Joe Croke: It's Croke, Joe Croke CROKE.

Male Interviewer 1: So today, we're talking with Joe Croke in Cortez, Florida about red tide. And Joe, I want you to start out by just giving a little background on your history in fishing when you started and what kind would you used to fish with. So, could you just talk a little bit about that?

Joe Croke: I started fishing in 2008, kind of retired fishing. And that's what I've been doing. And, I've had some other - I've found a lot of businesses in my life.

Male Interviewer 1: Okay.

Joe Croke: And, I would normally go out, and we usually fish one to two days a week, is what it is. We don't fish long lines or anything like that. So we just got catching grouper.

Male Interviewer 1: What kind of gear?

Joe Croke: We use, in short, we use rods and reels and then if we go out deep we'll use our electric rods and reels.

Male Interviewer 1: Okay.

Joe Croke: So.

Male Interviewer 1: And, you say you're fishing for grouper, any others?

Joe Croke: Groupers, snapper, just anything like that. Mainly your bottom fish.

Male Interviewer 1: Okay.

Joe Croke: Yeah.

Male Interviewer 1: How did you learn, who taught you to fish?

Joe Croke: I grew up right on the beach in West Palm Beach. That's where I born in Florida here in West Palm Beach. And with my dad and my friends, we would just go fishing all the time. And then to be honest, in 2008, I had one of my boats I wanted to write it off for taxes. So I just got some fishing licenses. And, lo and behold, they never lost money which they were supposed to do. And they just kept making money and I got sick a few years ago and sold my businesses and I've just been fishing since then.

Male Interviewer 1: Okay. And how long you've been in Cortez? Was it 2008?

Joe Croke: No, no, it wasn't 2008. That was up in Indian Rocks Beach.

Male Interviewer 1: Okay.

Joe Croke: It's been about five years, I'd say.

Male Interviewer 1: Five years?

Joe Croke: Yeah, something like that.

Male Interviewer 1: So, what we'd like to talk about and we call it red tide, but there could be whatever water change [00:02:00] that you've seen, but we'd kind of want to go back since in 2007. Anything prior to last year that you remember any kind of water change, quality red tide, anything prior to that?

Joe Croke: You know what, the red tides that I remember were just very small. And you would hear that if they were on the beach or something for a day or two and they were gone. But I don't remember any red ties where I saw lots of fish killed like this last year.

Male Interviewer 1: Okay.

Joe Croke: Nothing like that.

Male Interviewer 1: Yeah. So, if you looked at this map, and could you draw on there the extent of where you remember the red tide occurring?

Joe Croke: The old one or from last year?

Male Interviewer 1: The old one. First would be if you can. And, do you know approximately what year that was?

Joe Croke: They've had it and Sarasota, it seems like this's been in Sarasota along the beaches there every year, but it's just right on the beach is all you hear about it. I don't – I've not seen it in the bay or I've not seen anything in the last five years down here at all.

Male Interviewer 1: Okay.

Joe Croke: No, nothing other than this last year.

Male Interviewer 1: Okay. So then let's go to the last year.

Joe Croke: Okay.

Male Interviewer 1: And, can you draw on that map extend from what you...

Joe Croke: Yes. All right. How do you want me to do this?

Male Interviewer 1: Just write one of those.

Joe Croke: I know, but, where to go, okay, so here we are right here.

Male Interviewer 1: Yeah.

Joe Croke: We're right here. Okay, we're right there.

Male Interviewer 1: Because this is Anna Marie, I want that.

Joe Croke: Oh, yeah. No, we're right there. That's we're right there. Okay. So I would be talking from here up to the, just straight up to St. Pete beach, basically.

Male Interviewer 1: St. Pete beach?

Joe Croke: Right. So how do you want me to, I mean, but...

Male Interviewer 1: This is about, just...

Joe Croke: Like, but what about Edward? Because Edward, I didn't see it, but I sure did notice it, but I didn't see it. But in close, you could see all the dead and smell the water.

Male Interviewer 1: So, what do you mean you notice this? And if you...

Joe Croke: The fish are gone. I mean, anyway, just gone.

