

## RISE: Climate Change and Coastal Communities

### Part 3 - Chuey's Story

#### Final Script

#### 0. Billboard

##### Narration:

Most of the world's population lives along the coast. And rising waters are lapping at our shores. The Pacific island nation of Tuvalu plans to evacuate its entire population to New Zealand. The Dutch are building higher and higher defenses against the North Sea. How will we adapt to sea level rise and increasingly severe weather in Manhattan, Memphis, New Orleans? And along the San Francisco Bay.

**Jose:** We'll have to get a boat, or something. [All laugh]

**Chuey:** A big boat (**Mom:** A house boat.) Noah's Ark.

**Mom:** We'll have a houseboat. [laughs]

**Mendel:** Many famous businesses that are located along the shoreline, Yahoo, Google, Nasa Ames Research Center, they're actually below sea level. And they're so important economically to the world.

##### Narration:

But adapting to climate change, will create winners and losers. This is Chuey's Story.

**Chuey:** I pretty much like it the way it is. Here we feel free.

##### Narration:

RISE: Climate Change and Coastal Communities. After this...

#### I. Intro

##### Narration:

RISE: Climate Change and Coastal Communities. Chuey's Story.

(Runs under opening water sounds)

##### MUSIC: Main

Wave breaks. Theme music swells. Runs in clear for 2 phrases, then run low under narration.

##### Narration:

Climate change. We talk about it as this big problem, up ahead of us, in our future. But climate change is here. Already our problem. Record heat waves, record cold snaps, increasing storms, hurricanes, floods – and sea level rise. And this is just the tip of the iceberg. Especially as icebergs continue to melt.

While we must stop producing the green house gases causing climate change, we also need to start adapting to the impacts that are now inevitable.

Along the shores of the San Francisco Bay these impacts are high tides and high waves coming from the Bay and big rains swelling the rivers and creeks running into the Bay. All of this adds up to more and more flooding for the 7 million people who live and work here.

In the South Bay, restoring our wetlands is one way to address this flooding. But adapting to climate change will not help all of us equally and it may even hurt some people. Chuey Cazares and Tom Laine are caught in this bind.

**Music:** Fades out as Chuey and Tom are introduced above.

## **II. Out fishing on the No Name**

**Ambience:** On Tom's fishing boat

**Tom:** My name is Tom Laine. I run the No Name boat in Alviso I've been on this since 1960, working in shrimp in the Bay. And this is what we do for a living.

**Chuey:** My name is Chuey. I work on the No Name boat with Tom.

**Tom:** No name.

**Chuey:** We're right here in Alviso.

**Tom:** No Name is the name of the boat.

**Chuey:** And um, well I'm Tom's deckhand. And I basically do all the dirty work for him, while he drives the boat. And um, we're fishing for shrimp, bullheads, mudsuckers.

**Narration:**

Tom and Chuey started well before dawn this morning.

**Tom:** That's a diving bird that's taking my shrimp. It's a fish eater.

**Narration:**

They launched the "No Name" from a dock in Alviso, a tiny hamlet, at the very southern tip of the San Francisco Bay.

**Tom:** This end of the Bay is the nursery. And it's the nursery for everything. Fishwise. OK.

**Narration:**

Or... it used to be, when the South Bay was all wetlands. Then Leslie Salt bought it and broke it up into ponds for salt production. Cargill took it over from them.

**Chuey:** First thing is get here early in the morning. And help him unload everything off of his truck, all the gas and the salt. Get everything ready, prepped. And then uh, untie the boat. And we go out.

**Narration:**

Tom and Chuey motor through the Guadeloupe Slough and past the salt ponds that ring the shallow, briny waters of the South Bay. It's a long trip out to the fishing grounds where Tom and Chuey trawl for grass shrimp.

**Tom:** You drag about 30 or 40 minutes. Then we pull the net. See what we have and then we go back and do it again. Whatever happens happens.

**Tom (to Chuey):** 10 minutes and you go back to work.

**Tom:** Well we're turning it around to start the drag. We're getting ready to set it out. Right now I'm going to line it up. And once I get it lined up, we're going to start dragging.

**Tom (to Chuey):** Chuey, get the mud line so you can pull it in. Pick up the slack. Pick up the slack in the net.

**Tom:** You see where it goes in the water right there? The net's right straight out from that. I'm going to pull it and see how much shrimp we got in there.

**Tom (to Chuey):** Yah, Chuey? (Yeah) We're at the top of the tide, Chuey.

**Chuey (to Tom):** Do you want me to take this down already? Are you ready?

**Narration:**

By mid day Chuey and Tom are back at the Alviso dock...

**Tom:** We have it docked in Alviso at the South Bay Yacht club.

**Narration:**

...which is actually just a half-submerged, rotting pier, in front of the once elegant Alviso Boat Club.

**Chuey:** It's tough. Especially waking up early in the mornings but it's pretty, it's pretty good. It's an interesting job. And working with Tom is a good experience. He's a good man. He um, tells a lot of stories.

**Tom:** Chuey? He's excellent. Good fella. Good on the job. When it was time to work, he worked.

**Tom (to Chuey):** What do they weigh, Chuey?

**Chuey (to Tom):** 20 and one was 15.

**Tom:** That's what we thought. 35 pounds of shrimp.

**Narration:**

A hard day's work leaves Tom with just \$100 in his pocket. Chuey hasn't made much either. But they love the work

**Tom:** So... Another day another dollar in the hole.

**Chuey:** It kinda sucked for us. But we'll be at it again tomorrow.

**III. Walk-About Part I**

**MUSIC: Walk-about song**

Walk-about music comes in here and runs in and out of Chuey's tour of Alviso.

