



Climate and Oceans Support Program in the Pacific

JULY 2014



Scenic view at South Tarawa, Kiribati.

Manager's message

End of financial year already—how the time flies!

So far this year has been really productive for COSPPac: We held the PNG workshop and two regional workshops, completed capacity mapping for Tuvalu and PNG Met Services, and made great progress with our projects on traditional knowledge, malaria, drought and hydropower.

We also had our annual COSPPac planning meeting, with representatives from all of our partners, to discuss what COSPPac has achieved to date and where we are headed in the next year. The external mid-term review panel was also there to meet everyone and start to get an understanding of COSPPac—what's working and where we can improve. We expect the review to be completed in the next few months. If you have the opportunity to speak with the panel, please share your thoughts on what we are doing well and what we can do better.

Coming up in the second half of this year, we're delivering the next version of SCOPIC, some new features on the ocean portal, the COSPPac website, and providing many more training and development opportunities.

Until then,

Janita

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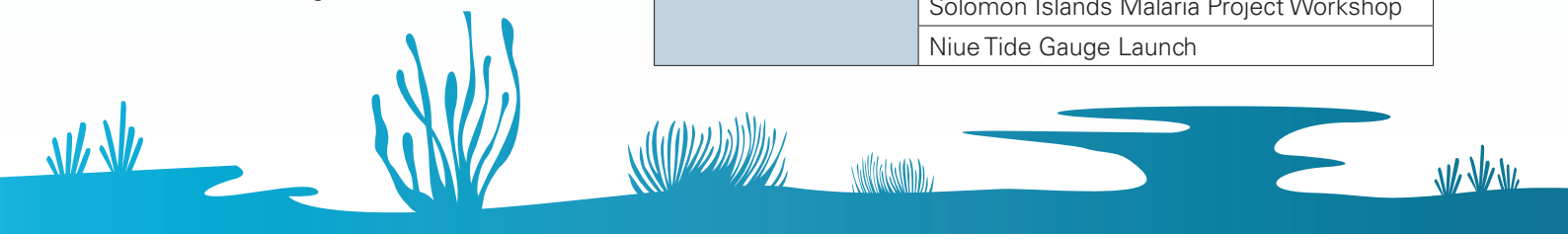
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The COSPPac team and our partners throughout the Pacific will be very busy over the coming months, with many exciting and high profile events occurring throughout the region.

Upcoming events	UN Conference on Small Island Developing States, Samoa
	Tuvalu Workshop
	NCCARF Conference, Gold Coast
	Solomon Islands Malaria Project Workshop
	Niue Tide Gauge Launch





Water pumping and storage infrastructure at the Bonriki groundwater reserve, South Tarawa.

Drought planning in South Tarawa, Kiribati

The people of South Tarawa rely mostly on groundwater, and use rainwater when it is available. However, with population growth over the past decade or so, the main fresh groundwater sources on Bonriki and Buota islands are not able to cope with demand. This is particularly challenging in times of drought, when rainwater tanks become empty and local groundwater in the villages along South Tarawa becomes saline.

COSPPac hydrologist Tony Falkland worked with the Kiribati Meteorological Service, the Water Engineering Unit, and the Ministry of Public Works and Utilities to update and improve the South Tarawa Drought Plan and bring it into line with the latest changes in COSPPac's drought monitoring software.

We hope to continue working with these agencies, as well as the National Disaster Management Office and Public Utilities Board, to include groundwater salinity as a secondary drought monitoring indicator to rainfall. This would allow the relevant agencies to also use groundwater salinity measurements to monitor the impacts of drought on the main fresh groundwater resources.



Participants at the PNG National Weather Service stakeholder workshop, Gateway Hotel, Port Moresby.

