



THE AWP PARTNERS WORKSHOP

From: Secretariat



The AWP Partners Workshop Participants 2019

The CEO attended the AWP Partners Workshop held in Brisbane 5-7 February this year at the invitation of the CEO of AWP. As an international partner, PWWA for the first time was invited to participate and present at this annual event. The attendance of the CEO on behalf of PWWA was timely as the Phase 1 assistance from AWP comes to an end and Phase 2 is under consideration. The presentation from the CEO at the Partners Workshop told the story of PWWA's development over the last few years and the role of AWP's support in the

development of PWWA and building the capacity of its members, successes to date, lessons learned and the way forward.

IN THIS ISSUE

1. The AWP Partners Workshop *[from the Secretariat]* [page 1](#)
2. Community Developments in the Pacific
[from Water Authority of Fiji]
 - i. WAF holds Customer Forum Around Fiji [page 3](#)
 - ii. Minister Usamate visits WAF treatment plants in the Norther Division [page 5](#)
 - iii. WAF opens new express centre in Suva [page 7](#)
 - iv. WAF holds Consultations for Wastewater works in Lautoka [page 9](#)
- [from American Samoa Power Authority]*
 - v. Drilling New Water wells to sustain life on Tutuila island [page 11](#)
- [from Ministry of Natural Resource & Environment, Samoa]*
 - vi. World Water & Forests Day 2019 in Samoa [page 14](#)
- [from Tonga Water Board, Tonga]*
 - vii. Water Supply Upgrade for Nuku'alofa Area [page 17](#)
 - viii. Zonation of Nuku'alofa District [page 17](#)
3. Upcoming Events [page 18](#)

The workshop, according to the CEO, was a wonderful opportunity for partners to meet and network with each other and meet with AWP, DFAT, FAO, IWMI, World Bank and Asian Development Bank colleagues and to spread the PWWA story. Tremendous support for programmes for the Pacific region was promulgated by the **Hon Anne Ruston**, Assistant Minister for Water of

Australia who opened the Workshop, and called on AWP for a “stepped up” Pacific programme.

The PWWA Board and Secretariat are exploring and pursuing this window of opportunity for capacity building programmes for its members.

UNELCO
ENGIE

DoWR
Department of Water Resources

Dates:
5 - 9 August
2019

At the
Warwick Le
Lagon

Ministerial Forum at
the Vanuatu
Convention Centre

**"Vanuatu ready to
host the 12th
Pacific Water &
Wastewater
Conference &
Expo" and "5th
Ministerial
Forum"**

**REGISTRATION
NOW OPEN**

**EXPO
REGISTRATION
NOW
AVAILABLE**

**CALL FOR
ABSTRACTS AWAIT
YOUR GREATEST
CONTRIBUTION**

*See You
There!*

COMMUNITY DEVELOPMENTS IN THE PACIFIC REGION

WAF HOLDS CUSTOMER FORUMS AROUND FIJI

FROM: WATER AUTHORITY OF FIJI - FIJI



Figure 1 Participants at the WAF Business Customer Forum 2019 at the Holiday Inn in Suva (18/02)

The Water Authority of Fiji (WAF) held two sessions with its business and domestic and residential customers at the Holiday Inn in Suva on the 18th of February 2019. WAF also held similar customer forums in the Western Division on Thursday, 21st February 2019 at the Tanoa Waterfront Hotel and on Thursday 27th February 2019 at the Hotel Takia Conference Room.

While opening the Customer Forum, WAF General Manager Customer Services and Acting General Manager Operations, Mr Sekve Uluinayau said that the forum was a platform to formally engage with customers on a regular basis.

“The purpose is to provide updates on WAF developments and plans and discuss issues arising and this platform gives us the opportunity to listen to you, and your views as well as your feedback on our service delivery. The main aim of this forum is to basically foster Trust, Value as well as Understandings for you, our customers,” said Mr. Uluinayau.

“This forum is also designed to transmit information and create awareness in a

timely, cost effective and organized manner with a long term objective of bringing attitudinal and behavioural changes in the society in terms of water conservation and waste management including WAF services as a whole.”

