

L. Fonadhoo

1.1.4 Groundwater (well water)

In Fonadhoo, 80.9 % of households believes that the groundwater available for consumption is safe to use. Table 5 shows that 18.5% of the households do not feel it is safe to use ground water for non-portable use.

Table 5: Household perception on the safety of the groundwater for their consumption. (Source: Population and Housing Census 2014).

| Islands | Is Well Water Safe as percentage of households | | |
|------------|--|------|------------|
| | Yes | No | Not Stated |
| L.Fonadhoo | 80.9 | 18.5 | 0.5 |

1.1.11 Quality of Groundwater at Households

About 61.2% of the households stated that the groundwater from the wells in their households did not had any smell while 22.4% of the households reported that the groundwater had a smell. Figure 14, Figure 15 and Figure 16 shows the contour maps of the groundwater tested from the households where the survey was administered.

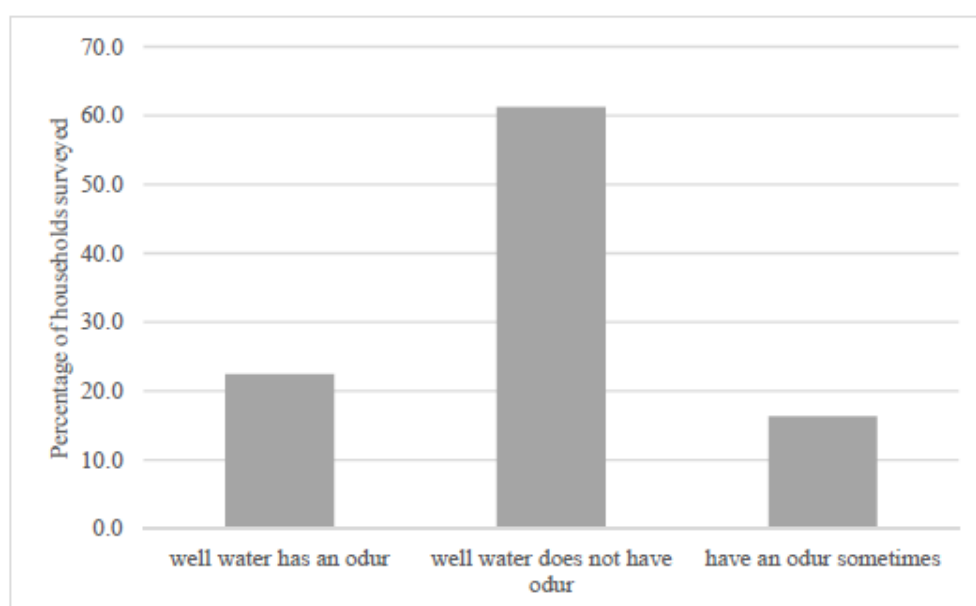


Figure 13: Quality of groundwater at the households

WHO guidelines suggest a maximum Chloride content of 250 mg/l for potable uses which equates to a conductivity of approximately 1,500 $\mu\text{S}/\text{cm}$. However experience in other small island states (Falkland, 2001) confirms whilst this is desirable, a more realistic limit is 2,500 $\mu\text{S}/\text{cm}$.

