

PWWA NEWSLETTER

2nd Edition, 01st April – 30th June 2022



From the Head of Secretariat

Talofa lava to all our members!

Last quarter we reported that only 4 of our member countries remained covid-free. At the end of this quarter, only Tokelau remains covid-free. Such has been the impact of this pandemic reaching all corners of the world. What is heartening to see is the rapid increase in countries taking action in pushing for the vaccinations roll-out as protection not only for the population dying from the virus, but protection of the vulnerable people from contracting severe symptoms of the virus (see update of Covid-19 in our region in the last article).

Borders are easing up and opening for most countries with plans for wider opening without restrictions from July onwards for our member countries. The implementation of higher vaccination roll-outs has therefore been crucial in countries opening its borders, and to get economies back on track following two years of closure.

We are pleased that with borders opening we can **confirm a face-to-face Annual Conference** this year! A special thank you to Water Authority of Fiji for coming to the rescue, taking over from Solomon Islands as host for this year's conference. We hope you will all participate and we are currently working to ensure we have a successful conference. The Water Ministers will also have their forum and we hope this will canvass the profile much needed for this sector by the participation of our political leaders.

The **Young Water Professionals** program which will begin online around mid-August and will culminate at the annual conference where a few sessions and presentations are planned for our YWPs; we are almost done with finalising the program.

The 2020 Benchmarking Survey Report is now available following multiple delays in submissions of toolkits; we managed to get a 60% participation rate. The toolkits and timetable for the 2021 Benchmarking Survey has now been sent to all of you. We trust that this year we will get all of you to participate in this very valuable survey. We plan to have the data analysed and report done in October and presented to Ministers and participants at the annual conference in November.

Other major activities we have been involved in with you include:

Collaboration with the Institute for Sustainable Futures, University of Technology Sydney: Thank you to all of you who

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responded to participate in the interviews on GESI in your organisations. And special thanks to WAF and SIWA who made special presentations on their GESI policies in the ADB WASH webinar last month. Your participation is encouraged to complete the questionnaires on gender distributed along with the benchmarking toolkits last week. The data will also feed into the gender data and research activities under this project with ISF/UTS.

ADB WaSH Webinars: The series of webinars that we collaborate with ADB on which started in late 2020 continues this year and during this quarter we were pleased to have seen some of you do presentations in the two webinars during this quarter – namely the Water Safety Plans Implementation in April and the Gender Equality and Social Inclusivity in Water held in the beginning of June. The turn-out to these webinars has been excellent and have been extremely useful for utilities.

ADB Regional TA-9181 – Water Quality Management and Assessment Support for the Pacific: This TA which was planned to complete in May has been extended to December this year. This small regional TA provided assistance on a demand basis towards reviewing for utilities existing water quality data and identifying potential sources of water contamination; identifying potential human and environmental health risks arising from water contamination and recommending strategies and policies to mitigate such risks; provide practical advice for water quality monitoring including sampling and analysis (both field and laboratory tests); designing and implementing training programs which may include sampling methods, sample handling procedures, testing methods, and analysis and assessment of water quality test data etc.

Four utilities have sought and gained assistance under this project; these include: Palau Public Utilities Corporation, Water Authority of Fiji, Solomon Islands Water Authority, and the Department of Water Resources Vanuatu.

Renewal of MOU with the Australian Water Association (AWA). I am pleased to inform you that we have renewed and formalised our relationship with the Australian Water Association (AWA) through the signing of an MOU. We hope that this relationship will augur well for our membership in terms of assistance to capacity building for us whilst encouraging closer ties with Australian industry members.

Stay safe and well!

Lusia



Solutions for contaminated water

Most sources of surface water, groundwater and seawater are unfit for human consumption without some form of treatment. Common contaminants include suspended solids (e.g., dirt or silt), heavy metals (e.g., arsenic and iron), biological matter (e.g., algae, bacteria and viruses) and salt.



There are a range of treatment options which can remove each of these contaminants of concern from water. Once the contaminants have been identified, an appropriate water treatment system can be designed, constructed, and installed.

