

Board of County Commissioners May 11, 2021 – Regular Meeting

SUBJECT

STORMWATER UPDATE AND FOLLOW UP

Category

REPORTS

Briefings

None

Contact and/or Presenter Information

Chad Butzow, P.E., Public Works Director - Ext. 7476 Anthony Russo, P.E., Field Operations Deputy Director - Ext. 7349

Action Requested

Board Direction

Enabling/Regulating Authority

County Code of Ordinances

Background Discussion

The Board requested follow up during the January 19, 2021, storm water work session to focus on storm water project needs and cost estimates.

Attorney Review

Not Reviewed (No apparent legal issues)

Other (if applicable)

Reviewing Attorney

Instructions to Board Records

None

Cost and Funds Source Account Number and Name $\,{\rm N/A}$

Amount and Frequency of Recurring CostsNone



Manatee County Public Works Stormwater Session Follow UP May 11, 2021



Board Direction From January 19, 2021 Work Session

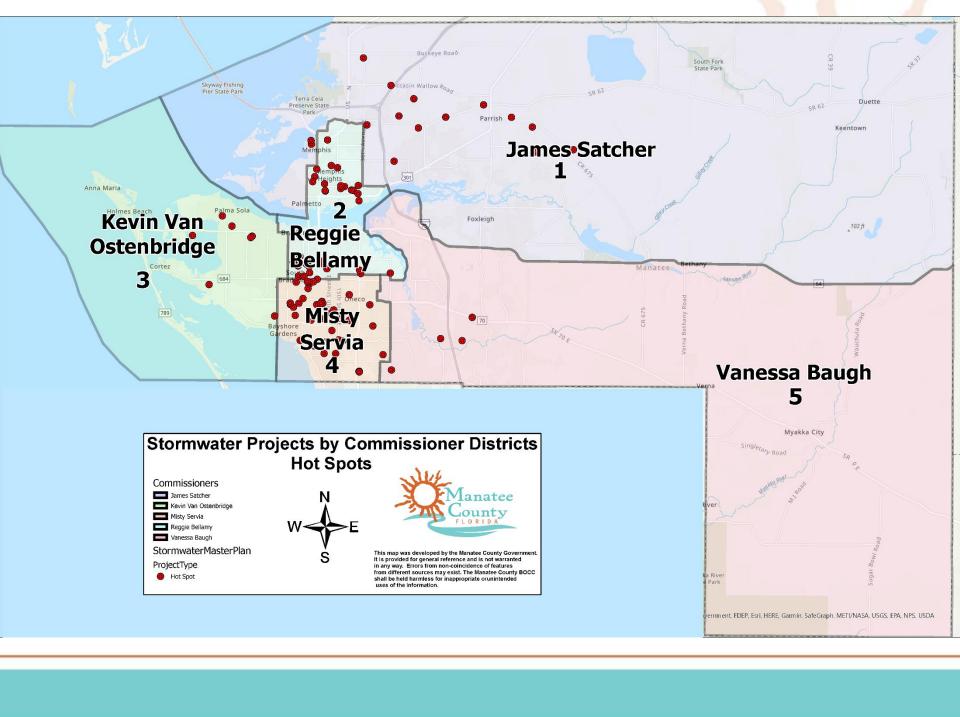
- 1. Develop a list of known "Hot Spots" that occur during rain events and what is needed to fix them.
- 2. Develop a plan for completing all basin studies and estimated costs, schedules and resulting projects lists for basin flood improvements based on the studies.
- 3. Develop a list of services (projects) for enhancement and what is needed to accomplish them.
- 4. Develop a total list of project needs and costs.
- 5. Develop a list of all our funds, restricted and unrestricted, with an explanation of both.

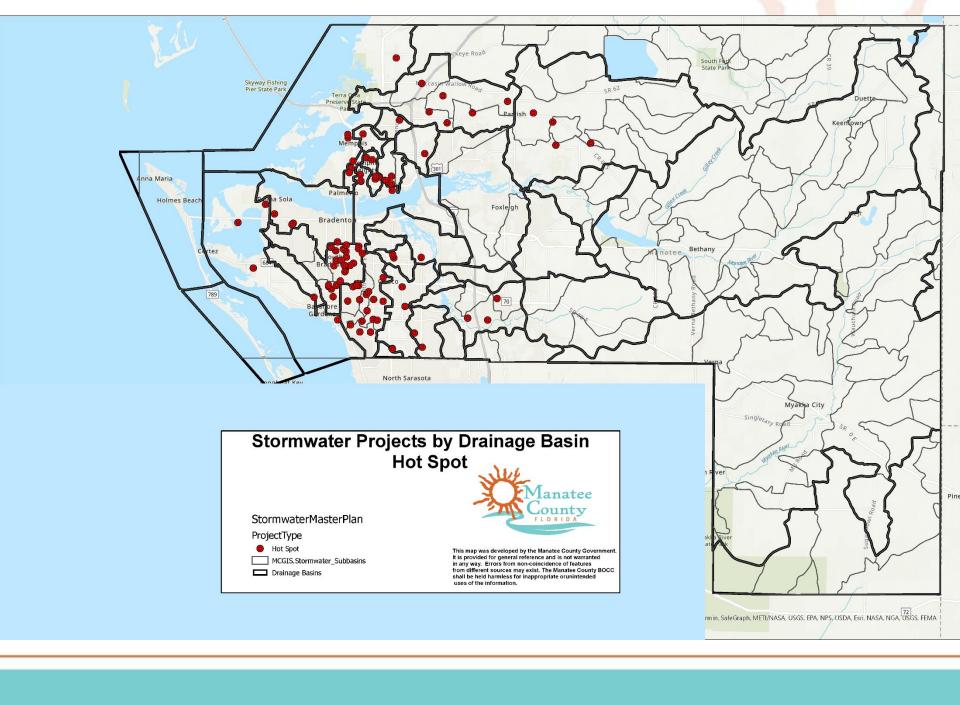
1a. List of known "Hot Spots"