Mr Uluinayau said that the forum also provides a platform to have a clear demarcation of the representative’s views and it was imperative to separate the business customers from the domestic customers.



Figure 2 WAF General Manager Customer Services and Acting General Manager Operations, Mr Sekove Uluinayau at the opening of the WAF Customer Forum 2019 at the Holiday Inn in Suva (18/02)

“This is due to the nature of the issues, ideas and discussions that may take place may be different from a domestic customer forum. The Business Customer Forum is solely for our commercial customers while the Customer Council focuses on residential or domestic customers and institutions and members of the Forum are invited representatives of all sectors of the community and business associations and groups,” said Mr Ulunaiyau.



Figure 3 WAF Project Manager Sub-division, Iaitia Nakautoga while presenting at the WAF Customer Forum 2019 at the Holiday Inn in Suva (18/02)

The participants were briefed and updated on a wide-range of topics such as the WAF Achievements and the plans for 2019 and 2020, SCADA Network, Public Sector Investment Program (PSIP) update plans for 2019 and 2020 (Regional Updates),

Integrated Meter Management plans for 2019 and 2020, Subdivision, Liquid Trade Waste Management, Wastewater Services, Compulsory E-Billing Services as well as the Customer Charter.



Figure 4 WAF Senior Business Analyst, Manasa Tusulu while presenting at the WAF Customer Forum 2019 at the Holiday Inn in Suva (18/02)



Figure 5 WAF Team Leader SCADA, Thomas Hughes while presenting at the WAF Customer Forum 2019 at the Holiday Inn in Suva (18/02)



Source:
Media Release
Water Authority of Fiji
18th February 2019

MINISTER USAMATE VISITS WAF TREATMENT PLANTS IN THE NORTHERN DIVISION

FROM: WATER AUTHORITY OF FIJI – FIJI

As part of the Minister for Infrastructure, Transport, Disaster Management and Meteorological Services, Hon. Jone Usamate's Northern Division tour, the Minister visited the Water Authority of Fiji's Namara Wastewater Treatment Plant in Labasa as well as the Navaca Desalination Plant on the island of Taveuni.



Minister for Infrastructure, Transport, Disaster Management and Meteorological Services, Hon. Jone Usamate (sitting-middle) with WAF crew members at the Namara Waste Water Treatment Plant in Labasa.

At Namara Waste Water Treatment Plant (28/02), the Hon. Minister was briefed by the Regional Manager North, Mr Apete Radrodrolagi and the Supervisor – Namara Waste Water Treatment Plant, Mr Tomu Vuniwai.

Minister Usamate met and greeted WAF crew members at the plant as he toured the wastewater treatment plant facility.



(L-R) WAF Supervisor – Namara Waste Water Treatment Plant, Mr Tomu Vuniwai briefs the Minister for

Infrastructure, Transport, Disaster Management and Meteorological Services, Hon. Jone Usamate (middle) while WAF Regional Manager North, Mr Apete Radrodrolagi looks on.

“The Namara Waste Water Treatment Plant has been there for some time, I was quiet taken back with the way it is, the location, but I am glad to see the mitigation measures in case of a flood. It is obviously under stress as it was designed to cater for 5,000 people but it is now servicing 11,000. But, I am glad to see the plans in place to try and address that, because, on the sanitation side, that is something important for us,” said Hon. Usamate.



(L-R) Assistant Minister, Hon. Vijay Nath, Minister for Infrastructure, Transport, Disaster Management and Meteorological Services, Hon. Jone Usamate, WAF Supervisor – Namara Waste Water Treatment Plant, Mr Tomu Vuniwai, WAF Regional Manager North, Mr Apete Radrodrolagi during a tour at the Namara Waste Water Treatment Plant.

On the island of Taveuni (02/03), Minister Usamate travelled to Naselesele to inspect the on-going works along the access road to the Vakaderibua water source (Northern-end).

