

## JohnBanyasPartI

John Banyas: Yes.

Interviewer: Like I said, john, first today here we're talking to John Banyas in Cortez. It's May 3, about the red tide interviews. And John, we will start to just talking about your -- how'd you get started in fishing and what kind of fishing did you do?

John Banyas: I'm fourth generation fishermen from Cortez and I've been fishing my whole life and listen to a lot of my grandfather's fishing story. So I heard a lot. Been around for 53 years going on 54.

Interviewer: How did you get started?

John Banyas: Listening to my grandfather's fishing stories.

Interviewer: And what kind of fishing did you do in the beginning?

John Banyas: We started in the beginning, gill netting and whole sanding and purse seining.

Interviewer: And today, what do you do?

John Banyas: Today I'm still purse seining, I'm still gill netting in our federal waters and federal areas, and 500 square foot sands where we're living.

Interviewer: Okay. And so, when you think back to the first red tie that you remember, when you're on the water and stuff, what time are we talking? The one that you remember well enough to kind of...

John Banyas: The farthest back?

Interviewer: Yeah.

John Banyas: Well, everybody knows that red tide's been around a while, but it wasn't so common every year. Usually it would be seven or eight or so years before you'd see red tide back again. I remember in elementary school days, when I was 12 or 14, you know, singing off on the beach and other things. So it was, you know, the red tide had been around, but it was spotty. And it didn't seem to last very long and got away for quite a few years.

Interviewer: So what I mean and -- that was when you were a kid and up until what point did you then remember a red tide that you're on the water that had some effect to your fishing?

John Banyas: Well, it really never affected me a great deal until recently. I mean, we've always had a red tie that was affecting an area, but you could usually work around it.

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Interviewer: So if you took one of those markers, could you -- are there specific areas that you remember the patch of red tide that had that he ran across in the past and where did they occurred?

John Banyas: Before the present?

Interviewer: Yeah.

John Banyas: Or a couple of years? Because there's been a red tide every year for the last five or six years.

Interviewer: For the last five or six years.

John Banyas: At least.

Interviewer: But it wasn't...

John Banyas: It's always been and it's affected our mullet fishery for at least five or six years every year.

Interviewer: And I mean, is there particular areas where you saw it?

John Banyas: Yes.

Interviewer: Just take a guess, if you use the red marker, show me where those patches would have been, where it would have shown up.

John Banyas: Okay. So we're going to go here. I'm going to go south because a lot of our fish migrate in the fall of the year from the south and they migrate north as the frogs come through. And so there's just a small select area of red tide in Apache place when they go to migrate and move, they have to go through the red tide. And that is detrimental because you can't get nothing through that patch red tide without them dying. But go into it and within a matter of an hour, they're going to be dead laying on the bottom. And I've had too many fishermen document and look at it and tell me time and time and time again, it's loud now they got up in the red tide, they're down there laying on bottom and then nothing can get up here to us. So you know they will always come through Charlotte Harbor all this stuff down in here, lot of stuff. Then fish come out of this a Punta Gorda Isles, which is up in here. And there's some developments up in here some stuff. But they always try to migrate here and then there would be pockets of red tide in these places here. Even -- should have brought my glasses here. Donna Bay, yeah Venice and here. They given these places and down in to Sarasota Bay, Sewer Line Rocks we call it just -- you know, they get into this area on this eastern shore. Yeah, down in the Venice area and all down through here. They come in through this Pine Island Sound round through here, and they try to travel up through here. And then the fish will come out of here and they got to go this way. And they run into these pockets and they die off before they get here. And we all know the Caloosahatchee River that

that's got their own set of problems. That's a whole another area of the Blackwater and everything coming out of here. So you just got to highlight that because that one's a given.

Interviewer: So that's not necessarily the classic red tide is coming out of there?

John Banyas: Everybody wants to call it what they want. Now we heard from St. Pete the paper the university, what they put in the paper a couple weeks ago. Did you read that article? They're saying as the dwelling coming in from the offshore waters the under current comes and overlays on the top currents and that's what causes the red tide. Well, I have a hard time understanding them because it was coming in here and doing this. Where's it going to be on the beach and why is it in the spot areas when it's doing an overlay of what's going on out here?