PRIDE PARK	
6222 12 th St Ct E, Bradenton.	inlets in cul-de-sac
703 56 th Ave E, Bradenton.	check inlets on 56 th Ave E, and on 7 th St Ct E.
720 56 th Ave Dr E, Bradenton.	check inlets on 56 th Ave Dr E
5723 8 th St Ct E, Bradenton.	check inlets in area.
1103 59 th Ave Cir E, Bradenton.	check inlet at end of cul-de-sac
5607 5 th St Ct E & 5603 5 th St E, Bradenton.	check inlets in cul-de-sac
503 59th Ave Dr W, Bradenton.	check inlet on 5 th St W (dead end)
511 60th Ave E, Bradenton.	Check inlets on 60 th Ave E to dead end.
EAST COUNTY	
3506 27 th St E, Bradenton.	check inlets from address North to canal
45 th St E and 44 th Ave E, Bradenton.	check inlets on 45 th St E to 26 th Ave E.
Tara Preserve Ln & Linger Lodge Rd, Bradenton.	check inlets on Tara Preserve Ln.
66 th Ave Dr E & 93 rd St E, Bradenton.	check inlet at the corner of 66 th and 93 rd .
5328 4 th St E, Bradenton.	Check inlets on both sides of the street.
5404 4 th St Ct E, Bradenton.	Check inlets on both sides of the street.
5405 3 rd St E, Bradenton.	Check inlets on both sides of the street.
405 28 th Ave E, Bradenton.	check inlets on 28 th and the corner of 4 th St E
401 30 th Ave E, Bradenton.	Check inlets on 30 th from 4 th St E to 2 nd St E.
Samoset	Check streets for flooding.

1b. List of known "Hot Spots"

WEST COUNTY	
2109 29 th Ave W, Bradenton.	Check inlets on both sides of the street.
2805 8 th St Ct W, Bradenton.	Check inlets on street.
3100 11 th St W, Bradenton.	Check inlets on both sides of the street.
5412 16 th Ave W, Bradenton.	Check inlets on both sides of the street.
5513 21st St Ct W, Bradenton.	check inlets
2411 55 th Ave W, Bradenton.	Check inlets from 25 th St W East to canal.
5412 24 th St W, Bradenton.	Check inlets.
4532 19 th St Cir W, Bradenton.	Check inlets in area.
4200 18 th St W, Bradenton.	Check inlets on street.
5505 8 TH Ave Dr W, Bradenton.	Check inlet at dead end
5606 10 th Ave Dr W, Bradenton.	Check inlets on both side of street.
7623 9 th Ave Dr NW, Bradenton.	Check inlets at address.
Flamingo Dr & Spoonbill Rd W	Check inlets at dead end. Outflow into wetland.
NORTH COUNTY	
603 14 TH St E, Palmetto	Check inlets in area.
1902 6 th Ave W, Palmetto	Check inlets just south of address.
1827 18 th St E, Palmetto	Check inlets on 18 th St
1611 18 th Ave Dr E, Palmetto	Check inlet at the corner of 17 th & 18 th Ave Dr.
2211 17 th St E, Palmetto	Check inlets at corner of 17 th St & 24 th Ave
2005 Bayshore Rd, Palmetto	Check pipe that flows into canal.
3306 Water St, Ellenton	Check inlet just West of address and outfall pipe.
5119 Baystate Rd, Palmetto Point	Check inlets at address.



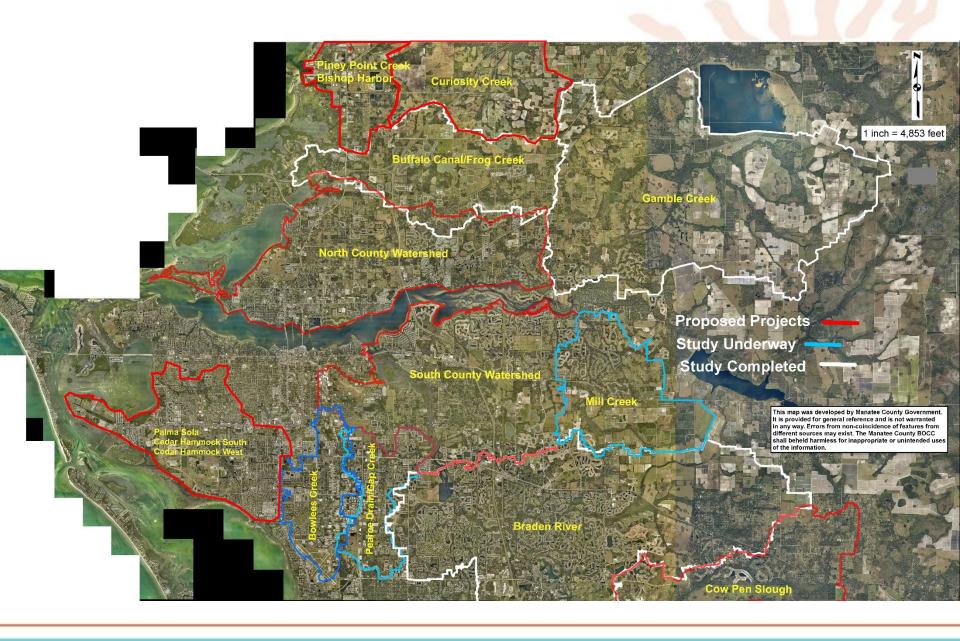


2. Watershed Management Plans and Estimated Costs

- *Completed* = *3*
- In Progress = 15
- *Planned/Need Update* = 5 (*Estimated Cost* \$6,444,850.00)



