

Economic Impact Assessment of Water Ban, December 2016

Summary Report Prepared for

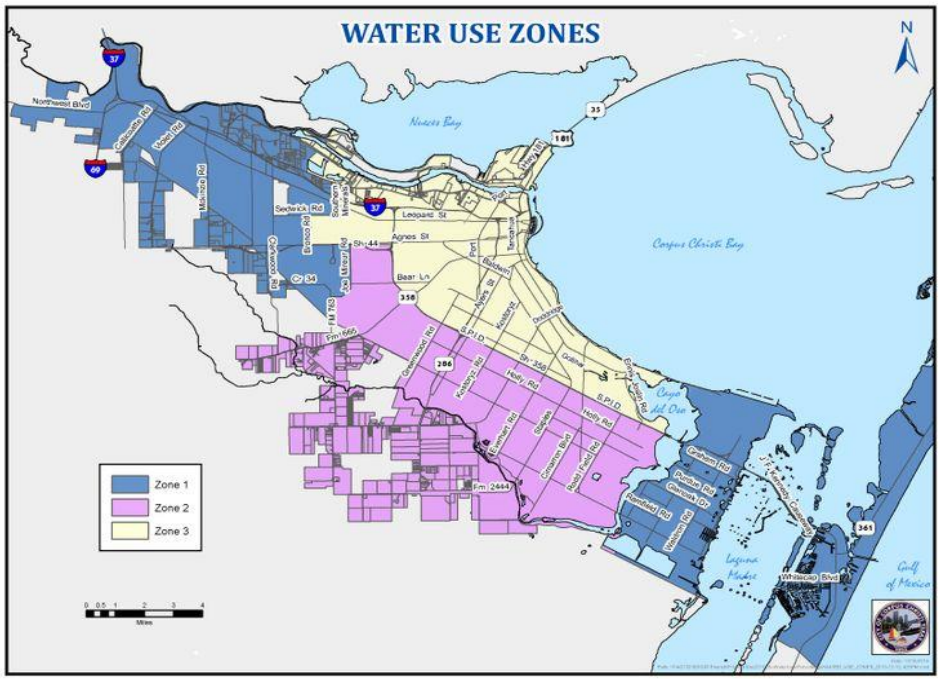
Corpus Christi Regional Economic Development Corporation

December 22, 2016

Background

- On late Wednesday, December 14, 2016, the City of Corpus Christi advised all its water customers to avoid using tap water for all water needs until further notice, due to a potential contamination in the water source.

- On Friday, December 16, the City rescinded its DO NOT USE advisory for Zone 1, which could resume using tap water for all regular uses. The advisory for Zone 2 was changed to LIMITED USE of tap water for such activities as bathing and washing clothes, but not for drinking or cooking/food preparation. The DO NOT USE advisory remained in full effect for Zone 3.
- On the morning of Sunday, December 18, the City lifted all tap water restrictions citywide.



Focus / Scope

- This summary report focuses on local businesses that were adversely affected by the water advisories.
- While the water advisories impacted most local businesses and residents in Corpus Christi, businesses in certain industries were more severely affected than others because they were either closed or they lost a substantial portion of their business during that period.
- These specific private-sector businesses are (1) hotels and motels; (2) restaurants and other eating and drinking places; and (3) beauty salons.
- Estimates of business losses are based on the following key assumptions:
  - **ZONE 1:** All businesses in these three industries were closed for one day.
  - **ZONE 2:** All businesses in these three industries were closed for one day. For two additional days, eating and drinking places remained closed, whereas beauty salons and hotels and motels were open, but hotels and motels incurred additional costs of bottled water.
  - **ZONE 3:** All businesses in these three industries were closed for three days.
- Economic impacts beyond these three industries were also felt, such as replacing tap water with bottled water for employees, but these cannot be estimated with a strong degree of confidence at this time.

