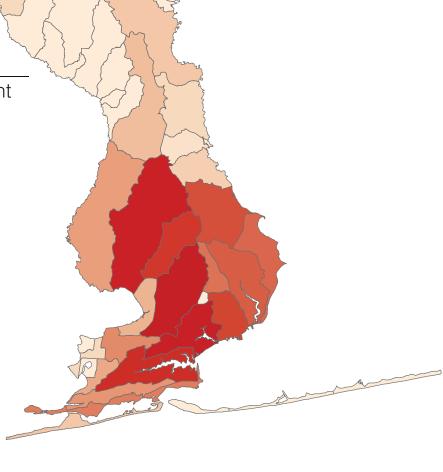


Escambia County

Stormwater Needs Assessment 2015 Edition

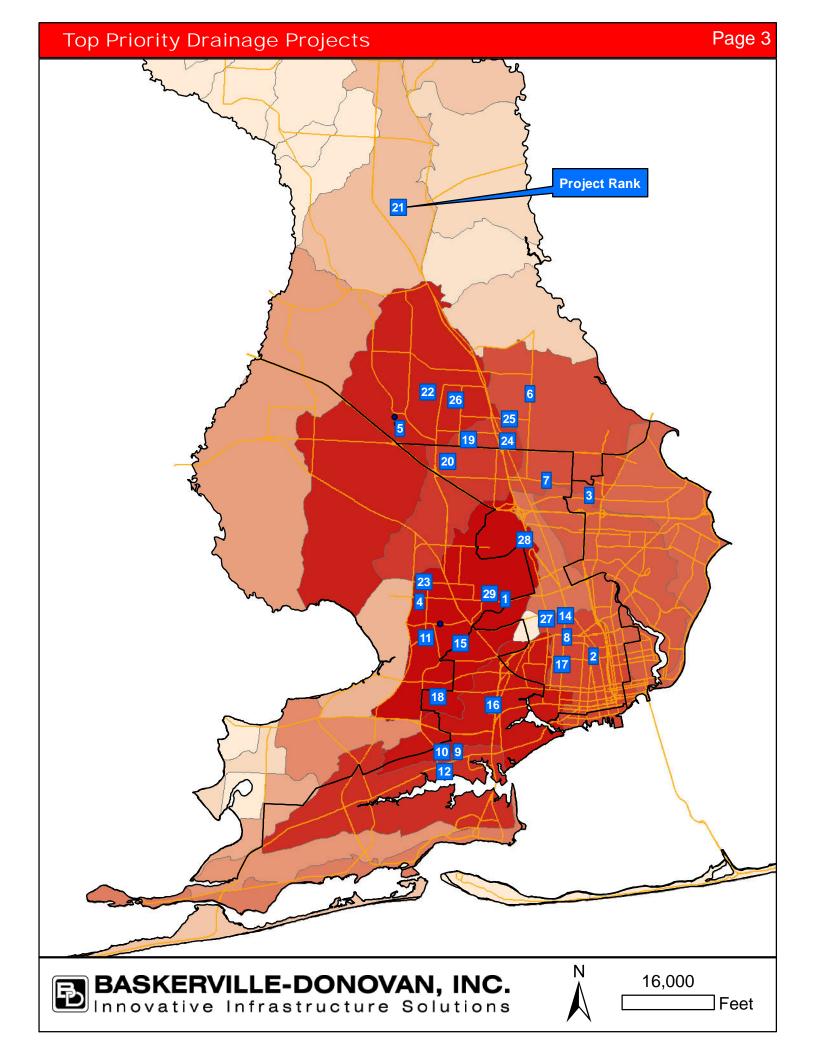




Prepared For: Escambia County

BDI Job Number: 25899.02

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Rank	Project		Page
1	Crescent Lake		87
	Construct drainage system and new ponds on east side of Crescent Lake through the Blue Springs Drive drainage system up to Glass Street and Sun valley Drive	\$4,000,000	
2	Spring Street - Leonard Street - PHS Drainage		97
	Joint Drainage project between the City and School Board to address flooding on Spring Street and School Area.	\$500,000	
3	Frinchez Heights (Sabra, Erwin, Whitmire, Ernistene Area)		65
	Proposed drainage capacity improvements in the Frinchez Heights area including Sabra Dr, Erwin Dr, Whitmire Dr, Ernistene Rd (North of Olive Rd) which will likely require a ditch conversion into a pond site	\$400,000	
4	Muldoon Road and Saufley Field Rd Area		83
	Drainage improvements are needed to address existing drainage capacity from Blue Angel to Muldoon Road. FDOT is currently (2015) reviewing partial drainage with sidewalk projects.	\$3,000,000	
5	Flood Plain Management, Wetland Restoration, and Regional Pond Construction in 11-Mi Basin	le Creek	51
	A large scale project to provide channel, stream, and flood plain restoration improvements, including at minimum of 9 regional stormwater management faculties (ponds). Project completion will require multiple grants to provide a complete realization of the 11-Mile Creek Basin Study Recommendations. The total estimated project costs is over at least a 10-year period.	\$46,538,265	
6	Willowbrook Lake Dam		55
	Restore dam and overflow structure at Willowbrook dam East of Chemstrand Road to provide Water Quality	\$500,000	
7	Ensley Draiange - Caro-Mayflower Pond Area		63
	Expansion of the Caro-Mayflower pond, to address drainage issues south of Caro Street, north of Johnson Ave between Hwy 29 and Palafox Street, including repetitive flooding loss on Orange Avenue.	\$1,300,000	
8	Delano Drainage Area (L Street, Leonard, Fairfield, Herman, and Fairfield Area)		97
	Drainage System Improvements to include new regional pond(s) and rehab of existing ponds for water quality and flood control	\$6,488,476	
9	Beach Haven Area Drainage and Sewer Northeast Phase 1		107
	Roadway/drainage and sewer improvements; currently under design (NE of Decatur Ave to Gulf Beach Highway; from Mills Ave to Decatur Ave including ponds for Phase 1 & 2)	\$10,887,839	
10	Beach Haven Area Drainage and Sewer Northeast Phase 2		117
	Roadway/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach Highway; Fairfield Dr to Colbert)	\$7,823,000	
11	Muldoon-Saufley Field-Velma (Pond Expansion)		91
	Property purchase and drainage improvement design to provide positive outfall for two County ponds, expand the Velma St Pond, and provide outfall to Bayou Marcus Creek. Refer to Bayou Marcus Basin Study -Velma Dr Pond Outfall Branch C to be modified by property acquisition and Velma pond expansion.	\$3,450,000	
12	Beach Haven Area Drainage and Sewer (South)		117
	Roadway/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach Highway; Fairfield Dr to Colbert)	\$12,000,000	
13	Bristol Creek Propery Acquisition	#C 100 000	51
	A large scale project, with a Property Acquisition Plan for repeatedly flooded property and easement acquisition. Project will be partially funded by HMGP grant if approved. Related to project "Flood Plain Management, Wetland Restoration, and Regional Pond Construction in 11-Mile Creek Basin."	\$6,189,380	
14	Bevery Parkway Basin Zone H- Loretta Street, between Kelly Ave and North "P" Street		89
	Construct new ponds and expand the stormwater collection system in the area around Loretta Street.	\$6,499,810	

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Rank	Project		Page
15	North 61st Property Purchase and flood plain restoration	\$700,000	93
	Purchase of 10 properties for the purposes of flood plain restoration, and stream restoration	φ. σο,σσσ	
16	Old Corry Outfall Property Purchase and Flood Plain Restoration		107
	Pete Moore ditch- Jackson Creek flood plain and habitat restoration.	\$978,881	
17	Avery Street Drainage (Kupfrian Park/Hernandez and Lakeview)		97
	Continued drainage for the Kupfrian Park area to include stormwater pond(s) for flood control/water quality, and conveyance system to address flooding issues on Hernandez and Lakeview between Pace and J Street.	\$998,563	
18	Myrtle Grove System A (remaining portion)		105
	Completion of System A to included drainage improvements including acquisition for easement and pond site on 72nd and 73rd Ave, South of Jackson, and North of Harvey St	\$450,000	
19	Ponderosa Drive Area Drainage		61
	Expand existing pond to accommodate contributing basin	\$2,243,000	
20	Kingfisher, Bush Street, and Interstate Circle Drainage		61
	Eight Mile Creek Priority 5 Drainage to construct a regional pond to address flooding for Kingfisher, Blue Jay Way, Bush Street, and Interstate Circle	\$2,500,000	
21	Pin Oak Lane Drainage (Phase 1) and Flood Plain Restoration Project (Phase 2)		31
	Construct a new roadway connection to Quintette Road at North end. Also purchase property to restore flood plain at South end.	\$725,277	
22	West Roberts Drainage Improvements and Regional Pond (Regional Pond in 11-Mile Cree		51
	Regional pond and conveyance system on West Roberts Road utilizing on FDOT pit (Part of 11 Mile Creek Basin Plan to reduce flood stage in Bristol Creek/Bristol Park/Ashbury Hills)	\$1,500,000	
23	Bellview Avenue Branch E Drainage Chestnut-Hogan Pit expansion		83
	Bellview between Rosewood Estates and Hogan Road, includes expansion of the Chestnut- Hogan Pit	\$1,500,000	
24	Chandler Road Drainage		63
	Alleviate lot flooding by installing a conveyance system in the area connected to the main trunk line currently being installed by FDOT. This line drains to the Holsberry pond, part of the Hwy 29 lane widening project	\$600,000	
25	Ten Mile Road Drainage and Roadway Improvements		55
	Address capacity and drainage problems from Chemstrand to Palafox to address flooding in the area of Holsberry Lane. May involve property acquisition.	\$5,000,000	
26	11 Mile Creek Basin Study Zone 5		53
	increase capacity of pipe under green hills rd. and construct a pond near urban drive to alleviate area flooding	\$3,619,643	
27	Bevery Parkway Basin Branch G- Andrew Ave and Coons Ave		89
	Extend the stormwater collection system along Andrew Avenue and Coons Avenue.	\$1,319,873	
28	Dorothy & Lydia Avenue Area Drainage		77
	Improve existing drainage system causing lot flooding. The surrounding area drains to private Rolling Hills borrow pit, causing sediment problems at Crescent Lake	\$400,000	
29	South Gulf Manor Private Pond Rehab		85
	Upgrade to county standards a private pond that has failed to accommodate flow from South Gulf Manor Phase 1 on numerous occasions. This has resulted in flooding of around 15 homes.	\$200,000	

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Rank	Project		Page
30	Avondale Estates - Bayou Marcus Branch E		83
	Roadway/drainage improvements for Cerny Road area and area North of Cerny to provide possible pond outfall solutions for Saufley Field -Muldoon Area Ponds. Concept plans requires further study for alternate pond outfall options considering Velma Pond.	\$3,300,000	
31	Palafox Street @ Oakfield/Kenmore/Pacific/Majors/Pinestead Drainage		77
	Drainage Project currently under design to address Beverly Parkway Basin Study Improvements Branches N, O, P, & Q	\$4,900,000	
32	Old Corry Field Area Drainage		109
	Construct a new stormwater collection system along Old Corry Field Road from Border Street to Jackson Creek.	\$2,000,000	
33	Catholic High Basin Zone A North - North end of the basin around Mission Street		95
	Expand pond storage by expanding existing pond and constructing a new pond as well as expanding and increasing existing collection to prevent home and street flooding. This improvement will not have negative impacts on downstream properties.	\$3,330,648	
34	Intersection of Hwy 29 and Hwy 97		21
	Construct a dry pond and conveyance pipes at the corner of Highway 97 and Crabtree Church Road to contain and control downstream stormwater runoff. Increase the capacity of culverts running under Highway 29 to reduce roadway flooding.	\$558,137	
35	Helms/Beulah School Road		71
	Increase capacity of drainage structures crossing Helms Road to prevent roadway overtopping and decrease upstream flood stages.	\$207,509	
36	Carver Park Area Drainage Improvements West of 297A		37
	Four-phase roadway and drainage improvement project for the area south of Muscogee Road, north of the Road Camp, east of Booker, and west of Ransom, requiring property pond acquisition and drainage conveyance improvements.	\$2,250,000	
37	Haley Lane and Eagle Street		53
	Reconstruct the Brookhollow collection system and construct a new collection system along 10 Mile Road to reduce roadway flooding. Improvements may have a negative effect on downstream properties.	\$584,279	
38	Raise berm east of landfill (Perdido River South Basin)		49
	Raise the berm east of the landfill to prevent an existing pond from overtopping.	\$623,519	
39	West Highlands (Green and Lloyd) and Lloyd up to Mallory Street		95
	Address property flooding in an area North of Mobile Hwy West of Dominguez Street, and at Green St	\$650,000	
40	Carver Park/West Booker Road		43
	Reduce area flooding by increasing the capacity of area conveyance structures as well as constructing a new pond.	\$1,327,654	
41	Ferry Pass Drainage Zone 5		79
	Drainage System Improvements on Boyd Ave and adjoining Beagles St, Geeker St, De Loach St, and Raines St; dependent upon Olive Rd drainage system upgrades	\$950,000	
42	Delano Area North Kelly Avenue Basin		89
	Drainage System Conveyance Improvements for area between Pace Blvd, Massachusetts Av, W" St., and Truman to improve conveyance to Kelly Avenue pond, as well as provide for an improved outfall system. Project requires coordination with CRA improvements on Massachusetts Avenue for sidewalks and drainage improvements	\$400,000	
43	Nims Lane Drainage Project		63
	Nims Lane receives stormwater from a basin of approximately 29 acres. This basin extends just east of Holsberry Road and just north of Holsberry Lane. This area is prone to flooding due a lack of a positive outfall or stormwater conveyance system. Discharge from this conveyance system is expected to be routed to the Holsberry Pond	\$400,000	

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Rank 44	Project Lake Charlene Area Drainage (including future phases not covered by grant)		Page 107
	Increase outfall capacity of Lake Charlene by implementing some of the drainage system improvements from the 2007 Warrington Master Plan and the 2015 Lake Charlene Warrington Study.	\$1,992,309	
45	Treasure Hills Drainage		121
	Install drainage upgrades, stormwater pond w/pond site purchase, and drainage rehabilitation in area of Avon, Medina, and Gulf Beach Hwy	\$760,000	
46	Beverly Parkway Basin Branch C- Twelve Oaks Area		87
	Construct a new collection system for the Twelve Oaks Area with a discharge to the FDOT system. Connection to the FDOT system will limit design to the 3 year event.	\$2,522,301	
47	Beverly Parkway Basin Zone D-Brentwood		89
	Expand the stormwater systems on Cary Memorial Drive and Armenia Drive to Carolyn Way, Jacquelyn Way, Virginia Way, Palm Court, Concordia Street, and Chimes Way and tie into the existing system on Hardy Place. Connection to the FDOT system will limit design to the 3 year event.	\$3,596,439	
48	Dogtrack South -Coral Creek - Mariners Village-Hampton Lakes		113
	Stream and wetland restoration and construction of an attenuation pond. Two creeks merge north of Coral Creek, resulting in upstream flooding the affects Mariners Village to the northwest and a creek along Dog Track Road to the northeast.	\$3,400,000	
49	Westview Lane & Lewis St Area Drainage	*	67
	Drainage improvements to address stormwater and groundwater from Lewis Street and Moose Lodge 557 impacting lots along Westview Lane	\$200,000	
50	Klondike Road North of Mobile Highway		73
	Increase capacity of structure under Klondike Road to prevent roadway overtopping.	\$22,571	
51	Catholic High Basin Zone A South - South of Avery Street	Ø4 440 050	95
	Construct new collection system to prevent street flooding. This improvement will not have negative impacts on downstream improvements.	\$1,440,259	
52	N 69th Ave- Bayou Marcus/Millview Study Branch D		93
	Expand the stormwater collection system along 69th Avenue to reduce flooding in the area.	\$1,963,878	
53	Well Line Rd Home Flooding		37
	Increase the capacity of the culvert under Well Line Road to reduce roadway and home flooding. Connect the Well Line Road culvert to the culvert running under Forrest Street to minimize water flowing across the property (this will require permission or easements from two property owners).	\$67,472	
54	Hwy 29 (North of Bet Raines Rd)		21
	Increase the capacity of culverts under Highway 29 and modify the surrounding ditch area to reduce roadway flooding.	\$323,506	
55	Willowside Drive and Westlake Subdvision Drainage	4 === 000	105
	Address home, yard, and street flooding on 72nd Avenue and Willowside Drive through the Westlake Subdivision: Reference Warrington Basin Study-St James Branch C. May require modifications.	\$750,000	
56	Elsa Area Drainage		93
	Drainage project to address flooding in the area of Elsa Avenue South of Lillian from 48th Avenue over to Feldor Avenue including 49th, 50th, 52nd, State Street, Kinear Avenue, and Martha Ave	\$2,600,000	
57	Ranch Lands - Sagebrush Trail		61
	Repetitive loss flooding along Sagebrush Trail (Ranch Lands Subdivision) requires purchase of a pond site and improved drainage conveyance to address FDOT channel capacity. Refer to 8 Mile Creek basin Study Priority 3 for detailed information.	\$500,000	
58	International Paper Area		43
	Increase capacity of drainage system in order to reduce roadway overtopping and upstream flood stages.	\$367,980	

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Rank 59	Project Sunset/Patton/Elite/Gulf Beach Hwy Drainage Outfall		Page 117
	Realign the drainage outfall line beginning at Gulf Beach Hwy and Elite Drive to flow down Sunset St. in order to correct non-functioning sections and routing beneath homes.	\$220,000	
60	Velma Pond Outfall		91
	Construct outfall for the Velma Pond to prevent overtopping during a 100 year event.	\$905,319	
61	Bevery Parkway Basin Branch B- South Portion- Michael Drive		87
	Construct a stormwater pond on Michael Drive.	\$623,567	
62	System improvements between Interstate 10 and Hwy 297A		59
	Reconstruct Eleven Mile Creek in this area to incorporate more volume for flood control within the stream in lieu of constructing detention ponds to prevent flooding of homes between I-10 and Hwy 297A. Report also suggests requiring attenuation of the 100 year event upstream of this area.	\$48,315,410	
63	Ten Mile Road at Stefani Dr.		53
	Increase the collection system size along Stefani Drive and Ten Mile Road and increase the capacity of the culverts under Midway Drive to reduce extensive flooding in the area. Improvement may have a negative effect on downstream properties.	\$393,265	
64	Ten Mile Creek from Pine Forest to Stefani Dr.		53
	Reconstruct Ten Mile Creek from Pine Forest to Stefani Drive to provide additional storage capacity to reduce extensive flooding in the area. Improvement may have a negative effect on downstream properties	\$8,988,914	
65	Ten Mile Creek from Stefani Drive to Roberts Rd.		53
	Reconstruct Ten Mile Creek from Stefani Drive to Roberts Road to provide additional storage capacity to reduce extensive flooding in the area. Improvement may have a negative effect on downstream properties.	\$10,674,335	
65	Ten Mile Creek from Stefani Drive to Roberts Rd.		53
	Reconstruct Ten Mile Creek from Stefani Drive to Roberts Road to provide additional storage capacity to reduce extensive flooding in the area. Improvement may have a negative effect on downstream properties.	\$10,674,335	
66	Jamison Street Branch F -Warrington Basin Study		109
	Construct new stormwater system along Jamison Street and Rue Max Street with direct discharge to Bayou Chico to reduce discharges to the Barrancas Avenue System. Connect to Lexington Terrace stormwater ponds to provide water quality improvement prior to discharge to the wetlands.	\$2,000,000	
67	Beach Haven Area Drainage and Sewer Northwest		115
	Roadway/drainage and sewer improvements (NW of Fairfield to Gulf Beach Highway)	\$4,000,000	
68	Tate Road North of Petty St		45
	Increase capacity of roadway culvert crossings to prevent overtopping of Tate Road	<i>\$13,269</i>	
69	Filley Rd	4	53
	Increase capacity of culvert crossing to prevent overtopping of Filley Rd	<i>\$4,283</i>	
70	Amanda Rd	\$6,896	51
74	Increase capacity of culvert at Creekwood Drive to prevent roadway overtopping	φ0,090	00
71	Chestnut Rd to Hwy 29 Remove accumulated sediment from the upstream side of the Chestnut Road bridge in order	\$1,027,014	23
	to lower downstream velocities. Replace the culverts under Molino Road and Chestnut Road with bridges to prevent roadway overtopping and increase flow capacity.	ψ1,027,014	
72	Ashland Park Joint ECUA funded sewer and driange		55
	Improve Box Culverts at Rodney, Joel and Childers Streets.	\$100,000	
73	Yupon/Pebble Creek/Deerfield		59
	Reduce area flooding by enlarging existing ponds and increasing area culvert capacities.	\$663,784	

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Rank	Project		Page
74	Stagecoach/Wilshire/Mobile Highway		71
	Increase capacity of drainage structure at Mobile Highway and improve downstream channel to prevent roadway overtopping and residential flooding.	\$70,698	
75	Bayou Grande Basin K1- Gulf Beach to Winthrop SS		117
	Replace the outfall trunk line from Gulf Beach Hwy through Winthrop Ave. to prevent roadway flooding.	\$174,160	
76	Bevery Parkway Basin Branch E- west side of Hwy 29 on Mason Lane		89
	Construct a new collection system along Hwy 29 and Mason Lane along with a new pond for the system to connect to.	\$1,077,800	
77	Navy Point Drainage North		117
	Construct treatment swales within Navy Point to treat stormwater as it flows to the discharge point per Bayou Grande Basin Study.	\$20,000	
78	Navy Point Drainage South		117
	Construct treatment swales within Navy Point to treat stormwater as it flows to the discharge point per Bayou Grande Basin Study.	\$25,000	
79	Bevery Parkway Basin Branch I- Moss Lane tie in at Van Pelt Lane		87
00	Construct new stormwater system along Moss Lane.	\$237,810	40
80	Frank Reeder Rd & Rebel Rd Reconstruct the swale in the area near Rebel Road and construct a culvert under Frank Reeder Road.	\$49,521	49
81	Emory Drive- Warrington Basin Study Branch K		93
0.	Construct a new stormwater system along Emory Drive, Stanford Road, Stetson Road, and Vanderbilt Road with a new stormwater pond at the eastern end of Tulip Drive.	\$637,509	30
82	Navy Point Drainage and Sanitary Sewer		117
	Roadway/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach Highway; Fairfield Dr to Colbert)	\$300,000	
83	Bayou Grande Basin Study P1- Bainbridge Culvert		117
	Replace existing culvert on Bainbridge with a larger pipe to prevent road overtopping.	\$44,945	
84	Hwy 97 (East of Hwy 29) Increase the capacity of the culverts under Highway 97 to decrease likelihood of roadway flooding.	\$201,759	21
85	Lake Charlene/Querido Heights- Warrington Basin Branch B		107
	Reconstruct Lake Charlene overflow structure and outfall ditch. Reconstruction of the 69th Avenue drainage system to reduce discharges to Lake Charlene, increase the capacity of the 61st Avenue drainage system, and increase the capacity of the 61st Ave, Kittyhawk Drive, Lake Charlene Lane, and Myrtle Hill Circle drainage system. Solutions are currently under evaluation.	\$6,765,919	
86	Johnson Ave Drainage (East of Briese Ln)		63
	Remove/Replace faulty storm pipe from Pine Ridge Lane to Johnson Ave, Address pipe flow Crystal Wells pond, Address two 24" pipe feeding one 24" pipe down to outfall in Gulf Power	\$400,000	
87	Easement. Olive Manor & Lincoln Park Drainage		63
.	Drainage System Improvements with a creek restoration/preservation	\$1,200,000	00
88	Shadow Ridge Drive - Meadowview Lane	. , ,	55
88	Drainage Improvements proposed within unopened County right-of-way in coordination with adjacent property to address property damage and erosion for the accumulation of development.	\$30,000	33
89	Hwy 29 (North of Quintette Rd.)		29
	Replace the existing culverts under (divided) Highway 29 north of Quinette Road with two bridge structures to increase flow capacity and prevent roadway overtopping.	\$2,412,936	
90	Hwy 29 (Jack's Branch Q13)		31
_	Replace the existing culverts under (divided) Highway 29 with two bridge structures to increase flow capacity and prevent roadway overtopping.	\$2,410,815	
91	Hwy 29 (South of Omega Drive)	#004 070	23
	Increase the capacity of the culverts under Highway 29 south of Omega Drive to reduce roadway flooding.	\$331,272	

