

APPENDIX F
HURRICANE EVACUATION IMPACT ANALYSIS



Sweetwater Resort Community Hurricane Evacuation Impact Analysis

Final Technical Memorandum

January 26, 2010

Prepared by *PBSJ*

**Final
Technical Memorandum**

**Sweetwater Resort Community
Hurricane Evacuation Impact Analysis**

Prepared for

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INTRODUCTION

Dr. Crayton Pruitt of Secret Promise, Ltd. is working on developing a mixed use resort community in the coastal area of Taylor County, Florida. This study is being conducted to address what effect the additional units would have on the nearest adjacent evacuation routes out of the area and whether there would be a significant effect on evacuation clearance time and time to public shelter. Post, Buckley, Schuh and Jernigan (PBS&J), as the state's leading hurricane evacuation planning firm, was hired in July 2008 to develop the necessary hurricane evacuation model and to perform the necessary base analysis with and without the development. In 2009, Dr. Pruitt, working with WilsonMiller Inc., modified the land use plan so that most of the residential units are outside the coastal high hazard area (CHHA). This January 2010 update reflects the new land use plan for the development.

One of the challenges in performing the base work was the reality that the area has not had its hurricane evacuation clearance times updated recently. The area does not have the evacuation transportation model tools that have been developed in other parts of the state. Wilbur Smith Associates is currently developing a new transportation model for hurricane evacuation, but this work will not be completed for some time. Therefore, PBS&J began this analysis process by constructing an evacuation model tool that will not only show the Sweetwater Resort

impact but will also allow Taylor County and the State to test multiple evacuation scenarios. The model is included in its entirety in Appendix A of this report.

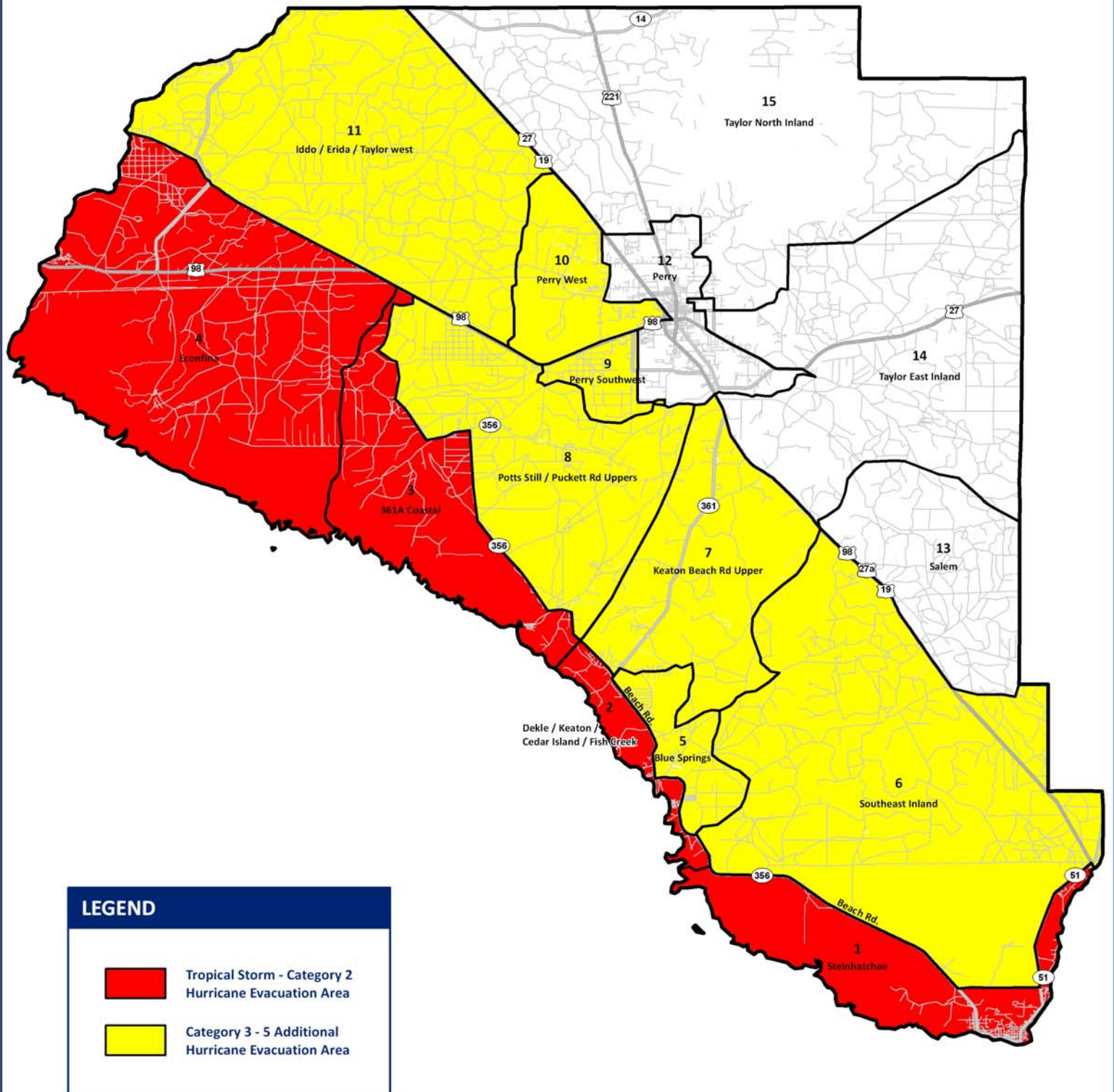
Another challenge for this analysis is the state of flux of hurricane evacuation review criteria by which the State and Regional Planning Councils (RPCs) must review development applications. In accordance with Florida Statutes Chapter 163.3178 and 9J5, the State has moved to a time to shelter and out of county time threshold for each county in the state as opposed to just looking at the percent of development traffic on the evacuation routes. PBS&J prepared this analysis under all benchmarks and analysis approaches to make review as efficient and clear as possible. In Appendix B of this technical memorandum, there is a Development of Regional Impact (DRI) Question 23 “stylized” response which puts the findings in an Application for Development Approval (ADA) appropriate format.

ANALYSIS AND FINDINGS

The subject property is located in Taylor County in the Category 1 surge area/coastal high hazard area between Dekle and Keaton Beach. PBS&J divided the county into traffic evacuation zones which reflect areas that are likely to be evacuated for various storm threats. These areas are shown in Figure 1. Although Sweetwater is partially in a Category 1-2 hurricane evacuation zone that would be asked to evacuate for any category of storm, most of the residential units are outside the potential Category 1 surge area and thus by State definition are outside the CHHA.

FIGURE 1

TRAFFIC EVACUATION ZONES



LEGEND

-  Tropical Storm - Category 2 Hurricane Evacuation Area
-  Category 3 - 5 Additional Hurricane Evacuation Area

Taylor County has a fairly limited evacuation road network. The nearest and sole evacuation route for the Sweetwater Resort site is Keaton Beach Road which is CR 361. This route coupled with US 19 into and through Perry constitute the major evacuation routes that would be impacted by the proposed development.

