INFORMATION MANAGEMENT

Advocacy & PR Officer

Molu Bulu

Overview of Presentation

The Presentation includes the following:

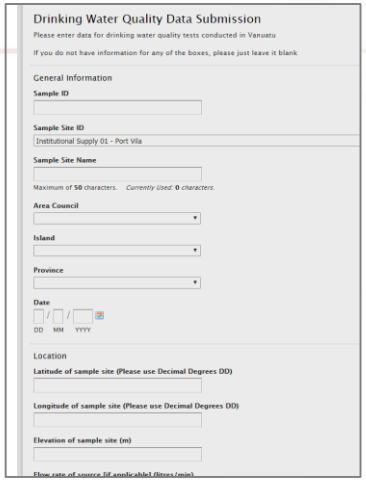
1. The Role of Information Management
2. What System Facilitates this roles:
   I. Part A – Data Collection
   II. Part B - Data Storage and Monitoring (database)
   III. Part C – Analysis & Reporting (dashboards/ websites)
   IV. Part D - Taking Action for Results
3. Information System Overview
4. Summary

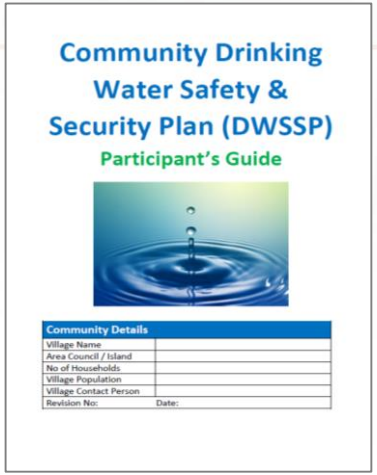
The Role of Information Management

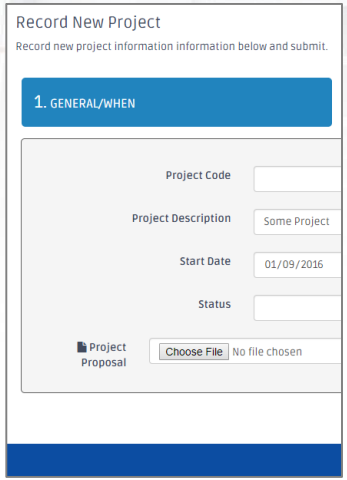
- Ensure all Department of Water **database is functioning**
- Check **quality of data** submitted and edit where necessary
- Ensure all **websites / dashboards** up to date and **accessible**
- Create **back-ups** and **archives** of all database and work files
- Create ready to be used data into **awareness materials**

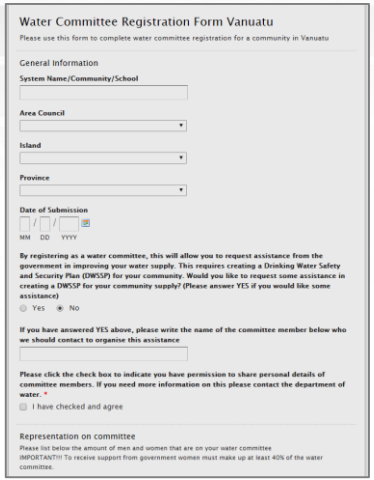
What System Facilitates these Roles?

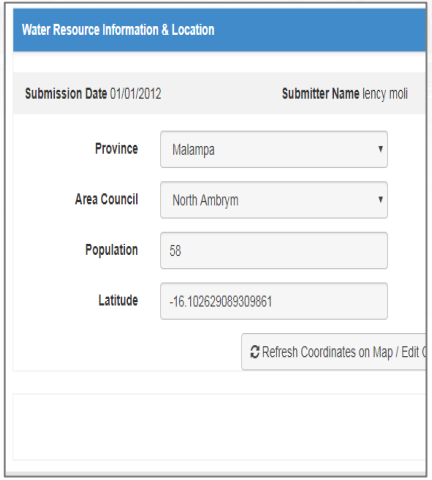
Part A – Data Collection (Web Forms)











What roles are associated with this?

