



Issues Paper No. 03 of 2013

A Review of the Water Supply Act No. 9 of 1985



Issues Paper No. 04 of 2013

**A Review of the Water Resources Management
Act No. 9 of 2002**

*You are invited to make a submission or comment on this
Issues Paper.*

Submissions close on 26 August 2013, 4:30pm.

About the Vanuatu Law Commission

The Vanuatu Law Commission was established on 30 July 1980 by the *Law Commission Act* [CAP115] and was finally constituted in 2009.

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Making Submissions

Any public contribution to an inquiry is called a submission. The Vanuatu Law Commission seeks submissions from a broad cross-section of the community as well as those with a special interest in a particular inquiry. Comments and submissions from the public are welcome.

The closing date for submissions is **26 August 2013**. There are a range of ways that a submission can be made and you can respond to as many or as few questions and proposals as you wish. You can write a submission, send an email or fax, or ring the Commission and speak to one of our staff.

You must indicate in your submission whether you wish your submission to be confidential as in the absence of such an indication your submission will be treated as non-confidential.



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Introduction and Background

Vanuatu comprises of over 80 islands, with sixty five of these island inhabited. The total population of the country in the last census was approximately 234,000. The majority (75%) of people live in rural areas and the main urban centers are Port Vila and Luganville on Santo Island.

With regards to the water resources and supply, both ground and surface water resources are utilized for domestic purpose. In urban areas the main water resource is groundwater whereas in rural areas, various sources such as wells, springs, rivers and rainwater are used. However, in most places outside of the main urban settlements, water supply systems are either quite poor, or do not exist. The quantity of water is inadequate in many cases, and water sources are subject to contamination. In the hot and dry season in particular it is common to have insufficient amounts of safe drinking water in the rural areas.¹

The current act that deals with water supply now warrants a review. In the last 27 years , water supply delivery involved two different government departments [Public Works Department- that addresses urban water supply and Department of Geology, Mines and Water Resources- that addresses rural water supply]. This review will find out whether or not this arrangement is good or whether it needs to change. The current Act must reflect the current working conditions and relationships and the future conditions of water supply.

In 2012, the Director of the Department of Geology, Mines and Waters Resources (DGMWR) requested the VLC to review the laws regarding the methods in which water is supplied, the tariff imposed on water supply, illegal tapping of water and Water Quality with emphasis on the need for consistent monitoring, water safety planning and water use efficiency for all water supply systems. The review is to focus on both rural and urban areas. The Director referred to the Water Supply Act 9 of 1985 and the Water Resources Management Act 9 of 2002, with other laws that address the issue of water supply.

This issue paper will look at the Water Supply Act No. 9 of 2002 and identify the issues that concern the water supply situation within the country now. These issues will be highlighted and findings made will be used as recommendations to amend the legislation.

¹ P.A. Kingston 'Surveillance of Drinking Water Quality in the Pacific Islands: Situation Analysis and Needs Assessment Country Reports' (2004) www.vanuatu.usp.ac.fj (Accessed 11/02/2013)

ISSUE ONE

Water supply managed by two departments

Water supply falls under several authorities in Vanuatu. For the last 27 years, the water supply delivery has involved two different government departments, namely, the Public Works Department, who is responsible for the urban water supply, and the Department of Geology, Mines and Water Resources who is responsible for delivering rural water supplies.

In accordance with section 22 of the *Water Supply Act*, the government has contracted a French-owned private utility, UNELCO, to manage and operate the Port Vila water supply system. This had been done for the past 19 years.

The Act is geared toward metered water supply systems and gives power to the Director of Public Works Department to administer the Act. With the aid of UNELCO, Port Vila is able to have a metered water supply. The Public Works Department supplies water to the five provincial headquarters around Vanuatu of which the major one is Luganville. However, since the rural water supply is under the responsibility of the Director of the Department of Geology, Mines and Water Resources, the water system in the rural areas is un-metered. Most water supplies in the rural areas are obtained from surface water, rainwater and groundwater and are of some concern particularly in small islands during periods of drought and seasonal rainfall fluctuations.

This makes the water supply system unreliable for the rural areas, thus putting the people living in rural areas at a disadvantage. The involvement of two departments, looking after two different areas of water supply, does not help in solving this dilemma as there is often lack of co-ordination to develop projects to deal with this issue.

In Fiji, the Director of Water and Sewerage in the Public Works Department has the overall responsibility for the water supply. The Mineral Resources Department (Ministry for Lands & Mineral Resources) assists in the planning, assessment and development of ground water resource. Other Ministries involved in the water sector include the Ministries of Fijian Affairs and Regional Development, Ministry of Health and the Ministry of Primary Industries. This wide involvement sometimes leads to lack of co-ordination of development projects. Responsibility for water resources development and management is vested in a number of government ministries and statutory authorities, each with specific interest. There are procedures for areas of common interest but these are at the project implementation and not at policy level. The need of a comprehensive national policy or strategy for better management of water resources is often discussed.²

Should these two departments work collaboratively to amend the existing Act to reflect the current working conditions and relationships now and into the future?