Suspended solids removal technologies are based on physical and/or chemical **filtration**. Suspended solids are physically screened out of water using media or membrane filters. Chemicals can be added to the feed water to enhance the physical filtration process by increasing the size of the particles.

Heavy metal removal technologies will depend on the metal species that require removal. Iron forms a precipitate upon contact with oxygen, therefore an **aeration/filtration** method can be used. Arsenic can be screened out using **membrane filtration** technologies.

Biological contamination requires **disinfection** to make the water safe for consumption. Most disinfection

methods are chemical based, physical based or a combination of the two. When choosing disinfection methods, it is important to consider cost, pre-treatment, where to source any chemicals and energy



Moerk Water News: Moerk dispatched two solar powered community seawater desalination units in April to assist with Tonga's post eruption recovery

use.

Desalination technologies can be divided into thermal, membrane and electrical methods. Electrical and membrane methods use the least energy for low salinity water (brackish water) and **Reverse Osmosis** (a membrane technology) is the lowest energy solution for high salinity water (e.g., seawater). At very high salinities, thermal methods are preferred. Renewable energy is making desalination a viable water treatment option.



There is a small set of water quality screening parameters that can help you determine which technology is best for you. Contact Moerk Water



Advantages of a Moerk Water system:

- 100% sustainably powered
- Chemical free options
- Made in Australia using German/Australian engineering
- Built using high quality parts
- Durable construction
- Simple operation
- Easy to source spare parts
- No longer need to gather firewood to boil water for safe consumption
- Reduction in plastic bottle waste



Moerk Water News: Construction has started on the Kiribati Institute of Training WASH Skills Training Centre which will house a Moerk Water solar powered Reverse Osmosis unit

In 2019, Moerk Water supplied 3 seawater desalination units to the Ministry of Infrastructure and Sustainable Energy in Kiribati to supply drinking water to communities on Maiana and Abaiang islands.

Testimony from **Mr Rimeta Tabwere**, Ministry of Infrastructure and Sustainable Energy, Kiribati:

“The desalination system in Tebikerai and Nuotaea based on feedback from communities is making significant positive impact in provision of safe drinking water and reducing work and time consumed to fetch and boil underground/rainwater.

Technicians also provided information that the system is easy to operate... - zero work on the mechanical and

Solutions if you are interested in finding out more about any of our technologies.

electrical in terms of troubleshooting and repair work.”

To ensure the success of the MISE units and build local capacity, Moerk Water entered into a partnership with the Kiribati Institute of Technology (KIT). Moerk has supplied an additional seawater desalination unit to the new WASH Skills Training Centre at KIT and will run training programs in the centre to build local capacity in desalination and solar power.

Moerk’s vision is to **roll out the same kind of combined technology and training approach across Pacific Island Countries** and to further the skills of locals in these important technologies. Building local capacity will be an important pillar for improving resilience to climate change. We feel our experience and technology can play a big part in securing water supplies across the Pacific.

Moerk Water has more than a decade of experience training daily operators and service technicians. Moerk understands that without sufficient training and local capacity, water treatment projects will not succeed. In May 2021, Moerk trainers were selected as experts for PWWA’s “Enhancing climate resilience and safe water access in rural areas in the Pacific” virtual training program.

Please don’t hesitate to get in touch with us. We look forward to hearing from you.



Barbara Brezger, Director of International Business Development

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IWSA - Independent Water Schemes Association

(source IWSA)

The Samoa Independent Water Schemes Association(IWSA) joined a partnership with the Scientific Research Organisation of Samoa (SROS) to conduct chemical testing at the water catchment areas of all 26 independent water schemes (IWSs) under the IWSA. The intakes of all community-run water networks are sourced from the rivers, streams, and springs. The majority of IWSs (97%) do not have centralized treatment: therefore, households are receiving their water directly from the source untreated.

From this partnership, all intakes will be tested to identify potential sources of contamination and to ensure that the chemical concentration within the water is at safe and acceptable levels for the communities.

The water quality results will provide the necessary baseline data to influence water management decisions and any future projects for the IWS.