“Here on Taveuni, we have seen the need for water, we came up to Naselesele and I have had perpetual complaints on water and we have seen the bore-hole that is not working, but we a glad to see the new water source has

been identified, so I am very hopeful that once the access roads are completed, WAF can carry out the works and WAF will be able to meet the needs for the people in the North-end of Taveuni,” explained Hon. Usamate.

The Hon. Minister then travelled to inspect the Desalination Plant at Navaca, the Southern-end of Taveuni Island.



Minister for Infrastructure, Transport, Disaster Management and Meteorological Services, Hon. Jone Usamate with Senior Government Officials tour the Desalination Plant at Navaca, Taveuni.

“At the Desalination Plant, we have seen the difficulties that WAF has in here and seems to be one of the major difficulties seem to be the issue of dust which comes into the plant and hopefully we can come up with a solution to prevent the dust coming in so that the plant can be working continuously and Water Authority of Fiji will have to make sure to make it work consistently.”

“The other major obstacle for this part of Taveuni would be the cost of water carting, here it would be the cost of electricity because they have to use diesel generators and that is also tied in with the overall plan that we have to make Taveuni totally

renewable – we have the Energy Fiji Limited’s, Hydro Plant, we have the solar energy farm coming in and that should be able to meet electricity needs and that will also drive down the cost that we have to drive this desalination plant,” said Minister Usamate.



Assistant Minister, Hon. Vijay Nath and Minister for Infrastructure, Transport, Disaster Management and Meteorological Services, Hon. Jone Usamate sample clean drinking water from the Desalination Plant in Taveuni.

“With the new source we have at Wainivasa in the next few years, if the land could be acquired quickly, I think that should go a long way to addressing the needs of the South-end of Taveuni. This is all towards our goal in ensuring people in having good water because it is their right and Government will continue to work with Water Authority of Fiji as well as with the other utilities to see that we can provide to the country with what they need,” explained Minister Usamate.

Hon. Minister Usamate was accompanied by his Assistant Minister, Hon. Vijay Nath and Deputy Secretary Infrastructure, Mr Iliesa Vonu.



Source:
Media Release
Water Authority of Fiji
3rd March 2019

WAF OPENS NEW EXPRESS CENTER IN SUVA

FROM: WATER AUTHORITY OF FIJI – FIJI

In an effort to uplift its customer services by moving nearer to the larger population, the Water Authority of Fiji (WAF) today opened its new 'Suva Express Centre' located at the Post Fiji Building in Suva.



Minister for Infrastructure, Transport, Disaster Management & Meteorological Services, Hon. Jone Usamate while officiating at the opening of the WAF Suva Express Centre (08/03)

While officiating as Chief Guest, the Minister for Infrastructure, Transport, Disaster Management & Meteorological Services, Hon. Jone Usamate said that the new Express Centre will provide customers with a better experience for commercial, institutional, and residential customers collectively.



WAF General Manager Customer Services and Acting General Manager Operations Mr. Sekove Uluinayau at the opening of the WAF Suva Express Centre.

“Prior to this development, customers had to make their way to the WAF National Office based at the Centre point. The foresight to establish a customer service here that is

convenient and accessible, more emphasize valuing customer satisfaction. This is all part of the expanding and improving WAF’s services to the people of Fiji.”



WAF is aiming to uplift its customer services by moving nearer to the larger population, to approximately 30,000 customers and improving customer experience to its commercial, institutional, and residential customers collectively in the greater Suva-Lami area.

“WAF in 2018 conducted a survey on customer satisfaction. This survey showed that of the 11% of the surveyed population who responded, 85% were satisfied with response to customer complaints. This is a testimony of Government’s commitment to the delivery of basic services to all Fijians. Most importantly, to serve the customers of the greater Suva area that has a vast working population as compared to other parts of the country,” said Minister Usamate.



Minister Usamate said that due to security and space constraints, no bill payments will be accepted at the Express Centre.



