Norfolk has problems with water and with housing. Norfolk isn't just facing one of the fastest rates of sea level rise in the country. It's also a place where sea level rise makes the problem of housing scarcity much more complex. Over the course of this series, we've heard from Norfolk residents in different neighborhoods with different housing situations and incomes, as well as experts, advocates, and elected officials-- all dealing in different ways with the same complex problem:

how will sea level rise shape housing in this city that doesn't have enough?

Water's taken care of at the speed of redevelopment.

This park he' worse'n any'o'em. Cause it's on a-sea-level.

What I see in Vision 2100 is a plan for climate gentrification.

What is gonna happen, you know, for us or to us with this project?

In the mix of conversations around making cities more resilient, one very important question that isn't often heard is: resilient for who? In this episode, we'll look at two different approaches to resilience and their implications for the people who will experience the effects of sea level rise first and worst. We'll hear both top down and bottom up approaches to resilience, and how those angles reflect different values.

Most of the time, when coastal scientists and Norfolk City officials talk about resilience, they use that word to mean a mix of flood proofing combined with an economic safety net. To people dealing with the ongoing threat of displacement, resilience might look and feel more like a place where anyone can continue to live happily.

These definitions don't have to be in conflict, but sometimes they are.
(Music changes from guitar to synthesizer, lots of delay, few notes with a long sustain) Top-down approaches to resilience tend towards large scale infrastructure projects that physically and politically protect economic assets first. This kind of project tends to conceive of climate change disaster as one big spectacular event, like a hurricane. Big solutions have big effects, but they leave some residents behind.

(acoustic guitar arpeggios on major eseventh) On the opposite end of the pyramid, bottom up approaches aim to meet the expressed needs of people who are most affected by the problems at hand, empowering them to work together to advocate for themselves and for each other. This kind of approach often uses grassroots strategies, building structures to support what affected people are saying that they want and need.

In Norfolk, bottom up strategies aim to center the people who are dealing with the daily problems of climate change.

Let’s start at the top and work our way down. (synth sound from beforee)

There are three big resilience projects in Norfolk. First, the St. Paul's Transformation, which will successfully decrease flooding by intentionally surfacing a suppressed creek. It'll also add more apartments to the housing supply downtown. Unfortunately, this project comes at the high cost of displacing a high percentage of mostly Black residents of the public housing in the area being redeveloped. We've seen this before. Efforts to promote economic development result in displacing Black residents.

Monet Johnson, advocate with New Virginia Majority had this to say about it in episode three.

[00:04:23] **Monet Johnson:** From before the first building was torn down or vacated, they were informed by us, by residents, by others that there's not gonna be a place to go with these vouchers. The city and NRHA ignored that.

[00:04:35] **Adrian:** The city of Norfolk's second big resilience project is the Ohio Creek Watershed Project. This public work will build an earthen mound that protects the historically Black area of Chesterfield Heights from sea level rise. Since the infrastructure is made of earth, and not of concrete, the project also offers wetland protection and restoration, as well as reduced flooding.
The project also includes improved public spaces, a park, a beautiful trail, raised roads, and more. But there are lingering doubts for the residents of those areas that this project might lead to the rapid gentrification of their neighborhoods, and they may be priced out. We talked about this in episode four, focusing on the experience of April Hatfield, resident of Grandy Village, adjacent to the Ohio Creek project.

[00:05:30] **April Hatfield:** It should not be that you are displacing someone else because of the way you want something to look. I feel like that kind of is the mindset.

[00:05:40] **Adrian:** Bigger even than St. Paul's or the Ohio Creek project is Norfolk's downtown flood wall. (subtle beat with high hat and bass drum in background) This is also the most expensive project. It is essentially a six to seven foot tall cement wall. It stands between downtown and the water, with a gate [00:06:00] that opens and closes. (beat pauses)

[00:06:02] **Skip Stiles:** When the gates close, the city is protected from the storm surge that comes from the outside.

[00:06:08] **Adrian:** Skip Stiles, the ecologist and advocate from Wetlands Watch.