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Rank	Project		Page
92	Hwy 29 (North of Hwy 97)		21
	Increase the capacity of the culverts under Highway 29 near North Highway 95A to prevent flooding.	\$283,017	
92	Hwy 29 (North of Hwy 97)	¢202 017	21
	Increase the capacity of the culverts under Highway 29 near North Highway 95A to prevent flooding.	\$283,017	
93	Hwy 97 at Elementary School	¢007.007	21
	Increase the capacity of the two culverts under Highway 97 near the Molino School and connect them with an earthen ditch. This will prevent roadway flooding.	\$297,927	
94	Old Corry Field Rd- Warrington Basin Branch H	#0.400.000	95
	Construct a new stormwater collection system along Old Corry Field Road from Border Street to Jackson Creek.	\$2,126,280	
95	Midas- Muldoon Area including West side of Green Acres	<i>#</i> 050,000	83
	Miscellaneous drainage improvements in this area to address flooding, including a small pond and conveyance improvements	\$250,000	
96	Frank Reeder Rd & Beulah Rd		49
	Reconstruction of the ditch and installation of culverts where necessary to provide a defined drainage path.	\$64,153	
97	Helms Rd & Woods Lane		69
	Construct a new culvert under Woods Lane and reconstruct the ditch feeding to the existing culvert.	\$69,780	
98	Lakewood/Millwood Terrace- Warrington Basin Branch F		109
	Construct new stormwater collection system in the Lakewood Road area with a stormwater pond at Lakewood Road and Addison Avenue with an outfall under Lakewood Drive to Bayou Chico.	\$4,510,975	
99	Shoshone and Doug Ford Drive Drainage		121
	Evaluate pipe system and obtain permits to restore flow the wetlands and alleviate home flooding along Shoshone Drive.	\$240,000	
100	Lanette Drive		83
	Construct new stormwater system for the area around Lanett Drive to reduce flooding in the area.	\$1,000,000	
101	Hwy 29/Tate School Road	# 107.001	45
102	Increase capacity of culverts to prevent overtopping of Tate Road Bayou Grande Basin Study P7- Bay Meadows Treatment Pond	\$187,331	115
102	Provide treatment pond for existing residential development north of Bay Meadows Dr. This	\$112,361	113
	will not affect downstream properties.		
103	Ten Mile Creek from Roberts Rd North to Kingsfield Rd		51
	Reconstruct the creek to provide additional storage volume and increase the culvert capacity under Roberts Road, Dolphin Street, Tate Road, and Kingsfield Road to prevent flooding to structures. Improvements may have a negative effect on downstream properties.	\$4,494,457	
104	Pine Forest/Klondike Road		59
	Construct two new retention/detention ponds and increase capacity of driveway culverts along Klondike Rd to reduce peak flows downstream, and reduce scour.	\$2,116,233	00
105	Bayou Grande Basin Study S2- Athens Ave Culvert		115
	Enlarge the existing culvert on Athens in order to prevent road flooding. This improvement will not negatively impact downstream properties or other improvements.	\$18,000	
106	Bayou Grande Basin Study S1- Americus Ave Culvert		115
	Enlarge the existing culvert on Americus in order to prevent road flooding. This improvement	\$12,000	
107	may impact other improvements. Carrington Lakes		29
	Repair outfall erosion at the private subdivision pond to prevent further erosion and possible wetland impacts.	\$276,893	

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Rank	Project		Page
108	Ashton Brosnaham Park Construct a new eterminator pend at the end of Pet mark Lane with a ditch connecting runoff	\$1,568,145	55
	Construct a new stormwater pond at the end of Bet mark Lane with a ditch connecting runoff from the recreational center to the pond.	φ1,566,145	
109	Myrtle Grove System E (McNair Ln and 57th)	# 4.00.000	107
	Decrease drainage impacts on Lake Charlene through drainage improvements on 72nd and 73rd Ave, South of Jackson and North of Harvey St.	\$100,000	
110	Northcreek and Valley Ridge Area Drainage Joint Sanitary Sewer Project		55
	Drainage and sanitary sewer improvements in Northcreek Subdivision and in the adjacent Deer Run and Valley Ridge subdivisions, as well as on Bison Road and Motley Court	\$250,000	
111	Tributary 10-A of Eight Mile Creek Basin Study		75
440	Increase the capacity of the culvert under Pine Forest Road at Lake Francis to decrease roadway flooding and accommodate the improved secondary sewer system. Rittenberry Drive	\$58,307	05
112	Increase the capacity of the culverts under Rittenberry Drive and Madrid Road and deepen the roadside ditches to prevent home flooding.	\$70,597	35
113	Well Line Rd		37
	Increase the capacity of the culverts under Well Line Road to reduce roadway flooding. Clear debris and large pieces of concrete pipe from the downstream channel to facilitate stormwater flow.	\$58,461	
114	Stacey Rd (at the bridge)		31
	Clear and grade the existing channel area and construct an improved concrete outfall channel	\$45,289	
	to provide adequate stormwater conveyance and reduce yard and building flooding.		
115	Stacey Rd at Quintette Rd		31
	Increase the capacity of the culverts under Stacey Road and Quinette Road and construct a ditch that connects them to prevent roadway and home flooding.	\$127,811	
116	Quintette Rd (North of Welcome Circle)	¢50 474	31
	Increase the capacity of the culverts under West Quinette Road and replace the existing grate inlet to decrease roadway flooding. These improvements may have a negative impact on downstream properties.	\$59,474	
117	Muldoon-Cerney-Velma-Fresno Area Drainage		91
	Drainage System Improvements including Velma pond expansion, outfall, and drainage conveyance to Velma Pond; better outfall for Muldoon Area Ponds	\$2,200,000	
118	St Johns North of PCC	4.50.000	89
	Purchase property for pond site and connect to 48" pipe across PCA. Add conveyance from system to the North per Beverly Parkway Basin Study Zone F including upgrades to system from Oleander drive to Cummings Street. This will address flooding problems at Cummings Street and St. John's before tying into the PCA Campus.	\$450,000	
119	West Highlands		95
	Proposed new system located on Kirk Street and extend from West Avery Street to West Gonzalez Street and the surrounding area. This new system requires the acquisition and construction of a new retention/detention pond. (see Branch I in Warrington Master Plan)	\$2,700,000	
120	Breise Lane between Jeffry and Olive Road		63
404	Extend existing Johnson Ave drainage system to relieve roadway and yard flooding.	\$100,000	67
121	Ellyson Industrial Park Drianage Miscellaneous Infrastructure drainage improvements to address roadway flooding at Grow	\$1,000,000	67
	Road, Copter Road, and East pond expansion	. ,	
122	Bayou Grande Basin Study E1 - Gulf Beach Hwy Outfall Improvement	\$73,035	107
	Increase the culvert size along Gulf Beach Hwy culvert between Brigadier and Richmond. The downstream channel to Winthrop St will be regraded and shaped to provide positive flow to the Winthrop culvert. This improvement will not affect downstream properties.	ψ1 0,000	

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Rank	Project		Page
123	Bronson Airfield design 3 (entire)		99
	Construct a pond over the entire Bronson Airfield property.	\$27,631,968	
124	Edgewater Drive - Warrington Basin Study Branch F		109
	Extend and increase the capacity of the stormwater system on Edgewater and Chaseville Streets. Construct an outfall ditch and discharge pipe into Bayou Chico.	\$1,572,096	
125	Bayou Grande Basin Study CC1- Sidney Culvert		113
	Enlarge existing culvert to prevent road flooding along Sidney Rd.	\$10,000	
126	Bayou Grande Basin Study R1- Weller Dr. Culvert	455.000	115
	Replace and increase the existing culvert along Weller Dr. to prevent road overtopping. This improvement will not negatively impact downstream properties.	\$55,000	
127	Muldoon R. Improvements	#00C 000	83
	Improve the drainage system along Muldoon road.	\$386,830	
128	Tributary 16-A of Eight Mile Creek begins at Belgium Rd south of Holly Hill Rd and enters channel north of Pine Forest Rd		75
	Increase the capacity of the structures at Belgium Road and Lillie Lane to minimize roadway flooding.	<i>\$50,273</i>	
129	Beulah Road Ditch		39
130	Clean out existing culvert and construct a new ditch to convey stormwater to the culvert. Bridlewood Rd (at Mobile Hwy)	\$90,039	57
	Construct two stormwater ponds, remove the culvert under Bridlewood and construct a new culvert under Nine Mile Road to prevent yard and road flooding.	\$929,651	
131	West Cervantes at Westworth		95
	Correct road flooding in area with no drainage system	\$600,000	
132	Magaha Area/Nine Mile Road		57
	Improve channel and increase capacity of the upstream structure along Nine Mile Road to prevent roadway overtopping and yard flooding.	\$1,240,677	
133	11 Mile Creek Basin Study Zone 6		53
	increase culvert capacity under Amanda lane and 9 1/2 mile road (seems to be partial overlap with 94 priority 19)	\$258,586	
134	11 Mile Creek Basin Study Zone 8		53
	Increase culvert capacity to reduce area flooding.	\$99,466	
135	Godwin Lane - bayou Marcus/Millview Study Branch F		85
	Construct new stormwater system for the area around Godwin Lane including two stormwater ponds.	\$5,320,591	
136	Pensacola Heights- Branch F	# 4.050.077	85
	Modify the existing collection system serving Pensacola Heights and construct a new detention pond.	\$4,352,877	
137	South Bronson Airfield Ditch Block	04.40.700	111
	Construct ditch blocks in the ditch south of Bronson Airfield. (Treatment only)	\$142,730	
138	Citrus Street Area Drainage Drainage System Improvements on Citrus per Warrington Basin Study Branch G (Study modification required to consider existing County parcel for pond site and conveyance system).	\$1,300,000	95
139	Bayou Grande Basin Study P3- Fairfield Storm Sewer at Gulf Beach	¢106 742	115
140	Replace existing storm collection with a larger system to prevent road overtopping. Bayou Grande Basin Study BB9- Carrier Dr Channel Improvements	\$106,743	113
	Clear and regrade channel downstream of the culvert on Carrier Dr. to alleviate road flooding.	\$8,427	
141	Brookshill Drive		37
	Replace the existing culverts under Brookhills Drive with a bridge span to increase flow capacity under the road and decrease roadway, yard, and home flooding. Set a minimum finished floor elevation for any new homes built along the road in order to prevent structure flooding.	\$409,429	

Ranked Needs Assessment List	Page 13
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Rank 142	Project Piney Lane		Page 41
	Construct a ditch along the road and a culvert under Piney Lane.	\$101,294	
143	Frank Reeder Rd culvert and swales		49
	Construct drainage swale adjacent to roadway and culvert under Frank Reeder Road.	\$100,168	
144	Shelby Lane		57
	Construct a ditch along the road and a culvert under Shelby Lane.	\$95,666	
145	Bayou Grande Basin Study Y2- Kinard Drainage System		113
	Increase and extend existing roadside ditch system along Kinard Ave. and Robertson Rd. to control road and yard flooding.	\$179,778	
146	Perdido Rd West of Balboa Road		35
	Increase the capacity of the culverts under Perdido Road to decrease roadway and yard flooding. This will negatively effect downstream properties and should be performed in conjunction with other Balboa Road improvements.	\$43,814	
147	Daylilly Road		31
	Increase the capacity of the culverts under Daylily Road to decrease roadway overtopping. This improvement may have a negative effect on downstream homes, so the downstream ditch should be considered in construction plans.	\$49,488	
148	Stacey Rd (at the bend)		31
	Regrade the right-of-way and increase the capacity of the culverts under Stacey Road to prevent roadway and yard flooding.	\$93,335	
149	Schaag Rd at Stokes Pond		25
	Place riprap along the channel from Stokes Pond to the cross drain inlet to prevent channel erosion. Replace the upstream headwall to prevent headwall failure and roadway undermining.	\$98,040	
150	Crabtree Church Rd at Abbott Lane		21
	Replace the existing culverts under Crabtree Church Road with a bridge to reduce roadway flooding.	\$927,730	
151	Bet Raines Rd (East of Bridge)		23
	Increase the capacity of the culverts underneath Bet Raines Road and construct an earthen ditch to improve flows and reduce yard flooding.	\$75,991	
152	Bridge on Bet Raines Rd	4.7.004	23
	Improve flow conditions through the bridge area by removing trees and brush from the flow path and ensuring a 6 foot clearance below the bottom of the bridge.	\$17,001	
153	Chestnut Rd South		23
	Increase the capacity of the culverts under Chestnut Road to decrease roadway flooding and possible home flooding.	\$101,837	
154	Bronson Airfield design 2 (Eastern Side)		99
134	Construct a pond on the eastern side of the Bronson Airfield property.	\$9,767,981	33
155	Quintette Rd (at Welcome Rd)	7 -, ,	31
	Increase the capacity of the culverts under Quinette Road and improve the downstream channel in order to reduce roadway flooding.	\$51,489	
156	Schaag Rd Bridge at Jack's Branch Tributary P		25
	Replace the existing bridge with a new bridge that has sufficient hydraulic capacity to prevent roadway overtopping.	\$695,188	
157	Bayou Grande Basin Study P2- Gulf Beach Storm Sewer at Fairfield		115
	Replace existing storm collection with a larger system to prevent road overtopping.	<i>\$78,653</i>	
158	Chestnut Rd North		23
	Raise the elevation of Chestnut Road increase the flow capacity of the culverts to decrease roadway flooding.	\$271,465	
159	Via DeLuna Drainage at Pensacola Beach RV Resort	4007 170	123
	System should be cleaned of sediment and checked regularly. Increased system capacity should be considered.	\$287,470	

Page 14 Ranked Needs Assessment List

Rank	Project		Page
160	Corto, Largo, and Rio Vista Drives Drainage		125
	Repaving at Corto Drive and Rio Vista Drive. Regrading at Largo Drive from Avenida 17 to the sound. Stabilizing along Rio Vista Drive south of Largo Drive.	\$735,389	
161	Isaacs Rd		49
	Construct a ditch along Isaacs Road and a new culvert under Beulah Road.	\$114,800	
162	Muscogee Rd & Beulah Rd Reconstruct the ditches in the area of the intersection and construction of a culvert under Beulah Road.	\$59,651	39
163	Thompson Bayou - Scenic Hills Basin Study Tributary A		67
	Construct a new stormwater pond between University Parkway and Shoal Creek Drive.	\$1,736,479	
164	Thompson Bayou Main Channel		65
10-1	Construct new stormwater pond at Airway Drive near the end of the Thompson Bayou main channel and increase the capacity of the existing culvert at Airway Drive.	\$2,009,815	00
165	Eaton Rd - Warrington Basin Study Branch K Construct a new stormwater system along Eaton Road from Feldor to Adkinson Drive with a discharge to an existing county pond per Warrington Basin Study Branch K.	\$1,219,351	93
166	Coral Village Storm Drainage Replacement	¢200 000	113
4.5-	Reduce flooding by replacing failing storm pipe within drainage easement.	\$300,000	
167	Royal Pines - Bayou Marcus/Millview Study Branch B Construct new stormwater system for the Royal Pines subdivision to reduce flooding in the area.	\$2,908,721	91
168	Tributary 21-A of Eight Mile Creek (south of Site 6, through the pit at Bush Street and ente channel south of Detroit Blvd)	rs the main	61
	Increase the capacity of the pond south of Bush Street. Increase the capacity of the culvert at Bush Street to prevent roadway flooding. Expand the channel in this area to increase capacity and prevent out-of-bank flooding. Relocate and increase the capacity of the structure at Nine Mile Road to line up with the improved channel.	\$1,628,083	
169	Main channel crossing at Mobile Hwy		73
170	Raise the elevation of the Mobile Highway Bridge 2.5 feet to prevent over-topping. Bayou Grande Basin Study BB4- Windward Ct Outfall Improvements	\$2,539,817	113
	Clean and grade ditch outfall from Windward Court in Coral Creek.	\$13,483	
171	Bayou Grande Basin Study BB3- Coral Island Dr. Outfall Improvements		113
	Provide stormwater collection along Coral Island Dr. in order to alleviate flooding along the roadway.	\$36,517	
172	Ridgewood Park - bayou Marcus/Millview Study Branch B		91
	Construct new stormwater system for the Ridgewood Park subdivision to reduce flooding in the area.	\$2,524,333	
173	Riola Place - Bridge Creek/Heron Bayou Study Branch E		101
174	Lower pipe inverts and increase the capacity of the culvert under Riola Place to decrease out- Risen Drive and Bonanza Drive	\$189,379	51
	Upgrade the culvert under Bonanza Drive and obtain drainage easement over downstream ditch to reduce roadway flooding at the intersection. Improvement may have a negative effect on downstream properties.	\$101,125	
175	Pensacola Beach Blvd Stormwater Outfall Upgrades		123
	Installing stormwater treatment on the outfall in the vicinity of the marina within the existing stormwater easement	\$401,121	
176	River Annex Road bridge		33
	Reconstruct the bridge over River Annex Road to a higher elevation.	\$623,519	
177	Roosevelt - Warrington Basin Study Branch K		93
	Construct a new stormwater system along 61st, 59th, 60th, 63rd, and 65th streets with a new stormwater pond west of 61st street.	\$4,512,150	
178	SR 297-A/Meander Road		51
	Increase capacity of culverts to prevent overtopping of State Road 297-A	\$61,024	

	Ranked Needs Assessment List		Page 1
Rank	Project		Page
179	Bayou Grande Basin Study P6- Athens St. Ditch Improvements		115
	Improve and regrade existing ditch along Athens and Gulf Beach Hwy to decrease road flooding.	\$8,427	
180	Bayou Grande Basin Study Y1- Robertson Channel Improvements Increase and extend existing roadside ditch system along Robertson Rd to control road and yard flooding.	\$106,743	113
181	Deerwood Drive - Bayou Marcus/Millview Study Branch F		85
	Increase the capacity of the Deerwood Drive stormwater system and outfall pipe.	\$1,971,838	
182	Perdido Rd at Saverna Park		35
	Increase the capacity of the culverts near Perdido Road to prevent roadway overtopping.	\$166,774	
183	Cedar Tree Lane (Hwy 29 Side Drain)		31
	Lower and increase the capacity of the culverts under Cedar Tree Lane to prevent roadway flooding. Rebuild the downstream ditch in order to provide a positive grade away from the cross drain.	\$137,132	
184	Cedar Tree Lane (at Cedar Point Rd)		31
	Increase the capacity of the culverts under Cedar Tree Lane to prevent roadway flooding. The roadway in this area should also be paved to decrease sediment buildup in the culverts.	\$85,872	
185	Welcome Rd (at the bend) Increase the capacity of the culvert under Welcome Road to prevent roadway overtopping and	\$47,062	31
186	add end treatments and riprap to prevent erosion. Hernandez Street pond site 3		97
100	Construct a new pond on Hernandez St. to reduce flood staging in surrounding and downstream. This improvement will not negatively impact downstream properties/impacts.	\$1,195,738	5 1
187	New 36 Inch Pipe Outlet Along Hernandez Street		97
	Construct a new collection system and outfall connection to the existing system to decrease flood stages in the surrounding areas. This improvement could have impacts on all downstream properties.	\$2,232,399	
188	Serenity Circle (pond)		99
	Construction of stormwater pond adjacent to Serenity Circle.	\$113,944	
189	Beverly Parkway Basin Branch B- North Portion- Lookout Drive		87
	Construct a stormwater system along Lookout Drive West Michigan Avenue, and Rock Island Place with a discharge to the FDOT pit.	\$1,128,009	
190	Bayou Grande Basin Study L1- Cousineau Rd. Outfall		117
	Replace the outfall from Cousineau Rd. to Bayou Grade by an outfall ditch in order to prevent street flooding.	\$25,281	
191	Bayou Grande Basin Study BB10- Liberty Church Discharge Structure Provide stormwater pond at Liberty Church with a discharge structure to control the water level and time of detention.	\$14,045	113
192	Bayou Grande Basin Study CC2- Sidney Culvert		113
	Enlarge existing culvert to prevent road flooding along Sidney Rd.	\$16,854	
193	Bayou Grande B1- New Storm Drainage System		119
	Construct a new street collection system consisting of roadside swales and culverts along 1st and 2nd streets to reduce roadway flooding. Improvement is an independent project and will not affect downstream properties.	\$308,994	
194	Calle Juela Drainage at Via DeLuna		127
195	Regrade to a grate inlet with outfall through an exfiltration pipe Calle Traviesa Drainage at Via DeLuna	\$93,595	127
	Regrade to a grate inlet with outfall through an exfiltration pipe	\$93,595	
196	Siguenza Drive Drainage	400	123
	Construct a small retention area at the bend adding a new inlet at the location of the flooding	\$93,595	