This important initiative is one of the improvement actions outlined in all IWSs Drinking Water Safety Plans that were developed through funding from the European Union.



May 13

Matafaa IWS

Fun Fact: Matafaa also known as Matafāalagī is literal translation for the Four eyes of Heaven.

The name relates to the Four Paramount Titles of Samoa: Tuiatua, Tuia'ana, Vaitamasoali'i & Gatoaitele.

Over the past week, we have been collecting water pressure data on the Matafaa water supply network. The water flow rate was also taken at various parts of the supply line to check for any water loss.



All these findings will be presented to the Matafaa village community next week at our workshop, where we will also be discussing the development of the Matafaa IWS Drinking Water Safety Plan (DWSP)

The development of Matafa'a's DWSP is one of the initiatives under our [European Union](#) - funded project. [Civil Society Support Program - Samoa](#)



EUROPEAN UNION



May 17

IWSA launched its first Handbook and Guide.

The Independent Water Schemes Association (IWSA) has completed and launched its first Handbook and Guide.

This handbook provides volunteers, donors, new employees and interested communities an invaluable introduction to the organisation.

It also includes background information on the IWSA (their mission, vision and strategic goals), their past projects, challenges they continue to face and policies to name a few. IWSA have even included a section on our beautiful country, our culture and tourist attractions for their overseas partners/volunteers.



This project was made possible with funding from the Australian Volunteers Program and support from IWSA's former volunteer Mark Abela.

The launch was attended by the IWSA Board and stakeholders which include:

- Ministry of Natural Resources and Environment
- Ministry of Women Community and Social Development
- Ministry of Health
- Samoa's Civil Society Support Programme,
- Samoa's Umbrella for Non-Government Organisations
- Australia Pacific Training Coalition
- Australian Volunteers Program
- Samoa Water Authority.

The Australian High Commission's Second Secretary Mr. Patrick Lawson delivered the keynote address.



This project was funded by Australian Volunteers and Australian Aid.



May 18

IWSA marks the completion of all drinking water safety plan (DWSP) workshops for their 26 schemes. The last workshop was held in Matafaa IWS, located on the Lefagaoalii Peninsula.

Their key stakeholders Ministry of Women, Community & Social Development Ministry of Health Samoa Ministry of Natural Resources and Environment Samoa joined IWSA in preparation of Matafa'a's DWSP which informs the current state of their water supply and improvements that need to be made.



Fun fact: Matafa'a IWS was the first ever community in Samoa to utilize polyethylene pipes (PE) in their water supply network back in 2012.

This initiative is funded by the [European Union in the Pacific](#)



25 May

Samoa commemorated the World Water, Forests, Wetlands and Meteorology Day with the launching of the 3 million National Tree Planting Campaign 2022-2028.

IWSA together with 3 other communities under the IWSA have been selected to receive a grant worth SAT10k each for tree planting.

Tree planting is one of the most important improvement actions documented in each IWS community's Drinking Water Safety Plan (DWSP), which helps to improve water quality for the untreated community-managed water supplies.

IWSA acknowledged and thanked the:

- Government of Samoa,
- Civil Society Support Program - Samoa &
- Ministry of Natural Resources and Environment Samoa for their continuous support for our communities.

Also greatly acknowledge the European Union's financial assistance in the development of DWSPs for all 26 independent water schemes.



Pictured(left): Ministry of Natural Resources and Environment CEO, Lealaisalanoa Frances Reupena, IWSA President, Sulutumu Taiatu Sasa Milo & Samoa's Water, Sanitation and Hygiene Sector Coordinator Ruth Ueselani Foliaki.



Installation of 70 Household Water Filters in 8 Independent Water Schemes

The partnership between the Independent Water Schemes Association (IWSA) and the Australia Pacific Training Coalition (APTC) has fostered many valuable programs that work towards providing safe and clean water for independent water schemes (IWS) through plumbing training.

In June 2022, through APTC's trainings, notable works achieved include the installation of home water filtration treatments for IWS communities on both Upolu and Savaii. In Upolu, 50 home water treatment systems were installed for families in Letogo, Falevao, Lotofaga (Aleipata), Samamea, Sataoa and Vaiee.