Or should the responsibility of managing the water supply system be given to just one department and any legislative provisions or powers given to this department with regards to water supply, be applied in both the rural and urban areas? If the water supply system was to be placed under the PWD, then as provided for in the Water Supply Act 9 of 1985, should all water supplies be metered in both rural and urban areas?

For Vanuatu, should a comprehensive national policy or strategy for better management of water resources be considered as well?

² SPREP 'Proceedings of the Pacific Regional Consultation on Water in Small Island Countries-Country Briefing Papers' www.sprep.org/att/IRC/eCOPIES/Countries/Fiji/23.pdf (Accessed 12/02/2013)

In PNG Provincial Governments have been set up for the different provinces and under the *Provincial Government Administration Act 1997*, they are required to first establish the basic minimum needs for the development of the urban and rural area of their respective provinces relating to the maintenance of roads, bridges and infrastructure including urban roads, public facilities and the environment, health programs and hygiene, education facilities, safe housing and safe and accessible water.

In Australia, its Constitution states that natural policy, including that relating to water, is the responsibility of its different states. The institutional arrangements for service provision vary among States and Territories. For example, in parts of Queensland and Tasmania, the local government is responsible for the provision of water services. In New South Wales, Victoria and Southeast Queensland, there are separate municipal retail service providers and state bulk service providers that cover large parts of each state. A National Water Commission was also formed and this is an independent statutory authority that provides advice to the Council of Australian Governments and the Australian on national water issues. They are responsible for providing independent assurance of governments' progress on water reform.³

Should the management of contamination and the pure quality of water supplies remain with the Ministry of Health?

Should this model also be followed by Vanuatu, in order to get a better understanding of the people's needs and wants with regards to water issues? Or is it best left to the department responsible for water issues to handle?

Since Vanuatu is divided into 6 provinces and funds and resources are limited, would it be more practical to leave the responsibility of water supply to the six provinces as in Australia and PNG? Provided that they come under the umbrella management of the Public Works Department, and who will also lend its services to the six provinces in terms of the efficient management of the water supply system?

In Australia, the National Water Resources Advisory Committee established under the *Water Resources Management Act 9 of 2002* may also be used to provide advice on national water issues.

PNG has taken a step further by initiating a "bottom up" approach to planning, based on specific needs for each community. This was done by the Eastern Highlands Provincial Government, who brought all the councilors together to attend a weeklong workshop, during which each one was given the opportunity to tell others about the specific problems faced by their people. They were then given the opportunity to identify priority projects for their respective communities. It was explained that public servants used to decide for the people in previous years, but this time it was decided that the people should be allowed to decide for themselves.

³ Australian Government 'National Water Commission' <http://www.nwc.gov.au/organisation/role> (Accessed 13/02/2013)

ISSUE TWO

Updating of water tariff

The Water Supply Act provides for the procedures in getting connection to the water supply and the costs and liabilities associated with these procedures. The supply of water is regulated through the charging of water by meter readings. Meter readings can only be taken by a person authorized in writing by the Director of Public Works.

Since the water supply system is under the management of two departments, the water tariff imposed in the rural and urban areas differ. In Port Vila, UNELCO sets the water tariff while the water tariff imposed in the provincial headquarters is set by the Act. In accordance with the contract that it has with the government, UNELCO is required to send out its price adjustment for water once every half a year.

However, this is not the same for the other urban and rural areas. In Luganville, the water prices have not changed since 1991 even though operating and maintenance costs have risen significantly. This has subsequently led to under-investment in the water network, resulting in a decrease in the quality of water. Rural water supplies are often donor-funded and managed and operated by communities.

In November 2012, the Public Works Department submitted a request to the Utilities Regulatory Authority to conduct a review of water prices in Luganville. This resulted in a new proposed tariff, which was obtained after an extensive research and consultation that was conducted in Luganville. However, the Public Works Department has proposed some conditions on the implementation on the new tariff and one of these conditions is that no changes will be made to the tariff in 2013 and will only come into effect on 1st January 2014.

While this may be seen as a step forward for updating water tariffs, this may have implications on the other provincial headquarters. As previously stated, the Public Works Department is responsible for the water supply to the provincial headquarters and Luganville is its major area of supply. With this new updated tariff in Luganville, the same may also be done to the other provincial headquarters.

This may be problematic as any new water tariff may be considered as high for the people living in these provinces. Based on the research conducted in Luganville, the new tariff was calculated according to the number of people living there and the assumed growth rate in order to determine water consumption. Taking this into consideration, more and more people are moving from rural areas to urban areas and this alone justifies the need for a new tariff being imposed to reflect the current conditions in the urban areas. However, with more people leaving the rural areas, water consumption may be lower in the rural areas and the imposing of a higher new tariff for the other provincial headquarters will be unfair.

Should the laws be amended to ensure that any new tariff implemented should reflect the current conditions and circumstances of each province?

Or should standard water tariff rate for all provincial headquarters be set?

Should a standard tariff rate be used for all the provinces and all urban centers or should it vary widely in their structure and level between urban centers and provincial headquarters and or between user categories (residential, commercial, industrial or public buildings)?