47

\$68,655

197

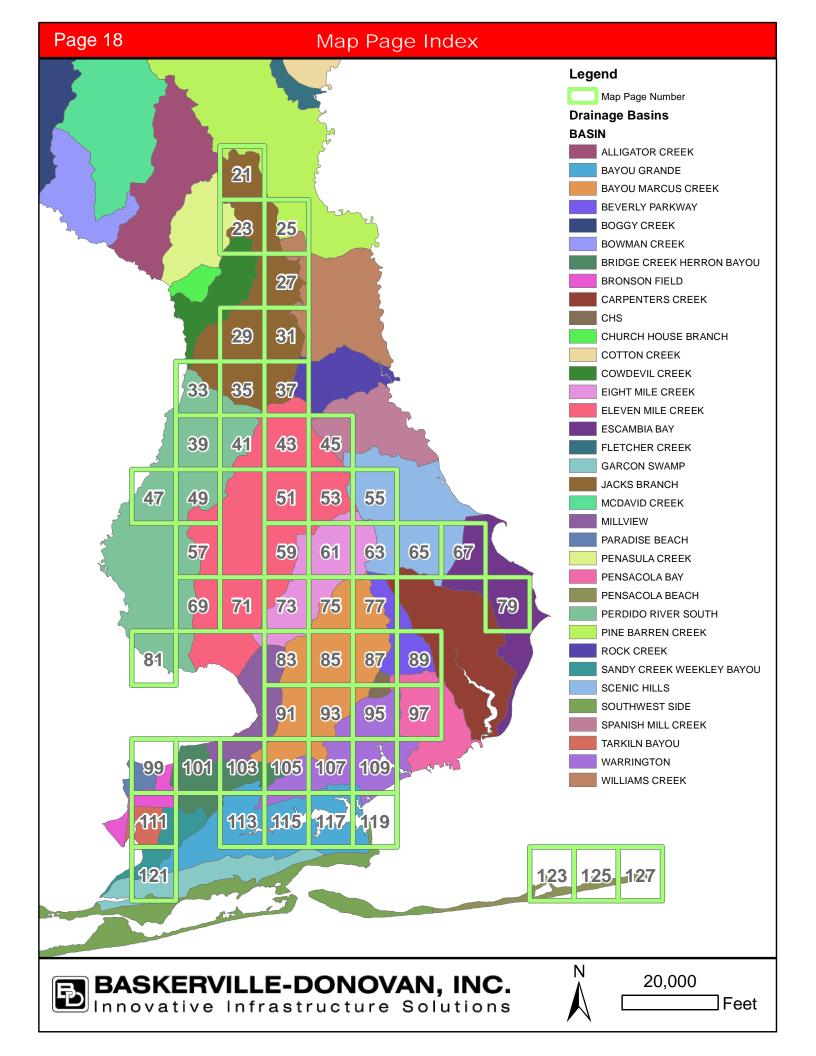
Frank Reeder Rd ditch

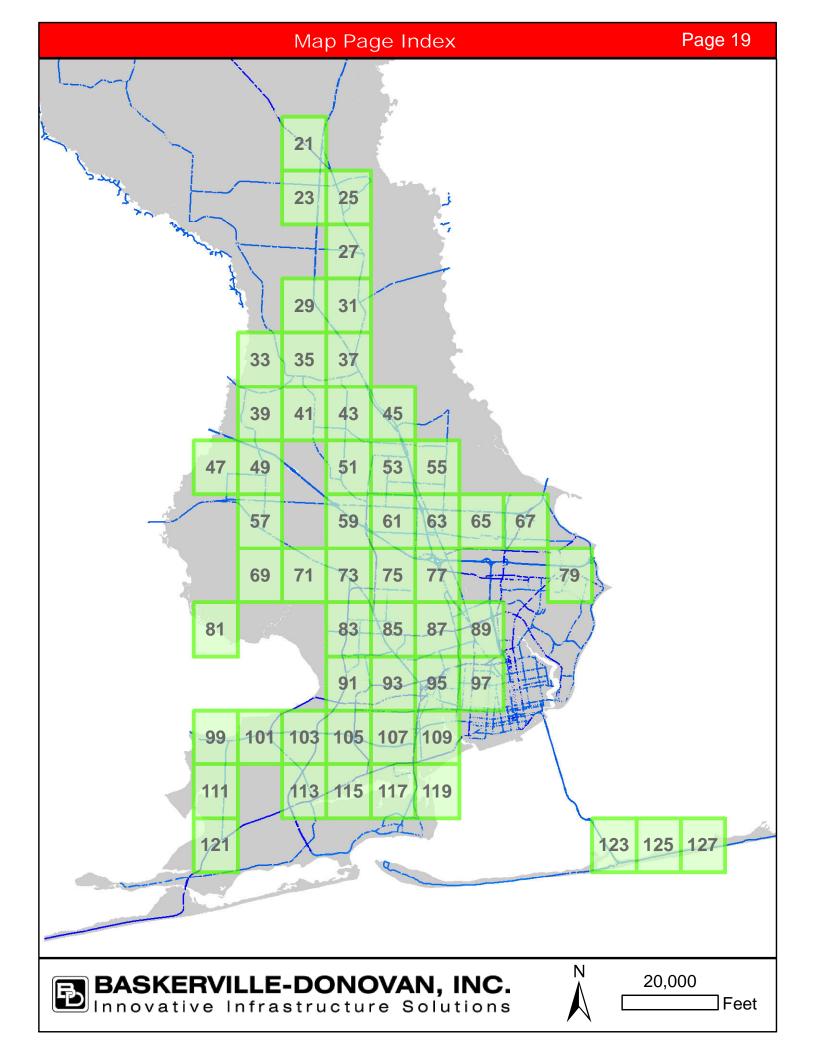
Construct a ditch along Frank Reeder Road.

Page 16 Ranked Needs Assessment List

Rank	Project		Page
198	Hurst Hammock		81
	Construct an additional culvert under Hurst Hammock and install flap valves on the downstream side of the culverts to prevent the propagation of seawater from tidal action.	\$61,902	
199	Bayou Grande Basin Study P5- Grundy Culvert		115
	Enlarge the existing culvert on Grundy in order to prevent road flooding. This improvement may impact other improvements.	\$25,843	
200	Sal Tillo - Bayou Marcus/Millview Study Branch C		91
	Improve the stormwater collection system serving the area around Sal Tillo Street.	\$188,068	
201	Perdido Bay Country Club Estates Unit 7 Drainage and resurfacing projects to address flooding and groundwater problems	\$170,000	121
202	Bayou Grande Basin Study E2-Brigadier St. Culvert Increase the culvert size on Brigadier St. to prevent road flooding. This Improvement may	\$33,708	107
	have a negative impact on downstream roadway flooding.		
203	Bayou Grande Basin Study P4- Bay Meadows Dr. Culvert	ΦEC 101	115
	Replace the existing culvert on Bay Meadows Dr. with larger pipes to prevent road flooding.	\$56,181	
204	Bayou Grande Basin Study BB8- Vonna Jo Discharge Structure	¢14.045	113
	Provide stormwater pond on Vonna Jo Circle with a discharge structure to control the water level and time of detention.	\$14,045	
205	Imperial Drive - Bayou Marcus/Millview Study Branch B		91
	Construct new stormwater system for the area around Imperial Drive to reduce flooding in the area.	\$526,033	
206	49th Av - Warrington Basin Study Branch K		93
	Construct a new stormwater system along 49 the Ave with a discharge to the existing county pond on Lillian Highway.	\$1,648,952	
207	Carrollwood Subdivision Resurfacing & Drainage Rehabilitation		65
	Replace older cross drain at Stillbrook Road and repair existing drainage system on Pickwood including grading/resurfacing on Candlewood Circle	\$1,200,000	
208	Crabtree Church Rd (East of Chestnut Rd)		21
	Increase the capacity of the culverts under Crabtree Church Road to decrease roadway flooding.	\$51,767	
209	Saint James Place-Warrington Basin Study Branch C		105
	Construct a new stormwater system for the St James Place/Dowdy Drive area.	\$902,785	
210	Bayou Grande Villas	#000 000	115
	Roadway/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach Highway; Fairfield Dr to Colbert)	\$200,000	
211	Aileron Ave - Bridge Creek/Heron Bayou Basin Branch B	* * * * * * * * * * * * * * * * * * *	103
	Install a new storm sewer system along Aileron Avenue and increase the capacity of the existing culvert under Dog Track Road to reduce roadway flooding.	\$189,379	
212	Tatnall Street - Bridge Creek/Heron Bayou Basin Branch D		103
040	Extend the existing ditch northward into the bayou to reduce flooding.	\$163,750	
213	Main channel crossing at a private driveway located between Asland Rd and Interstate 10	\$92,885	61
	Raise the road height by constructing a bridge at the private driveway crossing of the main channel to prevent road overtopping and reduce flooding.	ψ32,000	
214	Schaag Rd (North of Hwy 196)	*	27
	Raise the surface elevation of a portion of Schaag Road and increase the capacity of the culverts underneath to prevent roadway overtopping.	\$351,943	
215	Catholic High Zone C Drainage		97
	Re-evaluate previous basin study solution (a new discharge trunk line with storm sewer extensions, treatment swales, and underground vaults) to determine whether ponds or direct piping produces the greatest impact.	\$9,000,000	
216	Via DeLuna Side road Connection Drainage Improvements		125
	Drainage Improvements	\$334,268	

	Ranked Needs Assessment List		Page 17
Rank	Project		Page
217	Visitor Information Center Access Road Drainage		123
	Regrading and repaved roadway to add slope and positive outfall to drainage inlets	\$93,595	
218	Beulah Rd sag near bridge		39
	Regrade Beulah Road to prevent overtopping. Improvement may have a negative effect on downstream properties.	\$248,732	
219	Windham Pond Outfall		83
	Construct an outfall for the Windham Pond. This improvement could cause negative effects to other properties.	\$293,987	
220	Felton Pond Outfall		83
	Construct an outfall to connect the Felton Pond to the Windham Pond. This improvement could cause negative effects to other properties.	\$342,660	
221	Catholic High Basin Zone B - Intersection of "S" Street and Avery Street and consist of a sewer system running up "S" Street to Leonard Street	large storm	97
	Increase and expand existing storm collection system and provide stormwater treatment. Provide tie-ins to outfall proposed in "Begins at the intersection of Avery Street and run south to Gonzalez Street, west to "U" Street and south on "U" Street to its discharge point to Maggie's Ditch." This improvement can only be constructed after the completion of the proposed outfall trunk line.	\$3,850,727	
222	Pearson Rd- Bayou Marcus/Millview Basin Branch C		91
	Construct new stormwater system for the area around Pearson Road to reduce flooding in the area.	\$1,364,488	
223	Improve Open Ditch Outlet Terminating at Fairfield Drive		97
	Enlarge outlet orifice for open ditch flowing to Fairfield Drive. This will not negatively impact downstream properties/improvements.	\$20,990	
224	Ailanthus Drive and Bauer Drive (culverts)		99
	Upgrade culvert near intersection of Ailanthus Drive and Bauer Drive.	\$301,051	
225	Monroe Avenue		37
	Increase the capacity of the culverts under Monroe Avenue to decrease roadway flooding. This may have negative impacts on downstream properties.	\$90,647	
226	Bronson Airfield design 1 (northeast corner)		99
	Construct a pond in the northeast corner of the Bronson Airfield property.	\$1,017,098	
227	Bellview and East Fence/Saufley Road		83
	Provide conveyance system to Saufley Field C&D Pond from Bellview	\$1,500,000	
228	61st Ave - Bayou Marcus/Millview Basin Branch D		93
	Increase the capacity of the 61st Avenue stormwater system to reduce flooding in the area.	\$374,139	





Intersection of Hwy 29 and Hwy 97

\$558.137

Construct a dry pond and conveyance pipes at the corner of Highway 97 and Crabtree Church Road to contain and control downstream stormwater runoff. Increase the capacity of culverts running under Highway 29 to reduce roadway flooding.

54

Hwy 29 (North of Bet Raines Rd)

\$323,506

Increase the capacity of culverts under Highway 29 and modify the surrounding ditch area to reduce roadway flooding.

84

Hwy 97 (East of Hwy 29)

\$201,759

Increase the capacity of the culverts under Highway 97 to decrease likelihood of roadway flooding.

92

Hwy 29 (North of Hwy 97)

\$283,017

Increase the capacity of the culverts under Highway 29 near North Highway 95A to prevent flooding.

93

Hwy 97 at Elementary School

\$297,927

Increase the capacity of the two culverts under Highway 97 near the Molino School and connect them with an earthen ditch. This will prevent roadway flooding.

150

Crabtree Church Rd at Abbott Lane

\$927,730

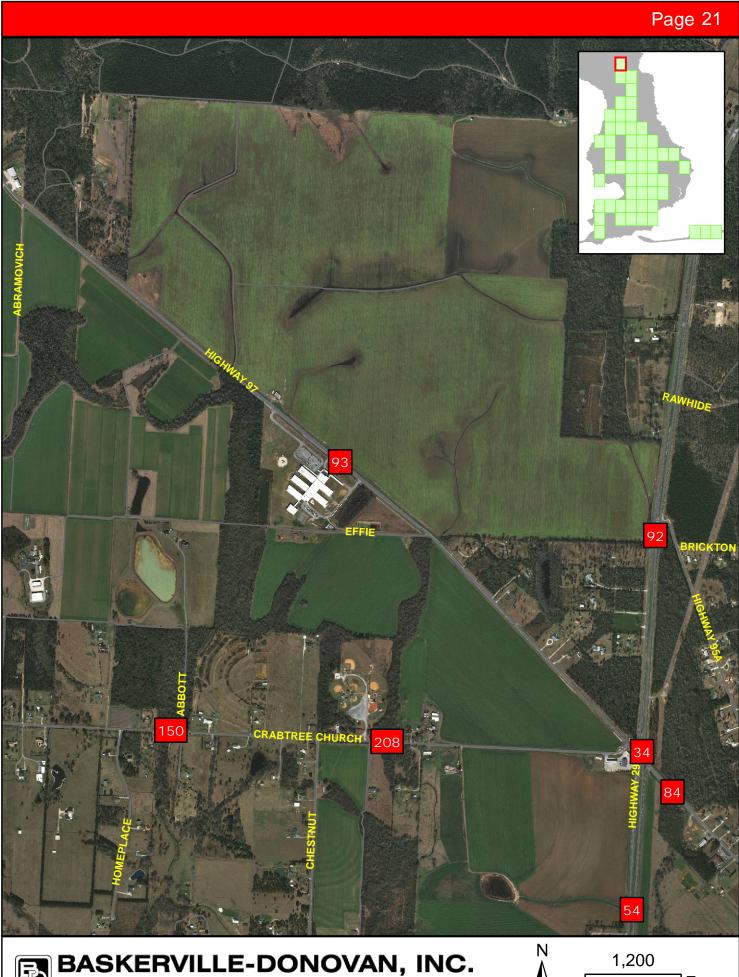
Replace the existing culverts under Crabtree Church Road with a bridge to reduce roadway flooding.

208

Crabtree Church Rd (East of Chestnut Rd)

\$51,767

Increase the capacity of the culverts under Crabtree Church Road to decrease roadway flooding.



Feet

158 Chestnut Rd North \$271,465

Raise the elevation of Chestnut Road increase the flow capacity of the culverts to decrease roadway flooding.

152 Bridge on Bet Raines Rd \$17,001

Improve flow conditions through the bridge area by removing trees and brush from the flow path and ensuring a 6 foot clearance below the bottom of the bridge.

151 Bet Raines Rd (East of Bridge) \$75,991

Increase the capacity of the culverts underneath Bet Raines Road and construct an earthen ditch to improve flows and reduce yard flooding.

153 Chestnut Rd South \$101,837

Increase the capacity of the culverts under Chestnut Road to decrease roadway flooding and possible home flooding.

91 Hwy 29 (South of Omega Drive) \$331,272

Increase the capacity of the culverts under Highway 29 south of Omega Drive to reduce roadway flooding.

71 Chestnut Rd to Hwy 29 \$1,027,014

Remove accumulated sediment from the upstream side of the Chestnut Road bridge in order to lower downstream velocities. Replace the culverts under Molino Road and Chestnut Road with bridges to prevent roadway overtopping and increase flow capacity.





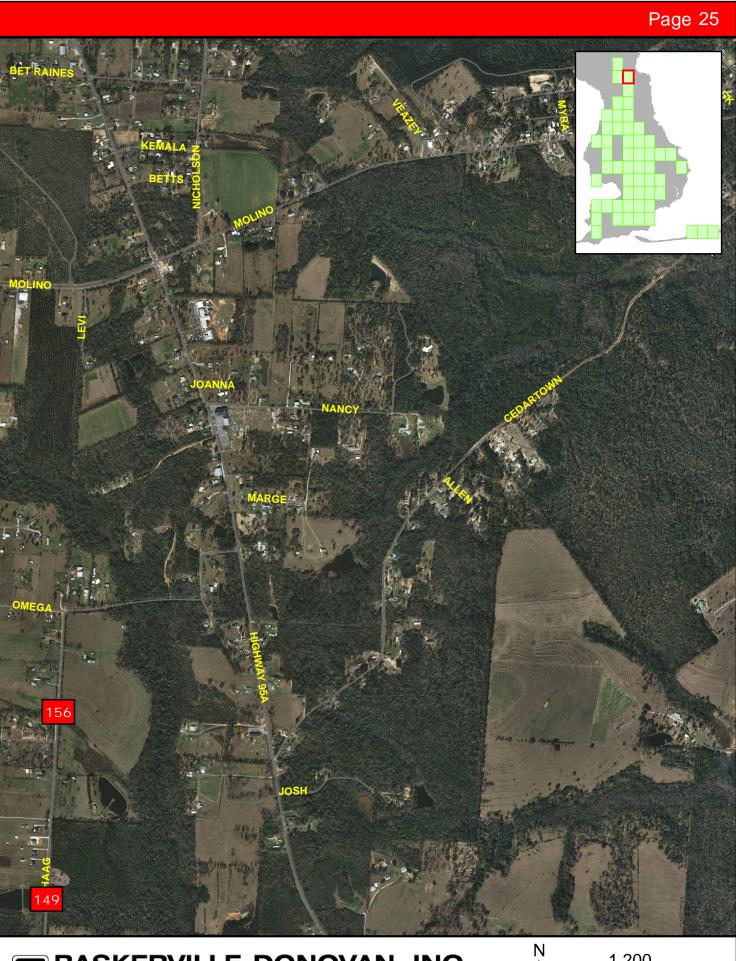
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Schaag Rd at Stokes Pond \$98,040

Place riprap along the channel from Stokes Pond to the cross drain inlet to prevent channel erosion. Replace the upstream headwall to prevent headwall failure and roadway undermining.

Schaag Rd Bridge at Jack's Branch Tributary P \$695,188

Replace the existing bridge with a new bridge that has sufficient hydraulic capacity to prevent roadway overtopping.





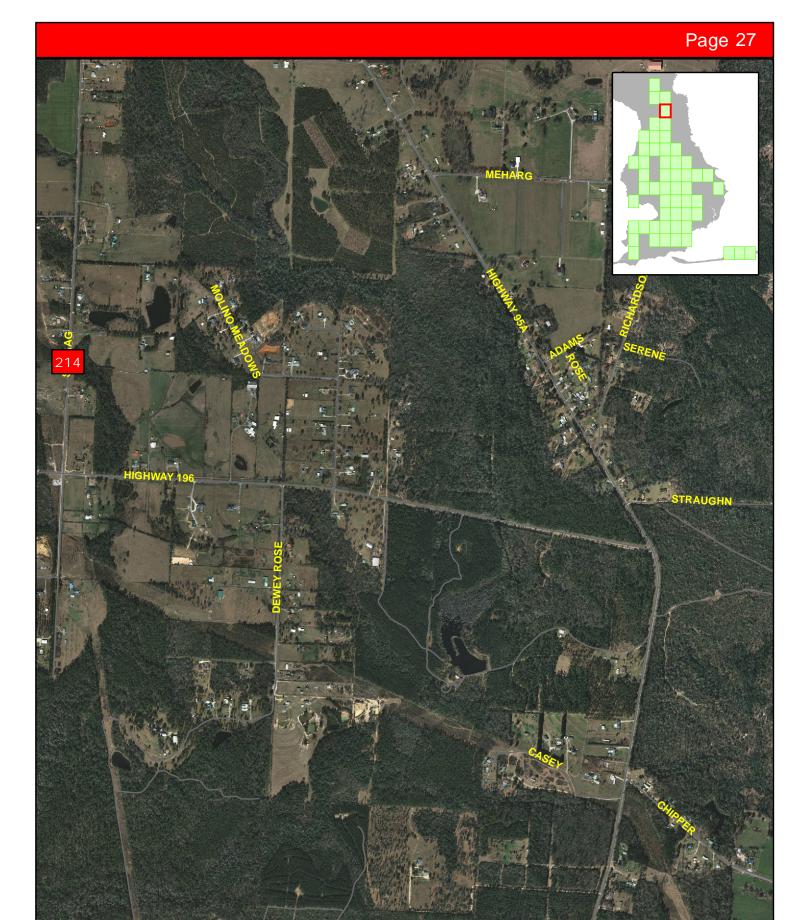
1,200

Feet

Page 26

214 Schaag Rd (North of Hwy 196) \$351,943

Raise the surface elevation of a portion of Schaag Road and increase the capacity of the culverts underneath to prevent roadway overtopping.





1,200

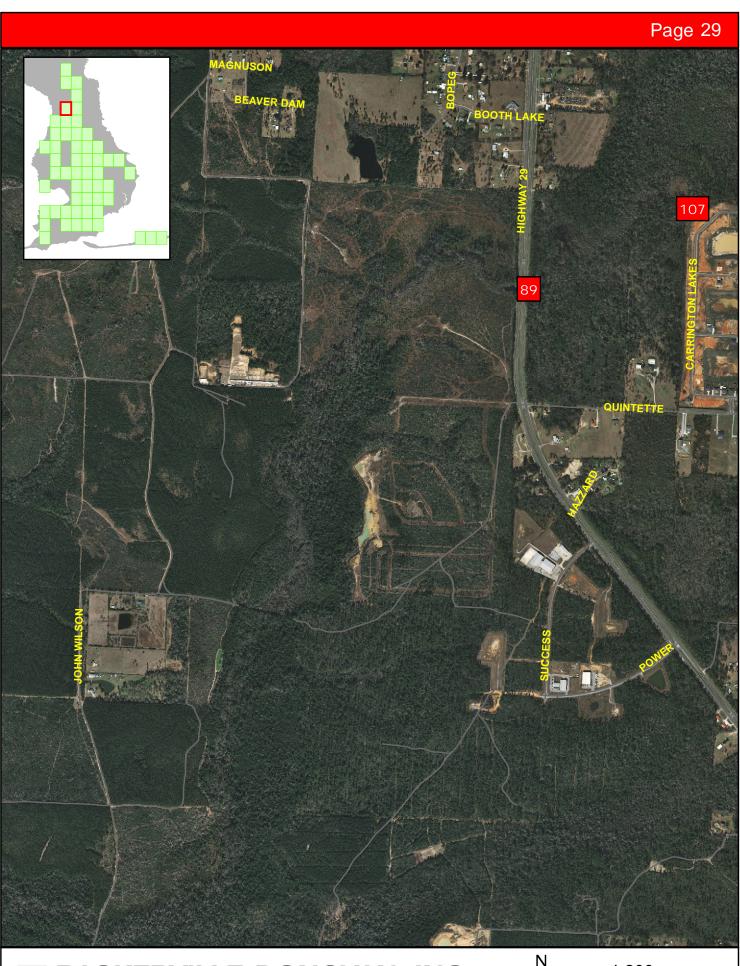
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89 Hwy 29 (North of Quintette Rd.) \$2,412,936

Replace the existing culverts under (divided) Highway 29 north of Quinette Road with two bridge structures to increase flow capacity and prevent roadway overtopping.