Now they probably have a theory of some tide that gets out offshore because there'd be pockets of red tide offshore that are fish dying when there's these spot areas going on. So I don't know how they would correlate it being so far away to say this was caused from the up dwellings that were coming from the offshore. So how does that happen? I don't know.

Interviewer: I thought that was an interesting one.

John Banyas: Yeah. And I mean they just get -- and in a different year, it might be here, might be there, it might be in between here and it might be in between a spot. Everglades this last year was doing pretty good. Yeah, right. And I mean this, from this point south, I mean, you know, everything was from here all the way up here this year. This was kind of the line that was about where I seen good water south.

Interviewer: South of there?

John Banyas: Yeah. We've flew, I mean, I've been flying and doing a lot of looking. I mean, I got an aerial view in my mind of just how bad this particular tide was last year.

Interviewer: So how far out did it come and then how far north did it go would you say?

John Banyas: I looked off here probably 25 miles from this Cape Sable, which is out here. And then I couldn't tell you too much more what was going out. This seemed to be okay. But then they had problems down here where the water quality coming out of below right here, because this comes out of Okeechobee and filters out through here. So as the water is coming this way, this is just what I'm making up the story and it's good to look at it like this perspective. You got something coming out here that everybody's talking about. The water can't get clear. It just blows the light little breeze and it stirs it up. It wasn't like it used to be because it used to be a lot cleaner and more visible and I can't see the bottom like they used to. This is coming from reports from all the guide fishermen here and the and the commercial guys down in the keys, that's kind of what I've been hearing about what's working out this way.

Interviewer: But then, so this line here, this came all the way up?

John Banyas: So this year or last year which was 2018 and we'll go with these have been the pass, you know, which is the majority of -- well let's talk about the past red tides because that's been just as detrimental as to the fishery here and for Cortez bait and seafood as the fish coming up migrating up here to us, and this is a hot mullet area that you're aware of, because a lot of these fish will pull out of these places and work up here and slowly be going offshore to spawn. So when they hit these places they die and that's taken a big percentage of the run out. And not this past year, because it was so crappy because of the red tide we had nothing.

Interviewer: Yeah.

John Banyas: I mean we work twice as hard. I went on the road try to get some fish and I didn't push it too much because I didn't want to even put more of a burden on what was still live there. We needed a few fish but I didn't go crazy to try to produce a bunch of fish, and hopes that they would just go spawn and do what they needed to do and we'd have a better year this year. But...

Interviewer: Did this red tide, this whatever we're going to call it this last year, did it look different than these? Can you describe it what it look like and what...

John Banyas: I'm thinking there was three different types we had. There was a green, there was -- it was like a orange, and there was this white stuff. It was a green, orange, black looking water that was -- there was dead fish in it. I don't know why there was such a -- there was different contrast of the color of the red tide, but there was definitely fish floating out of it.

Interviewer: They are different? Did those colors correspond with any kind of difference in the water and depth or clarity or anything like that that you remember?

John Banyas: Well most of what we were seeing is sometime in later in the season, they'd wanted to stay more offshore, it seemed to want to start and shore. When we were looking at it, it was -- I mean all this area was -- I can just...

Interviewer: Just sketch them...

John Banyas: Just from here, I mean this area that I flew, is this in feet? I really should have brought my glass.

Interviewer: I think it's fathoms.

John Banyas: Is it? Okay. Yeah, I think it would be but I can time it out basically what was going on. I mean this area up here to Sanibel, I mean, we already know the record but I flew this area and I'm just going to lightly take it all the way. It has been all the way

up. This is, I'm not sure I have in my calendar. Yeah. This isn't anywhere around, this was all the way up and it was all the way past. It went all the way over here to Clearwater to Tarpon Spring. It was Tarpon Spring this way and then it cleared up that away.

Interviewer: North of Tarpon Springs?

John Banyas: Yeah.

Interviewer: It was clear?

John Banyas: Mm-hmm, yeah.

Interviewer: Okay.

John Banyas: So this was all just patches of red tide everywhere, and even went out to -- we were out to 17 miles of long boat past here, 17 miles and it was intermediate the whole way all the way down the coast that we were seeing really, really bad places or just places where it's already been and it was just dead, there was no fish and it was brackish brown. Then you would see fresh areas of new blooms around. Yeah.

Interviewer: So what did you guys do?

