



KASELEHLIE

EPA Water Quality Surveillance



POHNPEI EPA WATER LAB RECERTIFIED
BY USEPA FEB 2017

FOR CONDUCTING FRESH AND
MARINE WATER TESTING.

Water/Pihl

- ▶ Drinking/ Pilen nimpil
- ▶ Recreational/ wasahn mwemweiht
- ▶ Bathing/ duhdu
- ▶ Sakau preparations/ doadoak ehng kaunopadahh sakau
- ▶ etc./ soahng tohto





Water Quality Threats

- ▶ Piggery/ Kelen pwihk
- ▶ Improper Toilet Facilities/ wasahn kotala sohte mwahu
- ▶ Improper waste disposal/ epwel pen kiht sohte mi ni pwungi
- ▶ Constructions of: /wiawihdahn ihmw de ahl akan
 - buildings
 - roads

Effects of water quality(kapwal akan oang mwakelekel en pihl)

- ▶ Human health risk from Pathogens of Piggery and other sources:(kapwal en mouhr sang ni mwahs akan me sang ni kelen pwihk oh soahng tei kan)

Cholera

Leptospirosis

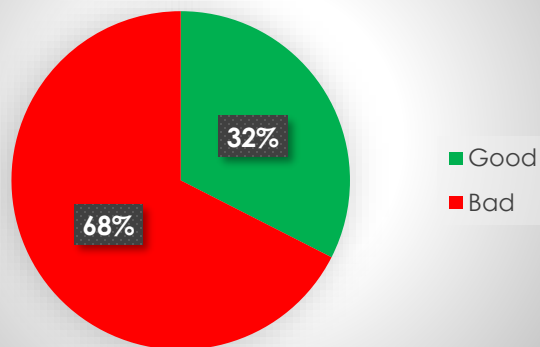
E.coli

Salmonella

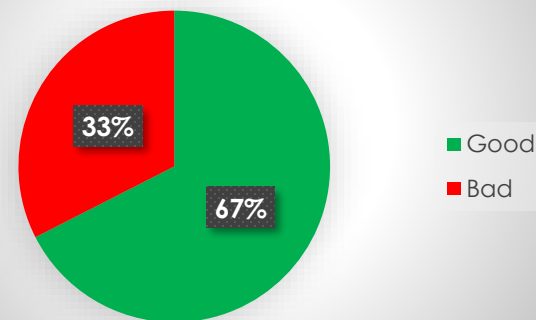


2013-18 WATER QUALITY TEST RESULT

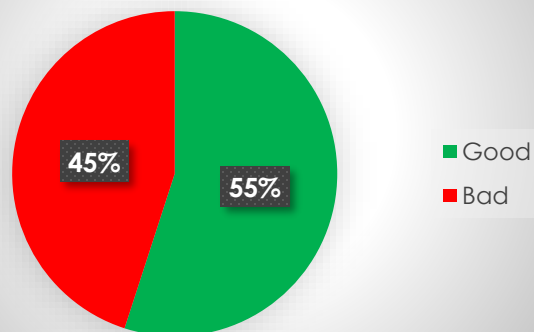
2013



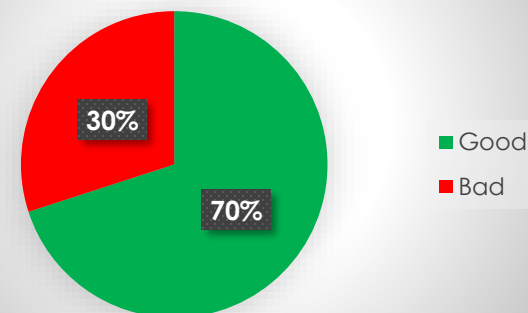
2016



2014



2018



Madolenihmw, n=12

Stream	2013 E. coli mpn/100 ml	2014 E. coli mpn/100 ml	2018 E. coli mpn/100 ml
Tuweri	450	1,300	505
Ipwitek	3,150	>24,000	7,800
Lehnpwus	1,600	400	50
Pahnahdo	410	190	70
Kitapw	245	190	145
Lehdau	485	550	80
Lehn Diadi	880	740	170
Peiai	2,050	6,700	265
Nankep	390	490	30
Sapwehrek	1,450	135	0
Parahu/Mahnd	2,900	660	355
Pohndau	680	390	25

Kitti, n=13

Stream	2013 E. Coli mpn/100 ml	2014 E. Coli mpn/100 ml	2018 E. Coli mpn/100 ml
Dauen Kopil	430	3,200	415
Soukroun	1,700	1,600	100
Enpein Powe	385	305	25
Enpein Pah	120	585	70
Pwok 1	125	70	60
Pahnkati	210	165	40
Kipar	1,050	545	2,250
Lehn Mesi	195	1,030	40
Diadi	18,000	1,165	405
Sekeren Lapahu	770	245	70
Pehleng	1,330	115	340
Kepin Mwomwi	115	235	65
Paies	885	290	420

