TOXI•CITY

A combinatory film by Roderick Coover and Scott Rettberg

Toxi•City (2014-15) is a combinatory climate change narrative that generates a new feature-length film each time it is shown. Seven people struggle to survive after hurricanes and toxic events have devastated Philadelphia and New Jersey. These speculative stories of life in a post-industrial wasteland are set against the true stories of deaths from Hurricane Sandy in an algorithmic symphony of contemporary despair.

Setting: Delaware River estuary, in the near future.

PART 1: NARRATIVE SEGMENTS

These segments are each about two minutes in length. Voice actors are used to share these stories and evoke the conditions of living described. Many of the scenarios described (flooding disasters, shipping and industrial accidents, and toxic events) are based on events that have actually taken place, although they described here in a compressed time frame under a scenario in which several Hurricane Sandy scale events have taken place with a few years. The actors themselves are not filmed. Instead, river imagery, urban ruins, and flooded landscapes are used to place the audience within the characters' perspectives.

Voice 1: Fisherman, African American, 40s (10 segments)

People have been saying we shouldn't eat the fish here for years. I've pulled stripers, smallmouth, walleye, rock bass, a lot of great eating fish out of this water. I put food on the table. Look at all this water. You know how quick a body of water this size refreshes itself? And look—give me that knife—here—here. Look, you see? Look at this filet here. That's good fish. I've been fishing these waters my whole life. You think I can't tell, looking at a fish, cutting open and spilling it's insides? You think I can't tell a good fish from a bad fish? With the economy what it is, they want to tell me I can't have a license to fish? There hasn't been work at the factory or the shipyards for a decade. I can't even get a job at the damn Wal-Mart so many people are looking for work. And you want to tell me I can fish because they

found dioxin or some shit ten miles away from here? This is a big body of water. I need to put food on the table. I'll fish where I damn well please.

I used to come out this way to try and catch fish. I pulled perch, striped bass, a lot of good eating fish. Nowadays of course with the contaminants they say it ain't safe. I never know what to believe. It's a powerful river, can wash a lot of stuff away. Not right now, of course, I mean, look at it. After a hurricane there's no point in fishing, with all the sewage and debris. So what am I doing here? I ain't fishing for fish. I aim to get some furniture. Now most of your contemporary pieces like that recliner there are useless when you pull them out, but a lot of folks around here had antiques, period pieces. Stuff that got handed down. Like -- look that dresser there, I'm going to try to snag it. I've gotten some great pieces. Damaged sure but not past refinishing. My garage is full of this stuff. Once they're in the river, they don't belong to anybody, you know? Yesterday I pulled out a captain's chair must be two hundred years old. And once those people come out of the camps and back into the high ground settlements, once they start to rebuild, they're going to be looking for furniture, you know? I figure it's like a harvest in a way. Once this stuff dries out it doesn't smell so bad. Sand it, new coat of varnish, like new again. Get lemons, make lemonade.

The Prometheus? It was a big tanker, single bottom, double sided, 750 foot, filled with crude and we was towing it in to Berth #11 so they could deliver the crude to the Citgo Asphalt Refinery in Paulsboro. The tug captain noticed it first, the oil in the water, and he says "Oh shit, Frank, I think got a problem here." Cypriot ship. It had 13 million gallons of the stuff on the manifest. We notified the USCG right away. Few minutes later the taker lost power and you could see it listing about eight degrees on the port side. And all that stuff was just pouring out. You could see it separating in the water, tar sinking down and the light stuff shining on the surface and the smell of it in the water was like blacktop and dead fish. You hardly ever think about what's in those boats, but what we deliver to the asphalt refinery is real raw stuff, thick gunk that settles on the river bottom. I don't know you could say it was anybody's fault. There was an old anchor in the water, and a 15 foot piece of old pipe, and concrete slabs, enough debris to tear open the belly of a ship. Where it came from who knows? Some things fall off and never get reported, other things wash in. And all these old factories. There's a lot of material down there. People don't appreciate. It's a big river with a lot of old junk on the bottom. You do your best to navigate, but you know: God rolls the dice, don't he?

What I remember most is the birds. The fish kills they happen every now and again, sometimes for natural causes and it doesn't bother you much other than the smell, the stink of rotting fish. Something leaks out or they eat some bad algae. Whatever, you know? Fish die. It's part of life on the river. Sometimes you steer your way through a nasty patch of floaters: bullhead catfish, striped bass, white perch, gizzard shad. Kills you to see a good eating fish oiled up like that. But the birds. The Canadian Geese flying over this time of year. The feathers soak up the oil, and they look pathetic in the water, the geese and the ducks, flapping around like that. The ones that make it to the shore try to run around and shake it off but they're like half blind. They try to clean themselves and they end up eating that sludge, it's really pitiful. They try to fly and they can't any more. Thousands of them. And Philadelphia International is right there, you know, so it was kind of ironic watching it. The planes kept taking off and landing but the birds couldn't get off the ground.

What you get up on the shoreline looks much like fresh blacktop, a thick layer of asphalt. Looks like somebody decided to build a highway underwater and the shoreline is like the shoulder of that highway that you can't see. And the seawall, at low tide it's like somebody came along and dipped it in black paint. And the tar balls. Those will be floating around in the river for years. They gum things up, you know? They had to shut down the water intake for a couple of weeks, and the nuclear power plant too. It's no small thing. But still, you know, the river is amazing. The estuary cleans itself, eventually. Crabs and oysters from here is still good to eat. They tested them and they were fine for eating.

It could be worse, you know? You're too young to remember the Corinthos. That was '75. What you had there was two tankers colliding, both carrying explosive material into the BP refinery. The Corinthos had the Algerian crude and the other boat had a chemical load, phenol, vinyl acetate, paraffin. Slam those two boats together and *Kaboom!* There was flames 400, 500 feet in the air. I could hear the explosion. And see the flames. Forty-four people died on that wreck. Some just immediately blown apart, others they fell burning into the water and on the shore. Some survived but most had serious, serious burns. You would see some of them around later. Lots of folks with horrible burns, scaly skin, melted faces, real nightmare material. Everybody watches the boats come and they don't think a minute about what's on them. We got bananas and sugar and oil and paraffin and all sorts of chemicals I don't even know the name of floating past us right here in our back yard.

Everybody felt bad for the people on the boat of course but then a lot of those chemicals also turn out

Toxi•City Script 4

to be bad for your lungs. A kind of pall hung over town for a week or two after, and I remember some

people was coughing up blood and other things. People live a little bit harder in places like this, that's

the truth of it.

It seems like it's always the boats with Greek names that have the worst accidents. Sometimes they

have Greek crews or Cypriots or Filipino but its like they're always named after some island or Greek god

or something? You ever think about that? Maybe they're tempting the Gods. But I've got nothing

against the Greeks. I mean I know they have like the world's worst economy because they're always

bribing each other and so on, but where would we be without Greek diners, you know? They know how

to run a restaurant and get a hot coffee in front of you is what I'm saying. I love that flaming cheese. I

got nothing against the Greeks.

I figure everyone around here has at some point inhaled something or other they shouldn't have. If you

ever smoked a cigarette, you breathed something toxic, didn't you? And well hell a lot of folks around

here have lung problems. Emphysema, black lung, silicosis, asbestosis, I've known people got all of that.

You work in industry you're going to breathe in some things you ought not to breathe. Vinyl chloride is

fairly innocent far as these things go. Week or two of coughing and then it clears up. They say it causes

cancer, but what doesn't cause cancer these days? You'd have to live like one those bubble boys.

The new laws are messed up if you ask me. I get it about the chemicals and the radiation issues in the

area around Salem, the nuclear plant. They say that whole area will be a wasteland for years. And the

boundary islands that were all washed away, sure, makes sense to stay away from there. But they put

the better part of the whole state off limits now. People want to go back to their home places. Of course

they climb the fences and go back. Why wouldn't they You can't just seal off a place like that. You can't

just say all of New Jersey is off limits. That's just crazy. You can't just wipe a whole state off the map

because of the hurricanes and the flooding and all the chemicals and a couple of leaks at the plants.

Voice 2: Young woman: early 20s

(14 segments)

I remember when it all began, at least when it really started to get worse. I was just a kid when the big floods started. There had always been flooding, of course, but not the big ones that take out roads and rewrite shorelines. When the real storms started coming, all of them hurricanes one after the other, all these places that had never flooded before were getting hit, one after another. I used to spend a lot of time down in the basement. Money was tight in the recession and sometimes Mom and Dad would argue and it seemed like a safe place. I remember one night I was down there painting things, scenes of things like I sometimes did, listening to the rain, and the walls did crack. The foundation fractured and the water seeped through. The water had a strange smell to it. It got worse and worse over time, there was a lot of mopping. Finally the walls and floors did all come off-kilter, and tiles and things came off, floorboards coming off and stuff. By the time the inspectors said we had to move, the house itself was at a strange angle, like the leaning tower of Pisa or something.