John Banyas: There's nothing we could do. I went down here off of this line and came on to Everglades and we fished there. This whole summer was wasted because we are catching fish up until typically in July and August. Usually we have enough in inventory. We just kind of let those couple months ago by and try to -- we have to take a vacation or do something else because it's hard, fish are busted up normally so we don't hit it hard. But I finished that on 2018 January, February, March. April was good fish and I built my inventory up. Then I let my guard down not knowing what was going to happen. I should have been fishing those last couple months because after -- well it was in July, we could probably find some dates out somewhere but when I got bad. So I didn't have after July, so I only had my inventory of the spring. I let that month go and then I was ready to go back fishing and the red tide was there and it blew the rest of the year. I had nothing and the mullet season was nothing. So we didn't do nothing. We went in the hole.

Interviewer: What species of fish were you seeing, what kind were dead out there?

John Banyas: There was everything. Well, that's why I was talking with -- I'll let Sarah know where I was seeing redfish, where I wasn't and then we took some clippings for that some, you know, some clippings out of Tampa Bay. Because normally they do a study off of St. Pete that start into September and October, and they tag a lot of redfish and a lot of those fish were dying that was coming out of the bag. There was fish washed up on Egmont Key, redfish for her study that I seen. But even in just floating out longbow past flounder, a grouper eels, you name it, it was dead.

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Interviewer: Big fish, little fish?

John Banyas: Any size.

Interviewer: Any size?

John Banyas: I seen cobia, I would, I surf. You know, I did a lot of looking. There were there was stuff in the bag you wouldn't even think would have been there, big cobia, black grouper, sheepshead. I never knew there were so many eels on the bed. There was eels, tarpon mullet, trout pinfish, grunts. If it was in the water it was dead.

Interviewer: Anything that you didn't see that surprised you that was there?

John Banyas: No. The only thing that lasted a little longer than the rest was the stone crab and then eventually the stone crab die. Because I seen stone crabs floating at *[indiscernible]* [00:15:29]

Interviewer: Oh, really?

John Banyas: Yeah. And you know, when they put their traps over all this out here, they didn't do nothing. You pull 400 traps for three pounds. In the beginning, they were being hopeful put some gear over and it's just don't even bother. And that correlates with the stone crab season being good to the north, because that's where the stone crabs were this year is from Tarpon Springs, Clearwater is the boundary right there. So anywhere about a way, they done really good on stone crabs.

Interviewer: You guys did well?

John Banyas: I did but, you know, we're 60 miles to run to get to any stone crab and we made it happen because we had to make it happen or do nothing. So we're on the fine line of being able to run that far to do anything. So we did catch a few but profitability margin is a little tougher when we flies the distance and flies the distance back and less time to crab. So you know, it's better up that way than you get past the panhandle than we had it start in Port St. Joe, because I've talked to Eugene and Rafael did he had red tide up there in his back, towards the end of our season. So all this was a lost all the way down to this Cape Romando, right in this area. And it would just be blotchy, you know, if it's one week, it'd be hotter here not so hot, but it's already dead and already had been inshore and killed everything inshore, you know, the backwaters. Pine Island, I went and rode around Pine Island two weeks ago, and I was just down there for somebody's birthday, whatever. We spent the weekend down there and some shallow water, little jet boats. We were running around looking. I've seen snook and stuff I didn't see any big amounts of any mullet that was hanging around. The other was...

Interviewer: This is two weeks ago?

John Banyas: This was only -- it's probably like three weeks ago now.

Interviewer: So I mean then that's my other question is, have you seen any recovery in these areas and stuff?

John Banyas: I've seen spotty recovery. Fish were kind of anywhere around the end where they kind of pushed up in the back. They were killing a lot of fish, a lot of fish pushed up in the head of the day and it didn't kill everything all the way up. I've been seeing a lot of fish is pushed up in these little creeks and back waters and stuff, were trying to survive. There's little pockets alive here and there. But you don't see it everywhere. So it's going to be a slow recovery in my mind.

Interviewer: Any particular species coming back higher than the others?

John Banyas: I've seen -- I can't say. I think it all just kind of comes back at a slow rate, just about every species. And in Palma Sola, I've seen redbfish, I've seen snook, I've seen mullet. Surprisingly it looked good in a little area to the north here but that was -- we're on the end of our boundary here so it was something good but I wanted to see more fish down here in Pine Island because I didn't -- I thought it would be looking better than it did. And I don't know from Fort Myers south there's not a lot of back country so I don't know too much what's going on there other than what the bait fishes out there.