In Savaii, a total of 20 home water treatment systems were installed for families in Paia, Avao, Lelepa and Fagamalo. APTC has also supported IWSA with the installation of a UV filtration unit at the Paia Primary School, Savaii.

Through this same partnership, APTC has also provided necessary training to close to 80 IWS plumbers across Samoa in order to strengthen the plumbing skills needed by IWS plumbers to properly operate and maintain their community's water supply.

The plumbing trainings were funded by the European Union and Australia's Department of Foreign Affairs and Trade.

June 22

Launching of the Ecological Purification System at Solosolo

The Minister of Women, Community and Social Development Afioga Leota Laki Lamositele delivered the keynote address during the launching of the Ecological Purification System (EPS) at Solosolo this morning.

This initiative concludes IWSA - Independent Water Schemes Association's EU-funded project "Support to improve the capacity of communities to better manage water resources."

The minister acknowledged the funding assistance by the European Union in the Pacific and its tremendous

impact on the community through technical support and capacity building, modern and innovative resources and most importantly having access to clean and safe drinking water.

In addition, the minister reminded the village on the proper utilization of this resource to ensure its long-term sustainability in order for everyone in the village to access quality and safe drinking water.

Member of parliament for Anoamaa West, Honourable Fonotoe Pierre Laufofo who cut the ribbon, as well as representatives from government ministries, stakeholders and partners namely the Ministry of Finance, Government of Samoa, Ministry of Women, Community & Social Development Ministry of Health Samoa Ministry of Works, Transport and Infrastructure, Samoa Water Authority and UNDP.



The village has expressed their gratitude towards this great initiative that will benefit their community through access to safe and clean water for everyday consumption that uses natural ecological process without chemicals.



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PRESS RELEASE

May 10, 2022

Peleliu Elementary School Students Visit Ngerikiil Water Source



As part of PCC's Educational Talent Search Program, 8th graders from Peleliu Elementary School visited Ngerikiil water source on April 29, 2022. The Ngerikiil river along with Ngerimel dam are the two main water sources for Koror and Airai. Water from these two sources is treated at the Koror-Airai Water Treatment Plant in Ngeruluobel before being distributed to almost 5,000 residences in Koror and Airai.

PPUC's water plant operator Roger Salle gave the students a brief tour of the water source to include daily operations such as water level and pump monitoring. In addition, he explained the process from which water from the sources is sent through pipes to the Water Treatment Plant for treatment prior to being distributed to the community for everyday use. Water in Koror and Airai meet safe drinking water quality standards.

Mesulang to PCC Educational Talent Search Program for coordinating this activity for the students, a great learning opportunity for them.

Vision: PPUC will be the most professional utility corporation in providing reliable, economical, sustainable and quality services for its customers

Mission: To provide essential utility services to foster growth, economic development and improved quality of life for the people



MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT

(sourced from the Ministry of Natural Resources and Environment)

COMMEMORATION DAY FOR WATER, FORESTS, WETLANDS AND METEOROLOGY IN SAMOA

The Ministry held a combined celebration yesterday, 25th of May 2022 at the TATTE Convention Centre. The theme was "Sustainable Actions for Forests, Water, Wetlands and Meteorology - For People and Nature".

The theme re-emphasises the importance of these ecosystems to our survival and in sustaining nature and all the renewable resources we depend on. It highlights the need to re-forge and re-invent ways to pursue sustainable development and rehabilitation of our environment. It also promotes the importance of multi-hazard early warning systems in safeguarding Samoa from meteorological, hydrological and geo-hazards.

As part of the commemoration activities, the 3Million National Tree Planting Campaign 2022-2028, will be launched as part of the government's efforts to mitigate climate change impacts through forest replanting. This will include the signing of Memorandums of Understanding with various groups, in a collective effort to achieve the 3million tree target, by the end of the program period.

The signing of MOUs will be with Districts, Community Conservations Areas, Community Based Organizations, Non-governmental Organizations and Faith-based Organizations.

A number of awareness materials will also be launched featuring messages on water, forests, wetlands and meteorology.

