

Table 3 Variations in pH values of Shatt Al-Arab River during 1977–2013

Years	PH values	Discharge m <sup>3</sup> /s	TDS (g/L)	References
1977-1978	7.40- 8.6 (8.0 <sup>**</sup> )	919	0.44- 1.81 (1.13)	(Ministry of irrigation, 1979)
1986	7.60- 7.87 (7.7)	759 <sup>1</sup>	1.56- 2.61 (2.09)	(Al- Mousawi <i>et al.</i> , 1990)
1991-1992	7.29- 8.31 (7.8)	334 <sup>1</sup>	1.30- 3.00 (2.15)	(Al-Aubaidy& Al-Hello, 1996)
1996-1997	7.40- 8.50 (8.0)	606 <sup>1</sup>	0.90- 5.99 (3.45)	(Ajeel & Abbas, 2012)
2001	7.90- 8.20 (8.1)	300 <sup>1</sup>	1.06- 4.39 (2.73)	(Awad <i>et al.</i> , 2004)
2013	7.38- 8.24 (7.8)	41 <sup>2</sup>	1.40- 33.19 (17.30)	(Present study)

1 ( Al- Asadi, 2013)

2 (Ministry of water resources, 2014)

\*\* average value