Industry (Mines, Zoo and Fletcher International abattoirs) all identified that they will need an allocation in the area 70-80% to continue to operate next water year.

70-80% for HS, and tradability within categories will allow water to be redistributed in this market.

Issue raised by the Cobar mines is that they lose 50% of their allocation through losses down the Albert Priest Channel and Nyngan Weir, so any reduction on their allocation has a bigger hit.

Tritton – They also have delivery issues, 50% of the time with 100% of order ok, 50% of order would mean the mine shuts. Capital is an issue for water supply projects.

Zoo – 70 – 80% is feasible, have a 5ML reservoir on site, summer requires a daily supply. They have all their consumption and use data which they can provide to WNSW if required.

Town water allocations may need to be considered on an individual basis dependent upon alternative source options (Dubbo has access to groundwater where Nyngan and Cobar don’t. Nyngan and Cobar lose up to 50% of their water in transmission losses down the Albert Priest channel and Nyngan Weir pool.

70-80% for LWU, but unevenly distributed, will either allow trades between towns or specific AWDs.

Restriction to 70-80% of allocation does not mean same to all towns as impact of the restriction will be different to different towns.

During millennium drought in 2007-08 Cobar town’s water allocation was 15% higher than other towns in the Macquarie River.

DPI Trangie Research Station holds specific purpose HS licence and with 30% allocation they can only manage agronomy research, however for managing stock they need to invest in buying water or feed.

30-40% for D&S will be sufficient, but very unevenly distributed, and AWD should be higher/equivalent to HS, therefore recommend 70-80% with tradability within D&S.

No discussions on the expected allocations in 2019-20 for Cudgegong River, but LWU, S&D and HS allocations are expected to be 80% or higher. Starting allocations in Cudgegong River on 1 July 2007 during millennium drought for LWU, S&D and HS had been 80%.
Recommendation by ROSCCo

- Specific purpose HS licence allocation in Macquarie River >30%.
- LWU allocations in Macquarie River 80% and allow trading within licence category
- Regulated High Security in Macquarie River 70 – 80% and allow trading within licence category
- Stock and Domestic allocations in Macquarie 70 -80% and allow trading within licence category

What timeframe is manageable between flows in the regulated and unregulated sections including the creeks?

Discussion

- OEH advised that environmental focus will be on providing water to critical water holes for fish management. OEH is not advising water should be prioritised for the marshes.
- Unregulated streams indicate that a flow during winter should enable them to get through the summer for S&D requirements.
- Regulated stream downstream of Warren will need more regular flows – after 6-8 weeks users start to feel the pain
- The regulated streams also act as boundary fence and ceasing flows will need to be communicated early so downstream users can adjust.
- Irrigators advised to stop the flows downstream of Warren from June and was supported by Marsh landholders.
- Suggested the option to stop Main river at Warren in Winter but keep deliveries into Duck and Crooked till spring/summer. The storages in the creeks can only support 6-8 weeks of S&D requirements.
- There are holes in creeks which can hold water for fish refuge, but not in great condition. Water in ponds in Duck ck lasted long previously from summer -summer however this is not the case now due to low flows and silt.
- Mainly raised the issue about improving Infrastructure. Creeks have silted up over the many years so in the reg system there are very few holes which hold water. There needs to be the ability to excavate the silt out to improve pools. Water will not hold in Duck creek for very long at all.
- May need to look at desilting holes in the downstream sections of the creek to create larger water holes for S&D supplies and also fish habitat.
- NSW Fisheries commented that to dig holes there is a process and can be possible. Deep holes in river d/s of Warren (1.5 -3m) can provide fish refuge. Requested landholders that if they see any weir pool drying and potential fish kills to contact NSW Fisheries, rather than relocate and stress more fish.
- OEH commented that not enough water to do much in Marshes, interested in critical fish refuge particularly below Warren and effluent cks. EFRG decided not to call for translucent environmental water even if it is triggered.