			Planned/	
Completed Watershed Management Plans (Adoption Date)	Completed	In Progress	Need Update	Estimated Cost
Braden River (May 21, 2013)	1		1	\$2,650,500
Buffalo Canal/Frog Creek (October 26, 2010)	1		1	\$930,000
Gamble Creek (June 26, 2012)	1			
Watershed Management Plans in Progress (Tentative Adoption Date 2022)				
Mill Creek		1		
Bowlees Creek/Oneco Drain		1		
Pearce Drain/Gap Creek		1		
Watershed Management Plans Pending BCC Execution				
North County Watershed Management Plan				
Big Chimney Drain (2022)		1		
Carr Drain (2022)		1		
Canal Road Drain (2022)		1		
Government Hammock (2022)		1		
Tampa Gap Drain (2022)		1		
Slaughter Drain (2022)		1		
South County Watershed Management Plan				
Glen Creek (2022)		1		
Sugarhouse Creek (2022)		1		
Cypress Strand (2022)		1		
Williams Creek (2022)		1		
Gates Creek (2022)		1		
Cow Pen Slough (2022)		1		
Pending Watershed Management Plans				
Piney Point Creek/Bishop Harbor/Curiosity Creek			1	\$2,125,500
Palma Sola Drain			1	\$88,350
South/West Cedar Hammock			1	\$651,000
,				, , , , , ,
Total	3	15	5	\$6,444,850



3a. List of Services for Enhancement

- GIS Mapping of Existing System
- Inlet Cleaning
- Pipe Cleaning
- Swale Cleaning
- Canal Cleaning
- Pipe Lining



3b. List of Projects for Enhancement

- Betterment/Capacity Improvements
 - Total Number = 70
 - $Total\ Cost = \$105, 189, 882.00$
- Repair/Replacement
 - Total Number = 92
 - $Total\ Cost = \$26,000,126.00$
- Total Projects
 - Total Number = 162
 - Total Cost = \$131,190,008.00



Betterment/Capacity Project Name	Location	Project Description	Planning Estimate
1 Sarabay Flood Mitigation	Sarabay Country Club (26-35-17)	Modification to existing weir structures	\$559,410.00
2 Meadors Subdivision Diversion	59th AVE E - 9th ST E to Pittsburg Drain (13&14-35-17)	Construction of dual 48" RCP Diversion Pipeline	\$2,300,472.00
3 Centre Lake Flood Mitigation	65th AVE CIR E (02-35-18)	Construction of a flood wall.	\$8,444,000.00
4 Mockingbird Hill/La Selva Drainage	34th AVE - US 301 to 27th ST E (06-35-18)	Drainage improvements.	\$2,000,000.00
5 Glen Creek/Tropicana Outfall	17th AVE E/15th ST E/27th ST E (36-34-17/31&32-34-18)	Culvert Upsizing. Channel Improvements.	\$2,000,000.00
6 Morgan Johnson Road @ Johnson Creek	Morgan Johnson Road @ Johnson Creek (10-35-18)	Culvert upsizing and stabilization/Sediment Sump	\$2,000,000.00
7 Piney Point Creek Improvements	Piney Point Creek - US 41 to County Line Road (06-33-18)	Culvert upsizing and stabilization/Channel improvements.	\$500,000.00
8 Northwest Bradenton	9th AVE NW @ 92th ST NW to 99th ST NW (24&25-34-16)	Drainage outfall Improvements.	\$500,000.00
9 Bowlees Creek Regional Storage	Various - Bowlees Creek	40+ acre regional stormwater facility	\$6,600,000.00
10 Fountain Lakes	Fountain Lakes Circle (14-35-17)	Drainage improvements.	\$2,000,000.00
119th AVE NW - 84th ST NW Outfall	9th AVE NW - 84th ST NW (25-34-16)	Stormwater outfall pipeline	\$400,000.00
12 505 57th AVE E Outfall	505 57th AVE E (13-35-17)	Stormwater outfall pipeline	\$286,000.00
13 Holiday Heights	5004 22nd ST W (10-35-17)	Drainage improvements.	\$500,000.00
14 Bay Colony	5203 Bay State Road (35-35-17)	Drainage improvements.	\$2,000,000.00
15 Country Creek	Mill Run E & 147th ST E (27-34-19)	Drainage improvements.	\$500,000.00
16 Stone Creek Subdivision	3427 29th ST E (5-35-18)	Drainage improvements.	\$2,000,000.00
17 Pemelman Acres	2212 33rd AVE E (3-35-17)	Drainage improvements.	\$500,000.00
18 Palm Village MHP	3528 14th ST W (2-35-17)	Drainage improvements.	\$2,000,000.00
19 Cortez Park	17th ST W (11-35-17)	Drainage improvements.	\$2,000,000.00
20 Tangelo Park	Orlando AVE (11-35-17)	Drainage improvements.	\$2,000,000.00
21 Pic Town	Various locations (11-35-17)	Drainage improvements.	\$2,000,000.00
22 Sunniland	3rd ST E (13 & 14-35-17)	Drainage improvements.	\$2,000,000.00
23 Heather Hills	various	Drainage improvements.	\$2,000,000.00
24 Davan Heights	32nd ST E (29-34-18)	Drainage improvements.	\$150,000.00
25 Hammock Place	51st AVE E & 21st WY E (7-35-18)	Drainage improvements.	\$2,000,000.00
26 Pine Village	57th AVE E & 11 AVE E (13-35-17)	Drainage improvements.	\$2,000,000.00
27 Overstreet Park	15th ST E & 59th AVE E (13-35-17)	Drainage improvements.	\$2,000,000.00
28 Southwood Village MHP	South of 57th AVE DR W (14-35-17)	Drainage improvements.	\$150,000.00
29 Bayshore Windmill Village MHP	Windmill Blvd (23-35-17)	Drainage improvements.	\$2,000,000.00
30 Sunnylake Estates	60th AVE W (14-35-17)	Drainage improvements.	\$2,000,000.00
31 Manatee Oaks	31st ST CT E (8-35-18)	Drainage improvements.	\$2,000,000.00
32 Whitfield Pines	Madonna Place (25-35-17)	Drainage improvements.	\$2,000,000.00
33 Gateway East	Drake Blvd (16-35-18)	Drainage improvements.	\$500,000.00
34 Candlewood	48th DR E/50th PL E (8-35-18)	Drainage improvements.	\$2,000,000.00
35 The Trails	72nd AVE E (29-35-18)	Drainage improvements.	\$500,000.00

