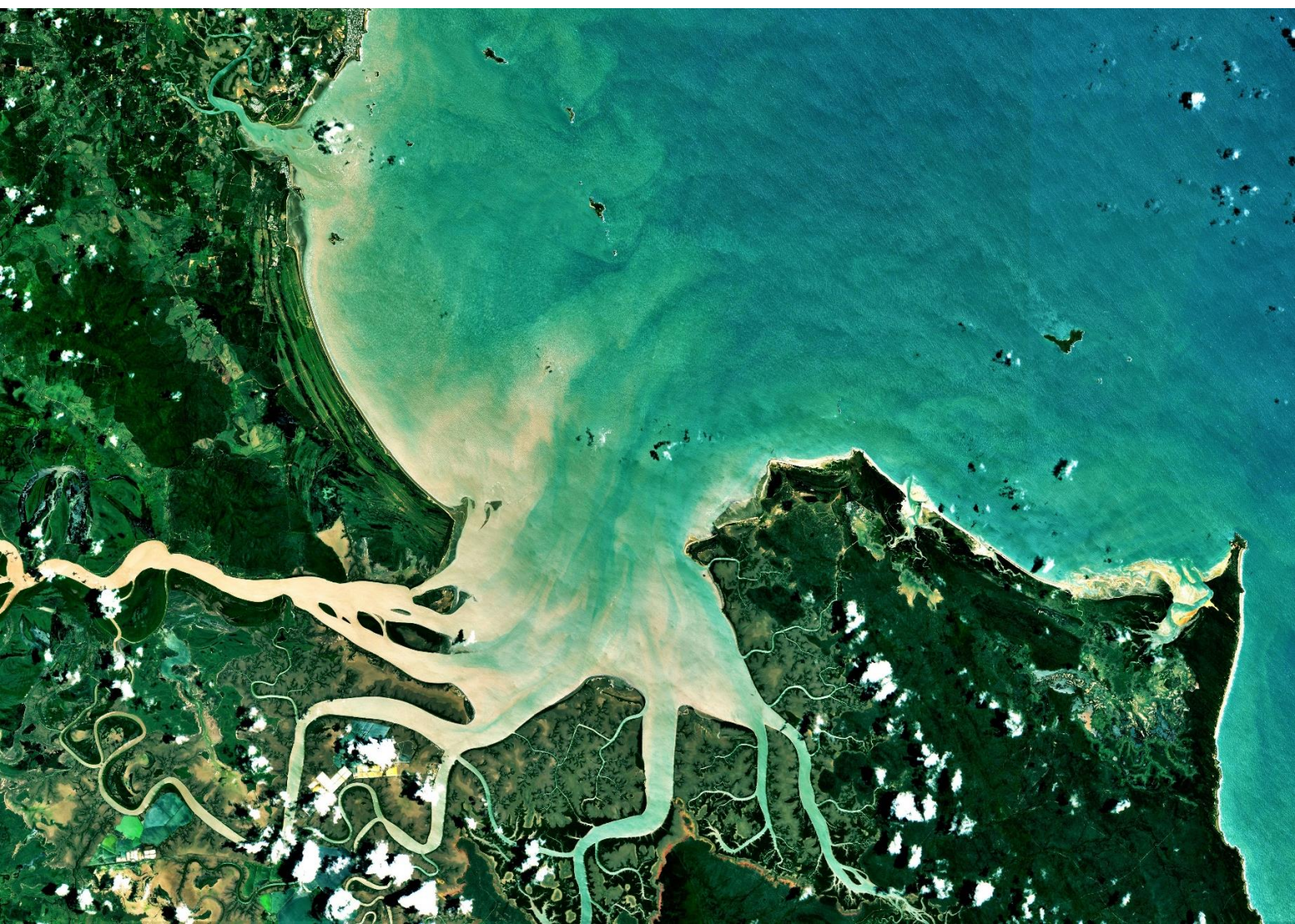
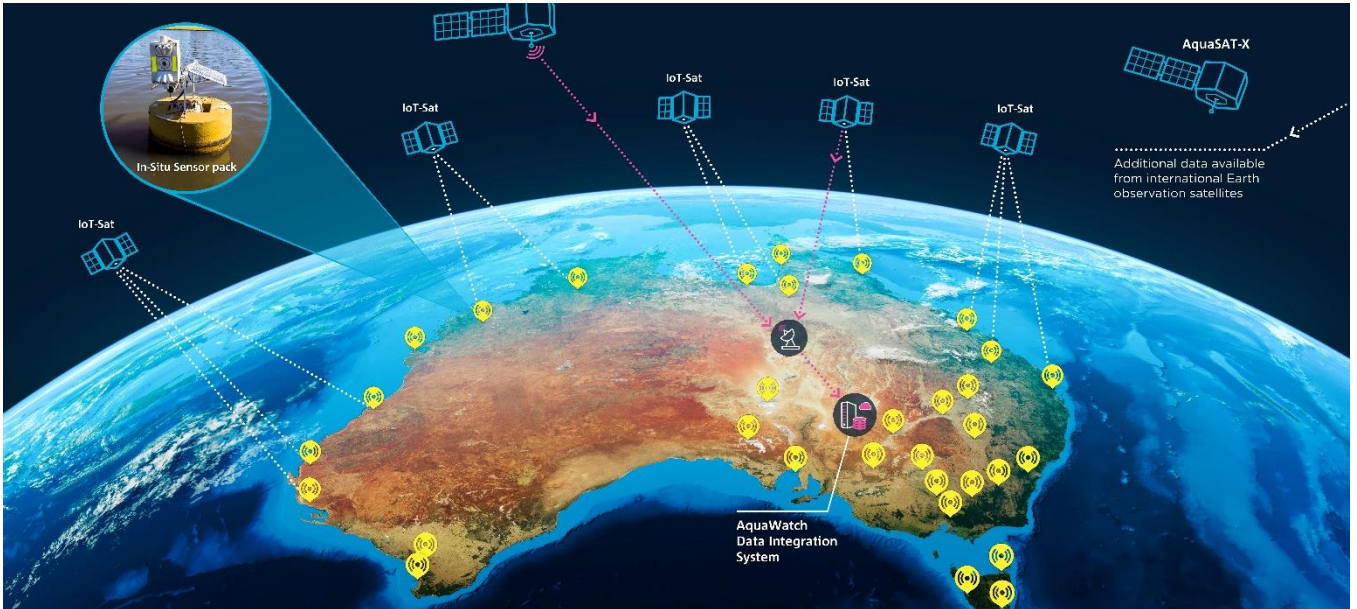