The MNRE wishes to thank our development partners for their continuing cooperation with water and forest resources management, wetlands conservation and meteorological services in Samoa.

Special mention of our key sponsors

- European Union,
- GOS and
- All the implementing agencies of the Environment, and the
- Water and Sanitation Sectors.



Our Finance and Corporate Administrator, Mrs Vaipa Tafeamalii Lui, attended the Commemoration of World Water Day and Water and Sanitation Forum 26 May on behalf of CEO and PWWA.



Solomon Water's first Newsletter

Solomon Water welcome it's very first newsletter of 2022.

CEO for Solomon Water Mr Ian Gooden said, the aim of this newsletter is to help their key stakeholders to improve their understanding of what Solomon Water are doing and how they function. This publication also focuses on aspects of their organisations and culture hoping people reading it.



Mr Gooden specifically acknowledge in their newsletter the farewell to their former Chairman Carson Korowa and board member Trevor Palmer and thank them for their long service to Solomon Water and the country. At the same time, he had also welcomed their new Chairman Donald Marahare and two new directors, Tony Makabo and George Rausi.

CEO and staff are looking forward to a strong working relationship with them as Solomon Water continues with its exciting journey of improving their water supplies and wastewater services to their communities.

Mr Gooden also mentioned some of their other projects will go to tender later in the year, including some Honiara wastewater works and provincial water supply upgrades. They sincerely thanked their donor partners ADB, World Bank and EU for their generous help, as well as acknowledge substantial support from the

Government, Australia, and New Zealand during these difficult times.

One of their interesting stories highlighted on celebrating International Women's Day 2022 section, titled ***"Breaking gender barriers in heavy plant operations"***.

A story of a female named Cynthia Tolia, started her journey after Secondary School when her and few other young women took up a three month operators' course and started with driving dump trucks and gradually expanded her skillset to operate other heavy plant and machine.

Today Cynthia drives Solomon Water's heavy machines such as backhoe loaders and excavator. Working on a male-dominated sector, she said there are challenges. 'Every job depends on how passionate the person feels about it, and about his/her working environment. I've worked my way up this far and I encouraged young women to empower themselves in the trades.'



Salute you Cynthia and congratulations Solomon Water on your first Newsletter.

An update of Covid-19 cases in our member countries is provided below:

Pacific Member Countries Covid-19 Status of Cases – 30 June 2022

Country	Cumulative Total at Last Report 14/03/22	Cumulative Total as of 30 June 2022	Newly Reported at Last 7 Days	Total Deaths	Persons Fully Vaccinated per 100 people
Australia	3,104,907	8,053,002	202,787	9,777	84.88
French Polynesia	70,158	73,268	82	649	162.4
PNG	41,533	44,718	26	662	5.16
Guam	38,362	43,073	376	371	209.89
New Zealand	327,929	1,323,280	40,997	1,449	230.33
Wallis & Futuna	453	454	--	7	146.06
Northern Marianas	10,326	11,759	190	35	194.26
New Caledonia	59,299	64,337	822	313	161.65
Fiji	64,060	65,558	197	865	164.55
Solomon Islands	8,491	21,544	--	153	68.59
Marshall Islands	4	18	--	0	122.76
Vanuatu	164	11,213	200	14	84.75
Samoa	45	14,901	89	29	221.28
Tuvalu	0	3	0	0	106.24
Tonga	1,320	12,301	222	12	247.47
Tokelau	0	0	0	0	262.07
Palau	3,894	5,220	27	6	262.34
Niue	1	10	0	0	257.17
Nauru	0	2,793	2,110	0	212.07
FSM	0	38	0	0	117.18
Kiribati	3,010	3,236	21	13	126.61
Cook Islands	247	5,768	6	1	226.3
American Samoa	443	6,414	-	31	198.3

Source: World Health Organisation Covid Dashboard

SAVE THE DATES

13th Pacific Water and Wastewater Conference & Expo
&
6th Ministerial Forum
14th—18th November, 2022
Fiji

See You There!

PUT THIS on YOUR CALENDAR!

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