# Replicable and Scalable Community Resilience Building in Two Communities in Palm Beach County, Florida

Outputs and Outcomes Reporting November 10, 2016



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✓ **Objective** – (what you were aiming to achieve).

Our objective was to create an online Resilience Adaptation Community Tool Kit, and to use it to increase climate resilience in two vulnerable coastal communities; by partnering with existing leadership in those communities to survey 100 households, and to report the results to public officials. The vulnerable community served in Boca Raton was comprised of the Pearl City, Lincoln Court and Dixie Manor neighborhoods. The second vulnerable community was in South Delray Beach.

✓ **Activity -** Write a narrative regarding the project processes/activities/methods/strategies; any action undertaken in order to address the Objective.

## **Strategies**

The following strategies were used:

- "Build the capacity of communities to take part in critical environmental and public health issues that impact them through the sharing of tools and other resources." 1
- 'Use effective messaging frameworks that focus on the desired outcome, changing behavior. (Create messages that) address why citizens should become knowledgeable and involved, and explain how impacts affect everyday life in order to cultivate a call to action.' <sup>2</sup>
- 'Use congregational resources to positively address the climate change crisis.'
- Build grassroots organizational capacity to support climate resilience within an existing community partner in a low income coastal community in Florida by working with the community partner's existing leadership to educate and survey 100 residents of their community about the public health effects of climate change.
- Consult with community leaders on design of the neighborhood campaign, design of outreach materials, selection of leaders within the community, and provide final reports to the leadership of community partners.
- Provide well qualified professional supervision to support the community partners' lack of organizational capacity; including community partners in the discussion of the development of management tools created for the project and training them to use them in ways that are applicable to other campaigns
- Give community partners the space to struggle with their capacity issues in order for them to self-identify people within the community who could grow into leadership or offer their personal skills to the endeavor.
- Leverage EPA dollars to replicate the community engagement model developed for this project. \$27,000 was raised to extend the project to other Florida coastal communities by documenting the pilot project and securing grant funding from the Unitarian Universalist Fund for Social Responsibility http://www.uufunding.org/fund-for-uu-social-responsibility.html and the Unitarian Universalist Fellowship of Boca Raton's Endowment Fund http://www.uufbr.org/endowment-committee/ and crowd sourced funds.

- Leverage EPA dollars by using highly educated and experienced unpaid volunteers to translate documents, create videos and other documentation, lead organizing efforts, create and administer effective management systems, record and transcribe most of the oral histories, handle tasks like errands to the printer and the purchase and tracking of stipend cards, create interactive Google maps, write grant applications, provide reporting and information analysis, and lead efforts to assure the replication and scaling of the pilot projects.
- Base analysis and action on an assumption that oppression of the environment is intricately linked to oppression of different groups of people.<sup>4</sup>
- Teach and model Direct Action Research Training (DART) principles of conducting community research to follow up with public officials regarding climate resilience concerns identified in Boca Raton.<sup>5</sup>

The following activities were undertaken in order to address the Objective.

## **Preliminary Organizing**

- The Green Sanctuary Committee (GSC) at the Unitarian Universalist Fellowship of Boca Raton (UUFBR) takes the Our Place in the Web of Life<sup>6</sup> course to identify and explore environmental justice issues within Boca Raton.
- UUFBR internal consultation with all committee chairs to inventory charitable and justice initiatives that have built relationships with community partners, and to identify key contacts in vulnerable communities.
- Consultation with Florida Atlantic University faculty regarding the EPA Request For Proposals and systems needed to apply for and to support receipt of a federal grant.
- Support systems established within UUFBR: Dun and Bradstreet (DUNS) number data updated, activation within the System for Award Management (SAM) system, and state submission of grant proposal for intergovernmental review
- Outreach to community partners.
  - O Boca Raton: The Florence Fuller Childhood Development Center was approached, but was not interested in partnering. Four members of the Green Sanctuary Committee met with three members of Developing Interracial Social Change (DISC) to discuss the possibility of working together. Two members of the Green Sanctuary Committee presented an overview of the proposed project at a meeting held at the Lois Martin Community center in the Dixie Manor public housing complex. A letter of commitment defining the scope of DISC's commitment to participate in the project was negotiated with DISC leadership, and appended to the grant application.
  - O Delray Beach: Organizations that had been involved in UUFBR projects in the past were approached about partnering on the project, including: Toussaint L'Ouverture High School (TLHS), St. Matthews Episcopal Church, St. Andrews Episcopal Church, Sow Share, Legacy of Frog Alley Ancestors, faculty at the Village Academy, and Pompey Park Community Center. A letter of commitment defining the scope of TLHS's commitment to participate in the project was negotiated with TLHS leadership, and appended to the grant application.

- Academic oversight was arranged for the surveys and the oral histories.
- A potential Project Manager committed to the project, if funded.
- GSC writes the grant application and the UUFBR Board approves its submission to the EPA
- Telephone consultation, clarifications, and additional report filing with EPA Region 4
  regarding personnel changes and changes necessary due to delays in the grant award
  schedule.

#### Phase I

## **Systems Development**

- EPA Systems: Key personnel information filed with the EPA, online Automated Standard Application for Payment (ASAP) training completed for required personnel, Quality Assurance Project Plan (QAPP) completed and filed with EPA Region 4, internal financial management system established at UUFBR for grant funds
- Project Director/Authorized Representative completed EPA Outputs and Outcomes online training

## **Website Development**

www.ReACTToolKit.net was created, and the following were posted to the website during Phase I:

- Training videos that can be used at training sessions or can be used by organizers to self-educate and then prepare for training sessions were created.
  - A training video about the public health effects of climate in English and Creole
  - o A training video on conducting Oral Histories
  - o A training video on how to use tracking and reporting forms used in the
- Informational Pamphlets in both PDF and PowerPoint format.
  - Algae Blooms
  - o Contaminated Drinking Water
  - o Contaminated Flood and Standing Water
  - Indoor Mold
  - Storm Safety
  - Vector Borne Disease
- Outreach Materials
  - A summary one page, two-sided Health and Climate Outreach Pamphlet addressing emergency and public health contacts, evacuation routes, Heat Index and Air Quality, Storm Safety, Standing Floodwater, Contaminated Water and Boiled Water Alert, Minimizing Mold Growth, and Limiting Exposure to Mosquitos and Algae. This Outreach Sheet was translated into Spanish and Creole in both PDF and Word format, together with instructions explaining that the Word document can be used as a template to adapt the materials to other geographies.

- A Sea Level Rise Risk Perception Survey, which included questions about experiences with flooding, asthma, mold and water contamination in the current residence (see Appendix C). This was translated into Spanish and Creole.
- o An Oral History Protocol (see Appendix D) was prepared in English, Spanish and Creole.
- o An Oral History Consent Form was prepared in English, Spanish and Creole.
- A PowerPoint presentation on the Health Effects of Climate Change was created. This is the PowerPoint that was used in the training video. Organizers, who have self-educated using the video can then present the PowerPoint at their training session.

## **Consultation with Public Health and Community Resource Partners**

- The Health and Climate Outreach Sheet was presented to the Palm Beach County Climate Change Coordinator in draft form.
- It was then reviewed by both the Palm Beach County Health Department and Palm Beach County Emergency Services. Changes were made as relevant.

### **Organizing for Outreach**

- Meetings were held with a Habitat for Humanity organizer in Boca Raton, educators in both Boca Raton and Delray Beach, the project director of Healthier Delray Beach, a lead organizer of Sow Share, and an organizer with Gladiolus Education Garden in Delray Beach. Contact was made with the All People's Day Diversity Festival and the Pompey Park Community Center.
- Meetings were held with community partners DISC, in Boca Raton, and TLHS in Delray Beach. These meetings achieved the following:
  - o Creation of an outreach plan for the community
  - Development of job descriptions for Outreach Leaders and the Climate communicators who would report to the Leaders.
  - o Community feedback was solicited on outreach materials, and incorporated into subsequent drafts when appropriate.
  - o Recruitment of Outreach Leaders and Climate Communicators
  - o Branding was created for the website and the outreach campaign. The website materials have a washed font of ReACT Tool Kit on each page. The outreach campaigns were branded *Rising Together: Temperature, Water, Health and Strength*.
- Systems for tracking and reporting were created.
- An Oral History protocol was created, and a Sea Level Rise Risk Perception Survey was modified, to include grant required content regarding Toxic Substances Control Act, Section IO(a); and Planning for alternative water sources, and making changes to water allocation, in the event of an emergency in relation to the Clean Water Act, Section 104(b) (3).

## **Training for Outreach**

- The Boca Raton Outreach Team had a training session that included the health effects of climate change and how to explain the Public Health and Climate Outreach Pamphlet to others. They had a second training session on how to speak with their neighbors, how to engage their neighbors in a survey, and how to use the tracking and recording systems developed for the outreach campaign. They had an abbreviated introduction to oral histories as well.
- The Delray Beach Outreach Team had classroom instruction about climate change during school hours prior to their training session on the health effects of climate change and how to explain the Health and Climate Outreach Pamphlet to others. They were trained on how to conduct oral histories, which they practiced. The Delray Beach Outreach Team sent one representative to the second training session on how to speak with their neighbors, how to engage their neighbors in a survey, and how to use the tracking and recording systems developed for the outreach campaign.