36	Sara Palms	East of Lockwood Ridge South of Whitfield (28-35-18)	Drainage improvements.	\$2,000,000.00
37	Oak Grove	Oak Grove Drive (32-35-18)	Drainage improvements.	\$500,000.00
38	Circus Road	South of Tallevast Road (32-35-18)	Drainage improvements.	\$2,000,000.00
39	Elwood Park	45th ST E - 26th AVE E to 44th AVE E (4-35-18)	Drainage improvements.	\$150,000.00
40	Hilltop Canal Culvert Crossing	33rd ST E (20-35-18)	Feasibility Study. Street Flooding. Culvert Crossing Upsize	\$2,000,000.00
			Feasibility Study. Culvert Crossing Replacement. Flood	
41	39th ST E Pearce Drain Culvert Crossing	39th ST E south of SR 70 (17-35-18)	Storage.	\$2,000,000.00
42	Country Oaks	Various (33-35-18)	Drainage improvements.	\$2,000,000.00
43	DeSoto Lakes - Palm Aire	Country Club DR (27 & 28-35-18)	Drainage improvements.	\$2,000,000.00
44	Carlyle	Creekside Trail (21-35-18)	Drainage improvements.	\$2,000,000.00
45	Whitfield Manor	12th CT E/13th ST E/70th DR E (25-35-17)	Drainage improvements.	\$2,000,000.00
			Feasibility Study. Utilize SWFWMD property for flood	
46	Buffalo Canal Regional Storage	US41 and I-275 (19-33-18)	storage.	\$2,000,000.00
47	Sylvan Oaks	South of 17th ST E (13-34-17)	Drainage improvements.	\$500,000.00
			Increase flood storage by modification to adjacent pond	
48	Pearce Drain Flood Storage/Outfall Retrofit	Various locations	stages/Outfall retrofits	\$2,000,000.00
49	Waterhole Creek/Fox brook Trail	Fox brook Trail (36-33-19)	Chronic Sediment Build-up clogs culvert pipes	\$500,000.00
50	Mill Creek Culvert Crossings	Various culvert crossing locations	Chronic Sediment Build-up clogs culvert pipes	\$1,000,000.00
51	. Warners Bayou	Riverview Blvd & 59th ST W (20-34-17)	Install flap gates at pipe outlets (storm surge/tidal flooding)	\$150,000.00
52	Belle Chase/ Samoset	38th AVE E north to 26th AVE E (6-35-187)	Drainage improvements.	\$500,000.00
53	Sunny Lake Estates	59th AVE DR W south to 60th AVE TER	Drainage improvements.	\$500,000.00
54	Morgan Johnson Rd/ Louge connection	From Amberly DR to SR 64 (27 & 34-34-18)	Drainage improvements.	\$500,000.00
55	Waterline Rd	15000 Blk west to Rye RD (26 & 24-34-19)	Drainage improvements.	\$2,000,000.00
		US 301 north to 44th ST CT E Btw 100th AVE E & 96th AVE E		
56	Beck Estates	(1-34-18)	Drainage improvements.	\$500,000.00
57	-	Sally Lee to Highland Shores DR (18-34-18)	Drainage improvements.	\$500,000.00
58	Garden Heights	22nd ST W to Garden Lane (3-35-17)	Drainage improvements.	\$2,000,000.00
		From Mandalay through Silverlake/Heights through COB to		
59	Silverlake channel improvements	Evers	Drainage improvements.	\$500,000.00
60	McCullom Lakes	30th St. W, roughly between 26th st. w and 34th st. w	Drainage improvements.	\$2,000,000.00
61	Coral Heights Drainage Improvements	61st Street Drainage Improvement	Drainage improvements.	\$2,000,000.00
62	Cow Pen Slough	CR 675 downstream to County Line	Drainage improvements.	\$1,000,000.00
63	Mill Creek Tributaries	SR 64 downstream to Rye Road/Mill Creek confluence	Drainage improvements.	\$1,000,000.00
64	Frye Canal	Extents of Gamble Creek	Drainage improvements.	\$1,000,000.00
		Headwater US 301 downstream to Colony Cove/confluence		
65	Slaughter Drain	Manatee River	Drainage improvements.	\$1,000,000.00
		Additional maintenance of creek between CR 675 and		4
	Gamble Creek	Mulholland Road	Drainage improvements.	\$1,000,000.00
	Cross Creek (Gamble Creek Tributary)	Fort Hamer Road to Gamble Creek confluence	Drainage improvements.	\$1,000,000.00
68	Rattlesnake Slough	Upstream Lockwood Ridge Road crossing to Honore AVE	Drainage improvements.	\$1,000,000.00
60		Headwater Creekwood through Tara confluence Evers	Darlin and Incompany	ć4 000 000 0
69	Nonsense Creek	Reservoir	Drainage improvements.	\$1,000,000.00
70	Cedar Drain	Headwater Palm Aire through Mote Ranch to Braden River confluence	Drainago improvements	\$1,000,000.00
		connuence	Drainage improvements.	
	Total			\$105,189,882.0