The development will include 624 total residential and 400 conference hotel units. For analysis purposes, 80 percent of the proposed 624 residential units were assumed to be seasonal in nature and 20 percent permanent (year-round) residential units. All of the conference hotel units were treated as seasonal units. Of the residential units, 190 are within the CHHA and 434 are outside the CHHA. Of the hotel units, 150 are within the CHHA and 250 are outside the CHHA. This analysis was performed to determine the maximum theoretical impact of the Sweetwater Resort and thus is a conservative analysis that may overstate the actual impact.

EVACUATING VEHICLES

The number of additional evacuation vehicles was calculated using very conservative socioeconomic and behavioral parameters and the abbreviated hurricane evacuation transportation model developed by PBS&J for this study. As shown in Table 1, the proposed additional units will add a total of 379 evacuating vehicles to the evacuation road network in a Category 3 hurricane low seasonal occupancy scenario and 1,022 evacuating vehicles in a high occupancy scenario. This analysis assumes that 100 percent of these evacuation vehicles will use CR 361 to leave the area. (While the Category 3 scenario is the benchmark analysis scenario used around the State of Florida, it

should be noted that the revised land use concept moves many units outside of the CHHA area thereby reducing congestion for Category 1 evacuations in the area.)

Table 1
Sweetwater Resort Hurricane Evacuation Impact Analysis

<i>Evacuation Vehicles Generated</i>	
	<i>Sweetwater Resort</i>
Dwelling Units	899 seasonal units 125 perm resident dwelling units 1024 total units
Seasonal Unit/ Occupancy Levels	20% low seasonal occupancy 85% high seasonal occupancy
Evac Participation Rate/ Category 3 Hurricane	100% of all units
Vehicles per Unit	1.10 vehicles per seasonal unit 1.81 vehicles per perm unit
Evac Vehicle Usage Rate	80% of permanent unit vehicles 100% of seasonal unit vehicles
Evacuating Vehicles Generated	Cat 3-5 Low Seasonal Occ 379 vehicles Cat 3-5 High Seasonal Occ 1022 vehicles

<i>Public Shelter Demand Generated by Project</i>	
People per Unit	2.33 people per seasonal unit 2.28 people per perm resident unit
Percent of Evacuees to Local Public Shelter	5% of perm resident evacuees 1% of seasonal resident evacuees
Public Shelter Demand Generated	<i>Sweetwater Resort</i> Cat 3-5 Low Seasonal Occ 18 people Cat 3-5 High Seasonal Occ 32 people
Nearest Public Shelter	Taylor County HS capacity 750 people Total Taylor Co shelter capacity 2510 people

Table 1 (continued)
Sweetwater Resort Hurricane Evacuation Impact Analysis

<i>Evac Vehicles as Percent of LOS E Directional Service Volume Calculation</i>				
	<u>cat 3-low occ</u>	<u>cat 3--low occ</u>	<u>cat 3--high occ</u>	<u>cat 3--high occ</u>
	<u>361</u>	<u>US 19 into Perry</u>	<u>361</u>	<u>US 19 into Perry</u>
Percent of Sweetwater EvacTraffic Using 361 Keaton Bch RD	100%		100%	
Percent of Sweetwater EvacTraffic Using US 19 into Perry		100%		100%
Evac Vehicles Over Entire Evacuation	379 vehicles	379 vehicles	1022 vehicles	1022 vehicles
Highest Hourly Contribution of Evac Traffic as a % of Total Evac Traffic Based On Medium Behavioral Response curve	30%	30%	30%	30%
Highest Hourly Contribution of Sweetwater EvacTraffic by Route From Project	114 vehicles	114 vehicles	306 vehicles	306 vehicles
Maximum Directional LOS E Service Volume by Route	1410 veh per hour	1810 veh per hour	1410 veh per hour	1810 veh per hour
Max Hourly Evac Veh as % of LOS E Hourly Directional Service Volume Calculation	8.1%	6.3%	21.7%	16.9%

To calculate the additional unit's **maximum hourly** contribution to the evacuation, the highest hourly percentage (30%) of evacuees loading the road network was obtained from the medium behavioral response curve used in most of the hurricane evacuation studies around the state. These curves show the assumed percentage of total evacuees loading the road network by each hour of the evacuation. Using that figure, the proposed development's maximum hourly contribution of evacuation traffic would add 114 to 306 evacuating vehicles to the CR 361 and US 19 evacuation routes depending on seasonal occupancy.

CR 361 and US 19 were analyzed to determine whether the proposed development would utilize 25 percent or more of the segment's LOS E hourly directional maximum service volume and thus have a material adverse effect on the area's evacuation clearance times (according to previous Florida Department of Community Affairs, DCA) guidelines on what is a significant impact). Per the calculations shown in Table 1, the additional units will utilize up to 21.7% (306 vehicles divided by 1410 vehicles per hour) of the current LOS E hourly directional maximum service volume for the CR 361 evacuation route for a Category 3-5 hurricane with a high seasonal occupancy scenario. On US 19 (which is actually the controlling bottleneck for Taylor County evacuations), the additional units will utilize up to 16.9% (306 vehicles divided by 1810 vehicles per hour) of the current LOS E hourly directional maximum service volume for a Category 3-5 hurricane with a high seasonal occupancy scenario. These calculations show that the project will not have a material adverse effect on evacuation clearance time under the State's previous statutory rules and benchmarks.

PUBLIC SHELTER DEMAND

Given the predominant seasonal character of the development and its residents, the additional public shelter demand generated should be minimal. Most residents will seek inland hotels and motels or will not even be present at the start of an official evacuation advisory. To calculate a shelter demand figure, it was assumed that five percent of the permanent resident evacuees and one percent of the seasonal resident evacuees would go to local public shelter. This generates an additional net maximum of 32 public shelter evacuees that the county

would need to accommodate for a Category 3-5 hurricane, high seasonal occupancy scenario.

STATE REVIEW CRITERIA

To be responsive to the intent of the Chapter 163.3178 State legislation and 9J5 regarding review of development hurricane evacuation impacts, PBS&J also identified the nearest public shelter and analyzed the longest amount of time any one public shelter evacuee might experience traveling there from the Sweetwater site (Appendix A which includes the model has a sheet that calculates this parameter). For a conservative calculation, the nearest public shelter was assumed to be Taylor County High School on the northwest side of Perry. Its current public sheltering capacity is 750 people and should be able to adequately handle the additional demand when combined with four other shelters that may be opened. Total Taylor County shelter space is 2,510 people. Looking at the worst congestion that will be experienced at any time during an evacuation in this area of Taylor County, public shelter evacuees from Sweetwater will experience no more than 92 to 146 minutes of travel time to this shelter for the benchmark Category 3 scenario. That compares very favorable to the 12 hour criteria set by the State in Florida Statutes Chapter 163.3178. This calculation takes into account other evacuation zonal traffic in the area and background traffic that will be on the network.