Minister for Infrastructure, Transport, Disaster Management & Meteorological Services, Hon. Jone Usamate while unveiling the commemorative plaque following the opening of the WAF Suva Express Centre (08/03)

“Therefore, all water bill payments can be made at any authorized agents such as Post Fiji or Max Value outlets; be sure to present your water bill statement or you can even make payments through Vodafone’s M-Paisa or Digicel’s Mobile Money. You can also make your payments via internet banking via Westpac, ANZ, BSP, and Bred Bank,” explained Minister Usamate.

Minister Usamate said WAF was allocated a total amount of \$8.5 million to ensure maximum customer service delivery, for this financial year out of the overall operations budget of \$102 million.

“This Government is a government for all people. We prioritize and ensure to remove barriers when it comes to serving the needs of our citizens,” said Minister Usamate.

WAF General Manager Customer Services and Acting General Manager Operations, Mr Sekove Uluinayau said that the new office has the capacity to accommodate a total of fifteen customers at any one time during our opening hours who will be served by three Customer Service Representatives or agents.

“We have also provided a telephone booth for our customers, whereby customers can pick up a dedicated telephone and directly contact the Authority’s National Contact Centre for speedy and a much faster feedback, in terms of queries or complaints that needs our attention,” explained Mr Uluinayau.

Meanwhile, the new facility will open from 7am to 6pm on weekdays, the Centre will also be open on Saturdays from 8am to 12pm.



Source:
Media Release
Water Authority of Fiji
8th March 2019

WAF HOLDS CONSULTATIONS FOR WASTEWATER WORKS IN LAUTOKA

FROM: WATER AUTHORITY OF FIJI – FIJI



(L-R) Presenters at the public consultation WAF Team Leader Wastewater in the West, Mr. Engtash Permal, Intergroup Limited's Mr. William Kaisenberg, WAPCOS Consultant, Mr. Bajwinder Singh and WAF's Environment Officer, Ms Dimareta Kabakoro during a question and answer session.

In an effort to educate and inform the residents of Lautoka about the 'Natabua Wastewater Desludging and Odor Control' project, the Water Authority of Fiji (WAF) held a public consultation at the Fiji National University's Natabua Campus in Lautoka (21/03).

While presenting at the consultation, WAF Team Leader Wastewater in the West, Mr Engtash Permal informed the audience on the importance of the works and the need for it to be carried out.

"The consultation and awareness at Natabua Campus was very successful, we needed to make aware to our customers, residents living in Natabua as well as stakeholders about what we are doing, we will be undertaking the desludging of the Natabua Wastewater Treatment Plant – which is a pond based treatment plant. The last desludge was undertaken about 25 years ago, so there is a lot of sludge in the ponds. We have been assured by the contractors that there will be minimum disturbance to the residents in the vicinity, we also have the

Environment Unit who will also be strictly monitoring this project. Therefore, it was imperative to hold this consultation to inform and seek the cooperation and understanding of our customers and residents," said Mr Permal.

Lautoka resident, Mr Peter Chongsue thanked the Authority for the organizing the public consultation.



Lautoka resident, Mr. Peter Chongsue gives his feedback during the question and answer session at the Public Consultation in Lautoka

"The consultation is very good and we are now very familiar with this project. I am very thankful that we have this program and hearing good ideas of what is going to happen, it was well presented. It was very clear. I am very thankful that once these works are done, it will put us forward. In fact our system here is outdated and it is good to hear that we are taking this step," said Mr Chongsue.

Ms Alisi Tokailagi of the Lautoka Health Office said the consultation was informative and educational.

"My expectations in attending this consultation was to try and understand the process of how the desludging activities will be carried out and to hear some of the control strategies that WAF has in place. I enjoyed

coming to the consultation because I was actually able to know how Water Authority is trying to carry out its remedial actions and all these activities in regard to wastewater treatment,” said Ms Tokailagi.