**Narration:**

Tom and Chuey's financial woes are tied to climate change – or rather to the ways in which their town of Alviso is responding to this threat. Most people in San Francisco have never heard of little Alviso, which juts into the South Bay, like a finger poking the salt ponds surrounding it. Alviso is legally part San Jose further to the south, but it is a world apart from that bustling city.

**Chuey:** Let's go! Go. Yeah, well this is it, just uh... this is basically where I hang out, right here. Walk around, take my dogs out. Enjoying everybody around here.

**Narration:**

Alviso's history has been defined by its relationship to the Bay's waters: the salt ponds and wetlands encircling it, the creeks running down from the hills behind it, the ground water sinking below it.

**Chuey:** Yeah the parks back there, the school We used to go to school back there. George Main Elementary. We went there for a while. And that's the church right there. It's a Catholic church. I try to go there and uh, just [chuckle]. Right there in the big field we just ride around in there on the dirt bikes. Or go carts or stuff like that. We're approaching First Street, right here, Michigan and First Street. This is the Taco de Oro restaurant. That's the truck right there.

**Woman:** Uh, two carne asada, plain. And one carne asada burrito with just rice, cheese and meat.

**Chuey:** Taco de Oro's been here for a while and everybody, everybody likes it. It's the closest thing to us, you know.

**Narration:**

As climate change causes sea level rise and increasingly erratic weather, the waters around Alviso will alter the lives and livelihoods of Chuey's family.

**Other Music:**

Neighborhood music up. Runs under next bite.

**Chuey:** Right now we're on Essex Street. Walking towards my Grandma's house. Mostly everybody here is Chicano, you know Hispanic, Chicano. That how everybody is man, everybody knows each other. And we're all somehow connected, you know. By marriage or by blood. We're all connected. And if we're not, you know, like my friends, my neighbors, They're like, uh, family to me.

**Chuey:** I love it here, it's like my paradise right here.

**Narration:**

A tour of Alviso would not be complete without visiting the disaster alarm bell.

**Other Music:** OUT by now.

**Chuey:** See that big old bell up there? Yeah, right here, when there's like uh flood uh, it rings really loud and um, once we hear that bell, that's when we know something's happening. And we got to get as much stuff as we can together and leave.

**Narration:**

That big bell has been used more than once, as flooding has always been a problem for Alviso. But with climate change flooding may become catastrophic for this town at the edge of the water.

**Chuey:** Well this is my Grandma's house. Grew up here, been here. Just a lot of memories here.

**Mom:** Come on in. Have a seat.

**Jose:** You guys tell her everything already?

**Chuey:** This is my cousin, Jose Luhan.

**Jose:** Um, I was born and raised here in Alviso. And this gentleman here is my cousin. But he's like a brother.

**Chuey:** What's your perspective.

**Mom:** I know you want to talk about your town.

**Music:** Back in

**Jose:** Uh, well I do know that, uh the San Francisco Bay Area's going to be affected by the, the global warming and how the the melting of the polar ice cap and what not and uh. One of the places is Alviso. We'll be one of the first places that the water will rise. And we'll be basically under water. Like within the next ten years? Because it's already melting within the last 10 years. You know it's already risen a little bit. Then the next, like 10, 15 years, that's when all this water will be melted.

**Aunt:** And um, we're below sea level here so there's always the threat of floods. And, um, with the global warming, um and the waters rising, it's kinda frightening to think that, you know, oh my god it's, you know. Are the waters going to rise, and uh...

**Jose:** So basically they'd have to move schools and businesses and all kinds of stuff away from the peninsula and the South Bay and what not.

**Music:** OUT by now.

#### **[IV. Mendel explains the flood problem](#)**

**MUSIC:** Mendel's song

Mendel's music comes in here and runs through his comments below, coming up in the clear at times.

**Mendel:** I'm Mendel Stewart. I'm the manager of the National Wildlife Refuges in the S.F. Bay Area, Bay Area for the U.S. Fish and Wildlife Service. I can do that better. Let's do it again. It's good practice. So, I'm Mendel Stewart. I'm the manager of (Fade out)

**Narration:**

Mendel Stewart. He helped me understand why Alviso – and all of the South Bay – is at such high risk for flooding in the face of climate change.

**Mendel:** I am a biologist. I was a biologist for almost 20 years.

**Narration:**

Unlike Chuey and Tom, Mendel was not born in Alviso.

**Mendel:** I am from Hopkinsville Kentucky. It's about a 30,000 population town just north of Nashville in Kentucky. That's where I'm from.

**Narration:**

But he manages the Wildlife Refuge right next door. And he sees the risk of flooding all around.

**Mendel:** Many places in Silicon Valley are at definitely at risk of flooding. They've been at risk and they continue to be.

**Music:** OUT by now

**Narration:**

Why? Well, low-lying land is one reason.

**Mendel:** Many of the communities, particularly in the south end of SF Bay, along the peninsula have subsided below sea level. They've sunk. Maybe a few inches to a few feet to multiple feet below sea level.

**Narration:**

Alviso? 12 feet below sea level.

**Mendel:** This occurred in the late 1800s, as the ground water was starting to be pumped out.

**Narration:**

They were using the water to irrigate orchards and farms.

**Mendel:** So, by pumping water out of the ground many of those communities are now below sea level.

**Narration:**

Alviso became a big bowl, which fills up during floods.

**Mendel:** At the same time this ground water was being pumped out, there was also destruction of the salt marshes.

**Narration:**

And here's the second part of the problem.

**Mendel:** At one time in South San Francisco Bay, there were thousands of acres of former salt marsh converted to salt making.