ISSUE THREE

Incorporating a provision in the Act to re-inject water tariff/revenue

Should the law be amended to incorporate a provision whereby a portion of the water tariff re-injected back to the responsible authority to assist with new water extension/development and the maintenance of the water system?

Or should this be left to the Utilities Regulatory Authority (URA)?

As a party to the UN General Assembly, which recognizes the human right to water and sanitation, should this section be removed or changed i.e. make it compulsory to ensure that at least each province has a proper water supply system in the provincial headquarters?

Should a provision be provided to make water use efficiency planning compulsory so as to ensure that there is a water use efficiency plan? Or is this a policy matter to be left to the Department of Public Works, geology Mines & Water Resources, UNELCO and the URA to deal with?

With the establishment of the Utilities Regulatory Authority, one of its current work programs consists of setting aside a share of the tariff revenues for investment in new assets, in particular grid extensions and new connections. These funds are made available to the concessionaire upon submission of investment proposals to the government, verification of their compliance with the objectives of the URA and approval or technical feasibility and economic efficiency⁴.

Fiji faces major financial constraints in developing, improving and expanding their water supply systems. In 2010, the Water Authority of Fiji took over the responsibilities, functions and operations of the Water and Sewerage Department. The Water Authority of Fiji is responsible for the implementation of all major and minor projects funded by the Government of Fiji and donors such as the Asian Development Bank. The Project Management Units is the body responsible for this implementation and there are 4 different sections under this Unit, each with a specific role to play in the overall running of all Capital Project Works. These 4 sections are Capital Work Projects, ADB Funded Projects, Flood Recovery Projects and the Land Management Unit⁵.

In the current *Water Supply Act* of Vanuatu, there is no provision to provide for a portion of the water tariff/revenue collected to be re-injected back to the responsible authority to assist with new water extensions/development and the maintenance of the water system. There is no responsibility on water authorities or UNELCO for maintaining and improving consistent and good quality water supplies, although section 17 protects the Government from liability. There is lack of the necessary funding that is much needed for operation and maintenance of the water network; and above all require that at least part of the revenue collected be re-directed for the water system for future investment. Furthermore, one of the constraints and challenges that this lack of funding poses is the provision of adequate and efficient infrastructure for the supply of water.

⁴ Vanuatu Utilities Regulatory Authority (URA) 'Proposal for PRIF Support' March 2010 www.theprif.org (Accessed 10/02/2013)

⁵ Water Authority of Fiji 'Project Management' <http://www.waterauthority.com.fj/en/history/> (Accessed 15/02/2013)

The lack of financial resources for the development and maintenance of the water supply system creates a lot of constraints. One of these constraints is that of the water use efficiency planning for all the water system. Water Use Efficiency simply put is using water without waste.⁶Lack of funding has led to all departments' concerned being under resourced and as a result, there is no water use efficiency planning for all the water system. Furthermore, under the current Act, where there is a failure to supply water, the Government will not be held liable for this failure.

The delivery of water supplies and sanitation services in many Pacific countries currently falls well short of Millennium Development Goal targets.

Samoa and Nauru have established and implemented policies on Integrated Water Resources Management (IWRM). The IWRM basically manages both water and land resources through improved sectoral collaboration and partnership between the government functions and civil society.

There is no legal provision for water use efficiency planning in all water supply system.

⁶ SOPAC 'Water, Sanitation and Hygiene: Pacific Islands Applied Geoscience Commission'
<http://www.pacificwater.org/pages.cfm/resource-center/water-tools/iwrn-toolboxes-1/water-use-efficiency-planning.html> (Accessed 18/02/2013)

ISSUE FOUR

Illegal Tapping

Illegal tapping or water theft has become an issue and is now a problem for Luganville water supply as well as for a few rural water supply systems. This has also led to high levels of water losses.

Currently, there is no legislative provision that deals with this issue and thus, no penalty.

In Australia, the 6 different states have heavy fines for those who are found to be illegally tapping into the water system. In New South Wales, the *Water Management Act 2000* was amended in 2008 to strengthen compliance and enforcement powers in response to water theft. This Act makes it an offence for an individual to take water without a license and the penalty is clearly set out. Individuals could be fined up to \$1.1 million and jailed for two years while corporations that offend may face fines of up to \$2.2 million and \$264,000 for each day the offence continues.

Should such a provision come under the Water Supply Act or the Water Resources Management Act?

What kind of penalties should be imposed and just how heavy should these fines be?

Should the same penalty apply to both individuals and companies or should they be separated?

How should these penalties be enforced?

Should the issue of all Government licences and permits, especially for waste management and mining, only be approved when all outstanding fines and penalties have been paid by a business or individual?

ISSUE FIVE

Water Quality

The importance of safe drinking water for health and development in the Pacific Island Countries has been reflected in many regional action plans and policies. Through the Regional Action Plan on Sustainable Water Management, Pacific Island countries outlined actions that were needed to achieve sustainable water management through collaborative efforts by water sector authorities and inter-sectoral partners⁷.

