SOUTH PACIFIC APPLIED GEOSCIENCE COMMISSION

&

WORLD HEALTH ORGANIZATION

WATER SAFETY PLANS

VANUATU SCOPING MISSION

ROUNDTABLE MEETING

2.00pm, Monday 08 May 2006
Dept. of Geology, Mines & Water Resources conference room
Findings:

- Strong interest from key authorities (Dept. of Geology, Mines & Water Resources, Min. of Health, Dept. of Public Works) to work together to establish WSP pilots in Port Vila and Luganville.
- National Water Resource Management Advisory Committee could take on the responsibilities of the WSP National Steering Committee as it essentially has the right composition of stakeholders.
- The work done by the Tagabe River Management Committee (i.e. catchment management and zoning plans) could be built on by a Port Vila WSP.
- There is good scope for WSP approach in Port Vila and Luganville (and other smaller) urban systems.

Mitesh Mudaliar, WHO, SP
Findings:

- Water Quality in both urban centers (Port Vila and Luganville) is generally very good with only calcium hardness to note. The only treatment is Chlorination. However, in both cases, aquifer levels are decreasing while pumping demand is increasing.

- Both aquifers are under increasing pressure from agriculture, housing and other developments within the catchment protection zones that have been established.

- Good efforts (catchment protection zones) to protect both urban (Vila and Lugaanville) catchments with SOPAC, SPREP, UNDP support / encouragement but mainly through Government’s own initiatives.

- Rural supplies are more variable with many unprotected sources affected by pollution and in some cases, contaminated by volcanic ash and gas emissions.
Findings:

- Rural water supply ongoing focus for ‘coverage’ could begin to shift towards ‘quality’; the Port Vila system is also interested in ensuring quality, having achieved leak reduction and consumer metering

- 6 existing laboratories were visited: UNELCO, MoH, VCH, Dept. of Geology, Mines and Water Resources, Department of Public Works (Port Vila), ND Hosp.(Luganville)

- A need to rationalize/support/coordinate this array of labs and their functions

- All (except UNELCO) had problems with expired consumables, low volume of water analysis and insufficient capacity/operator skills
Findings:

- There is consensus on the usefulness of village and household risk management approach
- There is recommendation by MoH to consider applying risk management approach in Volcano affected communities
- The Water Resources Act requires formation of water resource protection zones
Findings:

Port Vila Water Supply

- UNELCO, SHEFA Provincial Council, Port Vila Municipality agree to support/participate in a Port Vila WSP
- UNELCO is interested in applying WSP approach to the Port Vila water system
- Agreed to support the programme via facilities e.g. Laboratory
Findings:

**Luganville Water Supply**

- Strong interest and support from the SANMA Water Resource Management Committee, Dept. of Public works and Dept. of Geology for a WSP pilot in Luganville

Mitesh Mudaliar, WHO, SP
## Agencies recap potential role:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Current programmes</th>
<th>Interest</th>
<th>Capacity</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Geology, Mines and Water Resources</td>
<td>Rural water supply Water resource mngr.</td>
<td>NWRAC, TRMC</td>
<td></td>
<td>Key Implementing agency</td>
</tr>
<tr>
<td>Ministry of Health</td>
<td>Water Quality Monitoring Disaster Response</td>
<td>NWRAC</td>
<td></td>
<td>Implementing Agency</td>
</tr>
<tr>
<td>Department of Public Works</td>
<td>Urban Water Supply (except in Port Vila)</td>
<td>NWRAC</td>
<td></td>
<td>Implementing Agency</td>
</tr>
<tr>
<td>UNELCO</td>
<td>Water Producer – Port Vila</td>
<td>NWRAC</td>
<td></td>
<td>Key Partner</td>
</tr>
<tr>
<td>NGOs: Live &amp; Learn Wan Smolbag FSP Vanuatu</td>
<td>Education / Awareness Advocacy Desalination</td>
<td>NWRAC</td>
<td></td>
<td>Key Partner</td>
</tr>
<tr>
<td>Provincial Councils &amp; Municipalities</td>
<td>Land-use planning</td>
<td>NWRAC, TRMC</td>
<td></td>
<td>Key Partner</td>
</tr>
<tr>
<td>WHO SOPAC</td>
<td>Water Safety Plans; Water Quality Monitoring Programme; NZMoH Support;</td>
<td>Improve Drinking Water Quality in Vanuatu</td>
<td></td>
<td>Key Support agencies</td>
</tr>
</tbody>
</table>
Possible products and outputs:

- Establish a National WSP Framework / Standards (could be developed during Workshop)
- Rural WSP standards / guidelines (for easy replicability)
- Risk assessment / management system to ensure safe water
- Laboratory capacity (core functions) and coordination improved
- Key staff aware of SOP’s and risk management plan(s)
- Contingency / emergency procedures and/or plans established
- Support zoning of catchment (or catchment protection plan)
- Establish H2S test production / recycling arrangements
- Response for Volcano affected communities
- Community awareness package incl. H2S and Sanitary Surveys, proper hygiene & sanitation
- School programmes and informal education in WSP activities e.g. in school curriculum
Possible Project Structure: Functional

WHO/SOPAC Team

Dept. of Geology, Mines and Water Res.

