



Dairy Farmer Insights into Natural Disasters



Dairy farmers,
Gavin and Sarah Wake,
holding the Whittingham
Community Flood Plan

Whittingham Community Flood Plan

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Gavin and Sarah Wake's Story

Having a plan is the best way to minimise disruption and aides recovery after a natural disaster like flooding.

This was a lesson Gavin Wake and other landholders in Whittingham, NSW, learnt the hard way in 2007 when the biggest flood in a generation inundated farms and caught residents and farmers unprepared.

"It was just a normal day on the farm until we had a phone call from a friend upstream who said, "You guys better be

prepared, there's a lot of water coming." That was at lunchtime, and by 6 o'clock that night, our whole farm was under water," recalls Gavin.

Together with his father, Max, and wife, Sarah, the Wake's milk 270 Brown Swiss cows on 350 acres of Hunter Valley River Flats.

"It's all flood plain, we have no high ground at all", says Gavin.



The Wake's dairy farm, situated on 350 acres of Hunter Valley River Flats.

Walking in lush pasture that runs right to the banks of the Hunter River, Gavin recalls the events of the flood that set them on the path to better preparedness. "We had over 200 head of our own cattle, plus numerous other herds from the flats that needed to be evacuated," he says.

With night falling and waters rising and not knowing who to call or where to go for assistance, the Wake's and other landholders did what they could to protect their livestock, shutting the busy New England Highway and walking the animals out.

"I flagged down a motorist and told him what we were planning to do, and he put his hazards on and sat in behind us, and we closed the highway as best we could and started walking the cows out. I'm thankful no one was hurt but it was a stressful and scary experience," says Gavin.

While they managed to get themselves and their stock to higher ground there was no stopping the flood water which filled the holding yards and the pit at the dairy, was knee deep around the vat, and inundated the compressor.

"We lost kilometres of fencing, had 200 bales of silage wash away, and lost a shed full of hay, as well as having all our pastures covered in mud that wasn't fit for the cows to eat for a long time afterwards. It was a pretty tough time, everywhere you looked there was a job", recalls Gavin.

Community Takes Action

After things settled down Gavin and others impacted by the flood took time to reflect on their response to the situation.

"As a community we knew we could have been a whole lot better prepared, so a few landowners got together and decided that we should do something about it."

Fed from catchments of the Wollombi Brook, the Goulburn River and the Hunter River, the Whittingham flood plain can receive flood waters from any one or a combination of those catchments at any time. This means that residents downstream on the flood plain can know ahead of time when flood waters are approaching based on river heights up stream.

The problem in 2007 however was that

they didn't know where to look for the critical information, or where to evacuate their stock when threatened by rising waters.

And while they knew they needed a plan for future flood events, they didn't know where to start.

"The first step was reaching out to the State Emergency Services (SES) and the Local Land Services (LLS) for advice on how to come up with a plan and be able to implement it," says Gavin.

Led by farmers and residents, with guidance from the SES Incident Controller and LLS, the Whittingham community worked together to assess their risk and needs.

Well attended community meetings brought people to the table and made everyone aware of the complexities of the area regarding flooding and evacuation.

Over several years the community and agency leaders continued to meet, discuss, and gather information on river heights, evacuation routes, places of refuge, and contact information for everyone involved.

"It took a lot of time and a lot of meetings to work things out but eventually we came up with a very solid plan for evacuating livestock when threatened by flood," says Gavin.

The Plan

At around twenty pages long and containing graphs, tables, illustrations and maps, the plan is an impressive testimony to the efforts of all involved. Its purpose, as stated in the opening pages, is to ensure residents are informed of impending flood events and that livestock are evacuated to designated safe havens through a coordinated process.

"One of the most important things that came out of the plan was we set some trigger points which gives us a clear list of actions to be implemented", says Gavin.

Trigger points for the Whittingham Community Flood Plan are predicted and actual water level heights of the Hunter River upstream from the flood plain - issued by the Bureau of Meteorology and passed on to the SES.

When heights reach certain levels, the SES notifies Gavin, the plan's Coordinator,



Gavin and Sarah discussing the Whittington Community Flood Plan with Singleton SES Unit Commander, Tim Merrick

who passes the information onto Sarah who springs into action and lets everyone know the situation via a 'phone tree'.

"I'll send out an email, or text, or call people if that's required. But the important thing is that everyone gets timely and accurate information about the unfolding situation and can make their decisions based on that", says Sarah.

When members of the community receive information about water level 'trigger points' in the Hunter River, they can reference that information against a clear set of actions to take, which are documented in the plan.

