

Predicting and mitigating fire impacts on erosion and water quality following the Australian 2019/2020 wildfires: the case of Sydney's main water supply catchment

- The 2019/20 'Black Summer' wildfires burned the largest forest area in Australia's recorded history
- Extensive **post-fire ash and soil erosion threatened water quality** in Lake Burragorang, Australia's largest urban supply reservoir
- Collaborative work between scientists and water managers supported continuity of safe water supply to Greater Sydney
- Work included assessments of fire severity, ash quantities and their pollutant content and the application and further development of the WEPPcloud-WATAR-AU model (<u>https://wepp.cloud</u>)
- This modelling tool estimates probabilities for sediment, ash and contaminant transport, and aided the identification of risk hotspots for implementing post-fire erosion mitigation measures
- For specifics see <u>https://setac.onlinelibrary.wiley.com/doi/10.1002/ieam.4406</u>





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Sediment delivery (kg/ha) Annual average 0 - 350 200 - 1350 1350 - 0250

WaterNSW

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