The WHO workshop on Drinking Water Quality Standards and Monitoring in Pacific Island Countries developed a Framework for Action on Drinking Water Quality and Health in Pacific Island Countries, designed to support the implementation of drinking water quality actions envisioned in the Regional Action Plan⁸.

Protection of quality water supplies is provided under the Public Health Act with prison terms of up to 5 years and fines of up to 1 million VT may be imposed for polluting water or interfering with water tanks or supply equipment.

Water and sanitation, particularly for rural areas, have been absent from high level planning in Vanuatu for some time. Sanitation especially has particularly been neglected. Government agencies responsible for water supply planning and implementation face resource constraints in terms of both skilled staff and budget. The sector depends on the timely adoption of the National Water Resource Strategy to give legal status to the country's peak water body, encourage cross-sectoral co-ordination and spur the formation of the Department of Water. Currently the sector is highly fragmented⁹.

Data on coverage in Vanuatu is unreliable. Below is a table showing data that was compiled by WHO/UNICEF Joint Monitoring Program (JMP) for 2008 with regards to access to improved water and improved sanitation. The Joint Monitoring Program's national coverage figures generally correlate with findings from the 2009 National Population and Housing Census but the government data differs slightly, with much lower rural estimates¹⁰.

⁷ SOPAC 'Water Safety Plan- Water Supply Description Assessment: Vanuatu' (2006)

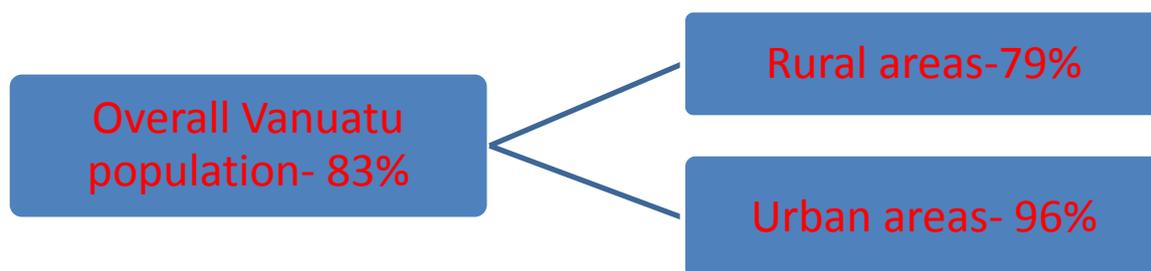
<http://www.pacificwater.org/userfiles/file/Vanuatu%20-Water%20Supply%20System%20Assessment-new.pdf>
(Accessed 13/02/2013)

⁸ Above n8

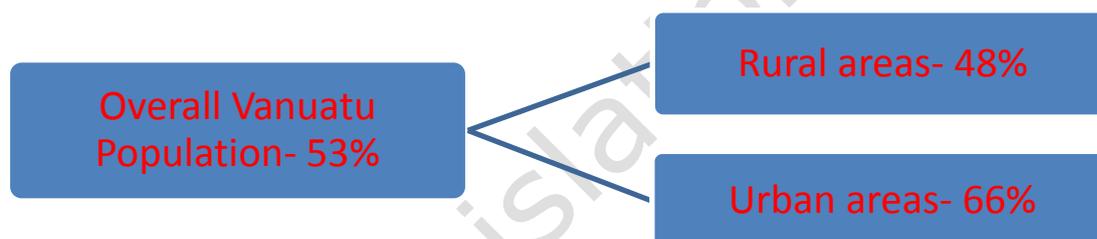
⁹ ISF-UTS (2011) 'Vanuatu Water, Sanitation and Hygiene Sector Brief' prepared for AusAID by the Institute for Sustainable Futures, University of Technology Sydney, October 2011 www.uts.edu.au (Accessed 15/02/2013)

¹⁰ Above n10

ACCESS TO IMPROVED WATER



ACCESS TO IMPROVED SANITATION



In Vanuatu both ground and surface water resources are utilized for domestic purpose. Groundwater has traditionally been exploited by the construction of hand dug wells in low lying or coastal areas. These open structures are prone to contamination and often contain water that is unsuitable for drinking.

Animal and human excreta are the main source of pollution of water supplies in Vanuatu and much of the surface water is exposed to animal and human wastes and other contaminants. This is due to the lack of source protection, and from waste water runoff during floods or heavy rainfall. Domestic wastewater is collected in septic tanks and there is no control mechanism on the tanks to check whether they are properly built and operated. In rural areas, water sources are open to bacteriological contamination originating from human or animal source. Due to the volcanic nature of the islands, naturally occurring chemical substances may also be a source of chemical contamination.¹¹

¹¹ Above n8

In addition, town planning has been deficient and water pollution is serious due to the overall lack of a domestic sewerage system and poor management of many individual septic tank systems.

Water quality in both Port Vila and Luganville is generally very good with only calcium hardness to note. The only treatment is chlorination. In rural areas, most water supplies are obtained from surface water, rainwater and groundwater and are of some concern particularly in small islands during periods of draught and seasonal rainfall fluctuations. There were six existing laboratories in Port Vila and Luganville which were: UNELCO, Ministry of Health, Vila Central Hospital, Department of Geology and Mines, Department of Public Works in Port Vila and the Northern District Hospital in Luganville. However these labs, with the exception of UNELCO, have not been fully operational and utilized due to many factors. These labs had problems with the expired consumables, low volume of water testing and insufficient operator skills¹².

