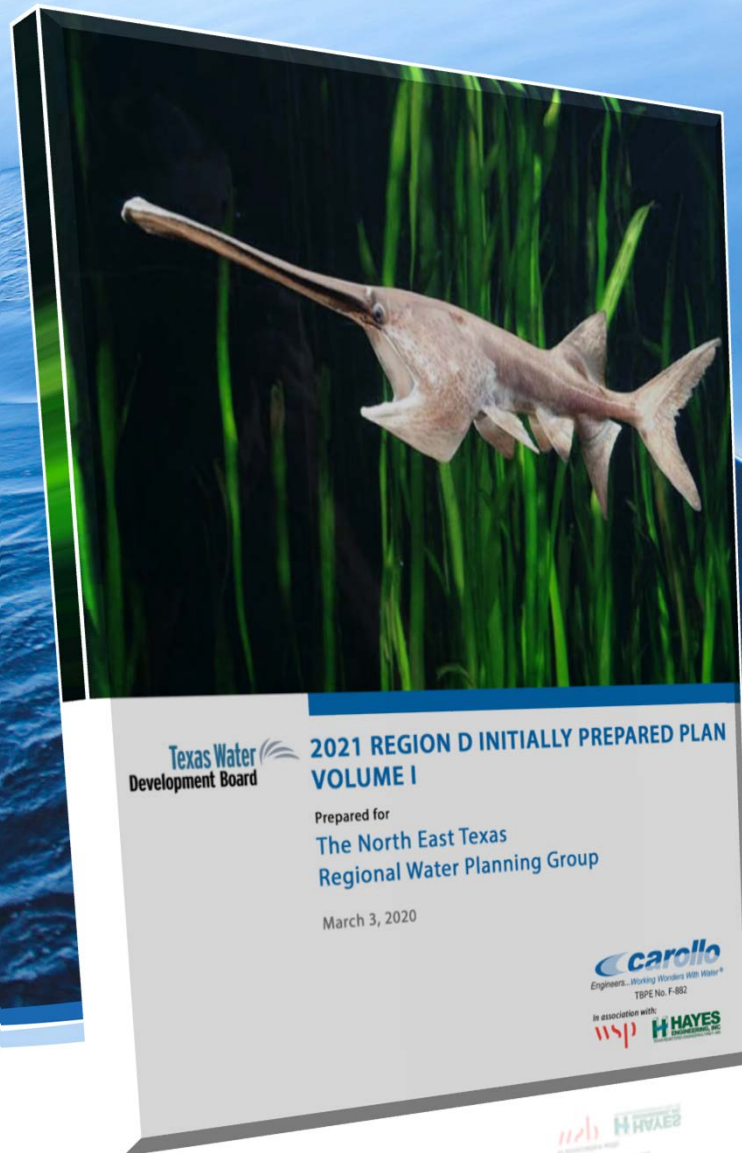


Region D Water Planning

CONSULTANT REPORT



September 2,
2020

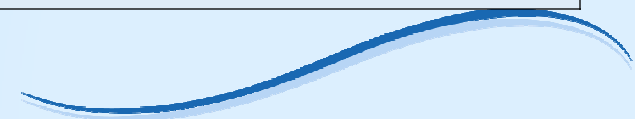
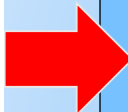
carollo
Engineers...Working Wonders With Water®