An aerial view of the Natabua Wastewater Treatment Plant in Lautoka

Meanwhile, the project is being contracted to Intergroup Limited and is expected to take

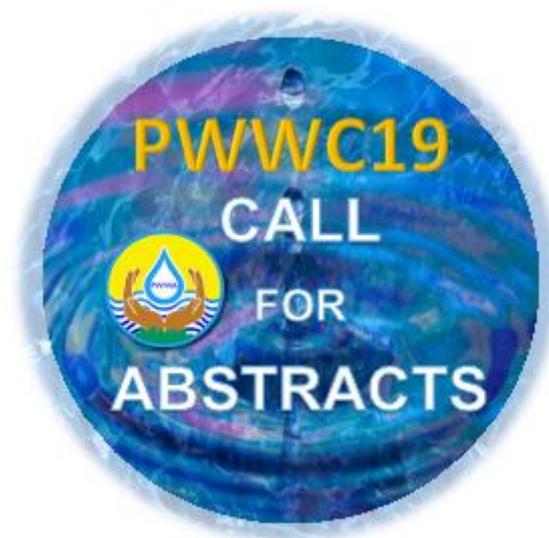
place for a period of six to twelve months at the Natabua Wastewater Treatment Plant in Lautoka. Desludging works are also earmarked to take place at the Olosara Wastewater Treatment Plant in Sigatoka as well as at the Navakai Wastewater Treatment Plant in Nadi.



WAF Team Leader Wastewater in the West, Mr. Engtesh Permal gives an overview of WAF Wastewater systems in the greater Western Division



Source:
Media Release
Water Authority of Fiji
24th March 2019



DRILLING NEW WATER WELLS TO SUSTAIN LIFE ON TUTUILA ISLAND

FROM: AMERICAN SAMOA POWER AUTHORITY – AMERICAM SAMOA

Submitted by: Matamua Katrina Mariner – ASPA

The American Samoa Power Authority (ASPA) has been drilling new groundwater wells with funding from the United States Environmental Protection Agency (USEPA) since 2014 to help resolve issues with high chlorides and groundwater under the direct influence of surface water (GUDI). ASPA's water supply is 99% sourced from groundwater extracted from production wells drilled to below sea level. The topography of Tutuila Island is small and narrow measuring roughly 33km long and 4.8km at its widest point. The Tafuna Leone plain on the South Western side is the widest part of the island and is where the majority of ASPA's highest producing wells are located.

In some areas of the plain, the very permeable formation allows for water to rapidly infiltrate to the subsurface carrying with it contaminants to the aquifer that supply the water to the production wells. The Tafuna-Fagaima well field is the highest producing well field in the system. The groundwater wells in this area was determined by EPA in 2010 to be GUDI. Surface water infiltration carry with it fecal coliform bacteria and other contaminants. ASPA is constructing a new micron filtration plant to resolve this GUDI problem and lift the long standing Boil Water Notice (BWN) in the affected areas. All drilling works targeting the central and Western side of Tutuila will locate new sites further inland where pristine mountain front recharge is available for good quality drinking water.

Since the start of the well drilling project, ASPA has drilled 8 new wells on the Western side of Tutuila Island with a combined

sustainable yield of 1,300 gallons per minute (gpm). Three of these eight new wells are now in operation and have assisted in removing the BWN from an area serving a population of over nine thousand.

The Eastern side of the island is the narrowest part of the island and is susceptible to seawater intrusion. Groundwater wells in these areas were drilled in the early 1980's and most are located close to the coast and yield high chlorides. ASPA's drilling program sited six (6) new wells on the Eastern side of Tutuila that is located further inland with sufficient recharge sources. ASPA has drilled two (2) new wells in this area so far, one in Pago Pago (see Fig.1) and the other in Lau'ii (see Fig.2)



Fig.1. ASPA drilling crew drilling new angled well in Pago Pago village, Tutuila, AS



Fig.2. ASPA drilling crew setting up downhole camera to video log new well in Lau'ii village, Tutuila, AS

The focus of this program is to site new wells in ideal hydrogeological locations further inland that will provide good quality drinking water to critical areas suffering from water supply shortage, poor water quality, low pressure and high chlorides. In order to accomplish this goal, ASPA invested over \$1M of its EPA SRF funds in a new drill rig that can drill angled holes. The Pago Pago well is the first angled hole ASPA has completed.

