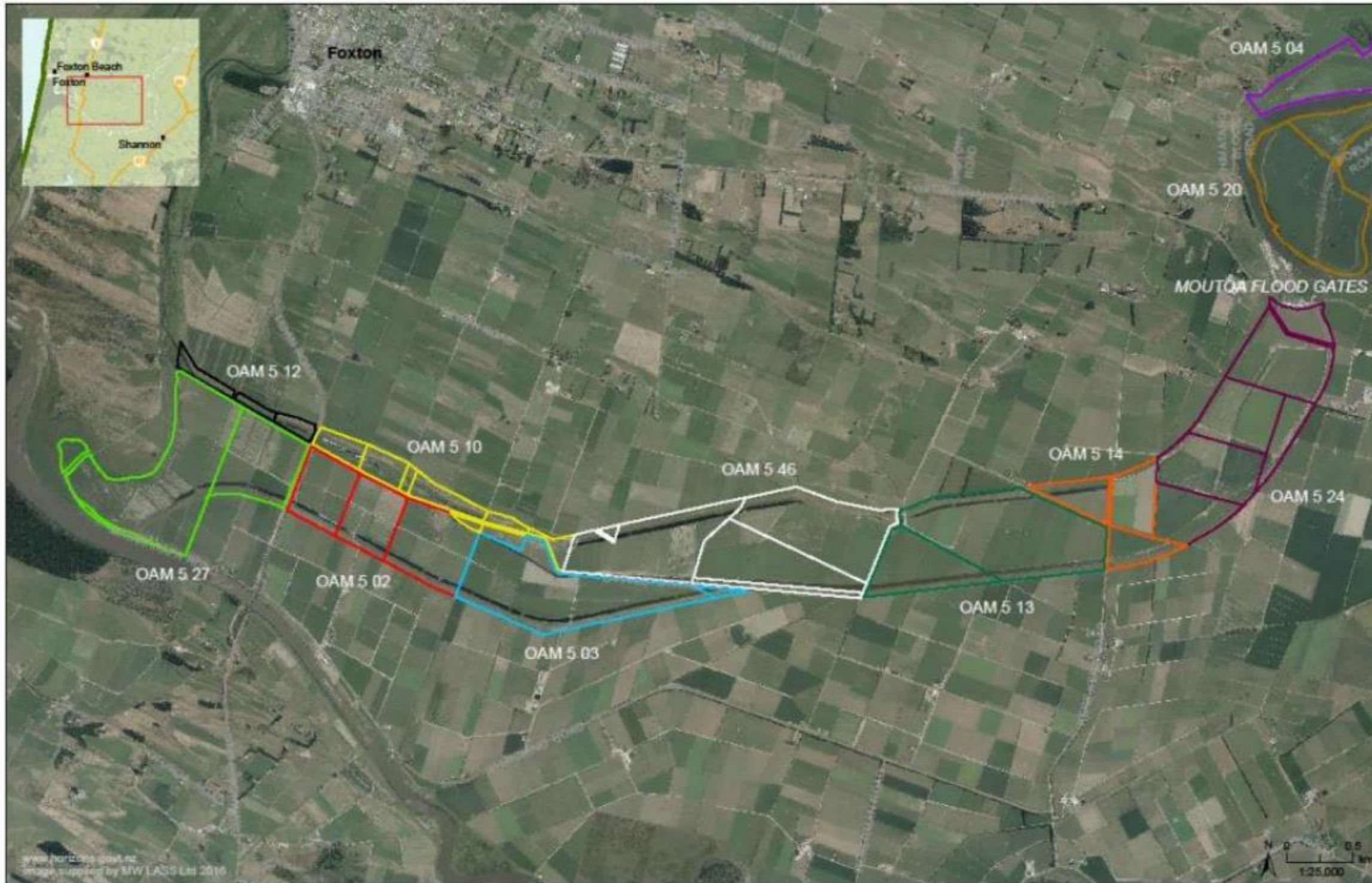
1. The team carrying out the initial gate opening must first obtain a brief from the Horizons Incident Controller (IC). This will include instructions for the initial gate opening, which may be a set time or a target river level.
2. Obtain the 'Moutoa Box' from the cupboard located in the Emergency Management storage cupboard, at Te Ao Nui. The two keys required for access at Moutoa are located in the box. One of the Council's standard keys will open the gate of the control building driveway; the control building; and the control room door at the top of the stairs. A different key is required to turn on the power supply to operate the gates.
3. The code for the Control Building security alarm system is recorded on the inside of the box lid.
4. The green file box located in the Moutoa Box has EOC contact lists, and a mobile phone for Moutoa is located in the Emergency Management office by the printer (021 359 160).
5. Check that the Moutoa Box contains the following items:
  - o A battery operated radio plus spare batteries
  - o Binoculars (to read the painted markings on the more distant piers)
  - o Torch plus box of spare batteries
  - o Topographical Map 1:50,000 NZMS 260 Sheet S24, Foxton, which shows the Manawatū River downstream of Palmerston North
  - o Gate opening log sheets
  - o Gate operating chart
  - o Current phone book
  - o Copy of the Moutoa Plan