107 Carrington Lakes \$276,893

Repair outfall erosion at the private subdivision pond to prevent further erosion and possible wetland impacts.



N

1,200

Feet

116 Quintette Rd (North of Welcome Circle) \$59,474

Increase the capacity of the culverts under West Quinette Road and replace the existing grate inlet to decrease roadway flooding. These improvements may have a negative impact on downstream properties.

Quintette Rd (at Welcome Rd) \$51,489

Increase the capacity of the culverts under Quinette Road and improve the downstream channel in order to reduce roadway flooding.

115 Stacey Rd at Quintette Rd \$127,811

Increase the capacity of the culverts under Stacey Road and Quinette Road and construct a ditch that connects them to prevent roadway and home flooding.

Pin Oak Lane Drainage (Phase 1) and Flood Plain Restoration Project (Phase 2) \$725,277

Construct a new roadway connection to Quintette Road at North end. Also purchase property to restore flood plain at South end.

185 Welcome Rd (at the bend) \$47,062

Increase the capacity of the culvert under Welcome Road to prevent roadway overtopping and add end treatments and riprap to prevent erosion.

114 Stacey Rd (at the bridge) \$45,289

Clear and grade the existing channel area and construct an improved concrete outfall channel to provide adequate stormwater conveyance and reduce yard and building flooding.

90 Hwy 29 (Jack's Branch Q13) \$2,410,815

Replace the existing culverts under (divided) Highway 29 with two bridge structures to increase flow capacity and prevent roadway overtopping.

148 Stacey Rd (at the bend) \$93,335

Regrade the right-of-way and increase the capacity of the culverts under Stacey Road to prevent roadway and yard flooding.

147 Daylilly Road \$49,488

Increase the capacity of the culverts under Daylily Road to decrease roadway overtopping. This improvement may have a negative effect on downstream homes, so the downstream ditch should be considered in construction plans.

183 Cedar Tree Lane (Hwy 29 Side Drain) \$137,132

Lower and increase the capacity of the culverts under Cedar Tree Lane to prevent roadway flooding. Rebuild the downstream ditch in order to provide a positive grade away from the cross drain.

184 Cedar Tree Lane (at Cedar Point Rd) \$85,872

Increase the capacity of the culverts under Cedar Tree Lane to prevent roadway flooding. The roadway in this area should also be paved to decrease sediment buildup in the culverts.



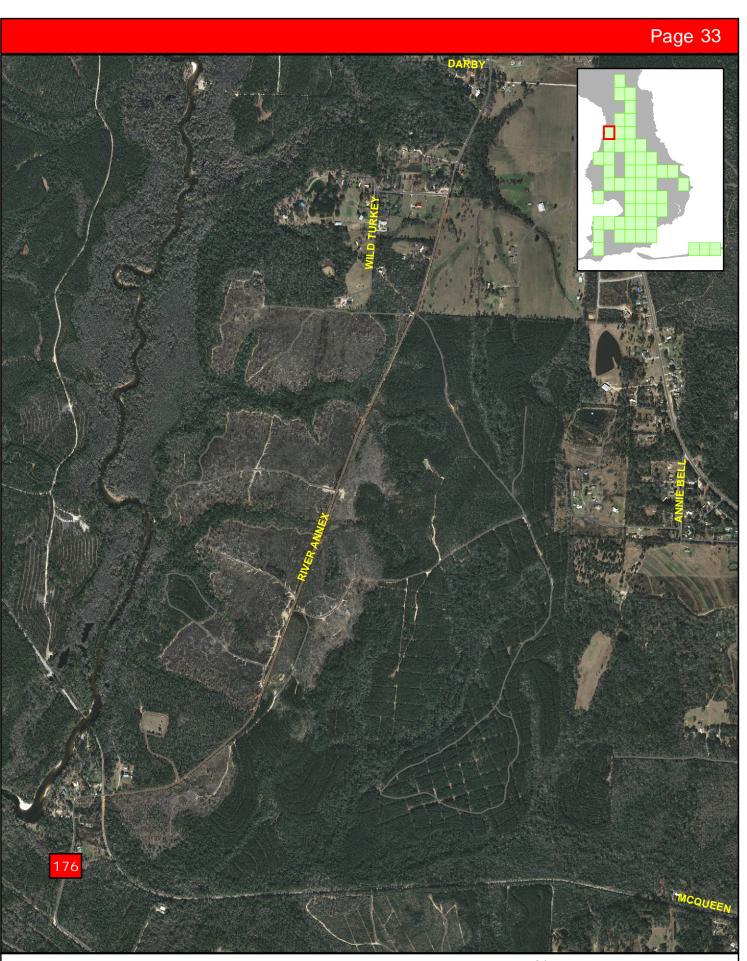


1,200

Feet

Page 32

176	River Annex Road bridge	\$623,519
Reconst	ruct the bridge over River Annex Road to a higher elevation.	



N

1,200

Feet

112 Rittenberry Drive \$70,597

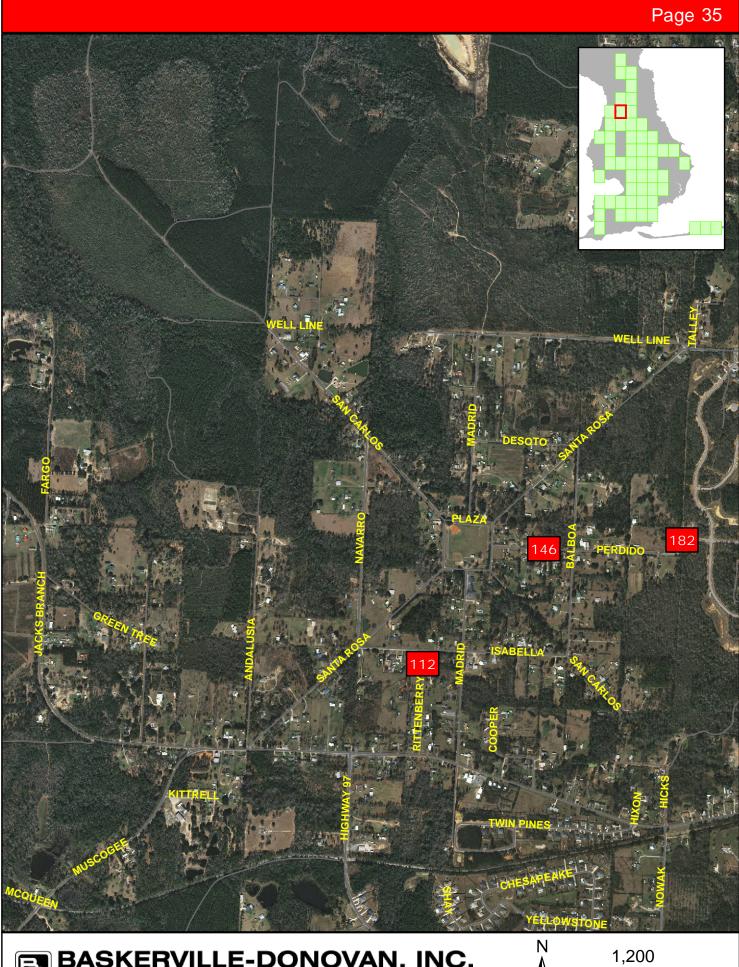
Increase the capacity of the culverts under Rittenberry Drive and Madrid Road and deepen the roadside ditches to prevent home flooding.

146 Perdido Rd West of Balboa Road \$43,814

Increase the capacity of the culverts under Perdido Road to decrease roadway and yard flooding. This will negatively effect downstream properties and should be performed in conjunction with other Balboa Road improvements.

182 Perdido Rd at Saverna Park \$166,774

Increase the capacity of the culverts near Perdido Road to prevent roadway overtopping.





113 Well Line Rd \$58,461

Increase the capacity of the culverts under Well Line Road to reduce roadway flooding. Clear debris and large pieces of concrete pipe from the downstream channel to facilitate stormwater flow.

141 Brookshill Drive \$409,429

Replace the existing culverts under Brookhills Drive with a bridge span to increase flow capacity under the road and decrease roadway, yard, and home flooding. Set a minimum finished floor elevation for any new homes built along the road in order to prevent structure flooding.

Well Line Rd Home Flooding \$67,472

Increase the capacity of the culvert under Well Line Road to reduce roadway and home flooding. Connect the Well Line Road culvert to the culvert running under Forrest Street to minimize water flowing across the property (this will require permission or easements from two property owners).

Monroe Avenue \$90,647

Increase the capacity of the culverts under Monroe Avenue to decrease roadway flooding. This may have negative impacts on downstream properties.

Carver Park Area Drainage Improvements West of 297A \$2,250,000

Four-phase roadway and drainage improvement project for the area south of Muscogee Road, north of the Road Camp, east of Booker, and west of Ransom, requiring property pond acquisition and drainage conveyance improvements.

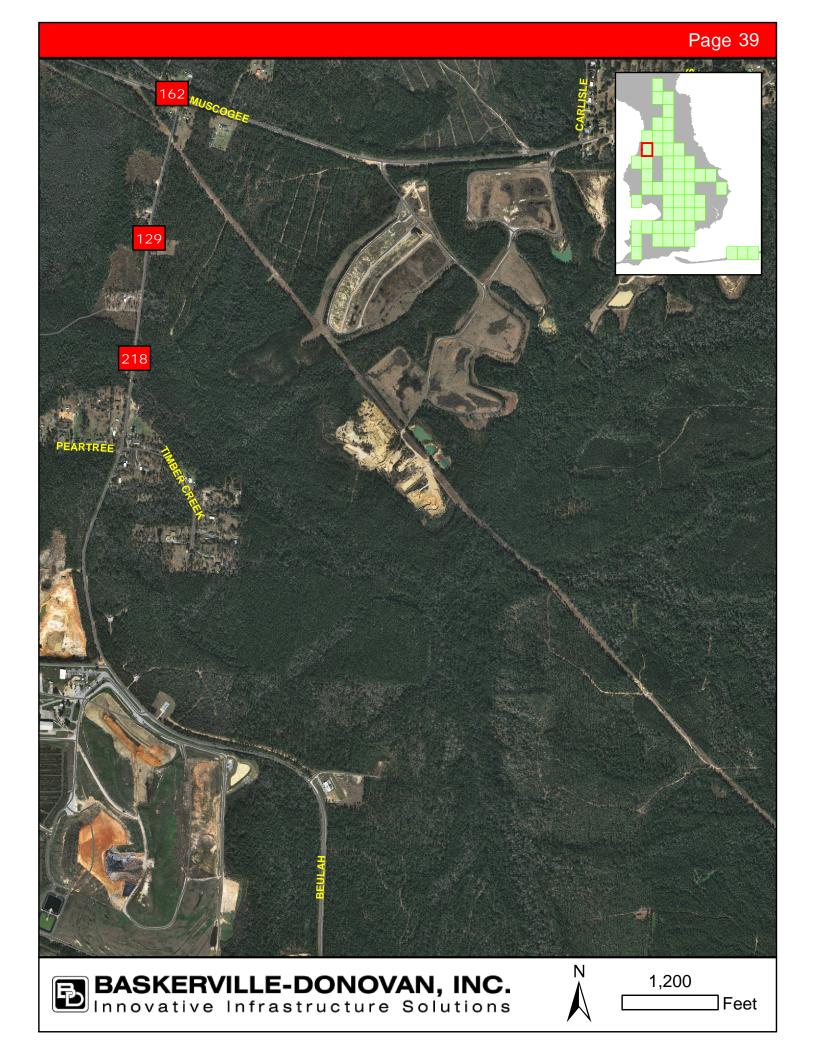




162	Muscogee Rd & Beulah Rd	\$59,651
Reconst	ruct the ditches in the area of the intersection and construction of a culvert under Beulah Ro	ad.

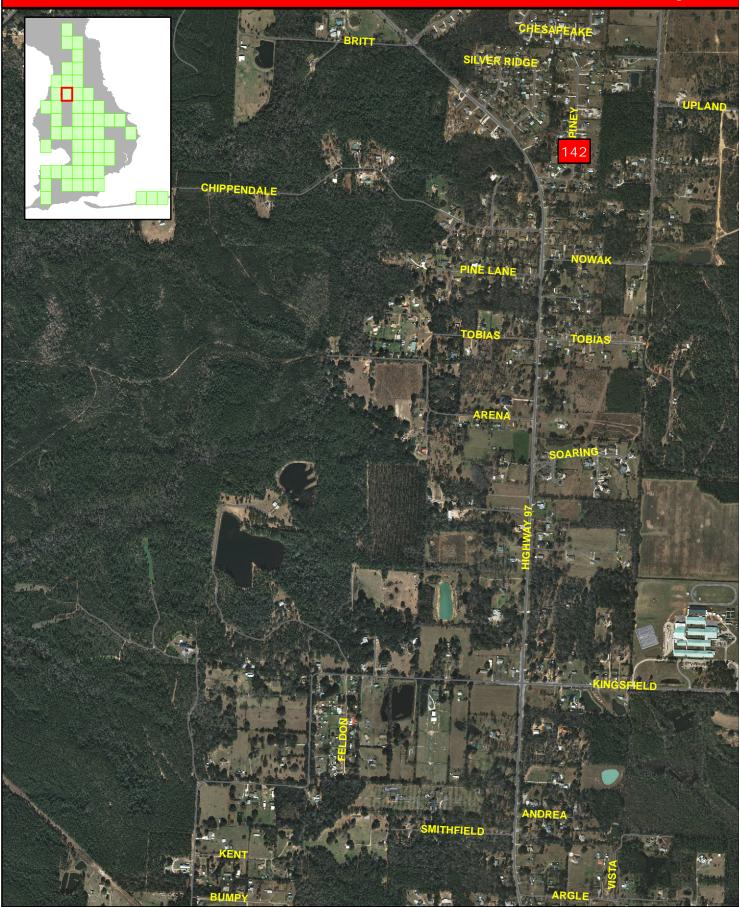
129	Beulah Road Ditch	\$90,039
Clean ou	at existing culvert and construct a new ditch to convey stormwater to the culvert.	

218	Beulah Rd sag near bridge	\$248,732
Regrade	Regrade Beulah Road to prevent overtopping. Improvement may have a negative effect on downstream	
propertie	properties.	



142 Piney Lane \$101,294

Construct a ditch along the road and a culvert under Piney Lane.





40	Carver Park/West Booker Road	\$1,327,654
Reduce area flooding by increasing the capacity of area conveyance structures as well as constructing a new		
nond		

58	International Paper Area	\$367,980
Increase	capacity of drainage system in order to reduce roadway overtopping and upstream flood	stages.



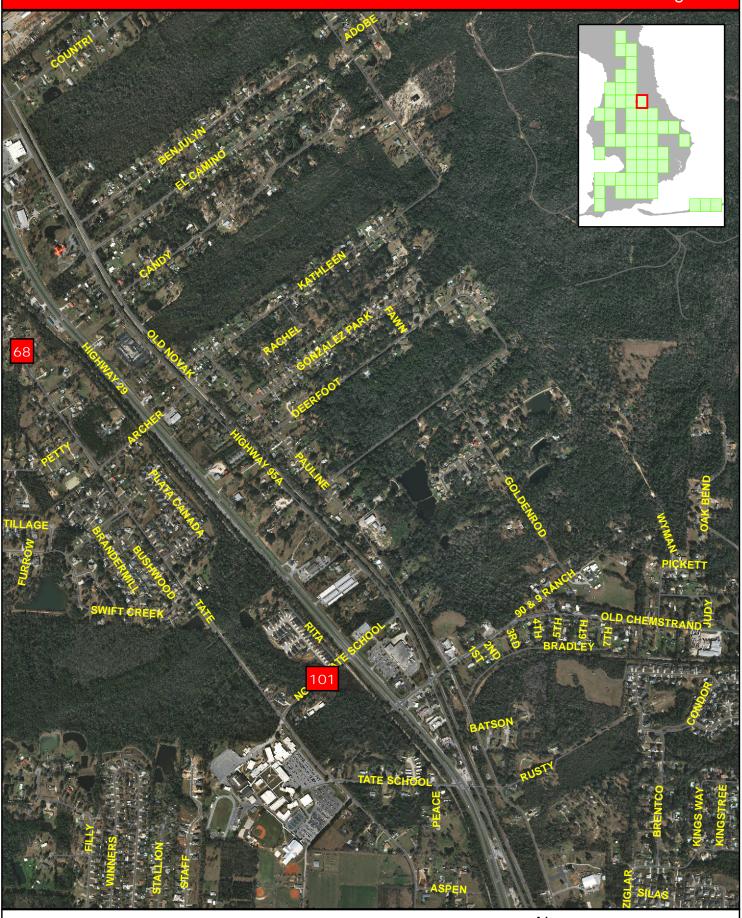


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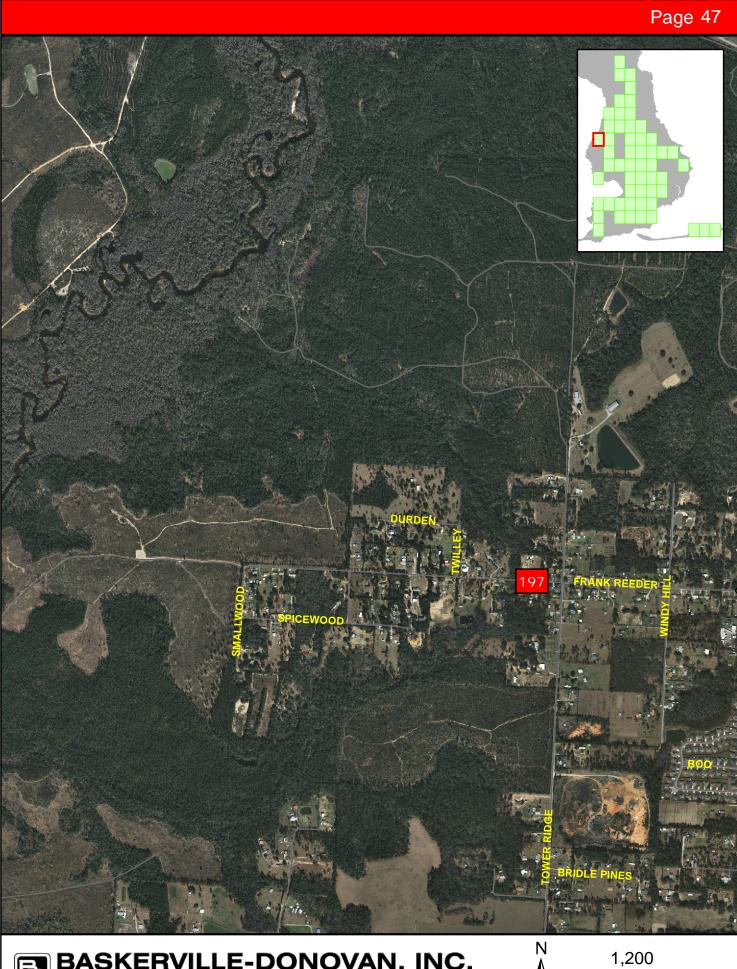
Feet

68	Tate Road North of Petty St	\$13,269
Increase	capacity of roadway culvert crossings to prevent overtopping of Tate Road	

101	Hwy 29/Tate School Road	\$187,331
Increase	capacity of culverts to prevent overtopping of Tate Road	



197	Frank Reeder Rd ditch	\$68,655
Construc	et a ditch along Frank Reeder Road.	



N

Feet

38	Raise berm east of landfill (Perdido River South Basin)	\$623,519
Raise th	e berm east of the landfill to prevent an existing pond from overtopping.	

161 Isaacs Rd \$114,800
Construct a ditch along Isaacs Road and a new culvert under Beulah Road.

Frank Reeder Rd & Rebel Rd \$49,521

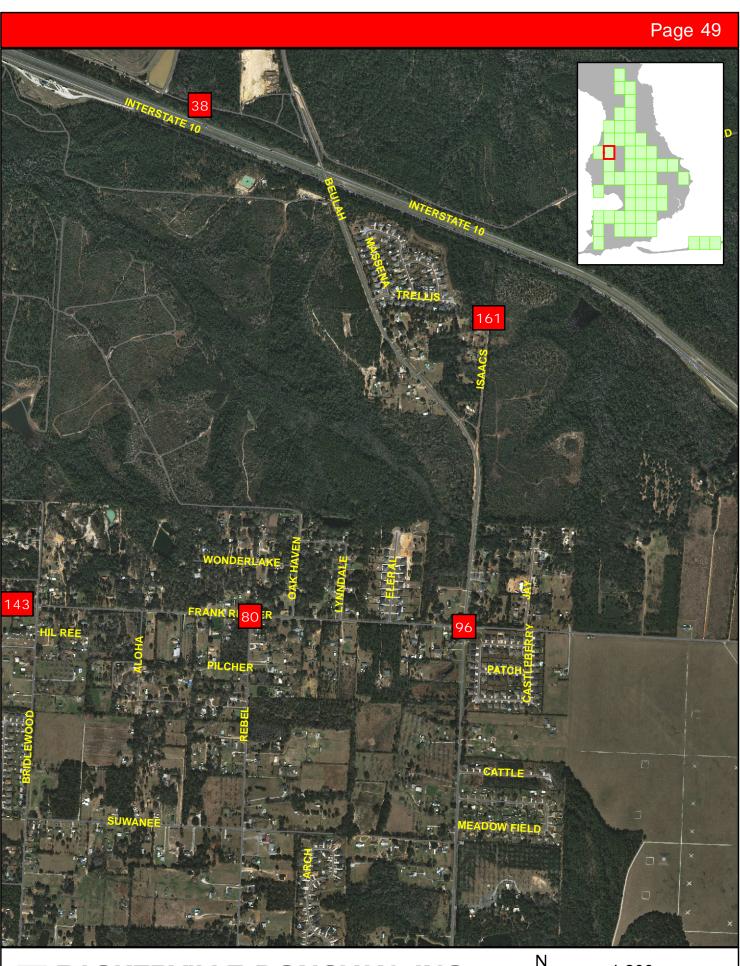
Reconstruct the swale in the area near Rebel Road and construct a culvert under Frank Reeder Road.

