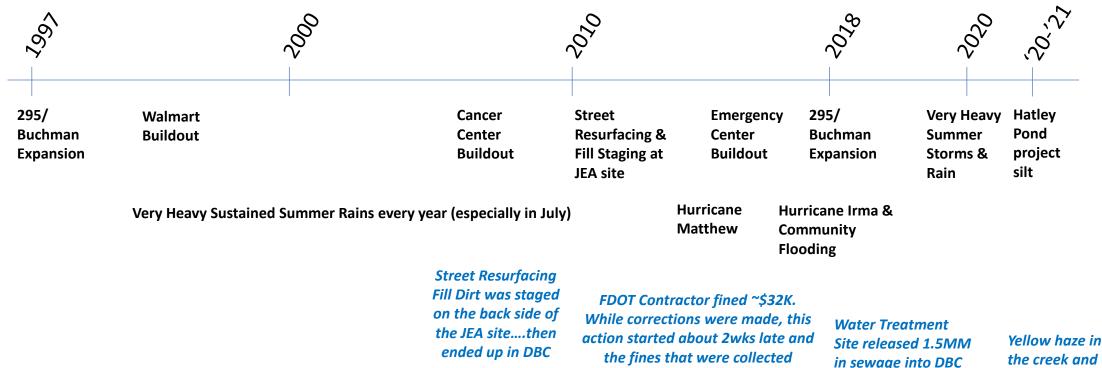
Deep Bottom Creek

Major Fill Dirt and Drainage Impacts Timeline

This is an old ongoing unnatural issue that the residents of the creek did not create, can not control, and should not be responsible for correcting. In every case, upstream project or drain related fill dirt or sewage was pushed into the lower creek and the mouth causing the issues.



9/29/2020 4pm - On Site review with Michael Boylan, Jax City Council

appear to be mis-appropriated (No funds were put into DBC restoration).

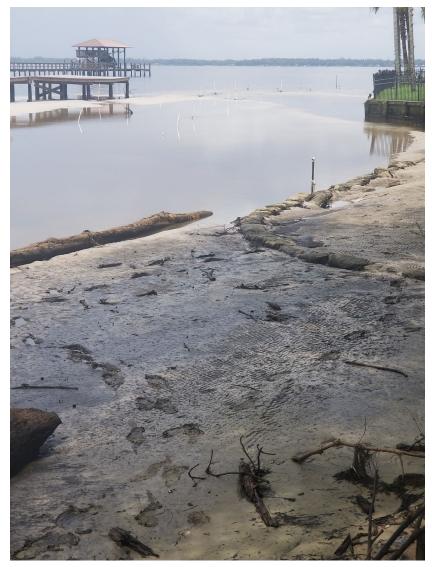
in sewage into DBC adding to the flooding and environmental issues

the creek and then video taped Hartley **Pond pumps** sending the dirt into DBC

Construction Fill dirt clogging the mouth

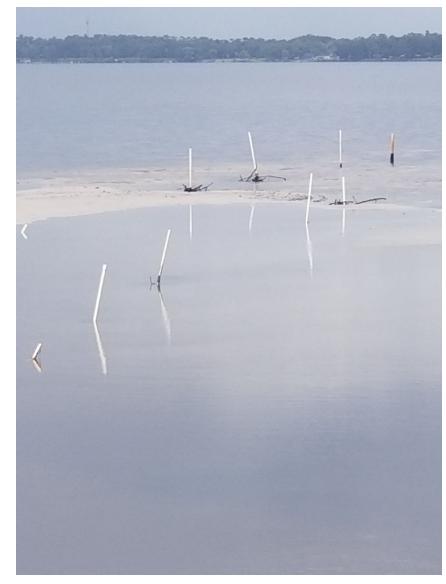


This was not just a small amount of dirt and the damage goes further up stream as well. The fill that has been dumped in DBC over several years could easily fill many large dump trucks. This is yellow construction fill dirt, and not the natural dark mud that all the SJ's creeks have.



Construction fill dirt clogging the mouth





The residents have already spent significant time and money on tactical damage repairs, but those get wiped out each time there is a significant drainage issue.