[00:06:12] **Skip Stiles:** But the water that's in the creeks and rivers in Norfolk can't get out. And so it just sits there. And then if you've got rainfall associated with it, all of that pollution goes into the water. And if it's held long enough, then you begin to get algal blooms and hypoxia and and things like that. But we don't know where that threshold is cuz we don't know how many times a year they're gonna close the gates.

[00:06:38] **Adrian:** Ideally, the gates are only closed a few times a year during significant storm surges. Storm surges come from the ocean when a lot of water piles up due to wind or storms that are happening at sea. And then all that water blows inland. It's not the same as a lot of rain falling on Norfolk, and it's also not the same as sea level [00:07:00] rise.

[00:07:00] **Skip Stiles:** It is designed only to protect the city against a storm surge. It does not protect the city against rain flooding. It does not protect the city against sea level rise. In the interim sea level rise is gonna continue. (ominous synth pad in background) The question is, all right, we're gonna protect ourselves from the storm surge, which is a necessary piece of this.
What do we do about the rainfall and the gradual and inexorable rising of the sea? 

I, I turned 73 this year, so I won't be around to figure it out!

(Interrupted by an intense chuckle that stops abruptly) But my kids will be here.


[00:07:51] Skip Stiles: Uh, they do now. I don't know how much longer they will.

[00:07:55] Adrian: Okay.

(Skip continues laughing with harsh abandon) [00:08:00]

[00:08:01] Adrian: (major synth pad chord with a few major guitar notes) Seawalls respond to some of climate change's most spectacular effects: major coastal storms and hurricanes. Also devastating, though, are the daily effects of climate change.

Sunny day flooding, a.k.a. nuisance flooding happens even when there's no precipitation (organ riff fades in) due to a combination of sea level rise and the ground under the city sinking. (beat with just bass drum joins in to organ riff)

Sunny day flooding can destroy cars. Sunny day flooding contributes to unsafe and unhealthy living situations because it produces black mold and mildew on the interiors of buildings. (claps join into beat, organ riff continues) It can make roads undrivable, making it impossible to get to school or to work or slowing down emergency vehicles. The seawall does nothing for sunny day flooding.

What the seawall does do, though, is already exist. It was built in 1971. And what the city is doing now is expanding it as part of a five step resilience plan that also includes levies and pump stations. (organ stops, beat continues) If you look at a map of Norfolk and where the seawall will protect, it only covers the downtown area-- where most of the business and high rent housing is concentrated. (curious guitar stabs)
It also includes where the brand new units of St. Paul's will be. There are still large parts of the city without substantial plans for protection. (music stops)
(guitar chords strum, ending on a suspended chord)

[00:09:31] **Kenny Alexander:** Um...Berkley Campostella.

[00:09:33] **Adrian:** This is Norfolk Mayor Kenny Alexander.

[00:09:35] **Kenny Alexander:** (fading in) ...At the very bottom. Okay. And... I see where... (fading out)

[00:09:39] **Adrian:** This is from a presentation to City Council about the flood wall and other flood resilience projects in Norfolk from May 24th, 2022.

[00:09:47] **Kenny Alexander:** Without the protection. Uh, Berkley is pushed to Portsmouth, almost.

[00:09:52] **Adrian:** Mayor Alexander is looking at a map of Norfolk that shows sea level rise projections, both without and [00:10:00] with city interventions.

The map is zoomed in on the South side, a sliver of the city that is separated from the mainland by the mile wide Elizabeth River. The South side is made up of the neighborhoods Berkley, Campostella and Campostella Heights.

[00:10:15] **Kenny Alexander:** And with the protection, let's see what it looks like. Filling basements, raising homes, and, and, and, and, and buyouts. Because there's no structure. Mitigation. There's only non-structure.

[00:10:30] **Chip Filer:** We've gone through and, and prioritized (fading out and under)

[00:10:32] **Adrian:** Since the South side won't be protected by the sea wall, three main tactics are proposed to protect the area from going completely underwater: raising homes on stilts, filling the basements to make them flood proof, and having the city buy homes so residents can relocate inland. To another city.