#### **Documentation and Sharing of Phase I**

- The tri-lingual Health and Climate Outreach Pamphlet was shared with organizers in Miami, West Palm Beach, Tarpon Springs, Sarasota, Naples, Lee County and Levy County and other Florida coastal communities.
- An Interim Report was filed with EPA Region 4 on May 1, 2016.
- Documentation was compiled for future incorporation into the instructions for organizers on www.ReACTToolKit.net

#### Phase II

### **Neighborhood Canvass**

- The Outreach Teams in both communities required additional field training.
- The DISC Outreach Team attempted a door to door neighborhood canvass. When this proved to be difficult, they hosted a neighborhood event with food on Memorial Day Weekend that was well attended, to collect the remaining surveys.
- The TLHS Outreach Team conducted outreach first as a homework assignment, with students surveying their families and neighbors. The remaining surveys were collected at a The All People's Day Diversity Festival, the TLHS Health Fair, a St. Matthews Episcopal Church Elders meeting, and a Dance Off at the Pompey Park Community Center.

#### **Website Development**

- An additional Outreach Pamphlet was created on Asthma, and posted on the website.
   This was added due to the high rates of asthma that were reported by survey respondents, and the desire to create materials for future communities that might have similar high asthma rates. (see Appendix G)
- The Community Tool Kit instructions for organizers were posted to the website, with links to job descriptions, tracking forms, and outreach materials

- o Pictures that were uploaded to a FLICKR account during the Outreach campaign were uploaded to the website.
- Webpage drafts were created for the communities participating in the extension of the pilot projects.

## **Survey Information Compilation**

- The top line analysis of survey results was included in PowerPoint presentations prepared for community meetings in each community.
- More comprehensive reporting was prepared (see Appendices A and B) for discussions with community partners about actions that can be taken based on the survey, and to support discussions with public officials.
- Interactive mapping of survey information on flooding was created.

#### **Oral Histories**

- Oral histories were transcribed and coded to protect the identities of residents.
- Quotes from the Oral Histories were included in the interactive flooding map created to help the DISC leaders understand and communicate about their flooding issues.
- Oral History top line information was included in a PowerPoint presentation prepared for community meetings in each community.
- More comprehensive reporting was prepared (see Appendices A and B) for discussions with community partners about actions that can be taken based on the survey, and to support discussions with public officials.

#### **Community Meetings**

- A final community meeting was held in each of the two pilot communities.
- A presentation about the project was made at a Boca Raton City Commission meeting by a DISC board member and the Project Manager Phase II.
- Press releases were created and sent out for external communication, and flyers were distributed within the communities.
- Public officials responsible for the health and safety of the community were invited to attend.
- Members of the Outreach Teams were prepared to present at the community events and to be recognized for their work.
- Thank you notes were emailed to all public officials who attended the community meetings.

#### **Documentation and Sharing of Phase II**

• Text and photographs representing the *Rising Together* outreach campaigns were prepared and submitted for inclusion in a curated exhibit titled *The New American* 

Patriot: Climate Art in the Public Interest Exhibition, which opened, July 1<sup>st</sup>, at THE BOX GALLERY in West Palm Beach, FL.

- A FLICKR account was set up to post project pictures
- A video was made about the project to assist with fundraising for replication and scaling of the project
- A poster was created for the Southeast Florida Regional Climate Change Compact's 8<sup>th</sup> Annual Climate Leadership Conference
- Branding was done for the website and communications tools. Logos were created and placed on T-shirts for the Outreach Teams.
- The community tool kit is being shared with organizers, who are replicating the project in West Palm Beach, Sarasota, Naples, Tarpon Springs, and on the Nature Coast of Florida in Levy, Marion and Citrus Counties.
- Instructions for organizers were posted on the ReACT Tool Kit website

#### Follow up on Identified Climate Resilience Concerns

- In Boca Raton, DISC leadership will be opening discussions with the Public Works Department regarding the flooding in their community. The Project Director is mentoring DISC in this process, by teaching DART research methods and tactics, and providing administrative support to DISC leadership.
- In Delray Beach, the Green Sanctuary Committee is working with the Office of Sustainability to develop reporting to the FEMA CRS manager regarding the *Rising Together* outreach efforts in South Delray Beach.
- The Green Sanctuary Committee begins reaching out to government entities, interfaith groups and grassroots groups about linking to www.ReACTToolKit.net
- The Green Sanctuary Committee will share final reporting with a doctoral candidate in California, who is preparing to engage in doctoral research on adaptation methodology in Delray Beach. Reporting will also be shared with Habitat for Humanity, which is engaged in Boca Raton community improvement in the study area.
- ✓ **Output -** Write a narrative describing what was delivered/accomplished from these activities; the direct results of each Activity.

#### **Output Summary Narrative**

The <a href="www.ReACTToolKit.net">www.ReACTToolKit.net</a> has been used in two pilot communities, and the process to use it in the next eight communities is underway. In Boca Raton, a total of 11 climate communicators were trained: 1 Community Liaison from our community partner, 2 Outreach Leaders and 8 additional Climate Communicators. 102 residents in 92 households were educated about Health and Climate. 82 residents signed up for Code Red, and 12 Oral Histories were recorded and transcribed. 1 interactive Google Map was created for our community partner DISC to use in their discussions with public officials regarding the flooding in the community. Survey and Oral History content was both presented in report form and included on the interactive map regarding improper functioning of storm drains,

causing flooding during intense rain storms. Residents' comments about mold, asthma, and water quality were aggregated and reported to DISC. The Green Sanctuary Committee will continue to assist DISC by providing further reporting information gathered in the survey and oral histories, and coaching DISC through the advocacy process. A brief PowerPoint about the project was presented at a final community meeting, and can be accessed here: <a href="http://reacttoolkit.net/wp-content/uploads/2016/09/Rising-Together-South-Delray-Beach-Presentation-Sept.-22-2016-.pptx">http://reacttoolkit.net/wp-content/uploads/2016/09/Rising-Together-South-Delray-Beach-Presentation-Sept.-22-2016-.pptx</a> The comprehensive Boca Raton results appear in Appendix A. In Delray Beach, a total of 20 climate communicators were trained, including 2 Outreach Leaders, 3 teachers, and 15 students. 2 Outreach Leaders and 7 Climate Communicators participated in outreach. 106 residents, including 77 households in the study area and 13 households in South Delray Beach west of I-95 were educated about Health and Climate. 26 residents were signed up for Code Red, and 19 Oral Histories were recorded and transcribed. Students trained as climate communicators surveyed their families and neighbors, many of whom were Creole speakers.

The City of Delray Beach recommended our *Rising Together* Project for inclusion in the poster session of the Southeast Florida Regional Climate Change Compact's 8<sup>th</sup> Annual Climate Leadership Conference. Although the conference was cancelled due to Hurricane Matthew, the poster can be viewed here: <a href="http://reacttoolkit.net/index.php/pilot-project-results/">http://reacttoolkit.net/index.php/pilot-project-results/</a> The Sustainability officer for The City of Delray Beach is investigating the reporting format we can use to include the Rising Together outreach project in South Delray Beach in documents submitted for FEMA CRS credit. The comprehensive Delray Beach Results appear in Appendix B.

✓ **Outcome** – Describes the impacts (*i.e.*, *changes in condition*) resulting from an Activity. "Outcome measures" answer the question: What impacts will the output/activities make relevant to public health and/or the environment? Outcomes are the impacts/benefits on the community. Example:

Short-term (awareness) – changes in learning, knowledge, attitude skills, understanding

- Residents of 2 low income coastal communities in Palm Beach County, FL have learned about climate change, sea level rise, and the health effects they can expect to be exacerbated by climate change in their community. They also learned about emergency resources and procedures.
- Leaders in the vulnerable communities acquired or improved communication skills, learned to work with people with language barriers, and how to communicate the dynamics of climate change and the consequences simply to others. These leaders now understand how to run a public health campaign in their community.
- Neighbors met neighbors they did not know, including meeting people who spoke different languages. This was facilitated by bilingual residents, who served as translators during the neighborhood canvass.

- English, Spanish, and Creole-speaking residents in Pearl City, Lincoln Court, and Dixie Manor understand the health and safety concerns related to the standing water in their community, and how to protect their health as climate change progresses.
- English and Creole-speaking residents in Delray Beach understand the health and safety concerns related to climate change.
- Dialogue has been opened with public officials responsible for the health and safety of the two pilot communities as climate change progresses through points of contact established during this project.