The current coastal element (section 1X.7) of the Taylor County Comprehensive Plan specifies a maximum clearance time limit of 9 hours for a Category 1 hurricane and 22 hours for a Category 5

hurricane. Taylor County, even with maximum expected traffic from the Withlacoochee area to its south and a build out of the Sweetwater Community, has a clearance time of only 5.0 hours in a Category 1 hurricane and 9.2 hours in a Category 5 hurricane with high tourist occupancy. Much of this time is built in behavioral response time and not even actual traffic demand servicing time. These times are much lower than the county's standard of 9 and 22 hours for a minor and major hurricane.

CONCLUSIONS

The analysis demonstrates that the project will have minimal impacts on clearance time and public sheltering in Taylor County. This part of Taylor County and Florida has relatively light roadway evacuation congestion and the Sweetwater development does little to negatively change that situation. In conclusion, the project will not exceed time to shelter or overall clearance time standards set by the county for hurricane evacuations.

Appendix A

TAYLOR COUNTY
SOCIOECONOMIC DATA-- 2008
Sweetwater Resort

Please note: Only numbers in blue are changeable by the user--all numbers in black are calculations/formula driven values

Evacuation Zones	Permanent Occupied Units	Change in Permanent Occupied Units	Mobile Home Units	Change in Mobile Home Units	Seasonal Tourist/Hotel/Motel Units	Change in Tourist/Hotel/Motel Units	People Per Permanent Occupied Unit	People Per Mobile Home Unit	People Per Tourist/Hotel/Motel Unit	Vehicles Per Permanent Occupied Unit	Vehicles Per Mobile Home Unit	Vehicles Per Tourist/Hotel/Motel Unit	Average Tourist Occupancy OFF-PEAK Hurricane Season	Average Tourist Occupancy PEAK Hurricane Season
1 Steinhatchee area	631	0	308	0	570	0	2.29	2.29	3.00	1.64	1.64	1.10	20%	85%
2 Dekle,Keaton,Cedar Isl,Fish Crk	375	125	168	0	1,139	899	2.28	2.28	2.33	1.81	1.81	1.10	20%	85%
3 361A Coastal area	100	0	69	0	270	0	3.69	3.69	3.00	1.95	1.95	1.10	20%	85%
4 Econfina area	134	0	123	0	278	0	2.55	2.55	3.00	1.75	1.75	1.10	20%	85%
5 Blue Springs/beaches inland area	28	0	19	0	20	0	2.28	2.28	3.00	1.81	1.81	1.05	20%	85%
6 Taylor southeast inland	94	0	1	0	58	0	2.62	2.62	3.00	1.83	1.83	1.05	20%	85%
7 Keaton Bch Rd upper area	250	0	174	0	0	0	3.69	3.69	3.00	1.95	1.95	1.05	20%	85%
8 Potts Still/Puckett Rd upper	648	0	450	0	147	0	3.69	3.69	3.00	1.95	1.95	1.05	20%	85%
9 Perry southwest area	382	0	162	0	5	0	2.69	2.69	3.00	1.61	1.61	1.05	20%	85%
10 Perry west area	943	0	454	0	12	0	2.64	2.64	3.00	1.70	1.70	1.05	20%	85%
11 Iddo/Eridu/Taylor west	157	0	143	0	0	0	2.55	2.55	3.00	1.75	1.75	1.05	20%	85%
12 Perry	3,658	0	890	0	250	0	2.60	2.60	3.00	1.30	1.30	1.00	20%	85%
13 Salem area	40	0	31	0	0	0	2.62	2.62	3.00	1.83	1.83	1.00	20%	85%
14 Taylor east US 27 inland area	226	0	74	0	2	0	2.59	2.59	3.00	1.68	1.68	1.00	20%	85%
15 Taylor north US 221 inland area	494	0	366	0	13	0	2.59	2.59	3.00	1.82	1.82	1.00	20%	85%
Total	8,160	125	3,434	0	2,764	899								

- Category TS-2 Evacuation Zones
- Category 3-5 Evacuation Zones
- Inland Evacuation Zones

TAYLOR COUNTY
 BEHAVIORAL DATA
 Sweetwater Resort

Evacuation Zones	Participation Rates											
	Cat 1 Part. Rate Perm. Units	Cat 1 Part. Rate MH Units	Cat 1 Part. Rate Tour. Units	Cat 2 - 3 Part. Rate Perm. Units	Cat 2 - 3 Part. Rate MH Units	Cat 2 - 3 Part. Rate Tour. Units	Cat 4 - 5 Part. Rate Perm. Units	Cat 4 - 5 Part. Rate MH Units	Cat 4 - 5 Part. Rate Tour. Units	Cat XX Part. Rate Perm. Units	Cat XX Part. Rate MH Units	Cat XX Part. Rate Tour. Units
1 Steinhatchee area	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2 Dekle,Keaton,Cedar Isl,Fish Crk	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
3 361A Coastal area	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 Econfina area	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
5 Blue Springs/beaches inland area	2%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
6 Taylor southeast inland	2%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
7 Keaton Bch Rd upper area	2%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
8 Potts Still/Puckett Rd upper	2%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
9 Perry southwest area	2%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 Perry west area	2%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
11 Iddo/Eridu/Taylor west	2%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%
12 Perry	1%	50%	50%	10%	90%	100%	20%	100%	100%	20%	100%	100%
13 Salem area	1%	50%	50%	3%	90%	100%	10%	100%	100%	10%	100%	100%
14 Taylor east US 27 inland area	1%	50%	50%	3%	90%	100%	10%	100%	100%	10%	100%	100%
15 Taylor north US 221 inland area	1%	50%	50%	3%	90%	100%	10%	100%	100%	10%	100%	100%