Sat View – fill dirt clogging the mouth

Current



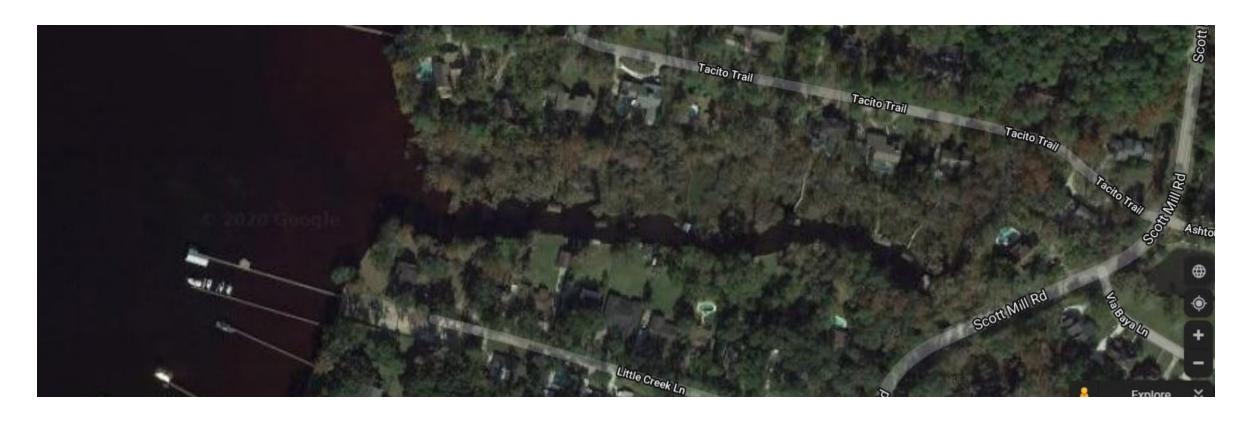
2007

Within the last 15-20 years significant drainage coupled with construction fill dirt mis-management has almost ruined this creek.



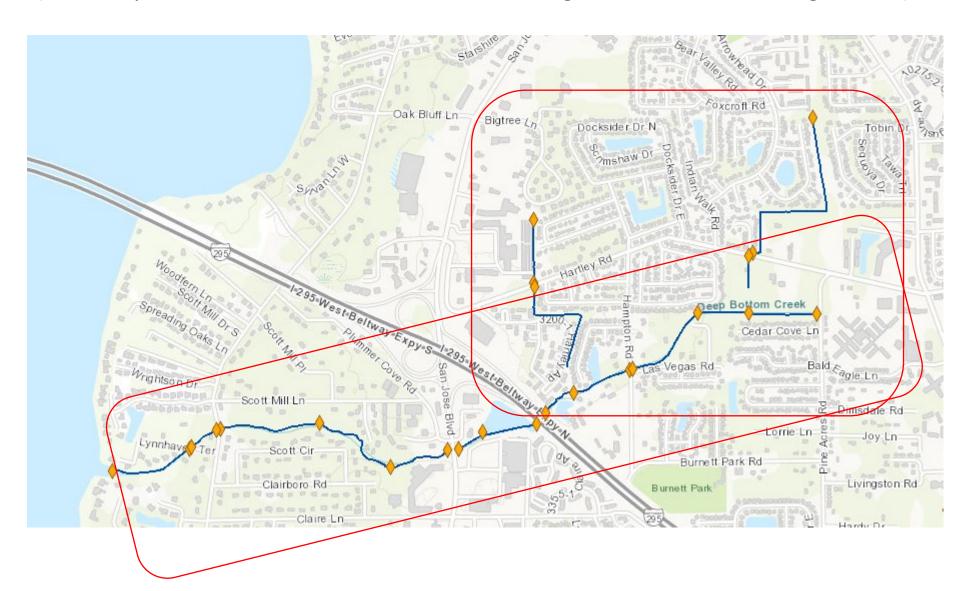
Little Creek – just a couple blocks south of Deep Bottom Creek