Riola Place - Bridge Creek/Heron Bayou Study Branch E \$189,379

Lower pipe inverts and increase the capacity of the culvert under Riola Place to decrease out-of-bank channel flooding.

Frank Reeder Rd & Beulah Rd \$64,153

Reconstruction of the ditch and installation of culverts where necessary to provide a defined drainage path.





1,200

5

178 SR 297-A/Meander Road \$61,024

Increase capacity of culverts to prevent overtopping of State Road 297-A

Ten Mile Creek from Roberts Rd North to Kingsfield Rd \$4,494,457

Reconstruct the creek to provide additional storage volume and increase the culvert capacity under Roberts Road, Dolphin Street, Tate Road, and Kingsfield Road to prevent flooding to structures. Improvements may have a negative effect on downstream properties.

West Roberts Drainage Improvements and Regional Pond (Regional Pond in 11-Mile Creek Basin) \$1,500,000

Regional pond and conveyance system on West Roberts Road utilizing on FDOT pit (Part of 11 Mile Creek Basin Plan to reduce flood stage in Bristol Creek/Bristol Park/Ashbury Hills)

70 Amanda Rd \$6,896

Increase capacity of culvert at Creekwood Drive to prevent roadway overtopping

Bristol Creek Propery Acquisition \$6,189,380

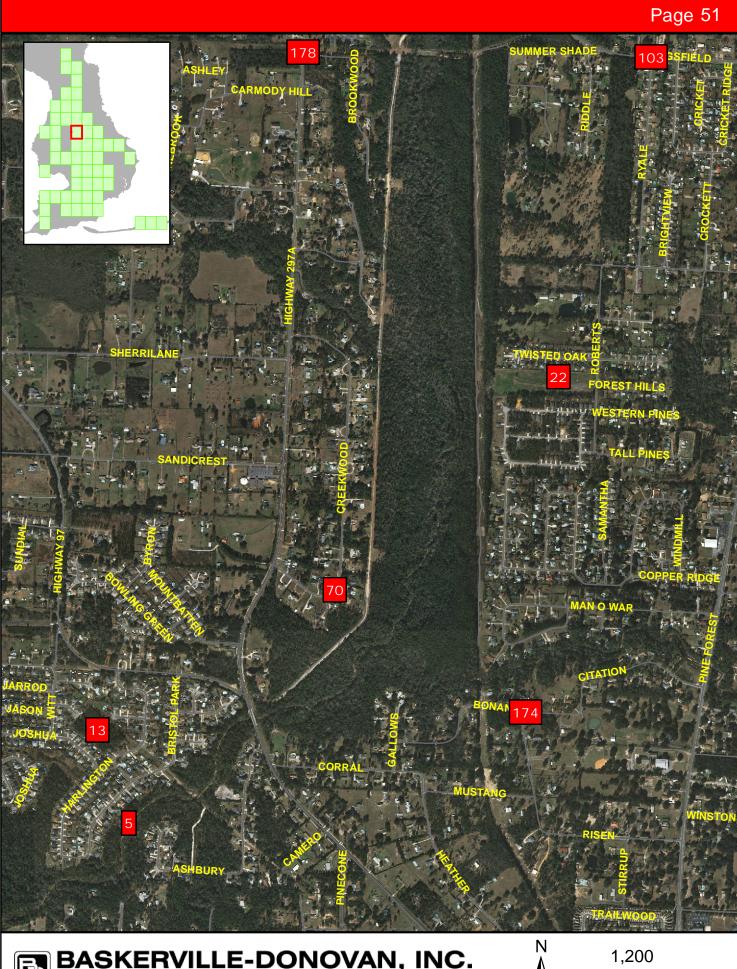
A large scale project, with a Property Acquisition Plan for repeatedly flooded property and easement acquisition. Project will be partially funded by HMGP grant if approved. Related to project "Flood Plain Management, Wetland Restoration, and Regional Pond Construction in 11-Mile Creek Basin."

174 Risen Drive and Bonanza Drive \$101,125

Upgrade the culvert under Bonanza Drive and obtain drainage easement over downstream ditch to reduce roadway flooding at the intersection. Improvement may have a negative effect on downstream properties.

Flood Plain Management, Wetland Restoration, and Regional Pond Construction in \$46,538,265

A large scale project to provide channel, stream, and flood plain restoration improvements, including at minimum of 9 regional stormwater management faculties (ponds). Project completion will require multiple grants to provide a complete realization of the 11-Mile Creek Basin Study Recommendations. The total estimated project costs is over at least a 10-year period.



69	Filley Rd	\$4,283
Increase	capacity of culvert crossing to prevent overtopping of Filley Rd	

134 11 Mile Creek Basin Study Zone 8 \$99,466
Increase culvert capacity to reduce area flooding.

Ten Mile Creek from Stefani Drive to Roberts Rd. \$10,674,335

Reconstruct Ten Mile Creek from Stefani Drive to Roberts Road to provide additional storage capacity to reduce extensive flooding in the area. Improvement may have a negative effect on downstream properties.

Ten Mile Creek from Pine Forest to Stefani Dr. \$8,988,914

Reconstruct Ten Mile Creek from Pine Forest to Stefani Drive to provide additional storage capacity to reduce extensive flooding in the area. Improvement may have a negative effect on downstream properties

26 11 Mile Creek Basin Study Zone 5 \$3,619,643

increase capacity of pipe under green hills rd. and construct a pond near urban drive to alleviate area flooding

Ten Mile Road at Stefani Dr. \$393,265

Increase the collection system size along Stefani Drive and Ten Mile Road and increase the capacity of the culverts under Midway Drive to reduce extensive flooding in the area. Improvement may have a negative effect on downstream properties.

Haley Lane and Eagle Street \$584,279

Reconstruct the Brookhollow collection system and construct a new collection system along 10 Mile Road to reduce roadway flooding. Improvements may have a negative effect on downstream properties.

11 Mile Creek Basin Study Zone 6 \$258,586

increase culvert capacity under Amanda lane and 9 1/2 mile road (seems to be partial overlap with 94 priority 19)





72	Ashland Park Joint ECUA funded sewer and driange	\$100,000
Improve	Box Culverts at Rodney, Joel and Childers Streets.	

6 Willowbrook Lake Dam \$500,000
Restore dam and overflow structure at Willowbrook dam East of Chemstrand Road to provide Water Quality

108 Ashton Brosnaham Park \$1,568,145

Construct a new stormwater pond at the end of Bet mark Lane with a ditch connecting runoff from the recreational center to the pond.

Shadow Ridge Drive - Meadowview Lane \$30,000

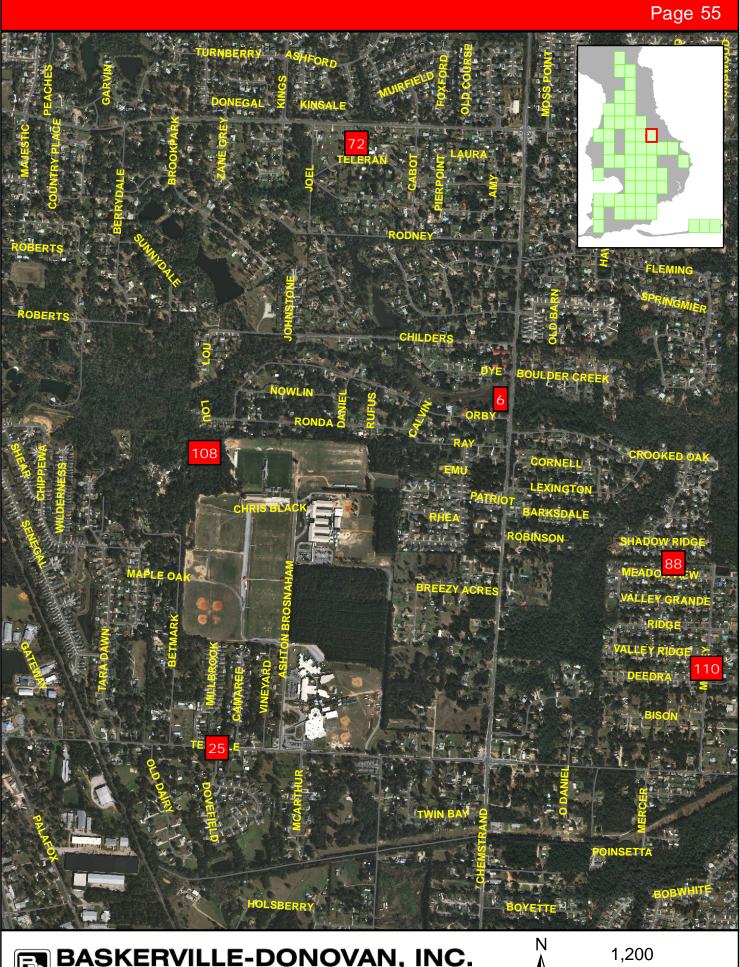
Drainage Improvements proposed within unopened County right-of-way in coordination with adjacent property to address property damage and erosion for the accumulation of development.

110 Northcreek and Valley Ridge Area Drainage Joint Sanitary Sewer Project \$250,000

Drainage and sanitary sewer improvements in Northcreek Subdivision and in the adjacent Deer Run and Valley Ridge subdivisions, as well as on Bison Road and Motley Court

Ten Mile Road Drainage and Roadway Improvements \$5,000,000

Address capacity and drainage problems from Chemstrand to Palafox to address flooding in the area of Holsberry Lane. May involve property acquisition.



130 Bridlewood Rd (at Mobile Hwy) \$929,651

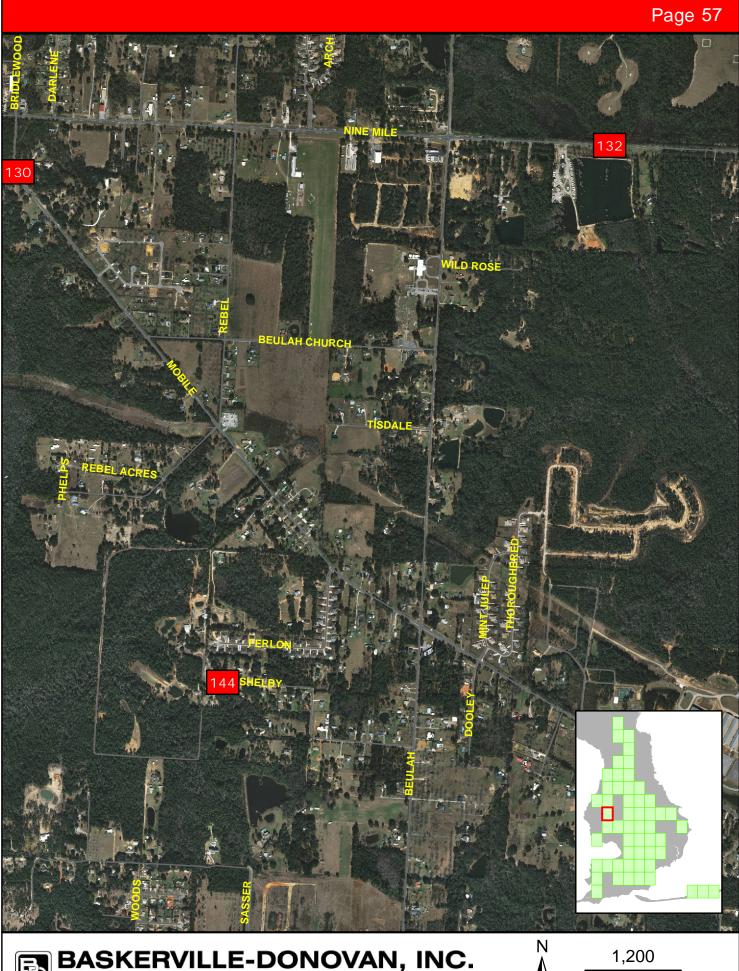
Construct two stormwater ponds, remove the culvert under Bridlewood and construct a new culvert under Nine Mile Road to prevent yard and road flooding.

132 Magaha Area/Nine Mile Road \$1,240,677

Improve channel and increase capacity of the upstream structure along Nine Mile Road to prevent roadway overtopping and yard flooding.

Show y Earlo	144	Shelby Lane	\$95,666
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Construct a ditch along the road and a culvert under Shelby Lane.





Feet

System improvements between Interstate 10 and Hwy 297A \$48,315,410

Reconstruct Eleven Mile Creek in this area to incorporate more volume for flood control within the stream in lieu of constructing detention ponds to prevent flooding of homes between I-10 and Hwy 297A. Report also suggests requiring attenuation of the 100 year event upstream of this area.

73 Yupon/Pebble Creek/Deerfield \$663,784

Reduce area flooding by enlarging existing ponds and increasing area culvert capacities.

104 Pine Forest/Klondike Road \$2,116,233

Construct two new retention/detention ponds and increase capacity of driveway culverts along Klondike Rd to reduce peak flows downstream, and reduce scour.





Ponderosa Drive Area Drainage \$2,243,000 Expand existing pond to accommodate contributing basin

Kingfisher, Bush Street, and Interstate Circle Drainage \$2,500,000

Eight Mile Creek Priority 5 Drainage to construct a regional pond to address flooding for Kingfisher, Blue Jay Way, Bush Street, and Interstate Circle

Tributary 21-A of Eight Mile Creek (south of Site 6, through the pit at Bush Street and enters the main channel south of Detroit Blvd) \$1,628,083

Increase the capacity of the pond south of Bush Street. Increase the capacity of the culvert at Bush Street to prevent roadway flooding. Expand the channel in this area to increase capacity and prevent out-of-bank flooding. Relocate and increase the capacity of the structure at Nine Mile Road to line up with the improved channel.

57 Ranch Lands - Sagebrush Trail \$500,000

Repetitive loss flooding along Sagebrush Trail (Ranch Lands Subdivision) requires purchase of a pond site and improved drainage conveyance to address FDOT channel capacity. Refer to 8 Mile Creek basin Study Priority 3 for detailed information.

Main channel crossing at a private driveway located between Asland Rd and \$92,885

Raise the road height by constructing a bridge at the private driveway crossing of the main channel to prevent road overtopping and reduce flooding.





Tensley Draiange - Caro-Mayflower Pond Area

\$1,300,000

Expansion of the Caro-Mayflower pond, to address drainage issues south of Caro Street, north of Johnson Ave between Hwy 29 and Palafox Street, including repetitive flooding loss on Orange Avenue.

Chandler Road Drainage \$600,000

Alleviate lot flooding by installing a conveyance system in the area connected to the main trunk line currently being installed by FDOT. This line drains to the Holsberry pond, part of the Hwy 29 lane widening project

Nims Lane Drainage Project \$400,000

Nims Lane receives stormwater from a basin of approximately 29 acres. This basin extends just east of Holsberry Road and just north of Holsberry Lane. This area is prone to flooding due a lack of a positive outfall or stormwater conveyance system. Discharge from this conveyance system is expected to be routed to the Holsberry Pond

Johnson Ave Drainage (East of Briese Ln) \$400,000

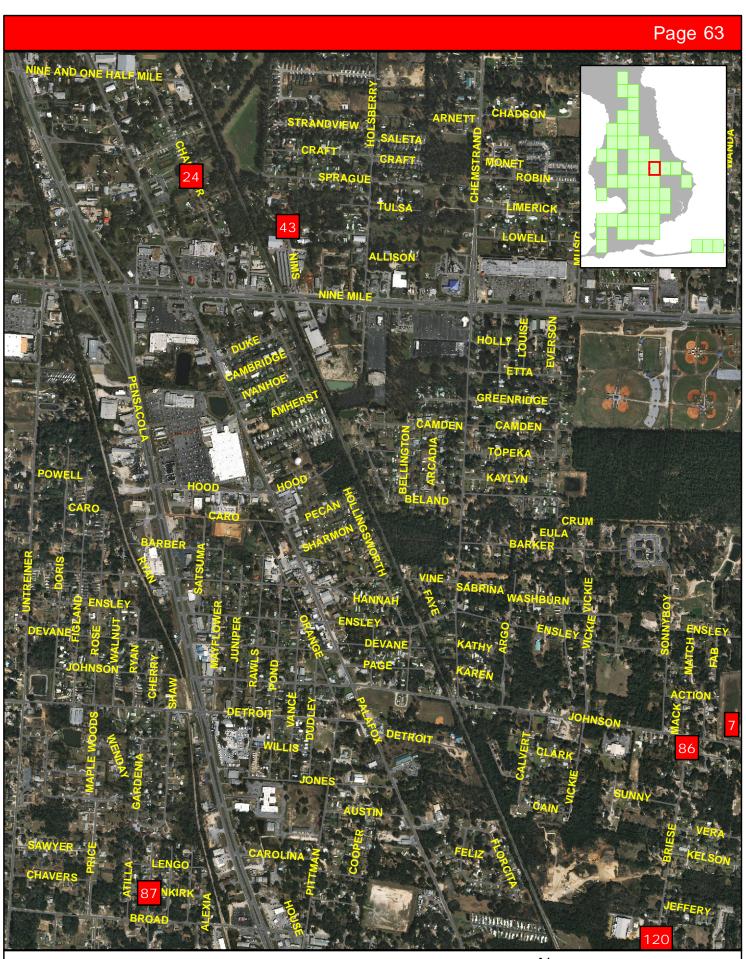
Remove/Replace faulty storm pipe from Pine Ridge Lane to Johnson Ave, Address pipe flow Crystal Wells pond, Address two 24" pipe feeding one 24" pipe down to outfall in Gulf Power Easement.

Olive Manor & Lincoln Park Drainage \$1,200,000

Drainage System Improvements with a creek restoration/preservation

120 Breise Lane between Jeffry and Olive Road \$100,000

Extend existing Johnson Ave drainage system to relieve roadway and yard flooding.





Frinchez Heights (Sabra, Erwin, Whitmire, Ernistene Area) \$400,000

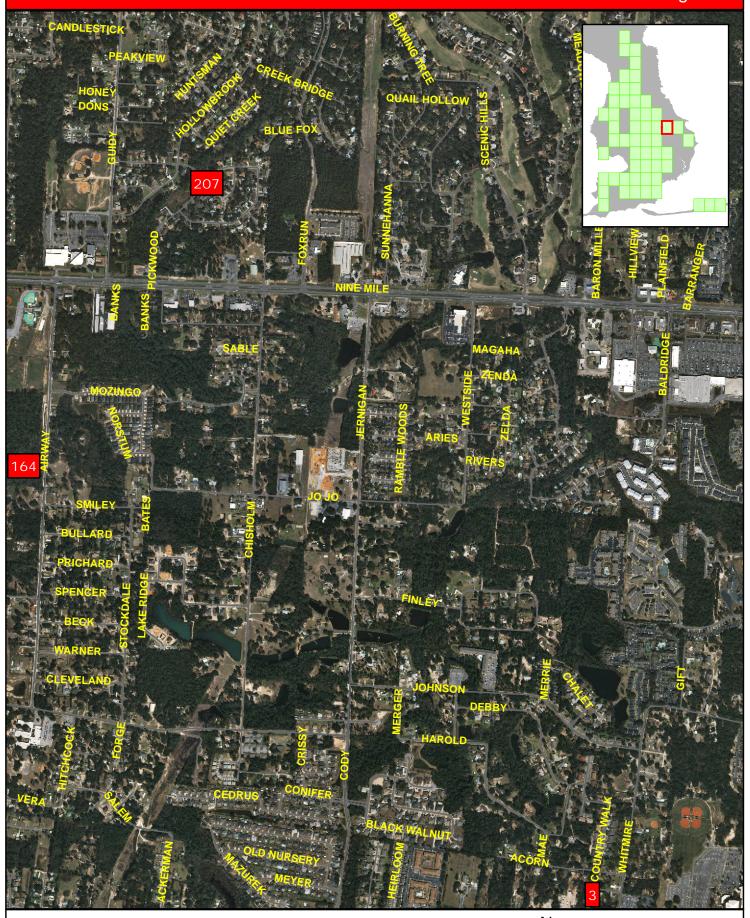
Proposed drainage capacity improvements in the Frinchez Heights area including Sabra Dr, Erwin Dr, Whitmire Dr, Ernistene Rd (North of Olive Rd) which will likely require a ditch conversion into a pond site

164 Thompson Bayou Main Channel \$2,009,815

Construct new stormwater pond at Airway Drive near the end of the Thompson Bayou main channel and increase the capacity of the existing culvert at Airway Drive.

Carrollwood Subdivision Resurfacing & Drainage Rehabilitation \$1,200,000

Replace older cross drain at Stillbrook Road and repair existing drainage system on Pickwood including grading/resurfacing on Candlewood Circle



Westview Lane & Lewis St Area Drainage \$200,000

Drainage improvements to address stormwater and groundwater from Lewis Street and Moose Lodge 557 impacting lots along Westview Lane

Ellyson Industrial Park Drianage \$1,000,000

Miscellaneous Infrastructure drainage improvements to address roadway flooding at Grow Road, Copter Road, and East pond expansion

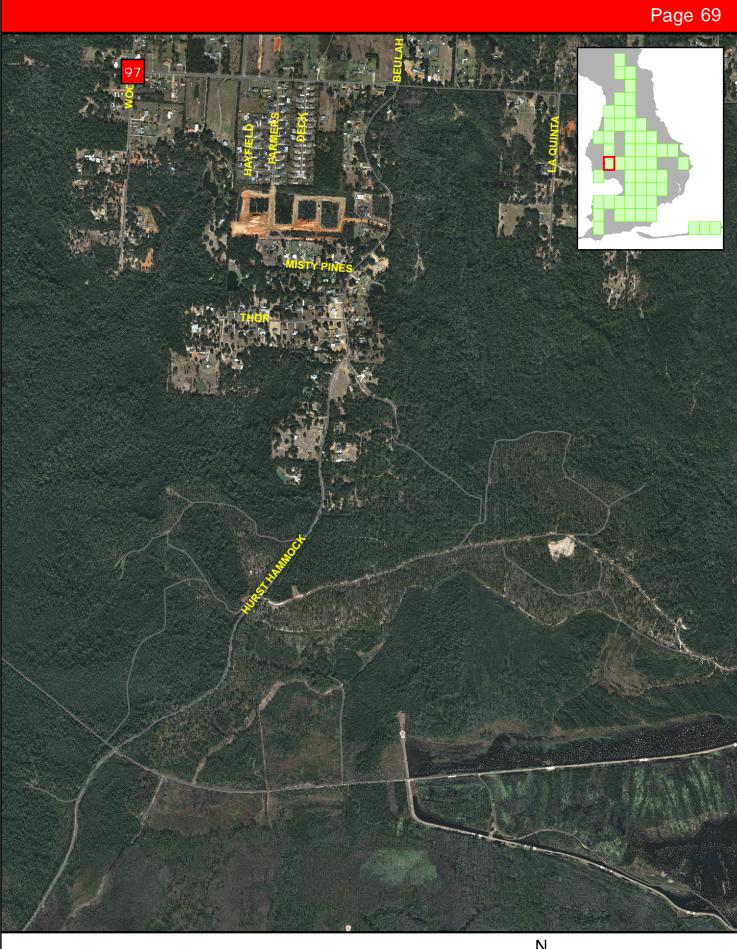
163 Thompson Bayou - Scenic Hills Basin Study Tributary A \$1,736,479

Construct a new stormwater pond between University Parkway and Shoal Creek Drive.