**Music:** In

**Mendel:** The conversion of San Francisco Bay salt marshes to salt production is an interesting story. It started in the late 1800s, particularly around the gold rush. People came here and they saw the native Indians harvesting small amounts of salt from natural salt licks within the marsh. And of course they said, we can do that bigger and better. And so they started to levee off small areas, bring in water, let it evaporate and then harvest the salt and sell it. Originally they were small mom and pop type organizations. 'Til Leslie Salt bought up all of the ponds in San Francisco Bay and made one large salt making operation.

**Narration:**

The old wetlands had sloughs meandering through them, allowing run-off from rivers to fan out into the marshes.

**Music:** OUT by now

**Mendel:** Today, channels have been straightened and ditched to the point where the water flows straight into the Bay, contained within these narrow channels.

**Narration:**

But in heavy rains, there's just too much water flowing down the hills for these channels to handle.

**Mendel:** So when flooding occurs, the flood waters back up. And it flows into cities and towns.

**Narration:**

Climate change will bring bigger rains, making this flooding from the rivers much worse. It will also bring flooding from the Bay, as sea level rises. And, of course, it's not just Alviso which is threatened by this flooding.

**Music:** Back in

**Mendel:** Now we have many famous businesses that are located along the shoreline, Yahoo, Google, Nasa Ames Research Center. All these areas, they're actually below sea level. And many of these businesses are so important economically to not only our country, but the world. There's the city of Palo Alto's water treatment facility and the city of San Jose's water treatment facility. We have built our communities in places where we shouldn't have built them in the first place. And we changed the natural environment to accommodate our communities. And frankly we're stuck with them.

**Narration:**

Working for Fish and Wildlife, Mendel is involved in a huge project to convert the South Bay salt ponds back to wetlands. This will certainly benefit fish and wildlife.

**Mendel:** The salt marsh harvest mouse and the California clapper rail which are now on the Endangered Species list. They lost much of that habitat. And those species are found nowhere else in the world.

**Narration:**

But it also has the potential to protect Alviso from impacts of rising waters – from both the Bay below and the creeks above.

**Music:** OUT by now.

**V. Grandma's House****Narration:**

Chuey's family is well aware of the devastation that flooding can bring to this town. They've lived here for generations.

**Mom:** We're waiting for my Mom. She's cleaning up a little bit. She's the one that lives in this house. And went through, you know, a lot of trauma and everything.

**Chuey:** Uh, yeah, this is my Mom, Juanita Luhan.

**Mom:** This is my son, Chuey. One of my sons. I have four sons.

**Chuy:** And this is my aunt, Tia Lupe Luhan.

**Aunt:** I am Chuey's aunt, one of his aunts. My name is Lupe Luhan.

**Mom:** Uh, this house belongs to my parents, Alphonso and Blanca Luhan.

**Chuey:** And this is my Grandma, Blanca Luhan.

**GMa: (Spanish)** I am Blanca Luhan. I am the grandmother of Jesus Casares.

**Mom: (Spanish.)** Ma, sit where ever you like.

**GMa: (Spanish)** I am the grandmother of Jesus Casarez.

**Chuey:** My name is Jesus Caseres. But they call me Chuey.

**Aunt:** When someone is named Jesus, they are always called Chuey. So you know...

**GMa: (Spanish)** I live in Alviso, California.

**Chuey:** They all live here in Alviso.

**GMa: (Spanish)** I was born in Mexico, In the city of Guilla. Next to the Techas River.

**Aunt:** It's a border state. with Texas. So that's where our family comes from.

**Narration:**

But today, Chuey's family must make up half the town of Alviso.

**Gma: (Spanish w/Aunt translating.)** Back in the '80s we had a family reunion and we counted at least 300 members of the family, but it's growing.

**Mom:** Everybody's related to each other, somehow.

**Aunt:** I think Alviso exists because of the Mexican families that have stayed here.

**Mom:** It's a lot of Hispanic people here.

**Chuey:** Mostly all Hispanic people around here.

**Aunt:** Many of them, uh, many of them worked in the orchards around here. Here there were pear orchards. (Mom: And the fields) Tomato fields and stuff. And many of them stayed. It was affordable for them, so they bought land here.

Mom: At \$5 an acre.

**Aunt:** Nobody wanted to live here and land was going cheap because of the floods.

### **MUSIC: Grandma's House**

Music in.

### **Narration:**

The last big flood in '83 may be a precursor of things to come.

**Mom:** I've been here since 1968. And I did experience the 1983 flood.

**GMA (Spanish with Aunt translating):** It was a very disastrous thing. In that time, in 1983, the floodwaters came in, like, 6 feet, inside the house.

**Mom:** It had been raining for a few days. And I had my two eldest sons, three years old and five years old. And I heard that the sirens were going out. So ...

**Chuey:** They have a big siren

**Mom (Over Chuey):** Yeah we have a big siren that goes in case of a disaster, that goes off.

**Chuey:** It's really loud.

**Mom:** And um, water was already coming right into town. It was coming. It was coming! So I got my kids and I got some blankets and I got their clothes. And I jumped in the car. The only thing I forgot was my dog. He drowned. (Voices under) So, um, you know everyone was doing the same thing. Everyone in town was doing the same thing. Everyone was evacuating. Everyone.

### **Music:** OUT

**Uncle:** Everybody said, go home, go save your family.

**Narration:**

That's Chuey's uncle, Pepe Luhan.

