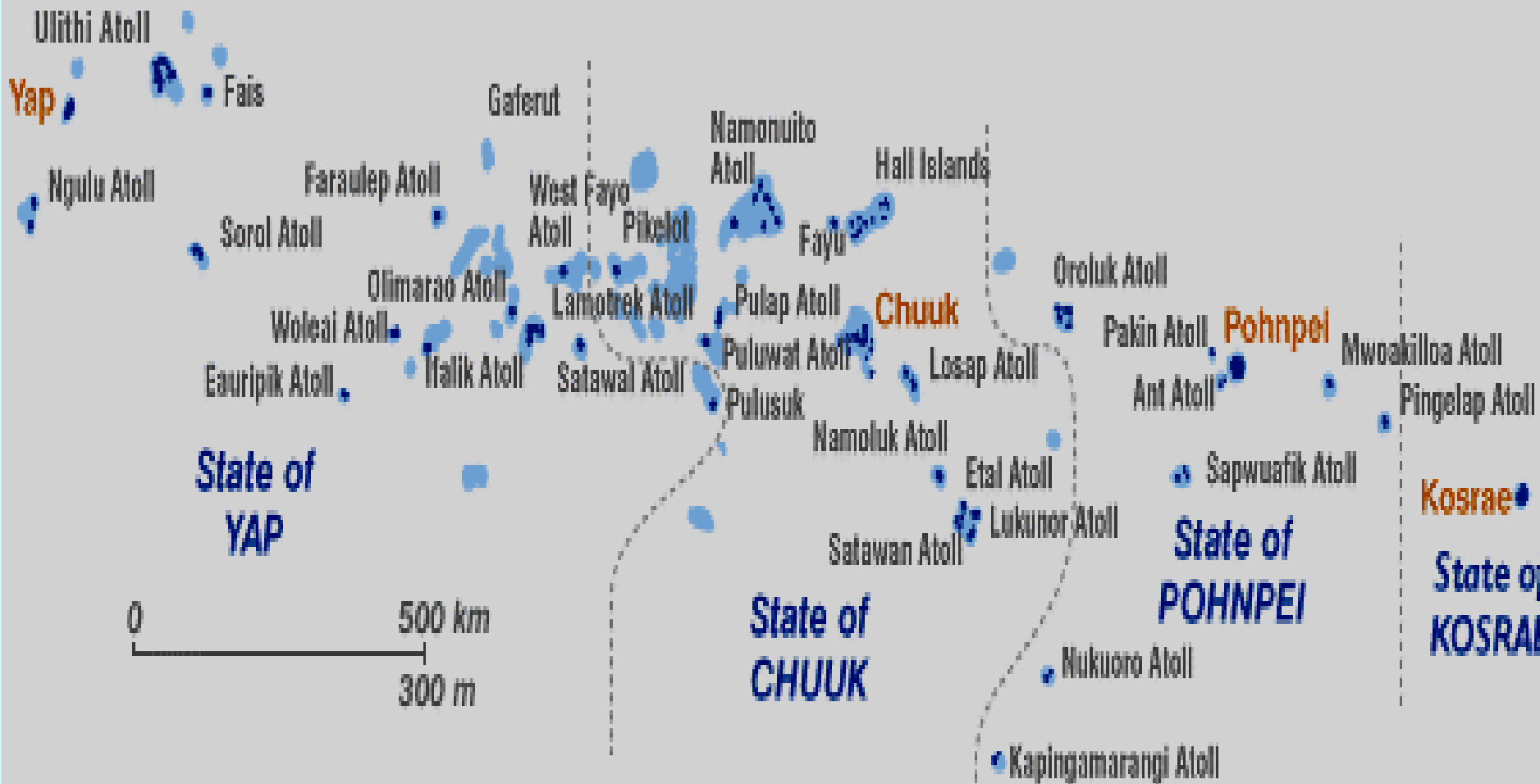


# Federated State of Micronesia

## Federated States of Micronesia



## LOCATION AND SIZE

The Federated States of Micronesia (FSM) consist of about 607 islands dispersed over a million square miles in the Western Pacific Ocean. The FSM spans approximately 2,000 mile from east to west and 900 miles from north to south and two time zones. The FSM comprises a total of 270.5 square miles and as well as a lagoon area of 2,777 square miles with in an east-west chain of islands known as the Carolinian archipelago.