Category TS-2 Evacuation Zones



Category 3-5 Evacuation Zones



Inland Evacuation Zones

TAYLOR COUNTY
BEHAVIORAL DATA

Evacuation Zones	Permanent Resident Destination Percentages															
	Cat 1 Percent to Pub. Shelt.	Cat 2 - 3 Percent to Pub. Shelt.	Cat 4 - 5 Percent to Pub. Shelt.	Cat XX Percent to Pub. Shelt.	Cat 1 Percent Out of County	Cat 2 - 3 Percent Out of County	Cat 4 - 5 Percent Out of County	Cat XX Percent Out of County	Cat 1 Percent to Local Res.	Cat 2 - 3 Percent to Local Res.	Cat 4 - 5 Percent to Local Res.	Cat XX Percent to Local Res.	Cat 1 Percent to Hotel	Cat 2 - 3 Percent to Hotel	Cat 4 - 5 Percent to Hotel	Cat XX Percent to Hotel
1 Steinhatchee area	5%	5%	5%	5%	40%	50%	70%	70%	52%	42%	22%	22%	3%	3%	3%	3%
2 Dekle, Keaton, Cedar Isl, Fish Crk	5%	5%	5%	5%	40%	50%	70%	70%	52%	42%	22%	22%	3%	3%	3%	3%
3 361A Coastal area	5%	5%	5%	5%	40%	50%	70%	70%	52%	42%	22%	22%	3%	3%	3%	3%
4 Econfina area	5%	5%	5%	5%	40%	50%	70%	70%	52%	42%	22%	22%	3%	3%	3%	3%
5 Blue Springs/beaches inland area	10%	10%	15%	15%	30%	45%	65%	65%	58%	43%	18%	18%	2%	2%	2%	2%
6 Taylor southeast inland	10%	10%	15%	15%	30%	45%	65%	65%	58%	43%	18%	18%	2%	2%	2%	2%
7 Keaton Bch Rd upper area	10%	10%	15%	15%	30%	45%	65%	65%	58%	43%	18%	18%	2%	2%	2%	2%
8 Potts Still/Puckett Rd upper	10%	10%	15%	15%	30%	45%	65%	65%	59%	44%	19%	19%	1%	1%	1%	1%
9 Perry southwest area	10%	10%	15%	15%	30%	45%	65%	65%	59%	44%	19%	19%	1%	1%	1%	1%
10 Perry west area	10%	10%	15%	15%	30%	45%	65%	65%	59%	44%	19%	19%	1%	1%	1%	1%
11 Iddo/Eridu/Taylor west	10%	10%	15%	15%	30%	45%	65%	65%	59%	44%	19%	19%	1%	1%	1%	1%
12 Perry	20%	25%	30%	30%	25%	35%	50%	50%	55%	40%	20%	20%	0%	0%	0%	0%
13 Salem area	15%	15%	20%	20%	25%	35%	50%	50%	60%	50%	30%	30%	0%	0%	0%	0%
14 Taylor east US 27 inland area	15%	15%	20%	20%	25%	35%	50%	50%	60%	50%	30%	30%	0%	0%	0%	0%
15 Taylor north US 221 inland area	15%	15%	20%	20%	25%	35%	50%	50%	60%	50%	30%	30%	0%	0%	0%	0%

- Category TS-2 Evacuation Zones
- Category 3-5 Evacuation Zones
- Inland Evacuation Zones

**TAYLOR COUNTY
BEHAVIORAL DATA**

Evacuation Zones	Vehicle Usage		Tourist Destination Percentages							
	Vehicle Usage % Perm. & MH	Vehicle Usage % Tourist	Cat 1 Percent to Pub. Shelt	Cat 2 - 3 Percent to Pub. Shelt	Cat 4 - 5 Percent to Pub. Shelt	Cat XX Percent to Pub. Shelt	Cat 1 Percent Out of County	Cat 2 - 3 Percent Out of County	Cat 4 - 5 Percent Out of County	Cat XX Percent Out of County
1 Steinhatchee area	80%	100%	1%	1%	1%	1%	99%	99%	99%	99%
2 Dekle, Keaton, Cedar Isl, Fish Crk	80%	100%	1%	1%	1%	1%	99%	99%	99%	99%
3 361A Coastal area	80%	100%	1%	1%	1%	1%	99%	99%	99%	99%
4 Econfina area	80%	100%	1%	1%	1%	1%	99%	99%	99%	99%
5 Blue Springs/beaches inland area	75%	100%	1%	1%	1%	1%	99%	99%	99%	99%
6 Taylor southeast inland	75%	100%	1%	1%	1%	1%	99%	99%	99%	99%
7 Keaton Bch Rd upper area	75%	100%	1%	1%	1%	1%	99%	99%	99%	99%
8 Potts Still/Puckett Rd upper	75%	100%	1%	1%	1%	1%	99%	99%	99%	99%
9 Perry southwest area	75%	100%	1%	1%	1%	1%	99%	99%	99%	99%
10 Perry west area	75%	100%	1%	1%	1%	1%	99%	99%	99%	99%
11 Iddo/Eridu/Taylor west	75%	100%	1%	1%	1%	1%	99%	99%	99%	99%
12 Perry	70%	100%	1%	1%	1%	1%	99%	99%	99%	99%
13 Salem area	70%	100%	1%	1%	1%	1%	99%	99%	99%	99%
14 Taylor east US 27 inland area	70%	100%	1%	1%	1%	1%	99%	99%	99%	99%
15 Taylor north US 221 inland area	70%	100%	1%	1%	1%	1%	99%	99%	99%	99%

- Category TS-2 Evacuation Zones
- Category 3-5 Evacuation Zones
- Inland Evacuation Zones

TAYLOR COUNTY
EVACUATION PEOPLE AND VEHICLE STATISTICS--EXISTING 2007 SCENARIO
Sweetwater Resort

Evacuating People								
Evacuation Zones	Cat 1 Evac Pop Avg OFF-PEAK	Cat 1 Evac Pop Avg PEAK	Cat 2 - 3 Evac Pop Avg OFF-PEAK	Cat 2 - 3 Evac Pop Avg PEAK	Cat 4 - 5 Evac Pop Avg OFF-PEAK	Cat 4 - 5 Evac Pop Avg PEAK	Cat XX Evac Pop Avg OFF-PEAK	Cat XX Evac Pop Avg PEAK
1 Steinhatchee area	1,786	2,897	1,786	2,897	1,786	2,897	1,786	2,897
2 Dekle,Keaton,Cedar Isl,Fish Crk	1,385	3,110	1,385	3,110	1,385	3,110	1,385	3,110
3 361A Coastal area	530	1,056	530	1,056	530	1,056	530	1,056
4 Econfina area	510	1,052	510	1,052	510	1,052	510	1,052
5 Blue Springs/beaches inland area	46	86	76	115	76	115	76	115
6 Taylor southeast inland	39	155	281	394	281	394	281	394
7 Keaton Bch Rd upper area	518	518	922	922	922	922	922	922
8 Potts Still/Puckett Rd upper	1,423	1,719	2,481	2,768	2,481	2,768	2,481	2,768
9 Perry southwest area	364	374	1,030	1,040	1,030	1,040	1,030	1,040
10 Perry west area	990	1,014	2,497	2,520	2,497	2,520	2,497	2,520
11 Iddo/Eridu/Taylor west	293	293	400	400	400	400	400	400
12 Perry	1,304	1,293	2,953	3,441	3,904	4,392	3,904	4,392
13 Salem area	41	41	75	75	85	85	85	85
14 Taylor east US 27 inland area	100	100	185	189	232	236	232	236
15 Taylor north US 221 inland area	481	479	871	897	989	1,015	989	1,015
Total	9,810	14,187	15,982	20,876	17,108	22,002	17,108	22,002