Budget Progress

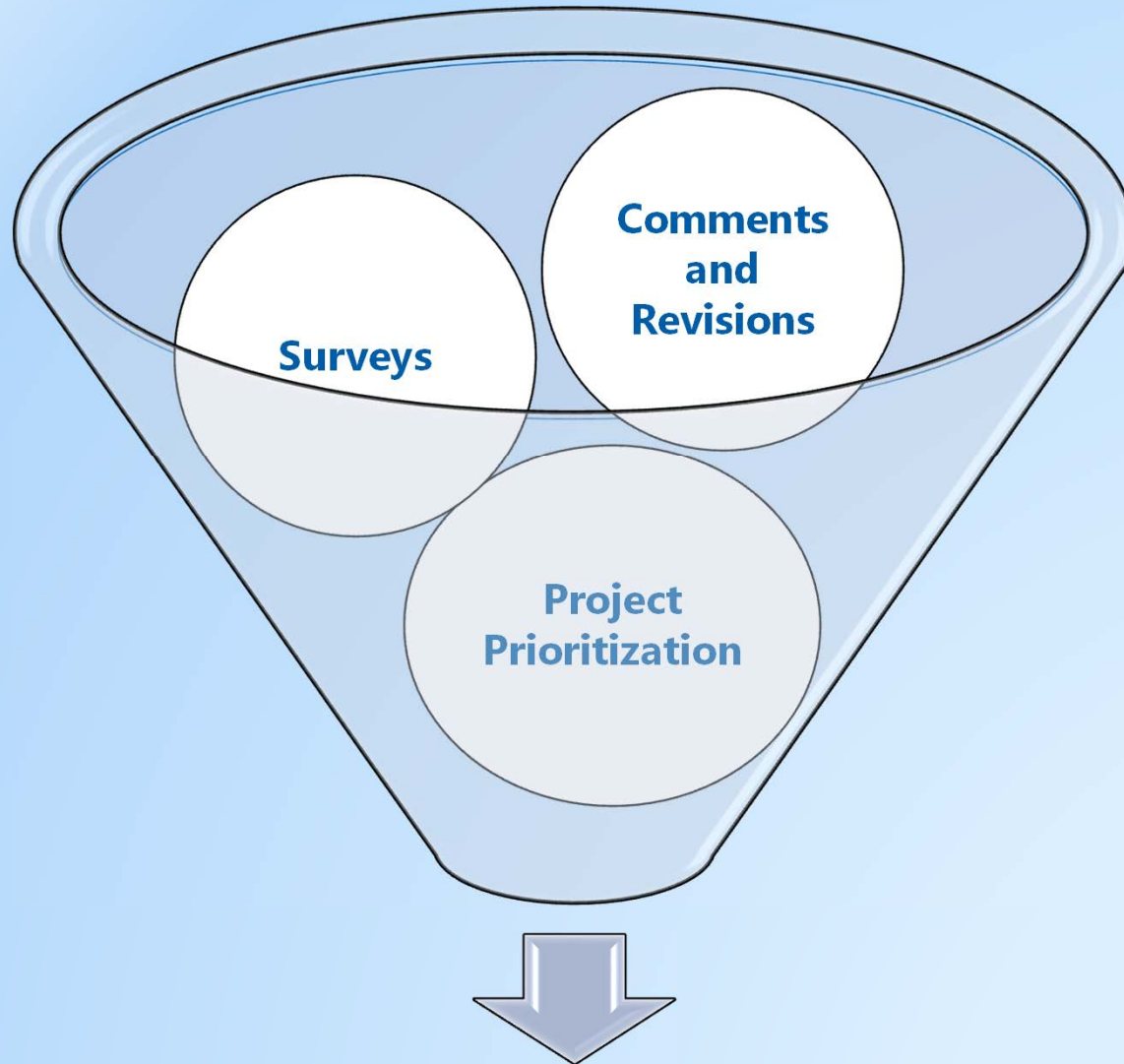
Task #	Task	Contract Amount	Expended to Date	% Complete
1	Planning Area Description	\$20,436	\$20,433	100%
2A	Non-Population Related Water Demand Projections	\$26,425	\$26,419	100%
2B	Population & Population-Related Water Demand Projections	\$37,364	\$37,342	100%
3	Water Supply Analyses	\$174,593	\$174,544	100%
4A	Identification of Water Needs	\$18,074	\$18,033	100%
4B	Identification of Potentially Feasible WMSs and WMS Projects	\$19,612	\$19,573	100%
4C	Prepare and Submit Technical Memorandum	\$25,932	\$25,925	100%
5A	Evaluation and Recommendation of WMSs and WMS Projects	\$387,695	\$376,769	97%
5B	Water Conservation Recommendations	\$28,672	\$24,454	85%
6	Impacts of Regional Water Plan	\$45,037	\$19,964	44%
7	Drought Response, Activities & Recommendations	\$91,930	\$70,389	77%
8	Recommendations Regarding Unique Stream Segments and/or Reservoir Sites and Legislative & Regional Policy Issues	\$10,361	\$7,322	71%
9	Water Infrastructure Funding Recommendations	\$8,467	\$7,417	88%
10	Public Participation and Plan Adoption	\$199,795	\$153,391	77%
11	Implementation and Comparison to the Previous Regional Water Plan	\$19,374	\$11,640	60%
12	Prepare and Submit Prioritization of Projects in the 2021 Regional Water Plan	\$11,582	\$4,200	36%
	TOTAL	\$1,125,349	\$997,817	89%