Interviewer: Yes and you're boat's down there now?

John Banyas: I have a boat in Fort Myers fishing this area up here quite a bit and that's -- there's bait, you know, all back down this way. The water doesn't clear up as much here so it takes 12 to 15 days after a front for things to lay down where you can really tell what you got. So I suspect there's good fishing back down this way. This up here I don't know about. I haven't seen a whole lot in our typical fishing grounds right here. I do know Wade and Lightman was crab and picking up gear to the north where they typically been. And he went to report it was -- he was off of Tarpon Springs and he went up there today to look for some date to see what he might be able to do.

Interviewer: So the way that you adapt is you have to travel far and you fish less days and so you're...

John Banyas: When we're fishing -- we're fishing the weather right now because the weather dictate it because we have a front. It blows 20, it muddies the water up, you wait three to four days for it to clear up and then you get two days to look while it's clear. And then you get another front. So that messes you up for three days. So then you got to wait on another better weather pattern, which we've had for four to five days now. So it's looking good. The weather looks typically good coming up here for a while to really survey things and look things off and see what's going on.

Interviewer: So you grew up with the pilot...



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John Banyas: I do quite a bit. You know, he's fishing one boat here out of Cortez while one boats in Fort Myers.

Interviewer: Yeah. Okay.

John Banyas: So he's looking up here and I'll probably, you know, if he see something. I'm kind of waiting on the word to see what he's looking at today. He'll probably back and then I'll see what was going on up that way as far as thread hair and fisheries going. And, you know, we're fishing offshore more. Typically, I don't have a, you know, all our nets, we fish inside a 40 foot. Now we can get up to 90 foot because that's all I got. And that's the only clean water there is.

Interviewer: Will your nets go down the bottom?

John Banyas: Yes, I've had to build another net. I built another net to try to fish a little deeper water.

Interviewer: And so I was going to say that's another way you've had to adapt as you build bigger net so you can go out to deeper water and something would love that or spend some...

John Banyas: Yes. Just a little more depth to them so you can 10 bomb without any longer. They're just a little deeper so you can get off because I had to fish beyond 17 miles.

Interviewer: Okay. Got it. Is there anything that management can do to help you in this process to kind of -- in anticipation of the red tide? I mean so what can management do to help?

John Banyas: Well, like I said in the beginning, if we know there's going to be a red tide and it's working into an area where we know there's a body of fish. Let us try to fish that area because Sarasota County has a seven-mile law you can't be at three miles. It's three miles is the state law. And then there was a county ordinance in Sarasota County where you had to be seven miles offshore. So it took that area out and there was a lot of fish there and they -- what are they going to do, sit there and die. At least let us go to the three mile line in that town. I mean...

Interviewer: It will save a lot of fish from washing up on the beach?

John Banyas: Right, right. So I mean, I can just -- do something and something worse. Then it's got to right here. So Sarasota would be right here. Yeah, Sarasota County goes to something like this. And you can't do nothing and then, you know, it gets squishy. Did I answer this one?

Interviewer: Sure. Let's stop.



John Banyas: Hey, Jim.

[Tape paused.]

Interviewee: My theory is of why it's happening as we've got the Up dwelling from the offshore waters. They're probably right about that from stuff that's happening off shore. But you have an inshore problem that's coming from these estuaries because it's pinpoints things too much in the same areas all the time like I talked about these areas be in the last five or six years. There is always present, it's always there.

The municipalities that are dumping the treated wastewater that I see dead fish coming from all the time. That you can go down and see all just use Manatee County for an example. I'm not trying to say it's all Manatee County's fault. But it happens in just about every county down the coast. So you can go right here out into our kitchen flat and I just happen to live right up in the head of the kitchen in most of the morning there's a trench where it comes from the municipalities and runs off there and the seagulls are packed in the dead fish from the runoff water that's going on in the day. You got your dead pinfish, you're dead little glass minnows.

And you see the water quality turned to a light brown color. It's not anything that's supposed to be there and it's – but treated waste water. So I'm sure under the regulations. It's good to dump. But you got an overpopulation people come in with too much sewer for them to handle the treat. So what are they going to do with it. You got to be able to either filter it to a cleaner source or do something else with to continue to keep dump in the barrier looking at more of the same problem.