Business Establishments by Zone

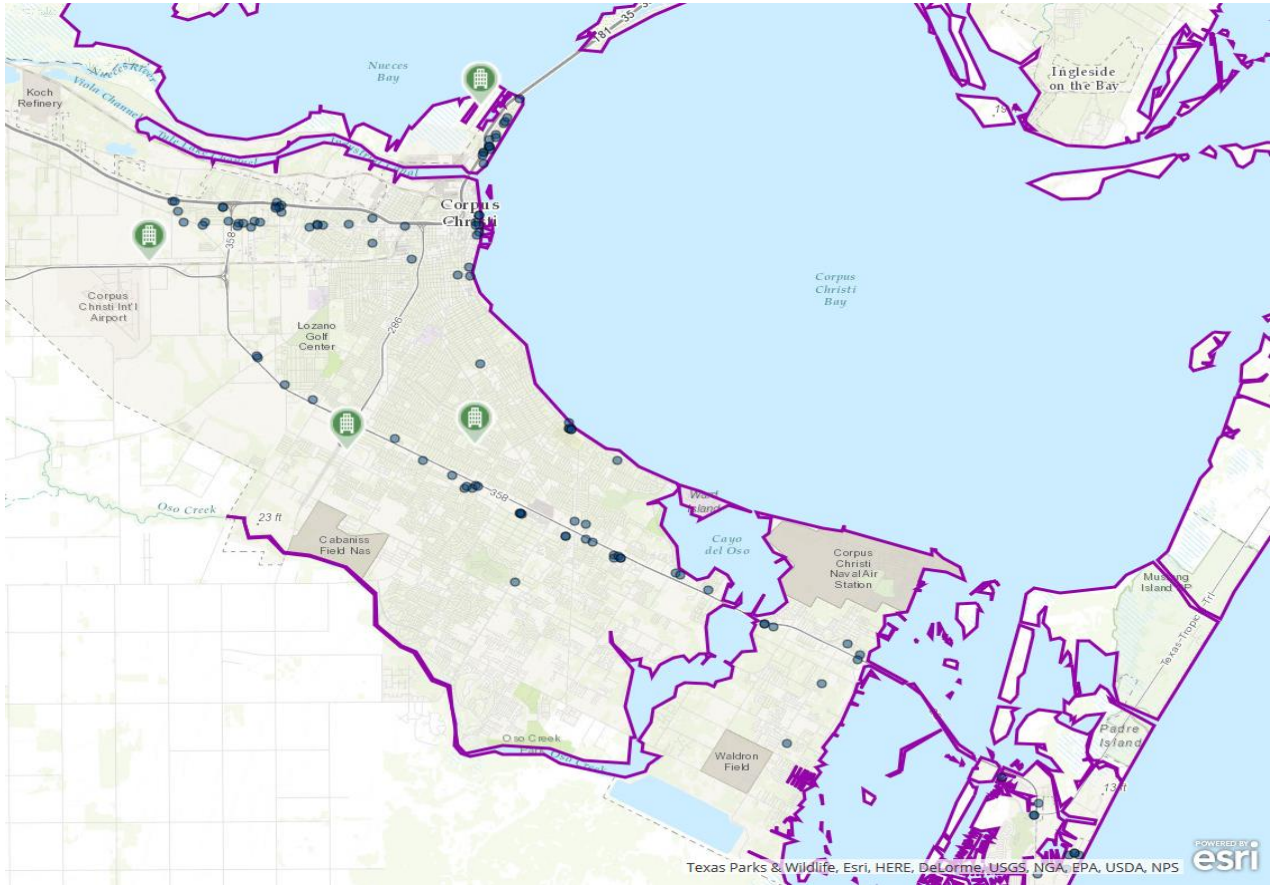
- The following table shows the numbers of business establishments in each of the three city zones.

Establishments

	Zone 1	Zone 2	Zone 3	City Total
Accommodation:				
Hotels/Motels	18	27	58	103
Eating & Drinking Places:				
Special Food Services	5	10	22	37
Drinking Places	11	18	34	63
Restaurants & Other Eating Places	91	154	343	588
Eating & Drinking Places Total	*107*	*182*	*399*	*688*
Beauty Salons	31	67	75	173