Local Public Shelter Demand (People)								
Evacuation Zones	Cat 1 PS Demand Avg OFF-PEAK	Cat 1 PS Demand Avg PEAK	Cat 2 - 3 PS Demand Avg OFF-PEAK	Cat 2 - 3 PS Demand Avg PEAK	Cat 4 - 5 PS Demand Avg OFF-PEAK	Cat 4 - 5 PS Demand Avg PEAK	Cat XX PS Demand Avg OFF-PEAK	Cat XX PS Demand Avg PEAK
1 Steinhatchee area	76	87	76	87	76	87	76	87
2 Dekle,Keaton,Cedar Isl,Fish Crk	48	65	48	65	48	65	48	65
3 361A Coastal area	20	25	20	25	20	25	20	25
4 Econfina area	19	24	19	24	19	24	19	24
5 Blue Springs/beaches inland area	4	4	7	7	10	10	10	10
6 Taylor southeast inland	1	2	25	26	37	38	37	38
7 Keaton Bch Rd upper area	52	52	92	92	138	138	138	138
8 Potts Still/Puckett Rd upper	135	138	240	243	360	363	360	363
9 Perry southwest area	36	36	103	103	154	154	154	154
10 Perry west area	98	99	249	249	374	374	374	374
11 Iddo/Eridu/Taylor west	29	29	40	40	60	60	60	60
12 Perry	247	249	702	707	1,128	1,133	1,128	1,133
13 Salem area	6	6	11	11	17	17	17	17
14 Taylor east US 27 inland area	15	15	28	28	46	46	46	46
15 Taylor north US 221 inland area	72	72	130	130	196	197	196	197
Total	858	903	1,790	1,837	2,683	2,731	2,683	2,731

Evacuation Zones	Evacuating Vehicles							
	Cat 1 Evac Veh Avg OFF-PEAK	Cat 1 Evac Veh Avg PEAK	Cat 2 - 3 Evac Veh Avg OFF-PEAK	Cat 2 - 3 Evac Veh Avg PEAK	Cat 4 - 5 Evac Veh Avg OFF-PEAK	Cat 4 - 5 Evac Veh Avg PEAK	Cat XX Evac Veh Avg OFF-PEAK	Cat XX Evac Veh Avg PEAK
1 Steinhatchee area	953	1,360	953	1,360	953	1,360	953	1,360
2 Dekle,Keaton,Cedar Isl,Fish Crk	793	1,608	793	1,608	793	1,608	793	1,608
3 361A Coastal area	215	408	215	408	215	408	215	408
4 Econfina area	249	448	249	448	249	448	249	448
5 Blue Springs/beaches inland area	25	37	42	56	42	56	42	56
6 Taylor southeast inland	15	50	141	181	141	181	141	181
7 Keaton Bch Rd upper area	205	205	365	365	365	365	365	365
8 Potts Still/Puckett Rd upper	560	651	979	1,080	979	1,080	979	1,080
9 Perry southwest area	163	166	462	466	462	466	462	466
10 Perry west area	477	485	1,205	1,213	1,205	1,213	1,205	1,213
11 Iddo/Eridu/Taylor west	151	151	206	206	206	206	206	206
12 Perry	455	537	1,031	1,194	1,364	1,526	1,364	1,526
13 Salem area	20	20	36	36	41	41	41	41
14 Taylor east US 27 inland area	45	46	84	85	105	107	105	107
15 Taylor north US 221 inland area	236	240	427	436	485	494	485	494
Total	4,562	6,412	7,188	9,142	7,605	9,559	7,605	9,559

Evacuation Zones	Evac Vehicles to Public Shelter							
	Pub Shelt Veh Cat 1 Avg OFF-PEAK	Pub Shelt Veh Cat 1 Avg PEAK	Pub Shelt Veh Cat 2 - 3 Avg OFF-PEAK	Pub Shelt Veh Cat 2 - 3 Avg PEAK	Pub Shelt Veh Cat 4 - 5 Avg OFF-PEAK	Pub Shelt Veh Cat 4 - 5 Avg PEAK	Pub Shelt Veh Cat XX Avg OFF-PEAK	Pub Shelt Veh Cat XX Avg PEAK
1 Steinhatchee area	43	47	43	47	43	431	43	47
2 Dekle,Keaton,Cedar Isl,Fish Crk	30	38	30	38	30	269	30	38
3 361A Coastal area	8	10	8	10	8	113	8	10
4 Econfina area	10	12	10	12	10	176	10	12
5 Blue Springs/beaches inland area	2	2	4	4	6	28	6	6
6 Taylor southeast inland	0	1	13	13	19	21	19	20
7 Keaton Bch Rd upper area	21	21	37	37	55	271	55	55
8 Potts Still/Puckett Rd upper	54	54	95	96	143	703	143	144
9 Perry southwest area	16	16	46	46	69	236	69	69
10 Perry west area	48	48	120	120	180	672	180	180
11 Iddo/Eridu/Taylor west	15	15	21	21	31	191	31	31
12 Perry	86	87	246	247	395	963	395	396
13 Salem area	3	3	5	5	8	40	8	8
14 Taylor east US 27 inland area	7	7	13	13	21	91	21	21
15 Taylor north US 221 inland area	35	35	64	64	97	470	97	97
Total	378	396	755	773	1,115	4,675	1,115	1,134

Evacuation Zones	Evac Vehicles to Friends and Relatives Homes							
	Friends/Rel Veh Cat 1 Avg OFF-PEAK	Friends/Rel Veh Cat 1 Avg PEAK	Friends/Rel Veh Cat 2 - 3 Avg OFF-PEAK	Friends/Rel Veh Cat 2 - 3 Avg PEAK	Friends/Rel Veh Cat 4 - 5 Avg OFF-PEAK	Friends/Rel Veh Cat 4 - 5 Avg PEAK	Friends/Rel Veh Cat XX Avg OFF-PEAK	Friends/Rel Veh Cat XX Avg PEAK
1 Steinhatchee area	430	430	347	347	182	182	182	182
2 Dekle,Keaton,Cedar Isl,Fish Crk	282	282	228	228	119	119	119	119
3 361A Coastal area	81	81	65	65	34	34	34	34
4 Econfina area	98	98	79	79	41	41	41	41
5 Blue Springs/beaches inland area	12	12	16	16	7	7	7	7
6 Taylor southeast inland	2	2	56	56	23	23	23	23
7 Keaton Bch Rd upper area	119	119	157	157	66	66	66	66
8 Potts Still/Puckett Rd upper	314	314	417	417	180	180	180	180
9 Perry southwest area	96	96	203	203	88	88	88	88
10 Perry west area	280	280	529	529	228	228	228	228
11 Iddo/Eridu/Taylor west	89	89	91	91	39	39	39	39
12 Perry	237	237	392	392	263	263	263	263
13 Salem area	12	12	18	18	12	12	12	12
14 Taylor east US 27 inland area	27	27	42	42	31	31	31	31
15 Taylor north US 221 inland area	141	141	212	212	145	145	145	145
Total	2,220	2,220	2,852	2,852	1,458	1,458	1,458	1,458