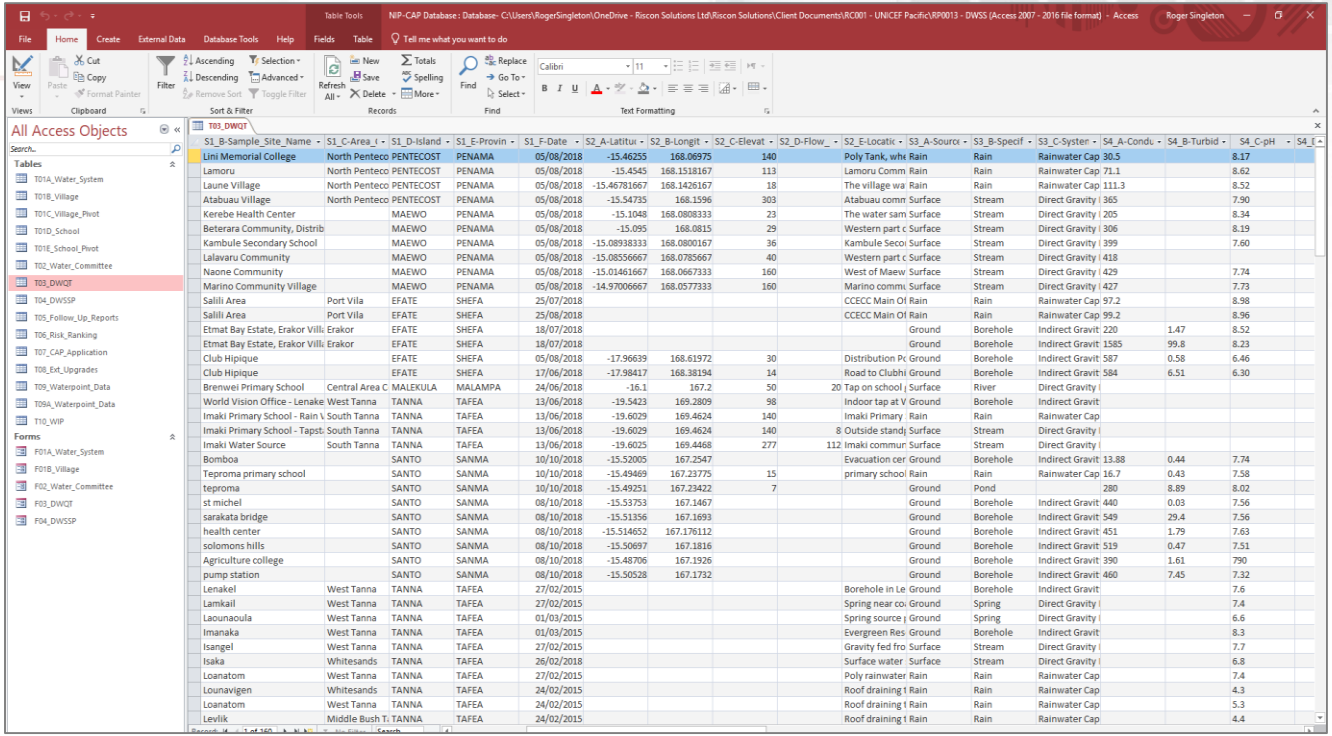
- Data collection
- Assist community

Data Collection (Forms)

Form Name	Physical Document	Description
01. Water System Registration	Not yet written	Registration of community water system based on the WRI (*Water Resources Inventory*)
02. Water Committee Registration	*N/A*	Currently LIVE FORM (Click to view) Registration of community water committee
03. Drinking Water Quality Submission	*N/A*	(Currently LIVE FORM (Click to view) Registration of drinking water quality data
04. Drinking Water Safety and Security Plan (DWSSP)	DWSSP Word Template	The completed plan from a Drinking Water Safety and Security Planning (DWSSP) training At present this form is submitted via (Fastfield forms (Click to view) with information sent to SQL server and an **EDITABLE** word copy to Google Drive. **Action Required: To identify how contractors can update submitted DWSSPs after submission, possibly via Google Drive.**

What System Facilitates these Roles?

Part B – Data Storage & Monitoring (Database)

