## WATER’s EDGE: TRANSCRIPT

**Episode 8: The significance of the Barmah Choke**

Speaker: Water's Edge podcast acknowledges the traditional owners of the country throughout the Murray-Darling basin and Australia, and recognises the continuing connections to lands, waters and community. We pay our respects to aboriginal and Torres Straits Islander cultures, and to the elders past, present and emerging.

Annabelle Hudson: Coming up, the inspector-General pays a visit to the Barmah Choke, one of the most significant sections of the River Murray.

Tory Grant: So I always believe it's better to see and hear what's going on in the ground, than just reading about it.

AH: We learn why the choke is such a point of interest.

Edwina Carter: It's quite a narrow, shallow bit of the river that causes some difficulty in delivering water through.

AH: And how water trade works through this section of the River Murray.

EC: And because of the supply and demand pattern above the choke, that water tends to be cheaper than water below the choke.

AH: I'm your host, Annabelle Hudson.

Speaker: This is Water's Edge and welcome to the conversation.

AH: Recently, the Inspector-General of water compliance Troy Grant paid a visit to the Barmah Choke. The choke is located on the border of Victoria and New South Wales just North of Echuca, and has the lowest flow in any stretch of the River Murray. The Inspector-General was there meeting with community members to learn more about the choke and its significance in the Murray-Darling.

TG: I've come down to the Barmah-Millewa state forest today, Australia's largest river redgum forest. A beautiful part of our nation and home of the Barmah Choke. Probably the most infamous and spoken about part of the Murray-Darling system, but the Barmah Choke still remains an issue when it comes to moving that water down the River Murray. It has an impact in relation to water trading between Victoria and New South Wales. It's having issues for our traditional owners who have join me on site to allow me to get an understanding of what they're looking to do to help come up with solutions to respect the connection to country, issues, the deep connection they have to this region, but the problem with the Barmah Choke is compounding. We've had one issue where the water is not being sent downstream in the supply required because of what's been identified recently as a massive sand sludge. And that's impacting the depth of the river through a highly regulated system and getting that water downstream when required.

The reason for the visit today is to get on ground here at the Barmah Choke in the beautiful Barmah-Millewa state forest because you can read all you want to about the constraints and the challenges and potential solutions to the issues here but until you see it first hand, and hear on the ground from local stakeholder and those people who are invested here about what the solutions will offer, what the solutions could be outside of what has already been adopted. And some of the issues are that have arisen because of the programs that have been put in place. So I always believe it's better to see and hear what's going on in the ground than just reading about it.

AH: In addition to hearing from local stakeholders, the Inspector-General saw how narrow and shallow the choke actually is. And that's a big problem because it means during high-demand periods, water is difficult to get through this section of the River Murray.

TG: This part of the Murray-Darling system is part of a highly regulated system, the River Murray that services communities demands for consumptive water that has massive environmental impacts and relationships, and ever growing traditional owner demands and traditional owner aspects that need to be properly considered in decision making around this area. We have growing industry downstream of the Barmah Choke that needs supply for the permanent plantings that are occurring there. As well as the environmental needs to get wetlands south of the Barmah Choke properly serviced through environmental flows that are just not possible because of the constraints that are being faced here.

AH: I spoke to the Director of water trade regulation, Edwina Carter to help us understand the significance of water trade through the choke.

MN: This is Water's Edge and welcome to the conversation.

AH: The Inspector-General was recently at the Barmah Choke and his visit comes ahead of a fairly significant time of the year at the choke. Trade through the Barmah Choke opens on the 1st of July and to explain a bit more about the significance of that is Director of water trade regulation, Edwina Cater. Welcome back to Water's Edge Edwina.

EC: Hi Annabelle, how you going?

AH: I'm fantastic. I'm very excited to talk to you about water trade today. That's your area of expertise. And I think firstly for us to really understand how trade in the choke works, we should explain some of the physical characteristics of the choke. The Inspector-General we heard mentioned the sand sludge, or sand slug being an issue so what does that mean and what are some of the other characteristics that are unique to the choke?

EC: It's quite a narrow, shallow bit of the river that causes some difficulty in delivering water through.

AH: So when you say it is narrow, how narrow are we talking? Like how much water would be getting through there on an average day?

EC: Yeah, so at the moment, the MDBA estimates that the amount of water that can be delivered through the choke at the moment is about 7,000 megalitres per day.

AH: Okay, and why is that an issue in terms of trade? Like, because if there's not much water going through, does that mean that water can't be traded?