Male Interviewer 1: Well, no, that would be part of that.

Joe Croke: Okay.

Male Interviewer 1: Or out how far out do you think it went?

Joe Croke: Let's look at to about 60 feet of water, which is going to be, okay, let's look at the bottoms on this map. Is that a feet [00:04:00] alright, five times. So...

Male Interviewer 1: The blue point you're marking is 60 feet?

Joe Croke: Yeah.

Male Interviewer 1: This is 60?

Male Interviewer 2: Yeah, that's 60.

Joe Croke: All right. Okay, so I would go from here up to here. So that's where you want to draw?

Male Interviewer 1: Yeah.

Joe Croke: Because that's exactly where it really affected everything. Right? Like that.

Male Interviewer 1: Okay.

Joe Croke: Here we go.

Male Interviewer 1: And, but you said it was also up in...

Joe Croke: Yeah, I can't draw because it doesn't go.

Female Interviewer 1: Up to St. Pete beach?

Male Interviewer 1: Up to St. Pete beach?

Joe Croke: Maybe to the bridge. And I guess the tide bought it. And it made it to the mouth of the Manatee River. And that, it was a lot of rainy that time too, so it didn't make it up those. I know that from stone crab and you could just tell the difference.

Male Interviewer 1: Okay.

Female Interviewer: So it's an error, maybe?

Joe Croke: Maybe it's an error, of course.

Female Interviewer: Of course.

Joe Croke: Yeah just like that.

Female Interviewer: Like around?

Joe Croke: Yeah, there you go.

Female Interviewer: I don't know.

Male Interviewer 1: [overlapping conversation]

Joe Croke: I'm sorry, it's, yeah, some sort of *[overlapping conversation]*. Yeah, the sky [indiscernible] [00:04:57]

Male Interviewer 1: It doesn't happen to that [indiscernible] [00:05:01].

Joe Croke: And, it really affected the stone crabs. It just wiped them out.

Male Interviewer 1: How long do you think it's been? I mean, from when did it start? Did you really notice it? And do you have an idea about just a general idea of how long it lasted?

Joe Croke: You know, I wasn't prepared to think about that. [Laughter]

Male Interviewer 1: Well, this is just, you know, we can't...

Joe Croke: I just remember it being most of last year, I mean, most of the year of 2018.

Male Interviewer 1: Okay.

Joe Croke: But I don't remember exactly. Just I know it was before, obviously, before October, because the stone crabs were wiped out. And then, in the middle of stone crabbing, which would have been probably November, December, some of them came out of the mud and there was a little bit of crabs coming out that you could tell because of their color that they were hiding or vegetating or whatever they do.

Male Interviewer 1: We just stone crab in the mud?

Joe Croke: Yeah.

Male Interviewer 1: Okay.

Joe Croke: Well, I did some this year, but it wasn't very good [00:06:00] compared to the normal years because the red tide wiped them a lot. I mean, there was none on the beach. There's not. We did some in the bay. That was the only place we could do it. And we could kind of sort of tell where it was. Because where we started to catch the crabs is where the red tide was gone, wasn't there.

Male Interviewer 1: Yeah.

Joe Croke: Yeah, so you could tell where it was. If it was there, they weren't there.

Male Interviewer 1: What did it look like?

Joe Croke: The red tide? Brown, like brown soup.

Male Interviewer 1: Brown soup?

Joe Croke: I mean, brown soup, like really thick brown soup is what it looked like.

Male Interviewer 1: Could you smell it on the water when you were in?

Joe Croke: Yes, you could smell it on land and the water, it was bad. Like I say, it killed the barnacles on the boat. I've never seen that. Yeah, kill the barnacles under the boat. I've never seen that in my life.

Male Interviewer 1: Did you – before it came, did you see any clue? Did you have any clues that it was going to come?

Joe Croke: No, the water was nice and clear. And the water is generally nice and clear down here, nice and clear. And then it just, you heard that, you heard it was down in Venice really bad. And, I saw it there Venice too, just my family lives down there. So I saw it and you could smell it was terrible. But you didn't think it was coming here and then when it got here, you know, the news was telling me and they were right. It was here. It came fast.

