

EVENT SNAPSHOT

EVENT DETAILS

Water Safety Planning – Pacific Case Studies
27 April 2022

Speakers

Clara Laydon
Water Safety Planning Specialist
Hunter H2O

Carmine Piantedosi
CEO
Nauru Utilities Corporation (NUC)

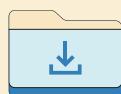
Emma Sinclair
Environmental Scientist
Samoa Independent Water Schemes Association (IWSA)

James Young
CEO
Kiribati Public Utilities Board (PUB)

Participating countries

- Federated States of Micronesia
- Fiji
- Kiribati
- Marshall Islands
- Nauru
- Tonga
- Tuvalu
- Papua New Guinea
- Samoa
- Solomon Islands
- Vanuatu

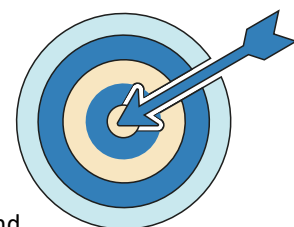
Event recording and resources are available [here](#).



Thousands of people in the Pacific still lack access to safely managed household drinking water leaving them vulnerable to disease and shortened life expectancy. Water Safety Plans (WSP) are the critical building blocks allowing water utilities to create, implement and maintain resilient water supply systems via data collection, adaptation to specific risks, and engagement with key stakeholders from water source to tap.

Webinar Overview

The Asian Development Bank (ADB) is actively supporting the introduction of WSP as a key methodology to improve standards of water quality in the Pacific- a region beset by variable water sources, water supply standards, and quality. In April 2022, ADB in association with the Pacific Water and Wastewater Association (PWAA), hosted an update to water safety planning and implementation in the region, highlighting case studies from Nauru, Samoa, and Kiribati. The event was attended by approximately 65 participants from 11 countries across the Pacific region.



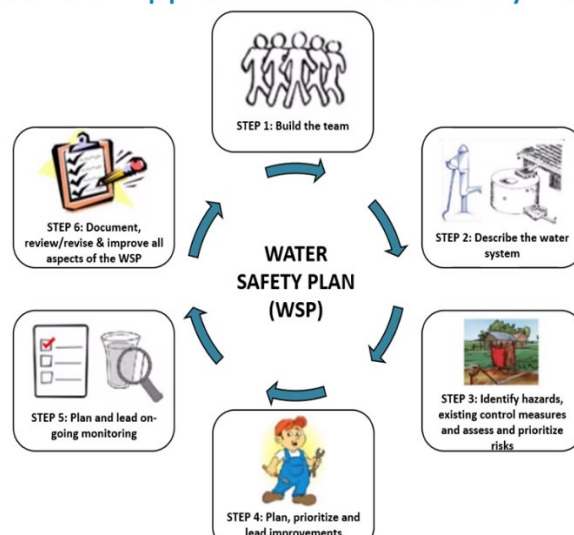
The webinar responded to these key questions:

- What are the key steps to developing and implementing WSP?
- What are the common barriers to WSP implementation?
- How can WSP be embedded into the daily operation of water utilities?
- How is risk measured and applied to WSP?
- What are the implications of climate change on water supply as part of WSP?
- How can communities and local populations be brought on the WSP journey?



The provision of safe, reliable, quality water is core business for the water sector. Yet, the approach to water safety planning is fragmented and often lacks practical implementation. In the Pacific, the variable quality of water sources, collection, storage, treatment, and distribution systems make water safety planning more complex and reliant on a methodology that can adapt to changing and differing requirements. Taking a step-by-step approach to planning - water safety data is mapped across the entire water system including the identification of hazards to water safety. Working with key stakeholders, the WSP implementation is planned and prioritized across the network in association with monitoring and implementation programs relevant to day-to-day water management. Spreadsheet templates provide clear and simple formatting to provide for future events and the changing environment.

General Approach to Water Safety Plan



Case Studies – risks and challenges

Nauru's main water supply is sourced from desalination and treated water is delivered to over 2000 customers by tanker direct to household tanks. The fleet of 12 tankers operated by Nauru Utilities Corporation (NUC) delivers approximately 300ML each year to customers and rainfall is the only other freshwater supply source to augment treated seawater. Contamination of household water often occurs via environmental factors and lack of adequate tank maintenance. **In Samoa, the Independent Water Schemes Association (IWSA)** was established in 2006 with support from international donor funding. It administers 26 schemes in 44 village communities, representing around 11% of the

country's population. 97% of the schemes have no centralized treatment capabilities and IWSA lacks the resources and finances to prioritize the many differing local water supply requirements and to adequately train communities to monitor water quality and maintain water tanks. **In Kiribati, there is an ongoing threat of cholera and water-borne diseases** due to limited water supply via the country's two freshwater lenses and loss of water in the system (approximately 40% of collected water). Community habits, including open defecation and pollution of the limited water sources, pose major threats to water quality, while population growth continues to strain the available freshwater sources.

Learning Snapshots

- *Climate change will continue to significantly impact fragile water sources in Pacific Island nations.* As the climate changes, adequate water supplies and water quality will become critical measures of public health and life expectancy.
- *If it can be measured – it exists.* Collecting good data across the water system is the first step in providing a baseline against which water safety improvements, monitoring, and implementation can be measured.
- *Risk identification leads to mitigation.* WSP includes a clear focus on identifying risks to the water system, including a ranking system to prioritize risks and mitigation options.
- *WSP implementation depends on multiple stakeholders.* The water system from source to tap is best managed with the engagement and inclusion of various stakeholders and a clear understanding of roles and responsibilities.

Upcoming Events



To register your interest in attending upcoming events please contact: lfernando@adb.org. Please take our survey by April 29, so we can respond to your preferred webinar topics: [ADB and PWWA Pacific WASH Webinars](#)
Past ADB Pacific WASH webinars can be accessed here: [Pacific WASH Webinars](#)

ADB continues to support government and water service providers in the region to build resilience, capacity and knowledge to manage threats in our changing world.