I'm not saying it's all sewer from the municipalities. It's a problem. [00:02:00] I think everything is the added problem to it. I've seen the guys with the green yards out there streaking fertilizer. He's only 10 feet away from a sea wall is out there spring with the hose and he's got slickers and boots and gloves on. I mean it's – you see the drain at the county puts there. This is our estuary system do not dump anything on it. But we've got somebody with an inch-and-a-half hose out there spraying green to keep their grass grown.

Is that the whole problem maybe not as a part of it maybe the treated wastewater maybe the just the everything accumulating to it. And it happens finally all the way down where you get your heavy populated areas, when you move into another county where there's a different area with a little bit different problem. You got the Hatchie River in the [indiscernible] [00:02:53]. I don't know what's going on here. But there's certainly something to be said to because you'll have dead fish just pouring out when they open the locks. It just a kills everything in the river in. That's what you got.

Interviewer: So all of this what you've seen over the past few years is it changing in terms of intensity, duration or anything like that I mean have you seen. Do you notice that?

Interviewee: The duration is definitely. I'm saying that every year now and I anticipate it being back this year. I've almost half the bet on there be in a red tide in my business down because of I don't know adapt to it. And it blind sides you as a 100% wiped out for the west coast like it did to us in 2018. You got to be ready for it, so.

Interviewer: So what you're going to do?

Interviewee: So, well, I happened to think that it's coming I don't know it and hopefully I'm wrong. [00:04:00] But I'm preparing for more red tide this summer. And have to work around it. I don't know what else I'm going to be able to do because it's been there last five or six years and spotty durations with fish trying to swim through it and it kills them.

Interviewer: Yeah. Okay.

Interviewee: So either I got to go. I got to work around it. I don't know I think it's fair to put any more pressure on the fisheries because it's not the fisheries fault.

Interviewer: Right.

Interviewee: The fisheries, they will listen to the fishermen right. They need a sound fishery to survive and that's what they want. It's always been declining not because they're over fishing it, its because of the water qualities not there to sustain the fishery. It's not because the fishermen are over catching, we've been catching our bait fish here for years and years in a very small area just off of Anna Maria and St. Pete out the three to seven miles.

You know, Manatee and Pinellas County for all of our boats we haven't – we fish three to seven miles. So three, four, five, six, seven miles you're only talking five mile wide strip by two counties. We were able to produce enough bay fishery for the whole state. There's been that little strip of area and one strip of area off of Port St. Joe where the Raphael's fish there's one fishery up there and there's one fishery here in Cortez and we've been able to produce all that within a five mile wide by two county long area for years.

Interviewer: I didn't realize. There's no big guys down there.

Interviewee: There is no big guys down there.

Interviewer: Well, that's incredible.

Interviewee: Right, so our only good area, this is I mean this is I'll just outline where we fish. It just goes a little bit off the map here, but we were from up three miles to the seven miles and went a St. Pete. So we were just the strip right here. And this goes down along the path – and runs into this line right here. So this was it.

Interviewer: Okay. Yeah.

Interviewee: That was it. That was our only fishing area for Cortez right there.

Interviewer: Really.

Interviewee: Yeah. We caught all our fish in there and only had to do it in the spring and a little bit in the fall before the mullet season. And there was only four boats. We got way light and toasties fishing here now and they might have a little bit area and then my two [indiscernible] [00:06:48].

Interviewer: That was it.

Interviewee: That's the only fishing grounds right there. That we got all that day. And what do you do with all this in here. And further to the north, so.

Interviewer: Was there anything that we haven't talked about that you think some important on this whole topic?

Interviewee: Well, it's all important to me. I appreciate your time.

Interviewer: Yeah. I mean if we missed anything that you think should be brought up.

Interviewee: Well, what are we going to do? What's the plan? What is the state's plan? What's NOAA's plan? What is NOAA want to do? Who are they going to cut back? Who are they going to let finish first? Who are they going to blame?

Interviewer: Right. Well, it's a good question I think that's kind of what we're trying to get at is if we can get this laid out and this is what's happening out there and this is what's the fisherman saying and this is the problem for them. And then people will start to think well how can or some of – what are some of the solutions and like you said that article that came out I thought was very interesting as well. That maybe where it starts, [00:08:00] but that doesn't explain all this stuff.