Papua New Guinea workshops explore climate and communication

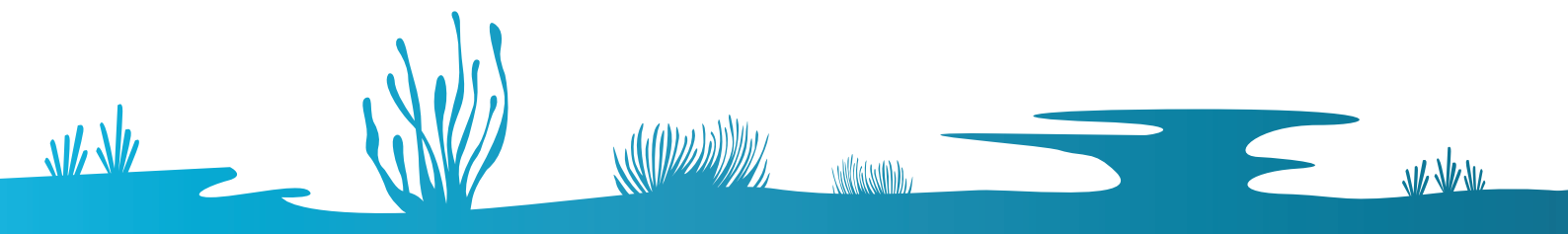
In May, Papua New Guinea's National Weather Service (NWS) hosted a staff workshop and a stakeholder workshop on climate science and communication in Port Moresby. Melissa, Simon, Lily and Jason headed to PNG to support these events.

The first workshop, for the NWS staff, focussed on refreshing and advancing understanding of climate science, SCOPIC, communication skills and encouraging stakeholder engagement.

The second workshop, for stakeholders of the NWS, had more than 35 participants from a wide variety of sectors—including agriculture, water, power, health and disaster management. This event focussed on exploring the fundamentals of climate science and gathering feedback directly from key users of climate information.

Both workshops dedicated time to looking at the current El Niño situation—an important topic, given that the Bureau is suggesting the potential for an El Niño event for 2014. Staff and stakeholders looked at the science behind the current situation, potential impacts on their areas of work and possible actions they can take to prepare.

Tenk yu tru to our partners at the PNG National Weather Service for an engaging and insightful week!





Traditional Knowledge workshop participants recording monitoring information about the fruiting and flowering of local trees.

Traditional Knowledge moving forward in Vanuatu

The team at Vanuatu Meteorology and Geo-Hazards Department (VMGD) has made great progress over the past year developing their Traditional Knowledge (TK) project and collecting data from communities around the country. They are now looking to take the next step—focussing on monitoring and safe storage of the TK weather and climate information.

In April, the VMGD hosted COSPPac’s TK Scientists Lynda and Roan for a workshop on collection and storage of TK data. Ideas and feedback abounded as everyone worked together to update their skills in the use of the specially designed TK data monitoring forms and database.

The workshop also provided a wonderful opportunity to have Samoa’s senior scientific officer, Mr Tile Tofaeno, join in the training. The lessons learnt will be carried over to Samoa, which is a great example of Pacific Island Countries working together on the TK project. A highlight for all was the outdoor group activities where participants looked for tree species to measure the level of their fruiting and flowering—a common TK weather indicator. We are excited about working with all of our TK project partner countries as they seek to take their TK projects to the next level.



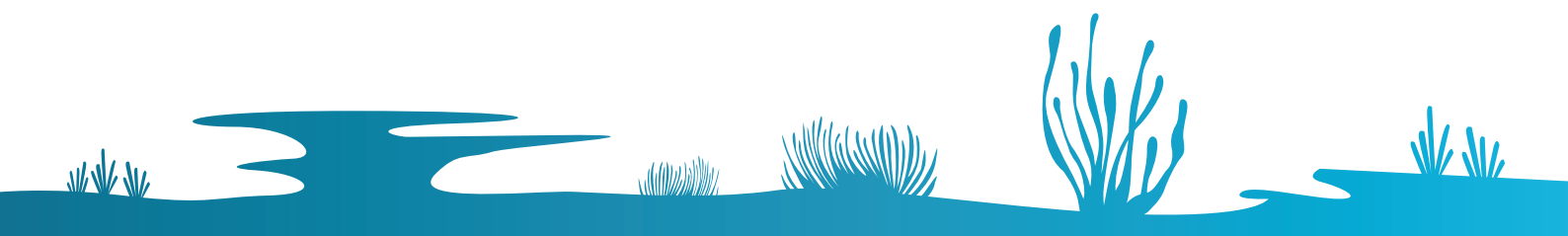
Solomon Islands Meteorological Service staff working together to develop their traditional knowledge pilot project proposal.