Male Interviewer 1: So how did it change your fishing?

Joe Croke: It made it pretty much nonexistent. It ruined our fishing. I don't fish long trips usually just overnight. You know, our boat can't handle all that. And so, a lot of our fishing was from here to 20 miles out or so. And we could catch a lot of, in winter was like really good time because I had a lot of great grouper in very shallow water here. They weren't there. All the – when we really couldn't catch the grouper, then with catching tremendous amount of grunts or lane snappers things like that. And they're gone. Everything's gone. We catch the mangroves. They're all – they weren't there. It was just dead [00:08:00]. Everything's dead. There was no bait fish. There was no nothing.

Male Interviewer 1: So did you...

Joe Croke: There's a lot of dead floating fish.

Male Interviewer 1: Yeah. Did you then try to go further out?

Joe Croke: Yeah, well, I've always gone further out. But we normally do that. We have gone farther out. And like said, out to about 20 miles and then first started to appear then.

Male Interviewer 1: Outside of 20 miles?

Joe Croke: Yeah, the first 20 miles was just dead. I mean, there weren't birds. There weren't anything. There's just nothing. Nothing.

Male Interviewer 1: Did it have any other effect on your fishing other than that you just had to go further out?

Joe Croke: Well, the stone crab, it ruined it. There wasn't, no it's tremendously, like 95% decreased. So it ruined that. And I don't know if that comes back or when so.

Male Interviewer 1: So were you stone crabbed with the same boat?

Joe Croke: No, no, no, I have a different boat for that.

Male Interviewer 1: Okay.

Joe Croke: Yeah, we have another one for that.

Male Interviewer 1: Okay.

Joe Croke: Yeah.

Male Interviewer 1: And, but then, have you always stone crabbed?

Joe Croke: On enough.

Male Interviewer 1: On enough?

Joe Croke: On enough, yes.

Male Interviewer 1: Okay.

Joe Croke: Yeah, we just – when we first used to do it, we used to do it half of the week, selling half of the week. We'd go with the family because they just love it so. Yeah.

Male Interviewer 1: So then did it have an impact on your business?

Joe Croke: Yes, because I bought more stone crabs this year and stuff.

Male Interviewer 1: You brought more crabs this year?

Joe Croke: I bought more crabs from the beginning of this year and more location and stuff, you know, more tides. And then, it didn't work out too good because of the red tide.

Male Interviewer 1: But then, what about your other fishing business? How did it affect?

Joe Croke: Effected it a lot too because...

Male Interviewer 1: Economically?

Joe Croke: Yes, it definitely affected it very badly.

Male Interviewer 1: Okay.

Joe Croke: Yes. Yeah.

Male Interviewer 1: But, did you do anything differently to try to accommodate that change, I mean, adapt to that?

Joe Croke: Other than going farther out?

Male Interviewer 1: Yeah.

Joe Croke: Yeah, we just went farther out.

Male Interviewer 1: So that was good, okay.

Joe Croke: Yeah. But that takes more time and, you know, fuel and time traveling and stuff. [00:10:00] We headed a down where could go pretty close to the shore and get things.

Male Interviewer 1: So you catch unless it's costing you more money?

Joe Croke: That is correct. Yes, that is correct.

Male Interviewer 1: It's not a good business for you, right?

Joe Croke: No, it's not. No. No, the red tide was seriously bad. I hope that we can get a handle on it.

Male Interviewer 1: So what species were affected that you could – that you know that exist?

Joe Croke: All right, this is just, I think everything was affected from the fish to the wildlife, to the birds, and we saw all kinds of dead turtles, dead dolphins, just tremendous amounts of dead small fish. I seriously think a lot of it was down on the bottom too that we didn't see because we could just tell just we could see fish underneath too in the shallow water. But in fact, I think it killed everything. Like I said, it killed the barnacles on the boat. That's crazy. Yeah, it just double turned black. I've never seen anything like it.

Male Interviewer 1: You just talked about the crabs coming out of the mud?

Joe Croke: Yes.