97	Helms Rd & Woods Lane	\$69,780	
Construct a new culvert under Woods Lane and reconstruct the ditch feeding to the existing culvert.			





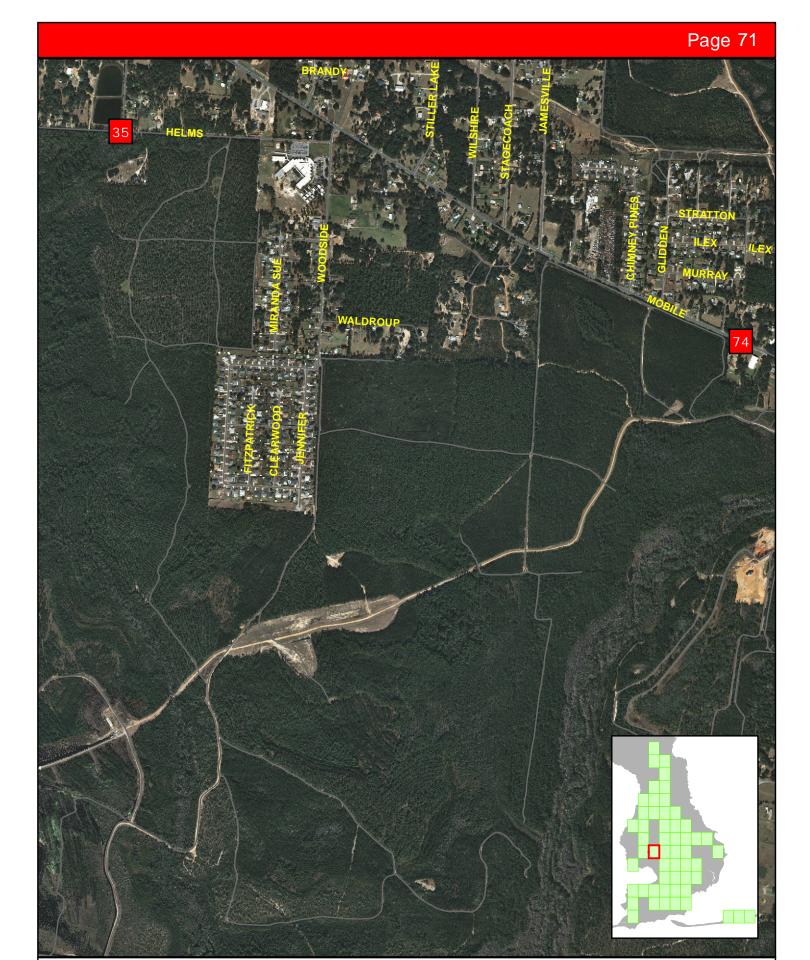
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35 Helms/Beulah School Road \$207,509

Increase capacity of drainage structures crossing Helms Road to prevent roadway overtopping and decrease upstream flood stages.

74 Stagecoach/Wilshire/Mobile Highway \$70,698

Increase capacity of drainage structure at Mobile Highway and improve downstream channel to prevent roadway overtopping and residential flooding.



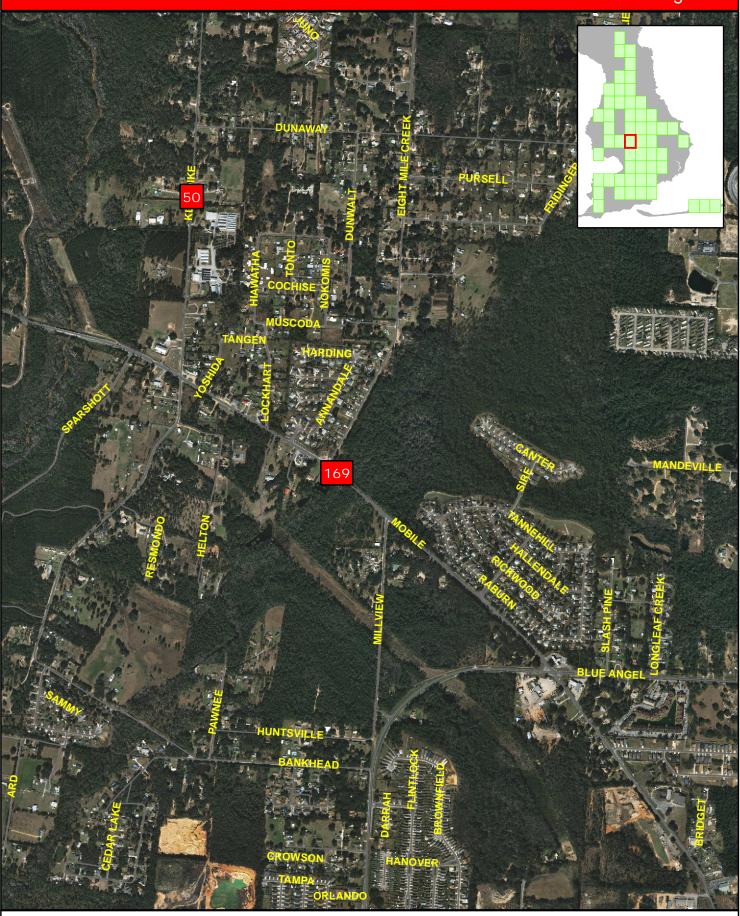


1,200

Feet

50	Klondike Road North of Mobile Highway	\$22,571
Increase	capacity of structure under Klondike Road to prevent roadway overtopping.	

169	Main channel crossing at Mobile Hwy	\$2,539,817
Raise th	e elevation of the Mobile Highway Bridge 2.5 feet to prevent over-topping.	





111 Tributary 10-A of Eight Mile Creek Basin Study \$58,307

Increase the capacity of the culvert under Pine Forest Road at Lake Francis to decrease roadway flooding and accommodate the improved secondary sewer system.

Tributary 16-A of Eight Mile Creek begins at Belgium Rd south of Holly Hill Rd and enters the main channel north of Pine Forest Rd \$50,273

Increase the capacity of the structures at Belgium Road and Lillie Lane to minimize roadway flooding.



Dorothy & Lydia Avenue Area Drainage \$400,000

Improve existing drainage system causing lot flooding. The surrounding area drains to private Rolling Hills borrow pit, causing sediment problems at Crescent Lake

Palafox Street @ Oakfield/Kenmore/Pacific/Majors/Pinestead Drainage \$4,900,000

Drainage Project currently under design to address Beverly Parkway Basin Study Improvements Branches N, O, P, & Q





Ferry Pass Drainage Zone 5 \$950,000

Drainage System Improvements on Boyd Ave and adjoining Beagles St, Geeker St, De Loach St, and Raines St; dependent upon Olive Rd drainage system upgrades



198 Hurst Hammock \$61,902

Construct an additional culvert under Hurst Hammock and install flap valves on the downstream side of the culverts to prevent the propagation of seawater from tidal action.



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Feet

4 Muldoon Road and Saufley Field Rd Area

Drainage improvements are needed to address existing drainage capacity from Blue Angel to Muldoon Road. FDOT is currently (2015) reviewing partial drainage with sidewalk projects.

Bellview Avenue Branch E Drainage Chestnut-Hogan Pit expansion \$1,500,000

\$3.000.000

Bellview between Rosewood Estates and Hogan Road, includes expansion of the Chestnut-Hogan Pit

Bellview and East Fence/Saufley Road \$1,500,000

Provide conveyance system to Saufley Field C&D Pond from Bellview

95 Midas- Muldoon Area including West side of Green Acres \$250,000

Miscellaneous drainage improvements in this area to address flooding, including a small pond and conveyance improvements

Felton Pond Outfall \$342,660

Construct an outfall to connect the Felton Pond to the Windham Pond. This improvement could cause negative effects to other properties.

100 Lanette Drive \$1,000,000

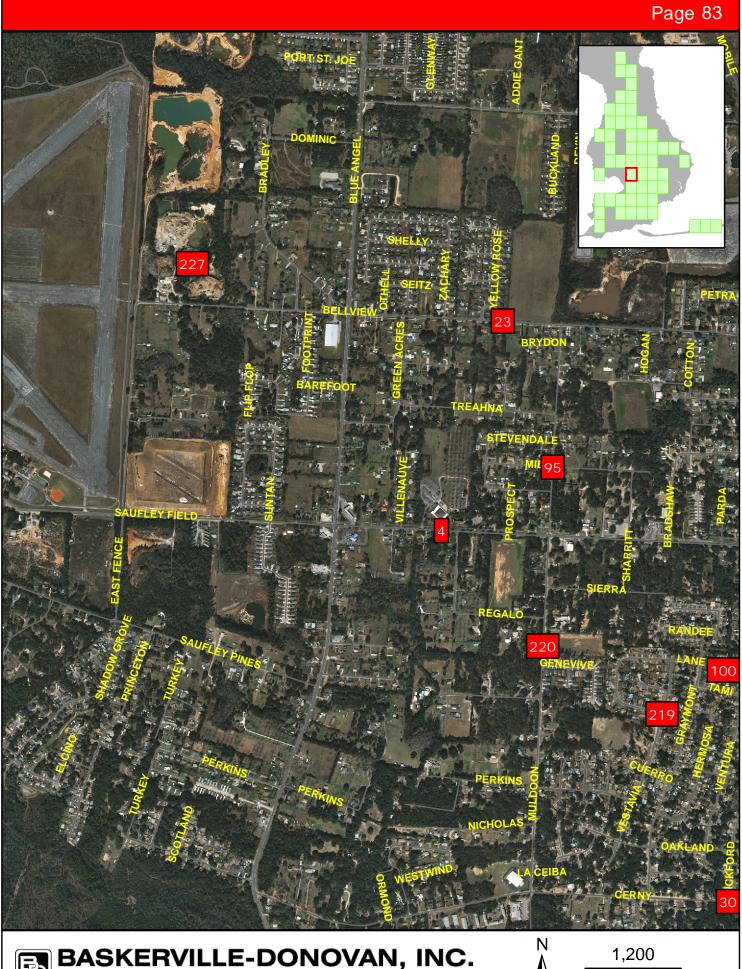
Construct new stormwater system for the area around Lanett Drive to reduce flooding in the area.

Windham Pond Outfall \$293,987

Construct an outfall for the Windham Pond. This improvement could cause negative effects to other properties.

30 Avondale Estates - Bayou Marcus Branch E \$3,300,000

Roadway/drainage improvements for Cerny Road area and area North of Cerny to provide possible pond outfall solutions for Saufley Field -Muldoon Area Ponds. Concept plans requires further study for alternate pond outfall options considering Velma Pond.



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135	Godwin Lane - bayou Marcus/Millview Study Branch F	\$5,320,591
Construc	at new stormwater system for the area around Godwin Lane including two stormwater ponds.	

Pensacola Heights- Branch F \$4,352,877

Modify the existing collection system serving Pensacola Heights and construct a new detention pond.

Deerwood Drive - Bayou Marcus/Millview Study Branch F \$1,971,838

Increase the capacity of the Deerwood Drive stormwater system and outfall pipe.

South Gulf Manor Private Pond Rehab \$200,000

Upgrade to county standards a private pond that has failed to accommodate flow from South Gulf Manor Phase 1 on numerous occasions. This has resulted in flooding of around 15 homes.





1 Crescent Lake \$4,000,000

Construct drainage system and new ponds on east side of Crescent Lake through the Blue Springs Drive drainage system up to Glass Street and Sun valley Drive

46 Beverly Parkway Basin Branch C- Twelve Oaks Area \$2,522,301

Construct a new collection system for the Twelve Oaks Area with a discharge to the FDOT system. Connection to the FDOT system will limit design to the 3 year event.

79 Bevery Parkway Basin Branch I- Moss Lane tie in at Van Pelt Lane \$237,810

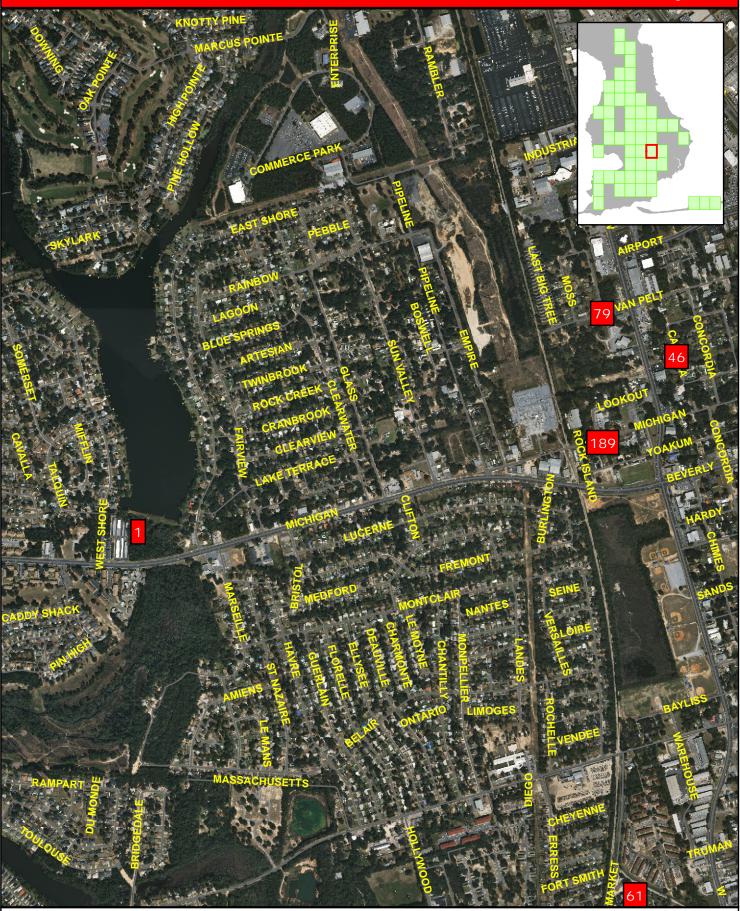
Construct new stormwater system along Moss Lane.

189 Beverly Parkway Basin Branch B- North Portion- Lookout Drive \$1,128,009

Construct a stormwater system along Lookout Drive West Michigan Avenue, and Rock Island Place with a discharge to the FDOT pit.

61 Bevery Parkway Basin Branch B- South Portion- Michael Drive \$623,567

Construct a stormwater pond on Michael Drive.





118 St Johns North of PCC \$450,000

Purchase property for pond site and connect to 48" pipe across PCA. Add conveyance from system to the North per Beverly Parkway Basin Study Zone F including upgrades to system from Oleander drive to Cummings Street. This will address flooding problems at Cummings Street and St. John's before tying into the PCA Campus.

47 Beverly Parkway Basin Zone D-Brentwood \$3,596,439

Expand the stormwater systems on Cary Memorial Drive and Armenia Drive to Carolyn Way, Jacquelyn Way, Virginia Way, Palm Court, Concordia Street, and Chimes Way and tie into the existing system on Hardy Place. Connection to the FDOT system will limit design to the 3 year event.

76 Bevery Parkway Basin Branch E- west side of Hwy 29 on Mason Lane \$1,077,800

Construct a new collection system along Hwy 29 and Mason Lane along with a new pond for the system to connect to.

Bevery Parkway Basin Branch G- Andrew Ave and Coons Ave \$1,319,873

Extend the stormwater collection system along Andrew Avenue and Coons Avenue.

Delano Area North Kelly Avenue Basin \$400,000

Drainage System Conveyance Improvements for area between Pace Blvd, Massachusetts Av, W" St., and Truman to improve conveyance to Kelly Avenue pond, as well as provide for an improved outfall system. Project requires coordination with CRA improvements on Massachusetts Avenue for sidewalks and drainage improvements

Bevery Parkway Basin Zone H- Loretta Street, between Kelly Ave and North "P" \$6,499,810

Construct new ponds and expand the stormwater collection system in the area around Loretta Street.

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Feet

Muldoon-Saufley Field-Velma (Pond Expansion) \$3,450,000

Property purchase and drainage improvement design to provide positive outfall for two County ponds, expand the Velma St Pond, and provide outfall to Bayou Marcus Creek. Refer to Bayou Marcus Basin Study -Velma Dr Pond Outfall Branch C to be modified by property acquisition and Velma pond expansion.

117 Muldoon-Cerney-Velma-Fresno Area Drainage \$2,200,000

Drainage System Improvements including Velma pond expansion, outfall, and drainage conveyance to Velma Pond; better outfall for Muldoon Area Ponds

200	Sal Tillo - Bayou Marcus/Millview Study Branch C	\$188,068
Improve	the stormwater collection system serving the area around Sal Tillo Street.	

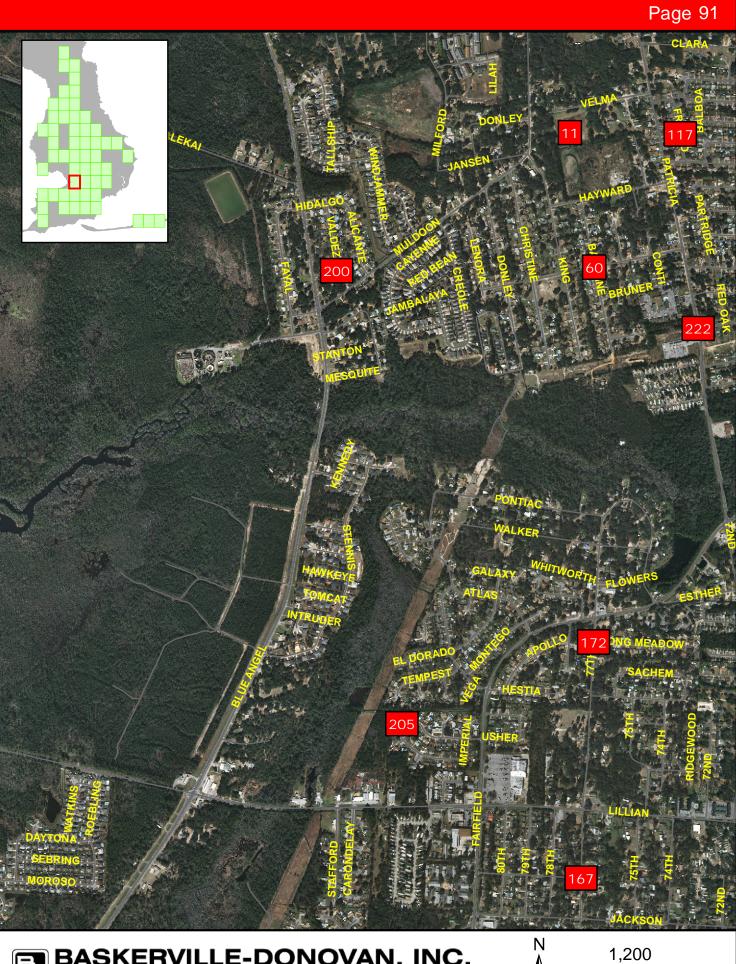
60	Velma Pond Outfall	\$905,319
Construc	et outfall for the Velma Pond to prevent overtopping during a 100 year event.	

222	Pearson Rd- Bayou Marcus/Millview Basin Branch C	\$1,364,488
Construc	et new stormwater system for the area around Pearson Road to reduce flooding in the area.	

Ridgewood Park - bayou Marcus/Millview Study Branch B \$2,524,333 Construct new stormwater system for the Ridgewood Park subdivision to reduce flooding in the area.

205	Imperial Drive - Bayou Marcus/Millview Study Branch B	\$526,033
Construc	ct new stormwater system for the area around Imperial Drive to reduce flooding in the area.	

167	Royal Pines - Bayou Marcus/Millview Study Branch B	\$2,908,721
Constru	ct new stormwater system for the Royal Pines subdivision to reduce flooding in the area.	



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North 61st Property Purchase and flood plain restoration \$700,000 Purchase of 10 properties for the purposes of flood plain restoration, and stream restoration

177 Roosevelt - Warrington Basin Study Branch K \$4,512,150

Construct a new stormwater system along 61st, 59th, 60th, 63rd, and 65th streets with a new stormwater pond west of 61st street.

228 61st Ave - Bayou Marcus/Millview Basin Branch D \$374,139 Increase the capacity of the 61st Avenue stormwater system to reduce flooding in the area.

Emory Drive- Warrington Basin Study Branch K \$637,509

Construct a new stormwater system along Emory Drive, Stanford Road, Stetson Road, and Vanderbilt Road with a new stormwater pond at the eastern end of Tulip Drive.