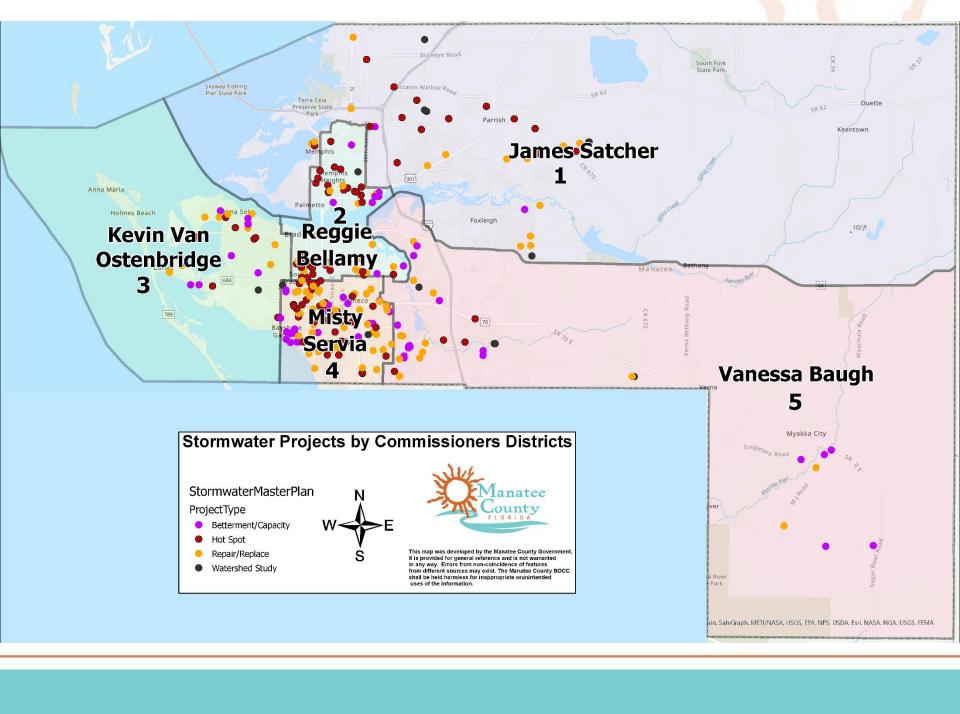
Repair/Replacement Project Name	Location	Project Description	Planning Estimate
1 North Palm Aire	Palm Aire - Various Locations (27 & 28-35-18)	Lining of 2,500 feet of existing pipe	\$547,250.00
2 Tide Vue Estates	Tide Vue Estates - Various Locations (17-34-18)	Lining of 2,250 feet of existing pipe	\$459,500.00
3 Catalina	Catalina - Various Locations (19-34-17)	Replacement of existing valley gutter inlets.	\$330,000.00
4 Bayshore Gardens	Florida Blvd/Bayshore Gardens Pkwy/Bay DR (22-35-17)	Replacement of existing CMP	\$2,324,500.00
5 Pic Town	East of US 41/North of 53rd AV W (11-35-17)	Replacement of existing CMP	\$1,535,000.00
6 Sunniland and North Palm Lake	South of 53rd AVE E/West of 9th ST E (13-35-17)	Replacement of existing CMP	\$1,050,000.00
7 Cortez Village	South of Cortez Road (3-35-16)	Replacement of existing CMP	\$2,500,000.00
8 Sunny Shores	North of Cortez Road (2-35-16)	Replacement of existing CMP	\$2,000,000.00
9Long bay	Long bay Blvd (35-35-17)	Replacement of Culvert Pipe	\$1,500,000.00
1043rd ST	43rd ST W at West Branch Cedar Hammock	Replacement of Culvert Pipe	\$546,000.00
11 MJ Road	NB 2003 (25-36-31)	Replacement of Culvert Pipe	\$550,000.00
12 MJ Road	NB 2034 (35-36-21)	Replacement of Culvert Pipe	\$550,000.00
13John Marble Park	John Marble Park - 3675 53rd AVE E (8-35-18)	Replacement of Culvert Pipe	\$377,600.00
14 Holiday Heights	Cortez Rd South to 53rd AVE W btw 26th St W & 18th St W (10-35-17)	Replacement of Culvert Pipe	\$600,000.00
15 Woods Of Whitfield	From Alderwood DR east to Connecticut AVE (25-35-17)	Replacement of Culvert Pipe	\$750,000.00
16 Brook Side Estates	From Alderwood DR west to Manatee ST (26-35-17)	Replacement of Culvert Pipe	\$800,000.00
17 Whitfield Estates	US 41 west to Westmoreland DR (36-35-17)	Replacement of Culvert Pipe	\$800,000.00
18 Heather Hills Estates	5th ST W east to Canal (11-35-17)	Replacement of Culvert Pipe	\$1,000,000.00
19 Henson Industrial Park	33rd STE west to 28th ST E (17 & 20-35-17)	Replacement of Culvert Pipe	\$400,000.00
20 Orlando Ave/ Tangelo Park	Mineola ST east to 5th ST W (11-35-17)	Replacement of Culvert Pipe	\$350,000.00
21 County Club Heights/ Rosedale	17th Ave W north to Manatee Ave (east of Bradenton Country Club)	Replacement of Culvert Pipe	\$500,000.00
22 Boston Lane	Off Upper Manatee River	Replacement of Culvert Pipe	\$250,000.00
23 Southwood Village	57th Ave W to 58th Ave Dr W	Replacement of Culvert Pipe	\$500,000.00
24 Palmetto Point/Skyway	Finger roads- Palmetto Pt Drive, Arlington, Bay State	Replacement of Culvert Pipe	\$250,000.00
25 Pinewood Village/ patterson Park	65th Ave W to 67th Ave W	Replacement of Culvert Pipe	\$250,000.00
26 Desears/ Pride Park	57th Ave E to 61st Ave E btw 9h St E and 15th St E	Replacement of Culvert Pipe	\$350,000.00
27 Meadow Lakes	15th St E to dead end (north of County pond on 15th)	Replacement of Culvert Pipe	\$250,000.00
28 Marlee Acres	18th St Ct E to 17th St E from Canal Rd to dead end	Replacement of Culvert Pipe	\$250,000.00
293rd ST CT W @ 65th AVE W	(23-35-17)	Replace 420 LF 48" CMP	\$205,800.00
3030th AVE E @ 51st ST E	(03-35-18)	Replace 122 LF 21" RCP & 77 LF 42" CMP	\$52,900.00
31 Bay Drive @ Bayou Lane	(27-35-17)	Replace 255 LF 14"x23" CMP	\$38,560.00
32 Shadowbrook	Btw 44th and 45th Ave E south of 63rd St E (29-33-18)	Replace 193 LF 19"x30" RCP	\$69,888.00
33 Bay DR @ Washington PL (34B)	(22-35-17)	Replace 74 LF 24" CMP	\$12,728.00
3411510 36th AVE W	(02-35-16)	Replace 107 LF 18" RCP	\$11,984.00
35 Between 6528 & 6527 Columbia DR	(22-35-17)	Replace 142 LF 33"x49" CMP	\$40,790.00
36 MJ RD 200 FT S. OF SR 70	(13-36-21)	Replace 40 LF 28"x42" CMP	\$14,800.00
37 MJ RD @ 11055	(13-36-21)	Replace 40 LF 28"x42" CMP	\$14,800.00
3837550 Clay Gully RD	(12-37-21)	Replace 40 LF 28"x42" CMP	\$14,800.00
395215 38th AVE W	(05-35-17)	Replace 310 LF 36" CMP	\$56,030.00
4041215 Clay Gully RD	(09-37-22)	Replace 40 LF 28"x42" CMP	\$14,800.00
412109 Morgan Johnson RD @ Church	(34-34-18)	Replace 40 LF 86" CMP	\$68,000.00
422905 Washington PL	(22-35-17)	Replace 50 LF 18" CMP	\$8,500.00
43 2406 51 ST CT E	(31-33-18)	Replace 120 LF 24"x44" CMP	\$44,400.00
447461 Prospect Road	(29-35-18)	Replace 38 LF 32"x52" CMP	\$17,100.00
13th AVE E btw 60th ST E & Morgan			, , , , , ,
45 Johnson	(34-34-18)	Replace 40 LF 34" CMP	\$14,800.00
46 5115 15th ST CT E	(07-35-18)	Replace 17 LF 24" CMP	\$5,000.00