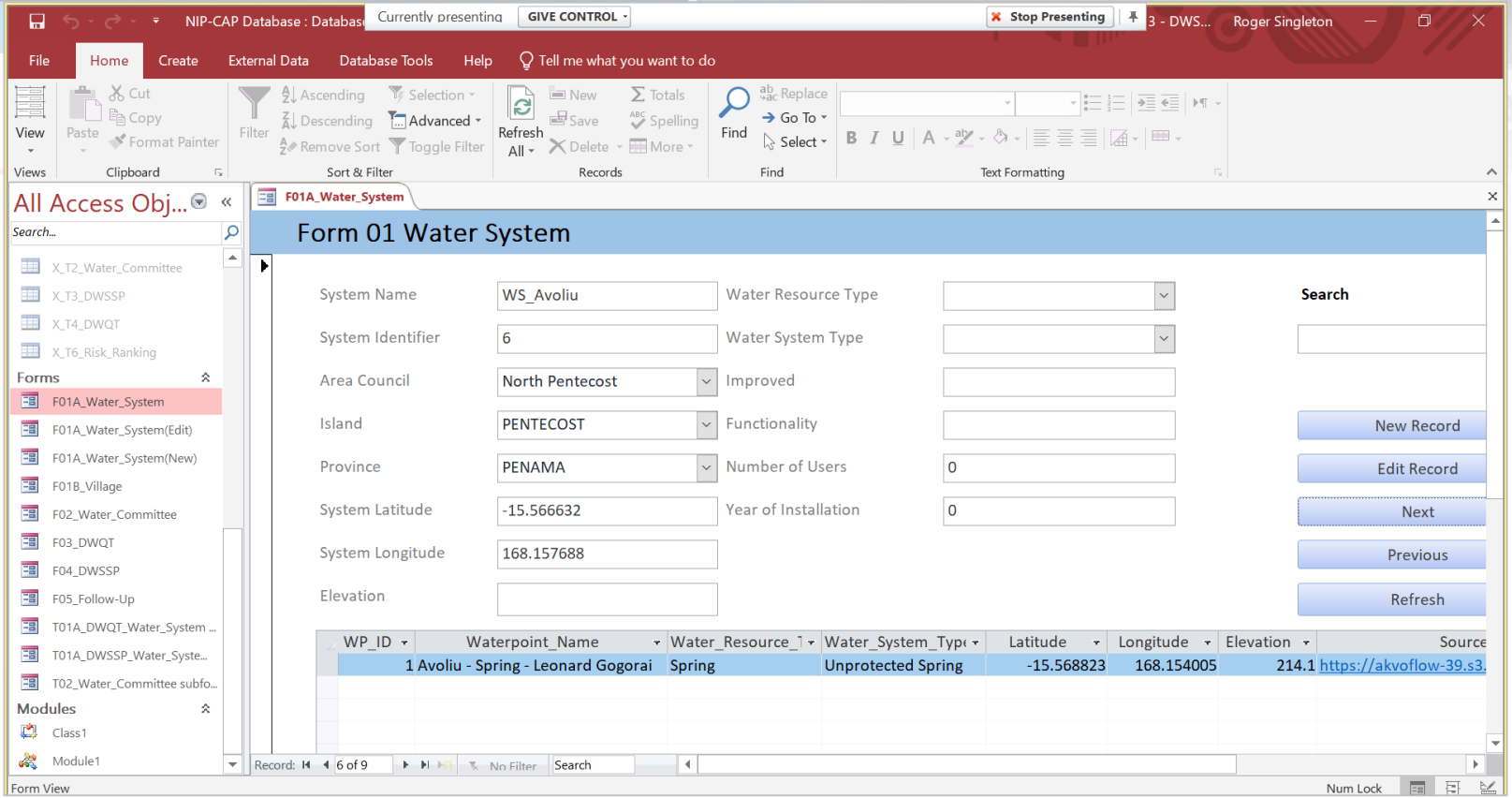


S1_B-Sample_Site_Name	S1_C-Area_(	S1_D-Island	S1_E-Provin	S1_F-Date	S2_A-Latitu	S2_B-Longit	S2_C-Elevat	S2_D-Flow_	S2_E-Locatic	S3_A-Sourc	S3_B-Specif	S3_C-Syster	S4_A-Condu	S4_B-Turbid	S4_C-pH
Lini Memorial College	North Penteco	PENTECOST	PENAMA	05/08/2018	-15.46255	168.06975	140		Poly Tank, whe	Rain	Rain	Rainwater Cap	30.5		8.17
Lamoru	North Penteco	PENTECOST	PENAMA	05/08/2018	-15.4545	168.1518167	113		Lamoru Comm	Rain	Rain	Rainwater Cap	71.1		8.62
Laune Village	North Penteco	PENTECOST	PENAMA	05/08/2018	-15.46781667	168.1426167	18		The village wa	Rain	Rain	Rainwater Cap	111.3		8.52
Atabuau Village	North Penteco	PENTECOST	PENAMA	05/08/2018	-15.54735	168.1596	303		Atabuau comn	Surface	Stream	Direct Gravity	365		7.90
Kerebe Health Center		MAEWO	PENAMA	05/08/2018	-15.1048	168.0808333	23		The water sam	Surface	Stream	Direct Gravity	205		8.34
Beterara Community, Distrib		MAEWO	PENAMA	05/08/2018	-15.095	168.0815	29		Western part c	Surface	Stream	Direct Gravity	306		8.19
Kambule Secondary School		MAEWO	PENAMA	05/08/2018	-15.08938333	168.0800167	36		Kambule Seco	Surface	Stream	Direct Gravity	399		7.60
Lalavaru Community		MAEWO	PENAMA	05/08/2018	-15.08556667	168.0785667	40		Western part c	Surface	Stream	Direct Gravity	418		
Naone Community		MAEWO	PENAMA	05/08/2018	-15.01461667	168.0667333	160		West of Maew	Surface	Stream	Direct Gravity	429		7.74
Marino Community Village		MAEWO	PENAMA	05/08/2018	-14.97006667	168.0577333	160		Marino comm	Surface	Stream	Direct Gravity	427		7.73
Salili Area	Port Vila	EFATE	SHEFA	25/07/2018					CCECC Main Of	Rain	Rainwater Cap		97.2	1.47	8.98
Salili Area	Port Vila	EFATE	SHEFA	25/08/2018					CCECC Main Of	Rain	Rain	Rainwater Cap	99.2		8.96
Etmat Bay Estate, Erakor Villa	Erakor	EFATE	SHEFA	18/07/2018						Ground	Borehole	Indirect Gravit	220	1.47	8.52
Etmat Bay Estate, Erakor Villa	Erakor	EFATE	SHEFA	18/07/2018						Ground	Borehole	Indirect Gravit	1585	99.8	8.23
Club Hipique		EFATE	SHEFA	05/08/2018	-17.96639	168.61972	30		Distribution Pc	Ground	Borehole	Indirect Gravit	587	0.58	6.46
Club Hipique		EFATE	SHEFA	17/06/2018	-17.98417	168.38194	14		Road to Clubhi	Ground	Borehole	Indirect Gravit	584	6.51	6.30
Brenwei Primary School	Central Area C	MALEKULA	MALAMPA	24/06/2018	-16.1	167.2	50	20	Tap on school	Surface	River	Direct Gravity			