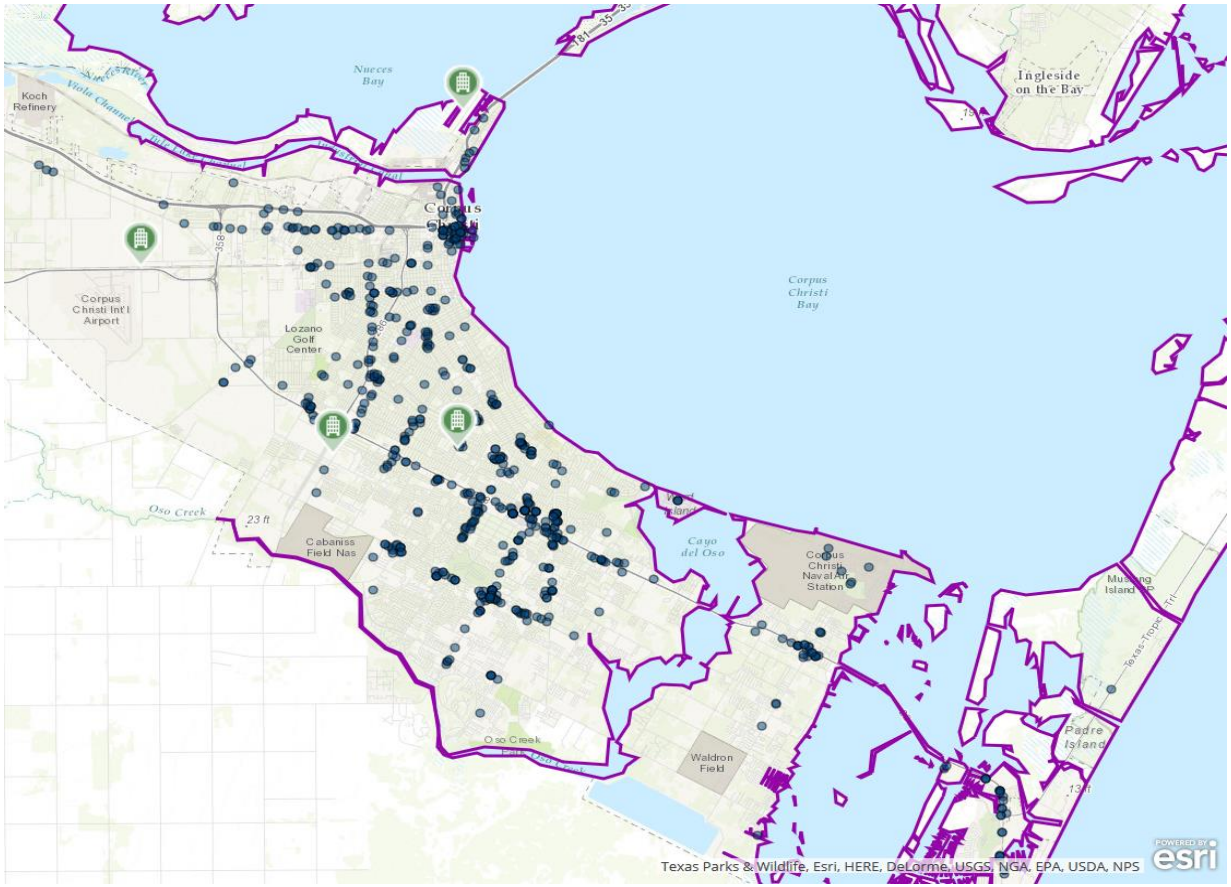
Hotels & Motels

- The following map shows the locations of hotels and motels in Corpus Christi.