[00:10:55] **Kenny Alexander:** I think that we need to be very open and very clear. That's the policy. [00:11:00] If that's the direction that we want go in. I think that's a conversation that we need to have at this Council level. If there's, if there's not gonna be any structural protection for the South side. Gonna be filling basements, raising homes, and and buyouts.
So I just wanted to make sure that. That we just don't gloss over that. Yeah, because that, that's, that is serious.

[00:11:25] Adrian: It is serious. The South side is a predominantly Black area. And most Black residents of Norfolk rent rather than own their homes. (Synth arpeggio minor chords in background) This is directly related to some of the historical issues we reported on earlier in the season.

Norfolk is home to a significant African-American population, about 40% of the city. Because of historically racist patterns, policies and practices, Black residents have been less able to access home equity, mortgage credit, and inherited wealth. Now that sea level rise is making itself known as a bigger and bigger problem in the city, proposed solutions fail to consider the ways that most Black Norfolk residents live: as renters, rather than homeowners. Add to that, the city's only existing strategy to protect that area from the inevitable rising ocean is by raising homes, filling basements and buyouts. It means that Black renters in the South side and in other Black neighborhoods and areas in Norfolk have nothing to gain, and their homes to lose. (music stops)

Renters can't raise a home or fill a basement. Similarly, only a homeowner would benefit from a buyout from the city. The renter would just have to move away, with no extra capital to support that move.

[00:13:03] Kenny Alexander: If there's, there's not gonna be any structural protection for the South side, we're gonna be filling basements, raising homes, and, and, and, and, and.

Buyouts.

Mayor Alexander was born and raised on the South side. When I hear this, I think he sounds a little surprised, and maybe disappointed, (quiet acoustic guitar arpeggios) at the plan to preserve his home turf. Meanwhile, City Manager Chip Fler appears to be biting his nails nervously. City Council seems like they're a little (notes stop abruptly) bit out of ideas on what to do to protect the south. (pensive guitar arpeggios)

The strategy behind the seawall, St. Paul's and the Ohio Creek Project reveals something important about how the city understands the need for resilience. The attitude behind these projects sees resilience as a kind of endurance, and the ocean [00:14:00] as an enemy that can be defeated. It's a narrow approach to a vast problem-- a titan!
In 2022, the International Panel on Climate Change published a report that calls out seawalls as an example of what not to do for resilience because they don't have a system-wide impact. The IPCC calls seawalls maladaptive solutions that put vulnerable people in ecosystems at more risk. By design and in execution, top-down approaches like the sea wall always prioritize the interest of a few people in a few properties, and shift the costs of unreachable goals, like defeating the ocean, onto a group of marginalized others.

[00:14:55] **Adrian:** That's not to say that there is resistance to the sea wall. No one is saying, 'Don't build the wall.' It's just clear that the wall is not enough.

[00:15:08] **Kim Sudderth:** So you got your sea level rise protection and storm surge protection. So, yay. So you're doing is all this stuff and yay, I'm glad. Right? But please, please don't leave out others.

What, what does give me pause is, um, this could be a prelude of, here are the folks who are gonna be sacrificed. And you know, there's just not a whole lot we can do. Um, that's what I hope doesn't happen.

(trails off)

[00:15:52] **Adrian:** Kim Sudderth is a Norfolk resident, community leader and environmental justice organizer. She was also the 2022 Repair Lab Practitioner In Residence.

Here, she's reflecting on the gaps left by the city's big resilience projects. Kim has grown familiar with these gaps through her experiences in advocacy.

[00:16:14] **Kim Sudderth:** I am a climate and environmental justice advocate professionally since 2016. Currently, I am vice chair of the Norfolk Planning Commission. I also chair the Environmental Justice Committee for the Norfolk NAACP.

Just a lady that loves Norfolk. From climate work and environmental work to justice for women, housing equality, just a lady that loves her city and the people that live in it and just wants best for everybody.

[00:16:46] **Adrian:** As a community leader and environmental justice advocate, Kim is someone who is invested in developing something that centers people who are falling through the cracks of other solutions in Norfolk.
One of those groups is Black renters. They are unlikely to benefit from solutions like the seawall.