Sat View – clear, natural mud bottom, and navigable

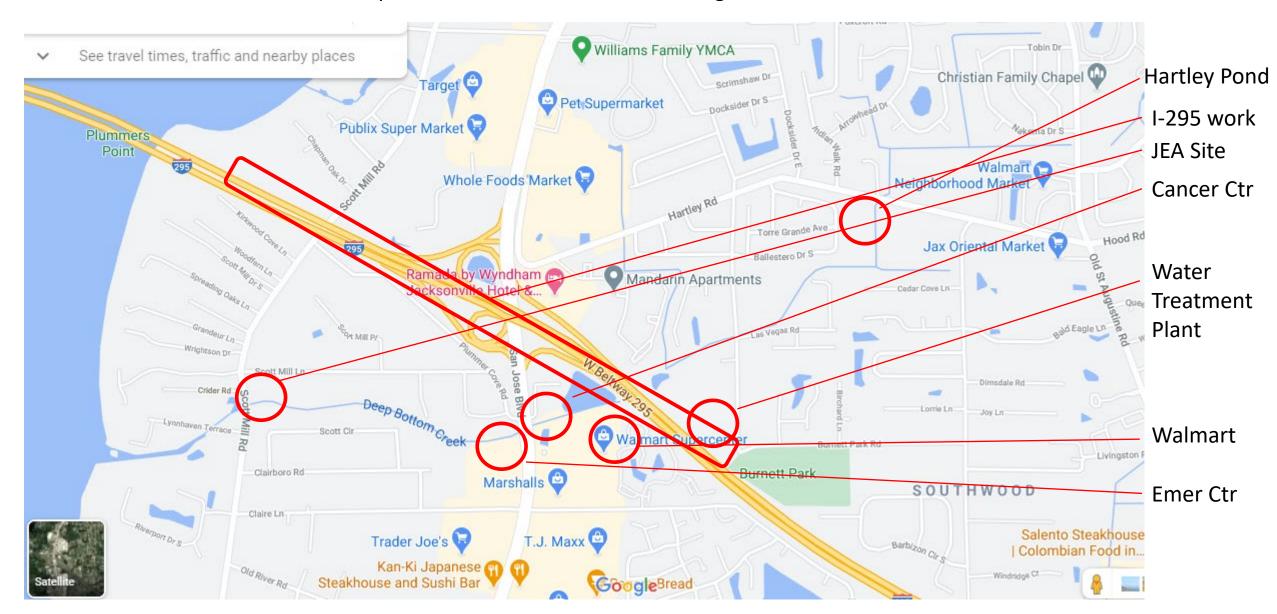


This creek which is near Deep Bottom Creek has shown zero fill dirt issues after well over 10 years highlighting that the drainage volume is less and better managed. This has a natural bottom with dark mud like the rest of the St Johns.

Storm Drainage Map – High Drain demand on this small creek (Chart only shows the main line in blue, all surrounding roads contribute drainage as well)



Area Map – with several fill dirt contributing locations noted



Estuary Environmental & Bacteria Level Neglect over many years

State of the River Report for the Lower St. Johns River Basin

2.6. BACTERIA (FECAL COLIFORM)

Pink indicates tributaries whose exceedances are at least 20 percentage points greater and light blue indicates tributaries whose exceedances are at least 20 percentage points lower when comparing the new criteria to the old criteria.

Fecal bacteria are a significant problem in the tributaries of the LSJRB, and considerable effort is being made to remedy this problem by way of the state TMDL, BMAP, and Source Tracking processes. Many tributaries with elevated fecal bacteria levels have undergone large reductions, which is an encouraging sign. However, despite making large reductions, actual fecal bacteria levels in many tributaries are persistently higher than the current rules for the water quality criteria, and the percent exceedances are very high. Results from the new criteria where *E. coli* and enterococci are analyzed may be showing lower exceedances in some instances compared to the historic fecal coliform criteria. As agencies obtain more data with the new criteria, continue source tracking, and continue to invest in improving sewage infrastructure, our understanding of fecal bacteria in the LSJRB should become clearer, and reductions in this problem should continue to be made.