Evacuation Zones	Evac Vehicles to Local Hotels and Motels							
	Hotel Veh Cat 1 Avg OFF-PEAK	Hotel Veh Cat 1 Avg PEAK	Hotel Veh Cat 2 - 3 Avg OFF-PEAK	Hotel Veh Cat 2 - 3 Avg PEAK	Hotel Veh Cat 4 - 5 Avg OFF-PEAK	Hotel Veh Cat 4 - 5 Avg PEAK	Hotel Veh Cat XX Avg OFF-PEAK	Hotel Veh Cat XX Avg PEAK
1 Steinhatchee area	25	25	25	25	25	25	25	25
2 Dekle,Keaton,Cedar Isl,Fish Crk	16	16	16	16	16	16	16	16
3 361A Coastal area	5	5	5	5	5	5	5	5
4 Econfina area	6	6	6	6	6	6	6	6
5 Blue Springs/beaches inland area	0	0	1	1	1	1	1	1
6 Taylor southeast inland	0	0	3	3	3	3	3	3
7 Keaton Bch Rd upper area	4	4	7	7	7	7	7	7
8 Potts Still/Puckett Rd upper	5	5	9	9	9	9	9	9
9 Perry southwest area	2	2	5	5	5	5	5	5
10 Perry west area	5	5	12	12	12	12	12	12
11 Iddo/Eridu/Taylor west	2	2	2	2	2	2	2	2
12 Perry	0	0	0	0	0	0	0	0
13 Salem area	0	0	0	0	0	0	0	0
14 Taylor east US 27 inland area	0	0	0	0	0	0	0	0
15 Taylor north US 221 inland area	0	0	0	0	0	0	0	0
Total	70	70	91	91	91	91	91	91

Evacuation Zones	Evac Vehicles to Out of County							
	Out of County Veh Cat 1 Avg OFF-PEAK	Out of County Veh Cat 1 Avg PEAK	Out of County Veh Cat 2 - 3 Avg OFF-PEAK	Out of County Veh Cat 2 - 3 Avg PEAK	Out of County Veh Cat 4 - 5 Avg OFF-PEAK	Out of County Veh Cat 4 - 5 Avg PEAK	Out of County Veh Cat XX Avg OFF-PEAK	Out of County Veh Cat XX Avg PEAK
1 Steinhatchee area	455	859	538	941	703	1,107	703	1,107
2 Dekle,Keaton,Cedar Isl,Fish Crk	465	1,271	519	1,326	628	1,434	628	1,434
3 361A Coastal area	121	312	137	328	168	359	168	359
4 Econfina area	136	333	155	351	192	389	192	389
5 Blue Springs/beaches inland area	10	22	21	35	29	42	29	42
6 Taylor southeast inland	12	47	70	109	96	135	96	135
7 Keaton Bch Rd upper area	62	62	164	164	237	237	237	237
8 Potts Still/Puckett Rd upper	187	277	457	557	647	746	647	746
9 Perry southwest area	50	53	209	212	301	304	301	304
10 Perry west area	145	152	544	552	784	792	784	792
11 Iddo/Eridu/Taylor west	45	45	93	93	134	134	134	134
12 Perry	132	213	393	554	706	867	706	867
13 Salem area	5	5	13	13	21	21	21	21
14 Taylor east US 27 inland area	12	12	30	31	53	54	53	54
15 Taylor north US 221 inland area	60	64	151	160	244	252	244	252
Total	1,897	3,727	3,494	5,426	4,943	6,873	4,943	6,873

	Category TS-2 Evacuation Zones
	Category 3-5 Evacuation Zones
	Inland Evacuation Zones

OUT ROUTE ASSIGNMENTS--EXISTING 2007 SCENARIO

TAYLOR COUNTY

Sweetwater Resort

Percent of Out of County/Region Vehicles Exiting by Specific Route						
Evac Zone	SR 51 NB	US 221 NB	US 19/27 NB	SR 14 NB	US 27 EB	Total
1 Steinhatchee area	30%	5%	65%	0%	0%	100%
2 Dekle, Keaton, Cedar Isl, Fish Crk	0%	15%	80%	0%	5%	100%
3 361A Coastal area	0%	15%	80%	0%	5%	100%
4 Econfina area	0%	5%	0%	90%	5%	100%
5 Blue Springs/beaches inland area	0%	15%	80%	0%	5%	100%
6 Taylor southeast inland	30%	5%	65%	0%	0%	100%
7 Keaton Bch Rd upper area	0%	15%	80%	0%	5%	100%
8 Potts Still/Puckett Rd upper	0%	15%	80%	0%	5%	100%
9 Perry southwest area	0%	20%	75%	0%	5%	100%
10 Perry west area	0%	20%	75%	0%	5%	100%
11 Iddo/Eridu/Taylor west	30%	5%	60%	0%	5%	100%
12 Perry	0%	20%	75%	0%	5%	100%
13 Salem area	0%	15%	85%	0%	0%	100%
14 Taylor east US 27 inland area	0%	15%	75%	0%	10%	100%
15 Taylor north US 221 inland area	0%	25%	70%	0%	5%	100%

TAYLOR COUNTY
 EVACUATING VEHICLE BY CRITICAL ROADWAY SEGMENT--EXISTING 2007 SCENARIO
 Sweetwater Resort

Modeled/Critical Roadway Segment	Base Year Evacuating Traffic						New Year/New Assumptions Evacuating Traffic						Change from Base Year Evacuating Traffic					
	Cat 1		Cat 2 - 3		Cat 4 - 5		Cat 1		Cat 2 - 3		Cat 4 - 5		Cat 1		Cat 2 - 3		Cat 4 - 5	
	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK	OFF-PEAK	Avg PEAK
SR 51 nb out of county	154	285	210	343	280	413	154	285	210	343	280	413	0	0	0	0	0	0
US 221 nb out of county	202	322	468	608	694	834	242	458	511	746	743	978	40	136	43	138	48	144
US 19/US27 nb out of county	2,593	3,819	6,259	8,063	10,280	12,332	2,807	4,543	6,488	8,801	10,539	13,099	214	723	229	738	258	767
SR 14 nb out of county	122	300	140	316	173	350	122	300	140	316	173	350	0	0	0	0	0	0
US 27 eb out of county	58	96	131	174	193	235	72	141	145	220	209	283	13	45	14	46	16	48
CR 361 Keaton Bch Rd at US 19	644	828	821	1,007	821	1,007	1,023	1,850	1,200	2,029	1,200	2,029	379	1022	379	1022	379	1022
CR 361 A Puckett Rd at US 19	808	1,092	1,286	1,581	1,286	1,581	808	1,092	1,286	1,581	1,286	1,581	0	0	0	0	0	0
US 98 W Hampton Sprngs Rd at US 19	325	524	352	551	352	551	325	524	352	551	352	551	0	0	0	0	0	0
US 19 nb through Perry	2,751	3,714	5,570	7,040	8,575	10,295	3,130	4,736	5,949	8,062	8,954	11,317	379	1022	379	1022	379	1022
SR 51 nb at US 19	956	1,370	981	1,396	981	1,396	956	1,370	981	1,396	981	1,396	0	0	0	0	0	0