Intermediate (behavior) – changes in behavior, practice or decisions

- Greater emergency response safety during hurricanes and other storms: 108
  people in the two neighborhoods will be receiving Code Red emergency
  notifications.
- Developing Interracial Social Change (DISC) will be in continuing dialogue with the City of Boca Raton regarding the flooding issues in their community.
- In Boca Raton, DISC will have a bilingual (English-Spanish) liaison to Spanish-speaking residents and a bilingual (English-Creole) liaison to Creole-speaking residents.
- Residents will include the understanding of their elevation, discussed with community leaders, as gentrification pressures related to elevation arise.
- Residents participating in CERT

Long-term (condition) – changes in condition

- DISC will provide effective comprehensive advocacy for all linguistic groups of residents
- In Delray Beach, this project may have helped to reduce flood insurance rates through the FEMA CRS management process.

## ✓ EPA Strategic Plan Linkage & Anticipated Outcomes, Outputs & Performance Measures

The EPA requires that grant applicants and recipients adequately describe environmental outputs and outcomes to be achieved under assistance agreements (see EPA Order 5700.7, Environmental Results under Assistance Agreements,

http://www.epa.gov/sites/production/files/2015-03/documents/epa order 5700 7a1.pdf).

**Output Goals v Expectations Summary Chart** 

Output Goals v Expectations Summary Chart		
OUTPUT GOALS	PERFORMANCE AGAINST EXPECTATIONS	
Production of trilingual pamphlets	✓ Trilingual pamphlets (English,	
(English, Spanish and Creole) including	Spanish and Creole) including	
prevention and response to toxic mold and	prevention and response to toxic mold	
water contamination	and water contamination were	
	produced. They are available in PDF	
	form in the left sidebar of the home	
	page of WWW.ReACTToolKit.com	
	in English. Spanish and Creole	
	Outreach pamphlets and forms were	
	needed in Boca Raton. Creole	
	Outreach pamphlets and forms were	
	needed in Delray Beach.	
Formation of outreach plans for two low-	✓ Outreach plans for two low-income	
income vulnerable communities	vulnerable communities were	
	completed, and executed with	
	modification. Neighborhood canvass	
	proved to be very challenging for	
	neighborhood volunteers. Some door-	
	to-door education and surveying was	
	done in each of the pilot communities,	
	augmented by tabling at existing	
	community events.	
Educating the Community by reaching	✓ In Boca Raton 102 residents in 92	
100 residents in each of two vulnerable	households in the study area were	
communities	educated. In South Delray Beach, 106	
	residents were educated, 77	
	households were in the study area, 13	
	households were out of the study area	
	(west of I-95 in South Delray Beach),	
	and several households were in	
	Boynton Beach. 200 laminated Health	
	and Climate Information Sheets were	
	given to residents to attach to their	
	refrigerators in the two communities.	
Documenting neighborhood risk	✓ Documenting neighborhood risk	
perception and concerns by surveying and	perception and concerns by surveying	
conducting oral histories that ask about	and conducting oral histories that ask	
experiences regarding climate resilience,	about experiences regarding climate	
presence of mold, asthma incidence, and	resilience, presence of mold, asthma	
history of water contamination	incidence, and history of water	
	contamination was accomplished	

	using the survey that appears in English, Spanish and Creole in the left side bar of the Home page of www.ReACTToolKit.net Results of the surveys and oral histories appear in Appendices A and B. The Oral History Protocol and Oral History Consent Form are located on this page <a href="http://reacttoolkit.net/index.php/links-to-tool-kit-materials-weeks-5-12/">http://reacttoolkit.net/index.php/links-to-tool-kit-materials-weeks-5-12/</a>
Public recognition of 3 trained climate communicators in each of the two communities	✓ The goal of public recognition of 3 trained climate communicators in each of the two communities was more than achieved. Two Outreach Leaders from the community presented their personal climate awareness stories and survey results in Boca Raton. They and their teams (a total of 10 people) were honored at a public meeting. In Delray Beach, one Climate Leader from the community reported at the community meeting, and the seven students from the school who participated in outreach received certificates acknowledging their participation.
Establishing Points of contact between residents and municipal representatives related to prevention and response to public health harms associated with climate change and sea level rise	Points of contact were established between residents and municipal representatives related to prevention and response to public health harms associated with climate change and sea level rise. In both communities connections were made with the police and fire departments, which manage Code Red and the Community Emergency Response Teams. attended by the Boca Raton Dir. of Public Works, Boca Raton Dir.  Environmental Services, the Assistant Fire Chief, several police officers, and the Manager of the Dixie Manor Public Housing Apartments. The Delray Beach school assembly was

	attended by the city's Officer of Sustainability Educational Liaison, members of the fire and police departments, the liaison from the CRA, and the founder of the Spady Cultural Heritage Museum.
Sharing information to encourage replication and scaling of the community resilience building pilot project	✓ Information has been shared, and replication and scaling of the community resilience building pilot project is underway in West Palm Beach, Sarasota, Naples, Tarpon Springs, and on the Nature Coast of Florida in Levy, Marion and Citrus Counties.

**Outcome Goals v Expectations Summary Chart** 

OUTCOME GOALS	PERFORMANCE AGAINST
	EXPECTATIONS
Creating Partnerships	
20 stakeholders sharing the ReACT Tool Kit	This is underway, but will not reach 20
electronically with community leaders	stakeholders until the Summer of 2017
15 stakeholders participating to address	✓ Stakeholders included:
climate resilience building and public health	
impacts of climate change and sea level rise,	1. UUFBR
including toxic mold and water	2. DISC
contamination	3. TLHS
	4. St. Matthews Episcopal Church
	5. Macedonia AME Church
	6. Spady Cultural Museum, Delray
	Beach, FL
	7. 1 <sup>st</sup> UU Congregation of the Palm
	Beaches
	8. Sow Share
	9. Climate Action Coalition of South
	Florida
	10. Sea Level Rise Solitions Group,
	Temple Solel, Hollywood, FL
	11. Unitarian Universalist Justice
	Florida
	12. Delray Beach Office of
	Sustainability
	13. City of Boca Raton Office of Public Works
	14. Boca Raton Fire Department (CERT program)
	15. Boca Raton Department of
	Emergency Management (Code Red
	Program)
	16. City of Delray Beach Dept. of
	Emergency Management (Code Red
	Program)
<b>Educating the Community</b>	
200 Residents trained by ReACT canvassers	✓ 200 residents were educated using
to reduce resident hazards associated with	the laminated Health and Climate
climate change, including increased	Outreach Sheet to reduce resident
incidence of Toxic Mold, Water	hazards associated with climate
Contamination, and Injury in overburdened	change, including increased
	incidence of Toxic Mold, Water

communities with large minority populations  100 residents in overburdened communities with large minority populations registered with PBC Regional Alert and Notification System to achieve public health improvements associated with climate change induced increased intensity of storms	Contamination, and Injury in overburdened communities with large minority populations  ✓ 82 residents in Boca Raton and 26 in Delray Beach registered with Code Red
6 trained climate resilience communicators residing in the affected overburdened communities with large minority populations	✓ 20 climate communicators were trained in Delray Beach. 17 of them were bilingual (English-Creole). In Boca Raton, 11 climate communicators were trained. 2 of these were bilingual (English-Creole) and one was bilingual (English-Spanish).
Documenting Neighborhood Risk Perception and Concerns	
At least 100 completed Sea Level Rise Risk Perception Surveys in two overburdened communities with large minority populations	✓ A total of 206 surveys were completed: 99 in Boca Raton and 107 in Delray Beach. Results were analyzed on 92 surveys in Boca Raton and 77 in Delray Beach after eliminating households outside of the study area and duplicates, where more than one person in the same residence took the survey.
Documentation of mold present or not present in homes surveyed (as reported by residents)	✓ There was a question on the survey related to mold.
200 responses documenting presence of mold, asthma incidence, and history of water contamination  Building Community Capacity to Address Public Health Harms from Climate Change Impacts	✓ Presence of mold, asthma incidence, and history of water contamination were documented in the survey.
Change Impacts  DISC and TLHS in dialogue with at least 1 emergency management official and one public health official responsible for public health and safety in their overburdened communities with large minority populations	✓ In Boca Raton, the Fire Department (responsible for CERT), and the Police Department (responsible for Code Red) are in dialogue with DISC. In Delray Beach, TLHS is in dialogue with the Department of Emergency Services (responsible

3 climate resilience communicators within each overburdened community with a large minority population connected to 2	for Code Red) and the Fire  Department (responsible for CERT).  ✓ In Boca Raton, DISC has established points of contact in the
each overburdened community with a large	✓ In Boca Raton, DISC has
each overburdened community with a large	[ * * * * * * * * * * * * * * * * * * *
_	established points of contact in the
minority population connected to 2	1
	Public Works Department, and the
municipal officials associated with climate	Environmental Services
change including increased incidence of	Department. In Delray Beach,
Toxic Mold, Water contamination and	TLHS has points of contact with the
injury	Department of Sustainability and
	with the Education liaison.
Improved Community Capacity	
At least 4 points of contact from the	There were no municipal public health
overburdened community with a large	departments in Boca Raton or Delray
minority population and the municipal	Beach. Points of contact were therefore
representatives responsible for their public	made with emergency services, police and
health and safety	fire departments.
Increased skills in overburdened	✓ Participants learned how to work
communities with large minority	
	<u> </u>
3	<u> </u>
At least 3 members of each overburdened	✓ There were 10 people on the
community with a large minority population	Outreach Team in Boca Raton and 9
	on the Delray Beach Outreach
	Team. Level of participation was
neighborhood campaign	realli. Level of participation was
overburdened community with a large minority population and the municipal representatives responsible for their public health and safety  Increased skills in overburdened communities with large minority populations, including 6 members of the community with public speaking experience on the subject of climate resilience  At least 3 members of each overburdened community with a large minority population experienced in running a public health	departments in Boca Raton or Delray Beach. Points of contact were therefore made with emergency services, police and fire departments.  ✓ Participants learned how to work with their neighbors across languag barriers, how to speak succinctly about health and climate change, and improved their communication skills in general.  ✓ There were 10 people on the Outreach Team in Boca Raton and on the Delray Beach Outreach

## ✓ Linkage to EPA Strategic Plan

Pursuant to Section 6a of EPA Order 5700.7, "Environmental Results under EPA Assistance Agreements," EPA must link proposed assistance agreements to the Agency's Strategic Plan.