World Vision Office - Lenake	West Tanna	TANNA	TAFEA	13/06/2018	-19.5423	169.2809	98		Indoor tap at V	Ground	Borehole	Indirect Gravit			
Imaki Primary School - Rain \	South Tanna	TANNA	TAFEA	13/06/2018	-19.6029	169.4624	140		Imaki Primary	Rain	Rain	Rainwater Cap			
Imaki Primary School - Tapst	South Tanna	TANNA	TAFEA	13/06/2018	-19.6029	169.4624	140	8	Outside stand	Surface	Stream	Direct Gravity			
Imaki Water Source	South Tanna	TANNA	TAFEA	13/06/2018	-19.6025	169.4468	277	112	Imaki commur	Surface	Stream	Direct Gravity			
Bomboa		SANTO	SANMA	10/10/2018	-15.52005	167.2547			Evacuation cer	Ground	Borehole	Indirect Gravit	13.88	0.44	7.74
Teproma primary school		SANTO	SANMA	10/10/2018	-15.49469	167.23775	15		primary school	Rain	Rain	Rainwater Cap	16.7	0.43	7.58
teproma		SANTO	SANMA	10/10/2018	-15.49251	167.23422	7			Ground	Pond		280	8.89	8.02
st michel		SANTO	SANMA	08/10/2018	-15.53753	167.1467				Ground	Borehole	Indirect Gravit	440	0.03	7.56
sarakata bridge		SANTO	SANMA	08/10/2018	-15.51356	167.1693				Ground	Borehole	Indirect Gravit	549	29.4	7.56
health center		SANTO	SANMA	08/10/2018	-15.514652	167.176112				Ground	Borehole	Indirect Gravit	451	1.79	7.63
solomons hills		SANTO	SANMA	08/10/2018	-15.50697	167.1816				Ground	Borehole	Indirect Gravit	519	0.47	7.51
Agriculture college		SANTO	SANMA	08/10/2018	-15.48706	167.1926				Ground	Borehole	Indirect Gravit	390	1.61	790
pump station		SANTO	SANMA	08/10/2018	-15.50528	167.1732				Ground	Borehole	Indirect Gravit	460	7.45	7.32
Lenakel	West Tanna	TANNA	TAFEA	27/02/2015					Borehole in Le	Ground	Borehole	Indirect Gravit			7.6
Lamkail	West Tanna	TANNA	TAFEA	27/02/2015					Spring near co	Ground	Spring	Direct Gravity			7.4
Laounaoula	West Tanna	TANNA	TAFEA	01/03/2015					Spring source	Ground	Spring	Direct Gravity			6.6
Imanaka	West Tanna	TANNA	TAFEA	01/03/2015					Evergreen Res	Ground	Borehole	Indirect Gravit			8.3
Isangel	West Tanna	TANNA	TAFEA	27/02/2015					Gravity fed fro	Surface	Stream	Direct Gravity			7.7
Isaka	Whitesands	TANNA	TAFEA	26/02/2018					Surface water	Surface	Stream	Direct Gravity			6.8
Loanatom	West Tanna	TANNA	TAFEA	27/02/2015					Poly rainwater	Rain	Rain	Rainwater Cap			7.4
Lounavigen	Whitesands	TANNA	TAFEA	24/02/2015					Roof draining t	Rain	Rain	Rainwater Cap			4.3
Loanatom	West Tanna	TANNA	TAFEA	24/02/2015					Roof draining t	Rain	Rain	Rainwater Cap			5.3
Levlik	Middle Bush T	TANNA	TAFEA	24/02/2015					Roof draining t	Rain	Rain	Rainwater Cap			4.4