**TAYLOR COUNTY
EVACUATING VEHICLE BY CRITICAL ROADWAY SEGMENT**
Sweetwater Resort

Generalized Hourly Service Volumes

Modeled/Critical Roadway Segment	Times	Times	Times	Times	Times	Times	Evac Serv Vol 1st Quarter of Evacuation	Evac Serv Vol 2nd Quarter of Evacuation	Evac Serv Vol 3rd Quarter of Evacuation	Evac Serv Vol 4th Quarter of Evacuation
	Cat 1 OFF-PEAK	Cat 1 Avg PEAK	Cat 2 - 3 OFF-PEAK	Cat 2 - 3 Avg PEAK	Cat 4 - 5 OFF-PEAK	Cat 4 - 5 Avg PEAK				
SR 51 nb out of county	0.7	0.8	0.7	0.9	0.8	0.9	1000	920	850	1000
US 221 nb out of county	0.8	1.0	1.1	1.3	1.3	1.6	1000	920	850	1000
US 19/US27 nb out of county	3.0	3.6	4.3	5.2	5.8	6.7	2980	2742	2533	2980
SR 14 nb out of county	0.7	0.9	0.7	0.9	0.7	0.9	860	791	731	860
US 27 eb out of county	0.6	0.7	0.7	0.7	0.7	0.8	1000	920	850	1000
CR 361 Keaton Bch Rd at US 19	2.1	3.0	2.3	3.2	2.3	3.2	1000	920	850	1000
CR 361 A Puckett Rd at US 19	2.0	2.4	2.6	3.0	2.6	3.0	860	791	731	860
US 98 W Hampton Springs Rd at US 19	0.9	1.1	0.9	1.1	0.9	1.1	1000	920	850	1000
US 19 nb through Perry*	4.0	5.0	5.8	7.1	7.7	9.2	1700	1564	1445	1700
SR 51 nb at US 19	1.7	2.2	1.7	2.3	1.7	2.3	860	791	731	860

CHANGE IN HOURS OF CLEARANCE TIME BASED ON USER CHANGES TO SOCIOECONOMIC, BEHAVIORAL, SERVICE VOLUME, AND/OR OUT ROUTE ASSUMPTIONS

Modeled/Critical Roadway Segment	Times	Times	Times	Times	Times	Times
	Cat 1 Avg OFF-PEAK	Cat 1 Avg PEAK	Cat 2 - 3 Avg OFF-PEAK	Cat 2 - 3 Avg PEAK	Cat 4 - 5 Avg OFF-PEAK	Cat 4 - 5 Avg PEAK
SR 51 nb out of county	0.0	0.0	0.0	0.0	0.0	0.0
US 221 nb out of county	0.0	0.1	0.0	0.1	0.1	0.2
US 19/US27 nb out of county	0.1	0.3	0.1	0.3	0.1	0.3
SR 14 nb out of county	0.0	0.0	0.0	0.0	0.0	0.0
US 27 eb out of county	0.0	0.0	0.0	0.0	0.0	0.1
CR 361 Keaton Bch Rd at US 19	0.4	1.1	0.4	1.1	0.4	1.1
CR 361 A Puckett Rd at US 19	0.0	0.0	0.0	0.0	0.0	0.0
US 98 W Hampton Springs Rd at US 19	0.0	0.0	0.0	0.0	0.0	0.0
US 19 nb through Perry*	0.2	0.6	0.2	0.6	0.2	0.6
SR 51 nb at US 19	0.0	0.0	0.0	0.0	0.0	0.0

*includes Withlacoochee region evacuation traffic from counties south of Taylor

CLEARANCE TIME Sweetwater Resort to Taylor County High School
TAYLOR COUNTY Sweetwater Resort

Minutes/Hours of Worst Traveltime to Nearest Public Shelter

Low Tourist Occ	minutes	hours	High Tourist Occ	minutes	hours
cat 5	92	1.53	cat 5	146	2.44

DETAILED CLEARANCE TIME CALCULATIONS

Sweetwater Resort Hurricane Evacuation Analysis

Critical Link: US 19 through Perry
 Scenario: Cat 5 low seasonal occupancy

Roadway Capacity Assumptions

Hourly Service Volume (1st quarter of evacuation):	1,700
Hourly Service Volume (2nd quarter of evacuation):	1,530
Hourly Service Volume (3rd quarter of evacuation):	1,360
Hourly Service Volume (4th quarter of evacuation):	1,700

Travel Demand Assumptions

Base Model Evacuating Traffic:	8,575
Sweetwater Additional:	379
Other Evac Traffic:	0
Other Evac Traffic:	0
Background Traffic:	400

Traveltime to Critical link and from there to Taylor HS

0.6

MEDIUM RESPONSE-BEHAVIORAL RESPONSE CURVE B

Hour of Response	(vehicles) Base Evac Traffic	(vehicles) Seaview Additional	(vehicles) Other Evac Traffic	(vehicles) Other Evac Traffic	Percent of Traffic Trying to Load by Hour	(vehicles) Background Traffic	Diminishing Rate of Background Traffic by Hour	(vehicles) Theoretical Hour by Hour Traffic Demand at Link	(hours) Queuing Delay by Response Hour
1	172	8	0	0	0.02	360	0.9	539	-0.7
2	686	30	0	0	0.08	280	0.7	996	-0.4
3	1,286	57	0	0	0.15	160	0.4	1503	0.0
4	2,144	95	0	0	0.25	80	0.2	2319	0.5
5	2,573	114	0	0	0.3	40	0.1	2726	1.0
6	858	38	0	0	0.1	20	0.05	915	-0.3
7	686	30	0	0	0.08	8	0.02	724	-0.6
8	172	8	0	0	0.02	0	0	179	-0.9
								9902	

6.61 hours of raw total evac clearance time required

DETAILED CLEARANCE TIME CALCULATIONS

Sweetwater Resort Hurricane Evacuation Analysis

Critical Link: US 19 through Perry
 Scenario: Cat 5 high seasonal occupancy

Roadway Capacity Assumptions

Hourly Service Volume (1st quarter of evacuation):	1,700
Hourly Service Volume (2nd quarter of evacuation):	1,530
Hourly Service Volume (3rd quarter of evacuation):	1,360
Hourly Service Volume (4th quarter of evacuation):	1,700