EC: So the issue is getting water through the choke for people who are on the downstream side of the choke. So a lot of the development that's taken place in the Murray is downstream of the choke. A lot of almond plantations, horticulture, things like that are actually below the choke, so when you've got a narrow, shallow bit of river that makes delivery difficult, that has an impact on how much water you can... it's... it's a choke point.

AH: Exactly, yup.

EC: Yup.

AH: So if it's only getting 7,000 megs a day, there's no way you could possibly trade more than 7,000 megs from above the choke.

EC: Yup, so... so the trading rule works at the moment that you can't have any net trade across the choke.

AH: So what does net trade mean?

EC: So it means you need to trade capacity from downstream of the choke to upstream of the choke, and that takes some of the pressure off delivery through the choke which then mean you can trade upstream of the choke to downstream of the choke.

AH: And so what's the significance of the 1st of July? What happens on the 1st of July?

EC: So on the 1st of July, the Murray-Darling Basin Authority resets the Barmah Choke balance, so the Murray-Darling Basin Authority keeps the choke account throughout the year, and they're responsible for being the single-source of truth for the choke balance, the choke account balance for trade across the choke.

AH: And does the balance change each year?

EC: The balance changes day-to-day, minute-to-minute, so whenever you have someone trading below the choke to above the choke, that creates capacity to trade.

AH: Right.

EC: And so you can go onto the MDBA's live, they've got a live data feed for choke data, and you can see how much is live and available to trade at any time. The reality is most of the time it sits at zero because...

AH: people snap it up so quickly.

EC: People snap up the choke capacity so quickly. Yes.

AH: Is that because, I guess it's a supply and demand thing, water from below the choke is more expensive than water from above the choke?

EC: Yeah, so what happens when you've got markets that aren't connected. So when a market's connected, you have the same price in that market. When you have markets that become disconnected through restrictions such as the choke, you get different prices happening between those 2 markets. And because of the supply and demand pattern above the choke, that water tends to be cheaper than water below the choke.

AH: And then on the 1st of July, the balance is reset?

EC: Yeah, so there's a running balance and that gets maintained by the MBDA through the year and what happens is the 1st of July, any balance or credit that's sitting there on the 30th of June gets reset to zero and then the MBDA apply what they call the snowy savings, on the 1st of July, and that is opening credit for the Barmah Choke so and the snowy savings are calculated by the MBDA annually and changed annually.

AH: So do we know what it is for this year yet?

EC: So the MDBA have announced that it's roughly 60.6 gigalitres of choke opening balance that will be available.

AH: And how quickly is that likely is that to be sold?

EC: So last year, the opening balance which I think was about 40 gigalitres, was gone before about 2 o'clock in the afternoon on the 1st of July.

AH: So for context, trade opens at midnight?

EC: So the MDBA resets the balance. They take any credits away and then apply the snowy saving and depending on trade processes, trade can open at midnight.

AH: Okay. So that's what, 14 hours or something.

EC: Yeah.

AH: Didn't take long, and this year it's a fairly unique situation because it's opening on a Saturday, I understand.

EC: So, the 1st of July falls on a Saturday so the MDBA will be resetting the... in accordance with what's put in the Murray-Darling Basin Agreement and the protocols around how they do the accounts for the Barmah Choke. The MDBA will reset... delete any credits at midnight on the 1st of July and then apply the snowy savings of 60.6 gigalitres. And then states open trade on their own timeframes.

AH: Okay, and, so when we're talking about states, we talking about Victoria and New South Wales in this instance,

EC: Yes.

AH: So when it comes to the 1st of July and the balance is set at 60.6 gigalitres, what's the process between the different states in terms of being able to buy water?

EC: So, Victoria and New South Wales are responsible for their own trade processing. And that's why the MDBA is involved because they keep the account between the 2 states cause it's a true shared restriction. So what we have is Victoria have a rather automated system across the board for all their water trading activity whereas New South Wales have a more manual approach where someone actually needs to enter the data into a system and do things like that. So Victorians, Victoria's approach and registers are more setup to work automatically, whereas New South Wales approach and systems are setup to be more manual in nature.

AH: Well this has been a really interesting chat and I've learnt quite a lot about trade through the choke. Thank you very much Edwina Cater for joining us for this episode of Water's Edge.

EC: Thank you, Annabelle.

Female narrator: Water's Edge is produced by the Inspector-General of Water Compliance, Australian Government Canberra. For more information, visit, www.igwc.gov.au