There are four trigger points in all, beginning with a 10-metre predicted river height, when, 'minor flooding and inundation of lower river side paddocks' can be expected. At this point livestock owners are recommended to 'move stock from flood prone paddocks while access by truck is still possible'. At the final trigger point, a 12-metre predicted river height whereupon an evacuation order is issued by the SES, it will be no longer possible to move animals.

Critically, the plan does not only let residents know when it's time to move stock, but also provides information on where to take them, and has contact numbers for all the key people at each location.

"It's important to have a plan because after the 2007 event, we found that our actions were reactive, it was a panic, it was rushed," says Sarah.

By not being prepared and having a plan, the Wake's concede they and other members of the community gave away hours of time in the lead up to the flooding that could have been used to move animals and equipment and prepare for inundation.

"We didn't know where to access information. We had no relationship with

the SES and were relying on friends and neighbours upriver to give us warning. Now, as soon as we get a notification, we don't have to go looking for what to do, it's all there and everyone's got a copy of it," says Gavin.

Implementation

After finalising its details, the Whittingham Community Flood Plan went unused for several years, until 2021 when it was put into action six times in 18 months.

The biggest flood during that time was in July 2022 when the Dunolly Bridge gauge on the Hunter River measured almost 2 metres above the plan's final trigger point, and all livestock on the Whittingham flood plain had to be evacuated.

"At those heights our whole farm, including our dairy, is underwater", says Gavin.

While implementing the plan for the first time was daunting, Gavin recognises the situation would have been more stressful without it, and the extreme wet weather of 2021 and 2022 meant the Whittingham community gained valuable experience putting the plan into action and continued to adjust their strategies based on feedback from residents, the SES, and LLS.

"It's just peace of mind knowing that you're making the right decisions because you've thought about them ahead of time and don't have to try and make decisions when there's a lot going on and things are happening fast. It's just about second nature to us now", says Gavin.

Maintaining the Plan

The plan means the community are prepared for the safe and orderly evacuation of livestock during times of flood, and Gavin is proud to say not a single animal was lost during the 2021-2022 period of extreme wet weather and multiple flood events.

"Having the plan means our animals are safe, fed and well cared for if they are evacuated which means they come home

to farm in better condition which makes a massive difference to our recovery and reduces the impact on the business,” he says.

With people regularly moving in and out of the area, Sarah has the task of keeping contact details up to date, ensuring local knowledge isn't lost when residents move away, and new community members are aware of the plan and how it works without feeling overwhelmed.

“It’s really important to have someone that is passionate about it and has the ability to drive it and maintain it. At the end of the day, if you don’t maintain it, it’s just a piece of paper in the drawer,” says Gavin.

And while maintaining the plan is a big job, Sarah has also seen its impact beyond emergency events.

“It’s brought the community closer together because we have talked more and there’s a level of trust involved in being part of something like this where we are relying on each other,” she says.

Advice to other communities

As the cows come into the dairy for the afternoon’s milking Gavin greets Singleton SES Unit Commander, Tim Merrick, and LLS District Veterinarian, Kristi Arnot, at the entrance to the farm. The pair have come to chat about the Whittingham Community Flood Plan and discuss any advice they can offer other flood prone communities thinking of creating something similar.

The first step, advises Tim, is for residents to get together and discuss their needs and risks associated with flooding, and to then contact their local SES commander and seek their input on how to work with the SES to create and implement a plan.

In the planning phases, advice and support on animal welfare, biosecurity, emergency animal disease prevention can be given by LLS, and in an emergency they can assist at evacuation centres ensuring animals are secure, healthy, attend to any injuries, and provide fodder if necessary.

If people or animals are unable to leave their properties, the LLS can also provide



Gavin greets Singleton SES Unit Commander, Tim Merrick, and LLS District Veterinarian, Kristi Arnot, at his property following recent flooding.

advice on the phone until they are able to enter properties to assist.

The most important aspect however is to ensure any plan is community driven.

“If a flood plan has direct community involvement and they’re the ones that design it and they’re the ones that implement it and they have the contacts, that’s going to be the most successful plan you could have”, says Kristi.

“My advice to other communities who are thinking about creating a flood plan is don’t leave it until it’s too late. Act now and prepare yourself for a coordinated approach to flooding”, says Tim.

For Gavin, the message is simple.

“If you live in a flood prone area and you’re thinking about developing a flood plan, just do it. Take the time and do it.”



Gavin and Sarah Wake at home on their dairy farm Whittingham, NSW

Acknowledgments

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