2021 Plan Schedule Detail

Date	Scheduled Events/Tasks
April 16, 2018	TWDB adoption date for projections
September 10, 2018	Due date: Technical Memorandum
March 3, 2020	Due date: Initially Prepared Plan (IPP)
June 11, 2020	Public Hearing on IPP
August 11, 2020	Due Date for Submittal of Comments on IPP
September 2, 2020	Meeting on Comments and Revisions for Final Plan
???	Meeting for Adoption of 2021 Region D Water Plan
November 5, 2020	Due date: Final RWP



Today's Items for Consideration



Revised Deliverables

From Draft to Final

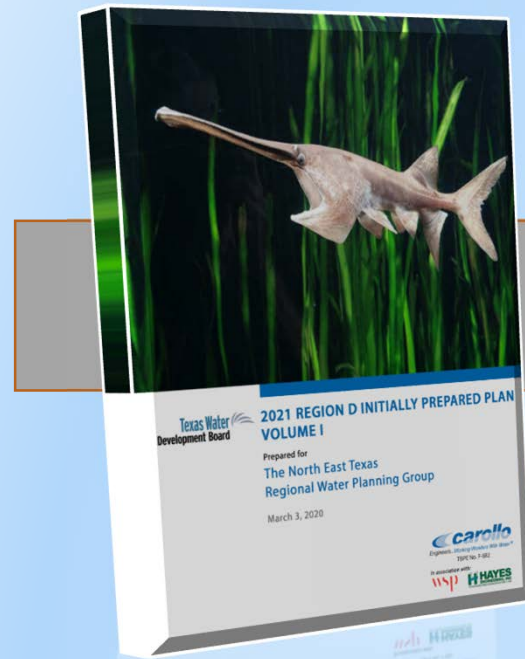
Water
User

Groups &
Providers

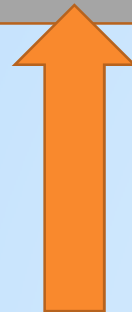
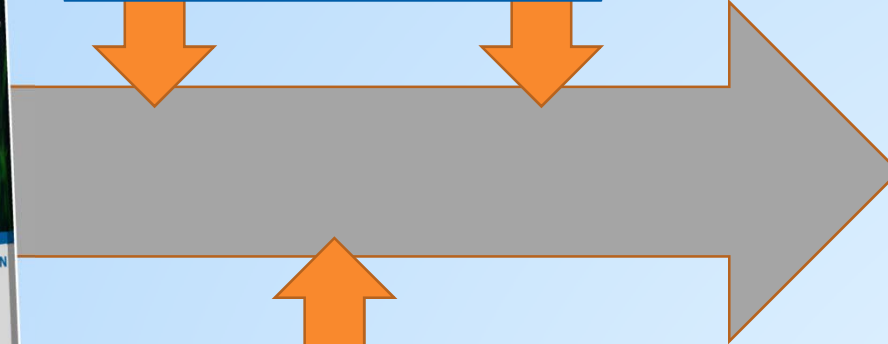
Public



Hearing &
Written Comment



March 3,
2020



State
Agencies

**FINAL
2021
REGIONAL
WATER
PLAN**

November 5,
2020

Agency Comments

Texas State Soil and Water Conservation Board

- Editorial revision for reference to the board.

Texas Parks and Wildlife Department

- Support of recommendations
- Update Threatened and Endangered Species lists (June 2020)
- Support consideration of springs and groundwater-surface water interaction in the establishment of DFCs

Texas Water Development Board

TWDB Comments

Level 1 Comments

- Comments, questions, and data revisions that must be satisfactorily addressed in order to meet statutory, agency rule, and/or contract requirements.
- 32 received.
 - Reconciliation between report and updated DB22 material.
 - Confirmation of 2020 WMSs, as non-implementation may necessitate future amendments per SB 1511.
 - Additional material on navigation in the region.
 - Indicate planned timing of submittal of recommendation package to TPWD for unique stream segments.

