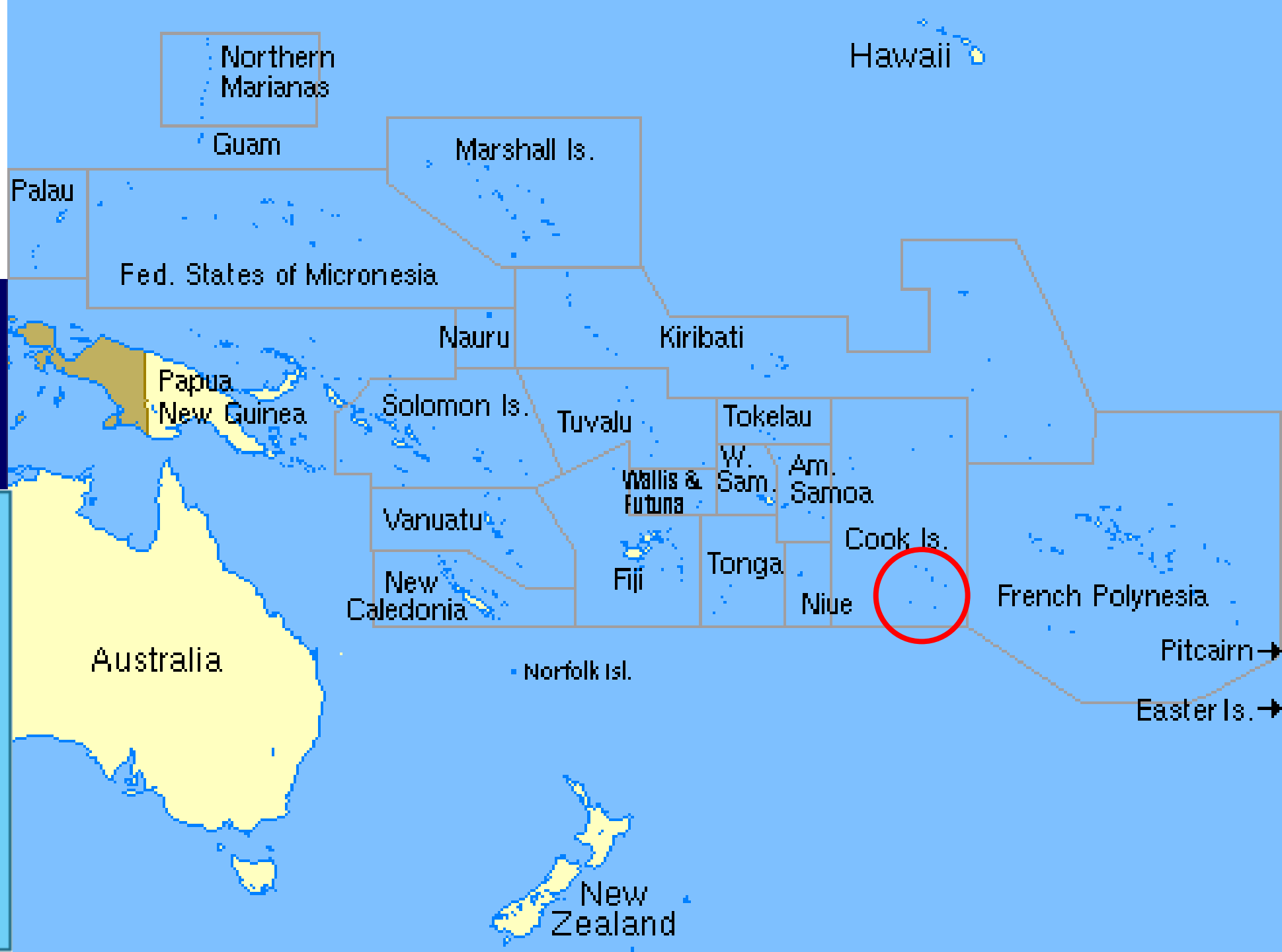


# The Cook Islands





- Largest infrastructure project in Cook Islands history
- First joint venture aid project by PRC with another country
- CECCC laid the pipes, McConnell Dowell built the treatment plants
- Cart before horse
- **Lessons learned**



Te Mato Vai.....



# To Tatou Vai

- New government owned company set-up to operate Te Mato Vai (lessons learned from past infrastructure projects)
- But first, we needed a CEO







Welcome to the Cook Islands











# Challenges

- No staff
- No land
- No electricity (at intakes/water treatment sites)
- No support
- Resistance to use of “chemicals”
- Opposition to disinfection of the water
- Opposition to water charges
- Near zero storage capacity

