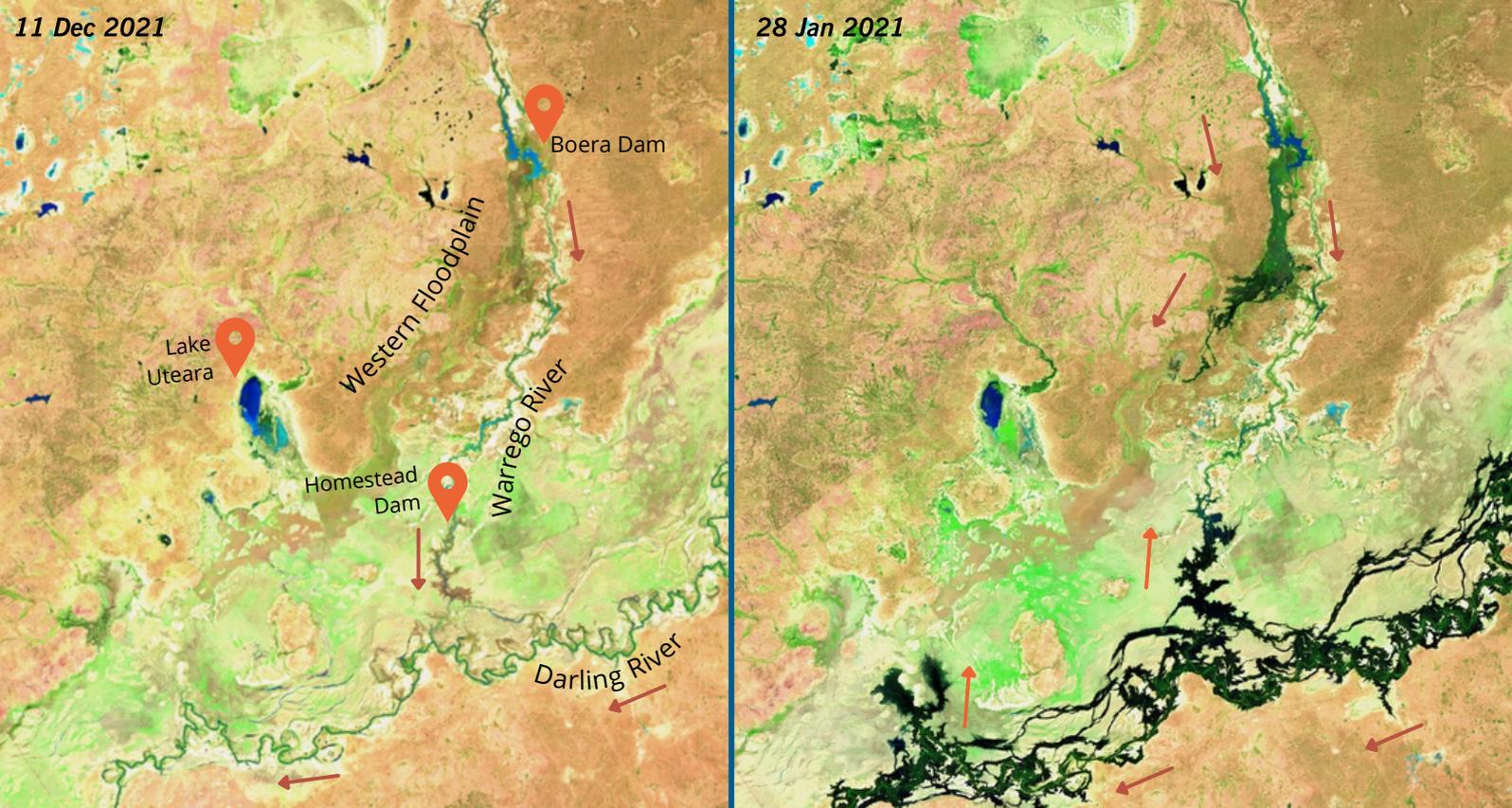


11 Dec 2021

28 Jan 2021



# Toorale Floods

Figure 1: False colour Sentinel-2 images of the Junction of the Warrego and Darling Rivers. Arrows on 11 Dec image shows regular flow direction, 28 Jan images shows flooding induced flow direction and flood extent.

The end of 2021 saw higher than average rainfall across the Northern Murray-Darling Basin which produced the largest flows through the Darling River since 2012, with a peak of 73,000 ML/day at the Bourke gauge. For comparison, the 2012 flood reached a peak of 179,000 ML/day, and the largest flood on record was 501,412 ML/d in 1976.

Usually, the Warrego River flows into the Darling just south of Bourke. However, during this event water levels in the Darling got so high that water flowed over the banks of the Darling to the floodplains and riparian areas and also backed up into the Warrego channel all the way to Homestead Dam (Figure 1).

The imagery also shows flow from the upper Warrego catchment rainfall progressing downstream into the northern reaches of Toorale National Park and onto the Western Floodplain.

As flooding like this doesn't happen very often, we're keen to head into the field as soon as we can to sample water quality and food webs, monitoring what

impact this phenomenon has had on the environment of the Warrego River and Western Floodplain.

With the arrival of water we are expecting the aquatic ecosystems of Toorale to boom. We are hoping to see healthy vegetation and waterbirds flocking to the replenished wetlands. We should see frogs thriving in their newly wetted floodplain and more fish moving through the connected and flowing Warrego and Darling rivers.

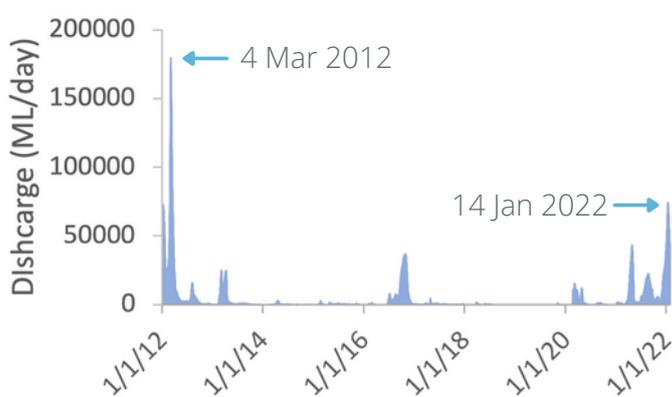


Figure 2: Hydrograph showing average discharge of the Darling River at Bourke gauge (425003)

Managing water for the environment is a collective and collaborative effort, working in partnership with communities, private landholders, scientists and government agencies - these contributions are gratefully acknowledged. We acknowledge the Traditional Owners of the land on which we live, work and play. We also pay our respects to Elders past, present and emerging.