Male Interviewer 1: What is that? What are you talking about?

Joe Croke: Okay, the stone crabs - I'm not the biologist here, but I just know what I see. There was very few stone crabs then also then we start to get more. And what it is, is

they were real dark, which means they were, you know, hunkered down in the mud probably, is that what they do, I don't even know. But they were down in the mud. And those ones that were – those were the ones that we're starting to catch, which means they were hiding and then coming out.

Male Interviewer 1: Okay.

Joe Croke: Is what...

Male Interviewer 1: They survived?

Joe Croke: They survived. But most of them just left and went north. They all went up towards Hudson and stuff. That's where they were catching them all. They, everything just left. Just went away. You know, the ones that could survive left. I mean, the fish just all went out.

Male Interviewer 1: If you guys have a question or something that you want to clarify, just go ahead and ask Joe. I just want to make...

Joe Croke: Yeah, I don't. [Laughter]

Male Interviewer 1: Did that affect your health at all?

Joe Croke: Yes.

Male Interviewer 1: How so? [00:12:00]

Joe Croke: Couldn't breathe. It was bad.

Male Interviewer 1: So if you...

Joe Croke: I mean, my house is across the street here, right here. It's bad. It was bad. And Joey, my little guy goes to school at Emory Elementary school, it was bad there. I mean, it was just bad everywhere. It was bad.

Male Interviewer 1: When you guys were out on the water, did you...

Joe Croke: Yes.

Male Interviewer 1: Like, did you know?

Joe Croke: Yes, it could definitely affect, yes it affects.

Male Interviewer 1: Do you think you had any long term ramifications from that you know of that?

Joe Croke: Not that I know of, no.

Male Interviewer 1: Just temporary stuff?

Joe Croke: Yeah, yeah.

Male Interviewer 1: So, has it recovered that this area that you marked out?

Joe Croke: Okay, as for recovery from what I've seen and this is just in the last, let's say, for last month, I've started to notice where we saw bigger fish like a mangrove snapper that would be 12 inches or 15 inches. There's now two and three inch ones. Everything is super small. We were just out there yesterday getting bait and things, everything is really small. It's like it's starting all over. But there's no big fish there. They're just still no big fish. The grouper are all five and six inches long. The snapper are all two or three inches long. Everything's really small. But there's no big fish there still.

Male Interviewer 1: So you still haven't gone further out?

Joe Croke: Yeah, we just went 30 miles on the last trip. And that was about as close as we could go to catch fish. Yeah, it was 30.1 miles out, Avalon boat.

Male Interviewer 1: So you think that this year, your expenses are going to be more because you're going to have to continue?

Joe Croke: Definitely, yes.

Male Interviewer 1: Okay.

Joe Croke: Yes. And also, it really cuts in our thing because we have a short window that we go. So it cuts out a lot of our fishing time too.

Male Interviewer 1: You need to move...

Joe Croke: In other words, we usually go for a 48 hour trip, we go for two days.

Male Interviewer 1: Okay.

Joe Croke: And, now [00:14:00] we're traveling twice as far or more in time. So it takes away the fishing time. So that hurts too.

Male Interviewer 1: Do you have any idea of what's causing?

Joe Croke: I have my thing, yes. I'm from Florida, and that's me. It's the farmer's in Lake Okeechobee. I mean, I watched all that green stuff go down. I watched the red tide eat it. Then the red tide eats the fish. And it grows bigger and bigger and bigger. That's my thing. I'm not a scientist, but I've watched how they ruined Lake Okeechobee

because I used to do professional bass fishing on that long ago when I was younger. And it's, they ruined it. It's horrible. The green algae is everywhere. And of course, that's the extra water for the sugarcane and the rice farmers there. I mean, that's they uses their own personal place.

Male Interviewer 1: Yeah.

Joe Croke: And they've been doing that forever since I was a little kid. So it's nothing new. But I also had a big restaurant over in Port St. Lucie right on the water. And when they would send the overflow, it would kill everything that there is Stewart, it would kill everything and we would get it like a red, like a green algae and we'd wipe out everything. So my thing is sending all that fresh water I think ruins all the rest of whatever it is.