When I was a kid, I was a vegetarian, which turned out to be lucky for me I guess because I didn't get sick like everybody else in the family during the big botulism outbreak. My father always made fun of me because I only ate vegetables and for a little while only ate things that were raw. Then there was the sickness that people got from eating steaks. Everybody pretty much knew that toxins were getting into the food chain, they even had studies to prove it, but then the government stopped testing the food because they ran out of money for non-essential services. Of course, once you had all of the people dying from the cow taint and the diphtheria that got in the fish and all of the other things that ended up in the animals people were used to eating, a lot more people became vegetarians. Clean meat is very expensive. After the meltdown even the vegetables aren't necessarily safe. You need to be careful. You need to know where they're coming from. It's a shame we can just be like the plants, and live off of the light, photosynthesis. Mostly I eat beans and root vegetables, with an iodine sauce. You need to dip them in iodine to sterilize them, just to make sure they're safe.

My father was sort of a strange man. He would catch odd fish that had parts where there should not be. Crabs that did not have claws, fish with strange lesions on their scales or extra eyes or none at all. He would bring these things home and he would show them to us but that would not stop him from fishing. Some looked like new breeds. I guess they sort of mutated, but most of the fish looked like they had been born wounded. I guess that's how most of these things happen. It's not like in the comic books. They don't glow in the dark. Most of the things that happen to fish are on their insides. Their organs won't work right or their hearts are malformed. They are born blind. They can't spawn, reproduce. Then

all of the sudden—their generations don't take long—a whole species just drops out of the food chain. They say the whole world is getting less diverse now. Fewer species.

At least we have the Internet. I lost a lot of friends in the floods and all the other incidents. People got scattered, moved further to the interior or to other towns. Some of them fell out of touch, or got drafted to serve in the military, or died or were lost in other ways. But I think it's very cool that social media survived, you know? I mean everybody I knew was on the Internet, and it's good to stay in touch. Even, you know, some of my friends who perished, still have their Facebook walls so I can still go and visit them in a way. I can look at their pictures and little things wrote before they vanished and sometimes I do. If I don't see many friends anymore, I still have my social network. I have some friends who like my status updates, and some friends who comment, and some other friends who are only traces. I don't know what I'd do without the Internet. They say it was built in a way it could survive a nuclear war. Nothing like that happened. But this was kind of close.

I guess it makes sense that they had to close things like swimming pools and day care centers and old folks' homes and mental health centers and community colleges and fire departments and zoos and all those other things. There was so much to do all of the sudden just to keep basic things operating with all of the flooding and everything and the violence. Most of the money from taxes has to go the police and the department of Homeland Security and FEMA and the military. They had to put up all those walls and fences and clean up all of those ruined places and bury all those people that died. I wanted to go college and study art but only very wealthy people can afford art school now. Still, I can learn about some things from the Internet and I can draw and paint on my own. I can't go to the museum anymore, since they shut it down until the crisis is past. I miss the room with all the works of Marcel Duchamp. His readymades always made me laugh. Sometimes I try to make things like that, combining bits of things I find in abandoned houses. There is no lack of materials out there, there are plenty of forgotten things waiting to find a new purpose.

Rich people still have nice hospitals they can go to, but insurance costs so much now that the rest of us can't afford it. Your best bet is to not get hurt or sick. I take vitamins. Some clinics are free. If you break a bone or something, they'll set it for you and you can get flu shots that work some seasons, and if you get cut they'll stitch you up. The more complicated stuff they can't really deal with anymore. Terminal diseases are really terminal now. A lot of folks get cancers and if you get one now they don't really

bother pretending that there's much they can for you other than make you comfortable. They give people morphine and send them home or to the hospice if they're far enough along. Most of the people who get shot are dead before a doctor can even see them. People volunteer at the hospices, and I'm so grateful for that. I tried to do it for a few weeks after my mother died but it was just too much for me. I can't handle everything all the time. I feel bad about that. Sometimes I just need to focus on taking care of myself.

I worked at the Wal-Mart for a while when my mother was in hospice. It was good to have a job. It helped us pay for food and supplies. We were lucky because my father's life insurance paid out before things got really bad so Mom and I had a little bungalow pretty much paid off, but you still need to pay for food and water and electricity. I didn't really like the job at Wal-Mart but it was nice to be around people. And places like that are important, stores where things still work more or less like they used to. Where the products are the familiar and the shelves are still stocked. Then I got fired when I let one of the shoplifters escape before the police got there. She was a lady from our neighborhood and I knew she had a three year-old at home to feed. All she had taken was a few bags of oatmeal and some cans of corned beef and I didn't think she should go to jail for that. I left the back door open while the security guard was out having a smoke but they caught me on one of the cameras and sent me home that afternoon.

I draw a lot of things that I see and not all of them are ugly. I still see beautiful things, everyday. I have an eye for ruins. Sometimes I go draw these abandoned factories filled with mysterious machines where they used to use to make things fifty or a hundred years ago, or houses that have no roof but still have pictures on the walls. Some of the flooded places are very dangerous, but other places you can see nature coming back. I've seen wildflowers growing where there used to be parking lots. All kinds of flowers, colors I've never seen in the city before. Some species turn out to thrive. A lot of birds die but then other birds come back and take their place. Flocks of starlings make amazing patterns in the sky. Even though most of the old playgrounds have been vandalized or fallen apart or just floated away, children make new ones out of old tires and abandoned FEMA trailers and pipes and things. The sun still comes up every morning.

Sunset almost makes me cry. Sometimes it's almost like a rainbow, all the purples and oranges, and blues and even sometimes something like green in the clouds. I guess some of the gasses up there are

the reason why the sunsets take on all of these different hues. I know it's probably the air pollution and that it's bad. It's why its hard to breath sometimes on hot summer days. But whatever the reason it's still kind of magical. Life is hard but I think it's sort of our job to live in the moments that we have now.

I spent a lot of time with her at the hospice towards the end, and I saw a lot of kids I used to know there to visit their parents too. It was like a class reunion. I guess we live in what you would call a cancer cluster, though my guess is there are so many clusters on the map now it's other places that look like outliers. I read *Little House on the Prairie* to her. She used to read me that book when I was little, so I thought it was a good choice. We were reading about the Ingalls leaving Minnesota—that part always moved me—how they just said goodbye to everyone, all their families and friends and packed up the wagon, knowing they might well never see their folks again, when she clutched my hand and told me I needed to go, that I needed to get out. And there's nothing for me here, really. But it isn't like it's easy go someplace better. She died three days later. A few of the neighbors came so that was nice but still at the crematorium I felt a little hollowed out inside and that feeling hasn't really gone away.

I remember Mom and Dad spent all those years saying the house was "underwater"—like most of our neighbors houses had been—which meant the house was worth less than what they paid for it—but I don't guess they ever imagined it would be so literal. You could see the roof of our bungalow from the shelter on the hill. At least we were able to salvage some of our of things. When the waters subsided, the place was mostly filth and mud. I managed to save a few pictures. They're stained but you need to have a few things to take with you. Other than that there wasn't much worth taking. My father's hunting knife. A few cans of soup. I pulled the last of the money out of the ATM and bought a backpack and a sleeping bag and a few other things at Target. I spent the most of what was left paying the ferryman to take me across to the Wash. It can't be as bad as they say. I guess you could say I'm sick of civilization for now.

There are things in the Wash that scare me at night. There are packs of dogs and coyotes who will howl in the dark. There are many boars in the Wash and they will eat anything. They will eat roots and bulbs and worms and snakes and lizards and small dogs. They will eat corpses if they find them on the riverbanks or in the ruins of houses. The big male boars forage alone, but the females and the young ones move in sounders, groups with as many as thirty of them together. They are not threatened by any human on her own. They are intelligent and will surround you. They can be fierce around their young. I

have seen their eyes and heard their snorting breaths. I have seen them coming out of the woods. I have seen them gathering. I have been afraid. They are thriving in the Wash, where they have few predators. Some people hunt them for their meat, but I steer clear. In a way it's beautiful that all of these animals are getting a new home, but still, they frighten me when I am alone.

I found an old church on a hill that was dry with pews wide enough that I could stretch out and sleep upon them. There were some damages to the place and you could tell that it had been used as shelter before but the stained glass windows brought in a pretty kind of light as the sun and the door shut tight enough that I could rest secure for the night. I made a table up on the altar and brewed myself some ramen noodles there on my camp stove. I found some big candles and sat a kind of vigil with myself before I drifted off to sleep. It may be true that there are no real holy places anymore but still a quiet space alone can restore some energies.

I wake to the sound of squeaky wheels and a kind of struggling noise. I pull open the heavy church doors to see a teenage boy pushing a Wal-Mart shopping cart up a hill. A card table balanced across the shopping car and a body wrapped in a Spiderman blanket on the table. The boy is sort of holding back sobs and his hair is all akimbo. He wears a Mickey Mouse sweatshirt. I know that this must be someone he loves. He pushes the cart over to an open place in the graveyard, unstraps and lifts the body off and to a patch of dry ground. He removes a shovel from the cart and he begins to dig. I walk towards him. I know what he is doing. I can help him with this task.

Voice 3: Middle aged woman: African American, 40s (13 segments)

Around the time of the first big hurricane in 2012 we figured it was just a freak thing, one of those hundred-year, whatever, two-hundred-year events. And we were lucky around here, really. A little flooding, so what? The Schuylkill floods at least twice a year. You clean up and get on with it. What we got here was like an ordinary event, basically, not like what hit them in New York or on the Jersey shore. Of course nobody could anticipate these things would start coming regular, that the East coast would start have hurricane seasons just like those poor people down in the regulated territories in Florida, and

what used to be New Orleans. Now there's a lot of places that used to be places and are places no more. A lot of evacuation zones that will never dry out again. Do you remember Atlantic City? We used to have so much fun there. The boardwalk.