U, n=7

Stream	2013 E. coli mpn/100 ml	2014 E. coli mpn/100 ml	2018 E. coli mpn/100 ml
Diadi	580	580	1,200
Nihmoak	> 24,000	> 24,000	3,100
Dien	1,850	1,850	2,850
Pahlap	4,250	4,250	630
Metipw	5,650	5,650	16,600
Awak	20,000	20,000	13,500

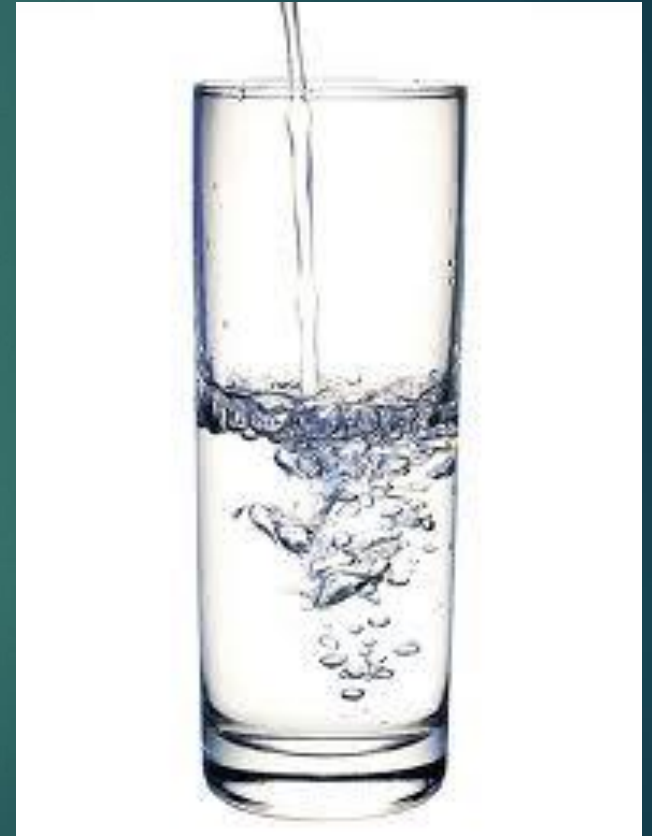
Sokehs, Nett, Kolonia, n=9

Stream	Municipality	2013 E. coli (mpn/100 ml)	2014 E. coli (mpn/100 ml)	2018 E. coli (mpn/100 ml)
Soundau	Sokehs	480	255	215
Dolon	Sokehs	17,000	17,000	1,372
Sekere	Sokehs	> 24,000	5,600	535
Luhke	U/Nett	765	180	
Meitik	Nett	3,000	2,750	1,250
Kahmar	Nett	745	450	4,750
Lowetik	Nett	2,300	65	
Dauen				
Neu	Kolonia	58,500	14,500	2,600
Nintu	Kolonia	19,500	>24,000	3,250

Water Quality Standards

Pohnpei Environmental Protection Agency

- ▶ Drinking Water
 - ▶ 0 mpn/100 ml E. coli



Water Quality Standards

Pohnpei Environmental Protection Agency

- ▶ Recreational Standard for Fresh Water
- ▶ < 576 mpn/100 ml E. coli



mpn = most probable number

Water Quality Standards

Pohnpei Environmental Protection Agency

- ▶ Marine Recreational Standard
- ▶ < 151 mpn /100 ml enterococci



Projects



- ▶ Piggery projects- Pehleng, Kitti and Mand Madolenihmw- 15 dry litter pig pens
- ▶ Waste management – 2 waste oil containment facility completed