Male Interviewer 1: It's on both ways?

Joe Croke: Yes, because it kills all the fish and the clams too. Because they can't handle that fresh water and they dumped so much at that time and it's always just horrible brown that being colored ruins everything. And that was on both coasts. I've noticed that. Yeah.

Male Interviewer 1: Do you have any recommendations for management on how we could help?

Joe Croke: Yeah, don't let the water from Lake Okeechobee go down the St. Lucie or the other river there. However you say that name. Yeah, don't send the water out. Send it south.

Male Interviewer 1: Send it south?

Joe Croke: Send it south, because I don't know of any cure for fixing this. And, [00:16:00] I assume its nutrients is what it is causing all this. I'm looking that you comes up with [indiscernible] [00:16:08].

Male Interviewer 1: I'm a social scientists, they may know more.

Joe Croke: I mean, I think, yeah...

Male Interviewer 1: I think everybody's got...

Joe Croke: I think it's a septic systems. I think it's all that type of stuff.

Male Interviewer 1: I think you know a lot that. Yeah, it's good.

Joe Croke: Yeah, it's just, I mean...

Male Interviewer 1: Sugarcane and so all that stuff.

Joe Croke: But that water that would come down to St. Lucie and the other one and it'd just, I mean, it'd just wipe everything out and there was no rhyme or reason it seemed for it just like we got to send it. And when you talk to people, they said well that's the rule since the 1940s and hasn't been changed.

Male Interviewer 1: Yeah.

Joe Croke: So maybe some better government.

Male Interviewer 1: Well, do you have any idea of how, I mean, could it be monitored? Any ideas on how we could monitor the red tide?

Joe Croke: Well, I only see what you guys do. I only see in the paper, I mean, where you, you know, where they go down and check the water. But I don't know what else we could do. I mean, you normally know the water from you guys, from the scientists before you see it or smell it, when you say there's so many parts of water there you usually know before I would ever notice it.

Male Interviewer 1: Do you guys pay an intention to, like, I think in Florida have them to see?

Joe Croke: Yeah, they send it to me on my phone. Every like two or three days, they send it out.

Male Interviewer 1: So you are looking at that?

Joe Croke: Oh, yeah.

Male Interviewer 1: So you...

Joe Croke: Yeah, because not too long ago, they had a little bit and Sarasota was like, oh God, it's going to come again this year.

Male Interviewer 1: So, I mean, what do you think is going to happen this year?

Joe Croke: I don't know. I don't know. I just know that the fish, even if there was the red tide this year, my fishing won't recover because the fish aren't big enough. It's going to take more than a year for them to come back and stone crabs, I don't know about that. That really – that we didn't even have a business issue. So we were down 95%. It wiped us out on that.

Male Interviewer 1: So do you, when you were stone crabbed, you didn't try for the other, I mean, some people said like...

Joe Croke: You know what, it was very good [00:18:00] Tarpon springs North, Hudson North where the red tide really didn't go. It was very good and the crabs were more concentrated up there, really good test that would, no, I have other things that I do also that would not be feasible. It wouldn't be a good business model to go up there. It just wouldn't.

Male Interviewer 1: Because I heard that some guys did go up there but made me wonder about so there's probably already guys stone crabbed in there.

Joe Croke: Oh, yeah, they weren't happy. No, and the guys that did go up there did all right for a very short time. And then they pretty much wiped it out.

Male Interviewer 1: Okay.

Joe Croke: Because everybody went in a concentrated area. So it was good for about two months, October, November, December and then that was it. The crabs are – there's nothing that right now. So that kind of like that area too. So we've had far reaching effects on that type of thing.

Male Interviewer 1: So, I guess you've already told us how you kind of adjust would you go further out and that's about the only thing you can.

Joe Croke: Yeah, and the stone crabs is, you can't do anything about it. We'll just wait till next year and try again, I mean.

Male Interviewer 1: Is there anything else out there, other changes that you've seen that may not totally related to red tide or could be related but you don't know anything other? And when I say we call it red tide, but we're not sure it's just...