What roles are associated with this?

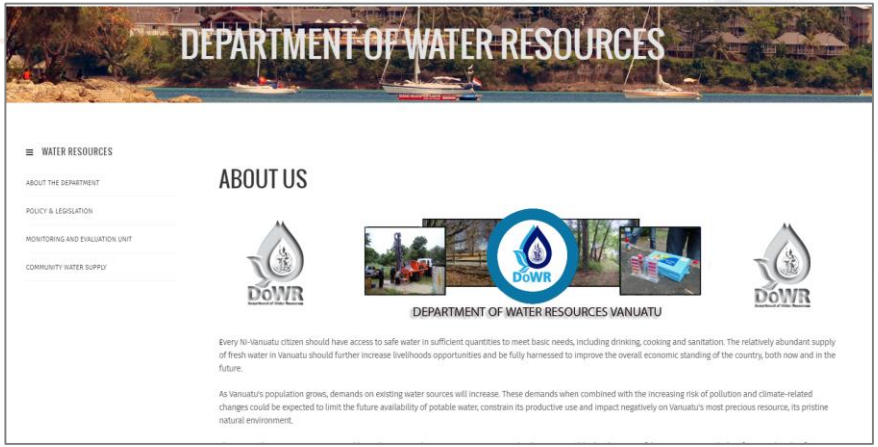
- Database functioning
- Data quality
- Community risk ranking
- Maintain accessibility

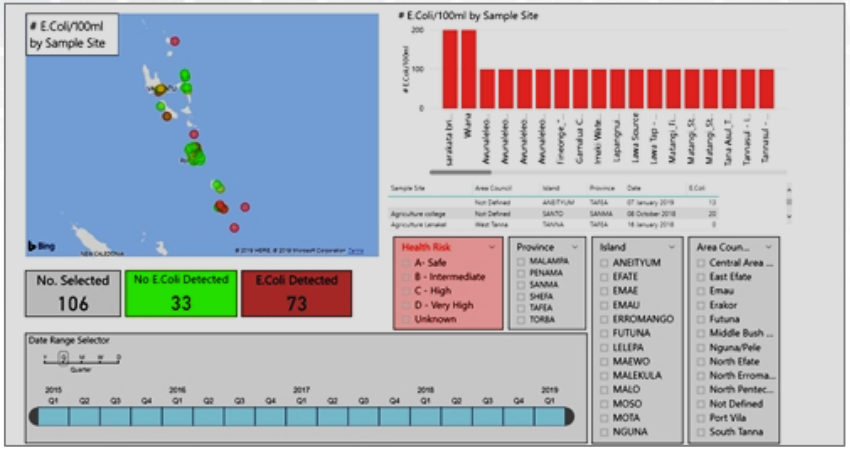
Data Storage (Database)



What System Facilitates these Roles?

Part C – Analysis and Reporting (Dashboard / Website)