## TOPOGRAPHY AND LAND

The constituent islands of FSM vary from small coral atolls to large mountains of volcanic origin. The states of Chuuk, Pohnpei and Yap comprise main islands and other outlying islands except the state of Kosrae which is a single island state. The main island grouping in each state is of volcanic or tectonic origin, but the majority of the outer islands are coral atolls. Each of these focal islands is surrounded by a reef, largest in the case of Weno Chuuk state, where the reef encloses a lagoon area of 800 square miles, containing a number of the volcanic islands.



## CLIMATE:

- The FSM has a tropical climate characterized by warm temperatures, high humidity and high precipitation. Mean monthly temperature are typically in the order of 27 degree Celsius throughout the year. Both Kosrae and Pohnpei experience very heavy rainfall with annual coastal region rainfall in the range of 200 inches and the interior rainfall of up to 400 inches in the case of Pohnpei. Rainfall in Weno/Chuuk range from 100 to 185 inches per year and in Yap the average is 120 inches. Rainfall is less evenly distributed over the year in Weno/Chuuk and Yap than pohnpei or Kosrae, giving rise to prolonged period of drought.

## POPULATION:

A national census was undertaken in the FSM during September 1994 when the following summarized population results were obtained

State	population	% of FSM Population	Density per sq. mile	# of house holds	mean houses size
Yap	11,128	10.6	242	1,889	5.9
Chuuk	52,870	50.5	1,072	6,863	7.7
Pohnpei	33,372	31.9	252	5,244	6.4
Kosrae	7,354	7.0	170	1,003	7.3
FSM	104,724	100.0	387	14,999	7.0

## EXISTING AND OPERATION WATER SYSTEMS IN THE FSM

SYSTEMS WITH-IN FSM			
NAME OF SYSTEM	LOCATION	POPULATION ON SERVED	SOURCE OF WATER
KOLONIA	POHNPEI	1,900	RIVER/WELL
PALIKIR	POHNPEI	1,600	WELLS
WENO	CHUUK	10,000	RIVER/WELLS
COLONIA	YAP	3,150	RESEV/WELL
GAGIL-TOMIL	YAP	1,700	WELLS
SOUTHERN	YAP	900	WELLS
TOFOL/LELU	KOSRAE	2,927	WELL/RIVER
MALEM	KOSRAE	1,257	WELL/RIVER
UTWE	KOSRAE	1,152	WELL/RIVER
TAFUYAT	KOSRAE	407	WELL/RIVER
YEKULA	KOSRAE	430	WELL/RIVER
MUTUNTE	KOSRAE	1,360	WELL/RIVER
WALENG	KOSRAE	100	WELL/RIVER

The existing water systems in each state is run and operated by the utility corporation of each state.

LOCATION	ESTIMATE OF GROUND WATER RESOURCES (mgd)
AVERAGE RAIN	
KOSRAE	2.62
WENO (CHUUK)	3.20
YAP PROPER	2.40
KOLONIA AREA ( POHNPEI )	6.90

PRODUCTION CAPACITY OF OPERATIONAL WELLS		
LOCATION	NO. OF WELLS IN OPERTION	PRODUCTION CAPACITY (gpd)
KOSRAE	4	331,000
CHUUK	32	1,600,000
POHNPEI	11	700,000
YAP	13	900,000

## PROBLEMS AND CONSTRAINTS

- NEED TRAINING
- INSTRUMENTS
- EQUIPMENTS
- FUNDING
- PUBLIC AWARENESS
- EXTERNAL ASSISTANCE
- LAGGING EXPERTISE IN THE FIELD OF HYDROLOGY

## CONCLUSION

I want to thank the following donors for the many contribution and effort they have invested in making this training possible.

- SOPAC
- NIWA
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- WMO
- NZAID