Interviewee: That doesn't set it off in these different - water quality is killing something to the bacterial level that. I don't know what they want to call it. If there's different types of red tide that's coming from these upwelling off shore. When I was at the FWC meeting that had a whole thing was part of their agenda the red tide and the dwellings come from the offshore waters mixed in with the top and come back around and pick this up off the bottom and that's all fine and well, when it is probably true for these offshore waters.

Interviewer: Yeah.

Interviewee: But there was a gap between what's happening inshore and there's a gap between what's happening now offshore.

Interviewer: Yeah.

Interviewee: So it doesn't look good. I don't know what's going on past the Panhandle of Florida out that way I don't know. What's going on, but why is it worse I mean we know it's been there, you know, it's been documented to 17, 1800 or whatever or back a good long ways to the back in the –

Interviewer: Yeah. That's been a matter of time.

Interviewee: 1920 it's not stuff. But is bad there was a lot of fish around, so you take one of these little spots right here and you kill heavy concentration of fish, but there is going to be bad. It's going to smell, it's going to be nasty, it's going to look like big and bad and ugly. But you might have those real bad sea only I remember, but when we have a few fishermen in Cortez saying that back in 1921, we had a real bad red tide and it could have just been a 20 mile radius around Cortez and would have been found the rest the way down the shore line.

Interviewer: Right.

Interviewee: We don't know how widespread it was back in the early 1900s.

Interviewer: Right, yeah. That's right.

Interviewee: [00:10:00] So I don't know I mean we have on the east coast like he stayed relatively clear all last year.

Interviewer: Guys and [indiscernible] [00:10:12]. Did they say anything about there?

Interviewee: I don't think they did.

Interviewer: This water came out, but it didn't stand up to that far.

Interviewee: Right, and as far as the red tide reports that you'll see from FWC or than now or whatever if we they didn't really show it there, you can keep up with kind of some things that was going on and then on the East Coast late in the year something showed up over there.

Interviewer: Was there anything about the reporting the testing that they're doing, I mean you guys get to red tide reports from them from already.

Interviewee: Yeah. You can picked up on your phone and see what it is and it's pretty accurate because their check in what they're saying but it's really more widespread than what they're saying because they won't see these offshore places so much that I was --

Interviewer: Okay.

Interviewee: -- Pinpoints I'm looking at it from 4,000 feet and seeing how big it is and it's going a little further offshore where they're showing up, but there it's maybe more widespread. From where they're just doing their water when whatever their water samples are like say that it's detected and it's true and that's where it is. But if they go more places they would find more detection, it's --

Interviewer: What about if you guys when you're up there. We had a reporting system that you could report and give it to them and with that help me. It gives there with --

Interviewee: I think we're flying to --

Interviewer: They're flying to.

Interviewee: They take aerial surveys from time to time to.

Interviewer: [Indiscernible] [00:11:41].

Interviewee: Yeah. I don't mind sharing information and if somebody wants to call and talk me see what that's we fly four, five days a week, four or five hours a day. We've been turn and burn and hard to try to [00:12:00] way got to keep fishery going because you have your sales, you have your customers and there we want to keep that going. You don't want to lose it.

Interviewer: Yeah.

Interviewee: So that's what I'm fishing so hard to get one so far to try to keep it together.

Interviewer: Do your -- do fish either the man in Florida when [indiscernible] [00:12:17].

Interviewee: It's mainly Florida.

Interviewer: Is it really?

Interviewee: A little bit in the Panhandle maybe a little in the Carolinas, but --

Interviewer: Mainly?

Interviewee: Right now everybody's doing without so the markets are local.

Interviewer: I mean.

Interviewee: I mean we have the most of the keys in the Miami Lauderdale in the West Coast and many further that. We don't have any markets there it's all stays in that state.

Interviewer: So that's all I got. Is there any other environmental changes up to you seen other than retired or something is anything else that's hard or anything you see in there doesn't seem to maybe not be called red tide or something else that you see?

Interviewee: I can't really say that I've seen anything out of the ordinary other than what's been there you see these treated waste water pipes coming up out of the water that you see for when out of the water in the way. There's one up in Tennessee, Tampa Bay, you know the one in Manatee County just runs through the ditches and runs out of the bay. But I'm just saying we got to clean the water quality up to get a better handle on it and the growth in population is out over doing or water quality efforts fine so.