Tributary	Percent Exceedances: Old and New Criteria Comparison (# Samples exceeding criteria / total number of samples)			
	Old Criteria [Fecal coliform for marine and fresh waters] (Data from Table 2.2A)		New Criteria [Enterococci for marine waters] [E. coli for fresh waters]	
Sherman Creek	Fecal coliform	45% (191/420)	Enterococci	18% (4/22)
Fishing Creek	Fecal coliform	50% (181/364)	E. coli	52% (35/67)
Hopkins Creek	Fecal coliform	71% (251/355)	Enterococci	53% (10/19)
Newcastle Creek	Fecal coliform	71% (135/189)	E. coli	53% (8/15)
Big <u>Eishweir</u> Creek	Fecal coliform	89% (263/296)	E. coli	56% (9/16)
Miramar Creek	Fecal coliform	72% (119/166)	E. coli	62% (8/13)
Hogan Creek	Fecal coliform	80% (218/273)	E. coli	73% (16/22)
Cormorant Branch	Fecal coliform	48% (89/187)	E. coli	73% (16/22)
Miller Creek	Fecal coliform	90% (235/262)	E. coli	100% (18/18)
Deep Bottom Creek	Fecal coliform	75% (145/194)	E. coli	100% (22/22)

This Creek is also a key estuary in this part of the river. The fill dirt blocking the mouth impacts all aquatic life (many varieties of crabs, fish, shrimp, birds, manatee, otters, and many others) that used to thrive as part of the ecosystem in a once healthy tributary. Example: on 7/14/21 a large Manatee almost got stuck on the sand bar trying to exit the Creek after feeding upstream. The bacteria may also be impacting the aquatic life and vice-versa.

Things that need escalation

Again, this is an old ongoing unnatural issue that the residents of the creek did not create, can not control, and should not be responsible for correcting. In every case, upstream project or drain related fill dirt or sewage was pushed into the lower creek and the mouth causing the issues.

We need your help with three huge things for Deep Bottom Creek:

- 1) Immediately escalate and fund the remediation (dredging) to restore the Creek.
- 2) Engage an engineering review of the creeks fill dirt and drainage issues to come up with longer term permanent solutions. When implemented along with dredging, we should be able to avoid these issues in the future.
- 3) Add more rigid controls to any future construction requirements and inspection where they have the potential negative impacts to Deep Bottom Creek like historical construction has.

Deep Bottom Creek – dredging estimate & location

Summary -The project would clean out the fill dirt that has built up and clogged Deep Bottom Creek at the mouth and upstream to the first bridge on Lynnhaven Ter where a barge and excavator can access the creek for dredging. The mouth would get a 20x6ft deep channel at our lowest tides, and up stream would get a 6x8ft deep channel. The mouth channel would be along north side properties seawall straight out the St. Johns and upstream would be in the center to make the flow as efficient as possible and lasting. There may also be a recommendation to dig out a previous catch basin area at the first bend between the mouth and the bridge for sediment capture and removal maintenance.

Deep Bottom Creek Remediation Estimate	\$
Civil Engineering Diag Review	75,000
City DBC drainage governance enhancements	5,000
Remediate High Erosion Areas	TBD
Total Erosion	80,000
Initial hydro survey and permitting	
Dredge and Disposal work	
Post completion inspection and permit closure	
Total Dredging	270,000
Grand Total	350,000



Appendix

August Note

From: alanseabrooke@comcast.net
Sent: Monday, August 10, 2020 2:11 PM

To: Boylan, Michael

Subject: 32223 Storm drainage, roads, and creek issues

Please disregard my last note. I'm not sure what happen in outlook here as it sent an older draft version a few minutes back, but here's the note that I intended to

send.