There's was always the sense that things like this can only happen other places, not places where we actually live. We know in an abstract sense that there are a couple of refineries nearby, that there are some chemical plants. But we lived in a nice community, a sort of suburban place that was not so far from Philadelphia that we couldn't enjoy the culture of the city, and close enough to nature that we didn't feel entirely disconnected from it. It was a town, a real town and people knew each other. I remember listening to the trains rolling over the creek bridge, the shuffling noise and the whistles, the building and declining acoustics of approach and departure, I always thought they were kind of romantic, the trains. It was a nice old bridge. There was a sense that everything had a purpose. You would never expect the bridge itself to fall, or for a cloud like that to rise from it.

I'm proud of the fact that they saved New York, and most of Philadelphia, but you need to feel for the people of New Jersey. Some people still live there, in the Wash, like they call it now. Can you imagine breeding there, having children in that swamp? Horrible things happen there, and there is poison all around. Some of those Jersey kids are born with organs outside of their bodies. We always we give when the Red Cross comes around. Sometimes they airlift in food and blankets. You feel for them. Why people still choose to live there, I'll never understand.

Every hurricane season we see them on the news, the people who decided to go ahead and rebuild in the regulated zones. Their shantytowns thrown up on the shores of toxic rivers, their deformed children, the body-bags the helicopters carry away to the incinerator. Every year the Red Cross collects for them, and the pictures always make me sick. I understand that people are drawn back to the places they come from, there's a pull to the home place, sure. But they put up those fences for a reason. And radioactivity doesn't just fade away overnight. The towns near that nuclear plant are going to be dead for as long as we're alive. I don't care if your family lived there for eight generations, if you choose to squat there with your children, you are basically giving them a death sentence.

People have different opinions about the what's happening down in the Wash. I don't think we should lose sight of the fact that those people are still American citizens, still human beings. I know the

argument—they chose to hide out during the evacuations or to escape from the camps and go over the fences, and we can't take them back because of the danger of contamination. I understand how diseases spread if they don't get them under control. Don't get me wrong, I think those people are fools and I understand the danger they pose. But they aren't rats. You shouldn't stop the aid agencies from helping them. I feel for the children, is all.

The homeland security measures were supposed to be temporary. But like they say, give them an inch, and they'll take the whole Eastern seaboard. It's a hard time now. It's hard for the kids to live through this. Can you imagine? The kids born now, they won't remember the times when this was simply one country, before they set up all the regulated zones, before all the checkpoints and the water conflicts.

There was a time we knew all our neighbors and we trusted them. We held doors open for each other. You would think the best of people. You would mow your neighbor's lawn if they were out of town. You would talk in the back yard, over the fence. People used to let their kids run free in the afternoon. People around here knew each other. We all had this sense that we were in it together. People just don't trust people the way they used to. I don't know what happened to the golden rule. It's like everyone has forgotten how to share. Everybody hides cans of spam in the basement and lies about how much water they've got stored up. Completely normal people you'd see in church on Sunday carrying loaded guns in holsters on their hips like its perfectly normal. It's not. Everybody standing their own ground. Sometimes I just want walk up and shake them. It's not normal to spend so much time feeling so afraid. It is not at all right.

My daughter Melanie is in the National Guard. Sometimes on a Saturday I'll catch her on the video Skype. She's deployed out there by the Hoover Dam. I don't like the idea of her carrying a gun, and I don't like knowing that she has put to herself in harm's way over water that Americans should not be fighting over to begin with. I really don't like that they are using the Guard like that, when there is still so much recovery work that needs to be done right here at home. We need to get on with rebuilding. We don't need any more tearing down, no more fighting over the scraps. She should be helping to build roads, and to clean up these blighted neighborhoods, to build new housing for the refugees. She shouldn't be out there protecting a Dam from farmers and terrorists. We have got plenty that needs doing right here. I miss my girl, I want her here at home.

My man Frank died years before this all started. Sometimes I think that's a blessing in disguise. He would have hated to see what's become of this country. He always wanted what was best for us. He was the type of man who would work a double-shift at the paint factory three nights a week so that his wife and daughter would want for nothing. Melanie had ballet lessons, and birthday parties and we took her down to Disney World for vacations four times before she was ten. He was a hard-working man. He did all of that for us. We could never prove anything but I swear it was that factory that killed him. All those paint fumes, all that sludge. He had a lot of good years, but he was not an old man when the Lord called him home. He didn't live to see his fiftieth birthday. It was like he worked until he just broke and then we buried him in the ground. In the end he had real bad bronchitis, and conjunctivitis, and his liver gave out. It was a hard time to live through, it was a hard few years, and I miss him still. I do. I miss my man.

They've restored a lot of things, roads and water towers and basic sanitation and electricity to most areas. We need to be grateful for these things. That we are getting back the essentials. People rebuild, that's what people do, eventually. For all that we've lost, we have still the Wal-Mart and the McDonald's and the Starbucks and a lot of the other things. Even though the unemployment rate is so high, there is a great barter economy. I like that, it's gets people together, people talking to each other. People around here have learned to trade with one another, to contribute how they can, to make what they can and trade for the things they can't make. I bring my hairdresser some tomatoes, she gives me a haircut. I give Stanley some potatoes and he gives me some bacon. I wash the linens for Antonio's, and I eat pasta there three times a week. We make arrangements and we do things for each other and it's all off the books and we get by. It's how we survive, how we'll rebuild.

I don't want to give you the wrong impression. Those of us who are still living, who are living relatively normal lives in these hard times, we have a lot to be grateful for. I say just take a look around you. You don't need to look far to see someone worse off than you. Every night before I go to bed I try to remind myself of a few things I'm grateful for. I am alive, and my daughter is alive, and I have a roof over my head, and I have food on my table. There are thousands and thousands of people all around here that don't have that, who sleep in the street or squat in old factories. There are people who have not been able to take a bath in months, who are lucky if they have an air mattress to lie on and a tarp to keep out of the rain. People who need to beg for a crust of bread to eat. I grow roses in my garden. I grow tomatoes and zucchini squash and purple potatoes and wildflowers. When I feel that soil under my fingers and I smell them lilies and lavender growing in my yard and I feel that sun on the back of my neck

I am so glad to be alive.

I keep try to keep my eyes open. I try to watch out for people. We have got to try. Kindness is the only thing that can save us, taking care of one another. With so much taken away now, that's the one thing we can hold on to. People fall off, disappear for different reasons. There was a girl and her mother lived down the street. She liked to draw and paint and sometimes she would sit here and sketch the garden, the flowers. She was always polite and would ask if I minded? If I mind, her painting irises and daylilies? Trying to find something beautiful in this mess? Of course I don't mind. But when her mother died she stopped coming around. I brought her some beefsteak tomatoes, and she thanked me but said she had to say goodbye. She lost her work or something I guess, said she had to move on away from this place. All these young people, leaving or dying. And what can you tell them? Don't give up? Things will get better? We are running out of creative ways to wait for that to happen.

Nature takes back the things that we take away from it. Those fenced-off places and swamps, places on the shore that are underwater, these toxic poisoned places, they will all eventually go back to nature. Vines will grow over all that cracked cement. Weeds and tall grasses will grow over all these places we've condemned. Birds don't mind our fences, and animals build new lairs in the places we abandon. Soil renews itself and wetlands reclaim their territory. I heard an ecologist talk at the library and she said that other than the radiation, this quarantine might be the best thing that has happened to the shore in two centuries. The coastline can take its own shape now. Flooding isn't such a big problem if we don't build houses where they ought to not be built. One way of thinking of it is that nature has gotten what is due to her. Other creatures live in places we can't survive.

Voice 4: Teenager, about 17-18

(13/14 segments)

My lungs are awful. I cough like some old coal miner. It used to be better when I was a kid, before the accident. I used to love trains. I would run after them, try to see them up close, climb up on them if they was stopped. We lived near the tracks. I would count the cars, watch them pass, wonder where they came from and where they was going to, what they were carrying in their freighter cars and tanks. Whenever I heard the whistle I'd be like "Train!" and stop whatever I was doing to dash over to the

bridge and watch them go by. That time I was running and I saw the train going over the bridge when one of the tank cars slipped and sort of jack-knifed off the tracks. I was looking up at it and it was hanging over. I could tell it was going down. The conductor was trying to get out of the engine car to see what was the matter when he fell. I'll never forget him screaming and falling and the thump it made when he hit the ground. Then the car was coming down too and all I could think to do was run away from there. There was this great groaning noise when it fell and there was a big boom. I remember getting blown off my feet from the explosion and then came the yellow fog. The air was so heavy and so nasty from the gas. I was so afraid. I couldn't breathe and my eyes were burning. I was screaming "I can't see, I can't see!" and I was all alone. Eventually the EMTs found me and put one of those masks on me and got me to the hospital and after a while, I was like ok but, you know, never really the same. Whatever. I have trouble breathing sometimes still.

When I was sick in the hospital, my granddad would bring me things he found in the river and along the shore. He brought me arrowheads and strange rocks and bullet casings he found. Belt buckles and pieces of glass that got polished in the river and made all smooth so they would not cut. They would shine in the sun red and blue and purple and green. I remember how he would offer up those treasures in his cracked and calloused palms. He was a longshoreman and his hands and skin were rough. He made me a treasure chest out of driftwood. He carved with his own hands and I kept it under the bed in the hospital. He told stories about pirates and bootleggers and an amusement park he used to go to when he was a kid. They had wooden roller coasters and this parachute ride. You could sort of float down from the sky to the earth. He was this awesome old guy. But then he got real bad emphysema or whatever on his lungs, and he died.