**Uncle:** So then, by the time we got to the house, Dad was out in that Cadillac that he had. He was out there in the middle of the street, telling Mom, "Come on, come on, we gotta go. Cause the water was coming fast, right? And it was already up to the doors of the Cadillac. I told Dad, What's going on? He goes, your Mom, she doesn't want to get in the car, she's afraid of the water. You know and he was afraid of getting out of the car, into the water, right? So I was like, "Come on Mom, let's go let's go." And Mom's like, "Uuuhhh No, No." So I ran over there, where she was at. And I got her. And I carried her to the car. So, then I told Dad, "Just take off," you know. (Spanish:) Remember Ma?

**Gma (In Spanish)** Yes, he carried me to the car.

**Uncle:** She never knew how to swim or anything, right. So she's afraid of the water, but...

**Gma (In Spanish):** There was a lot of water.

**Uncle:** But, the water was scary. It was scary.

**Music:** In

**Mom:** I was scared. I didn't know where I was going to go. And then they were telling everyone that they had to go to a shelter, which was at the Independence High School. So we went over there and sure enough there was everybody there. Everybody in town. You know my neighbors were, like, right next to me and their neighbors were right next to them] and it was like... (Gma under in Spanish) we were together. Everybody was in the same gym. My parents were there too.

**Gma: (In Spanish)** We were all together.

**Music** OUT

**Mom:** Yeah, we were altogether. We ended up altogether at the shelter. And it was terrible. We had no privacy, first of all. And um, we had to go to the restroom at different hours.

**Gma (with Aunt translating)** What could you do. Everybody know why they were there. It was out of necessity. So I guess they had to put up with whatever situation was there. The use of the bathrooms and all. All the difficulties and suffering.

**Mom:** We did that for three weeks. Three weeks in the gym. And then they put us in a temporary housing. The total time was three months away from home.

**Uncle:** It was up, it was up like for months, huh. It was up. It was probably about this high right here.

**Several voices:** Discussing how high the water came.

**Uncle:** Actually the whole house was underwater up to maybe a foot below the ceiling.

**Music:** In

**Mom:** We were not allowed to come into town. Because it was, uh, contaminated, uh the water with rats and snakes and dead dogs and dead animals and things like that and **(Spanish)** the sewer. The sewer. So it was bad.

**Narration:** No single weather event can be tied to climate change. But a pattern of increasingly severe storms and floods is now clear. And stories like this one are becoming more and more common.

**Mom:** We feel for the people of New Orleans. We really do. We can relate to their lose and what happened to them. Their experience, you know.

**Mom:** Well, they finally let us back in. They, you know the word was out that you could come back home. And so that's what we did. We came back home, to find that everything was ruined. Twelve feet down everything was mud. I couldn't even wash the mud off. It's so thick. So I had to get rid of everything. My clothes, uh, my refrigerator was tipped over. My table, my chairs, my bedding, my linens, all my antiques that was gone, they were just full of mud.

**Gma (Spanish w/Aunt translating):** Well, coming back everything was full of water and saturated and it all, like it came apart.

**Music:** OUT

**Gma (Chuey continues the translating):** They had an order, a letter saying that they had to get all their furniture and all their stuff and put it out onto the street. Cause it was all contaminated from all the water and stuff.

**Mom:** Everything had to be thrown away.

**Chuey:** Into the street.

**Mom:** Yeah, into the street. And then it was clean up.

**Chuey:** This is what happened in '83? (Aunt: Yeah.) It was five years before I was born, yeah.

**Music:** In

**Mom:** Yeah, it hurt. Came back and saw that nothing was there anymore. Not even my dog. That hurt.

**Aunt:** I know it's painful for her. And, uh, she's gone through a lot.

**Music:** OUT

**Mom: (voice breaking)** For me I lost a lot of my memories. Like my kids' pictures. Baby pictures. And my wedding pictures. Just things I had. I don't have anything anymore. I think that's what hurts me.

**Aunt:** It's difficult to talk about. (**Mom:** It is) Because she, she was in some kind of a depression, you know.

**Mom:** I had that depression for a long, long time.

**Other Music:**

La Llorona song interwoven through next scene.

**Narration:**

Memories of the flood take many forms, as stories, nightmares, even ghosts.

**Mom:** Here in the town of Alviso, uh, the majority of people have seen, uh, the ghost.

**Aunt:** The stories about La Llorona,

**Mom:** Yes in this house. Oh yeah, [laughing] we have a lot of ghost stories out here

**Narration:**

La Llorona is perhaps the most famous ghost is Mexican lore. When the waters are rising, La Llorona is sure to be somewhere nearby.

**Mom:** Well, I was staying here with my Mom, maybe about, uh, five years ago and I was in the room with my parents and my little son comes to me and he says, "Mom, Mom, Mom. I saw a ghost. I saw a ghost. There's a ghost in the house." And I'm all like, didn't pay attention to him. And I finally said, well, "What's the matter?" And he says, "There was a ghost that come right into the living room here and went right through the wall right through where Grandpa was," and I said, "What?" He said, "Yeah." And he described the ghost to me. It was a young girl like a teenage girl dressed in, uh, probably 1920s attire, with the long hair.

**Aunt:** La Llorona [laugh]

**Mom:** [Laugh] It was a young girl like La Llorona.

**Gma: (in Spanish)** I haven't seen it. All laugh. (Aunt: She hadn't seen her.)

**Mom:** Yeah, but Alex did. Alex did. Yeah.

**Chuey:** Believe it or not, it's true. It's all true. .

**Mom:** Oh yeah, I think that, uh, that was a ghost or a spirit.

**Aunt:** If somebody sees La Llorona, it's usually near water. You know you're near water somehow. Okay?

**Chuey:** She drowned her kids.

**Aunt:** Right, yeah, she drowned her children, um....

**Narration:**

That's how she got her name. La Llorona, the crying woman, has been immortalized in story... and in song.

