**Niue Island and Its Geology**

- Niue is a Karstic (limestone) Island with a land mass of 269km².
- It is an uplifted coral island with two forms of plateau: Upper and Lower. It has a max. thickness of 15m of limestone above sea level, and 500m below sea level underlying be a volcanic structure.
- The Island main source of water supply is from the underground freshwater 'lens' which lies at various depth in all areas from 30 to 55 meters below ground level.
- The Island’s population is approx. 1,541 people (2009 Agr mini census).

**Niue National Strategic Plan (2009-2013)**

**PROJECT TITLE**

'USING INTEGRATED LAND USE, WATER SUPPLY AND WASTEWATER MANAGEMENT AS A PROTECTION MODEL FOR THE ALOFI TOWN GROUNDWATER SUPPLY AND NEARSHORE REEF'
NIUE IWRM Demonstration Project

Components

- COMPONENT 1: Ongoing sound, integrated, transparent governance of Niue’s water resource
- COMPONENT 2: Water Legislation, Policy and Planning Measures
- COMPONENT 3: Improved Management of Hazardous and Waste products to reduce risks of ground water contamination
- COMPONENT 4: Improved management of non-household chemicals, effluents and fuels
- COMPONENT 5: Improved water supply management to reduce peak demands and risk of saline up-coning
- COMPONENT 6: Improved Water Resource Management Measures
- COMPONENT 7: Education and Awareness Program
- COMPONENT 8: Delivery of the Niue GEF IWRM Demonstration Project

<table>
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<tr>
<th>Village</th>
<th>Households</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
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<td>Alofi South</td>
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<td>178</td>
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<tr>
<td>Totals</td>
<td>162</td>
<td>286</td>
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</tbody>
</table>

GIS Mapping of the Demo Site

Demo Village Population

Solid Waste Land Fill
Wastewater Disposal

NPC Hospital

ALOFI CATCHMENT
Port Alofi Bay
GIS Mapping of the Demo Site
Contour Map Alofi District - Prediction of Groundwater Flow

VILLAGE WATER MANAGEMENT PLANNING (Men’s Group)

Launching of the Village Water Plan-

VILLAGE WATER MANAGEMENT PLANNING (Ladies Group)

Community Engagement - Leaks and Repairs

LEAKS and REPAIRS COMMUNITY TRAINING
Community Engagement,Leaks Repairs

WATER QUALITY COMMUNITY TRAINING

NATIONAL WATER SONG COMPETITION 2010, CONSTITUTION CELEBRATION

WATER and EDUCATION MATERIALS

Support Capacity Building within Staffs
Average low flow loss 5‐6 cum/hr, prior to repairs

Average low flow loss 2‐2.5 cum/hr

Water Demand System Loss Achievements

Drinking Water Safety Plan Benefit and Costs Analysis (BCA) Team

Consultation with the Cabinet Ministers during the DWSP Auditing July 2011

Construction of New Water Tanks
National Planning Programs (EU IWRM Support)

- Coordinating the Niue Water Steering Committee – (Managing both GEF IWRM Demo project/ PACC project including the Policy and Awareness groups)
- Finalising Drafting Niue Water Resource Legislation- in a context of IWRM Framework
- Drafting the Niue IWRM Framework Plan
- Drafting the Niue WUE Plan
Niue Waters Programs

Steps

- NNSP (2009-2013)
- IWRM Projects (2009-2013)
- Nine IWRM Plan
- Nine WUE Plan

Challenges

1. Groundwater Monitoring Program at the Demo Site
   Quote for Drilling Works is higher than the allocated Budget under the Demo Project

2. Various projects implemented at the same time towards Infrastructure improvements that some requires PMU technical support

3. Few PMU staff ends of contracts at the end of the year

Niue IWRM Project Management Unit

TEAM
Together Everyone Achieves More.

MEITAKI MAATA