This project is most closely aligned with Goal 1, Objective 1.1 of the EPA's FY 2014-2018 Strategic Plan.<sup>6</sup>

## Goal 1: Addressing Climate Change and Improving Air Quality.

**Objective 1.1: Address Climate Change.** Minimize the threats posed by climate change by reducing greenhouse gas emissions and taking actions that help to protect human health and help communities and ecosystems become more sustainable and resilient to the effects of climate change.<sup>6</sup>

The survey, oral histories, and educational materials distributed in the two pilot project communities supported this objective by helping to protect human health in the following ways:

- 1. Identifying health-related climate resilience concerns.
- 2. Educating residents about climate change, sea level rise, and the health impacts of climate change, with an emphasis on the steps that residents can take to protect their health and safety.
- 3. Training residents to lead a public health campaign, and to advocate for their community to receive resources to address climate resilience concerns that impact public health.

The pilot projects supported Objective 1.1 by helping the two communities and ecosystems become more sustainable and resilient to the effects of climate change by reaching Spanish-speaking and Creole-speaking residents with information about climate change, sea level rise, and the health impacts of climate change, with an emphasis on the steps that residents can take to protect their health and safety in their native language. This involved not only creating tri-lingual outreach materials, but also creating several bilingual points of contact within each neighborhood that will be useful when the communities must deal with emergencies and public health hazards.

This project was also in keeping with the EPA's strategic plan section, "Working to Make a Visible Difference in Communities." Posting the outreach materials and methods on a website, and making them immediately available to organizers in other coastal communities "empower(s) community dialogue, engagement, understanding, and action through effective information sharing, including outreach and environmental education that informs the public about ... environmental stewardship to benefit current and future generations. The website <a href="https://www.ReACTToolKit.net">www.ReACTToolKit.net</a> was created to make the outreach materials created for communities available to the pilot project communities, and to future communities wishing to replicate the project. Leadership in two low income communities was consulted at every stage of development of outreach materials. There were 6 revisions to distill the content into information that the

Outreach Team of residents in the vulnerable communities felt was important to communicate to their neighbors. A great deal of technical information was removed, in favor of the ReACT Tool Kit format, which addresses: What is the Health Impact? How is it Related to Climate Change? Who is vulnerable? What can residents do to prevent or respond to the public health impact? Where can more information be found?

The website has a Community Tool Kit with instructions and materials that would allow an organizer in another community to conduct an outreach campaign on the public health impacts of climate change, and gather information from the community about climate resilience challenges that can be reported to public officials. Janice T. Booher, MS, who served as Project Director of this project, obtained \$27,000 of additional funding to extend this project to eight more coastal communities. These outreach campaigns are in the planning stages now that funding has been secured.

The model for public health outreach and civic engagement presented on www.ReACTToolKit.net is the model tested in two communities with EPA grant support. It assumes that an organization outside a diverse vulnerable community, which in this case was the Unitarian Universalist Fellowship of Boca Raton, partners with existing leadership in that community to educate about Health and Climate, and to survey 100 households in the community. The goals are to increase climate resilience and to empower an organization in a vulnerable community to speak to public officials about climate resilience concerns. The materials and methods used in the two pilot communities are available on www.ReACTToolkit.net. Word document templates on the website, with links included in this document, can be modified to include local Emergency Service resources, and to reflect the climate challenges faced in other coastal communities. Methods used are chronicled on the website, which contains links to training videos, organizing instructions and outreach materials.

## APPENDIX A

Results of Climate Resilience Building Outreach Pearl City, Lincoln Court, and Dixie Manor. Boca Raton, FL

## **Results of Climate Resilience Building Outreach**

## Pearl City, Lincoln Court and Dixie Manor Boca Raton, Florida

November 5, 2016



In Partnership with



With Canvassing Training Support from Habitat for Humanity



Project Director
Project Manager Phase I
Project Manager Phase II
Academic Oversight: Surveys
Academic Oversight Oral Histories

Janice T. Booher, MS Dr. Ana Puszkin-Chevlin Dr. Debra Weiss-Randall

Dr. Keren Bolter Dr. Sandra Norman

The Green Sanctuary Committee
The Unitarian Universalist Fellowship of Boca Raton
2601 St. Andrews Blvd., Boca Raton, Florida 33434

### **Boca Raton Findings**

#### How Climate Resilience Was Increased

- Signing 82 residents up for the emergency notification system: Code Red
- Building relationships in the community by training residents to educate their neighbors
- Reaching across linguistic barriers to reach immigrants living in the community: Three bilingual residents served as translators, and outreach materials were distributed in English, Spanish and Creole.
- Training leaders living in the community, and supporting them in acquiring the experience of conducting a successful public health campaign
- Educating 102 residents about the public health impacts of climate change, including heat waves, poor air quality, safety during a flood, contaminated flood and standing water, contaminated drinking water, indoor mold, vector borne disease and algae blooms
- Distribution of specific information in English, Spanish and Creole on protecting health and safety in the face of climate change

## Climate Resilience Challenges Identified

A survey of 102 residents augmented with 13 oral histories revealed three key areas of opportunity for the Pearl City, Lincoln Court, and Dixie Manor neighborhoods to increase climate resilience:

- **Neighborhood Flooding**: Discussion with the Public Works Department to determine the cause and possible remedies for the flooding reported by 47 of 91 survey respondents is underway.
- **Elevated Asthma Rate:** Asthma education is needed; particularly in the Dixie Manor complex.
- Further study of the high incidence of mold, asthma, and water contamination reported in the Dixie Manor public housing complex to determine causes and possible remedies

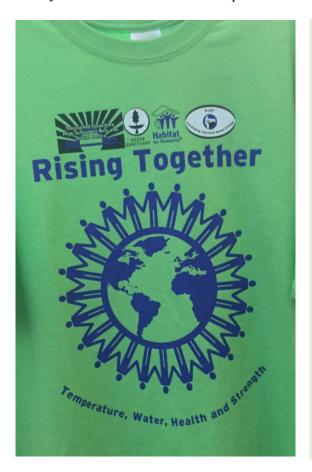
## **Organizing Observations**

- Resources within the community that made this project successful include: bilingual
  residents, retired educators, retired government employees with information management
  skills, some well educated residents, and the community partner's established regular
  dialogue with law enforcement.
- When approached about a climate resilience project, community leadership may not see the relevance to their community, even though the community may be experiencing hardship that will be exacerbated by climate change. When first contacted, community leaders in the Pearl City community stated that they were not aware of any flooding

issues or asthma in their community. The leadership of DISC framed their participation as "helping us." The survey revealed that over half of the residents were dealing with street flooding on a regular basis, with 4 residents reporting the need for costly repairs to flooded cars parked in neighborhood parking lots or on neighborhood streets. Asthma rates in the community were more than twice the county rate, and almost 4 times the county rate in the public housing complex. When results were compiled, leaders were surprised at the number of residents reporting flooding, but also said they were aware that certain areas of their community "had always flooded."

- This project unified portions of the community that were not communicating prior to the outreach campaign. This was due to efforts to reach across language divisions, and the need to survey people in each of the three neighborhoods in the community in order to reach 100 households.
- Door to door neighborhood canvassing was more challenging for the Outreach Team than tabling at a community event. The difficulty of finding a time when people were at home, and the need for door to door canvassers to be out-going, personable and engaging discouraged some volunteers.
- Residents were not willing to use iPads to conduct the neighborhood canvass. They expressed safety concerns. They did not want to carry an expensive electronic device around the neighborhood, because they thought it would make them targets. Residents preferred paper surveys.
- The Outreach Team found oral histories technically challenging to record and transcribe. Residents arranged for people to be interviewed at locations in the community, and asked the Project Manager, Project Director or the Community Liaison to record the interviews on video, cassettes, or smart phones.
- Challenging a grassroots organization to survey 100 residents of their community built organizational capacity in the following ways:
  - O The Outreach Team organized two community events. The Interfaith Family Fun Day on April 30, 2016, where the Survey was first introduced to the community, and a Memorial Day event on Memorial Day weekend. A Habitat for Humanity organizer assisted with the Interfaith Family Fun Day, which gave the community the experience of recruiting participants at booths, publicizing the event, and communicating with residents about the Sea Level Rise Survey.
  - Working for turnout at community events, including: relying on church networks, personally inviting people, creating flyers, and serving food to attract more people.
  - Conducting a neighborhood skills inventory, and recruiting residents with needed skills
  - Outreach Team members report that they increased their communication skills
  - People with information management skills were identified, and those individuals had the experience of entering information for a public health campaign into an online Google form
  - Problem solving skills were needed to address logistic concerns, and the community was given the space to internally solve several problems. Some new leaders were identified in this process.

