This bulletin is being issued for information only, and reflects the current situation and details available at this time. The Tuvalu Red Cross with the support of the International Federation of Red Cross and Red Crescent Societies (IFRC), has determined that extended external assistance is not required, and is therefore not seeking funding or other assistance from donors at this time. The current partners of Tuvalu Red Cross in the Pacific will support as required.

<click here to view the map of the affected area, or here for detailed contact information>

The situation

Parts of the Pacific island state of Tuvalu is in danger of running out of natural drinking water. The country is entering its second week of drought-induced state of emergency.

The government declared a nation-wide state of emergency on 28 September 2011 due to critical shortage of water. The decision followed a detailed joint assessment of two of the worst-affected islands, Nukulaelae island and the capital island, Funafuti, by the Tuvalu Red Cross Society, National Disaster Management Office and the Secretariat of the Pacific Community/Applied GeoScience division (SPC/SOPAC). The state of emergency was declared after existing desalination plants broke, exacerbating an already dire situation. The Government of Tuvalu desalination plants are producing about 38,000 litres/day (30,000 litres/day from desalination unit 1 and 8,000 litres/day from desalination unit 2).

Tuvalu depends primarily on rain water for most of its drinking water, which is collected and stored in storage tanks. Since early this year, the country has been hit by a prolonged period of dry weather attributed to the La Nina weather pattern. According to SPC, this is the third year it is happening and the past 12 months have been the second driest period in the 78 years that Funafuti has been keeping rainfall records. Over 330 people on Nukulaelae and 5,200 people on Funafuti have been severely impacted by the water shortage.

“The situation has become dire as we have not received adequate or sustained rainfall in over six months, and this is the third consecutive year that we have received below average rainfall in Tuvalu. The drought is
likely to continue into December as meteorologists have forecast very little rain until then," said Tataua Pese, Secretary General of the Tuvalu Red Cross Society.

Most households in Nukulaelae and Funafuti are either out of water or running on very low supply and are depending on community rationed water of 40 litres per family a day. Although exceptions are being given to large families and those with babies, 40 litres of water is hardly enough for an average family of nine in Tuvalu to use for drinking, cooking, washing, as well as personal and domestic hygiene. This is currently below international sphere standards. The capacity on the mainland Funafuti has been doubled with the arrival of a desalination unit that arrived this week on an military airlift.

The island staff nurse has conducted hygiene promotion activities and to date, the situation has been stabilized. She reports no malnutrition on Nukulaelae at present but majority of food supplies are all imported and expensive. Also on the outer islands the taro crops are dying due to the lack of fresh water. Another constraint is expensive boat petrol, which limits the number of fishing trips that the locals can do. All these factors could potentially contribute to a long-term food security issue.

**Red Cross and Red Crescent action**

The Tuvalu Red Cross Society (TRCS) has been at the forefront of responding to the emergency. The National Society had a joint assessment with the NDMO. One staff and two RDRT trained volunteers, in the first assessment to Nukulaelae, delivered 10,000 litres of water to the communal water tank, water containers and tarpaulin packs.

The New Zealand Red Cross (NZRC) has sent two emergency desalination units along with two relief delegates to the most acutely affected island of Nukulaelae. The units arrived in Funafuti on Monday and were deployed immediately to Nukulaelae and were operating at full capacity within three hours. Daily production has been up to 4,000 litres with an approximate total of 22,000 litres produced and distributed so far. The New Zealand Red Cross delegate has stayed on the island and conducted desalination operational training and maintenance to appointed TRCS volunteers. Three team leaders with mechanical experience were also trained as boatmen. Under each team leader, approximately 10 assistants were also trained to maintain the units. The units are currently running 24 hours a day and working on a rostered shift. Water quality testing has been undertaken by New Zealand army on Wednesday, 12 October and it is found that coliform bacteria were present in the supplies of one of the Funafuti desalination machines. TRCS has supplied a 4-litre stock of liquid chlorine to treat the water until further stocks arrived.

Due to the lack of resources and hardware on the island, innovative answers have been sourced to fix the breakdown. For example, Greg Johns, a NZRC relief delegate supporting TRCS, said, “we stripped a ballpoint pen to fix a brush spring on a water pump and seems to be working well”. Greg has now left the island and is confident that the team leaders have developed the skills to operate the machines at full capacity and maintain them. Simple print outs of operating procedures for desalination plant and maintenance schedules were developed and translated into local language for use for both units.

A 500-litre tank was mounted on a trailer on a tractor. The tank was pumped with water from the sea by the desalination pump and then salt water was used to spray the roads to reduce the dust and prevent respiratory illnesses.

Fifty Tarpaulins were also prepositioned on Nukulaelae for future emergencies.

On Funafuti, TRCS and the NZRC delegate have been attending coordination meetings with partners from government and other agencies to coordinate humanitarian assistance and avoid duplication and as effectively as possible.

TRCS has prepositioned 150 hygiene kits, three pallets of bottle water, 480 tarpaulins, 425 of 20-litre collapsible jerry cans, 600 of 10-litre jerry cans, and two of 5,000 bladder and tap stands for emergency response in future disaster situations.

It is expected that a large shipment of salt water soap/gel is to be distributed to schools on Funafuti to support safe hand washing practice in schools due to the fact that there is little fresh water at present in schools. Also, a limited amount of hand gel is distributed to the hospital for immediate use by the hospital staff. All relief items have been supported by New Zealand Red Cross.
An outer island assessment team is expected to depart on Friday with TRCS volunteers. Paepaeisle, an islet south of Funafuti, has also requested support. The island is short of water and can only collect their supply on a weekly basis rather than daily. Public works department representatives and two TRCS volunteers were dispatched on 12 October to assess the situation and distribute 280 litres of water to the two families living there.

Further, a "donor roundtable discussion" was convened in Funafuti on 13 October to ensure coordinated activity.

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**Contact information**

For further information specifically related to this operation please contact:

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**How we work**

All IFRC assistance seeks to adhere to the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGOs) in Disaster Relief and the Humanitarian Charter and Minimum Standards in Disaster Response (Sphere) in delivering assistance to the most vulnerable.

The IFRC’s vision is to inspire, encourage, facilitate and promote at all times all forms of humanitarian activities by National Societies, with a view to preventing and alleviating human suffering, and thereby contributing to the maintenance and promotion of human dignity and peace in the world.

The IFRC’s work is guided by Strategy 2020 which puts forward three strategic aims:

1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of non-violence and peace.