Recommendation by ROSCCo

- Consider restricting flows downstream of Warren now with the view to restoring flows with the tributary inflows.
**Priorities for downstream tributary flows**

**Discussion**

**Priority order as presented at ROSCCo**
1. Tributary flows are managed adaptively.
2. Deliver current restricted regulated demands by reducing dam releases.
3. Restore flows in regulated sections that are stopped to allow access to BLR.
4. Divert flows to ‘regulated’ S&D replenishments, if not completed already.
5. Divert flows to ‘unregulated’ S&D replenishments – by matching available volume and duration with needs.
6. Deliver supplementary events when triggered as per WSP rules after allowing for higher priority requirements.

**Recommendation by ROSCCo**

- priorities for downstream tributary flows are endorsed as presented above

**Temporary Works to Manage Storage & System Losses**

**Discussion**

- Investigative works are underway for temporary works at Warren Weir and at Duck Creek and Crooked Creek regulators. Under current conditions regulated river flows beyond Warren and in Duck and Crooked creeks will cease from Spring to conserve water for town water supply and high security users.
- Investigative works are under way to implement pumping of the dead storage from Burrendong Dam to maintain town water supplies.
- Works are being planned to improve the channel capacity of the improved sections of the Duck creek to deliver freshes from the tributaries at a higher rate to restore flows.

**Recommendation by ROSCCo**

- Temporary works are supported.
What Trading rules should be applied for efficient operations?

Discussion

- About net 9,000 ML of allocation traded down from Cudgegong to Macquarie in this water year. On average about 6,000 ML is traded down every year. Up to now the traded allocations have been delivered in Macquarie River without resulting additional BWT from Cudgegong River.
- During millennium drought trading between Cudgegong and Macquarie Rivers remained suspended until improvements to the dam levels.
- Adaptation of following trading strategies were discussed for efficient water management operations,
  - Suspend trading between Cudgegong and Macquarie Rivers
  - In Macquarie River, permit trades that moves allocations to upstream only
  - In Macquarie River, permit trades to move downstream only with discounting for additional transmission losses as had been done in the Lachlan during millennium drought
  - Trades from Cudgegong are allowed but traded allocations are delivered only during tributary events and not from Burrendong Dam
  - Permit trading from Cudgegong River to Macquarie River on condition that the traded allocations are delivered if required with additional BWT which will result in Windamere Dam being drawn below 70 GL
  - Allow trades between licences within same licence categories, ie LWU and S&D
- All customers agreed that trade market should be left to operate (while WSP is not suspended) with trading within licence categories allowed to enable business to work together.

Recommendation by ROSCCo

- Permit trade market to operate as normal with trading within licence categories allowed to enable business to work together. If required, additional BWT is conducted to deliver traded allocations from Cudgegong River which will result in Windamere Dam being drawn below 70 GL.

Long-term options

Discussion

- Need to look at long-term drought management options to better manage the next drought. Options including piped supplies to Nyngan and Cobar towns and the mines, piped supplies to Wellington and Dubbo towns.
- Need to have this forum continue after the drought breaks. The valleys use of water is changing, permanent plantings Mines etc. Need to prepare best for next drought, no band-aid work, need permanent solutions

Recommendation by ROSCCo

- Need to have ongoing ROSCCo process for long term options
Other initiatives to assist stakeholders to manage drought

Discussion

- WaterNSW to seek system wide approval to permit individual landholders to secure essential S&D water supplies in river beds in sections where ceased to flow conditions are proposed for managing the drought.

Recommendation by ROSCCo

Keep Informed

Discussion

- Frequently asked questions (FAQ) to be developed and published on WaterNSW website and updated as required.
- WaterNSW’s EWN system is setup with stakeholder contacts for various sections of the system to target communications appropriately.
- The regulated streams also act as boundary fence and ceasing flows will need to be communicated early so downstream users can adjust.
- We need to have effective management of communication to ensure social media doesn’t get false news stories.

Recommendation by ROSCCo