Interviewer: Like it's going to be slowing down anytime.

Interviewee: Right, I don't know put filters on the train lines going into the way, you got a 36 inch pipe that's coming off the streets going into the bay put something.

Interviewer: Yeah.

Interviewee: Filter it [00:14:00] soft anything a little bit more than what we're doing.

Interviewer: That's all the question I got, Christina anything that you.

Christina: I think you kind of asked about that if you saw any indication like red tide was happening but I don't know for you opt out that.

Interviewer: Figures or anything like that and you could tell them. So it's kind of settle off or anything like that.

Interviewee: These body places that are up along the backwaters is the run off.

Interviewer: Just that you see that's what you're explaining –

Interviewee: Yes.

Interviewer: -- that and that's where it's going to happen.

Interviewee: Yeah.

Interviewer: That's what's going to happen.

Interviewee: Yeah. I mean in Sarasota and [indiscernible] [00:14:40] Sarasota county needing pretty much predict because you see the water now you got the green algae which is a film like coats the bottom. So it's already surviving on some kind of bacteria and when it grows something's happened it's not the clean heel grass that you're used to seeing and that's mothered out some of our heel grass this year. The green algae was so

thick it's mothered the grass and when it cleared algae scene was the white sandy bottom with no grass. So we kill the sea grass, yeah.

So I don't know got to get some cleaning the allergy up as it's growing. Filter clean the bottom clean the water. I don't know the exact answer what's mothering take on and now we're going to go back and say okay. Dr. Crosby which I met him in Sarasota and he is [indiscernible] [00:15:42] of the whole story and I haven't talked to them I mean five months or better.

Interviewer: Did they meeting about red tide on there?

Interviewee: Yes.

Interviewer: Okay.

Interviewee: Do you know Dr. Crosby.

Interviewer: I don't know, no, no. But I've heard of him, okay.

Interviewee: [00:16:00] He'd like my theory of filters in the pay over these drain because you got a 24, 36 inch pipe I mean but a clamp over and put something never does filter and threw there. It could be something we've got state dollars to go somewhere. We put a sock over the end of a drain pipe and you change it once a month.

Interviewer: They had in Gainesville Lake Alice safe there is experiment they got to so set up or that comes out into this drain Jerry, but it's looks part of like all its grew marshy area. It's a huge marsh that's supposed to the water sports to run through that and that treats at them before it gets into the lake and then the deep well inject it. But I don't know maybe that's something that they need to build where the stuff is gone.

Interviewee: Yeah. It was treated what it'd be better to go on the ground in our estuaries where the fish stocks are survive.

Interviewer: Yeah. Yeah.

Interviewee: There's not a good place for to go regardless. But where is the better of the two.

Interviewer: Yeah.

Interviewee: You don't want to dump put in our estuaries in your backyard.

Interviewer: Yeah.

Interviewee: And the deep well injection has a filtration system maybe underground that would might do it which wouldn't get into our aquifers.



Interviewer: Yeah.

Interviewee: For other wells and stuff, so. That's all got to be looked up, but that's try to get it out of the base I mean it's a direct. I mean it's bad enough you got your road runoff water without the municipalities putting the treated wastewater to add to it.

Interviewer: Yeah.

Interviewee: So start with the percentage or something doing some that we keep going we've this kind of – and that's just going to get worse. And help run on.

Interviewer: Yeah, yeah. Right.

Interviewee: I just that's what I'm saying and that's my prediction. And let's see today is the May or just get on May, June one more month is [00:18:00] July it's certainly heating up.

Interviewer: It should start again, yeah.

Interviewee: And that's when it started last year.

Interviewer: Yeah. We'll see soon.

Interviewee: Hopefully and we have so many fish around prior to that one too. It was looking really good because there was lots of fish everywhere I mean what just the commercial fisherman, the guy fisherman's, the [indiscernible] [00:18:20] that was around the smoke and just everything was looking real good. Then this whole area down here talking to people in Pine Island around though Killian places there was a lot of fish and they all died.

Interviewer: That's all I gone.

Interviewee: Uh-huh.

Interviewer: I appreciate and take your time.

Interviewee: Yeah. I appreciate it just going for it. I'm glad I finally got- I can cross that off my list.

Interviewer: Yeah.

Interviewee: I don't know who she talked about you or you or somebody she –