**Chuey:** And sometimes at night she comes and tried looking for her kids. She's just like, "Mis hijos

**Aunt:** I'm looking for my kids. I want my kids.

**Chuey:** Screaming.

**Aunt:** Wailing, Mi Kids.

**Aunt: (In Spanish):** Mom, do you remember? What's the story of La Llorona?)

**GMa: (In Spanish, Aunt translates)** She just remembers that they would tell her, you know, you better behave or something because La Llorona's going to take you.

**Chuey:** It is true. People, you can ask anybody and people will tell you the same thing.

### Station ID

#### **MUSIC: Main**

Theme music runs for 60 seconds.

#### **Narration:**

You're listening to RISE: Climate Change and Coastal Communities.

### VI. In the Kitchen

#### **Narration:**

Between visits from La Llorona, everyday life takes center stage for Chuey's family. Like getting dinner on the table.

**Aunt:** There's two cups there of Jasmine tea.

**Aunt:** Are you guys gonna hang around, cause we could make some food.

**Aunt:** I try to make everything in one pot. And anybody that comes by can eat. That's how I cook.

**Mom:** Grandpa's outside?

**Aunt: (In Spanish to Gma)** Mama, is this the right meat to use to make something to eat.

#### **Narration:**

But the threat of flooding is never far from their minds.

**Mom:** We've been living here forever, so every year, during the rainy season, Guadeloupe River is cresting. So that's we're just like on our toes. (Aunt: Yeah) Are we going to flood, or aren't we? Are we going to flood or aren't we?

**Chuey:** We can't predict the future but, pretty sure there probably will be.

**Mom:** Yeah, it will probably happen again. That water's strong.  
[chuckle] When it comes it comes.

**Jose:** We'll have to get a boat, or something.

**All laugh.**

**Chuey:** A big boat (**Mom:** A house boat.) Noah's Ark.

**Mom:** We'll have a houseboat.

**Great laugh.**

**Narration:** (under the next sequence):

Fear. And yet, resignation. They seem to go hand-in-hand.

**Mom:** What do you want me to do?

**Aunt:** Ah, well, if you want to cut the onion and the garlic. Have it ready there...

**Mom:** Where'd Mom go?

**Mom:** Yeah. You know what, I can't find tomato, maybe Mom doesn't have tomato. Salsa. But no tomato.

**Narration:**

It's not that they don't understand the threat.

**Aunt:** I mean, we're thinking about the now and what we're enjoying right now. And so, I don't know I just feel like, I guess we enjoy living here so much that we, we don't even think about the fear of flooding, you know. So. like we're living in the moment. Just enjoying it. And I guess if a disaster comes, then I guess we're going to deal with it at that time or something. You know I know it sounds kind of strange, but um...

**Mom:** But no, yeah, uh we just live with it.

**Narration:**

Maybe thinking about being forced to relocate is just too scary.

**Mom:** Oh my god, I wouldn't live anywhere else.

**Chuey:** Me either. It's nice.

**Mom:** The weather. The peacefullness.

**Aunt:** It's just the tranquility here, uh,

**Chuey:** Peaceful.

**Mom:** Plus everyone knows each other.

**Chuey:** Everybody's related. I know everybody.

**Mom:** And everybody helps each other and everybody watches out for each other.

**Chuey:** Could walk all around town, late night. Nobody would say anything.

**Mom:** And that's the beauty of it.

**Aunt:** Living next to the Bay. And the wildlife over here. Uh, there's egrets and, and ducks.

**Mom:** It's very celestial.

**Aunt:** I go out there and I could talk to God.

**Chuey:** It's like a little paradise.

**Mom:** It's beautiful out here. I wouldn't change it. I wouldn't go anywhere else, actually. I just love it. It's a beautiful place. My parents picked the right place to come and bring us.

**Narration:**

Chuey and Jose's loyalty to Alviso is written all over them.

**Chuey:** Uh it's my tattoo. It says Alviso on it. There's a cross on the bottom, right under it. Just to know that God's watching over my town and so I'll never forget where I was from, where I was born and raised. I got it right there, so I can see it every day, and know where I'm from.

**Mom:** There's a lot of kids in town that have the Alviso tattoos.

(**Aunt** under) They love this town.

**Chuey:** He loves it so much, look it

**Jose:** This is my tattoo of my home town Alviso.

**Chuey:** Tattoo'd

**Chuey:** It's big, across his chest. Two inch, three inch letters.

**Mom:** Alviso, right there Alviso. (**Chuey** under: We can't forget where we're from.) (**Jose** under: No never.)

**Jose:** Yeah, I've always wanted it, since I was a kid. Yeah.

**Chuey:** Some even younger kids have Alviso tattoo'd on them.

**Mom:** It's a cultural thing. I accept it. Yeah, you know.

**Chuey:** She was kinda tripped out at first. [Mom laughs] Kinda was mad for a little bit, but then she went along with it.

**Mom:** Well, I was more upset about him having a girl's name tattoo'd.

**Chuey:** Which was a mistake. [All laugh] It was a mistake. I just want to add that.

**MUSIC: Grandma's House**

Music comes back for a phrase

**Aunt:** By the time you get back, the food should be ready.

**Narration:**

Inertia, in the face of likely disaster. It all sounds very familiar. In Alviso, someone is tackling the problem of flooding. But the solution may be bitter sweet for Chuey's family – and for Tom Laine.

**Music:** OUT by now

## **VII. Bait Shop**

**Ambience:** Train by.

### **Narration:**

The train goes right through Alviso, past Tom Laine's bait shop.

