

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Oct. 3-4, 2021

Oct. 9-10 2021

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INTRODUCTION

The following are water quality reports for the canals and contiguous waters of Padre Isles, Corpus Christi, Texas, which fulfill the monitoring requirements as set forth in a letter from TCEQ (Sidne Tiemann) to the USACE (Mark King) dated October 12, 1994. All temperature measurements are in degrees centigrade. All dissolved oxygen measurements are in milligrams per liter.

METEOROLOGICAL CONDITIONS

Oct. 3, 2021. Day. Partly cloudy. Wind ENE - 10 mph. 30.8 C.

Oct. 4, 2021. Night. Wind NNW - 5 mph. 25.0 C.

Oct. 9, 2021. Day. Wind SSE - 15 mph. 31.3 C.

Oct. 10, 2021. Night. Wind SSE - 10 mph. 28.2 C.

Date	Time	Station	Temp. C	D.O. mg/l
10/3/2021	1830	1	30	10.3
	1540	2	30	7.6
	1840	3	30.8	9.4
	1710	4	29.7	11
	1550	5	29.1	6.9
	1610	6	29.1	9.1
	1630	7	28.9	9.8
	1725	8	30.8	10.3
	1740	9	29.4	8.1
	1750	10	29.8	8.1
	1800	11	30.1	9
	1815	12	28.5	8.5
	1700	13	29	10.2
	1655	21	29.5	9.7
	1650	23	31.1	10.2

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
10/4/2021	710	1	28	6.7
	415	2	28.1	3.8
	720	3	27	5.5
	540	4	28.3	7.2
	425	5	28.1	5.1
	440	6	27	7
	500	7	28.5	7.9
	600	8	27.7	4.8
	620	9	28.2	6.2
	630	10	27.9	6.3
	640	11	28.5	7.1
	655	12	25	6.9
	530	13	28.1	7.3
	525	21	27.4	6.8
	520	23	28.4	6.7

All measurements taken one foot below the surface

NUTRIENTS

Water samples for nutrient analyses were collected one foot below the surface (S) and one foot above the bottom (B) at stations 1,5,6,8,9,10 and 11. Values are reported as milligrams per liter (mg/l or PPM) of the element in the compound. * The lower limit of detection is 0.007 mg/l for nitrate (NO₃-N) and nitrite (NO₂-N) nitrogen, and 0.010 mg/l for phosphate phosphorus (PO₄-P). ND means not detectable.

* Strickland and Parsons (1968). A Practical Handbook of Seawater Analysis. Fisheries Research Board of Canada. Ottawa.

Date	Time	Station	Depth(ft)	NO ₃ -N	NO ₂ -N	PO ₄ -P
10/3/2021	1830	1B	11	0.011	ND	ND
		1S		0.009	0.007	ND
	1550	5B	10	0.019	0.012	ND
		5S		0.023	0.015	ND
	1610	6B	13	0.007	ND	ND
		6S		0.007	ND	ND
	1725	8B	11	0.007	0.007	ND
		8S		0.007	ND	ND
	1740	9B	11	0.01	0.007	ND
		9S		0.01	0.007	ND
	1750	10B	13	0.01	0.007	ND
		10S		0.01	0.007	ND
	1800	11B	11	0.012	0.007	ND
		11S		0.012	0.007	ND

Date	Time	Station	Temp C	D.O.mg/l
10/9/2021	1720	21	28.9	7.1
	1730	23	29.5	7.4
10/10/2021	610	21	27.9	5.2
	620	23	28.6	5.7