**[00:17:09]** *Kim Sudderth:* I'm grateful that these interventions, these structural interventions, I'm grateful that there is a plan that's going to protect at least 80% of the city. I'm really, really concerned about those areas that are relatively unprotected.

**[00:17:31]** *Adrian:* Kim spoke with me about an idea she's working on. It's a proposal for a project that would offer its support to folks who may not receive the benefits of the city's resilient strategies.

**[00:17:43]** *Kim Sudderth:* Well, this. It started as a wonder. I just wondered, how does climate change, and specifically in Norfolk flooding, how that intersects with our current housing crisis or gentrification long term. We have this really long and sustained shift in our climate. And how much of our city is just gonna be underwater.

That won't be a sudden thing. It'll be slow and insidious. And what about those refugees? Where might they go? That was the wonder.

Doing the research as far as the disproportionate homeownership by race, right? Black people make up a little over 40% of the city of Norfolk, but less than 30% of the homeowners and almost 60% of people living at or below the poverty line.

These are the same folks, right? Poor, Black, all of the things, that they're going to be impacted by climate change first and worst. So we add all of that together. Thinking about like, well, gosh, what can we do policy-wise to help folks who don't own a home, as much of the current solutions are centered around people who own a home?

So how do we help folks that don't actually own a home, and those people who are in a position where access to home ownership is limited?

**[00:19:15]** *Adrian:* When Kim says "we" here, she's talking about herself and post-doctorate research associate Jonna Yarrington as well as Assistant Alannah Bell with the Environmental Justice Policy Clinic at UVA.

The purpose of the Policy Clinic was to leverage the resources of the University of Virginia to help answer pressing questions about climate change posed by community leaders like Kim. The clinic has two responses to the question of
how to help folks that don't own homes. (smooth floaty synthesizer arpeggios)
One is a flood insurance cooperative, where renters can access the benefits of flood insurance in case their residence floods.

As things are right now, renters [00:20:00] have little control over their fate when it comes to flooding. Landlords have no requirement to warn renters about flooding, and although they can opt into flood insurance, most renters don't have it. So when their residents floods, there's no backup for them. The clinic's other response to how to help non homeowners is a community controlled land trust that lowers the cost of purchasing a new home.

In this hypothetical land trust, a nonprofit owns land on which houses can be bought and sold at a lower price, because the purchaser is only buying the home, minus the cost of the land. (synthesizer fades out) Kim wanted to make sure that her ideas were grounded in community from the get-go.

[00:20:49] **Kim Sudderth:** We wanna make sure that we are focused on, again, the people who are most vulnerable.

So we held a focus group, but we were calling them salons because (stage whispers) we're [00:21:00] fancy.

(Tape of a big, echoey room with many voices talking in the background, sounds of dishes and air conditioner) Um, anyone wanna add anything to the "Like, Change, Add" board, before I start... (fades out)

[00:21:09] **Adrian:** The first salon took place in June of 2022 at a Bistro and Norfolk's Park Place neighborhood.

[00:21:16] **Kim Sudderth:** And we invited folks out. We had about seven or eight people come out with their families, which was exciting. We had some kids there too, and we made sure that everyone had dinner and had a chance to really commune.

And I think we had a lively group and we talked a lot about, you know, what are your current attitudes about housing? The availability of it, the affordability of it. And what are your attitudes about flooding? What do you think a landlord could do or should do if, if you experience property damage by flooding?

Questions like that. And we went back and kind of synthesized the data that we got and we ended up with [00:22:00] the scaffolding of these two policies.
So the local land trust, that's making home ownership more accessible by removing the land value from the cost of the home. Which makes it at least 10, 15, 20, $50,000 more affordable. The land itself remains in ownership with the trust and whomever is holding the trust. The community organization, like a civic league or a homeowner's association, some official not-for-profit organization manages these land trusts.

[00:22:44] **Adrian:** A civic league is a community organization that represents a neighborhood, but with less power than the city government. In Norfolk, city government will sometimes consult with the civic leagues to make decisions that impact neighborhoods.

[00:22:58] **Kim Sudderth:** Even as this civic league owns the land—or multiple properties, land that, you know, that the improvements sit upon—they can leverage the value of the land to purchase more property and continue to turn out more land trusts, keeping the purchase price low, but not affecting the ultimate value of the property and the property values of the homes that are surrounding it.