**Tom:** How you doing today.

**Man:** I'm going to get a pound and a half of grass shrimp for sturgeon fishing. I always come here, the bait's always the freshest, biggest, healthiest.

**Tom:** laugh. Once it's dead it's no good.

**Man:** I used to come out here with my Dad when I was really young. We always used to come to this bait shop. And this place is still open. And I've just had real good luck with the bait from here.

**Tom:** \$19.

**Man:** Alright, thanks again man. Appreciate it.

**Tom:** Get a big one

**Man:** Oh, I'll try man, I'll try. Alright.

**Tom:** Hello. Looks like we're going tomorrow. This is Chuey! What's up? You got something to do? It's Chuey.

### **Narration:**

Waiting for Chuey to show up, Tom shows us around.

**Tom:** That's the barn that my great grandmother put here, she had her horse and buggies in. And that's the house she built behind me. It was built in 1886. Keep fish in there now. [chuckle] This is everything. The bait shop and, that's it, bait shop.

### **Narration:**

The land behind Tom's house used to be part of the vast wetlands that surrounded Alviso.

**Tom:** Steamboat Slough. This is a flood run-off channel. Where the water used to run out through the marshes. This all used to be marsh. As far as you can see it was marsh. Okay? Clear to Freemont. Now it's all salt ponds. That is salt right there you're looking at. Right there.

**Tom:** Everybody good. How are you today.

**Chuey:** Pretty good.

### **Narration:**

Chuey's house is just a few blocks away. So it doesn't take him long to come over.

**Tom:** What are you doing tomorrow?

**Chuey?** Uh, probably nothing.

**Tom:** Do you want to open up for me?

**Chuey:** Yeah. I'll open up.

**Tom:** Make sure you're here by about quarter to five.

**Chuey:** O K. That's fine.

**Tom:** I gotta leave at three, so. I gotta run the boat.

**Chuey:** Well it looks like I'm going to be working here tomorrow here with Tom at his bait shop. 4:45 in the morning.

**Narration:**

Working with Tom has become just a side job for Chuey now. He's found a more regular and more lucrative job.

**Chuey:** The moving company that I work at, it's called Silicon Valley Moving and Storage.

**Tom:** Well, like I was telling him when he first came to work, if he could get a job making more money and working steady.

**Chuey:** Yeah, well I had to start paying some bills, so....

**Chuey:** But I enjoy working more with Tom because I get to go out on a boat and be out there in the water.

**Tom:** You got that right. You got that right.

**Chuey:** I go on there, I'll go on there, my days off.

**Tom:** When he, with his spare time he goes.

**Chuey:** Yeah, it's nice.

**Narration:**

Tom hasn't always been struggling to make ends meet fishing for grass shrimp. For 30 years, he made good money harvesting brine shrimp, which are plentiful right here in the salt ponds.

**Tom:** The one's we were shrimping in in this area here was basically in the Alviso system. Where they make the salt. It was Leslie Salt when I started.

**Mendel:** One of the side benefits of salt making is the production of brine invertebrates. Brine flies and brine shrimp.

**Narration:**

That's Mendel Stewart again, from Fish and Wildlife.

**Mendel:** The salinities were just right for production of brine shrimp and brine flies.

**Tom:** Brine shrimp is about the size of a, about a half inch. That's it.

**Tom:** You had, like, Huck Finn rafts. They were 18 foot wide. And you use 4 nets.

**Narration:**

It was a good business.

**Tom:** The brine shrimp? Excellent money. Couldn't ask for any better. And I had a good crew. And we had for boats running. Four rafts running. And, uh, we got anywhere's from half a million pounds to a million and a half pounds a year. That's a little bit. Everybody did well.

**Narration:**

Now most of these salt ponds have been bought by the Federal government to convert them back to wetlands.

**Tom:** When Fish and Wildlife took it over, they made this a nesting area for these birds over, right there. I don't know the proper name. It's just a bird. But they nest here.

**Mendel:** The refuge has acquired over 30,000 acres of land. And about half of that is being restored back to tidal marsh. The other half will remain in salt production.

**Narration:**

But the Fish and Wildlife Service has stopped the brine shrimping even in the ponds that will remain in salt production.

**Tom:** No brine shrimping. Nobody. Not in California. Nobody is.

**Narration:**

Here's the catch. Brine shrimp makes great bird food.

**Mendel:** They're a food source for, for a lot of birds. Phalaropes, for eared grebes, for black necked stilts, avocets. Even ducks will eat many of these brine invertebrates. And because there was fewer acres available for this particular food source we needed to protect it more.

**Tom:** Federal biologists say that you can't shrimp those ponds because it's all for the birds. Birds feed on it. They say the birds need it.

**Mendel:** We decided that we needed to eliminate the harvest of those brine invertebrates because they were taking away from the wildlife which this refuge was established for. And so we did stop the harvest of shrimp.

**Tom:** When we first started this, there was so much meetings going on about what we were supposed to do and how we were going to do it and this and that.

**Mendel:** I know lots of characters in Alviso. Alviso's a wonderful community. Has a long history and many of the people that live there, like Tom Laine, have lived there for their whole life. And they're very committed to their community. And they want to see it protected and preserved. And they've been very involved in our restoration planning and implementation and been very supportive.

**Tom:** So I went to one of the meetings. And they had a college girl and one of the Fish and Wildlife. And they were talking about the birds. How important the birds were. And she was telling us how many nests and they were watching 25 nests. And they had so many chicks in it, you know, and how great it was doing, you know. They don't ask you what you think should be done here. There going, This is what were going to do.