Level 2 Comments

- Comments and suggestions for consideration that may improve the readability and overall understanding of the regional water plan.
- 14 received.
- Editorial and clarifications.

Draft Responses Submitted to TWDB for Informal Review

Surveys

Implementation Surveys

- Determine extent of implementation of recommended Water Management Strategies from the 2016 Plan
- Utilizes forms and spreadsheets required by TWDB

Infrastructure Financing Surveys

- Determine and characterize need for funding for recommended projects within Region D.

Outreach

- Started in December 2019.
- Phone/email to all WUGs with recommended strategies

Substantive Changes

Hickory Creek SUD

- Changed to unmet municipal need

Cash SUD

- Revised contract

Clarksville

- Groundwater wells

B H P WSC


- Now contracts directly with NTMWD
- 

37 Public Comments on the IPP

June 11, 2020 Public Hearing on IPP

- 12 individuals provided oral comments
- Transcribed and included in Final Plan

Written Comments

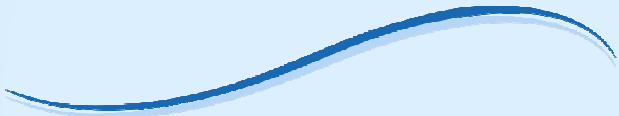
- 11 individuals submitted written comments by email (some provided multiple separate comments)
 - All copies included in Final Plan
- 

Summary of Public Comments and Responses

Majority of comments opposed Region C WMS for Marvin Nichols Reservoir

- Responses provide citations and text from within the Plan for Region D's continued position opposing Marvin Nichols Reservoir and lack of any agreement between Regions C and D at the time of publication of the Plan.
- Presents aggregated list of alternatives suggested by commenters.

Revisions for Other Comments

- Added discussion on cattle, poultry, and navigation.
 - Removal of references to combined cycle power plant in Hunt County
 - Added reference to the 2020 Texas Water Conservation Scorecard
- 

Prioritization of Recommended WMS Projects

All recommended WMS Projects are required to be prioritized.

Uniform Standards developed by Stakeholder Committee per 31 TAC §357.46.

Standard scoring criteria applied to each project using TWDB's prioritization template.

- Timing
 - Feasibility
 - Viability
 - Sustainability
 - Cost Effectiveness
- 

Prioritization Ranking of Region D WMS Projects (Top 50)

Rank	WMSP	Score
1	Riverbend WMS Water Right Amendment	964.0
2	Riverbend WMS Interim to Ultimate Storage Conversion	960.0
3	Riverbend WMS New Raw Water Intake 120 MGD 2030	932.0
4	Riverbend WMS New WTP 25 MGD 2030	932.0
5	Riverbend WMS Raw Water Pipeline 72 MGD 2030	932.0
6	Riverbend WMS Raw Water Pump Station 66 MGD 2030	932.0
7	Drill New Wells (Lindale, Carrizo, Neches)	894.3
8	Drill New Wells (Mining Marion, Queen City, Cypress)	894.3
9	Drill New Wells (Star Mountain, Queen City, Sabine)	882.3
10	WTP Expansion 2030 (Greenville, Sabine)	876.0
11	Drill New Well (Livestock, Wood, Queen City, Sabine)	874.3
12	Drill New Wells (Irrigation Harrison, Queen City, Cypress)	874.3
13	Drill New Wells (Irrigation Harrison, Queen City, Sabine)	874.3
14	Drill New Wells (Livestock Titus, Carrizo, Cypress, 2020)	874.3
15	Drill New Wells (Livestock, Camp, Queen, Cypress)	874.3
16	Drill New Wells (Livestock, Cass, Queen City, Cypress)	874.3
17	Drill New Wells (Livestock, Cass, Queen City, Sulphur)	874.3
18	Drill New Wells (Livestock, Franklin, Carrizo, Cypress)	874.3
19	Drill New Wells (Livestock, Franklin, Carrizo, Sulphur)	874.3
20	Drill New Wells (Livestock, Morris, Queen City, Cypress)	874.3
21	Drill New Wells (Livestock, Morris, Queen City, Sulphur)	874.3
22	Drill New Wells (Livestock, Upshur, Queen City, Cypress)	874.3
23	Drill New Wells (Livestock, Upshur, Queen City, Sabine)	874.3
24	Drill New Wells (Manufacturing Upshur, Queen City, Cypress)	874.3
25	Drill New Wells (Mining Gregg, Carrizo-Wilcox, Sabine)	874.3