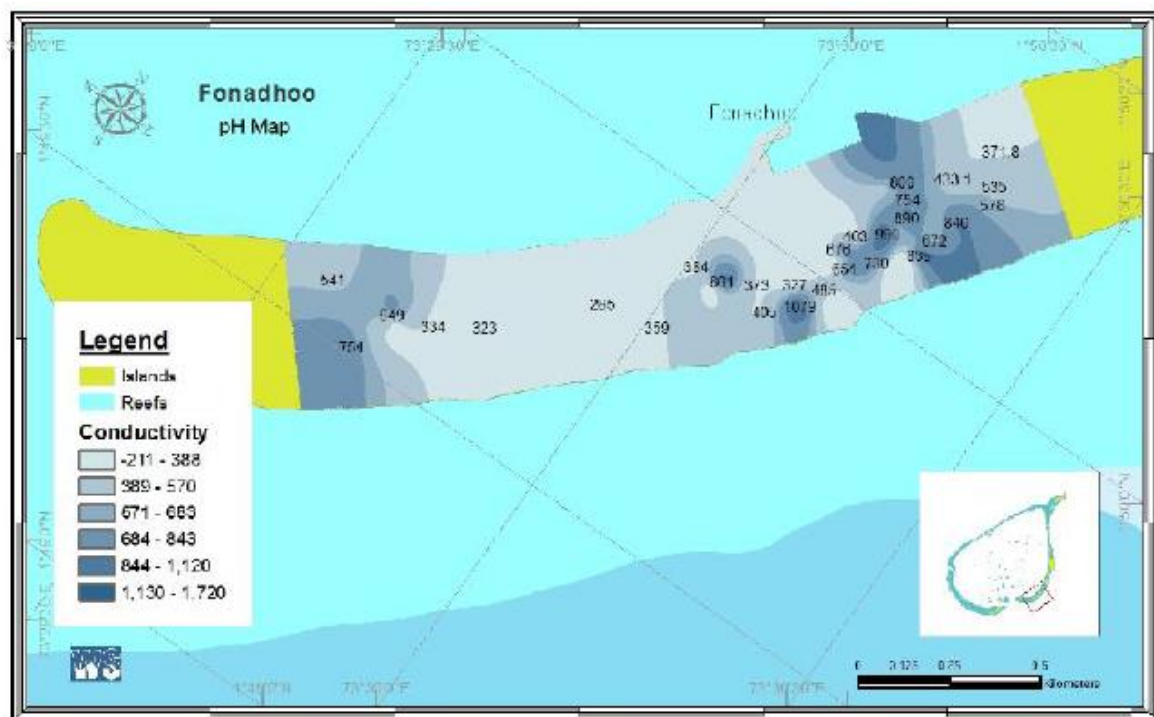


Figure 14: Conductivity map of the groundwater tested from surveyed households

Using the definition (Falkland, 2001), it is clear from Figure 14 above that Funadhoo has groundwater, on larger parts of the island, which has salinity levels below 1,500 $\mu\text{S}/\text{cm}$. The groundwater in these areas could be classified as fresh in terms of physical parameters.

Testing for salinity in the island (Figure 15) showed that the groundwater of the island had different salinity ranges across the island. Salinity was lowest in the centre of the island while it was observed to be highest in the reclaimed area near the harbour area on northern side of the island.