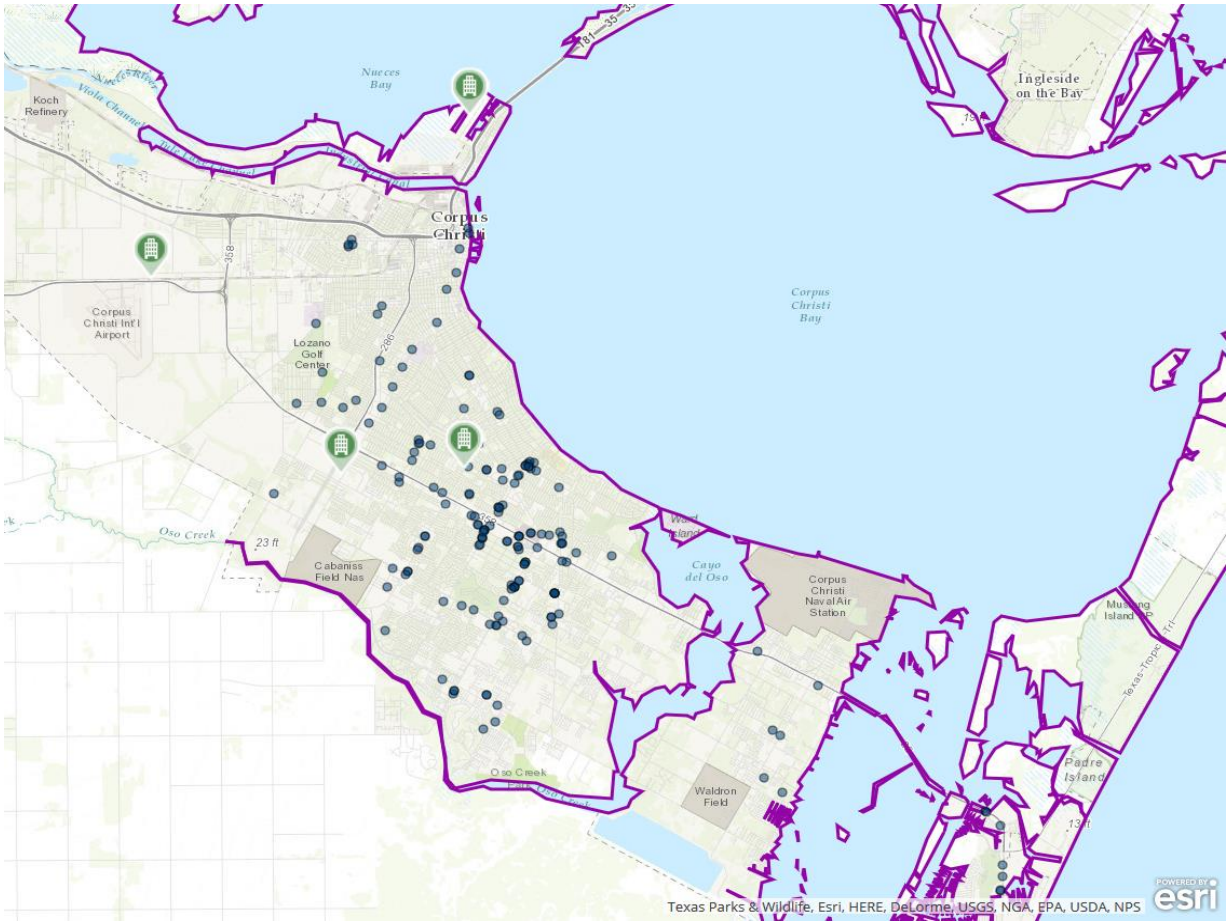
Eating & Drinking Places

- The following map shows the locations of restaurants and other eating and drinking places in Corpus Christi.



Beauty Salons

- The following map shows the locations of beauty salons in Corpus Christi.



Business Sales by Zone

- The following table shows the total daily gross sales figures of individual industries in each of the three city zones.
- Estimates are derived from Corpus Christi's 2015 total industry sales figures that are scaled by the number of establishments in individual zones.

Gross Sales Per Day

	Zone 1	Zone 2	Zone 3	City Total
Accommodation:				
Hotels/Motels	$95,050	$142,574	$306,271	$543,895
Eating & Drinking Places:				
Special Food Services	$11,345	$22,690	$49,919	$83,955
Drinking Places	$11,141	$18,232	$34,437	$63,810
Restaurants & Other Eating Places	$380,785	$644,405	$1,435,266	$2,460,456
Total Eating & Drinking Places	*$403,271*	*$685,327*	*$1,519,622*	*$2,608,221*
Beauty Salons	$19,686	$42,547	$47,627	$109,860
Business Total	$518,007	$870,448	$1,873,520	$3,261,976

Direct Business Losses

- The following table shows the estimated losses of business sales in Corpus Christi due directly to the water advisories.
- Those three types of businesses collectively suffered an estimated loss of **$8.4 million** over the three-day period of water ban.

Estimates of Business Losses

	Zone 1	Zone 2	Zone 3	City Total
	(1 day)	(1 day + 2 days partial effects)	(3 days)	
Accommodation:				
Hotels/Motels	$95,049.56	$151,900	$918,812	$1,165,762
Eating & Drinking Places:				
Special Food Services	$11,345	$68,071	$149,757	$229,174
Drinking Places	$11,141	$54,695	$103,312	$169,148
Restaurants & Other Eating Places	$380,785	$1,933,215	$4,305,797	$6,619,797
Total Eating & Drinking Places	*$403,271*	*$2,055,981*	*$4,558,866*	*$7,018,119*
Beauty Salons	$19,686	$42,547	$142,882	$205,115
Total	**$518,007**	**$2,250,428**	**$5,620,561**	**$8,388,996**

Data and Methodology

- The findings on business impacts are estimates given certain assumptions, instead of actual sales data. Estimates may be revised when actual sales figures become available.
- Distributions of business establishments in individual city zones are obtained from *ESRI*'s GIS mapping software.
- Industry sales data are derived from *EMSI*'s 2015 sales figures for all ZIP codes in Zones 1, 2 and 3 of Corpus Christi.
- Data on local hotels and motels are obtained from quarterly *Texas Hotel Reports* of Source Strategies, Inc.
- The total additional cost of bottled water for local hotels and motels is estimated at $4,663 per day. This estimate is based on the supply of two bottles for each of the estimated 4,766 overnight visitors at an average cost of $0.49 per bottle.
- This report focuses on businesses that were mostly affected by the water advisories; the findings therefore ignore effects on other businesses and residents, such as a loss of productivity, and the expenses of bottled water and other supplies.



Presented by: Jim Lee

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