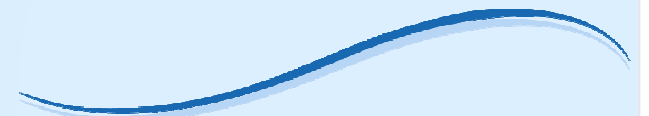
Rank	WMSP	Score
26	Drill New Wells (Mining Harrison, Queen City, Cypress)	874.3
27	Drill New Wells (Mining Harrison, Queen City, Sabine)	874.3
28	Drill New Wells (Scottsville, Queen City, Cypress)	874.3
29	Drill New Wells (Waskom, Queen City, Cypress)	874.3
30	DRILL NEW WELLS (BOWIE IRRIGATION, CARRIZO-WILCOX, SULPHUR)	854.3
31	Drill New Wells (County Other, Cass, Carrizo, Cypress)	854.3
32	Drill New Wells (County Other, Cass, Carrizo, Sulphur)	854.3
33	Drill New Wells (Manufacturing, Wood, Queen City, Sabine)	852.7
34	Riverbend WMS Pump Station Expansion 6 MGD 2040	852.0
35	Riverbend WMS WTP Expansion 5 MGD 2040	852.0
36	Drill New Wells (Livestock Hopkins, Hopkins, Carrizo, Sulphur, 2020)	834.3
37	Drill New Wells (Livestock Titus, Carrizo, Cypress, 2030)	834.3
38	Drill New Wells (Panola Bethany, Queen City, Sabine)	834.3
39	Increase Existing Contract (Harleton, Cypress)	832.7
40	Riverbend Strategy Cass New WTP and Transmission Line	832.0
41	Increase Existing Contract (Holly Springs, Cypress)	826.3
42	Drill New Wells (Irrigation Hopkins, Carrizo-Wilcox, Sulphur)	824.3
43	Drill New Wells (Cumby, Hopkins, Nacatoch, Sabine, 2020)	814.3
44	Drill New Wells (Irrigation Hunt, Nacatoch, Sabine)	814.3
45	Drill New Wells (Irrigation, Red River, Nacatoch, Sulphur)	814.3
46	Drill New Wells (Livestock Red River, Trinity Aquifer, Sulphur)	814.3
47	Drill New Well (EDOM WSC, Van Zandt, Carrizo, Neches, 2020)	806.3
48	Drill New Wells (Livestock Titus, Carrizo, Sulphur)	804.3
49	Drill New Wells (North Hunt SUD, Hunt, Nacatoch, Sabine, 2020)	798.3
50	Drill New Wells (Clarksville, Blossom, Sulphur)	798.3