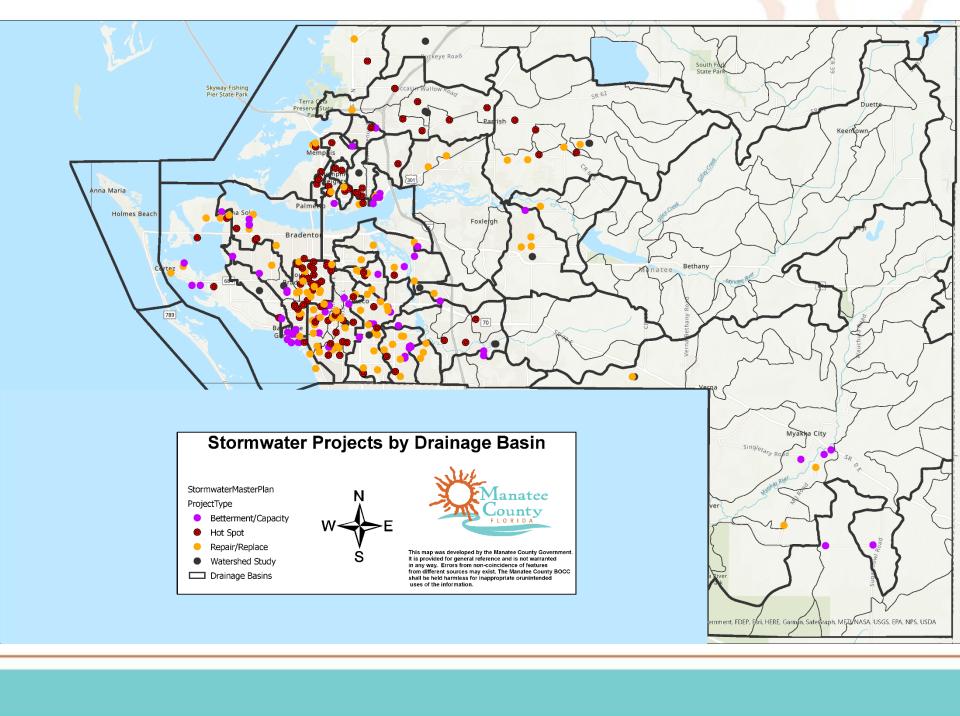
31-34-17) 35-35-17) 22-34-19) 18-35-18) 23-35-17)	Replace 125 LF 15" CMP Replace 358 LF 24"x33" CMP Replace 50 LF 33"x49" CMP Replace 30 LF 18" CMP	\$22,500.00
22-34-19) 18-35-18)	Replace 50 LF 33"x49" CMP	' '
18-35-18)	·	\$22,500.00
	Replace 30 LF 18" CMP	
23-35-17)		\$5,000.00
	Replace 1323 LF 36" CMP	\$529,200.00
16-35-18)	Replace 34 LF 74"x84" CMP	\$67,800.00
14-35-17)	Replace 245 LF 18" CMP	\$18,500.00
18-35-18)	Replace 44 LF 68" CMP	\$74,800.00
19-35-18)	Replace 70 LF 62"x76" CMP	\$119,000.00
10-35-17)	Replace 35 LF 56"x56" CMP	\$59,500.00
27-35-17)	Replace 115 LF 12" CMP	\$16,400.00
16-35-18)	·	\$18,750.00
•	Replace 152 LF 18" RCP	\$35,400.00
	Replace 111 LF 18" CMP	\$15,000.00
•	·	\$100,000.00
•	·	\$43,000.00
•	·	\$75,000.00
•		\$260,000.00
•		\$24,000.00
•	·	\$216,000.00
•		\$163,750.00
•	•	\$102,000.00
, ,		\$100,000.00
		\$60,000.00
		\$62,000.00
	, , , , , , , , , , , , , , , , , , , ,	\$60,000.00
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all I All e/ De30(0 Lakes (27-33-16)	replace 130 Li 13 Civir (nequesteu 2020 Cir)	\$00,000.00
Fidevue Estates (17-34-18)	Replace 673 LF 15" CMP (Requested 2020 CIP)	\$134,600.00
Fidevue Estates (17-34-18)	Replace 120 LF 15" CMP (Requested 2020 CIP)	\$24,000.00
Fidevue Estates (17-34-18)	Replace 675 LF 30" CMP (Requested 2020 CIP)	\$135,000.00
Fidevue Estates (17-34-18)	Replace 600 LF 15" CMP (Requested 2020 CIP)	\$120,000.00
Fido	Dardon FOO LE 2011 CNAD (Dominated 2020 CID)	¢100.000.00
, ,		\$100,000.00
, ,		\$377,600.00
•	·	\$81,750.00
16-35-17)	Replace 1550 LF 18 X29 CMP	\$169,200.00
16-35-17)	Replace 206 LF 30" RCP	\$60,000.00
•	·	\$14,625.00
	·	\$52,275.00
•	·	\$48,470.00
•	·	\$14,625.00
•		\$80,900.00
·	·	\$182,000.00
		\$182,000.00
	·	\$180,000.00
•	•	\$180,000.00
		\$85,000.00
21-33-11	Replace 300 LF 10 CIVIP/CIdy	\$155,000.00
		\$20,000,120.00
	19-35-18) 10-35-17) 27-35-17) 16-35-18) 13-35-17) 13-35-17) 12-35-16) 22-35-17) 23-36-21) 29-34-17) 22-35-17) 22-35-17) 20-35-18) alm Aire/DeSoto Lakes (27-35-18)	19-35-18 Replace 70 LF 62"x76" CMP 19-35-17 Replace 35 LF 56"x56" CMP 17-35-17 Replace 15 LF 12" CMP 16-35-18 Replace 15 LF 15" CMP 16-35-18 Replace 15 LF 15" CMP 16-35-18 Replace 15 LF 15" CMP 18-35-17 Replace 15 LF 18" CMP 18-35-17 Replace 15 LF 18" CMP 18-35-17 Replace 50 LF 30" CMP 12-35-16 Replace 250 LF 30" CMP 12-35-16 Replace 250 LF 30" CMP 12-35-16 Replace 250 LF 30" CMP 12-35-17 Replace 250 LF 24" CMP 18-36-21 Replace 141 LF 2"x43" CMP 18-36-21 Replace 100 LF 27"x43" CMP 18-35-17 Replace 170 LF 27"x43" CMP 18-35-17 Replace 170 LF 27"x43" CMP 18-35-17 Replace 110 LF 36" CMP 18-36-18 Replace 250 LF 21" CMP (Requested 2020 CIP) 18-36-18 Replace 250 LF 30" CMP (Requested 2020 CIP) 18-36-18 Replace 250 LF 30" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-18 Replace 150 LF 15" CMP (Requested 2020 CIP) 18-36-19 Replace 30 LF 36" CMP 18-35-17 Replace 30 LF 36" CMP 18-35-17 Replace 30 LF 36" CMP 18-35-17 Replace 50 LF 36" CMP 18-36-17 Replace 50 LF 36" CMP 18-36-17 Replace 50 LF 36" CMP 18-36-17 Replace 50 LF 36"