- Information gathered about the community: The grassroots community partner was given an interactive map with results related to flooding, lists of all households surveyed, with comments about their concerns, and copies of all final reports.
- Efforts were made to combine the Sea Level Rise Risk Perception Survey with a Habitat for Humanity Survey. The Habitat for Humanity Survey to assess neighborhood needs was to survey 300 households with a lengthy list of questions. The Outreach Team felt that the combined survey was much too long to be practical. Ultimately, the Habitat for Humanity organizer trained the Outreach Team on how to interact with neighbors.
- The Outreach Team had security concerns that were addressed in the following ways:
  - Outreach Team received bright lime green T-shirts and clipboards to make them easily identifiable in the community. The T-shirts were created and branded for the *Rising Together* project, with partner logos and the project name clearly visible to provide immediate identification of the canvassers.
  - o The police were informed about the neighborhood canvass.
  - o Flyers about the canvass were posted in the community.



An Outreach Team Tshirt is shown (left). Note that it is branded for the Rising Together project, with partner logos and the project name clearly visible, to provide immediate identification of the canvassers. Logos from left to right are: Toussaint L'Ouverture High School for Arts and Social Justice, The Green Sanctuary Committee of the Unitarian Universalist Fellowship of Boca Raton, Habitat for Humanity, and **Developing Interracial** Social Change.

## Boca Raton Executive Summary by Janice T. Booher

**Funding** A \$30,000 Environmental Justice Small Grant from the U.S. Environmental Protection Agency (EPA) was awarded to the Unitarian Universalist Fellowship of Boca Raton (UUFBR) for the project titled: Replicable and Scalable Community Climate Resilience Building in Two Communities in Palm Beach County, Florida. The Unitarian Universalist Fellowship was one of 40 non-profit and tribal organizations selected for awards of nearly \$1.2 million in competitive grants for work to address environmental justice (EJ) issues nationwide. UUFBR used the grant money to create a Resilience Adaptation Community Toolkit (www.ReACTToolkit.net), and use it in community led neighborhood canvassing and at community meetings. The goal of the canvasing and meetings was to provide education and training to reduce public health risks associated with increasingly severe storms and sea level rise associated with climate change in South Delray Beach and the Pearl City, Lincoln Court and Dixie Manor neighborhoods of Boca Raton.

Boca Raton Community Partners In Boca Raton, UUFBR partnered with Developing Interracial Social Change (DISC), and cooperated with Habitat for Humanity, which is implementing a long term neighborhood improvement initiative. DISC provided a letter of commitment that was attached to UUFBR's January 2016 EPA grant application. DISC is a grassroots community organization that sponsors gatherings and programs, which confront the legacy of racism and promote healing, and seeks to nurture leadership for the work of justice, especially in Boca Raton. Habitat for Humanity agreed to train neighborhood canvassers, and will be receiving full reporting from UUFBR's Green Sanctuary Committee on the results of both survey and oral history results that give insight into community housing and infrastructure needs.

Resident Engagement EPA notification of funding was received in November 2015, and organizing meetings began in the community in January 2016. Marjorie O'Sullivan served as the DISC Board liaison to UUFBR, and Pearl City residents LeJeune Goddard and Marie Hester served as paid Outreach Leaders. These three leaders and eight additional residents were trained as Climate Communicators with an understanding of the public health impacts of climate change. They received further training from Habitat for Humanity Organizer Ana Neira on how to conduct a neighborhood survey. Climate Communicators who canvassed the neighborhood received stipends. In addition to the three leaders, residents Mike Allen, John E. Brown (DISC Board member), David Collesano (DISC Board member), Anita Gonzales, Marlow Harris, Katie Mae Goddard, Fenide Jean Baptiste, and Allison Jenkins were trained to participate in the canvass. To facilitate communication among neighbors, DISC Board member David Collesano and resident Fenilde Jean Baptiste served as Creole translators. Resident Anita Gonzales served as Spanish translator.

**Professional Supervision** Project Manager Phase I, Dr. Ana Puzkin-Chevlin, a hazards mitigation specialist, conducted a training session for the Outreach Team on the causes and public health effects of climate change. Dr. Sandra Norman, an environmental historian, conducted an oral history training session. Project Director Janice T. Booher, conducted training on the forms and tracking methods used in the project. They received further training from Habitat for Humanity Organizer Ana Neira on how to conduct a neighborhood survey. Project

Manager Phase II, Dr. Debra Weiss-Randall, Certified Health Education Specialist, conducted additional field training on the protocol for information collection, and supervised all information collection; she worked together with Project Director Janice T. Booher on information analysis, and presented a PowerPoint with preliminary outreach results at the community meeting (see Boca Raton Rising Together Community Meeting Presentation Sept.15, 2016). Dr. Weiss-Randall also prepared a Boca Raton Community Meeting Flyer, a Boca Raton Press Release and a Program for the Boca Raton Community Meeting September 15, 2016

## **Information on EPA Environmental Justice Small Project Grants**

2015 Environmental Justice Small Grant recipients and project descriptions: http://www3.epa.gov/environmentaljustice/resources/publications/grants/ej-smgrants-recipients-2015.pdf

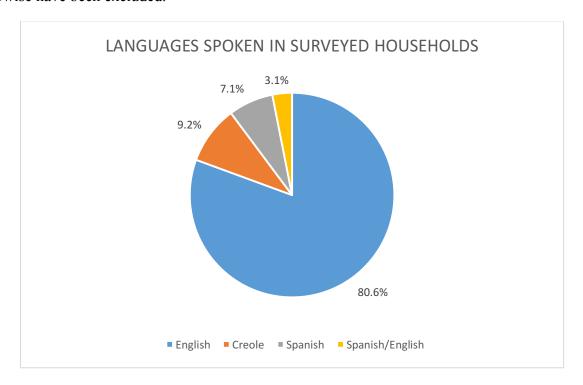
Environmental Justice Small Grants Program, including descriptions of previously funded grants: http://www3.epa.gov/environmentaljustice/grants/ej-smgrants.html Connect with EPA Region 4 on Facebook: www.facebook.com/eparegion4 And on Twitter: @EPASoutheast

## **Boca Raton Survey Outreach and Education**

- 102 residents in 91 households in zip code 33432, including Pearl City, Lincoln Court and Dixie Manor were surveyed regarding their perception of risk from sea level rise, and their household's experience with flooding, mold, asthma, and water contamination. The Sea Level Rise Risk Perception Survey was developed by sea level rise expert Dr. Keren Bolter, and modified to support objectives of this project by Project Director Janice T. Booher. The neighborhood canvass, information retrieval and recording was supervised by Project Manager (Phase II) Dr. Debra Weiss-Randall. The English version of the survey can be viewed in Appendix D and downloaded at this link <a href="http://reacttoolkit.net/wp-content/uploads/2016/05/Website-SLR-Risk-Perception-Survey-English.pdf">http://reacttoolkit.net/wp-content/uploads/2016/05/Website-SLR-Risk-Perception-Survey-English.pdf</a> The Creole and Spanish Surveys are available on <a href="http://www.ReACTToolkit.net">www.ReACTToolkit.net</a>
- 102 residents in 91 households in zip code 33432, including Pearl City, Lincoln Court and Dixie Manor were educated about the health impacts of climate change. The Health and Climate two-sided outreach sheet was developed by Project Manager (Phase I) Dr. Ana Puszkin-Chevlin. The English version can be viewed in Appendix C and downloaded at this link: <a href="http://reacttoolkit.net/wp-content/uploads/2016/05/Website-Climate-and-Health-Outreach-Sheet-English.pdf">http://reacttoolkit.net/wp-content/uploads/2016/05/Website-Climate-and-Health-Outreach-Sheet-English.pdf</a> Spanish and Creole Health and Climate outreach sheets are available from the left side bar on the home page of <a href="https://www.ReACTToolkit.net">www.ReACTToolkit.net</a>
- In response to the high prevalence of asthma found in the target area, Dr. Weiss-Randall created an Asthma factsheet (see Appendix G). In addition, the Program Coordinator from the American Lung Association was invited to make a presentation at the Boca Raton culminating event.