As far as going back to the tenant's cooperative flood insurance, one piece of feedback that we received, they said, you know, some people just don't wanna own a house.

**They just don't!**

[00:23:40] **Workshop participant:** (tape from workshop -- big echoey room, people talkign and dishes clacking in backgorund) I don't wanna buy a house. Cause everybody does not wanna own a house.

**We make the assumption that, that's the American dream.** (more workshop participant crosstalk)

[00:23:53] **Kim Sudderth:** (workshop tape in background) So maybe we could add more benefits in there for folks who, that's their decision. [00:24:00] "I'm, I'm not going to own a home."

And I had to take that feedback. I don't want to tell the cooperative how it should go.
Workshop participant: (workshop tape) That's what, that's what I'm saying. That's the part I don't like, (crosstalk) There needs something. Who does not want to buy a home? So, but there should be. (Fades out)

Adrian: There are some key aspects of Kim's proposal that are derived directly from sticky notes people left on Kim's giant notepad during the feedback sessions.

Kim Sudderth: (workshop tape-big echoey room, workshop participant crosstalk in background) Um, under change, there isn't enough benefit to the renter who does not wanna purchase.

Workshop participant: Exactly.

Kim Sudderth: Is the program income sensitive? Is the program FEMA.... (fades out)

(interview tape) Then we came back about two months later. Some of the same people, but mostly new folks. But just to say, 'Hey, we took your feedback from before. Here's what we came up with. Now, what do you think? '

Adrian: This is a gap filling proposal, not necessarily a world saving one. And it does exist as a proposal, not yet as policy. (simple synth chords with bass drum and handclap beat in background)

In order for the flood insurance cooperative to exist, it would need to be adopted by the Virginia General Assembly. The land trust would need to be adopted by the Norfolk City Council. But the community building part of this process is gathering vital participation from people who are most affected by the problems it aims to alleviate.

It's a different dynamic from the community sessions featured in municipal projects like the St. Paul's Transformation or the Ohio Creek Watershed Project, because Kim didn't have an end goal or millions of dollars waiting to go into development and construction. She folded participant feedback into her process, where the other projects sort of just added it on.

And participants had a [00:26:00] lot to say. (music stops) Almost all of them expressed feeling individually responsible for getting ready for inevitable flooding after big storms. There is not a lot of trust for any protection or support from the city. And landlords? Forget about it. There were a lot of complaints
about negligent landlords who wouldn't maintain or repair properties in a timely way or at all.

And when it comes to renter's insurance, it seems to cover the bare minimum at a premium price. Public housing residents, like the folks living in St. Paul's or Grandy Village, are eligible for renter's insurance, but not all of them have it. Vincent Hodges, a social worker, community organizer, and previous guest on the show often works closely with folks in the St. Paul's public housing communities. He was present in my conversation with Kim about her ideas.

(from interview tape) Can I ask you a question, Vince? [00:27:00]

[00:27:00] Vincent Hodges: Sure.

[00:27:00] Adrian: Would you be somebody who would be like eligible for this kind of cooperative flood insurance? Or would you be interested in it?

[00:27:07] Vincent Hodges: I would be interested in it for sure, but uh, the tenant base that I work with are economically transitioning folks. Public housing is never anybody's final, final stop, or not optimally. There are opportunities for folks, like Kim said, to to age in place using those programs. This literally gives folks an opportunity to kind of get a nest egg saved up and then transition, too. The problem that we find in Norfolk with public housing under the rules-- they're applied locally and from federal guidelines, is my understanding --is that, if tenants were to start building up income to save, to transition out-- the larger their savings, the more their, their rent is gigged.

And so it's just a self licking ice cream cone. Like it turns into, into nothing in evolution, that, that particularly Black women can't get out of. So yes, I'd be very interested in it to make sure that there was advocacy at the doors for sure.

[00:27:58] Adrian: And so, [00:28:00] what I hear when I hear these policies and think of them working together is, ways to make home ownership more accessible to people who are kind of in an in between space.