The Department of Geology, Mines and Water Resources Laboratory only tests and monitors rural drinking water when there is a review of the health statistics data. There is a still lack of the consistent monitoring of water supply.

There is no legislative provision that provides for the compulsory testing and monitoring of the quality of the water supply. Under the Water Resources Management Act, the Director has the power to take water samples for testing. It is virtually left up to the body responsible for the water supply, such as UNELCO in Port Vila, to decide when and how to test the water quality.

In PNG, the Environment (Water Quality Criteria) Regulation 2002 sets WHO standard criteria for pollutants released into freshwater and sea. The Public Health (Drinking Water) Regulation provides an indication of acceptable drinking water standards, whether from a supplier or from natural resources.

In one report conducted by SOPAC on the Water Supply Description Assessment in Vanuatu, it was recommended that the Ministry of Health should be appointed as the National Surveillance Agency giving them the necessary administrative power to perform surveillance activities. These surveillance activities include sanitary inspections and water sampling in urban and rural areas through the Provincial Health Offices. It was further recommended that the environmental Health Unit (EHU) should be responsible for surveillance activities and the overall supervision of the water quality aspects, and should develop a monitoring scheme for a short term including the chemical parameters to be monitored, sampling frequencies and inspection regimes¹³.

Should there be a provision inserted to provide for compulsory water testing? If so, how often should this testing occur?

Who is to do the testing, e.g. specialized personnel such as environmental health offices and other authorized officers appointed under the Public Health Act?

Furthermore, should the laws also be amended to provide for acceptable drinking water standards, as in PNG?

Should all these be addressed in the amended legislation? Should these powers also be included in the Public Health Act so that there is no duplication or clash between all of these laws?

¹² Above n8.

¹³ Above n8.

ISSUE SIX

Water Safety Planning

In 2005, the Water Safety Plans was introduced as the WHO's new risk assessment/risk-management approach to ensuring safe drinking water. A 'Framework for Action on Drinking Water Quality and Health in Pacific Island Countries' was completed and endorsed in the meeting of Pacific Islands Health Ministers in Samoa, two months later. This has led to three Pacific-wide water quality programs being proposed and funded, with Vanuatu being selected as one of the four Pacific Island Countries to benefit from this. Overall, this is a new approach and has only been implemented in at least 4 Pacific Island Countries.

Draft Water Safety Plans were drawn up for Port Vila and the Mele-Rural Supply and there was also a Draft National Implementation Plan. In 2007, Luganville and Mele conducted its first ever Water Safety Plan review and this resulted in a Water Safety Plan being finalized and the compilation of an improvement schedule. However, these are the only two areas in Vanuatu that has had any Water Safety Plan drawn up.

Should the URA provisions be taken as providing for this gap or are the provisions in the URA too broad and general?

Should the issue of water safety planning in all water supply systems, also be provided for under the Water Supply Act?

Or is this a policy matter to be left to the Departments of Public Works, Geology Mines & Water resources, UNELCO and the URA to deal with?

The Utilities Regulatory Authority Act allows the Authority to issue safety standards in relation to the safety of a regulated service in any place. It also provides for a safety inspector to enter any premises and take samples of any substance for the purpose of testing. The Authority may also issue reliability standards in relation to the reliability of a regulated service in any place.

There is no provision in the Water Supply Act to provide for any safety or reliability standards with regards to water.

Opinions and Submissions

Any opinions expressed in this Paper do not represent the policy position of the Government of Vanuatu, the Department of Geology, Mines and Water Resources or the Vanuatu Law Commission.

You are invited to make a submission on any matter raised in the Paper or anything you think is relevant to the statistics and census laws in Vanuatu. Information on where and how to make submissions is found on page 2 of this Paper.



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Introduction and Background

The issue of water supply, especially with regard to good and clean water being available to the people, is not a new issue in the Pacific even though the majority of the Pacific islands are not lacking in water resources. With lack of resources, both financial and otherwise, and also lack of coordination between the numerous departments that have the responsibility of looking after the water supply, the quality of the water supply in most of the Pacific island countries is not as high. This is further complicated by the lack of detailed legislative provisions to help monitor, regulate and manage water resources. Most of the Pacific Island Countries, if not all, do not have a comprehensive or detailed legislation dealing with water resource management.

Vanuatu comprises of over eighty islands, with sixty five of these islands inhabited. The total population of the country in the last census was approximately 234,000. The majority (75%) of the people live in rural areas and the main urban centers are Port Vila and Luganville on Santo Island.