Mr. Boylan - Can someone please take a look at our areas storm drainage and its related Creek? We used to have a great creek, called deep bottom creek, but this is now full of fill dirt from the storm runoffs and it's become a beach at low tide. As you can imagine, this is extremely bad for drainage, flooding, the environment, and any navigation. Over the last couple weeks storms have taken a huge toll on things. Water is backing up all around this area, up and down Claire lane and other roads, abnormally on everyone's lawns, and the creek ends up becoming a white water rafting mess with all kinds of fill dirt that ends up at a few of the wider points and creates beaches where there were deeper channels. There has literally been tons and tons of dirt pushed into the creek in just a few storms this month. Only a month prior, we had a mother manatee and her baby café way up in this creek eating the vegetation on the sides. Flounders were thriving on the bottom and juvenile mullet were running up and down the length. The old timers even said that Tarpon used to come up and down the creek. None of that is going to happen any time soon. These are just a couple of the environmental impacts so far from this.

We (many residents) have escalated this before to the various groups involved, to no avail. There was never any single resolution effort initiated by any of those entities. This was not what our residents expected from our City officials, but it seemed that a do nothing bureaucracy was alive and well. We're hoping things have changed for the better. Then we had major I-295 construction kick up that was supposed to help with traffic. This construction was actually proven to be negligent and damaging to the creek with runoff dirt. They even ended up fining the construction company. None of this money ever came back to helping repair or restore the creek after the extensive damage. I'm not sure that it's helped the traffic, but it has definitely had an impact on our drainage and creek as noted above and continues to contribute fill dirt making the problems worse.

When Irma came thru a couple years back many of the residents were flooded and these issues were a major contributor to that flooding. We're all restoring things, but have fears that the continued issues are only going to make the next big hurricane and related rains and storm surge much worse for us all no matter how much we prepare.

I think you and your teams should immediately initiate a comprehensive engineering review of the issues and the solutions that can be implemented to bring back proper storm drainage and life to this creek.

Please let me know if you have any questions.

Thanks, Alan Seabrooke 904-962-1362

2016 TU Article

Sediment, construction issues of Deep Bottom Creek

By Tiffanie ReynoldsPosted May 16, 2016 at 5:51 AM



https://www.jacksonville.com/news/metro/2016-05-16/story/sediment-construction-issues-deep-bottom-creek-run-residents-aground

2016 TU Article

By Tiffanie Reynolds Posted May 16, 2016 at 5:51 AM

Frank Peterson has lived by Deep Bottom Creek for 23 years, and last year was the first time his boat stranded on the creek bed.

"I've been actively going up and down the creek for 10 years, fishing it," said Peterson. "Last year, I got stranded several times where I couldn't make it back in at low tide. I mean, it was dry land. I could not drag the boat across it."

Deep Bottom Creek threads through Mandarin, crossing San Jose Boulevard before connecting to the St. Johns River. For years, residents swam in the creek and took boats both big and small out onto the river.

That's changed. Since 2012, Deep Bottom Creek drastically became shallow.

Sand and silt narrow the creek where it connects to the river, building up sand bars along the side and middle of the creek. The water is just high enough for boats to move over the growing sandbars at high tide, but residents say it's a gamble to get back during low tide. Some days the water is so low that people can walk across the creek to reach their neighbors.

Residents blame the increase of sand and silt on recent construction. The worst year was 2015, as Peterson spotted large hoses pumping muddy water out of a nearby retention pond and into the creek. He called several agencies and finally reached the Florida Department of Transportation.

The city of Jacksonville Environmental Protection Board fined Prince Contracting, the construction firm responsible for pumping the muddy water, a civil penalty of \$32,000 later that year, and ordered that someone on site monitor its work. The company's parent, Dragados USA, Inc., stated in a letter to the city's Environmental Quality Division that it will propose an environmental project as a way to reduce the civil penalty.

However, residents are still fighting. They say that nothing still has been done to clean up the creek, and are growing anxious that nothing ever will. They insist the city, Florida Department of Transportation and St. Johns Water Management District dredge the mouth of the creek.

A meeting between District 6 City Councilman Matt Schellenberg, city Environmental Quality Division and St. Johns Water Management District in April is as close as the residents got to an answer.

In that meeting, FDOT proposed to install a gabion weir farther upstream. That's a device to slow the flow of water and amount of sediment from water erosion in the future.