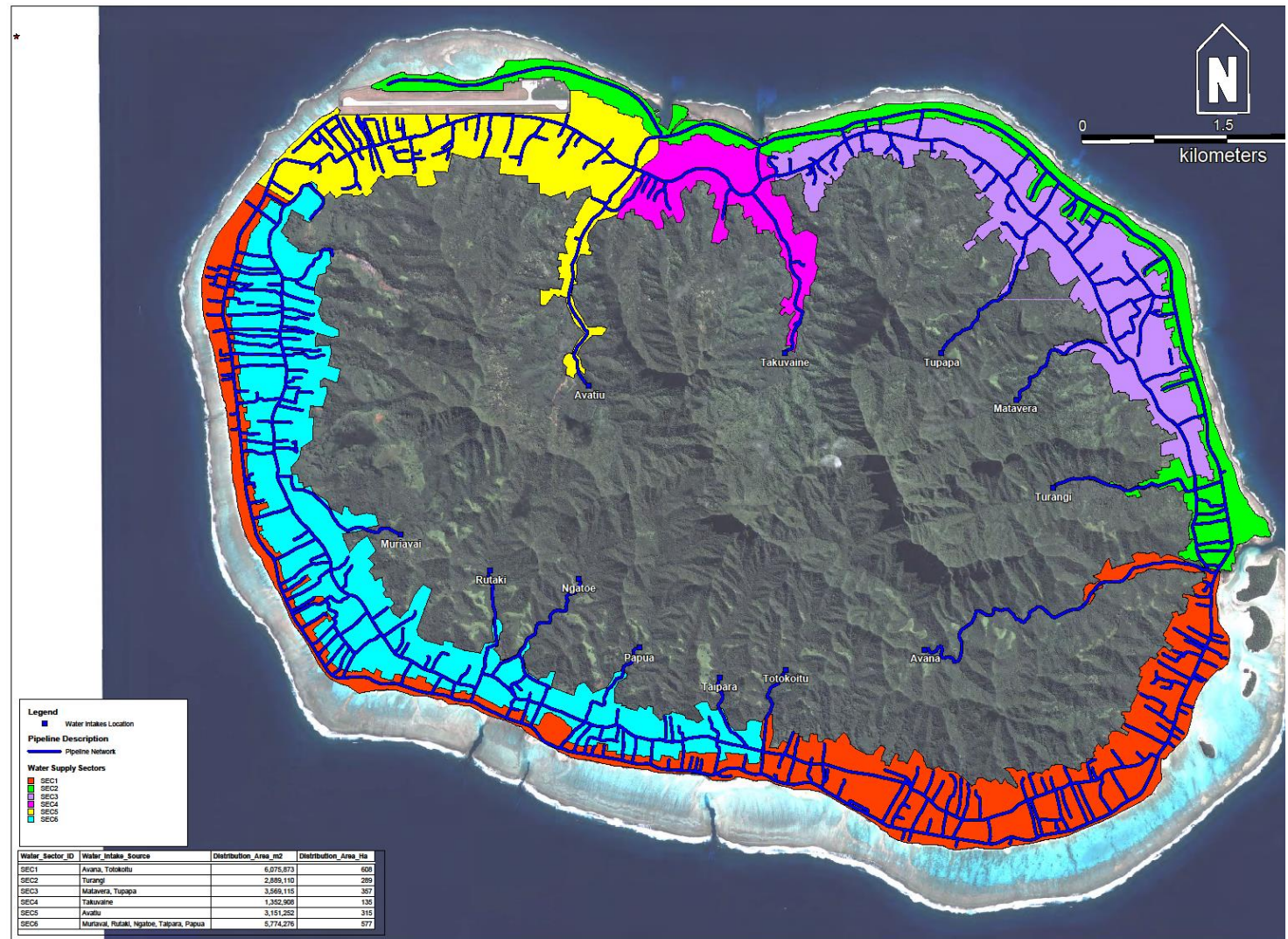


## To Tatou Vai Limited - Organisation Structure



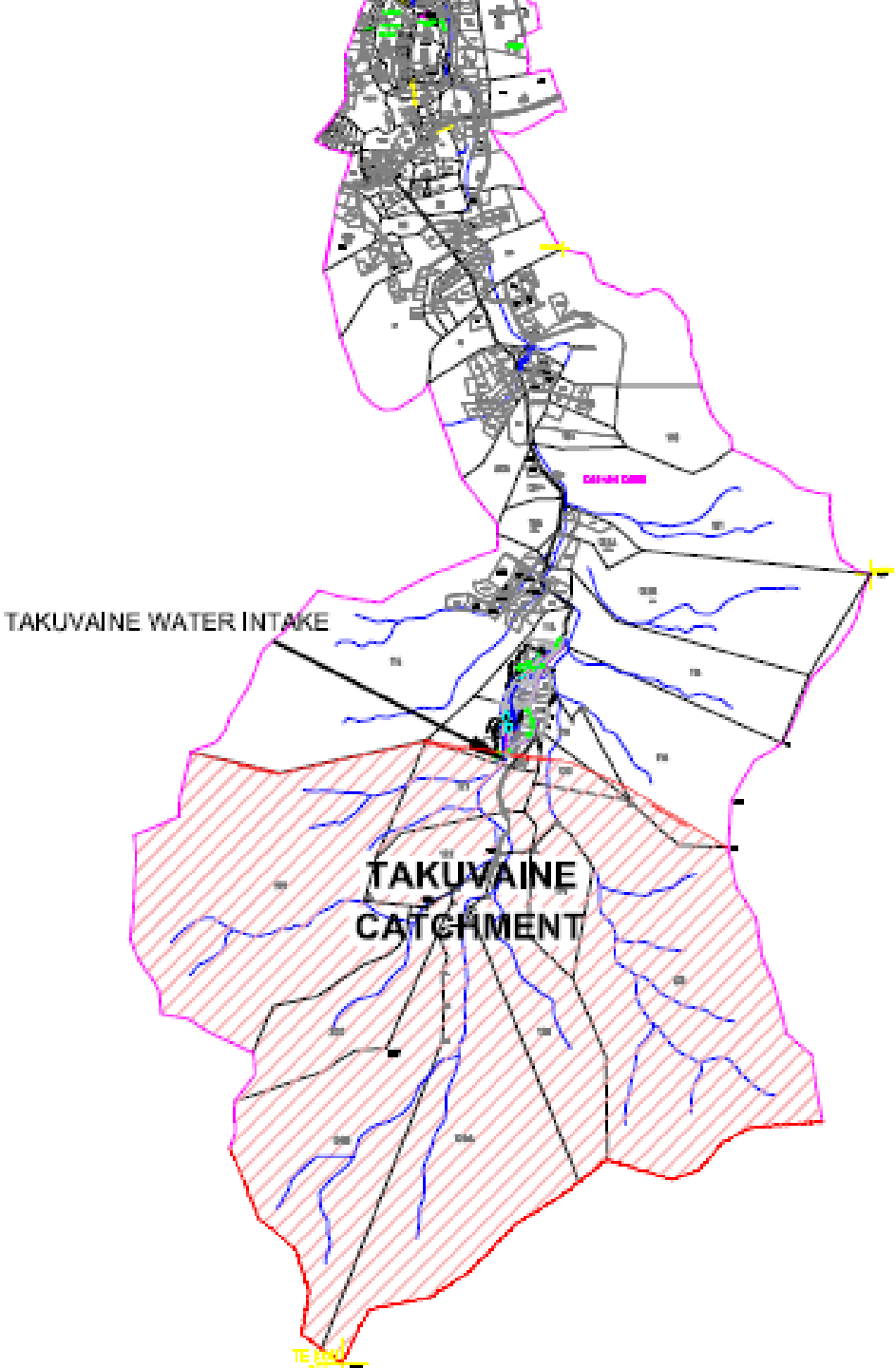


No land



RAROTONGA WATER SUPPLY - PIPELINE DISTRIBUTION AND SUPPLY SECTORS

Ministry of Infr





# No electricity....



- Treatment process designed (GHD) to rely on gravity
- Intakes up valleys – no easy access and limited sunlight – no solar power, no comms
- All auxiliary pumps battery powered
- No SCADA or automated control or alarms



No support...

GREAT IDEAS FORCED ON US BY FOREIGN EXPERTS...

YOU SHALL HAVE NO  
FUN BUT GOD! AND  
PUT SOME PANTS ON!



THE BLUE LAWS

YES WE'LL LEND THE  
MONEY BUT YOU GOTTA  
USE OUR DESIGN AND  
BUILDERS!



CHINESE CONSTRUCTION

THESE BIRDS WILL  
TAKE CARE OF  
THE WASPS!



MYNAB BIRDS

THAT'S NOT A LEAKING  
PIPE... IT'S IRRIGATION!



TE MATO VAI

PLANT PINE TREES FOR  
BUILDING AND ACACIA  
FOR FUEL!



TRANSFORMATION  
OF MANGAIA

YOU'VE NEVER HAD AN OUTBREAK  
OF WATERBORNE DISEASES - BUT  
CHLORINATE ANYWAY AND TAX  
PEOPLE FOR THE PRIVILEGE!



... ON AND ON IT GOES....

KATA



No storage capacity..





No Chemicals??





# Opposition to disinfection

- The water quality as is = POOR