With regard to the water resources and supply, both ground and surface water resources are utilized for domestic purposes. In urban areas the main water resource is groundwater whereas in rural areas, various sources such as wells, springs, rivers and rainwater are used. However, at most places other than the main urban settlements, water supply systems are either quite poor, or do not exist. The quantity of water is inadequate in many cases, and water sources are subject to contamination. In the hot and dry season in particular it is common to have insufficient amounts of safe drinking water in the rural areas.¹⁴

One of the Millennium Development Goals that Vanuatu has set out to achieve is to halve the proportion of people without sustainable access to safe drinking water and basic sanitation, by 2015. While it has been reported that Vanuatu is on track to achieve this MDG target, there hasn't been a recent significant improvement in access to improved drinking water in household and rural areas.¹⁵

In 2012, the Director of the Department of Geology, Mines and Waters Resources (DGMWR) requested the Vanuatu Law Commission to review the laws regarding water rights (taking into consideration United Nations declarations on water rights), the identifying of river buffer zones, the expansion of the National Water Advisory Committee (NWRAC) along with the establishment of Provincial Water Advisory Committee and a provision for the enforcement of Declared Water Protection zones and its surveillance. The Director referred to the Water Resources Management Act 9 of 2002 and the Water Supply Act of 1985 along with some other relevant laws namely; Land Lease Act, Environmental Protection and Conservation Act, Physical Planning Act and the Utilities Regulatory Authority Act.

This issues paper follows a request made by the Department of Geology & Mines to identify the best ways to improve the current legislations.

¹⁴ P.A. Kingston 'Surveillance of Drinking Water Quality in the Pacific Islands: Situation Analysis and Needs Assessment Country Reports' (2004) www.vanuatu.usp.ac.fj (Accessed 11/02/2013)

¹⁵ Prime Minister's Office 'Millenium Development Goals 2010 Report for Vanuatu' (September 2010) [://www.undp.org/fj/pdf/MDG%20 http Report/Vanuatu MDG.pdf](http://www.undp.org/fj/pdf/MDG%20http%20Report/Vanuatu_MDG.pdf) (Accessed 7/03/2013)

ISSUE ONE

Ownership of water- Water Rights

While Vanuatu is not a member party to the Convention on Economic, Social and Cultural Rights (ICESCR), it is a member of the General Assembly and on 28 July 2010, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realization of all human rights. The Resolution calls upon States and international organizations to provide financial resources, help capacity-building and technology transfer to help countries, in particular developing countries, to provide safe, clean, accessible and affordable drinking water and sanitation for all. In addition, Vanuatu is also a party to some UN Conventions that recognize the right to water, namely CEDAW¹⁶ and CRC¹⁷.

Furthermore, Vanuatu is a member of the Pacific Integrated Water Resource Management program which aims to implement applicable and effective Integrated Water Resource Management and Water Use Efficiency plans based on best practices and demonstrations. The Integrated Water Resource Management has been highlighted as part of the Millennium Development Goals and the Pacific Regional Action Plan on Sustainable Water Management, and has been put forward by the Pacific Island Government as the roadmap for securing water for sustainable development.

The Constitution states that Ni-Vanuatu indigenous custom owners collectively own all land in the country in perpetuity. The Water Resources Management Act allows for custom owners to continue using the water situated on their land if no other custom users or lawful users of the same water resources are adversely affected by that use and the use of that water is for a customary use. This, in an indirect way, can be taken as a general definition of water rights in Vanuatu legislation. However, it does not state or set out just exactly what these rights entail, for example, what activities are permitted or not permitted with this right. The *Mines and Minerals Act 1986* provides the Minister with the power to make regulations with respect to water rights and the use of water.¹⁸ However, these provisions have yet to be utilized. In addition, if any lease made under the Land Leases Act grants the right to use any water, the lessee is entitled to use any water on, adjacent to or under that land and must apply to the Director for the right to use water for any other purpose. Furthermore, there is no proper definition of the term water right, what this right entails and the limits associated with these rights.

In PNG sections of the *Environment Act*, as highlighted by the *Ramu Nico* case, gives effect to the principle of precaution and preventative action, which provides that an environmental permit confers on the holder the right to carry out the activities specified in the permit in accordance with the conditions imposed under the permit. The permit in other words enables and creates an opportunity for *preventative* measures or precautionary conditions to be included in the permits when issued so that holder of such permits will not only carry on their activities but also have due regard of the conditions set out under the permit either precautionary, preventative or both.

¹⁶ Art.14(2) (h): “to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communication”

¹⁷ Art.24(2) (c): “to combat disease and malnutrition, including within the framework of primary health care, through, *inter alia*, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risk of environmental pollution”.

¹⁸ *Mines and Minerals Act 1986* [Vanuatu], section 88(2)(w)

Should the law be amended to provide a more specific definition for water right which brings together the reference elsewhere in the Act to occupiers and customary rights and water use? Should this definition also provide for the limits that a landowner has with regards to water, such as with what has been done in Australia, by listing out the different rights that a custom owner of land occupier has and the types of activities that are permitted and restricted?

Should environmental permits given to holders provide also for the principle of precaution and preventative action, as in Papua New Guinea? If so, should the laws be amended to provide for this or should this be left to the relevant department's discretion?

Is there a need for the law to state that where water rights are illegally breached or limited, the customary owners or occupiers may seek compensation? Should the laws be amended to include a provision that deals with compensation? If so, what should be provided for under this provision? Should it follow a similar approach as the Western Australian approach where there should be no compensation subject to the limitations identified above? Or should any illegal interference with water rights be compensated on application to the Supreme Court?