My Dad used to take me to Phillies games. We would eat hot dogs and roasted peanuts and and when there was a home run they'd blow off fireworks. He used to read me books sometimes before bed. Where the Wild Things Are. I guess kids these days wouldn't get that book, since now it's like the wild things are everywhere and nobody needs a storybook to remind them. We lived in a real house with a door with a good lock and electricity and everything. We had a heater and in wintertime the house would stay warm. Back then you could just pay your gas bill and the house would stay warm all winter long. My Dad made foam at the factory, the kind they use inside of furniture. We always had nice sofas because he got a discount. Sometimes he would come home early so we would go out for water ice. He bought me a baseball glove for my sixth birthday and sometimes we would play catch. Then got a cancer

in his throat that moved too fast to other parts of him. My Mom told him he should have gone to the doctor sooner but he was stubborn. Stupid. Whatever. I loved him but then he got sick and he died and that was it.

My big sister was a great swimmer and she got a silver medal in the all states one time and Mom and Dad were so proud they put signs on the car and everything and her picture was in the paper with her like fist pumping when she broke some record. She didn't always want me in her room and sometimes she would get mad if I touched her stuff or she would tease me a little bit but she loved me too and sometimes she would build Lego with me or let me watch her shows I was too young for and I was proud of her too. I guess she was with her boyfriend in his car when the big storm came. They had been down by the river at a Barbeque or something and they were in the car and the car got stuck in traffic with all of the other cars when the water came and she tried to get out but they didn't get out in time and she died. People died in so many stupid ways. I miss her, I really miss my sister, but whatever.

After the big storms, for a while we were cut off like everybody else. We lived on canned pinto beans and rainwater. That's not even really eating. The toilets weren't working and nearly everybody got sick. We had to dig our own latrine in the woods. Going in a hole like that makes you feel like an animal. People went to the high school gym when they got sick, because they set up a nursing station there with beds and port-a-potties, but most of the people who went there to recover never got better. There was an awful flu around and cholera and they were running out of medical supplies everywhere. It smelled like rotten food and sick. Nobody felt right. Inside the house everything smelled moldy no matter how much you scrubbed. At night people camped out on their lawns and built fires, partly to scare away looters and animals, and partly just because the smoke cut the smell. It was like camping in a zombie movie or something, some twisted nightmare version of boy scout camp.

They kept using the trains after the shit hit the fan. A lot of the roads were washed out and bridges were down all over the place. They were able to clear the tracks faster than the roads. They used the Atlantic City line to take a lot of equipment down shore. Light tanks and Humvees and bulldozers and incinerators and other sorts of things. A lot of vehicles in camouflage. A lot of soldiers with M-16s. The trains heading back up to Philadelphia carried other things. Miles and miles of wrecked cars headed for the scrapyards. Open dumpsters full of debris. Refrigerator cars carrying human remains. Those were some sad-ass trains and it seemed like they was endless.

They evacuated the whole town eventually. The trucks started coming the same week they passed the Quarantine Act and soldiers told us we had a half hour to be on the bus. They gave us all these little duffle bags and told us we couldn't take anything that didn't fit in one. They didn't give you any options or time to pack up. They was pretty impersonal, pretty cold. They acted like they was herding cattle rather than kicking people out of their homes. Like we should be apologizing for inconveniencing them or whatever. Before we crossed the river to Philadelphia, they stopped the bus and separated the males and females. We all had to take these decontamination showers and get, like, deloused. It wasn't that big of a deal for me but I felt bad for the little kids separated from their mothers, not understanding what was happening or where they was taking us to.

They set up camps in the Sports stadium complex, the Linc and Citizen's Bank Park. Our tent was around the thirty yard line. Tens of thousands of people. It was like half the population of the Jersey shore. The soldiers were trying to take care of people but they didn't do it very well. I mean I know they were just doing their jobs but still. There were rules about who could leave and when, because the Philadelphia people didn't want their town to be overrun. They had a way of talking about us—Jersey people—like we were gypsies or something, like we had some awful contagious disease, like we were there to steal their stuff and contaminate their children, like it was our choice to get flooded out. At least there was hot food there, franks and beans and beef stew and oatmeal and stuff like that. After about a month they processed us into a one-bedroom apartment in Passyunk, and it was sort of better for a while. They gave us one month's worth of food stamps and told my Mom she needed to get a job.

My Mom said we needed to get away because it was too crazy and we couldn't afford the rent anymore and the break-ins happened too often and she couldn't pay the tickets the policemen put on our car even though we couldn't afford to replace the headlight or the bumper or the other parts that were broken. She said the school wasn't doing me any good any more. She was tired of living off the handouts or going to the church to ask them for cans of food even though she didn't believe in God any more. Nobody did, really, except for those nut-jobs who thought the whole thing was planned, liked the rapture or whatever. So we packed up some clothes and flashlights and cans of meat and one night she paid a ferryman to take us in a boat across the river to a place where we had heard there was a hole in the fence. There were searchlights but they didn't see us. We made it through and tried to find our way back home.

There are fewer people here in the Wash and there are no lines for things. There are lots of signs with skulls and crossbones and lots of places we should try to avoid. Some people are kind and other people are mean. Sometimes people steal things from us and try to take advantage but whatever, you know? There are lots of swamps now and a lot of towns have been bulldozed or burned down but there is still a lot of stuff you can get to live off of. We used to stay in camps with other people like us and sometimes the Red Cross would give us things there but the Red Cross doesn't come any more and sometimes army trucks show up at the camps and take people away to detention. And detention is like way worse that squatting in some sweet old house even if you do need to find your own water and there's no power except for batteries. So we mostly avoid the camps now.

My Mom used to take care of me and now I take care of my Mom. I find us food and stuff and every once in a while I'll score some brandy or something else that makes her happy. But yeah, she's sick, you can see it. She's got sores all over her and she's lost weight. She spends a lot of time in bed, it's kind of sad. Whatever. We live in a sweet old McMansion about five times the size of what we used to live in. I scored a Geiger counter and levels are pretty low here even if it is in a forbidden zone. I like the mansion, but I guess she was hoping we'd go back home and things would suddenly be back to normal. But when we got there it was like they bulldozed the whole neighborhood. Only the foundation was left. I don't care. I mean the new place is sweet, right? But that seemed to be a real big deal for her. She cried for like days after that. If she goes, or I guess when she goes, I don't know what I'll do. She's like the last person left in my family anymore. My last string. Whatever. I mean, everybody's an orphan eventually, right? World's smallest violin.

The snakehead fish come up out of the marsh waters and crawl across the land. I have seen some things I am not likely to forget. Those fish bite and they are maybe some kind of sign. Their mouths is full of dagger teeth and they can squirm across the mud. Some can weigh thirty forty pounds. They'll clean out just about any pond they find until there's nothing else left, and they'll bite humans too if you've not got boots on. They aren't bad to eat but they aren't sweet like trout used to be. And they are nasty, ugly fish. I'm not complaining, but it bothers me some that all we got left are the nastiest fish, and that it's the meanest fish that survive when everything goes to pot. Its the type that kill everything in their path that live the longest. I fear everything is dying and every place is less for it.

There are things in the Wash that we are not supposed to see. Mostly it's empty but there are some camps out here that are not just transitional, they are not just for refugees or whatever you want to call us. The people who came back in and get caught. There are other camps where soldiers carry machine guns and wear masks. They have dogs on chains. People wearing orange jumpsuits who have their hands zip-tied behind them are unloaded from the trains. The military is building out here with cinderblock and chain-link fences and moving these people in. It doesn't look temporary to me. I think the real reason they don't want us to come back home isn't really our safety. They call the Wash a wasteland but they are putting it to their use. We came to the Wash to come home. If this area is supposedly so dangerous, why are they building new compounds and populating them? The people they are bringing here now are not from New Jersey.

She fought it for a long hard time but then her will gave out. These last years of watching all my folks die and all the land go bad around me have taken such a toll that I'm am like to give up as I am to carry on. Sometimes I think it is all a dream but then I pinch myself so hard I get little welts on my arms and it pains me to say I find myself still in the same McMansion next to the same McSwamp. And from what I hear on the radio it's no better in the city or the other parts of the land. I wept for more than a day but now I must find place for her. I rigged up an old shopping cart and a folding table with some bungee cords and on this I will bear her away to a proper burial place. There will only be me for the ceremony but I will dig a proper grave for her.

Voice 5: Man's voice: White, mid-50s

(12 segments)

They had to redraw the map at a certain point, when reason took over and the military took control from the civilians, to parcel it out and put the most dangerous zones out of the reach of normal human beings. At a certain point you need to draw the line in the sand and say we're going to cut our losses and make it safe again, some places. It's time to rebuild civilization and you can't do that by going out of your way to help people who won't help themselves. Some people need to get cut out of the equation. The strong will survive, and the rest will sink.