AquaWatch Mission: a weather service for water quality

Goal: Establish an integrated ground-to-space national water quality monitoring system, to help safeguard our freshwater and coastal resources in Australia and around the world





AquaWatch Mission concept

Opportunity

The health and quality of our inland and coastal waterways are under threat from increasing human activity including climate change, urbanisation, population growth, land use changes, deforestation, irrigation and farming needs and contamination.

Whilst water quality sensors provide accurate data, they are restricted to the specific area where they are installed.

By combining satellite sensors and in-situ water quality sensors with data analysis and artificial intelligence, we will create an integrated system that delivers more timely and accurate water quality monitoring and forecasting across Australia and the world.

Impacts

Support measurement and tracking against indicators of the UN's Sustainable Development Goal 6 (clean water and sanitation) and 14 (life below water).

Improve management of freshwater for drinking and sanitation, by providing widespread and accurate water quality information.

Support climate resilience with monitoring and early warning for inland and coastal management of water resources and natural environments. Provide early warning to reduce economic impacts to fishing and tourism of harmful algae and contaminants.

As Australia's national science agency and innovation catalyst, CSIRO is solving the greatest challenges through innovative science and technology.

CSIRO. Unlocking a better future for everyone.

Contact us | 1300 363 400 | csiro.au/contact | csiro.au

Focus

- Infrastructure and data services
- Earth observation satellites
- Network of ground-based water quality sensors
- Predictive data modelling for real-time decisions
- Internet of Things (IoT)
- Data integration systems
- End user platforms

Collaboration

Please connect with us if you would like to know more about AquaWatch Australia.

We are interested in connecting with end users needing to improve their water quality information, and potential partners who can support the establishment of AquaWatch in areas including:

- Infrastructure and data services
- Earth observation satellite development
- High-performance data processing
- Implementing and operating sensor networks
- Predictive hydrologic modelling for real-time water quality applications.

For further information

CSIRO Space and Astronomy
 Dr Alex Held, Mission Lead AquaWatch Australia
 1300 363 400
alex.held@csiro.au
csiro.au/en/about/challenges-missions/AquaWatch