4. Total List of Projects

- Watershed Management Plans
 - Total Number = 5
 - Total Cost = \$6,444,850.00
- Betterment/Capacity Improvements
 - *− Total Number* = 70
 - Total Cost = \$105,189,882.00
- Repair/Replacement
 - *− Total Number* = *92*
 - Total Cost = \$26,000,126.00
- All Projects
 - *− Total Number* = *167*
 - Total Cost = \$137,634,858.00







5. List of all our funds, restricted and unrestricted, with explanation

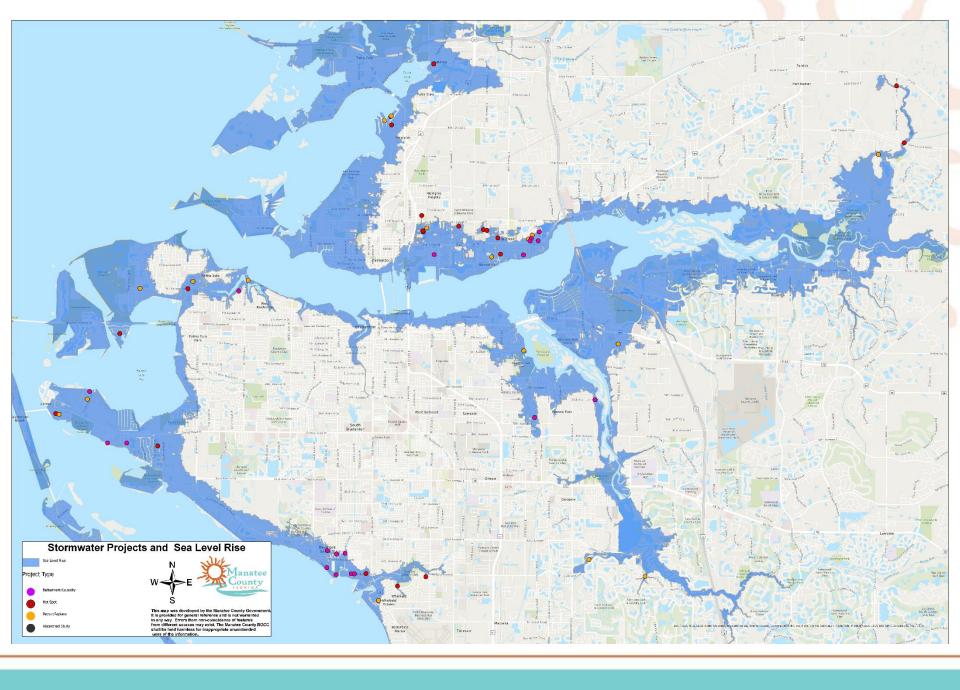
- To be discussed by Financial Management Department (FMD)
- This topic is being accomplished by FMD through the 2022 budget development process