Solomon Islands gets ready for Traditional Knowledge project

The Solomon Islands Meteorological Service (SIMS) hosted a series of meetings in April to develop a proposal for their TK pilot project. In an initial workshop with SIMS staff, ideas were flowing as participants brainstormed how to shape a TK project in true Solomon style. COSPPac’s Roan and Melissa were on hand to help facilitate the process.

Since the meetings, work on proposal development has moved quickly. SIMS aims to integrate TK into climate forecasting using TK information collected from three pilot sites. The final products and services created will hopefully benefit the mostly rural population of Solomon Islands.

We look forward to working with SIMS to roll out this project and begin documenting some of the rich and varied traditional knowledge about weather and climate that is held in communities across the Solomon Islands.





GNSS training course – Rarotonga, Cook Islands – June 2014. L-R: Bart Thomas, George Teiri, Vaipo Mataora, Nama Benson, Matthew Mazzucchelli, Royston Jones, Timoti Taniguaine.

Training for Pacific Land Surveyors

You might be surprised to learn that regular land-based surveying is a critical component of the Pacific Sea Level Monitoring Project. Without accounting for land movements it would be impossible to determine an absolute increase or decrease in sea level.

Through the Sea Level Monitoring Project, Continuous Global Positioning System (CGPS) stations were established in most countries in the early 2000s. These stations, now known as Global Navigation Satellite System (GNSS) stations, are constantly receiving positioning information from the GNSS satellites orbiting the Earth, accurately monitoring movements of these stations. Surveyors then link these stations positioning information to the tide gauges to improve the accuracy of sea level readings.

This year, COSPPac is supporting new GNSS surveying equipment and training for surveyors in 13 countries. According to training officer Bart Thomas from Geoscience Australia, 'In some countries this equipment will be used alongside their existing survey gear, and for others it has been a timely donation, allowing them to complete projects they were previously unable to perform due to lack of equipment and training.'

The GNSS training has been well received so far. Romano Reo, Chief Surveyor at the Kiribati Land Management Division, reported that 'the training and equipment has provided valuable experience for the staff in modern surveying techniques.'



Participants at the COSPPac Regional Workshop in Melbourne.

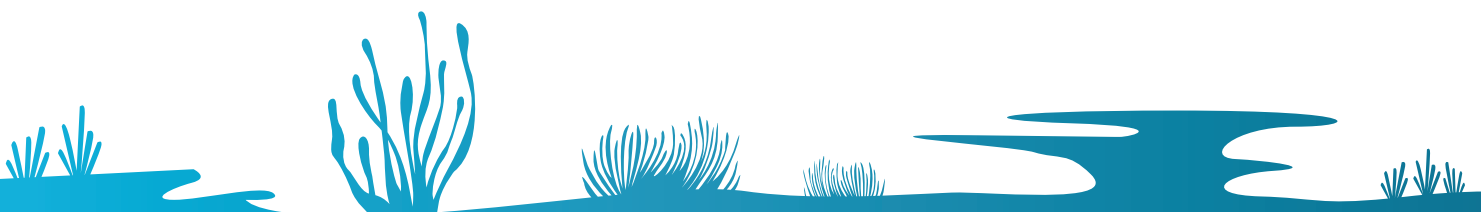
Pacific representatives shine at COSPPac Regional Workshop

In June, we were delighted to host some of our Pacific colleagues in Melbourne for the COSPPac Regional Workshop—the first such event that we've held.

Fourteen representatives from 13 of our Pacific partner nations gathered for two weeks of intense training and collaboration with the COSPPac team.

During the first week, participants worked step-by-step through the development of a Climate Communications Strategy for their agency, with everyone completing a draft strategy by the end of the week. The second week saw participants up-skilling and using COSPPac support tools to develop the beginnings of a scientific paper, abstract and presentation.

It was a challenging two weeks, with everyone battling icy winds and long days to try and get the most out of our time together, but it was very rewarding in the end! We could not have been more impressed by the dedication of all participants, and we were thrilled to learn so much from them along the way. Thank you to everyone involved!





Top: Sajiva Nand Sharma and Michael Shevchenko discussing training outcomes in Nadi, Fiji.

Centre: Joe Mala (Vanuatu) begins the rain gauge (TB3) calibration exercise during a field trip to the station at Yaqara.