"It could help, but it's not going to be an end-all," said resident Claudia Margolis. "Especially if they don't get out of the creek what doesn't belong right now. It's not going to fix all that and make that dirt move."

David Miracle, regulatory coordinator for the St. Johns Water Management District, agreed. He said sedimentation has been an issue with the creek for a long time. He remembered residents calling with concerns about sedimentation since 1999.

He also said that dredging is costly, and would be determined by who would pay for it. It would take research to figure out who owns different parts of the creek, and money and planning to arrange for a barge to hold the excess sedimentation and transport it to a proper dumping site.

Shellenberg said that he is looking into dredging the creek, but that it won't happen anytime soon. Dredging costs into the \$100,000s, and, with the pension still a large issue, the city currently doesn't have the money to dredge. He said that the residents can also look into public/private partnerships for dredging because that process may be a bit faster.

Miracle said that while the weir won't help the current sedimentation at the mouth of the creek, it can be part of a future solution. The water district has long identified severe erosion on parts of the stream bank as a source of sediment at the mouth of the creek. There's been talk of reinforcing the stream bank at San Jose Boulevard behind former Mandarin Mill and installing a gabion weir there to slow the flow of water and speed of erosion.

However, plans have not been drawn up on the project, and FDOT managers haven't decided if they want to go ahead with the weir.

Meanwhile, people living along Deep Bottom Creek are left to watch the sediment pile up.

Many have stopped taking their boats out to the river.

"They're on the water and some of them have lived there a long time," said Schellenberg. "They remember what it was and what it is now, and it's very discouraging and very frustrating."

Tiffanie Reynolds: (904) 359-4450

2016 CBS

By: Danielle Avitable, Action News Jax Updated:

May 16, 2016 - 11:49 PM It's a problem that's been growing for the past several years. The water level in the Deep Bottom Creek in Mandarin has been slowly going down from sediment buildup and now people who live along the creek say there's no way to even put a boat in the water. "We're paying waterfront property taxes and we don't have waterfront property anymore," Tony Milian said.

When Milian moved into his home along Deep Bottom Creek four years ago he said he would take the boat out all the time, but that isn't a possibility anymore. "That's the most shameful part of it all because (we) all love the water. That's the reason why we live here and we can't use it," Milian said.

Councilman Matt Schellenberg said the sediment buildup started back in 1999 with the water from other tributaries owing into the creek. Construction work on Interstate 295 added to the accumulation. "It will only get worse before it gets better," Schellenberg said. Even though the contractor from the I-295 construction was ned more than \$30,000 for contributing to the problem, Schellenberg said it doesn't come close to covering the hundreds of thousands of dollars needed to dredge the stretch of the creek. "It probably affects almost all of Mandarin because ultimately the water is not free owing and will continue to back up the sediment," he said. Schellenberg said right now, there's no time frame as to when the situation will be xed. He hopes that the half-cent sales tax will be passed so there will be more money in the budget to hopefully set aside to solve the problem.

Sediment buildup causing low water levels in Mandarin creek



2016 FCN

Deep Bottom Creek has bottomed out: Why?

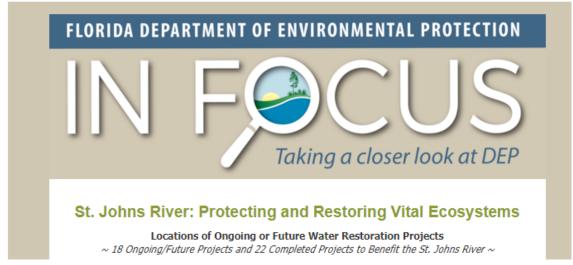
By: Ken Amaro, FCN

JACKSONVILLE, Fla. -- The water is so clear you can stand on the docks and see the bottom of Deep Bottom Creek. But what you're looking at is deceiving. "It is not like it was 100 feet deep, but it was enough that I could get my boat in and out," said Roslyn Karstedt. In November, Karstedt and her family purchased a home on the creek. When they moved in, they were able to use their boat, but not today. "We signed a letter asking the city for help. We don't want anything except our waterway back," she said. Since November, she and her neighbors have watched the creek they love turn into an impassible body of water. There's so much sedimentation, there are sandbars everywhere. "There were Manatees, schools of fish," said Karstedt. "There were birds and wildlife and they're not here. It is hurting the environment that we've come accustomed of seeing." The heavy silt build up in the creek affects about 13 households. "We wanted waterfront property and we wanted access to the river. We don't have it anymore," she said.