If any items are missing from the inventory advise the EMDO immediately.

EOC Logistics staff are responsible for making meal arrangements for the Moutoa Gate Operation Team. Ensure that appropriate meal arrangements have been made before departure.

- Some other useful items will be found in the control room cupboards, which should be checked when you arrive. Included is Hi-Viz clothing, to be worn if it is necessary to inspect the gates from the bridge.

- Drive to Moutoa, allowing sufficient time to arrive at the gates at least half an hour before the projected gate-opening time (unless the IC instructs otherwise).
- Enter the control building and deactivate the alarm within 30 seconds. The same key unlocks the upstairs door to the control room itself.
- Turn on the power to the gates using the key-operated switch. Turn on the outside floodlights at the same time noting that they take time to fully illuminate.
- Advise the IC that you have arrived. Check with them that the Works Team have finished checking culverts, and that all stock are clear of the floodway. On rare occasions it will be necessary to open the gates before the floodway is clear of stock, but this should not be done without the approval of the IC.
- Set up if required and test the VHF radio in the Control Room. This will be the form of communications with the EOC. Detailed instructions are with the radio.
- Gate staff will sometimes receive reports of problems on the river from local farmers and members of the public. These should be referred to the EOC. Judgement must be used, but during the rising stage of a flood, a Gate Operation Team member (never both team members) should only leave the gates to inspect a problem under the most extreme circumstances.



**HRC Lease Map**  
**Moutoa Spillway | Leased Area Location**

Prepared by Catchment Information  
 12 April 2017  
 CI Ref: CI13304  
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Appendix 1 - Moutoa Sluiceways Activation Checklist

Serial	Task	Actioned	Comment
1	EM staff prepare to activate the manual dial-out of the spillway list and arrange gate operator shifts.		
2	The dial-out list includes Horowhenua District Council and Higgins Levin (requirement to close Kere Kere Rd), Higgins PN (requirement to close the Ken Everett Cycleway) and John Leader Electrical (pre-check of gate operation). If contact can't be made then phone the Horowhenua EMO.		
3	Discuss health and safety procedures to gate operators for arriving at the gates and home safely. Consider having one point of contact for gate crew for those operating out of normal business hours e.g, EMDO or Response Manager EOC.		
4.	<b>Declare a Level 3 'Special Event'</b>		
5	Make arrangements for the 1 <sup>st</sup> shift of gate operators.		
6	Liaise with other TAs as required (HDC).		
7	Arrange a vehicle for gate teams if required.		
8	Prepare equipment box and mobile phone for uplifting by gate team.		
9	Consider refreshment and needs of gate team i.e milk, biscuits, toilet paper.		
10	Consider meal requirements for gate team. This may require a purchase order for Horseman's Café in Shannon (06 362 7097).		
11	Arrange for EOC or EMDO coverage as long as the gates are in operation.		
12	Brief the gate team before departure.		
13	Media release as required.		
14	Update the Call Centre and/or Reception on current situation.		
15	Advise CE and Chairman.		
16	Make arrangements for further shifts of gate operators as required.		

Acknowledgements		Received	
		Who From?	When?
1	Power on at the control building (report by river gang).		
2	Generator working at gates		
3	Floodway check complete (report from i/c river gang)		
4	Gate Team confirm arrival at gates		
5	Actual gate opening logged.		



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