Section 2

## 2.1 POPULATION (OF CITIES)

The population in the study area has increased over the past 10 years and is projected to double over the next 20 years. In order to accurately capture the population growth of the study area, the following information was collected from each participant towards the beginning of the study:

- Current population and growth projections;
- Number of water connections;
- Wastewater system information;
- Utility development agreements for planned developments; and
- Build-out schedules and conceptual plans of planned developments.

This information was used to develop population projections for each entity in five year increments through a 2040 planning horizon, including ultimate build-out of planned developments. The projected populations were compared to 2010 U.S. Census Bureau figures, as well as the TWDB population projections in the *TWDB 2011 Region L State Water Plan*. **Table 2-1** summarizes the total population projections for each entity and includes the U.S. Census Bureau figures and TWDB projections for comparison purposes.

Table 2-1: Population and Growth Projections

Entity	Growth Rate	2010	2015	2020	2025	2030	2035	2040
City of Point Comfort								
TWDB Projections	4.0%	1,27 6	1,573	1,870	2,415	2,959	3,520	4,08 1
City's Projections	0.1%	781	781	782	782	783	783	783
US Census Bureau Data	-	737	-	-	-	-	-	-



Entity	Growth Rate	2010	2015	2020	2025	2030	2035	2040
City of Port Lavaca								
TWDB Projections	0.8%	13,1 63	13,74 4	14,32 5	14,91 9	15,51 3	16,11 5	16,7 17
City's Projections	0.1%	12,8 00	12,80 6	12,81 3	12,81 9	12,82 6	12,89 0	12,9 54
US Census Bureau Data	-	12,2 48	-	-	-	-	-	
City of Seadrif	t							
TWDB Projections	0.3%	1,40 8	1,434	1,459	1,479	1,499	1,512	1,52 5
City's Projections	2.0%	1,45 2	1,597	1,742	1,917	2,091	2,300	2,50 9
US Census Bureau Data	-	1,36 4	-	-	-	-		
Port O'Connor MUD								
TWDB Projections	0.8%	1,34 6	1,406	1,465	1,526	1,587	1,649	1,71 0
MUD's Projections	1.0%	3,11 9	3,160	3,194	3,236	3,270	3,310	3,35 3

As presented in **Figure 2-1**, the projections provided by the City of Point Comfort show minimal growth due to Alcoa and Formosa Plastics purchasing the homes located within a certain distance from their industrial plants and leaving them vacant in order to provide a safety buffer.

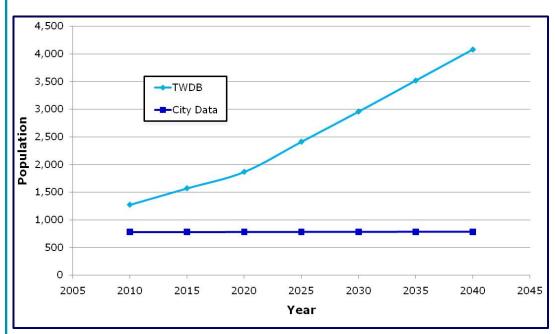


Figure 2-1: Point Comfort Population Projections – Comparison of Data

The City of Seadrift and Port O'Connor MUD have both provided projections greater than TWDB's due to the large number of residential developments planned for their areas, as shown below in **Figures 2-2 and 2-3**.

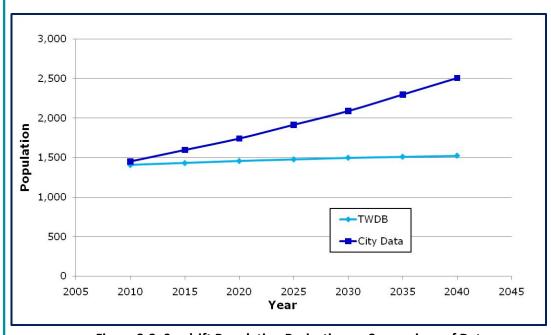


Figure 2-2: Seadrift Population Projections – Comparison of Data

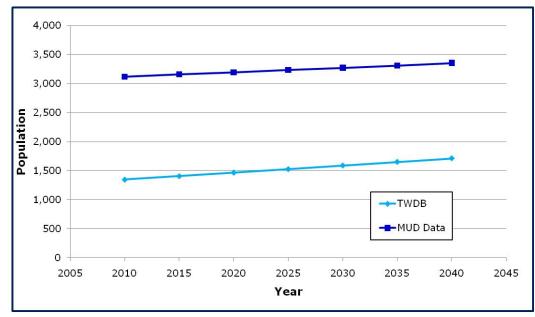


Figure 2-3: Port O'Connor Population Projections - Comparison of Data

Since each entity was able to justify the increase or decrease in population data and growth rate for their area, this data was used instead of the U.S Census Bureau figures and the TWDB data to size the proposed regional wastewater infrastructure. The new 2010 U.S. Census population figures were also lower than the data provided by TWDB and the entities due to a number of residents owning second homes in the study area and not claiming permanent residency in Calhoun County. This methodology, used by the project team, was approved by TWDB staff on March 31, 2011. The population projections for each of the entities were used to calculate wastewater demands for the study area.

## 2.2 SUBDIVISIONS OF CONCERN

The subdivisions herein referred to as subdivisions of concern, are the subdivisions in the vicinity of the project participants that have onsite sewage facilities (OSSFs) with documented OSSF failures like Port Alto, Double D and Meadow Brook Park in Area 1 or subdivisions on OSSFs which are similar in age and density to the subdivisions with OSSF failures. These subdivisions have been included in this study to address future potential scenarios of OSSF failures currently being experienced in some of the subdivisions which might

cause water quality issues. The other existing subdivisions that have been included are:

- Matson, Bowman, Shoreline Acres, Six Mile, Royal Estates, Shady Acres, Hackberry Junction and Bay Meadows in Area 1A;
- Olivia in Area 1B; and
- Indianola and Alamo Beach in Area 3.

## 2.3 PROPOSED DEVELOPMENTS

Southern Calhoun County was experiencing significant residential development prior to the current economic downturn. These developments are at various stages of planning and construction (See Figure 2-4). However, once completed, the proposed developments will have a significant impact on the future wastewater flows of Calhoun County. These developments range in size from 50 lots to 9,000 lots as shown in Table 2-2. The developments are assumed to be at 50% development by 2040 and at 100% development by 2060 (Source: 2008 Southern Calhoun County Water Supply Study and updated data from Urban Engineering).



Figure 2-4 Current, Planned and Potential Subdivisions

Table 2-2 Proposed Units in Each Subdivision

Dev No.	Proposed Development	Estimated Number of Units (Full Development Assumed to be in 2060)
1	Swan Point Landing	89
2	The Bay Club @ Falcon Point	108
3	Seaport Lakes	56
4	Sanctuary at Costa Grande	767
5	Caracol	74
6	Harbor Mist	225
7	Sanctuary-Phase III at Costa Grande	300
8/13	Falcon Point Ranch Phase I	1,500
10	Tidelands	82
11	Bindewald Tract	300
12	Fisher Tract	300
9/15	Powderhorn Ranch	500
14	Costa Grande	8,900
16	Lane Road	300

Swan Point landing subdivision is in the process of re-platting the 89 lots to smaller lots totaling up to 255 lots with lagoons and canals. This data was received at a late date in the preparation of this study and report and hence, the cost estimates do not reflect the 255 lots. The increase in the number of lots will potentially lower the monthly cost per lot payment currently provided in Section 6 for Swan Point Landing.