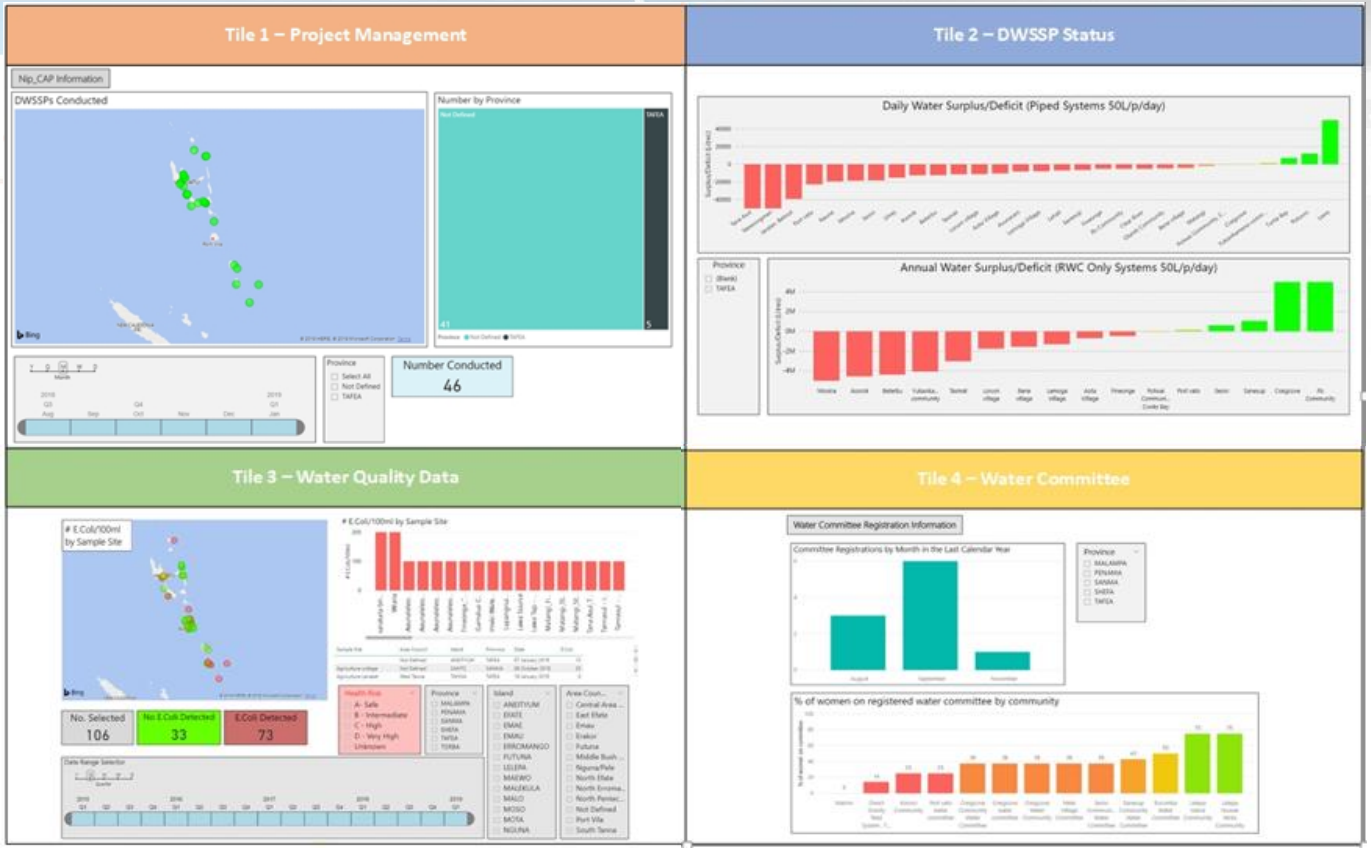




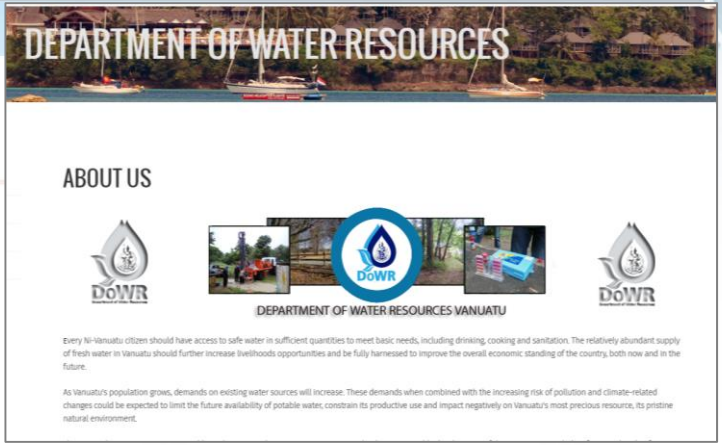
What roles are associated with this?