The angled well concept introduced by University of Hawaii – Water Resources Research Center (UH-WRRC) and an environmental consultant from America Samoa Environmental Protection Agency (ASEPA) as a means of accessing groundwater sources in hard to reach areas. ASPA is also under pressure to reduce dependence on aquifers near the coastal zone. Tutuila has a very steep and mountainous topography and very limited flat inland areas, angled well drilling is aimed at drilling below mountains and inaccessible terrain (i.e. wetlands, infrastructure and more) at a desirable angle that will allow for groundwater extraction without mass excavation and vegetation

clearance. Angled wells can have longer screened sections through thin aquifers and also cause less up-coning stress to the aquifers. While there are environmental and technical benefits to this type of drilling, the angle drilling of Pago Pago well has demonstrated the complexity and difficulty of carrying out this type of well construction. Although successful in the end, we have experienced many mechanical breakdowns and delays in drilling this well and recommend that future wells be drilled vertically.

Moving forward, ASPA will continue with its drilling program to site new groundwater sources for drilling. In the long run, we aim to shut down wells n the Eastern side producing high chlorides and construct a filtration plant in the Tafuna area to filter wells pumping from the Tafuna well field. All new water sources are aimed at targeting mountain front recharge and away from densely populated residential areas. We continue to monitor the yields and water quality from our groundwater production bores and ensure that we make all the necessary adjustments to mange them sustainable for future generations.



Source:
American Samoa Power Authority (ASPA)
Submitted by:
Matamua Katrina Marina
(ASPA)

WORLD WATER DAY COMPLIMENTS



Water for all **Leaving No One Behind**

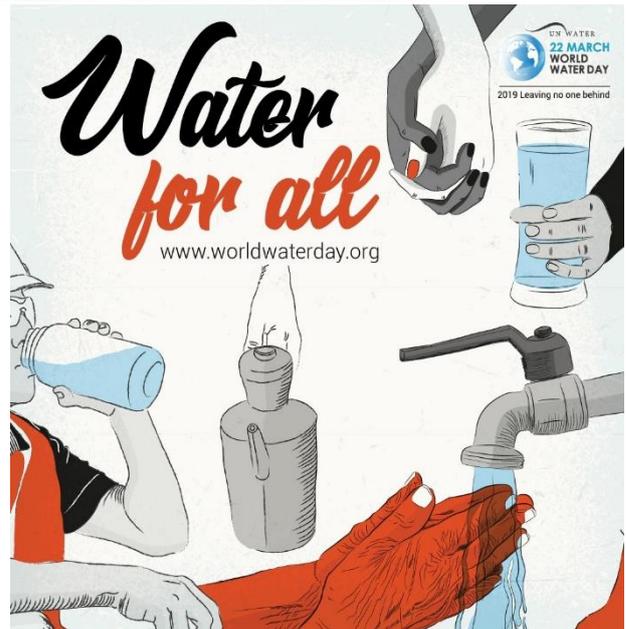
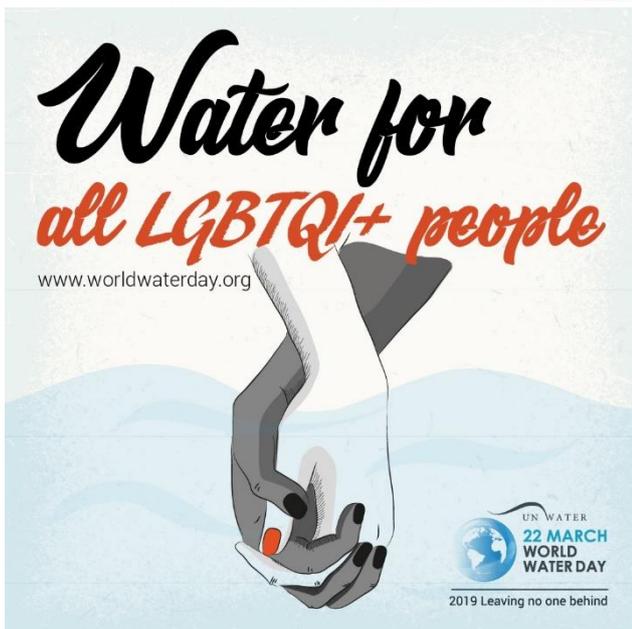
Whoever you are, wherever you are,
water is your human right.