Can you talk about sort of the big picture of how that-- making home ownership more accessible helps with some of the problems around housing and housing scarcity that flooding is kind of creating in Norfolk? Nawfolk. Uh...

[00:28:34] Kim Sudderth: Good job! (laughing harde)
Adrian: Thanks. I just like my, like mountain accent. We just put "r"s in other places like "warter" and,

Kim Sudderth: And here we are, removing an "r!" (still laughing)

Adrian: Yeah, I know. I'm just trying to catch up, but, um,

Kim Sudderth: It's almost like folks are having to choose between two evils. Either I can find a place that does not experience as much recurrent flooding, but the rent is probably gonna cost more. Or, I can find something that's affordable, but I'm probably gonna lose my car because of flooding.

So you have to like, pick which one that you can live with and and take your chances. We were also looking at trends in folks who are moving away from the coastline. If they're leaving those areas, where are they settling? We talk about gentrification, and it's not this abstract idea. Real people are moving from one place and moving to another, limiting the inventory of homes in established neighborhoods.

So as... as I think about these two programs, my hope is that that's a springboard for folks that otherwise may not have had a couple thousand dollars to put toward a a down payment. My hope is that folks who currently live in the neighborhood, and maybe they've been renting there for the longest time, 'I really wanna stay in my neighborhood and maybe this program allows me the opportunity to do that.'

That's what I'm hoping.

Adrian: Yeah. And I, I kind of wanna ask Vince, like what sort of effects do you imagine them having on people in the communities that you're working in?

Vincent Hodges: Well, I think the first thing that is important for us as a people to transition is, uh, keeping our eye on safe, dignified, and affordable housing.

You put any combination of those three things together and you start to inspire hope in people. I think that it would be a morale boost for the community. The reason why these land trusts are so important is because it gives the civic league the power to advocate for its own residents and its own constituents.
So residents are not just looking for a For Sale sign and a realtor that's gonna help 'em out. They're going in, they're looking to their neighbors at the civic league and saying, 'I've lived in the community for 25 years. I think I'm ready to make a transition. You know? Go from renting to owning.'

It has the ability to really galvanize a community, lighting the fuse on it, and getting it in orbit as fast as possible is imperative.

Again, I think that it just takes political will and bringing developers to heel.

There are other proposals on the table to deal with the growing consequences of climate change in Norfolk, but none address the underrepresented populations that Kim's does.

Some of the most vulnerable people in Norfolk: Black renters. Kim's strategy draws on place-based lived experience to fill gaps that are left by the big top-down solutions.

We don't know what will happen with this yet. There is not a perfect solution. To resolve the complex problems at the intersection of sea level rise and the housing crisis.

It's still so brand new and so much more detail that needs to be added. But I'm also very hopeful cuz this feels like a good first step and, and as we're again going through our advocacy, my hope is is that we end up with a policy that is, that makes sense. And it will be-- it's gonna take more than one plan anyway.

Sea walls and levees and you know, it's gonna take a lot of different things. If we are to save our city, we're gonna have to throw everything at it. We're gonna need a lot of interventions. Um, I just want to kind of raise that flag every time a plan comes. Don't forget about the poor people. Don't forget about the black and brown people. (synth chords swell in background)
Don’t forget about, um, those that are maybe not as mobile as others, right? Like, so yes, it's not a silver bullet. Um, that's gonna cure all of this. It's going to be a lot of different things. (music ends on unresolved chord)

[00:33:08] Adrian: (beat with tonal drums) Follow us on Twitter @therepairlab, or find us online at twotitans.org. This episode was written, recorded, produced, edited, mixed, mastered, and hosted by me, Adrian Wood. Show Art by Adrian Wood. Story editing by Kelly Jones. Music by Sugarlift. Consultation and visioning with 2022 Practitioner In Residence, Kim Sudderth.

The Repair Lab is part of the Karsh Institute of Democracy at the University of Virginia. Our co-directors are Kimberly Fields, Andrew Kahrle, Sarah Milov, and Sally Pusede. Our post-doctorate research associate is Jonna Yarrington. Transcriptions of this and all episodes are available on our website at twotitans.org

Thanks for listening.