Rank WMSP		Score	Rank WMSP		Score
51	Drill New Wells (Celeste, Woodbine, Trinity, 2020)	794.3	76	Drill New Wells (Celeste, Woodbine, Trinity, 2040)	694.3
52	DRILL NEW WELLS (IRRIGATION VAN ZANDT, QUEEN, NECHES)	794.3	77	Riverbend WMS Pump Station Expansion 30 MGD 2060	692.0
53	Drill New Wells (Miller Grove WSC, Hopkins, Carrizo-Wilcox, Sulphur, 2020)	794.3	78	Drill New Wells (North Hunt SUD, Hunt, Nacatoch, Sabine, 2040)	674.3
54	Drill New Wells (Mining Hopkins, Hopkins, Carrizo, Sulphur, 2020)	792.7	79	DRILL NEW WELLS (R-P-M WSC, CARRIZO-WILCOX, NECHES, 2040)	674.3
55	Drill New Wells (Livestock Bowie , Nacatoch, Red)	784.3	80	Drill New Wells (Canton, Carrizo-Wilcox, Sabine)	663.7
56	Drill New Wells (Livestock, Bowie, Carrizo-Wilcox, Sulphur)	784.3	81	Canton Indirect Reuse	635.7
57	Drill New Wells (Livestock, Delta, Nacatoch, Sulphur)	784.3	82	Drill New Wells (Winona, Carrizo-Wilcox, Sabine)	604.3
58	Drill New Well (Livestock Hunt, Trinity, Sabine)	774.3	83	Drill New Well (EDOM WSC, Van Zandt, Carrizo, Neches, 2050)	594.3
59	Drill New Wells (Livestock Red River, Blossom, Red)	774.3	84	Drill New Well (Little Hope Moore WSC, Van Zandt, Carrizo, Neches)	594.3
60	Riverbend WMS New Raw Water Pipeline 32 MGD 2050	772.0	85	Drill New Wells (Irrigation Hopkins, Carrizo-Wilcox, Sabine, 2060)	594.3
61	Riverbend WMS Pump Station Expansion 18 MGD 2050	772.0	86	Drill New Wells (North Hunt SUD, Hunt, Nacatoch, Sabine, 2050)	594.3
62	Riverbend WMS WTP Expansion 10 MGD 2050	772.0	87	DRILL NEW WELLS (R-P-M WSC, CARRIZO-WILCOX, NECHES, 2050)	594.3
63	Drill New Wells (North Hunt SUD, Hunt, Nacatoch, Sabine, 2030)	754.3	88	Drill New Wells (Mining Hopkins, Hopkins, Carrizo, Sulphur, 2050)	592.7
64	DRILL NEW WELLS (R-P-M WSC, CARRIZO-WILCOX, NECHES, 2030)	754.3	89	Drill New Wells (Starrville Friendship, Carrizo, Sabine)	544.3
65	Pat Mayse Raw Water Pipeline (Irrigation Lamar, Red)	754.3	90	Drill New Wells (Celeste, Woodbine, Trinity, 2060)	534.3
66	Drill New Wells (Gilmer, Carrizo, Cypress)	754.3	91	New Contract with Greenville and Pipeline to Wolfe City	532.7
67	Drill New Wells (Irrigation Hopkins, Carrizo-Wilcox, Sabine, 2040)	754.3	92	Drill New Wells (Livestock Hopkins, Hopkins, Carrizo, Sulphur, 2060)	514.3
68	Drill New Wells (Smith County MUD 1, Queen City, Sabine)	754.3	93	Drill New Wells (North Hunt SUD, Hunt, Nacatoch, Sabine, 2060)	514.3
69	Drill New Wells (Manufacturing Van Zandt, Carrizo-Wilcox, Trinity, 2020)	742.7	94	DRILL NEW WELLS (R-P-M WSC, CARRIZO-WILCOX, NECHES, 2060)	514.3
70	Drill New Wells (Mining Hunt, Trinity, Sabine)	722.7	95	Drill New Wells (Mining Hopkins, Hopkins, Carrizo, Sulphur, 2060)	512.7
71	Drill New Wells (Leigh, Queen City, Cypress)	714.3	96	Drill New Wells (North Harrison, Queen City, Cypress)	484.3
72	New Contract and Pipeline to Lamar Co WSD for Lamar Livestock	712.7	97	Drill New Wells (Cumby, Hopkins, Nacatoch, Sabine, 2070)	454.3
73	Drill New Wells (Crystal Systems Inc, Carrizo, Neches)	704.3	98	Drill New Well (EDOM WSC, Van Zandt, Carrizo, Neches, 2070)	434.3
74	Drill New Wells (Crystal Systems Inc, Carrizo, Sabine)	704.3	99	Drill New Wells (Miller Grove WSC, Hopkins, Carrizo-Wilcox, Sulphur, 2070)	434.3
75	Drill New Wells (Manufacturing Van Zandt, Carrizo-Wilcox, Trinity, 2030)	702.7	100	Drill New Wells (North Hunt SUD, Hunt, Nacatoch, Sabine, 2070)	434.3
			101	DRILL NEW WELLS (R-P-M WSC, CARRIZO-WILCOX, NECHES, 2070)	434.3
			102	New WTP Greenville	397.7
			103	New Contract with Greenville and Pipeline to Celeste	294.3

Revision to Front Matter

In Memoriam

"This Plan is dedicated to Johnny Mack Bradley, dedicated member of the North East Texas Regional Water Planning Group."



Path Forward

Editorial /
Formatting and
Digital
Deliverables

Distribution to
RWPG members
for review via
NETMWD
website.

Consideration
of Adoption and
Submittal



Questions?

Tony L. Smith, P.E.
Carollo Engineers, Inc.
Office: 512-427-8151
TLSmith@Carollo.com