Sea Level Rise Affect

- 56 listed projects/"Hot Spots" are located within inundation area caused by sea level rise to 10 feet elevation.
- Total Cost of affected enhancement projects =\$7,511,062.00





Project Name/Hot Spots	Location	Project Description	Planning Estimate
1 Rattlesnake Slough Improvements	Rattlesnake Slough	Repair/Replace	\$0.00
2 Catalina	Catalina - Various Locations (19-34-17)	Repair/Replace	\$330,000.00
3 6504 Georgia Ave	wc	Betterment/Capacity	\$52,275.00
4 Pipe Replacement	2905 Washington	Betterment/Capacity	\$8,500.00
5 Pipe Replacement	7461 36th St E	Betterment/Capacity	\$17,100.00
6 Gamble Creek Improvements	Gamlble Creek	Repair/Replace	\$0.00
7 Tide Vue Estates	Tide Vue Estates - Various Locations (17-34-18)	Repair/Replace	\$459,500.00
8 Sylvan Oaks	South of 17th ST E (13-34-17)	Repair/Replace	\$500,000.00
9 Highland Shores	Sally Lee to Highland Shores Dr	Repair/Replace	\$500,000.00
10 12th ST CT E from 44th AVE E to 46th AVE E	Tidevue Estates (17-34-18)	Repair/Replace	\$0.00
11 6920 26th St W	WC	Betterment/Capacity	\$16,400.00
12 99th St W @ 46th Ave W	WC	Betterment/Capacity	\$100,000.00
13 61st St NW	WC	Betterment/Capacity	\$260,000.00
14 Rose Ave from 26th St W to Canal	WC	Betterment/Capacity	\$216,000.00
15 Check inlets on both side of street.	Check inlets at address.	Hot Spot	\$0.00
16 Flamingo Dr	Spoonbill Rd W	Hot Spot	\$0.00
17 603 14TH St E	Check inlets in area.	Hot Spot	\$0.00
18 1902 6th Ave W	Check inlets just south of address	Hot Spot	\$0.00
19 1611 18th Ave Dr E	Check inlet at the corner of 17th & 18th Ave Dr.	Hot Spot	\$0.00
20 5119 Baystate Rd	Check inlets at address.	Hot Spot	\$0.00
21 3306 Water St,	Ellenton	Hot Spot	\$0.00
22 N-23	N-23	Hot Spot	\$0.00
23 N-22	N-22	Hot Spot	\$0.00
24 N-62	N-62	Hot Spot	\$0.00
25 N-50	N-50	Hot Spot	\$0.00
26 Palmetto Point/Skyway	Finger roads- Palmetto Pt Drive, Arlington, Bay State	Repair/Replace	\$0.00
27 12th St Ct E from 43rd Ave to 49th Ave	NC	Betterment/Capacity	\$350,675.00

28 11th St Ct E from 43rd Ave to 43rd Ave Dr	NC	Betterment/Capacity	\$350,675.00
29 10th St Ct E from 45th Ave to 46th Ave Dr	NC	Betterment/Capacity	\$350,675.00
30 10th St Ct E from 42nd Ave Dr to 43rd Ave Dr	NC	Betterment/Capacity	\$350,675.00
31 620 Ixora Pl	NC	Betterment/Capacity	\$22,000.00
32 Bay Colony	5203 Bay State Road (35-35-17)	Repair/Replace	\$2,000,000.00
33 Davan Heights	32nd ST E (29-34-18)	Repair/Replace	\$150,000.00
34 W-1	W-1	Hot Spot	\$0.00
35 W-8	W-8	Hot Spot	\$0.00
36 W-53	W-53	Hot Spot	\$0.00
37 W-78	W-78	Hot Spot	\$0.00
38 Cortez Village	Cortez Rd W	Hot Spot	\$0.00
39 Rubonia	All	Hot Spot	\$0.00
40 103rd St Ct W @ Bayview Dr	wc	Betterment/Capacity	\$14,625.00
41 Bay Drive west of Canada Blvd	wc	Betterment/Capacity	\$155,000.00
42 Northwest Bradenton	9th AVE NW @ 92th ST NW to 99th ST NW (24&25-34-16)	Repair/Replace	\$500,000.00
43 Warners Bayou	Riverview Blvd & 59th ST W (20-34-17)	Repair/Replace	\$150,000.00
44 Rattlesnake Slough Bypass	Honore Avenue (22-35-18)	Repair/Replace	\$0.00
45 Morgan Johnson Rd/ Louge connection	From Amberly Drive to SR 64	Repair/Replace	\$500,000.00
46 Cortez Village	South of Cortez Road (3-35-16)	Repair/Replace	\$0.00
47 Sunny Shores	North of Cortez Road (2-35-16)	Repair/Replace	\$0.00
48 Whitfield Estates	Tamiami Trl wet to Westmorland Dr	Repair/Replace	\$0.00
49 Pipe Replacement	30th Ave E @ 51st St E	Betterment/Capacity	\$52,900.00
50 Pipe Replacement	Bay Drive @ Bayou Lane	Betterment/Capacity	\$38,560.00
51 Pipe Replacement	Bay Dr. @ Washington Pl. (34B)	Betterment/Capacity	\$12,728.00
52 Pipe Replacement	11510 36th Ave W	Betterment/Capacity	\$11,984.00
53 Pipe Replacement	Between 6528 & 6527 Columbia Dr	Betterment/Capacity	\$40,790.00
54 N-89	N-89	Hot Spot	\$0.00
55 N-45	N-45	Hot Spot	\$0.00
56 N-92	N-92	Hot Spot	\$0.00

Conclusion

- System grows with new development
- System ages (canals, swales, pipes and roads)
- System fails (metal pipe corrosion, leaking pipe joints, pipe and swale siltation, slope erosion, channel erosion, channel realignment and vegetative blockage)
- Level of Service
 - Required/Desired/Expected



Thank You

Questions?

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