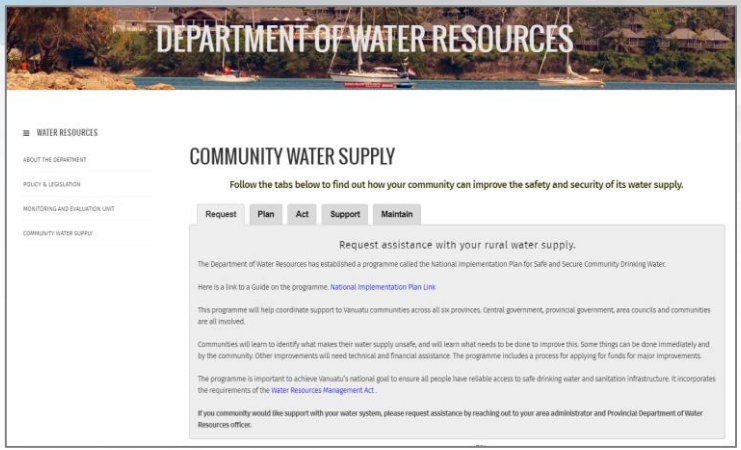
- Make decisions
- Check information
- Allocate resource

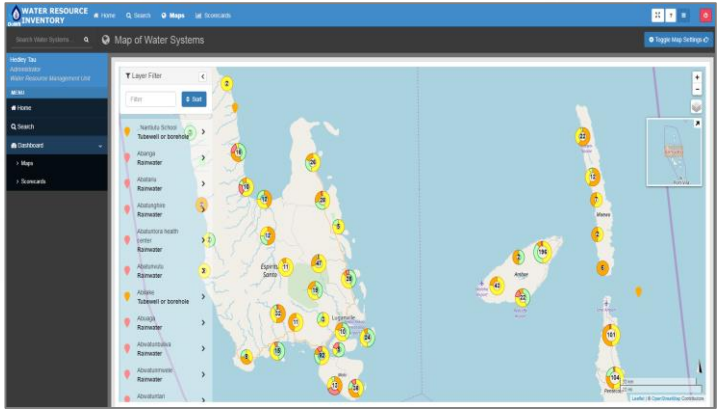
Analysis and Reporting (Dashboard)



Analysis and Reporting (Website)

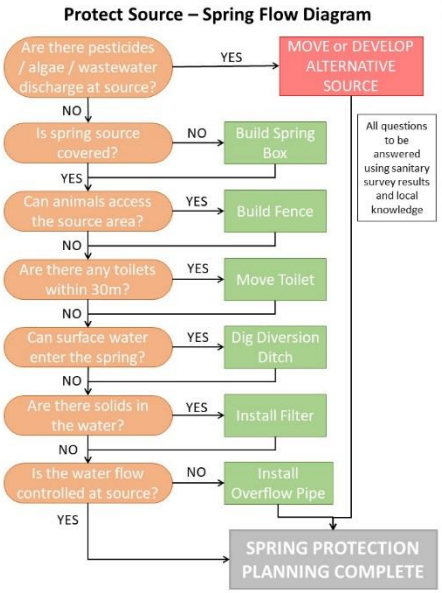






What System Facilitates these Roles?