## Languages Spoken in Surveyed Households

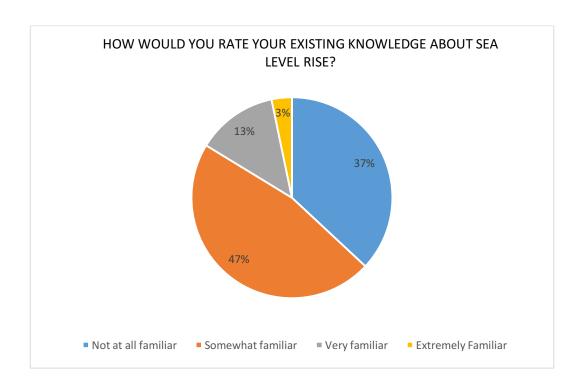
One aspect of climate resilience building in Pearl City, Lincoln Court and Dixie Manor was to establish bilingual points of contact within the community. Although Pearl City and Lincoln Court were historically African American communities, many African American residents have moved away, renting their homes to immigrants. Bilingual residents, who were willing to translate for their neighbors, facilitated introductions among neighbors and communicated information about sea level rise and the public health effects of climate change to their neighbors. Outreach materials were created in English, Spanish, and Creole. This enabled approximately 20 percent of the community to be surveyed in Spanish or Creole, which would otherwise have been excluded.



**Figure 1.** Prior to completing the survey, residents were asked what languages were spoken in their household. Responses reflected the changing demographics in the community. English was spoken in 80.6% of households, Creole in 9.2% of households, and Spanish in 7.1% of households. An additional 3.1% of household reported that both Spanish and English were spoken in the home.

## Residents' Self-Reported Familiarity with Sea Level Rise

Residents completed the survey prior to hearing information about the public health effects of climate change. The first survey question was, "How would you rate your existing knowledge about sea level rise?"



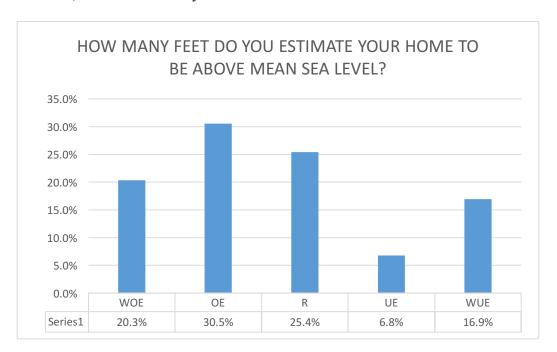
**Figure 2.** Of all Boca Raton residents surveyed in Pearl City, Lincoln Court and Dixie Manor, 37% reported that they were *not at all familiar* with sea level rise, while 46.7% reported that they were *somewhat familiar* with sea level rise. Only 13% reported being *very familiar*, and 3.3% *extremely familiar*, with sea level rise.

Because 37 percent of residents responded that they were not at all familiar with sea level rise, if the 91 residents surveyed are typical of low income households in Southeast Boca Raton, more education about sea level rise is needed. Note that 90% of residents surveyed responded affirmatively to the question, "Do you think sea level rise is occurring in Palm Beach County today?" (see page 28).

## How Many Feet Do You Estimate Your Home to Be Above Mean Sea Level?

Respondents' responses to the question, "How many feet do you estimate your home to be above mean sea level?" were compared against the actual elevations of their homes. The actual elevations were obtained by entering the address into the Eyes on the Rise "Find your location" dialogue box at this link <a href="http://www.eyesontherise.org/app/#tab1">http://www.eyesontherise.org/app/#tab1</a>

The difference between the actual elevation and the elevation entered by the respondent was calculated. Respondents who responded with an elevation higher than their actual elevation were found to underestimate their risk. Respondents who entered an elevation lower than the actual for their address were found to have overestimated their risk. The differences were grouped into: WUE=Widely under-estimated Risk, UE=under-estimated Risk, R=Realistic, OE=Over-estimated Risk, and WOE=Widely over-estimated Risk.

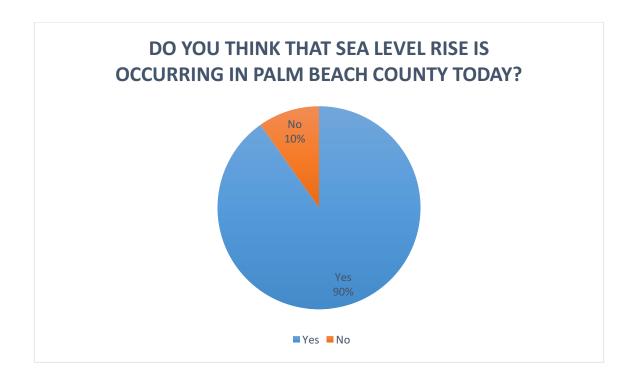


**Figure 3.** 20.3% of residents widely overestimated their risk. 30.5% overestimated their risk. 25.4% realistically stated their risk, while 6.8% underestimated their risk, and 16.9% widely underestimated their risk.

Roughly a quarter of the respondents realistically stated their risk. Although more respondents overestimated their risk than underestimated it, those respondents who underestimated their risk tended to widely underestimate it. This suggests that there is a need to locate and educate those who are widely underestimating their risk, so they will respond appropriately in hazard situations. Approximately half of all residents overestimate their risk. The range of responses, from 1,500 ft above sea level to 200 ft below sea level, reflect a lack of understanding that the neighborhood's proximity to the beach is relevant to the determination of elevation above sea level.

## Do You think that Sea Level Rise is Occurring in Palm Beach County Today?

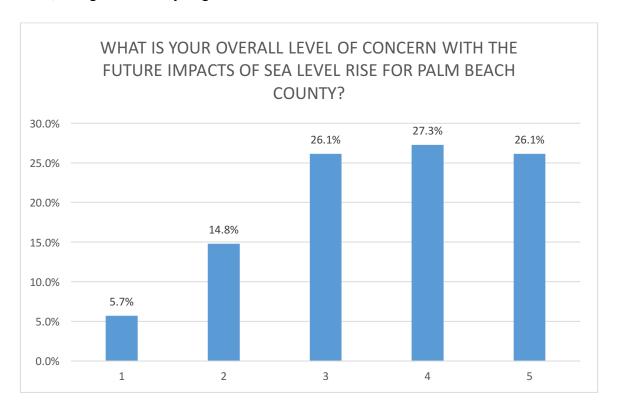
Canvassers were instructed to give the survey to residents prior to educating them about the health effects of sea level rise. Therefore, this result documents residents' perceptions prior to outreach education.



**Figure 4.** 10% of the 91 respondents living in Pearl City, Lincoln Court and Dixie Manor did not think that sea level rise is occurring in Palm Beach County today. 90% of respondents responded affirmatively.

## What is Your Overall Level of Concern with the Future Impacts of Sea Level Rise for Palm Beach County?

Respondents were asked to rate their overall level of concern with the future impacts of sea level rise in Palm Beach County. They chose from the following responses: 1-None, 2-Low, 3-Medium, 4-High and 5-Very High.

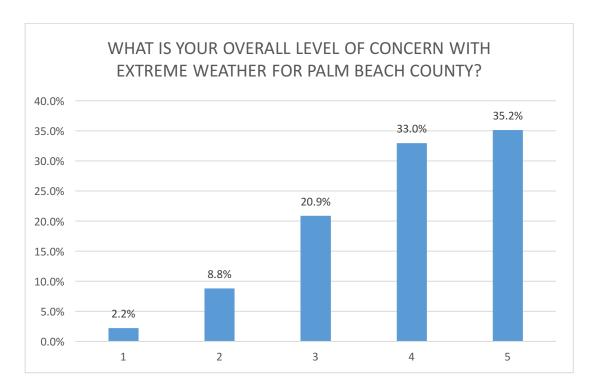


**Figure 5.** Most respondents had a medium level of concern or higher about sea level rise. 5.7% of respondents selected 1-None, which indicates no concern. 14.8% of respondents selected 2-Low, 26.1% selected 3-Medium, 27.3% selected 4-High, and 26.1% responded 5-Very High.

The levels of overall concern with the future impacts of sea level rise in Palm Beach County were higher in the Pearl City, Lincoln Court and Dixie Manor study area of Boca Raton than they were in South Delray Beach (see page 92.) This may be due to the large percentage of people in the Pearl City area (47%) that report experiencing flooding, even though that flooding may be unrelated related to sea level rise.

## What is Your Overall Level of Concern with Extreme Weather for Palm Beach County?

Respondents were asked to rate their overall level of concern with extreme weather for Palm Beach County. They chose from the following responses: 1-None, 2-Low, 3-Medium, 4-High and 5-Very High.

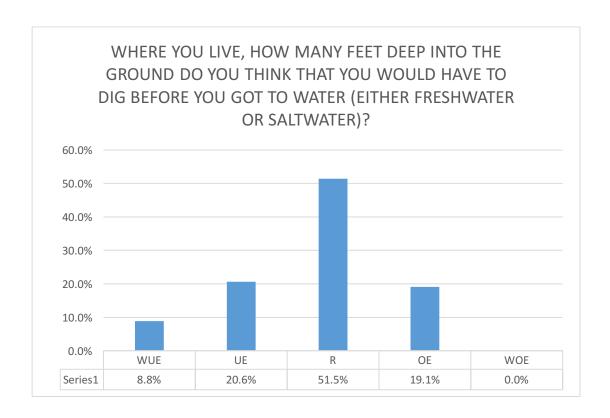


**Figure 6.** Level 5-High was the most common overall level of concern (35.2%) for respondents in the Boca Raton study area. This was followed by a 4-High rating (33.0%), a 3-Medium rating (20.9%), and a 2-Low rating (8.8%). The 1-None rating, indicating no concern with extreme weather for Palm Beach County, was selected by the lowest percentage of residents (2.2%).