Joe Croke: Like I said, I don't know that is right. Yeah, because it's not red, like some of the red tide I've seen looks red.

Male Interviewer 1: Yeah.

Joe Croke: This is more either really like brown soup. I mean, if you can't see through it, it all sorts of kinds of, I don't know if it's vegetal matter or what it is. It's something. And then also, there's a like a greenish color one, that's out there too. That was all – that was there during the same time. It'd be like real green thick water.

Male Interviewer 1: In the same area or different?

Joe Croke: No, different areas. Different separate areas, yeah.

Male Interviewer 1: How did it differ other than color, any other ways [00:20:00] that you could tell?

Joe Croke: It was more translucent. You could see through it better. But it smelled, and it was bad. But it was not that brown soup looking. The brown stuff was, it was thick looking. Yeah, that was more closer to shore or in Sarasota Bay.

Male Interviewer 1: Okay.

Joe Croke: That brown terrible stuff.

Male Interviewer 1: But the green was...

Joe Croke: That was farther out.

Male Interviewer 1: Farther out?

Joe Croke: Yes, farther out. Yeah.

Male Interviewer 1: It's interesting. Do you guys have any questions?

Joe Croke: How much information I have about this.

Male Interviewer 1: No, this is it. I mean, this is good. I mean, and this...

Joe Croke: Just smell bad.

Male Interviewer 1: This the process because, you know, one of the last things is other algae blues, other things like that, and then bringing that green one up as well. That's so different than the other.

Joe Croke: Yeah, like I said, that was more farther out. And then, sometimes it would be - it was more, yeah, it was more off of a my key probably areas where I saw that more than anything else. So but Sarasota Bay was the brown soup. It was, yeah, it was bad.

Male Interviewer 1: So, how long did the smell last around here? Weeks, moths?

Joe Croke: I was going to say probably about two or three months. I know, down in Venice, it was a whole year because my family was there and it just Sharky was just there. Yeah, you couldn't can even go there and stuff. And the pier, it was just bad all the time. But probably about two or three months here that people really noticed. And also, I guess you could check with, you know, no one was coming to the hotels or anything on the beach and everything so, because it was horrible.

Male Interviewer 1: [indiscernible] [00:21:41]

Joe Croke: Yeah.

Male Interviewer 1: I guess, I don't know, is there anything else that you recall or think that we should be aware of or anything?

Joe Croke: No, it just, it smelled bad. And like I said, you had a lot of dead wildlife other than [00:22:00] the fish. I mean, it was the birds and everything else they were, so it had affected all them too.

Male Interviewer 1: You saw dead birds floating?

Joe Croke: Oh, definitely. Uh-huh. And then also, it's gotten a lot better in the last month. But we, you know, the fish house here had an influx of pelicans. That was unbelievable, because there was no the bird like that color. So there's just no food. And then this last month, we've had an extremely huge outbreak of bait, like more than you ever seen before.

Male Interviewer 1: Really?

Joe Croke: Yeah, I mean, just way more than you normally see. Just a lot more. So I think...

Male Interviewer 1: I mean, where are you seeing?

Joe Croke: In the Bay.

Male Interviewer 1: In the Bay?

Joe Croke: In the bay. Just much more bait than I've ever seen. So I don't know if that's nature's way of trying to fix things. But there's a whole *[overlapping conversation]*. No, no, mullet, no. I would say not sardines, they're more like thread fin herring there. But they're small. And a lot of, what we call glass minnows, which [indiscernible] [00:22:56] things right over there. There's a lot more where you normally never saw. They're everywhere, right now. And that's just right down here. Right here in Sarasota bay. I can't tell you about any other place. But, yeah, a lot more bait in the water right now than I'm used to seeing.

Male Interviewer 1: That's all the question I got.

Joe Croke: All right. And the water's nice and clear right now too. So it's better.

Male Interviewer 2: Okay, that's great.

Male Interviewer 1: Well, listen, I appreciate that you talking the time.

Joe Croke: No, it's good to see you.

Male Interviewer 1: Me too.

Joe Croke: Yeah.

Male Interviewer 1: And, good luck fishing.