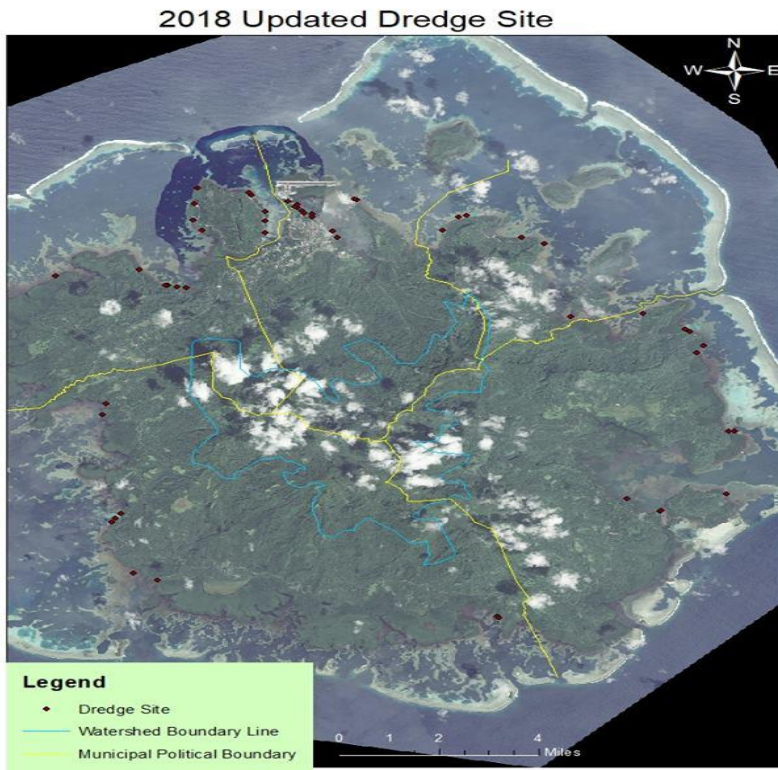


07/06/2018



07/06/2018

Dredge sites



60 dredge sites around the island of Pohnpei

Kitti- 7 sites

Madolenihmw- 10sites

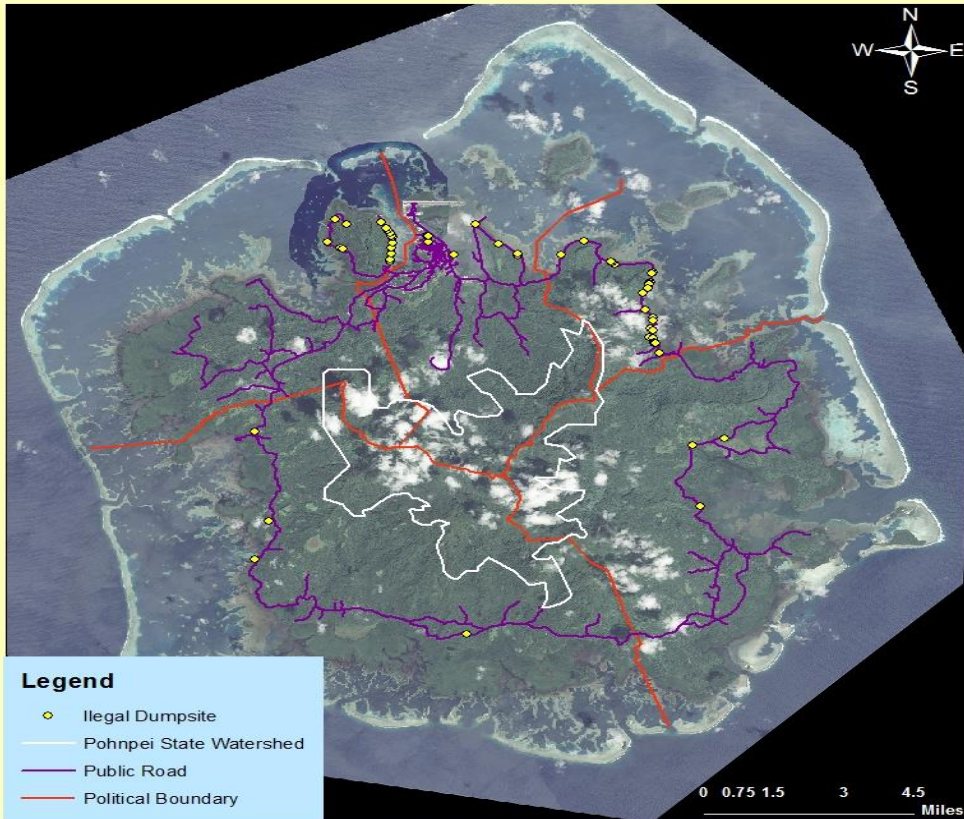
U- 8 sites

Nett- 6

Kolonia-10

Sokehs-19

Pohnpei Illegal Dumpsite



46 sites around the island of Pohnpei

Kitti- 4 sites

Madolenihmw- 3 sites

U- 17 sites

Nett- 4

Kolonia-3

Sokehs-15



Question?

Things do Know



- ▶ As population growth increases we are more reliant on imported food products.
- ▶ But as we import more we are also increasingly un aware of the effects of waste on our health and natural environment.
- ▶ Many things are imported into the islands and almost or all ends up as rubbish or trash.
- ▶ This is where our problem comes from

What We can Do?

- ▶ Take action in cleaning up our island
- ▶ Help enforce environmental laws and regulations
- ▶ Remove all sources of pollution 50/200 ft. away from any source of water
- ▶ Practice the 4R system at home, schools, office

KALAHANGAN