These results are consistent with the personal histories of residents participating both in oral histories and in the surveys in Pearl City, Lincoln Court and Dixie Manor. Most are long term residents, who have experienced hurricanes in the past.

## Where you live, how many feet deep into the ground do you think that you would have to dig before you got to water (either freshwater or saltwater)?

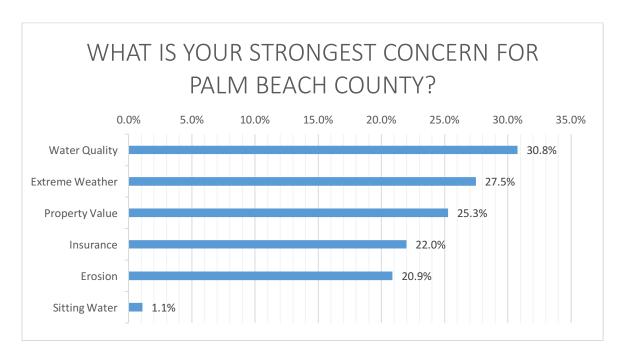
The difference between the actual depth to groundwater and the depth to groundwater entered by the respondent was calculated. Responses with a depth to groundwater greater than their actual depth to groundwater were found to underestimate their risk. Respondents who entered a depth to groundwater that was less than the actual for their address were found to have overestimated their risk. The differences were grouped into: WUE=Widely under-estimated Risk, UE=under-estimated Risk, R=Realistic, OE=Over-estimated Risk, and WOE=Widely over-estimated Risk.



**Figure 7.** Most residents realistically estimated their risk (51.5%). No residents widely overestimated their risk. 20.6% of respondents underestimated their risk, and 19.1% of respondents overestimated their risk.

## Residents' Strongest Concern for Palm Beach County

The Sea Level Rise Risk Perception Survey asked residents to choose their strongest concern for Palm Beach County from six multiple choice options: Water Quality, Erosion, Property Value, Extreme Weather and Other, with a blank to record the Other concern. Some residents indicated more than one strong concern. Because there is no way to determine which of the multiple concerns was the strongest on any given survey, the percentages below reflect all selections of each concern as a percentage of the 91 responses.



**Figure 8.** Water Quality was reported as a strong concern on 30.8% of the surveys in the Boca Raton study area. Extreme Weather was reported as a strong concern on 27.5% of the surveys, and Property Value was selected on 25.3% of surveys. Insurance was selected on 22.0% of surveys, and Erosion on 20.9% of surveys. One respondent to the survey entered Sitting Water in the blank marked "Other."

Although this question was about future water quality concerns, a few comments entered on the surveys in Pearl City, Boca Raton and Lincoln Court stated that there are current water quality issues (see comments on page 36).

# **Comments Explaining Residents' Primary Concerns**

A comment box on the Survey asked respondents to please explain their chosen concern. Residents' Comments are listed below, grouped under the related primary concern from the prior question. Spelling is recorded unaltered.

## **Water Quality Comments**

- Ruby St.: With recent news reports of poisonous water and my kids
- Pearl St.: Poor Quality
- Pearl St.: Quality
- Sapphire St.: Quality
- Sapphire St.: Can not be used for drinking
- NE 2<sup>nd Ct</sup>: Led in the water
- NE 15<sup>th</sup> Terrace: Water War-Far
- NE 15<sup>th</sup> Terrace: Water Quality and hurricane
- NE 15<sup>th</sup> Terrace: Water Quality due to possible contamination as well as standing water and mold
- NE 15<sup>th</sup> Terrace Apt A: Sometimes the water doesn't taste good
- Dixie Manor: Water has chlorine, harmful. Does drink it and cook with it.
- Dixie Manor: Water quality, would have to use filter; but much better use bottle
- Dixie Manor: Lot of bad water (fresh)
- Dixie Manor: I lived through hurricane Wilma and water came to my door
- Dixie Manor: Is not city water
- Dixie Manor: The water quality we have to boil before we use
- Dixie Manor: Water quality is bad even without a storm
- Dixie Manor: Concern is because the children love playing in the water and they don't know it is contaminated after it rains

#### **Extreme Weather Comments**

- NE Pearl St.: The storms are getting worse
- NE 2<sup>nd</sup> Ct: Bad weather
- NE 2<sup>nd</sup> Ct: Temperature is on the rise
- NE 15<sup>th</sup> Terrace: Well this is Florida so you really don't know what to expect each month out of the year. One just have to pray and thank God for the weather we are getting. It can always be worst. I just thank God for his blessing.
- NE 15<sup>th</sup> Terrace: The weather because if there's a storm, hurricane, or flood, etc, then the concern would be if I would still have a home.
- 15<sup>th</sup> Terrace: There's a storm out there now.
- NE 15<sup>th</sup> Terrace A: Puts your life in danger
- NE 15<sup>th</sup> Terrace: Water quality and hurricane
- NE 15<sup>th</sup> Terrace: Extreme weather is the only problem I have had to deal with in past years.

- NE 15<sup>th</sup> Terrace: Cuando hay mucha Agua en la lluvia. Hay problemos de salir a caminar. (When there is a lot of water when it rains there are problems going out to walk.)
- N. Dixie Hwy: Weather/water level arising from street
- Dixie Manor: Danger your life
- Dixie Manor: Hurricane weather
- Dixie Manor: I lived through hurricane Wilma and water came to my door.
- Dixie Manor: Extreme weather thunder storms- afraid
- Dixie Manor: (The concern is because) we had hurricane
- Dixie Manor: Comes out of nowhere thunder, Lightning. Parking lot flooded today.
- Dixie Manor: My concern is that one day the floods will be to severe for us to handle.
- Dixie Manor: Water quality is bad even without a storm
- Dixie Manor: Flooding and sitting water
- N. Dixie Hwy: Cyclone
- N. Dixie Hwy: My concern is that if there was a flood we would be in great danger because of poor concrete.

## **Property Value Comments**

- Pearl St: I don't understand how the property is appraised. If you live in a certain area (like Pearl City) it is so different.
- Pearl St.: Building in residential area.
- 2<sup>nd</sup> Ct: The property value might go down due to storms.
- 2<sup>nd</sup> Ct: seems the original residents are losing out.
- NE 11<sup>th</sup> St: Property value had decreased and now it is improving and several agents are trying to get residents to sell.
- NE 15<sup>th</sup> Terrace: Rising tax estimating property rated high costing low income family lots of taxes over 2,000 to 3,500 high.
- NE 15<sup>th</sup> Terrace: Needs to go down.
- NE 15<sup>th</sup> Terrace: (property value) going down.
- NE 15<sup>th</sup> Terrace B: Don't want property value to rise.
- NE 15<sup>th</sup> Terrace: City maintenance
- Dixie Manor: Property value of home and contents
- Dixie Manor: value impact of flooding.

### **Insurance Comments:**

- Ruby St: Property value
- NE 11<sup>th</sup> St.: Too high
- NE 12<sup>th</sup> St.: Price always going up
- NE 12<sup>th</sup> St: Windstorm insurance cost me a large premium
- NE 15<sup>th</sup> Terrace: Price way too high
- NE 15<sup>th</sup> Terrace: Don't have (insurance) because too expensive
- NE 15<sup>th</sup> Terrace: The rise of insurance

- NE 15<sup>th</sup> Terrace: lack of, cost, increasing cost whenever extreme weather happens, such as a hurricane
- Dixie Manor: May get house someday
- Dixie Manor: I don't have (insurance because) too expensive.
- Dixie Manor: I am concerned about a flood u know.
- N. Dixie Hwy: My money

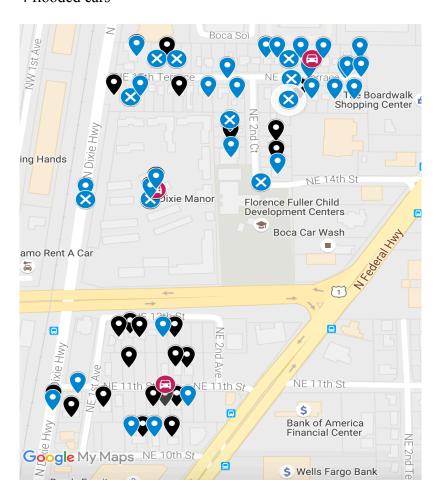
#### **Erosion Comments:**

- 15<sup>th</sup> Terrace: Dangerous!
  NE 15<sup>th</sup> Terrace: All problems
- N Dixie Hwy: Extreme flooding produces erosion.
- Dixie Manor: Due to hurricanes the State of Florida has lost a lot of beach sand.