However, there is no underlying policy or legislation that supports this and it is left to the Department of Environment and Conservation's discretion to consider environmental law principles in assessing environment impact statements and issuing permits.

In Australia, access to and use of water is governed by statutory rights administered by state and territory governments. There are different types of water rights and their properties, including tradeable water rights or water products. Water access entitlement or water right is defined under the Australian National Water Initiative as a perpetual or ongoing entitlement to exclusive access to a share of water from specified consumptive pool as defined in the relevant water plan. The different water rights included river right, stock and domestic right, water delivery right, irrigation right and native title right. While the other rights are tradeable, the native title right is not tradeable.

The legal position in Western Australia in relation to compensation is provided for under its Town Planning and Development Act 1928. This provides that claims for compensation can arise only where a property is injuriously affected by the making of a town planning scheme. It further provides that land is not deemed to be injuriously effected unless the town planning scheme permits development on that land for no purpose other than a public purpose or prohibits wholly or partially any use at all of that land.¹⁹ This includes land that is declared as a Water Protection Zone. Two methods of compensation have been identified and these are direct payments to landowners and indirect payments to landowners.²⁰

Another issue is compensation. This issue arises mainly from the limitations that are imposed on the use and development of the land.

¹⁹ Western Australian Planning Commission 'Statement of Planning Policy No. 4.1- State Industrial Buffer Policy' http://www.planning.wa.gov.au/dop_pub_pdf/spp4_1.pdf (Accessed 22/02/2013)

²⁰

ISSUE TWO

Definitions of River Buffer Zones

River areas are places where land, water, vegetation and animals interact. The current laws which provide for water protection zones do not provide a definition of river buffer zones and how these zones operate. There is also a failure to specify what activities are permitted and what is not permitted. For example, prior to the Tagabe river being declared as a Water Protection Zone, communities would make use of the river frequently for domestic purposes, such as bathing or washing. People and animals had easy access to the river.

Rivers and creeks are quite common in Vanuatu, especially on the larger islands. The flow is seasonal, and often villages are situated close to them. These sources carry water from inland spring sources to coastal area and often the quality of surface water is contaminated from upstream. This may be from humans or animals using the creeks or its vicinity for drinking or defecation²¹.

Under the Environmental Management and Conservation Act, the construction of any single family residential building in an approved residential area must be at least 30 metres from any river. While this is legally provided for, in practice, it is not strictly followed or enforced by enforcement officers, chiefs and community leaders. This leads to contamination of river water sources. The lack of any detailed legislative provisions for river buffer zones makes it difficult to monitor and ensure good water safety and quality in both rural and urban areas.

In Australia, the principal legislation for the protection of the rivers, springs and their riparian environments is the Water Act 2000. This Act applies to all lands (Crown and private) defined as being within the high banks or a stream or lake, as well as imposing limited controls on the land outside these features. The Act also grants the owner or occupier of lands adjoining a non-tidal boundary watercourse or lake, certain rights over the lands within the watercourse or lake to the water's edge. Specifically, this Act provides for the protection against disturbances that may adversely affect the stability of bed and banks of streams and lakes, for example, the clearing of native vegetation, excavation and placement of fill²².

Should Vanuatu's laws be amended to provide for definitions of river buffer zones for both rural and urban settings to provide better protection over Vanuatu's water zones or river environment? Should these amended laws also include the type of activities are permitted or not permitted as in Australia also?

²¹ SOPAC 'Water Safety Plan- Water Supply Description Assessment: Vanuatu' (2006)

<http://www.pacificwater.org/userfiles/file/Vanuatu%20-Water%20Supply%20System%20Assessment-new.pdf>
(Accessed 13/02/2013)

²² Queensland Riparian Legislation Info 'Appendix A- Legislation related to Management of Riparian Lands'
<http://www.malenyvoice.com/obiobi/resources/Old-Riparian-Legislation-Info.pdf> (Accessed 20/2/2013)

ISSUE THREE

Expansion of National Water Advisory Committee (NWRAC) and Establishment of Provincial Water Advisory Committee

Under the *Water Resources Management Act*, the Minister has the responsibility to appoint members of a National Water Resources Advisory Committee. The Director of the Department of Geology and Mines is the chairperson of this Committee and the Minister may appoint up to 5 additional members on the recommendation of the Director. Currently, the committee's membership is only 5 members.

The Committees task includes providing advice to the Director on matter relevant to the protection, management and use of water, overseeing the proper planning and development of urban and rural water supplies. It must operate in such a way as to ensure co-ordination of water resource management activities and do such other tasks as are agreed with the Director. The Committee is the nation's peak water body and the main mechanism for cross-sectoral coordination of the sector towards the Integrated Water Resource Management. The Committee has a low profile and meets infrequently.

Considering the large task that this body has with regards to how the water resources in Vanuatu are to be managed, should the laws be amended to provide for the appointment of more qualified and environmentally trained persons to help in carrying out the Committee's tasks?