Today we celebrate World Water Day.
We share with the world our commitment to
provide every citizen in Fiji with clean fresh
drinking water and proper sanitation.

And so we ask you to think about what
you can do to help. Please save water, protect
our God given resource. Every drop is precious.



For telephone enquiries call 3346777 or 5777 (For Vodafone or Inkk/ Digicel Users)



WORLD WATER & FORESTS DAY 2019 IN SAMOA

FROM: MINISTRY OF NATURAL RESOURCES & ENVIRONMENT – SAMOA



Group Photo with all the participants of the WWFD 2019 in Samoa

The commemoration of the WWFD 2019 on Friday the 22nd of March, was officially launched following the opening ceremony attended by more than 200 people at the new Water Resource Division Field Office in Vailima.

Official Opening



Honourable Deputy Prime Minister delivering the Keynote address

The Honourable Deputy Prime Minister, who is also the Minister of Natural Resources and Environment, Afioga Fiaame Naomi Mataafa delivered the keynote address following an opening prayer by Reverend Ioane Petaia of the Congregational Christian Church of Letava. The honourable Minister highlighted in her speech the importance of promoting education on sustainable water and forest

management through all levels of the community from the grassroots to the policy and decision makers, and involving everyone especially the often marginalised groups such as the elderly, women, children, refugees, indigenous peoples, people with disabilities, the unemployed and many others that are usually overlooked, and sometimes face discrimination as they try to access needed resources.



Ribbon Cutting for Official Launch of Water Resource Division Field Office

Water Resource Division Field Office - Official Launch

The program included many activities directly linked to this year's selected theme. After the Official Opening, the newly built Office Building for the Water Resource

Division Field Office where the commemorations were held, was officially launched. The building of this new office will enable field services to be centralised, especially with the increasing hydrometric network and rehabilitation programs causing resource mobilisation issues. The office will also provide a safe and high standard working area for the field teams and good storage for the many equipment that have been procured by different projects.

The formalities of the day ended with traditional performances from the Congregational Christian Church of Vailima Youth Group, directly linked to the day's theme.

Educational Journey



Information Display from various stakeholders



River flow gauging demonstration

The Educational journey was an exciting event for the students from the 8 invited schools/institutions. These included 6 Colleges, 1 Primary School as well as second and third year Science students from the National University of Samoa. The educational journey took the students through a series of educational displays and demonstrations, and some fun activities

from organizations within the Environment Sector as well as the Water and Sanitation Sector. The activities included a tour of plant nurseries under the Water Resource and Forestry Divisions of MNRE and a tree species identification walk, a tour of the Vailima Treatment Plant with the Samoa Water Authority, a Water Quality testing demonstration with the Scientific Research Organization of Samoa, a water flow gauging demonstration with the hydrology experts of the Water Resource Division, and lastly a tree planting activity with the Division of Environment and Conservation of MNRE. This activity was designed with the following objectives in mind;

- Identify the linkages between water, forests, natural resources management and ecosystem services (climate, hydrology, ecology etc.);
- Describe the inter-related nature of people-water-land, and connection to development, standard of living, green economy, climate change etc.;
- Characterize significant current and future issues related to water and forests;
- Describe the different roles played by the MNRE, SPREP, SWA, SROS, etc.;
- Understand the Sustainable Development Goal (SDG) 6 and how Samoa is progressing;
- Recognize their personal value and role in water and forest management;



Tour of the SWA water treatment plant

From the Q&A session which followed, it was clear that all the participating students were able to learn very important lessons on water and forest management and meet the objectives of the activity with flying colours.

NUS Research Program/Presentations

The program then continued on to project presentations from the Science students from NUS, sharing on some of their water and forest management related research projects which were being conducted throughout their first semester programs. This was a very good opportunity for the aspiring science students in the college level to gain insight on the level of knowledge and research to be expected when entering university level of studies.