Look, there's no alternative to using the Delaware Estuary for shipping, and I don't blame them for

putting all the factories there either. That's how you used to do it. This whole area it's been our economic lifeblood, definitely. Accidents happen, you know? What do you expect? I know there's stuff in there that we don't even want to think about, but what can you do? You see the pollution, the urban ruins, the toxic materials and the waste, but I see jobs, hundreds of thousands of jobs. Generations that made a good living because of these waters, those ships, those factories. What can you do? We didn't know then what we know now. And I'm sure that twenty years from now we'll have to deal with a lot of garbage from now we aren't thinking about now. Like your iPad there, or your flat screen TV.

By the mid-teens nearly everyone agreed that spending on FEMA was way out of control and that they needed to be put on a leash. The whole budget can't be disaster relief and when you've got four, five, six canes tearing up the coast every year you can't bail everyone out every time a storm hits. Sometimes it's like tough luck, you know? You should have built on high ground, right? They ran out of other people's money and then they ran out of trailers and then they ran out of rations. And that's when things got really complicated.

Do you remember gun control? You remember liberals? I never had time for people who couldn't bother to learn how to handle a firearm. Bleeding hearts. So how fast did they change their stories when the looting started? My neighbors we're pretty damn glad I had a Glock once the shooting started. Howard, across the street? He used to walk around the neighborhood with petitions from Amnesty International and shit like that and he never mowed his lawn. He tried to replant native grasses. I never liked Howard but he didn't deserve what he got when those savages came for him. And then they stayed there in his house for days, squatting and eating the poor guy's food. Damn nuisance. Finally a group us of got together and burned them out. We had to get rid of them one way or another.

The purpose of government is to protect our borders and to tackle the rat problem. The rats are taking over. We need men in trucks with traps and poison. We need to keep the electricity flowing and the water coming clean from the tap and we need to keep the rats down. We don't need government holding our hands, or telling us not to eat this or drink that. We don't need them taxing us to feed people who can't feed themselves or protect their own homes or pay their own damn doctors. The purpose of government is to make free enterprise possible, not to make life easier for every loser who walks in the door looking for a handout. If you want a handout, go to church and ask for one. I give to my church and we give handouts all the time to people who need it. From my government I just want

good rat control and the best damn military protection money can buy.

Climate change? Of course there was climate change. That's obvious. But all those people who spent all of their time worrying about it, passing around petitions and so on, I never had time for that Greenpeace Save the Manatee PETA garbage. Tree-huggers and Democrats and Hare Krishnas and so-called scientists. Where did all of their belly-aching get us? Did it make us one bit more prepared? The climate has been changing since before Jesus, you know what I mean? There were Ice Ages before and there will be other ones later. Continents shift and there are plate tectonics. Volcanoes blow and people die and there are tornados and tsunamis and forest fires and microbursts and outbreaks of disease. Plague, cholera, yellow fever, swine flu. Welcome to Planet Earth, where Shit Happens. It's not like any of this is actually our fault. Fate plays spin the bottle. Would you blame the dinosaurs for dying out?

I'm not some religious nut-job, but I go to church, sure. I get most of my employees from there, for the pig operation. Sometimes I'll meet a woman there and take her out on a date. I don't know if anybody's listening but I figure hell, we may as well pray, right? It can't hurt. I like the music. Once the storms started coming, some people went born-again, talking crazy about the rapture and the end times and all that. It was like every cult's wet dream. Lots of vulnerable people willing to believe these plagues were a sign of the end of the world or the second coming or whatever. It was like there was a Jim Jones on every corner and all these idiots were just begging to drink the Kool-Aid. I hate those sorts of predators and the desperate idiots who follow them around. You know the one good thing about suicide cults? They create a problem that tends to solve itself they become too much of a damn nuisance.

You have to have faith in a time like this. But I believe in evolution. Survival of the fittest is a theory proven every day, and more people should pay attention to it. You see what happens to the weak out here, every single day. They get eaten up. They get swallowed by the other animals. Homeless. You find them dead on the street, waiting for the meat wagons to come and take them away. I believe in the process of evolution that God set into motion. The big fish eat the little ones and that's how it is. You can't just coast by and expect the government to take care of you. It amazes me how many people thought that after the storms, everything would just be free. I believe in helping your fellow man, but you teach a man to fish, don't just keep giving him boxes of microwave fish-fingers. I help out the refugees when I can but I don't give anyone a handout. There's no pride in that. I put people to work. You want a hot meal? You want a roof over your head? You get to work. You have got to provide. And

people want that, they want to work. Most human beings are not parasites by nature. They don't want to leech off of you. They want to work for you.

We have got to grow our own food and harvest our own meat. And we can do that. I used to make my living in the insurance industry. When the company I worked for went belly-up after the first big wave of storms and gave me my walking papers, do you think I threw up my hands and gave up? Hell no. This is America. Show me a crisis, I'll show you an opportunity. Most of my neighbors moved out after the flooding. This block looked like a ghetto. I could have cut and run, could have whined about my property values and all the crime and everything, but I decided to stay right here. This is my neighborhood. I didn't know the first thing about pig farming five years ago but after the meat crisis, I said to myself if there's one thing people need now, it is good, clean, pure American meat. Do you think going to give up bacon just because corporate farmers fed their animals antibiotics that left us all vulnerable to the Porcine Endogenous Retrovirus— the PERVs? Hell no. We can have our bacon and eat it too. I started with just five piglets, but now I have a six-yard urban farm with over two hundred animals. One of my neighbors drowned in the second storm and the bank left his house just sitting there. I got it for a song. We put in some big bleeding sinks and set that place up as a slaughterhouse. Installed a butcher's counter. Everything we sell is locally sourced. People line up for it. We smoke our own meat in the garage.

I employ a lot of people. I don't pay most of them the so-called "federal minimum wage" and I don't intend to. I pay them in meat, which is far more valuable than greenbacks. Who knows the value of the dollar these days? It fluctuates so wildly as the government keeps moving from one crisis to the next. But a tray of pork chops or a side of bacon, a rack of baby back ribs, meat that you know won't make you sick, that has what you'd call intrinsic value. At any given time, I'll have six or seven people working the operation. There's refugees here who I've put a roof over their heads. I've got a butcher from Pleasantville who feels like he's got his old life back. He was sleeping in the street before I got him back on the knives. Feeding pigs, shoveling slop, killing and dressing animals, turning them into edible meat. That's real work, and it gives a man confidence, security. Everyone in my employ eats good food, and that's no small thing. We don't need your "Whole Foods." We have our own economy. Delores down the block brings me bags of potatoes and heirloom tomatoes from her garden, and I give her sausages and bacon. Another guy two blocks over is the chicken man. The people who are riding this out, the people who will survive, we're putting our backs to it. We're realizing our value in the market. That is

how you rebuild civilization. That's what the FEMA guys don't understand.

You think it's easy running a pig farm in the middle of the city? It's hard work for me and my people. We take care of our animals, our livelihood. In summer when the UV levels get too high, you'll see my guy Ed out there with the sunblock, slathering it on the pigs. In the winter when the temperature goes subzero, you'll see out us there under the tarps in the yard, stoking the fires and tucking those pigs up in blankets just like they were our babies. And we've never lost a pig in a flood, no matter what we need to wade through to gather them and take them to high ground. What I'm trying to say is that they are more than just meat to us. We all feel a kind of affection for them. Even on slaughtering day we treat them with dignity and respect. Those pigs are my pride and joy. My pigs and the people they provide for. They are what I've got in this world.

The pigs are valuable and people out there are hungry. We take turns keeping watch. I keep my Winchester Super X Pump with me on the porch. It is a fine weapon. It has an ingenious inertia-inspired action that relies on the rearward momentum created by the shot to help you cycle the action faster. I could squeeze off three rounds in a half a second with this baby. Don't get me wrong. It's not something I ever want to use. But sometimes the refugees make it difficult. You can put up signs, electric fences, Rottweilers in the front yard, but sometimes the only thing they'll understand is a barrel full of lead. We're near the river and sometimes the 'fugees will come up from the shoreline. I never want to pull that trigger but sometimes you have to squeeze off a warning shot. You see the strangest things. A couple nights ago I was sitting on the porch enjoying a tallboy while keeping watch with my night vision goggles when I see this teenage kid and some old lady out near the perimeter lugging duffle bags and looking hungry near the fence. I took aim and was near ready to fire if they took one more step near that fence. But they kept on going, right up to the shoreline. And what do you know, they kept on going. A boat met them and they headed across the river towards Camden, back into the Wash. People do the damnedest things.

Voice 6: FEMA worker, late 30s or 40s

(12 segments)

When a hurricane comes, you don't want to be old, and you want to know how to swim. With Sandy in

2012, the median age of the people who died was 60. Most of the young people survive. It's a lack of mobility that kills you. You're in a wheelchair, you have an oxygen tank. When the water starts coming you need to move, you need to be able to run and swim. More than half of the people who died drowned in their homes. Men die in disproportionate numbers. Males make stupid decisions, to ride the storm out, or to protect their homes, or to prove the forecasters wrong. Most directly related deaths are drownings. People get crushed, or struck by falling debris, or cut by something sharp. Electrocution. In terms of indirect deaths, most come from carbon monoxide poisoning. People bring a gas heater inside, and poison the whole family while they sleep. People don't always think clearly. People do stupid things.