And she said there's an impact on property values. "If I can't get watercraft in and out, I've lost \$100,000 to \$250,000 on this property," she said, "and I just bought this home." Residents believe the dirt is from a nearby JEA project. The creek is in Councilman Matt Schellenberg's district. He said that this has been investigated. "They've done analysis and they've come back and said it wasn't from their property right around the corner," he said. Now the Florida Department of Environmental Protection and the St. Johns Water Management District are investigating. "They're now investigating to find out what is the source of the problem," said Schellenberg. Schellenberg said next week, investigators will have an answer; if it is related to a construction issue, they will address that once they know what caused the problem. "It had to come from somewhere," said Karstedt. The residents are not so interested in blaming someone as they are in getting the creek restore to the condition it was nine months ago.

Estuary Environmental & Bacteria Level Neglect over many years

IN FOCUS: TAKING A CLOSER LOOK AT THE ST. JOHNS RIVER



Lower St. Johns River Tributaries I and II

Additionally, BMAPs were adopted in 2009 and 2010 to address bacteria impairments in 25 Lower St. Johns River tributaries. These BMAPs address excess concentrations of bacteria in tributaries that receive stormwater runoff from highly urbanized areas. Trout River (Middle Reach), Newcastle Creek, Deep Bottom Creek and Moncrief Creek are all showing water-quality improvements, with most recent monitoring results demonstrating less frequent fecal coliform criteria exceedances.

This project never addressed Deep Bottom Creek even though we were listed with issues.

Considered Navigable at one time.... No longer...

Jacksonville District Navigable Waters Lists

In Florida, Puerto Rico, and the U.S. Virgin Islands, the U.S. Army Corps of Engineers, Jacksonville District, exercises section 10 (of the Rivers and Harbors Act of 1899) regulatory jurisdiction over the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. Additionally, all or portions of tributaries to the above waters may also be subject to section 10 authority. However, complete lists of all rivers, streams, creeks, ponds, and lakes subject to Corps section 10 authority are not available. Below are lists of waters over which the Jacksonville District currently exercises regulatory jurisdiction under the authority of both section 10 of the Rivers and Harbors Act of 1899 and section 404 of the Clean Water Act on all or a portion of the listed water. The absence of a water on these lists does not mean it or a portion of it is not a navigable water. Likewise, the inclusion of a water on these lists is not meant to imply that the water is subject to section 10 authority in its entirety. All waters subject to the ebb and flow of the tide (tidal action) are navigable waters of the US, and many of the waters listed below have some portion that is subject to the ebb and flow of the tide. Inquiries concerning Department of the Army Permit requirements on these and other tributary streams and lakes not listed below should be submitted on a case-by case basis to the Regulatory Division, Jacksonville District.

The section 10 waters lists (below) from the Jacksonville District were compiled from multiple approved and draft navigability studies conducted during the 1970s and 1980s, and from local knowledge of tidally influenced waters. The District makes no claim that these lists are complete or completely accurate. These lists are for regulatory reference purposes only. They are not a substitute for a jurisdictional determination (JD). It is imperative that you contact the appropriate Regulatory Permit Section for a determination on whether the Corps is able to ascertain if a particular project falls within or outside of section 10 authority.

STATE OF FLORIDA

Rivers and Creeks

Cross Creek

Cross Florida Barge Canal

Crystal River

Cunningham Creek

Cut Creek

Cypress Creek

Danforth Creek

Dania Cut-off canal

Days Creek

Dead River (Kissimmee River)

Dead River (Lake County,

Florida)

Dead River (Wakulla County)

Dean Dead River

DeBlieu Creek

Deep Bottom Creek

Deep Creek