**Mendel:** Salt ponds benefit people, because they provide jobs. But our purpose is to provide habitat for wild life.

**Tom:** But the bottom line is, they pick up one thing and one thing only.

**Mendel:** That is our mission. It's wildlife first.

**Narration:**

So that's how Tom ended up fishing for grass shrimp.

**Tom:** We're doing grass shrimping. And we go out 4 ½ miles before we can start shrimping.

**Narration:**

The difference, says Tom, is night and day.

**Tom:** Day is brine shrimp. If I could go for the money and they'd let me do it, then I'd go back to brine shrimp. You can make more money, you not going to take it? This is not a gamble, that's a gimme. That's a gimme. But see, if they don't open it up, you don't have nothin.

**VIII. Wetlands restoration**

**Narration:**

So, it looks like the wetlands restoration is making things tough economically for both Tom and Chuey. But it just might save their town of Alviso.

**Narration:**

The salt ponds around Alviso which are being restored to wetlands are part of the Don Edwards National Wildlife Refuge. We're in their parking lot.

**Laura:** I've got a government vehicle. So I can take four other people.

**Narration:**

That's Laura Valoppi.

**Laura:** So someone needs to... (Man: Just follow those guys.) Help direct me.

**Narration:**

She's the lead scientist on the wetlands restoration project in the South Bay, which includes pond A8.

**Laura:** We're going to pond A8 which is... well, we'll describe it when we get there. It's probably the better to describe it when we get there.

**Narration:**

Pond A8 sits right next the town of Alviso.

**Laura:** I go straight and then left. Is that right? (Man: Yeah) So I kinda knew what I was doing.

**Narration:**

Laura's here with Mendel Stewart and other members of the team.

**Mendel:** This way probably will be shorter. And then we can walk up on the levee.

**Mendel:** We're standing at the southwest corner of pond A8 at big water control structure called the notch.

**Narration:**

This is not the idyllic scene that I was expecting. It's more like a construction site for a shopping mall.

**Mendel:** It's about 40 feet across. Made of massive concrete. And it's going to have these big drop log structures, these aluminum gates that we can drop in and out to control the water.

**Laura:** We're not restoring this completely to tidal marsh, yet. Um, there's going to be a notch which will bring water from Alviso Slough into Pond A8, and then A5 and A7. Actually, did I get that right? It's going in the top of A5, A7 And then out of Alviso Slough.

**Man:** It's coming in and out at Alviso Slough

**Narration:**

Well, whether it's going in or going out, the point is they have to manage the water's flow. They're worried that if they just open up the old salt pond and let the waters spread out, they may cause more problems than they solve. For example, stirring up mercury left over from old mining operations.

**Laura:** We can close it down. Or open it up. So it's more of a water control structure. Not just popping a hole.

**Ambience:** Huge noise pouring rock out of a truck.

**Narration:**

Yikes!

**Mendel:** Rip rap. It's, uh, rock to stabilize banks around the construction project.

**Narration:**

While the process might be somewhat industrial, the end goal is to make a lovely, living border between bay and land.

**John:** What's going to happen, you start with this white, salty crust.

**Narration:**

That's John Bougeois. He's Executive Project Manager for all of the wetland restoration in the South Bay.

**John:** And then the sediments are going to come in. And we're going to have, probably two, five, 10 years worth of just vast mud flats. So they'll be inundated with water at the high tides. At the low tides they'll be mud. And that's slowly going to accrete over time.

**Narration:**

As sediment keeps coming in with the tides and building up, the mudflats will get bigger and bigger.

**John:** And when we hit the right elevation, pop, we're going to see little sprigs of pickleweed here and there. Pickleweed and cord grass and gum plant. And then eventually, hopefully, it'll be a sea of lush green marsh vegetation.

**Narration:**

Along with the roar of the machinery, there was a pretty intense... um.. odor.

**Laura:** What you're smelling [chuckle] kinda pungent, but it's the marsh. A lot of bacteria and other organisms. That break down things and building them up. And that's just part of the cycle of the marsh.

**Mendel:** It's organic material that's producing gases.

**Laura:** It's a good stink.

**Eric:** What stage are you guys at?

**Man:** Um, putting in the stop logs this week. And uh, excavate the pilot channel. And hopefully next week we'll be breaching the pool and...

**Eric:** Good. Next week, huh? Fantastic. We're close. (Man: We're close.) Well thanks, we'll try to stay out of your way. We're just gonna...

**Mendel:** It just gives me, like, goose bumps to think, we've got all this stuff going on. It's happening. We talked about it for a long time. But now we're actually doing it. And that's, that's really fun.

**Laura:** And, and it's going to be providing flood protection for 3 or 4 million people in this area.

**Narration:**

So how will restoring the wetlands around Alviso keep back the big floods, coming with climate change?

**MUSIC: Mendel's song**

Music weaves through next section.

**Mendel:** Wetlands provide for flood control in a couple of ways.

**Narration:**

Mendel Stewart explained that one way wetlands help is to slow down the water that's rushing down stream during a big rain storm.

**Mendel:** So as run-off from upland areas flow into a wetland, they would flow through a series of small tributaries that would meander through the wetland. And they would naturally slow the movement of the water, which allowed the water to be absorbed and actually go into the ground water.

**Narration:**

This is what should have happened during the big storm of 83.

**Mendel:** But as these marshes were lost, they no longer were available to receive floodwaters from upstream and have their energy dissipated.

**Narration:**

Climate change will cause winter storms to be more fierce and more frequent. The other flood risk is from the Bay itself. And this risk is also getting worse with climate change as sea levels rise, bringing higher tides and higher waves.

**Mendel:** The levees along the shoreline were built just for salt production. Those levees are now the defacto flood control levees for Silicon Valley.