Vanuatu does not have any legal established bodies or committees to overlook the water resources management in the rural areas. The installation of rural water supply systems is normally financed by bilateral donors through the Government Investment Program. Projects are designed by the Rural Water Supply Section in the Department of Geology, Mines and Water Resources but a recent review reports that this section has a full time staff of only nine persons- with six based in the provinces and only three in the Head Office.²³

The Department's capacity is limited to providing for six projects per year. This means that donor agencies and non-government organizations fill the gap by providing rural water infrastructure through individual schemes outside these government arrangements. The ongoing maintenance and operation of rural water supply systems is undertaken by communities and, in theory, is financed by user fees collected by the village water committees, although the success of this arrangement varies from village to village.²⁴

²³ ISF-UTS (2011) *Vanuatu Water, Sanitation and Hygiene Sector Brief*, prepared for AusAID by the Institute for Sustainable Futures, University of Technology Sydney, October 2011.

²⁴ Above n8

Vanuatu's National Water Strategy has a water advisory committee from each province represented on the NWRAC. SANMA is the only province that has a committee similar to that of a Provincial Water Resource Advisory Committee. SHEFA has a committee that restricts itself to groundwater and surface water management, specifically that of Tagabe River. These provincial committees do not yet have legal recognition under the Act, unlike the village water committees which are recognized.²⁵

The Vanuatu Law Commission has recently recommended that health committees and hospital councils be officially recognized in health laws to ensure that local health issues are properly dealt with at provincial and village level.

Should the laws be amended to provide for the legal establishment and recognition of provincial WRAC, with its TOR? This would be a similar body as that of the NWRAC but this would be at the provincial level.

Should provincial WRAC be required to include provincial health representatives and representatives of chiefs, women and medically trained professionals?

Or should the WRAC be required to meet regularly with health committees in their provinces to ensure that a consistent and effective water resources policy is followed in each province?

²⁵ Above n8

ISSUE FOUR

Water Protection Zones

Should the laws be amended to provide for the enforcement and surveillance of Water Protection Zones through Department officers, authorized offices and Provincial Water Resource Advisory Committees, as South Australia has done?

Should the amended laws also provide for penalties to deal with any offences committed under this section, so as to help with the enforcement of these laws?

The Water Resources Management Act provides that a Water Protection Zone may be declared. This is done by the Director for any of the purposes as provided for by the Act. This type of zone can be urban or rural. To date, there is only one area in Vanuatu that has been declared as a Water Protection Zone and this is the Matnakara Water Protection Zone, and it protects the quality and quantity of the Tagabe River which is the only current water zone for Port Vila and nearby settlements.²⁶

A Water Protection Zone is also being established for Luganville although this is not yet gazetted. The main water intake is being relocated and the protection zone will then be redefined and gazetted. Compensation has already been given to landowners who have been relocated from within the protection zone. Water Protection Zones have not yet been started in Malekula or Tanna but it is known that farmers are already living within the water catchment. Protection Zones for all water supplies need to be

defined and gazetted quickly to prevent further settlement and farming within these catchments.²⁷

While the Act provides for the declaration of a Water Protection Zone, it does not deal with enforcement and surveillance. While a Water Protection Zone may be declared, it does not have much effect if it is not being constantly monitored and surveyed by Department officers and Provincial Water Resource Advisory Committees to ensure good and clean water quality. A provision for enforcement may be just the push that is needed to ensure that a Water Protection Zone is declared to protect the water catchments that provide water to the different rural and urban centres.

In South Australia, the Environment Protection Act 1993 and the Environment Protection (Water Quality) Policy refer to and set up the Water Protection Areas, which are defined for the purpose of providing special environmental protection. Prior to the authorization of the policy, there was no State legislation that enabled water bodies to be protected on the basis of their environmental value. This policy goes beyond the general environment duty by setting down specified obligations for listed industries. It also imposes obligations on the community and seeks to manage and control diffuse sources of pollution. The lack of a consistent State-wide approach to the management of water quality posed the risk, that over time, the quality of South Australian water would be degraded leading to economic, social (including public health) and environmental impacts²⁸.

²⁶ Declaration of Matnakara Water Protection Zone (Tagabe River) (Cap 281) Vanuatu

²⁷ SOPAC 'Sustainable Integrated Water Resources and Wastewater Management in Pacific Island Countries- National Integrated Water Resource Management Diagnostic Report Vanuatu' (2007) <http://www.sprep.org/att/IRC/eCOPIES/Countries/Vanuatu/29a.pdf> (Accessed 4/03/2013)

²⁸ Australia Environment Protection Authority 'Environment Protection (Water Quality) Policy and Explanatory Report 2003' http://www.epa.sa.gov.au/xstd_files/Water/Report/epwq_report.pdf (Accessed 7/03/2013)

Opinions and Submissions

Any opinions expressed in this Paper do not represent the policy position of the Government of Vanuatu, the Department of Geology, Mines and Water Resources or the Vanuatu Law Commission.

You are invited to make a submission on any matter raised in the Paper or anything you think is relevant to the statistics and census laws in Vanuatu. Information on where and how to make submissions is found on page 2 of this Paper.