Part D – Taking Action for Results

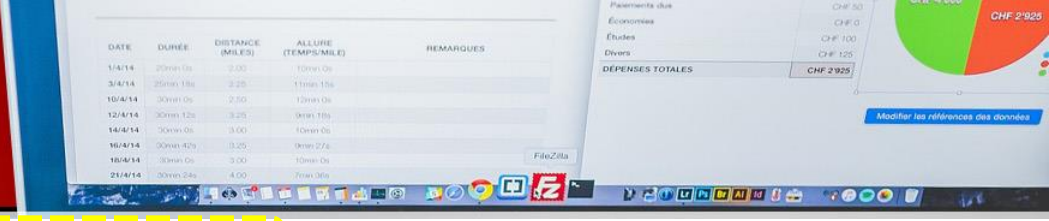


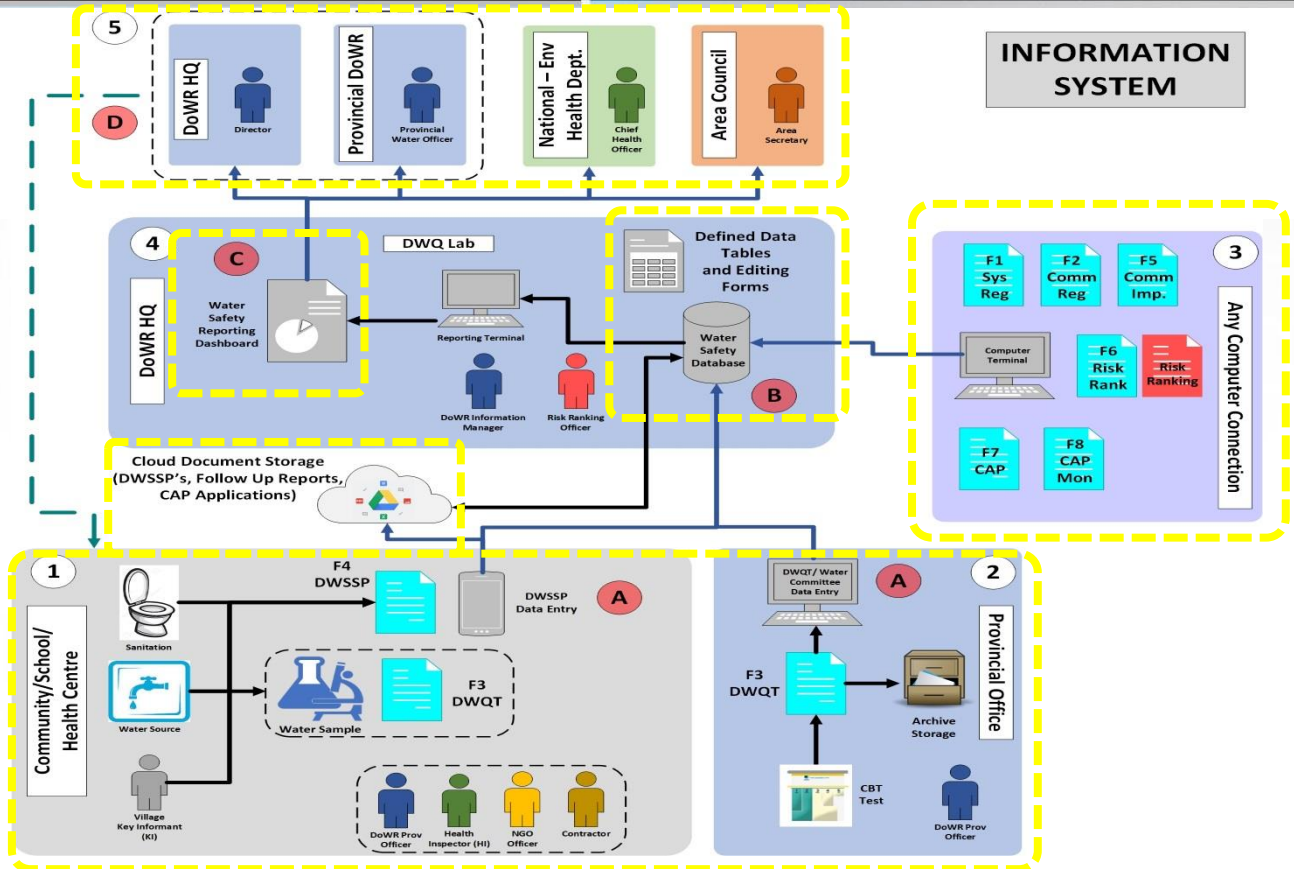
Parameter	Why outside the limit?	What action to take?
E.Coli	There is contamination from faecal matter somewhere in the system	Conduct a sanitary survey, part of a water safety plan to see if a cause can be found. If cause cannot be found, recommend boiling water as household treatment, or using a less contaminated source for drinking
Total Coliform	Contamination from any bacteria somewhere in the system	
Turbidity	Lots of suspended particles from source, or other sediment in system	If higher than 5 NTU chlorine use may be affected. Recommend storing water to let sediment settle, or choosing alternative inlet for water source.
pH	Low pH indicates acid contamination with high pH from alkaline	pH < 8 for effective chlorination, low pH causes corrosion in pipes, If contaminated look for a cause via a sanitary survey. Generally this is caused by contamination from industry or settlements.
Electrical Conductivity	Closely linked. EC increases with salt water content, TDS goes up with general contaminants in water	For groundwater, aim to monitor over time as it probably indicates saltwater intrusion. If this is the case, need to reduce the amount of water being pumped from the groundwater source.
Total Dissolved Solids		
Res Chlorine	Not enough chlorine in system	Check pH and turbidity. If ok, then increase amount of chlorine in treatment
Fluoride	Naturally occurring in ground rock formations	If above 1.5mg/L report to public health office and track over time. Depending on level and amount source is used, another water source may need to be used.

What roles are associated with this?

- Conduct actions
- Assist and supervise
- Fund Projects

Information System Overview





In Summary

In summary:

1. Information Management help show when we reach our goals
2. The main parts of an information system include:
    - Data Collection
    - Data Storage
    - Data Analysis and Reporting
    - Actions from Data

Thank you for your Time

☺