**Narration:**

Why not just use the salt pond levees?

**Mendel:** Because they were just built, just high enough to make a pond. Yet sea level continues to rise. And as the sea level rises we can't really raise them up. They're just piles of mud that were taken from the Bay and piled up on site. It will only stack to high and then it just collapses. And you have to pile more on, all the time. And then the more you pile on, the faster it sinks, because of the weight.

**Narration:**

So the idea is to use wetlands as flood control.

**Mendel:** San Francisco Bay is often hit by large storm tides a result of winter storms particularly. And historically, the wetlands were there to act as a buffer from tidal flooding.

**Narration:**

In reality, the South Bay is going to need true levees working in conjunction with restored wetlands.

**Mendel:** So there's two parts to the solution. One is the marsh that's out in front of the levee. And then the levee which is adjacent to the communities that actually provides the final line of defense for keeping the floodwaters out of communities. And by having this

buffer out in front of these levees, you also reduce the height and the height and therefore the cost of the construction of these levees.

**Music:** OUT by now

## **IX. Walk-About part 2**

### **MUSIC: Walk-about song**

Music weaves through Chuey's tour of Alviso.

**Ambience:** Transition back into town.

### **Narration:**

So saving Alviso with wetlands seems like a good idea. But... there's one more twist to this tale. Just who is Alviso being saved for?

**Chuey:** Most of these houses here? Like this like the inner Alviso here, this is Old Alviso. This is, you know. This is what I know Alviso. This is my Alviso right here. It's like, some people will say it's like being in a little town in Mexico and stuff. Because it's mostly all Hispanics and stuff around here. And just everybody knows each other. Everybody says Hi to each other. It's nice. It's cool.

### **Narration:**

But, it's the flood risk that has kept property values low in Alviso. Now that the risk is being dealt with, land that was \$5 an acre when Chuey's family settled is becoming prime waterfront real estate.

**Chuey:** Then where the new houses are that's like New Alviso. They're just all the new big two-story houses. They're nice, but they make 'em too expensive for us, yeah, if we wanted to buy one.

**Mendel:** Alviso, like any community has families, people who live there, businesses that have been built. They want their community to stay like it is. They don't want to see it, become a, gentrified.

**Chuey:** Hope they don't try to push us out. Because everybody grew up here. Everybody's from around here. And they just came and ruined everything.

**Mendel:** The city of San Jose, that's why they annexed it probably because it's waterfront property. And they wanted to be connected to the Bay. And the community of Alviso was in their way. Still in their way.

**Chuey:** Nothing we can do about it. We just fight it. And do what we gotta do. Stick together. As a community and as a family. We gotta stick together, help each other out.

**Mendel:** Gentrification? Probably is. It's all about economics. Those are really the issues.

**Chuey:** I pretty much like it the way it is. And if it could stay the way it is, then when my kids are born and stuff, I'm pretty sure they'll love it too. They'll love it too. Here we feel free.

**Music:** OUT by now.

### X. Back in the kitchen

**Aunt:** I didn't know you were going to follow me over here.

**Mom:** What would you like, some water melon or some cake.

**Aunt:** What are you looking for.

**Mom:** Something to cut the cake with.

**Chuey:** We went for a long walk. Over to the Bay. We went to go look around. Show them the, uh, alarm. (**Aunt:** Walking, huh?) Yeah.

### Narration:

In this kitchen, the wetlands restoration is an ongoing topic of conversation.

**Aunt:** There's a lot of restoration going on over here, because...

**Jose:** You know we never thought anybody would ever come and give a crap about Alviso, you know but,

**Aunt:** We're going to be surrounded by buildings and, and the little village, the true Alviso here with long standing families, you know, it, it, you know might get crunched up. So that's why we, we do not want, so much building and development and that kinds of thing.

**Jose:** You know money, it's all about money. You know because now there's all these, uh, people they come around and they're scouting for land to buy and houses and what not. and uh, I don't know that's just the way society is. You know, it's all about money. You know, we like our little neighborhood but.

**Chuey:** We like the way it is. We don't want it to change.

**Aunt:** It's done. Food is done.

**Mom:** I told her we should have made some enchilladas or something. But she said, oh no, this is homemade food here.

**Aunt:** Well you guys have to stay to eat.

**Chuey:** Well I gotta go.

**Aunt:** You gotta go? You not going to eat anything?

**Chuey:** No.

**Aunt:** Alright.

**Chuey:** But I'm good. Uh, (Spanish to Gma: want something to eat?)

**Aunt:** Alright. Good luck have a nice day.

**Chuey:** OK Grandma, (Goodbye in Spanish)

**Gma:** (In Spanish. The food is delicious, Lupe. [Laugh])

### XI. Close

**MUSIC: Main**

Music in here.

**Narration:**

Adapting to climate change will be a messy and painful business. And in the short term there will be winners and losers. But in the long run, we are all in the same boat; rising with the tide.

**Music:** Up in the clear. Then under credits.

**Narration:**

RISE: Climate Change and Coastal Communities. This program, Chuey's Story, was produced and directed by Claire Schoen. Associate Producer, Erica Mu. Original music by Jonathan Mitchell. Special thanks to Jan Stürmann, Stephen Most and Scott Koué. To hear all the stories in the RISE series and to learn about climate change in your area, please visit us on line at [searise.org](http://searise.org). I'm Claire Schoen.

**Music:** Up in the clear. Then out.

**Time:**

(Including ½ sec silence before/after each section)

Billboard:	1:00
Newshole	5:00
First half	26:53
Station ID	1:00
Second half	25.07
<b>TOTAL</b>	<b>59:00</b>