Travel Demand Assumptions

Base Evacuating Traffic:	10,295
Sweetwater Additional:	1,022
Other Evac Traffic:	0
Other Evac Traffic:	0
Background Traffic:	400

Traveltime to Critical link and from there to Taylor HS	0.6
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MEDIUM RESPONSE-BEHAVIORAL RESPONSE CURVE B

Hour of Response	(vehicles) Base Evac Traffic	(vehicles) Seaview Additional	(vehicles) Other Evac Traffic	(vehicles) Other Evac Traffic	Percent of Traffic Trying to Load by Hour	(vehicles) Background Traffic	Diminishing Rate of Background Traffic by Hour	(vehicles) Theoretical Hour by Hour Traffic Demand at Link	(hours) Queuing Delay by Response Hour
1	206	20	0	0	0.02	360	0.9	586	-0.7
2	824	82	0	0	0.08	280	0.7	1185	-0.3
3	1,544	153	0	0	0.15	160	0.4	1858	0.2
4	2,574	256	0	0	0.25	80	0.2	2909	0.9
5	3,089	307	0	0	0.3	40	0.1	3435	1.5
6	1,030	102	0	0	0.1	20	0.05	1152	-0.2
7	824	82	0	0	0.08	8	0.02	913	-0.5
8	206	20	0	0	0.02	0	0	226	-0.9
								12265	

8.20 hours of raw total evac clearance time required

Appendix B

QUESTION 23 - HURRICANE PREPAREDNESS –

- A. 1. Identify any residential development proposed within the hurricane vulnerability zone delineated in the applicable regional hurricane evacuation study, regional public hurricane shelter study or adopted county peacetime emergency plan. If so, delineate the proposed development's location on the appropriate county and/or regional hurricane evacuation map and respond to questions B.(1) and B.(2) below. Proposed mobile home and park trailer developments should answer question B.(1), regardless of location, or answer questions B.(1) and B.(2) below, if proposed within the hurricane vulnerability zone or the high hazard hurricane evacuation area.

The residential development is partially in a hurricane vulnerability zone (Category 1 Coastal High Hazard Area). No mobile home units are proposed.

2. Identify any hotel/motel or recreational vehicle/travel trailer development proposed within the high hazard hurricane evacuation area delineated in the applicable regional hurricane evacuation study, regional public hurricane shelter study, or adopted county peacetime emergency plan. If present, delineate the proposed development's location on the appropriate county or regional hurricane evacuation map and answer questions B.(1) and B.(2) below.

400 conference hotel units are included in the development plan.

3. Identify whether the proposed development is location in a designated special hurricane preparedness district.

No.

- B. 1. For each phase of the development, determine the development's public hurricane shelter space requirements based on the behavioral assumptions identified in the applicable regional study or county plan. Identify the existing public hurricane shelter space capacity during the one hundred year or category three hurricane event within the county where the development is being proposed and indicate whether the county has a deficit or surplus of public hurricane shelter space during the one hundred year or category three hurricane event.

Given the expected character of the development and its residents, the additional public shelter demand generated should be minimal. Most residents will seek inland hotels and motels or will not even be present at the start of an official evacuation advisory. To calculate a shelter demand figure, it was assumed that five percent of the permanent resident evacuees and one percent of the seasonal resident evacuees would go to local public shelter. This generates an additional net maximum of 32 public shelter evacuees that the county would need to accommodate for a category 3-5 hurricane, high seasonal occupancy scenario.

The County currently has 5 shelters with a total capacity of 2,510 spaces and this is adequate to handle the additional development generated evacuees and other in county evacuees seeking public shelter.

2. For each phase of the development, determine the number of evacuating vehicles the development would generate during a hurricane evacuation event based on the transportation and behavioral assumptions identified in the applicable regional study or county plan. Identify the nearest designated hurricane evacuation route and determine what percentage of level of service E hourly directional and maximum service volume the project will utilize.

The number of additional evacuation vehicles was calculated using very conservative socioeconomic and behavioral parameters and the abbreviated hurricane evacuation transportation model developed by PBSJ for this study. The proposed additional units will add a total of 379 evacuating vehicles to the evacuation road network in a category 3-5 hurricane low seasonal occupancy scenario and 1022 evacuating vehicles in a high occupancy scenario. This analysis assumes that 100 percent of these evacuation vehicles will use CR 361 to leave the area.

To calculate the additional unit's *maximum hourly* contribution to the evacuation, the highest hourly percentage (30%) of evacuees loading the road network was obtained from the medium behavioral response curve used in most of the hurricane evacuation studies around the state. These curves show the assumed percentage of total evacuees loading the road network by each hour of the evacuation. Using that figure, the proposed development's maximum hourly contribution of evacuation traffic would add 114 to 306 evacuating vehicles to the CR 361 and US 19 evacuation routes depending on seasonal occupancy.

CR 361 and US 19 were analyzed to determine whether the proposed development would utilize 25 percent or more of the segment's LOS E

hourly directional maximum service volume and thus have a material adverse effect on the area's evacuation clearance times (according to previous state DCA guidelines on what is a significant impact). Per the calculations shown in Table 1, the additional units will utilize up to 21.7% (306 vehicles divided by 1410 vehicles per hour) of the current LOS E hourly directional maximum service volume for the CR 361 evacuation route for a category 3-5 hurricane with a high seasonal occupancy scenario. On US 19 (which is actually the controlling bottleneck for Taylor County evacuations), the additional units will utilize up to 16.9% (306 vehicles divided by 1810 vehicles per hour) of the current LOS E hourly directional maximum service volume for a category 3-5 hurricane with a high seasonal occupancy scenario. These calculations show that the project will not have a material adverse effect on evacuation clearance time under the state's statutory rules and benchmarks.

To be responsive to the intent of new state legislation regarding development hurricane evacuation impacts, PBSJ also identified the nearest public shelter and analyzed the longest amount of time any one public shelter evacuee might experience traveling there from the Sweetwater site. (Appendix A which includes the model has a sheet that calculates this parameter) For a conservative calculation, the nearest public shelter was assumed to be Taylor County High School on the northwest side of Perry. Its current public sheltering capacity is 750 people and should be able to adequately handle the additional demand when combined with four other shelters that may be opened. Looking at the worst congestion that will be experienced at any time during an evacuation in this area of Taylor County, public shelter evacuees from Sweetwater will experience no more than 92 to 146 minutes of travel time to this shelter. That compares very favorable to the 12 hour maximum benchmark set by the state in the new pending legislation. This calculation takes into account other evacuation zones in the area and background traffic that will be on the network.

The state is also working out a hurricane evacuation out of county time threshold for each county in the state. Taylor County, even with maximum expected traffic from the Withlacoochee area to its south and a build out of the Sweetwater Community, has a clearance time of 9.2 hours in a category five hurricane with a high tourist occupancy.

3. Identify and describe any action(s) or provisions that will be undertaken to mitigate impacts on hurricane preparedness.
(None identified)