I was proud of the way we handled the first big storms. I'd say we did pretty well. A lot of people died, a lot of people, it was a catastrophic event, but we would have had many, many more fatalities if we hadn't rehearsed and coordinated and had such a great communication system in place. Then the sequesters came. You know we had to cut 5% in 2013? That might not sound like much, but it was a billion dollar haircut. Staff, services, supplies, trailers, blankets. And then we had four hurricanes in a row. All the problems with the chemical plants and water treatment facilities. All of the toxins that leached up into the water supply. The meltdown in New Jersey. It hit everything, flooded every part of the system. We had every agency from the National Guard, to the Army Corps of Engineers to the NRC to OSHA to the FERC, Port Authority, Homeland on down, everybody trying to coordinate relief and reconstruction. Just as soon as we had one situation stabilized we'd have another event. And what did Congress do? Once we'd blown past the year's budget they called us to the carpet. Then they cut the budgets again in '15, '16, and '17. It was the death of logical thinking.

I'm a Debris Removal Manager in FEMA Branch II, the New York, New Jersey, Puerto Rico, and Virgin Islands region. I spend most of my life in debris fields. We work with with federal, state, and local authorities in search and rescue, and then we supervise documentation and removal of debris and demolition of condemned properties. It used to be a fairly straightforward process that took about two to four months start to finish. Any time a hurricane hits there's going to be a certain level of chaos immediately after the event, but when four hit the same region in quick succession, we never even had a chance to finish clearing a scene before we had to rush off to the next one. No time to finish the teardowns, much less begin to rebuild. You need to realize that most of us have families in the area too, and many of our employees were affected, their homes, their families. There were a lot of no-shows. Anybody with a house near water had serious problems at home. Whole neighborhoods flattened, or

immersed. Whole landscapes just gone. Beaches that just washed away, memories. Whole subdivisions turned swamps. Bodies everywhere, just everywhere, and always that smell, that stink of decomposing bodies.

A huge section of the grid was basically down for three weeks. The looting started and they called in the troops. The National Guard was overwhelmed, so they called in the regular army. Helicopters in the sky all day and night. It got ugly when they started using the snipers to bring things under control. It went atavistic. Some people were trying to take advantage sure, ransacking the Apple store and Best Buy, walking out of there with 59 inch LED TVs. But some of those looters were just trying to survive. When they shot all those kids at the Shop-Rite in Egg Harbor Township, they weren't carrying weapons. They had cans of beans and boxes of mac and cheese. When you get trigger-happy local cops who've never had to deal with a crisis of scale before and you hand them a catastrophic set of circumstances, desperate people without food or sanitation, rats and corpses everywhere, it's a recipe for disaster. The collateral damage of this thing is incalculable.

The Quarantine Act was controversial, for sure. But the fact is it was already one of the most toxic areas of the country. New Jersey, fifth in the nation for mesothelioma. Asbestos was used heavily in the shipyards, in the factories, built into the buildings. Barrels of formaldehyde, pools of hexavalent chromium. Arsenic. Benzene. So much material was buried in the region, you couldn't put a shovel in the ground without hitting something. And after the hurricanes, those chemicals leached out all over the place. Superfund was just a Band-Aid on a bigger problem. The meltdown at Salem, the leak at Hope Creek, they were just the last straws on the camel's back. We have had to make choices. As a country, we have had to make choices. Not every site can be remediated. It got to that point. It was an awful decision they had to make, to seal off a whole region. At a certain point you just need to give up on recovery and bury the problem. Put certain places behind fences, pour cement over them and never let anyone live there again. Declare a total loss. Draw a new map.

After they fired the director of FEMA, they transferred control of the whole operation to the Pentagon. I suppose it was inevitable, with an event of this scale. First you take the head of whoever is sitting in the chair at the time, then the generals roll in and take over control. By the third storm of the season it was chaos all up and down the Eastern seaboard. For weeks, we were doing nothing but pulling swollen bodies from the river, tearing down buildings to bring out the bodies. The storm surge was just the

beginning of the problem, and we haven't even seen the end of it. The final solution here is unclear. All sorts of toxic sediment was churned up in the rivers. We have teams out there in HAZMAT suits 24/7 to try and remediate this mess, but it's like the genie is out of the bottle. Nitrobenzene, aniline, diphenylamine, and PCBs near Wilmington, Paulsboro, and Gibbston. Dioxin in the Passaic from the old Agent Orange factories. We tell people to boil the water, but we're basically passing out placebos.

The Pentagon takes some of our advice but more often they ignore it. It's a different situation now. FEMA used to be about helping people see their way through, about helping people rebuild. But with so many places wiped out, and so many people suffering, FEMA can't help much. In the new regime we're all about taking out the garbage, clearing the debris, sealing things off. The military deals with keeping order and restoring basic infrastructure. We coordinate the cleanup. We bulldoze the buildings, we get the bodies in body bags and ship them off to the morgue. We send teeth to the forensic dentists.

Sometimes the teeth are all we have to send. Sometimes we needed to take a mobile crematorium on site to dispose of contaminated cadavers. Those remains won't take care of themselves. They pose serious health risks. It's all about containment.

They still name the storms. Hurricane Danny, Tropical Storm Erika, Hurricane Fred. They recycle the list every six years, but they retire names of particularly memorable storms, like Tess and Benjamin. They've been retiring a lot of them the last few years. I was down in Tom's River supervising a cleanup operation for Hurricane Marco when Omar hit and flooded the Schuylkill. It was a strange path and people didn't expect that it would hit the Philly metro area the way that it did. My boy's school was in the path. The roof of the cafeteria caved in and he was trapped under a beam. They were able to save him but it—impacted his spine, fractured in three places. He'll never walk again. It's difficult, it's difficult. He's a happy kid, considering. All that we do, everything that we do, seems somehow kind of futile. We can't change the weather. I don't know if things would have been different if I had been there. Would I have seen the storm path changing and pulled him out of school, gotten him somewhere safe? Would I have been able to protect him? I don't know. It took me almost 36 hours to get back and over to the hospital. I never felt so sick as I did in those 36 hours. Even talking about it now—

Elisabeth never forgave me even though she knows rationally it wasn't my fault. I was away and that's what she remembers. It's like the light went out of her and never came back. She blames herself, too. Everybody does. My point is he's still alive and we need to do what we can, so we do. Special needs kids

aren't prioritized the way they used to be so a lot of it falls on Elisabeth. I'm thankful that Tommy is still alive, so many parents aren't that lucky. Still when you become a parent, you never think that twelve years later you'll be changing your kid's diaper. You never think you'll be pushing him in a wheelchair every time he wants to go out for a walk. You never think you'll be freaking out every time another storm comes, hoping he'll be on high ground, knowing he can't swim. These are things you don't think about until you have to, and at that point it's already too late.

I don't love the job but I need to keep it. These days if you need insurance, a government job is your best option. We have to pay for the nurse and the van and the home care and everything else. Elisabeth would have liked for me quit after the accident. She doesn't like it that I spend so much time away on sites. She says it's like I'm a ghost, as a father, as a husband. Things haven't been that great, not for a long time. I've never been what you'd call a happy-go-lucky type of guy and the things that I see on the job take a lot out of me. And when I do get home, sometimes she looks relieved, but so tired. It's not exactly like she's happy to see me, just relieved she'll get a night or two of sleep before she's back on full time again. She doesn't have time for herself anymore, much less for me. It sort of emptied her out. It's not really like a marriage anymore, you know? It's more like we're just co-workers on another job. There is still love there, but we're both sort of like ghosts going through the motions. We work together on this project, this project is our son, and that's all we have in common anymore. We try to keep him safe. We try to imagine a future with opportunities for him. We try to make him smile. Everything we have for each other anymore goes into that.

I don't ever get a full night's sleep. My dreams are filled with bodies, washed up on the shore. You know how they say doctors have a certain bedside manner? On this job, you develop a sort of graveside manner. We try to get all the survivors the hell off a site as soon as we possibly can but people never want to leave their homes, their properties, their families, their memories. It's a hell of a thing, explaining to someone how their life will be disposed of, how their home will be torn down, what you intend to do with the bodies of their mother or father or wife or husband or children, if you can even manage to recover them. You try to project a kind of—sense of confidence, that there is a procedure being followed, that there is a next step, that things are being handled efficiently and professionally. You try to treat them with dignity, respect. Still sometimes you just want to get them the hell out of there, the hell out of your way. And they are in a lot of pain. And you feel that pain in a real palpable way and honestly you want it out of your sight. You don't ever get immune to things, it eats at you every time. I

see their faces. I wake up feeling cold. Death's messenger.

Humans are the most destructive species. No question. Up until now there have been five mass extinctions during the history of the planet. Events where 50 to 90 percent of the species alive on the planet die-off. The Permian extinction took place over the course of a period of 60,000 years. That might sound like a long time, but you've got to realize that this is 90% of all life forms on the planet that were wiped out. The planet nearly went dead. Mass extinction #6 is taking place now. It's been going on for about five hundred years, and it's all because of humans. By the most conservative estimates, by the year 2100 we will have wiped out 50% of the species that were around 12,000 years ago. A majority loss of all species on the planet that has only accelerated. A half dead planet. These are our consequences. When the dinosaurs died off, it opened the way for new species, for mammals to move up the food chain. Sometimes I wonder what will thrive after we're done. This mass extinction will end with our own.

ELEGIES

(53 segments)

Note: this section is for a chorus of voices—or rather a mix of individual voices which plays a choral role as interludes between the main narrative fragments. These layer in between other more clearly connected narrative strands. In terms of image ideas, it might be interesting for this to be a series of individual portraits of people, or of portraits of buildings and landscapes that have suffered storm damage.