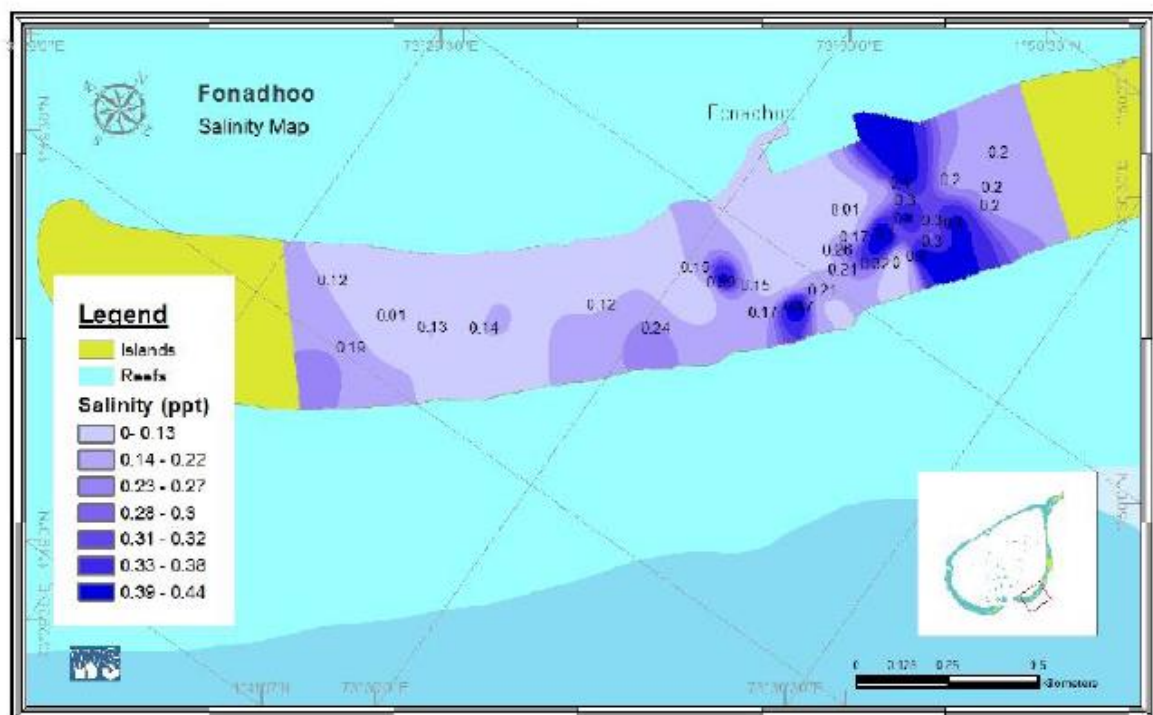


Figure 15: Salinity map of the groundwater tested from surveyed households

The pH level of ground water in Funadhoo island showed variations ranging from acidic to alkaline level. Low level of acidity of groundwater was found on north eastern side of the island while the groundwater was alkaline on centre of island.

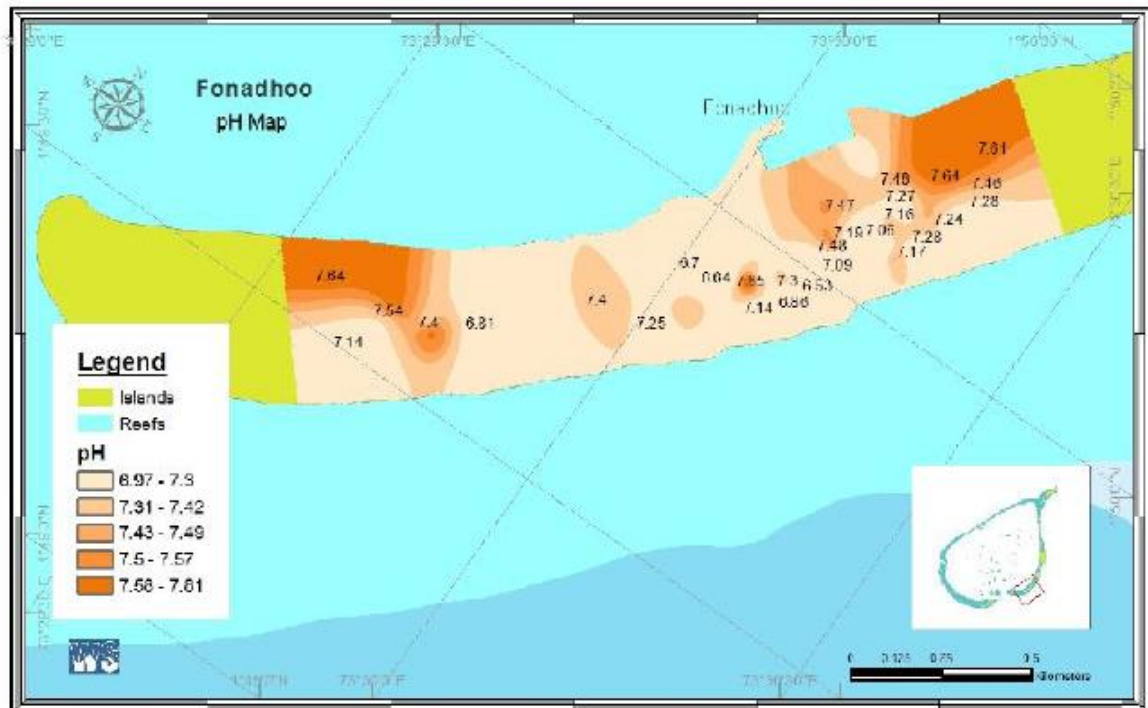


Figure 16: pH map of the groundwater tested from surveyed households