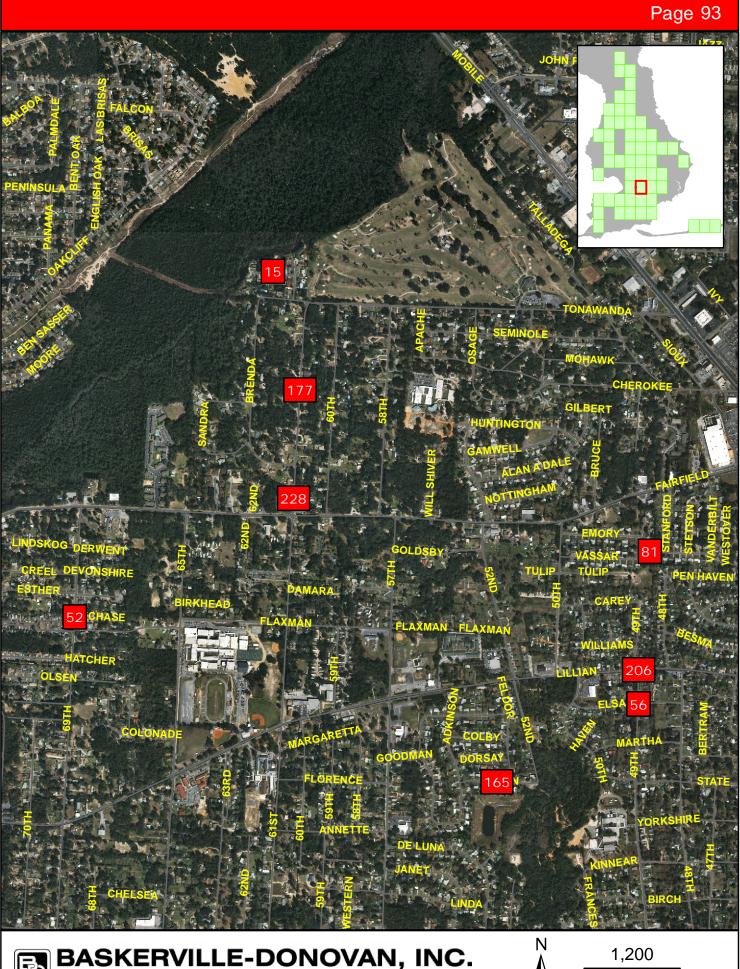
N 69th Ave- Bayou Marcus/Millview Study Branch D \$1,963,878 Expand the stormwater collection system along 69th Avenue to reduce flooding in the area.

56 Elsa Area Drainage \$2,600,000

Drainage project to address flooding in the area of Elsa Avenue South of Lillian from 48th Avenue over to Feldor Avenue including 49th, 50th, 52nd, State Street, Kinear Avenue, and Martha Ave

49th Av - Warrington Basin Study Branch K \$1,648,952 Construct a new stormwater system along 49 the Ave with a discharge to the existing county pond on Lillian Highway.

Eaton Rd - Warrington Basin Study Branch KConstruct a new stormwater system along Eaton Road from Feldor to Adkinson Drive with a discharge to an existing county pond per Warrington Basin Study Branch K.





Catholic High Basin Zone A North - North end of the basin around Mission Street \$3,330,648

Expand pond storage by expanding existing pond and constructing a new pond as well as expanding and increasing existing collection to prevent home and street flooding. This improvement will not have negative impacts on downstream properties.

Old Corry Field Rd- Warrington Basin Branch H \$2,126,280

Construct a new stormwater collection system along Old Corry Field Road from Border Street to Jackson Creek.

51 Catholic High Basin Zone A South - South of Avery Street \$1,440,259

Construct new collection system to prevent street flooding. This improvement will not have negative impacts on downstream improvements.

West Highlands (Green and Lloyd) and Lloyd up to Mallory Street \$650,000

Address property flooding in an area North of Mobile Hwy West of Dominguez Street, and at Green St

119 West Highlands \$2,700,000

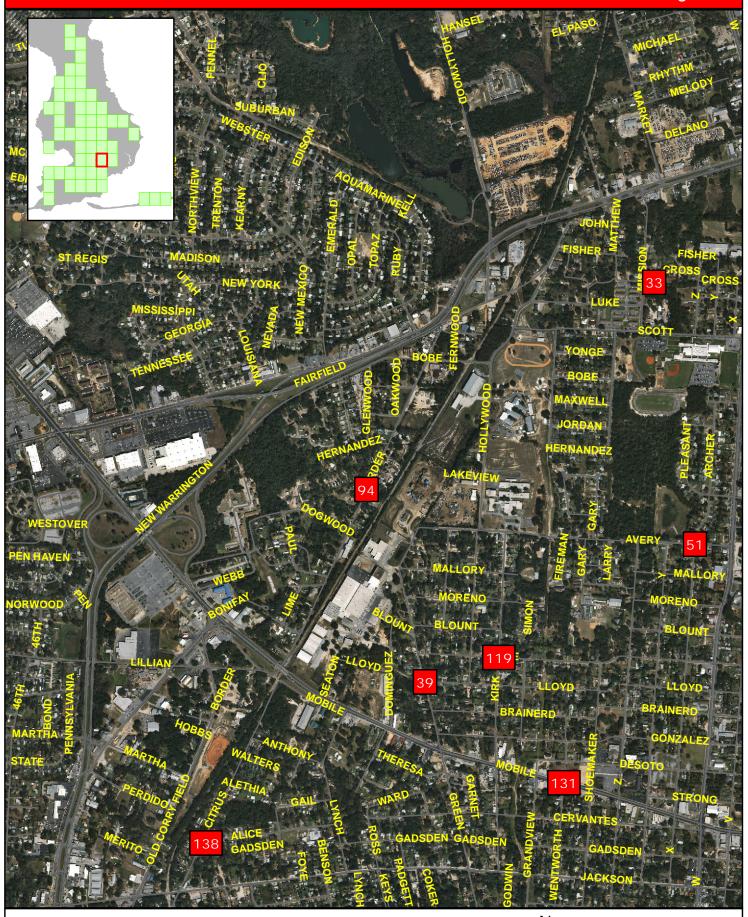
Proposed new system located on Kirk Street and extend from West Avery Street to West Gonzalez Street and the surrounding area. This new system requires the acquisition and construction of a new retention/detention pond. (see Branch I in Warrington Master Plan)

131 West Cervantes at Westworth \$600,000

Correct road flooding in area with no drainage system

Citrus Street Area Drainage \$1,300,000

Drainage System Improvements on Citrus per Warrington Basin Study Branch G (Study modification required to consider existing County parcel for pond site and conveyance system).





221

Delano Drainage Area (L Street, Leonard, Fairfield, Herman, and Fairfield Area) \$6,488,476

Drainage System Improvements to include new regional pond(s) and rehab of existing ponds for water quality and flood control

Spring Street - Leonard Street - PHS Drainage \$500,000

Joint Drainage project between the City and School Board to address flooding on Spring Street and School Area.

186 Hernandez Street pond site 3 \$1,195,738

Construct a new pond on Hernandez St. to reduce flood staging in surrounding and downstream. This improvement will not negatively impact downstream properties/impacts.

New 36 Inch Pipe Outlet Along Hernandez Street \$2,232,399

Construct a new collection system and outfall connection to the existing system to decrease flood stages in the surrounding areas. This improvement could have impacts on all downstream properties.

215 Catholic High Zone C Drainage \$9,000,000

Re-evaluate previous basin study solution (a new discharge trunk line with storm sewer extensions, treatment swales, and underground vaults) to determine whether ponds or direct piping produces the greatest impact.

223 Improve Open Ditch Outlet Terminating at Fairfield Drive \$20,990

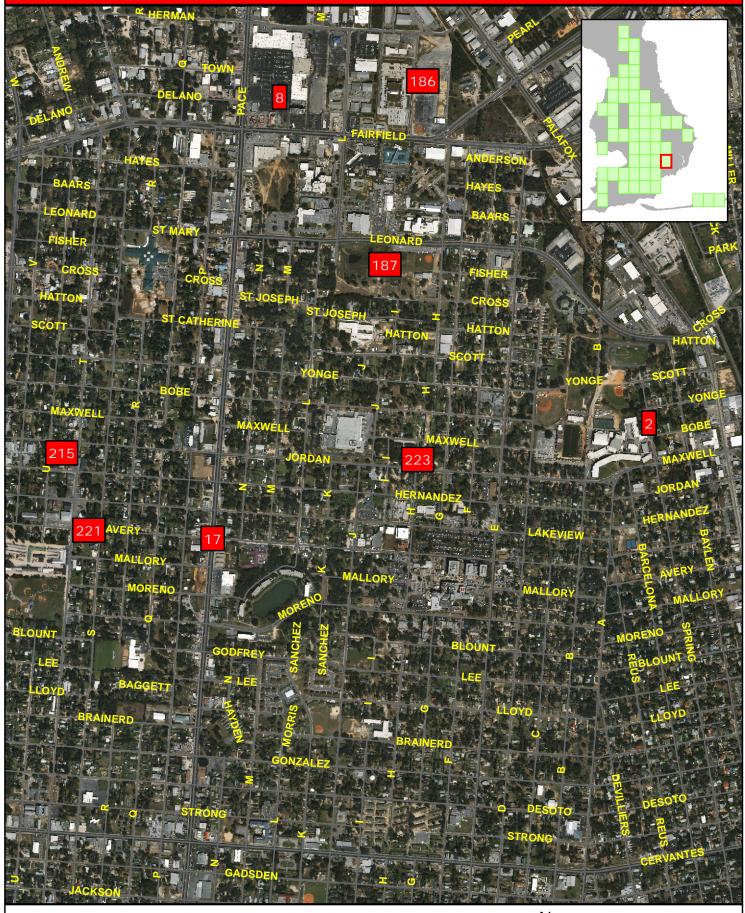
Enlarge outlet orifice for open ditch flowing to Fairfield Drive. This will not negatively impact downstream properties/improvements.

Catholic High Basin Zone B - Intersection of "S" Street and Avery Street and consist of a large storm sewer system running up "S" Street to Leonard Street \$3,850,727

Increase and expand existing storm collection system and provide stormwater treatment. Provide tie-ins to outfall proposed in "Begins at the intersection of Avery Street and run south to Gonzalez Street, west to "U" Street and south on "U" Street to its discharge point to Maggie's Ditch." This improvement can only be constructed after the completion of the proposed outfall trunk line.

Avery Street Drainage (Kupfrian Park/Hernandez and Lakeview) \$998,563

Continued drainage for the Kupfrian Park area to include stormwater pond(s) for flood control/water quality, and conveyance system to address flooding issues on Hernandez and Lakeview between Pace and J Street.





123	Bronson Airfield design 3 (entire)	\$27,631,968
Construc	ct a pond over the entire Bronson Airfield property.	

154	Bronson Airfield design 2 (Eastern Side)	\$9,767,981
Construc	ct a pond on the eastern side of the Bronson Airfield property.	

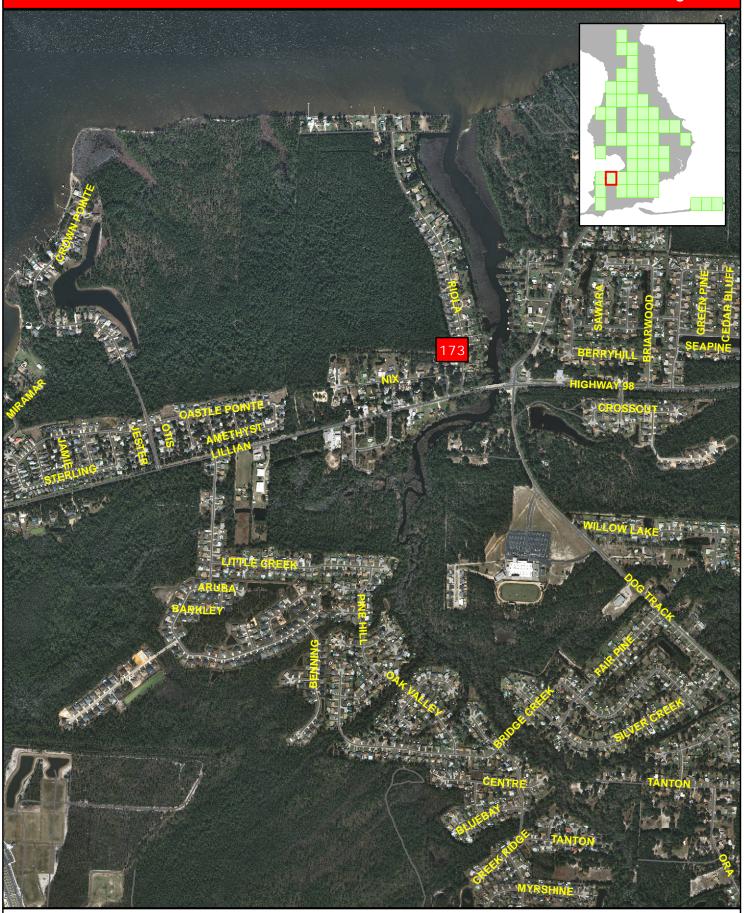
224	Ailanthus Drive and Bauer Drive (culverts)	\$301,051
Upgrade	culvert near intersection of Ailanthus Drive and Bauer Drive.	

226	Bronson Airfield design 1 (northeast corner)	\$1,017,098
Construc	ct a pond in the northeast corner of the Bronson Airfield property.	





Riola Place - Bridge Creek/Heron Bayou Study Branch E \$189,379 Lower pipe inverts and increase the capacity of the culvert under Riola Place to decrease out-of-bank channel flooding.





Aileron Ave - Bridge Creek/Heron Bayou Basin Branch B \$189,379 Install a new storm sewer system along Aileron Avenue and increase the capacity of the existing culvert under Dog Track Road to reduce roadway flooding.

212	Tatnall Street - Bridge Creek/Heron Bayou Basin Branch D	<i>\$163,750</i>
Extend t	he existing ditch northward into the bayou to reduce flooding.	



Myrtle Grove System A (remaining portion) \$450,000

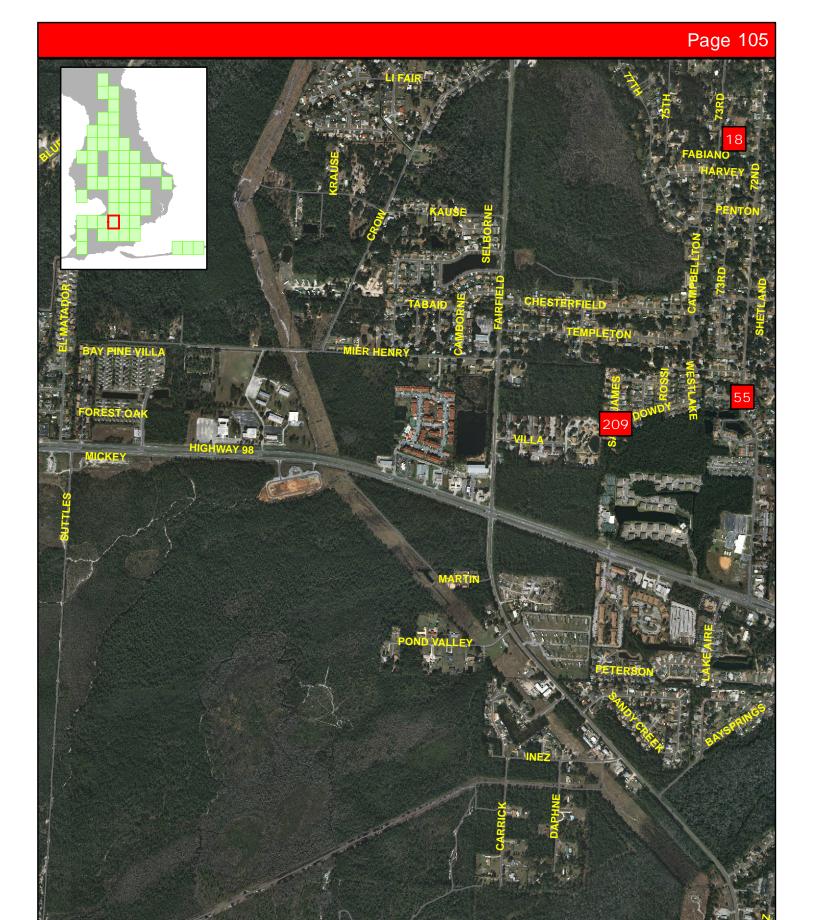
Completion of System A to included drainage improvements including acquisition for easement and pond site on 72nd and 73rd Ave, South of Jackson, and North of Harvey St

Willowside Drive and Westlake Subdvision Drainage \$750,000

Address home, yard, and street flooding on 72nd Avenue and Willowside Drive through the Westlake Subdivision: Reference Warrington Basin Study-St James Branch C. May require modifications.

Saint James Place-Warrington Basin Study Branch C \$902,785

Construct a new stormwater system for the St James Place/Dowdy Drive area.







Myrtle Grove System E (McNair Ln and 57th) \$100,000

Decrease drainage impacts on Lake Charlene through drainage improvements on 72nd and 73rd Ave, South of Jackson and North of Harvey St.

Old Corry Outfall Property Purchase and Flood Plain Restoration \$978,881

Pete Moore ditch- Jackson Creek flood plain and habitat restoration.

Lake Charlene/Querido Heights- Warrington Basin Branch B \$6,765,919

Reconstruct Lake Charlene overflow structure and outfall ditch. Reconstruction of the 69th Avenue drainage system to reduce discharges to Lake Charlene, increase the capacity of the 61st Avenue drainage system, and increase the capacity of the 61st Ave, Kittyhawk Drive, Lake Charlene Lane, and Myrtle Hill Circle drainage system. Solutions are currently under evaluation.

Lake Charlene Area Drainage (including future phases not covered by grant) \$1,992,309

Increase outfall capacity of Lake Charlene by implementing some of the drainage system improvements from the 2007 Warrington Master Plan and the 2015 Lake Charlene Warrington Study.

9 Beach Haven Area Drainage and Sewer Northeast Phase 1 \$10,887,839

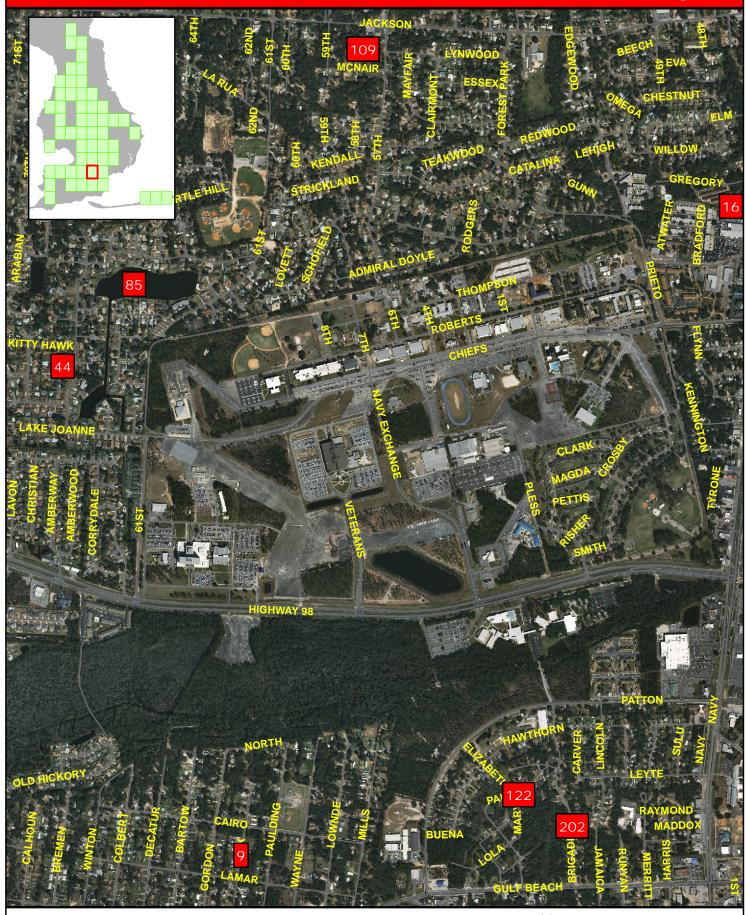
Roadway/drainage and sewer improvements; currently under design (NE of Decatur Ave to Gulf Beach Highway; from Mills Ave to Decatur Ave including ponds for Phase 1 & 2)

122 Bayou Grande Basin Study E1 - Gulf Beach Hwy Outfall Improvement \$73,035

Increase the culvert size along Gulf Beach Hwy culvert between Brigadier and Richmond. The downstream channel to Winthrop St will be regraded and shaped to provide positive flow to the Winthrop culvert. This improvement will not affect downstream properties.

202 Bayou Grande Basin Study E2-Brigadier St. Culvert \$33,708

Increase the culvert size on Brigadier St. to prevent road flooding. This Improvement may have a negative impact on downstream roadway flooding.





Old Corry Field Area Drainage \$2,000,000

Construct a new stormwater collection system along Old Corry Field Road from Border Street to Jackson Creek.

Jamison Street Branch F -Warrington Basin Study \$2,000,000

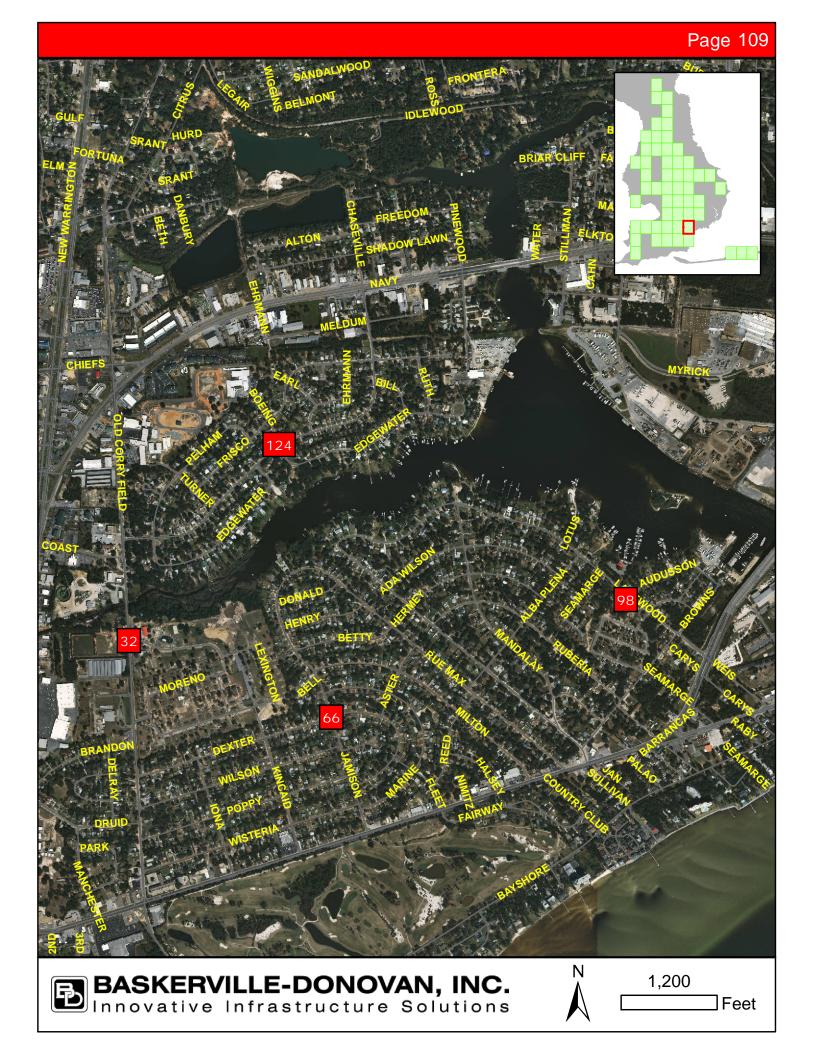
Construct new stormwater system along Jamison Street and Rue Max Street with direct discharge to Bayou Chico to reduce discharges to the Barrancas Avenue System. Connect to Lexington Terrace stormwater ponds to provide water quality improvement prior to discharge to the wetlands.