Hurricaine Sandy Deaths in New Jersey

Erwin in Little Egg Harbor lived close to the canals in Mystic Island. He had diabetes and a heart condition and little mobility on account of the back injury. He poured the last few shots of Old Turkey as his ex-wife begged him to leave with her and her fiancé and settled down into his EZ-Boy recliner as everybody left. He was drowned in the storm surge and was found face down in the muddy debris with his boots still on.

Maureen in Jersey City died after her oxygen machine stopped working when the power went out. While she worked for the Jersey City Municipal Authority, her philosophy was simple: Strangers must be vetted. There was no way you would make it past her desk without an appointment. But once she confirmed you were there on official business she would offer you a cup of coffee. It looks like she tried to make do with bottled oxygen once the machine stopped but then she ran out.

The Everetts died of blunt force trauma as they were trying to make their escape from Randolph. A large old oak about 33 inches in diameter fell approximately 100 feet, crushing the cabin of their Chevrolet Silverado. Their two boys, 11 and 14 years old, were in the back seat, and escaped unharmed.

Fletcher, the board chairman of a bank in Hawthorne, died when two trees, an oak and a pine, crashed through the roof his bedroom. He suffered blunt force trauma to his head and was pinned between the two trees. He was pronounced dead at the scene. His wife in the next room survived. Fletcher was an

avid painter whose friends called him Fletch. His children retrieved many of his landscape paintings from the home later in the week but declined to speak the press. The authorities declared the home uninhabitable.

Thomas loved nature and riding over the woods in hot air balloons. He liked to go for long hikes in the woods and he knew which plants could be used to make tea or to salve wounds. One time he made a friend a bar of jewelweed soap. He was using a chainsaw the day after the storm and suffered severe head trauma when the saw kicked back on an unstable limb that fell on him. He died the next day of complications from his injuries.

Mudiwa and Kenya in Newark died of carbon monoxide poisoning from a diesel generator that was placed too close to the open window of their apartment. The open window created a vacuum effect that pulled the smoke in as they slept in the cold room. They died in their sleep and were found cuddled together in Kenya's bed.

Joseph, a retired salesman for Accurate Precision Fasteners, drowned in South Hackensack while on a coffee run to Dunkin' Donuts. His modest brick home was bone dry so he thought it was safe to go out. He apparently thought the floodwaters were shallow and drove his 2002 Mazda into them. As the water flooded the car he attempted to escape through the driver's side window, and he was carried off in the floodwaters. His body was found some miles from there next to the shore of the Hackensack River.

Amadeo, a landscaper in North Brunswick, was trimming a partially fallen tree in the backyard of his residence when the tree broke loose, causing a fatal injury.

William, a volunteer fireman and emergency management coordinator in Bethlehem Township, wore his brown cowboy boots everywhere. He was working with a private contractor to clean up storm debris at a residence in Raritan Township when he was hit by a pickup truck whose driver did not see him. He later died.

When the lights went out in Hawthorne, retired Spanish and Drama teacher Benjamin tripped and fell down the stairs to his death. He was known for his love of native American culture and his vocal stylings with local doo-wop singing groups.

Lester of Brigantine was a retired lawyer and limousine company owner who loved playing blackjack at Harrah's and the Golden Nugget in Atlantic City. He always enjoyed watching Jeopardy and liked taking risks. His wife said used to swim so far out into the ocean that she was afraid he would never make it back but he always did. He was found on the floor of his flooded and unheated home four days after the storm hit, one day after the President and the Governor visited the island. His neighbors had no idea he was still in the house. He was found naked on the floor. It is unclear why he was naked. He died of hypothermia while en route to the hospital in the ambulance.

Celestine of Forked River was a lovely lady who lived for 94 years before dying of hypothermia in her flooded home. Nothing in her house was salvageable. It was a complete loss. She was a frequent customer of Forked River Florist, and always bought floral centerpieces for her dinner parties. She was known as a great hostess. She outlived two husbands and never had children.

Bruce of Jefferson Township was a baker on disability on account of his diabetes. He was sitting in his chair waiting the storm out when a tree crashed through the roof and killed him. He was a thoughtful, nice, and friendly guy whose neighbors thought well of him and who loved his German Shepard, Hope. His neighbors found him in the debris by following the mournful sound of Hope's barking.

Vernie, the founder and owner of Frost Point Heating and Cooling, had Lou Gehrig's disease that made the oxygen machine a necessity. He died of respiratory and heart failure in West Orange when his oxygen machine stopped working after the electricity went out. His daughter will soon be engaged and wanted him to be there to walk her down the aisle. She did not know that it would happen so fast.

Bobby's last meal was turkey and provolone sandwiches. He drowned while working an extra shift in Newark at the Wakefern warehouse. He was always taking extra shifts to put food on the table for his wife and three girls. He could see out the warehouse window that the Passaic River was rising and took a break to move his car out of the parking lot. He loved gospel music and apparently drowned in his car.

Margaret and Lawrence died in a fire in their one-story home in Middlesex, apparently caused by a candle they were using during the power outage. Lawrence, who collected old vinyl LP records, was found dead of smoke inhalation in the basement. His mother Margaret was pulled from the blaze but

died in the hospital ten days later. Margaret used to sing, not only in church, but with the Sweet Adelines all-ladies barbershop quartet.

People knew that it was likely that Bayonne, surrounded by the Newark Bay, the Kill Van Kull and the New York Bay would flood and lose power, but Alice, born in Bayonne in 1926, stayed in her home. She slipped while using the bathroom in the dark, struck her head on the doorknob and fell to the floor, where she died and was found five days after the storm struck.

Robert lived in Long Branch a block from the beach, where he would ride his specially made beach cruiser bicycle to the sand whenever he could. He had planned to go fishing with friends the day after the storm, and when he didn't show they called the police, who found him wrapped in blankets and unresponsive on the floor of his apartment, where he died of hypothermia. He had a real big heart, was good with his hands, and was loved on the jetty.

Ernest had a black belt and he'd help out friends and family if they were down. If someone came to him he'd pay the light bill to stop their power from getting cut off. He loved science and listened to the blues. After retiring from Bethlehem steel he suffered from asthma. After the storm was found dead with an inhaler in his hand.

Robert and Karyl stayed active in their retirement. They went scuba diving in the Caribbean, and rode horses, and restored two different 18th century homes. The couple met in the last century while working at RCA, and Robert spent a decade in sales at Xerox before he retired. Karyl decided to leave the house and stay with relatives who had power while Robert decided to mind the fort during the nights without power after the storm. He fell in the dark and struck his head and died on the floor near the front door of their home.

Walter was a World War II veteran who served with the Ordnance department of the US army. He died in the surging waters on the bay side of Ventnor City while trying to move his car.

Eva began every day with a swim in the local pool in Summit. She was a child in Germany when they firebombed Dresden. She survived that horrible night and then nearly starved to death during the years after the war. She loved poetry and gardening and sewing and the opera. She fell down her stairs while

the power was out, broke her neck, and died almost instantly.

William was a very competent pharmacist in Hamilton and an essential member of the crisis response team. There was not much he could not handle. He was sharp and funny and loved languages. During his lifetime he studied Latin, French, Italian, Spanish, Slovak and German. He was calm under pressure. The day the hurricane hit, he had just driven through the dark and rain to report for his overnight shift. He was walking through the hospital's parking lot when a gust of hurricane-force wind blew him off his feet and up into the air and then down to the pavement. He suffered a blunt-force trauma injury from the fall and died later because of complications.

Vernon played bass guitar in a number of bands. He learned to play when he was thirteen and would often fall asleep with the instrument in his hands. He taught art at Brick Township High School and loved the oddities of life. He was so grateful when the storm hit that a tree fell in his yard instead of into the house. It was uprooted and left a large hole behind. He had climbed into that hole to cut away the roots when the tree shifted and fell on him, leaving his head and shoulders exposed above ground. Frantic neighbors and rescue workers tried to save him but then he lost consciousness and died in that hole twenty minutes later.

Bernice and her husband were inspecting their Sea Isle City vacation home about a month after the storm while recovery workers were gathering debris from the road. Bernice stepped out of the way to let dump truck pass but did not notice when it began to back up again to gather additional branches and torn pieces of metal. She was run over by the heavy vehicle and died at the scene.

Edwin and Charlene were married for nearly fifty years. Charlene loved Edwin and Edwin loved Charlene. He was an aircraft mechanic with the Air Force for many years and they traveled the world together to his different postings. Charlene had been forced into retirement a couple years before due to a horrible accident that left her disabled and wheelchair-bound. Edwin was known for his culinary skills and their son Timothy had planned to meet his parents that day to celebrate his birthday but on the night before he was woken with news that their house was on fire. He rushed over to find the place engulfed in flames. They were using a gas generator during the power outage, though the fire may have been due to an electrical problem. Both Edwin and Charlene died in the fire.

Princeton Township investment banker William's front yard had already seen some tragedy. Nine years before the storm a 24-year-old University of Maryland student suffering from a breakdown had crashed his car into the old oak tree out front. When William answered the door, the man attacked him with a knife, stabbing William multiple times in the upper chest and shoulder before William's wife smacked over the perpetrator over the head with a frying pan. When the assailant stumbled back into the yard, he slit his own wrists and then refused to drop the knife. He shouted "Kill me now" before he was shot fatally by police. William eventually recovered from the stabbing injuries and was doing well when Sandy struck. He was clearing debris from his driveway some days after the storm when the big old oak tree fell right on top of him. He was trapped underneath it and he died at the scene.