Presentation of research projects from NUS students

Parallel Events

In parallel to the abovementioned activities, the Ridge to Reef project piloted the Waste Management on Public Transport project, an initiative to support the waste ban initiative in Samoa and combat the issue of waste management all over Samoa. The invited schools were provided with transport to and from the venue and the buses used for this were the demonstration sites for this activity. The students were enlightened on the impact of improper waste disposal on our natural environment and water resources. 15 rubbish bins were donated to 15 buses to kick off this activity.



Handover of rubbish bins for the pilot program on Waste Management on Public Transport

The Mid-Term review of the National Environment Sector Plan 2017-2021 was also conducted as part of the commemorations with Long Term Objective (LTO) 1 in the plan, focusing entirely on the Sustainable Management of Natural Resources, including Water and Forests. The review included many of the relevant stakeholders of the Sector who were invited to deliberate on the progress of the various Long Term Objectives and End of Sector Plan Outcomes, issues encountered as well as to recommend solutions in moving forward. The event was very successful with the participation from more than 100 stakeholders taking part in very intense group discussions and presentations.

In addition to this, there was also a tree planting activity as part of the Two Million Tree campaign which was held at the O le Pupu Pu'e National Park in Togitogiga with the participation of four schools from the Falealili District. Native forest tree seedlings and exotic timber tree species were sourced from the Ministry's nurseries in Vailima and Togitogiga, for replanting of this degraded forest and watershed area, as it is regularly done with reserves and community conservation areas, woodlots, agroforestry and coastal plantings. These are all in the Ministry's rehabilitation efforts around the country in collaboration with communities, schools and various organizations which submit requests for this particular type of activity.

In conclusion, the Water and Forests Day commemorations for 2019 were a success. The program included a number of fun-filled activities engaging many different stakeholder groups and highlighted many important aspects of sustainable water and forest management in Samoa.



MNRE, Samoa
22nd March 2019

WATER SUPPLY UPGRADE FOR NUKU'ALOFA AREA

From: Tonga Water Board – Tonga

Major work was successfully conducted by the TWB/CCEC engineers last Saturday 16th February 2019, resulting in a water supply temporary SHUT DOWN from 10am to 4pm for all the Nuku'alofa Area residents. This was to facilitate works for the connection of the mainline from the new ADB funded project reservoir at Mataki'eua with the existing distribution mainline.



Tonga Water Board would like to acknowledge excellent team effort by Quddus, Nafe and the Engineering and Support teams in the planning and implementation of this major project undertaking.



Source:
Tonga Water Board
16th February 2019

ZONATION OF NUKU'ALOFA DISTRICT

From: Tonga Water Board – Tonga



Zonation of Nuku'alofa District under the NUKU'ALOFA URBAN DEVELOPMENT SECTOR PROJECT (NUDSP) funded by Asian Development Bank, Australian Government and the Government of Tonga has commenced work through the installation of meters and stop valves which is mapped out to 13 different locations throughout Nuku'alofa. The first location where this major work is undertaken is at the By-Pass Road at the Small Industries, Ma'ufanga.



Source:
Tonga Water Board
16th February 2019

PWWA UPCOMING EVENTS

| Dates | Activities |
|------------------------|--|
| April 2 -4 | World Bank Water Week |
| April 10 - 12 | New Zealand Industrial Waters 2019 |
| April 17 | Call for Abstracts due |
| April 19 | Benchmarking Data Collection due |
| End April | Executive Board Meeting (Date TBC) |
| May 7-9 | Ozwater'19 Conference & Expo |
| August 5-9 | 12 th Pacific Water and Wastewater Conference & Expo 5 th Ministerial Forum |
| September 18-20 | New Zealand Water Conference & Expo |

PACIFIC WATER AND WASTEWATER ASSOCIATION SECRETARIAT

P.O. Box 868
L4 FMFMII Building
Eleele-fou, Apia
SAMOA

PH: +685 30326

E-mail: info@pwwa.ws
Website: www.pwwa.ws