98 Lakewood/Millwood Terrace- Warrington Basin Branch F \$4,510,975

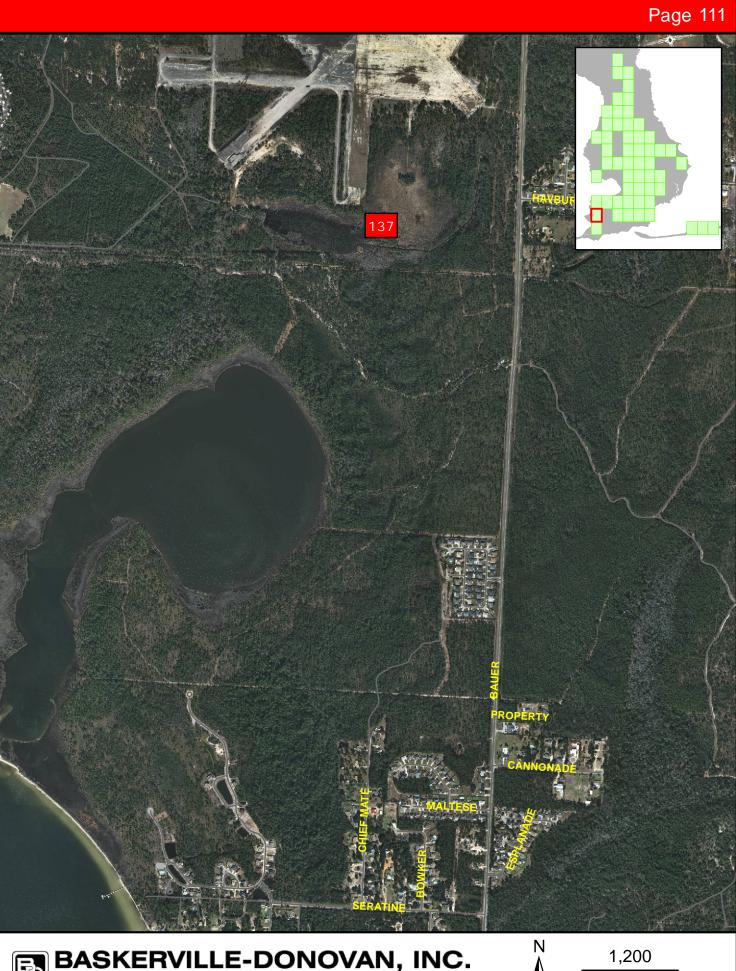
Construct new stormwater collection system in the Lakewood Road area with a stormwater pond at Lakewood Road and Addison Avenue with an outfall under Lakewood Drive to Bayou Chico.

124 Edgewater Drive - Warrington Basin Study Branch F \$1,572,096

Extend and increase the capacity of the stormwater system on Edgewater and Chaseville Streets. Construct an outfall ditch and discharge pipe into Bayou Chico.



137	South Bronson Airfield Ditch Block	\$142,730
Construc	ct ditch blocks in the ditch south of Bronson Airfield. (Treatment only)	



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Feet

140 Bayou Grande Basin Study BB9- Carrier Dr Channel Improvements \$8,427 Clear and regrade channel downstream of the culvert on Carrier Dr. to alleviate road flooding.

Dogtrack South – Coral Creek – Mariners Village-Hampton Lakes \$3,400,000

Stream and wetland restoration and construction of an attenuation pond. Two creeks merge north of Coral Creek, resulting in upstream flooding the affects Mariners Village to the northwest and a creek along Dog Track Road to the northeast.

166 Coral Village Storm Drainage Replacement \$300,000 Reduce flooding by replacing failing storm pipe within drainage easement.

Bayou Grande Basin Study BB10- Liberty Church Discharge Structure \$14,045 Provide stormwater pond at Liberty Church with a discharge structure to control the water level and time of detention.

170	Bayou Grande Basin Study BB4- Windward Ct Outfall Improvements	<i>\$13,483</i>
Clean ar	d grade ditch outfall from Windward Court in Coral Creek.	

171	Bayou Grande Basin Study BB3- Coral Island Dr. Outfall Improvements	\$36,517
Provide	stormwater collection along Coral Island Dr. in order to alleviate flooding along the roadway.	

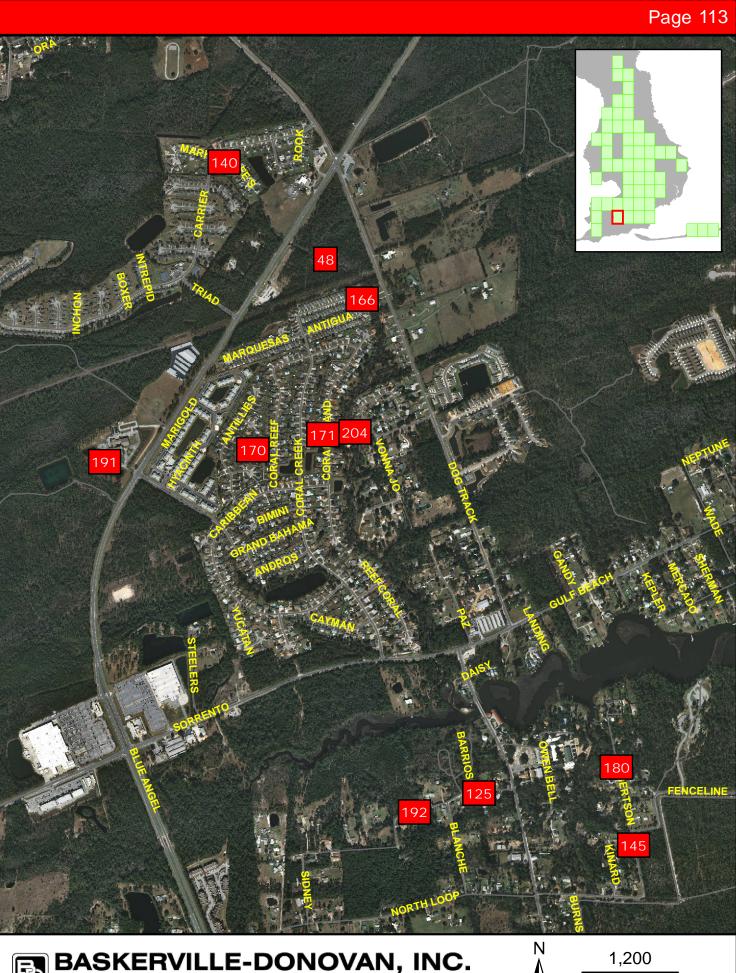
204	Bayou Grande Basin Study BB8- Vonna Jo Discharge Structure	\$14,045	
Provide stormwater pond on Vonna Jo Circle with a discharge structure to control the water level and time of			
detentio	detention.		

192	Bayou Grande Basin Study CC2- Sidney Culvert	\$16,854
Enlarge	existing culvert to prevent road flooding along Sidney Rd.	

125	Bayou Grande Basin Study CC1- Sidney Culvert	\$10,000
Enlarge	existing culvert to prevent road flooding along Sidney Rd.	

180 Bayou Grande Basin Study Y1- Robertson Channel Improvements \$106,743
Increase and extend existing roadside ditch system along Robertson Rd to control road and yard flooding.

Bayou Grande Basin Study Y2- Kinard Drainage System \$179,778
Increase and extend existing roadside ditch system along Kinard Ave. and Robertson Rd. to control road and yard flooding.



Page	114	
67	Beach Haven Area Drainage and Sewer Northwest	\$4,000,000
Roadwa	y/drainage and sewer improvements (NW of Fairfield to Gulf Beach Highway)	

179	Bayou Grande Basin Study P6- Athens St. Ditch Improvements	\$8,427
Improve	and regrade existing ditch along Athens and Gulf Beach Hwy to decrease road flooding.	

203	Bayou Grande Basin Study P4- Bay Meadows Dr. Culvert	\$56,181
Replace	the existing culvert on Bay Meadows Dr. with larger pipes to prevent road flooding.	

199	Bayou Grande Basin Study P5- Grundy Culvert	\$25,843
Enlarge	the existing culvert on Grundy in order to prevent road flooding. This improvement may impa	ct other
improve	ments.	

139	Bayou Grande Basin Study P3- Fairfield Storm Sewer at Gulf Beach	<i>\$106,743</i>
Replace	existing storm collection with a larger system to prevent road overtopping.	

157	Bayou Grande Basin Study P2- Gulf Beach Storm Sewer at Fairfield	<i>\$78,653</i>
Replace	existing storm collection with a larger system to prevent road overtopping.	

102	Bayou Grande Basin Study P7- Bay Meadows Treatment Pond	\$112,361	
Provide	treatment pond for existing residential development north of Bay Meadows Dr. This will not a	affect	
downstre	downstream properties.		

106	Bayou Grande Basin Study S1- Americus Ave Culvert	\$12,000
Enlarge	the existing culvert on Americus in order to prevent road flooding. This impro	ovement may impact other
improve	ements.	

126	Bayou Grande Basin Study R1- Weller Dr. Culvert	\$55,000
Replace	and increase the existing culvert along Weller Dr. to prevent road overtopping.	This improvement will not
negative	ly impact downstream properties.	

210	Bayou Grande Villas	\$200,000
Roadwa	y/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach	Highway;
Fairfield	Dr to Colbert)	



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Feet

Beach Haven Area Drainage and Sewer Northeast Phase 2 \$7,823,000

Roadway/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach Highway; Fairfield Dr to Colbert)

Beach Haven Area Drainage and Sewer (South) \$12,000,000

Roadway/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach Highway; Fairfield Dr to Colbert)

78 Navy Point Drainage South \$25,000

Construct treatment swales within Navy Point to treat stormwater as it flows to the discharge point per Bayou Grande Basin Study.

59 Sunset/Patton/Elite/Gulf Beach Hwy Drainage Outfall \$220,000

Realign the drainage outfall line beginning at Gulf Beach Hwy and Elite Drive to flow down Sunset St. in order to correct non-functioning sections and routing beneath homes.

75 Bayou Grande Basin K1- Gulf Beach to Winthrop SS \$174,160

Replace the outfall trunk line from Gulf Beach Hwy through Winthrop Ave. to prevent roadway flooding.

Bayou Grande Basin Study P1- Bainbridge Culvert \$44,945

Replace existing culvert on Bainbridge with a larger pipe to prevent road overtopping.

Navy Point Drainage North \$20,000

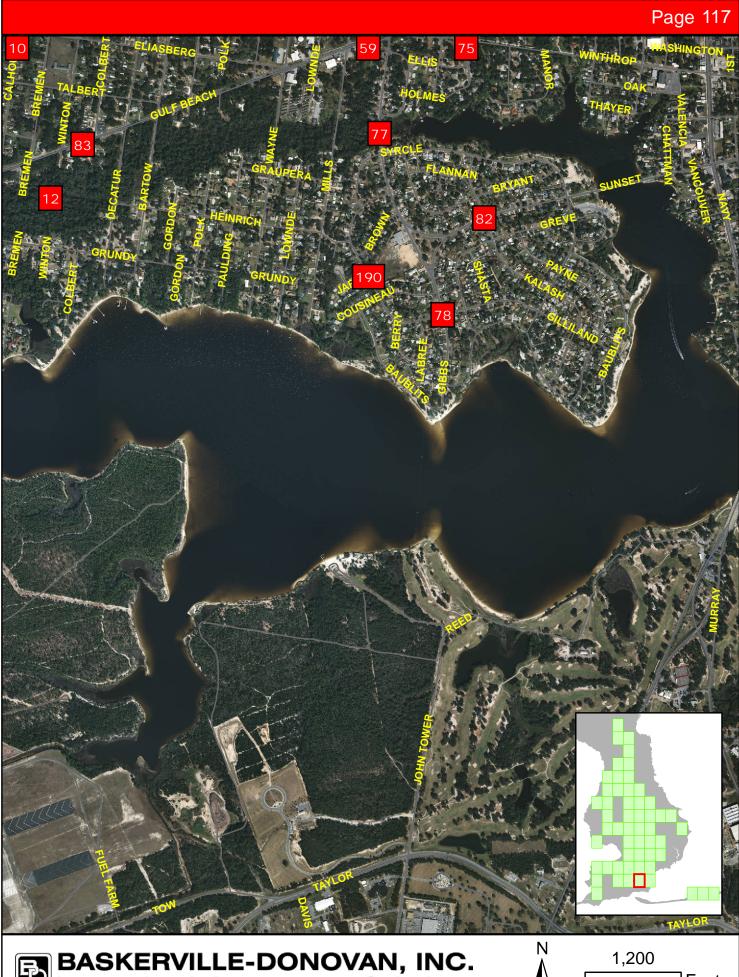
Construct treatment swales within Navy Point to treat stormwater as it flows to the discharge point per Bayou Grande Basin Study.

190 Bayou Grande Basin Study L1- Cousineau Rd. Outfall \$25,281

Replace the outfall from Cousineau Rd. to Bayou Grade by an outfall ditch in order to prevent street flooding.

Navy Point Drainage and Sanitary Sewer \$300,000

Roadway/drainage and sewer improvements; currently under design (NE of Fairfield and Gulf Beach Highway; Fairfield Dr to Colbert)



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Feet

193 Bayou Grande B1- New Storm Drainage System \$308,994

Construct a new street collection system consisting of roadside swales and culverts along 1st and 2nd streets to reduce roadway flooding. Improvement is an independent project and will not affect downstream properties.



99	Shoshone and Doug Ford Drive Drainage	\$240,000
Evaluate	pipe system and obtain permits to restore flow the wetlands and alleviate home flooding a	long Shoshone
Drive.		

201	Perdido Bay Country Club Estates Unit 7	\$170,000
Drainage	e and resurfacing projects to address flooding and groundwater problems	





Via DeLuna Drainage at Pensacola Beach RV Resort \$287,470

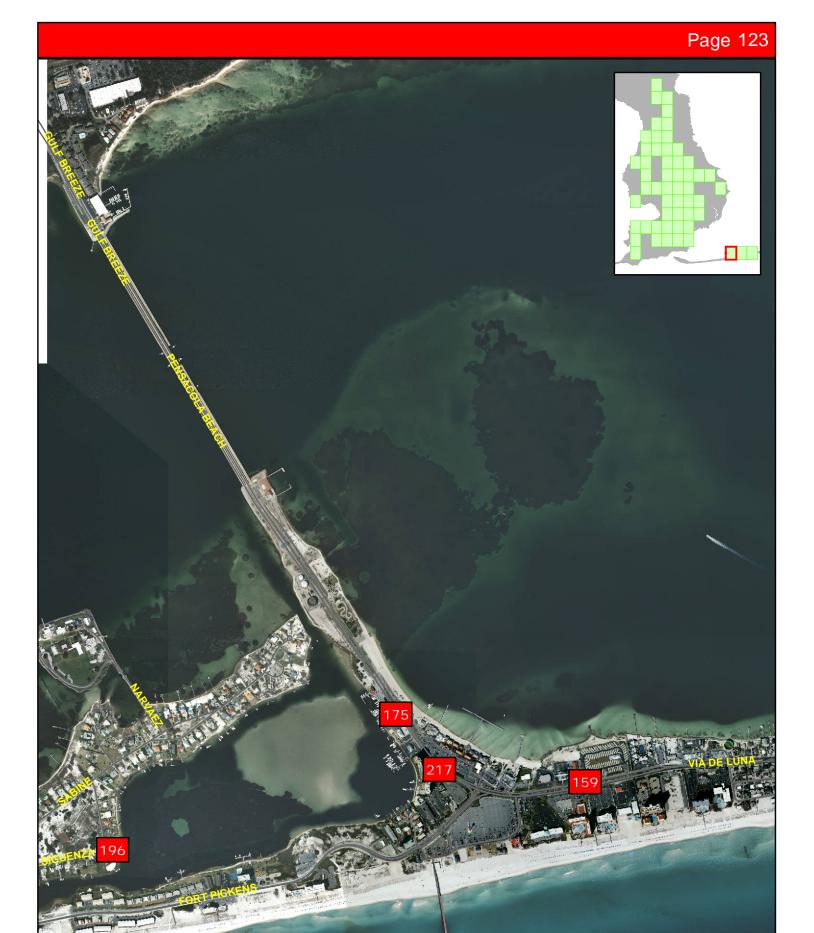
System should be cleaned of sediment and checked regularly. Increased system capacity should be considered.

175 Pensacola Beach Blvd Stormwater Outfall Upgrades \$401,121

Installing stormwater treatment on the outfall in the vicinity of the marina within the existing stormwater easement

196	Siguenza Drive Drainage	\$93,595
Construc	ct a small retention area at the bend adding a new inlet at the location of the flooding	

217	Visitor Information Center Access Road Drainage	\$93,595
Regradii	ng and repaved roadway to add slope and positive outfall to drainage inlets	



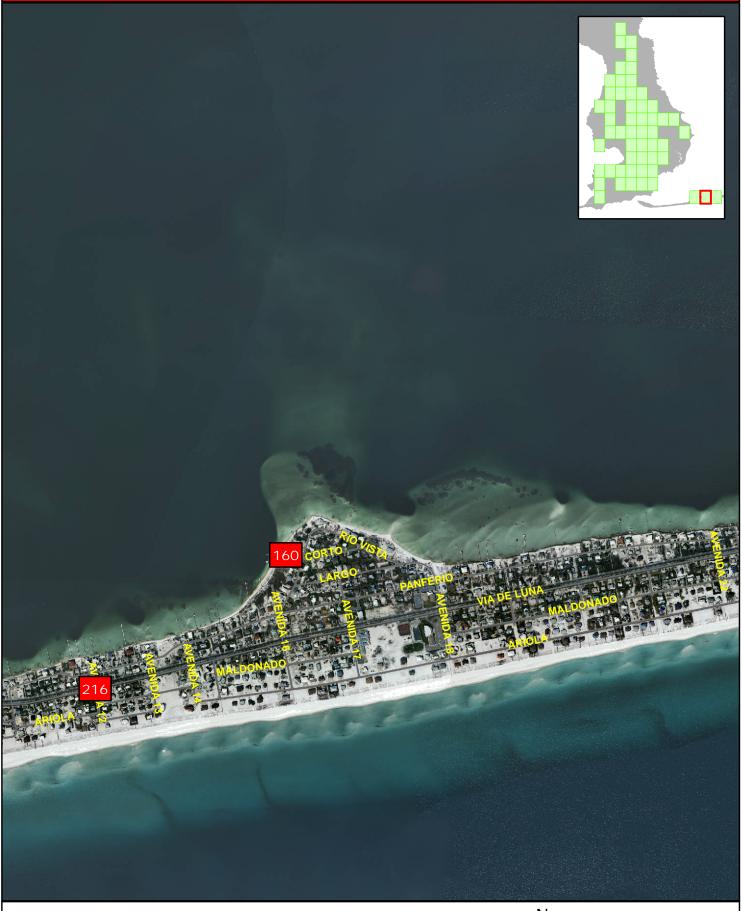




160 Corto, Largo, and Rio Vista Drives Drainage \$735,389

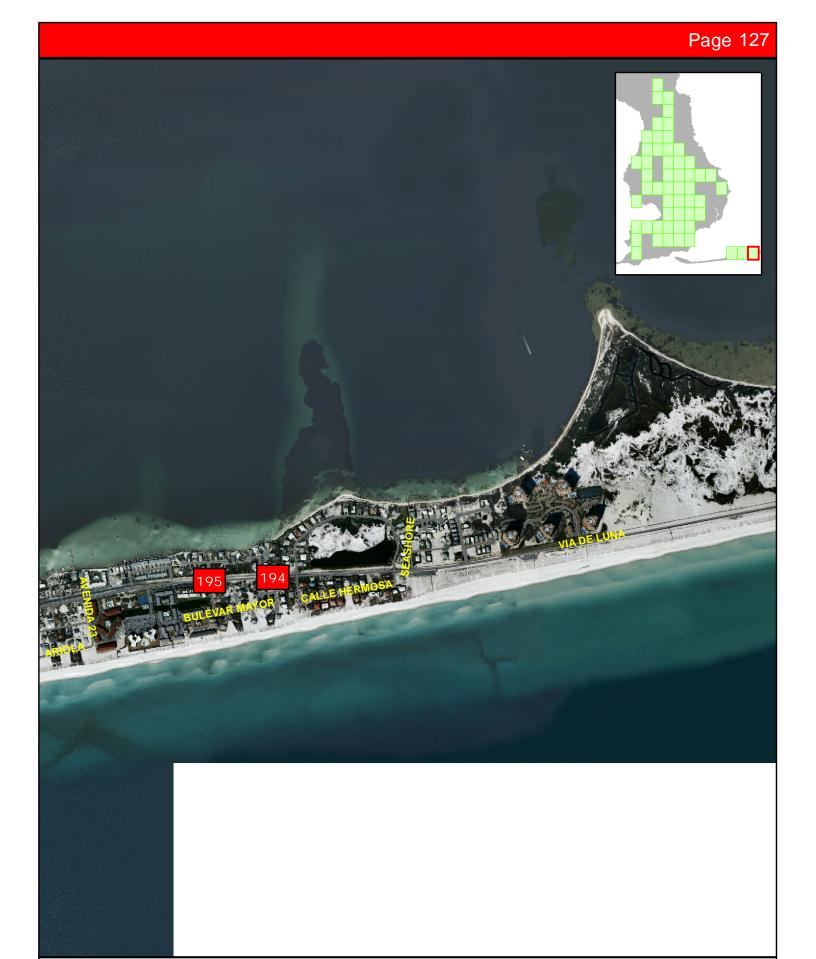
Repaving at Corto Drive and Rio Vista Drive. Regrading at Largo Drive from Avenida 17 to the sound. Stabilizing along Rio Vista Drive south of Largo Drive.

216	Via DeLuna Side road Connection Drainage Improvements	<i>\$334,268</i>
Drainage	e Improvements	



194	Calle Juela Drainage at Via DeLuna	\$93,595
Regrade t	o a grate inlet with outfall through an exfiltration pipe	

195	Calle Traviesa Drainage at Via DeLuna	\$93,595
Regrade	to a grate inlet with outfall through an exfiltration pipe	





449 W. Garden Street, Pensacola, FL 32502