George was an unsuccessful painter and sculptor born in Hungary during the middle of the last century and his brother remembers that the Danube flooded over its banks each spring near where they live and that both boys were terrified of the power of water. He couldn't understand why George nevertheless chose to live in a little bungalow that sits alongside the lagoon in Brick Township. George didn't drive and he rarely left home. Neighbors said he lived like a hermit. During the storm surge the floodwaters washed through the bungalow and George drowned.

Mary Lou taught business at Bound Brook High School and lived in Middlesex Borough. She loved mysteries, antique china, roses, and azaleas. She fell in the dark, and was found dead at the bottom of the basement stairs.

Dhyanesh was a four year old boy who loved his small red bicycle with training wheels on it. The streets of Jersey city were dark from the blackout and the woman driving the car did not see Dhyanesh crossing the street while holding his mother's hand.

Robert was a retired Edison fireman who never really left the job. He fell asleep on the couch while his new generator was running and died of carbon monoxide poisoning.

Bernice used to volunteer at the soup kitchens in Atlantic City, especially Sister Jeans. She had a heart attack on the evacuation bus on the way out of time and died. Her daughter Bernita was having knee surgery at the time and her husband waited to tell her about Bernice until Bernita was in stable condition. "Oh man," he said when he heard the news "this is too much."

Leonard was a neighborly but private man who mostly kept to himself. Some of his Stafford Township neighbors wish he had reached out for help. Leonard was good with his hands and loved to tinker with stuff. While he served in the Navy during the early 60s, he worked with missiles and other weapons systems, and he would sometimes bring model airplanes and military memorabilia to church for Lori's special-needs son, who was fascinated by them. He did some worked for some time as a trainer at the Fork Creek nuclear facility and had done some teaching at the community college. He owned two cars, both of which were crushed by a falling tree, and Leonard himself was found in his home, dead of hypothermia. He was born in Chicago and that's where they buried him.

Gracie and James had a hard life in Trenton. Gracie worked at Cranbury farm, where she spent her days cleaning spinach. She always liked cowboy movies and dance, and she tried to make life easier for her family. She kept things light and happy and cooked hearty breakfasts with the lightest fluffiest pancakes you ever tasted. When the emergency workers arrived at the house, they found all seven members of the family suffering from the effects of carbon monoxide poisoning, but Gracie was the only one who died.

New York Sandy Deaths

Lauren stepped outside of her home in Richmond Hills to take some pictures of the storm she could post on the internet. She stepped on a downed electric line she did not see, was electrocuted and died on the scene. The 23 year-old beautician caught fire and her neighbors could see the flames through the window as she burned. Her family later sued Con Ed for wrongful death.

Walter and Marie Colborn of Great Kills, Staten Island died while trying to escape the storm surge of Hurricane Sandy. Walter, 89, was 23 years older than Marie, but Walter was the love of her life. Walter was a World War II veteran with a Bronze Star and had served in the Air Force for six years after the war. Marie was a long-time middle school science teacher and Walter a financial comptroller. For several years prior to their retirement, the two had owned and managed a BMW dealership. Marie's friends said they would always miss her love of life and her guidance. Her favorite expression was "You need to buck up."

John K. and his son John C. were found in the basement of their Staten Island home, locked in a final father and son embrace. They died when the storm surge crashed through the wall of their basement. Both drowned and their bodies were located under the debris. John K.

served as a Marine in Granada, and had been a city Corrections Department officer, working first on Riker's Island, then in the Manhattan court system. His hand was cradling his son's head, as if trying to shield him from the wave.

Arthur, an off-duty police officer, was able to get six members of his family, including two men, ages 69 and 31, three women, ages 31, 56 and 68, and a 15-month-old boy into his attic so they could safely escape the rapidly rising water but then returned to the basement to check the fuse box. He was electrocuted and died in the flooded basement.

Tony was a thirty year-old graduate student at St. John's University College of Business Risk Management Program. He was sitting on a couch in a room on the second floor of his house in Flushing when an eastern cottonwood tree with a weak root system fell on his home and crushed him. His mother blamed the city's negligence for the death of her son, and she thinks about his pointless death every time she sees an overgrown tree.

Anne Marie from Levittown was found in a wooded area near Commack a week after the storm inside a tent, crushed by a fallen tree. The 55-year-old former school teacher had moved to the woods after a falling-out with her family. She used to walk everywhere, and she loved to walk. She would walk from the woods to Sports Authority and to Target, where sympathetic employees would let her wash up. One of her friends would sometimes drive her to Sunken Meadow beach where she loved to walk on the shore and watch the tides. She was cremated and her ashes were spread there.

Augustine lived in Hempstead and worked in a nearby medical facility. A week and a half after the storm, the traffic lights on Franklin Avenue in Valley Stream were still out of order, and a white 2007 Nissan struck and killed her as she was crossing Linden Street. Her family took her body back to the Dominican Republic, to bury her in the land of her birth.

Michelle from Oceanside was a 44-year single mother of two who loved animals. She would give you the shirt off her back, if you needed it. Her 19-year-old daughter and 22-year-old son were away when she

was found a week after the storm dead in her home along with her three pets—a labradoodle named Zoey, a cat named Skittles, and a bird named Lila. The animals were also dead. A generator was found in the attached garage of her Oceanside home, and the door was shut. Neighbors mentioned that in the immediate aftermath of the storm, she had generously welcomed them to use her little generator to charge their phones.

Drowning in the Delaware

Davin from Bray, in County Wicklow, Ireland was a college student in the USA on a work study visa. He and some friends decided to take advantage of the summer weather and drove down from Brooklyn to go rafting on the Delaware River. Davin jumped in and was swimming along raft when he got caught up and pulled into the rapids on a stretch of the river near Lumbertown. Because of all the rain, the river was swollen and the stirred-up sediment was dark. One of his buddies jumped in but Davin wasn't wearing a life-jacket. He got pulled under in the swirling mud and disappeared from sight. His body was recovered three days later about 40 feet from shore. Davin loved the music of Bob Marley and the Wailers. His mother said he came to America in search of a better life, and that he was like a flame that would never go out.

Shawn and a friend decided to take advantage of the high water to go kayaking on the Lackawaxen River, which was swollen from overnight rain. Near Kimbles, the discharge from the PPL hydro-electric plant creates rapids. Martin's boat flipped near the Kimbles bridge and his unsecured life-jacket came off as he struggled in the waves. His kayak and life-jacket were found about ten miles downstream. He drowned and his body drifted for six weeks before his bloated corpse was found 90 miles downstream on Duck Island near Trenton, New Jersey. The 29 year-old musician was an avid outdoorsman.

Anthony of Herndon, Virginia was tubing with a group of friends on the Delaware River near Point Pleasant in Buck's County. He was about 15 feet from shore when he slipped off the inner tube and disappeared in the swirling waters. Three weeks later, his decomposing body was found snagged on a low tree branch. Anthony worked for the Department of the Interior. He worked and played hard and had played. A graduate of the University of Oregon, Anthony had played baseball with the Oregon Ducks and always loved the game. He was an outfielder and a decent hitter. He played softball with some friends in Philadelphia the day before he drowned.

Gary was a 38 year-old truck driver from Summit. Gary was tubing near the Delaware River Family Campground in Knowlton Township with his 14 year-old daughter Ciara when a sudden current flipped them into the river. Ciara suffered minor injuries but was able to make it to shore because she was wearing a floatation device. Gary didn't have a life jacket and was pulled under. His body was found the next week 35 miles downriver on the shore near Frenchtown. Authorities said they had tried to warn people to stay out of the river, because recent rains had raised water levels to dangerous heights.

A nine-year old Bushkill boy was out fishing with his family on the shoreline at the Delaware Water Gap National Recreation Area. The boy wandered a few steps too far in the water, lost his footing and was caught by a strong undertow. His father, other family members, and a passing boater tried to rescue him, but lost sight of him. His body was found two hours later by divers in nine feet of water. While the river may appear deceptively calm on the surface, it has strong currents, steep drop-offs, underwater obstacles, and conditions that change constantly.

Industrial Accidents

Henry, a 53 year-old from Newark, worked at Hartin Paint & Filler in Carlstadt. While working at the plant, we was overcome by paint fumes and fell onto a vat of industrial solvent. The vat contained the chemical toluene and was capable of holding 500 gallons. Firefighters had to hose down Henry's body to decontaminate him before attempting to revive him. He was taken to the hospital unconscious and died later that night.

Other Accidents

DeAnn was out with her friends Jean and Monica to celebrate her 25th restaurant at Club Heat, a new nightclub out on old Pier 34. The three worked together at the New Jersey State Aquarium, and everyone was celebrating. Monica had just gotten hired and Jean had a promotion. The three were dancing on the outdoor deck when there was a sudden volcanic rumble and the end of the 90 year-old pier came off its pilings as the floor collapsed beneath them. All three perished in the Delaware River. DeAnn was a graduate of Temple University who regularly attended church. She suffered a severe head injury, and then a major chest injury, and then drowned, probably because she was unconscious.