Bottom: Sajiva Sharma (third right) shows Toni Fauena (Samoa, left) and Steven Bip (PNG, second left) how to compile a METAR (weather report predominantly used by the aviation industry).

Reflecting on the regional observers training workshop in Fiji

My name is Michael Shevchenko, and I joined the Bureau of Meteorology in 1990 as an Observer trainee. After working for 10 years as a field observer at some of the most remote weather stations in Australia, I became an observer training officer in the Bureau of Meteorology Training Centre. This has been a most enjoyable experience as I have always been passionate about teaching. Although most of my training is done in Melbourne, my duties have occasioned travel to a remote town or to one of Australia's islands to train observer field staff.

In March, COSPPac approached me to assist the Fiji Met Service in organising their Regional Observer Workshop in May 2014.

This would be my first overseas mission and, given the short notice, the COSPPac Admin team knew exactly what to do. I hastily packed my suitcase, transferred our training files onto my 2TB Seagate slim drive, and headed for the airport.

I found a very warm welcome in Fiji: The island lifestyle was a natural sanatorium, the warm climate was quite pleasant, and staff at the Fiji Met Service treated me like an old friend. I met the two technical training officers, Sosiceni Dumukuro and Sanjiva Nand Sharma. Sosi (head of the training section) created a new workspace in his office and we scrubbed his whiteboard clean, rolled up our sleeves and got to work.

Remember the old proverb, hard work always pays off? Well, we proved it true!

Within two weeks we had progressed from an impromptu training needs analysis to a complete timetable. The bulk of the sessions were to be delivered by the authorised training officer, Sanjiva, with special contributions from Andrew Harper (from NIWA, NZ), Simon McGree (from COSPPac), five meteorologists, two climatologists, a seismologist, and the local observations inspector.

The remaining two weeks before the start of the workshop were spent concluding the course administration and providing/creating training resources. Further advice was also given upon request to the senior training officer and to the director concerning the observations initial course. Of course, I made time for a scenic boat tour to the Yasawa islands and a bus tour to Suva; and both excursions left lasting memories of the wonders of Fiji.

The training workshop was opened by the Deputy Secretary for Transport and Energy, Malakai Tadulala, and the acting Australian Head of Mission Glen Miles on Monday 5 May.

Trainees included 14 delegates from 13 Pacific countries, with diverse levels of experience and responsibilities. All seemed united in their desire to learn the valuable skills required of meteorological technicians and to be able to transfer them back their colleagues upon their return to their home countries.

I wish them the very best, and thank COSPPac for this opportunity to contribute to their careers and future endeavours.



Elisabeth Thompson.

Elisabeth Thompson - COSPPac

Growing up in Darwin, Townsville and Brisbane, Elisabeth caught the travel bug at a very early age. She has lived and studied in Germany, the United Kingdom and Australia. After one year of studying music she redirected her academic focus towards Meteorology, Oceanography and Climatology. Elisabeth joined the Bureau in March 2012, working on the Pacific Island Climate Prediction Project (PICPP) and then COSPPac.

Elisabeth is both very sad and very pleased to say that she will be leaving in September to commence a PhD in archaeological science at the University of Oxford, studying past environmental changes and impact. She has learnt so much from her Australian and Pacific colleagues, and had some incredible experiences visiting partner countries. Elisabeth would like to thank you all for teaching her about your countries and your work, and hopes to see you all again in the future.



Lloyd Tahani.

Lloyd Tahani - Solomon Islands Meteorological Service

Lloyd Tahani is the Deputy Director of Solomon Islands Meteorological Service who assists the Director in administration and functions of the Division. He coordinates the climate application project on malaria in the Solomon Islands with COSPPac and is very much involved in the operations of the Climate Services team. With a background in computing, weather and climatology, Lloyd is very keen on developing these areas to harness and foster climate information appropriate to rural communities in the Solomon Islands. He loves spiritual music, sports such as soccer, rugby and basketball, fishing, and also loves meeting friends.



Australian Government

Tell us about your work on climate and sea level

Down here in Melbourne, we'd love to hear about the work you are doing in the sunny islands. If you have attended a terrific climate or sea level conference, done some interesting work with stakeholders, or even just broken a climate record recently, drop us an email to let us know about it! COSPPac_CDC_Unit@bom.gov.au.