Nat. Water Resource Management Advisory Committee

Luganville Water Resource Advisory Committee

Urban - Luganville

Develop and establish risk assessment and management system

Catchment Management
Water Supply Management
Water Quality Monitoring

Dept. of Geology, Mines & Water Resources
Dept. of Public Works
Min. of Health / Council

Rural – village/household

Developing community tools and promote sanitary practices e.g. boiling

NGOs & Community Reps
Rural Water Supply
Dept. of Public Health

Mitesh Mudaliar, WHO, SP
Possible Project Structure: Urban

WHO/SOPAC Team

Dept. of Geology, Mines and Water Res.

Nat. Water Resource Management Advisory Committee

(Load implementing agency – National activities)

Luganville Water Resource Management Committee

(WSP Steering Committee – Luganville)

Tagabe River Management Committee

(WSP Steering Committee – Port Vila)

Catchment Management

Water Supply Services

Water Quality Surveillance

Dept. of Geology, Mines & Water Resources

Min. of Health / Council

Dech. of Geology, Mines & Water Resources/ SHEFA Province

UNELCO

Min. of Health / Port Vila Municipality
RURAL/COMMUNITY WATER SAFETY PLAN

Dept. of Geology, Mines and Water Res.

WHO/SOPAC Team

National Water Resource Management Advisory Committee

Rural Water Committees

Community Awareness Programmes

Rural Water Supply

Water Quality Surveillance

Dept. of Geology, Mines & Water Resources

Min. of Health / Council

NGOs

Mitesh Mudaliar, WHO, SP
Possible next steps:

1. Commitment
   - Letter of request to be included in programme

2. National Water Resource Advisory Committee
   - Discussion & further development of proposed project structures

3. Project Description

4. Risk Management Training and Planning Workshop (September??)
   - Training of in-country counterparts on development and implementing a WSP — by WSP Experts
   - Preparatory work by Vanuatu (Dept. of Geology, Mines and Water Res.): budget, participants, venue, resources, programme etc…

Note:
- National Lands Summit (Sept)
- National Comprehensive Reforms Summit (early Oct)

Mitesh Mudaliar, WHO, SP
# Water Safety Plan steps & timetable:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Forming a Steering Committee</strong></td>
<td></td>
</tr>
<tr>
<td><strong>System description and analysis</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Training/Planning workshop</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Development of Tools &amp; activities</strong></td>
<td></td>
</tr>
<tr>
<td><strong>System Risk Assessment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Water Safety Plan</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Evaluation &amp; Verification</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Activity Timeline

- **Forming a Steering Committee**: Completed in March
- **System description and analysis**: Ongoing
- **Training/Planning workshop**: December
- **Development of Tools & activities**: August
- **System Risk Assessment**: September
- **Water Safety Plan**: October
- **Evaluation & Verification**
Possible early activities:

- Commitment by Govt. of Vanuatu
- Consider workshop to train and plan for WSP project
- Preparations for workshop on risk assessment / management training and planning (proposed objectives, programme, participants, experts, venue, budget, logistics) by Dept. of Geology / National Steering Committee
- Possible water supply system description, assessment and risk analysis by UNELCO (Port Vila), Dept. of Public Works (Luganville) using WSP worksheets
- Possible H2S Test production / recycling arrangements by MoH
WSP Pilot Committees:

**Rural Water Safety Plans**
- Dept. of Geology, Mines & Water Resources
- Dept. of Public Health
- Dept. of Public Works
- NGOs (Live & Learn, Red Cross, VANGO, Community/Women’s Groups)
- Provincial Councils
- WHO
- Ministry of Education ??

**Luganville Water Safety Plans**
- Dept. of Geology, Mines & Water Resources
- Dept. of Public Health
- Dept. of Public Works
- VECA
- NGOs (Live & Learn, Red Cross, Community/Women’s Groups)
- SANMA Provincial Council
- Luganville Municipality
- ND Hospital

Mitesh Mudaliar,WHO,SP
National Water Resource Advisory Committee (National Steering Committee):

Possible Terms of Reference:

Role: Guide the implementation of the National WSP activities, make decisions and ensure inter-agency cooperation

- Guide WSP national activities
- Ensure sharing of information among related projects
- Oversight of international and local inputs and resources

Mitesh Mudaliar, WHO, SP
Commitment:

- Department of Geology, Mines and Water Resources (time, effort) and players (focal point / coordination)

- Nature of project support from WHO/SOPAC programme
  - Technical Support
    - WHO/SOPAC Project Officers & advisors
    - NZ MoH Experts
  - Support for Training workshop & Capacity Building
  - Development of Tools (Print Materials)

- Letter requesting Vanuatu’s inclusion in the Programme from Ministry of Lands & Natural Resources
  Mitesh Mudaliar, WHO, SP