Microbiology				
Escherichia coli by MPN(Colilert-18)				
Escherichia coli	MPN/100 mL	>200	130	>200
Total Coliforms	MPN/100 mL	>200	>200	>200
Sample Details		WATERS	WATERS	WATERS
Lab Sample ID:		190318-145-21	190318-145-22	190318-145-23
Client Sample ID:		Sampled By: Ross	Sampled By: Ross	Sample By: Chris G
Sample Date/Time:		16/03/2019 11:20	16/03/2019 11:00	16/03/2019 12:45
Description:		Aorangi Church Pre Filter	Rimas A (Mun)	Grey Water PR

- Cook Islands Government yet to make a decision on “disinfection”
- Implied in Funding agreement and Te Mato Vai contract
- ‘Consultation’ arranged on Rarotonga
- Social media campaign mounted by opponents
- Lack of expert comment/discrediting of science



# Water charges anyone?





# But things have changed....

- Communications...
- Customer Service
- Staff training commenced
- Leaks being properly prepared
- Clear Purpose (Mission, Vision and Values)
- Cocoa to clear water (objective is potable water)
- Employment opportunities bringing employment home
- Reservoir storage/infrastructure management and maintenance

## TO TATOU VAI Strategic Framework







[www.totatouvai.gov.ck](http://www.totatouvai.gov.ck)