# **Mapped Reports of Flooding**

Link to Google Map with all comments from Surveys and Oral Histories within the study area with addresses recorded. Contact Marie Hester Marie.hester02@gmail.com, the Secretary of DISC for the link and password. Comments regarding flooding are available by clicking the icons.

- 59 reports of flooding (2 are related to past storms and 1 is a leaking roof)
- 12 reports of blocked storm drains or comments about debris
- 4 flooded cars



**Black**: No experience with flooding reported.

**Blue**: Reported experience with flooding

**Blue Circles with X's:** Reported flooding with storm drain blockage or debris

**Red:** Reported car damage from flooding. (Two are in Dixie Manor. The 27 residences in Dixie Manor overlap on the map).

**Figure 4** This is a still shot of an interactive Google map that documents survey and oral history responses related to flooding. There were 59 reports of experience with flooding, including 4 reports of car damage from flooding and 12 reports of debris blocking storm drains. Residents report that trees planted in Lincoln Court during a beautification campaign do not have regular city maintenance, creating excess foliage and debris. Residents report that debris in storm drains is causing flooding. The Dixie Manor parking lot floods during rain events. There have been 2 reports of car damage from Dixie Manor.

# **Residents' Comments Regarding Flooding**

Text in white on a black field is related to debris and storm drain blockage.

Dixie Manor Apartments: 1350 N Dixie Hwy, Boca Raton 33432

Dixie Manor: Yes. At doorstep flooding

Dixie Manor: Floods

Dixie Manor: Flooding with rain

Dixie Manor: flooding: 8 days no water and lights

Dixie Manor: Alta Inundacion por flata de alcun tarrillas

Dixie Manor: frequent flooding

Dixie Manor: When it rains- have to find safe place to park.

Dixie Manor: flooding

Dixie Manor: Car flooded in shop 9 days. Need new carpet (Dixie Manor parking lot) 8 inches.

Dixie Manor: Hightide flooding during rain

Dixie Manor: I'm 5'2 and the water flood was almost close to my knees.

Dixie Manor: Flooding from rain. Dixie Manor: Just in parking lot

Dixie Manor: Sewers stopped up and does not drain. Dirty water comes up in parking lot-

does not drain-comes close to his house. Drains not draining.

Dixie Manor: When no rain, with no has not rain.

Dixie Manor: High flooding, (they) don't clean (the) drains.

Dixie Manor: Drain being clogged from debris.

Dixie Manor: Not that bad yet u know its ok for now.

Dixie Manor: My car was flooded and I have to pay so much money to fixed it.

Dixie Manor Flooding with rain Dixie Manor: Rain water flooding Dixie Manor: In the back of my apt

N. Dixie Hwy: Heavy rains, streets flooded and can't drive. Here 26 years, never seen it like that.

N Dixie Hwy: Sewers stopped up and does not drain. Dirty water comes up in parking lot-does

not drain-comes close to his house. Drains not draining.

NE 2<sup>nd</sup> Ct: Water drains clogged

NE 2<sup>nd</sup> Ct: High tide flooding

2<sup>nd</sup> Ct: None that I can remember

2<sup>nd</sup> Ct: Flooding sometimes

2<sup>nd</sup> Ct: High flooding

NE 2<sup>nd</sup> Ct: Sometimes the drains get overflow from debris in the road.

NE 10<sup>th</sup> St: Hurricane flooding NE 11<sup>th</sup> St.: Flood in 1948?

NE 11<sup>th</sup> St: Car flood

NE 11<sup>th</sup> St. Saltwater None

NE 12<sup>th</sup> St: High insurance NE 12<sup>th</sup> St: High tide flooding

NE 12<sup>th</sup> St: unknown

NE 15<sup>th</sup> Terrace: None so far

NE 15<sup>th</sup> Terrace: Keeping the drain clean when rain would help.

NE 15<sup>th</sup> Terrace: None so far NE 15<sup>th</sup> Terrace: Water erosion

NE 15<sup>th</sup> Terrace: High flooding, drain clogged.

NE 15<sup>th</sup> Terrace: None NE 15<sup>th</sup> Terrace: None

15<sup>th</sup> Terrace: Flooding, water contamination NE 15<sup>th</sup> Terrace: doesn't flood as much as before

NE 15<sup>th</sup> Terrace: Drainage NE 15<sup>th</sup> Terrace A: Floods NE 15<sup>th</sup> Terrace B: None

NE 15<sup>th</sup> Terrace: Flooding in house NE 15<sup>th</sup> Terrace: high (flooding)

NE 15<sup>th</sup> Terrace: Bad drainage. Most of the debris from the street washes into my yard whenever

there is rainy weather.

NE 15<sup>th</sup> Terrace: A month or so ago, due to severe rain. Debris from up the street was swept in

the yard.

NE 15<sup>th</sup> Terrace: When it rains, lots of street flooding whenever it's more than 6 inches.

NE 15<sup>th</sup> Terrace: Street flooding

NE 15<sup>th</sup> Terrace: Car stalling because of floods. (Water damaged my car and I had to put in shop for engine repairs.)

NE 15<sup>th</sup> Terrace: Some street flooding during heavy rains

15<sup>th</sup> Terrace: High tide flooding NE 15<sup>th</sup> Terrace: Difficulty driving

NE 15<sup>th</sup> Terrace: Deep water on the street

NE 15<sup>th</sup> Terrace: el problema es mas cuando llueve mucho (the problem is worse when it rains a lot)

N. Dixie Hwy: None

N. Dixie Hwy: Flooding in the street and home

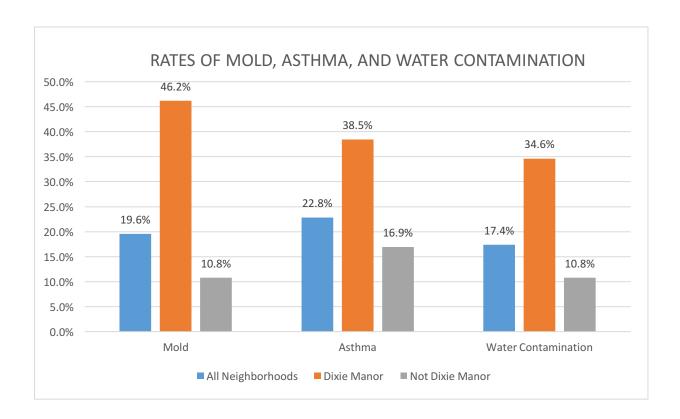
N Dixie Hwy, Apt 1: Hurricane flood, heavy rain flooding

N Dixie Hwy, Apt 4: Block the street

N Dixie Hwy, Apt 5: So far none that I know of.

# Mold, Asthma, and Water Contamination

Residents were asked, "Have you or anyone in your household experienced any of the following at your current address?" Respondents circled Yes or No in response to Mold, Asthma and Water Contamination.



**Figure 4.** In Dixie Manor, mold was experienced by more than a third of respondents, a rate four times that of survey respondents living outside Dixie Manor. Water contamination was reported by 34.6% of Dixie Manor respondents and by 10.8% of residents living elsewhere in the community. Reported household asthma rates were extremely high in Dixie Manor, with a reported prevalence of 38.5%; over three times the County lifetime asthma prevalence of 10.4% (Florida CHARTS)<sup>8</sup>. Asthma prevalence was high outside of Dixie Manor as well, at 16.9%.

The rates of mold, asthma and water contamination are much greater in the Dixie Manor Public Housing complex than they are in residences in Pearl City or Lincoln Court. Although it is outside the scope of this study, these preliminary self-reported results argue for a broader effort to address these issues in the Dixie Manor public housing complex. Inspection teams in tribal communities noted that "resident-reports of mold have been found to be very reliable indicators for mold and moisture problems."

# **Using Oral History**

By Dr. Sandra Norman

It is a common argument that when there is a disaster, impending or imminent, experts are sent in, plans made, and the public is told what to do. Seldom is the public asked what has happened. This project was so different. With the clear proof that global warming is happening, and that sea level rise is occurring now, not maybe, this project was designed to inform endangered populations of the need for self-awareness and community protection.

But when did water and mold and asthma and allergies become a problem in these communities? What do we know about housing, families, illness, awareness? We know by asking. Other key features of this project are described elsewhere, but one key was to introduce communities to the formal practice of Oral History. In each of these communities the informal practice of oral storytelling and community history has long been practiced, but this was a project to train people in formal technique and then have them engage their own communities in the telling of health and weather related stories.

Inhabitants of Delray Beach and the Boca Raton study area, were questioned on standing water, wet in their houses, damp and mold, allergies, asthma and other lung diseases, early deaths from lung diseases. These questions had never been asked of these communities, and this project provided significant data for health officials and city engineers. The number of lung related problems, including asthma and allergies, was multiples over what the average for the area stands at. Some people were embarrassed to talk about mold in their houses after storms, as they felt it indicated that they weren't good housekeepers. This just isn't true.

In conjunction with the interviews, and even for those households that did not wish to be interviewed, information was presented on disaster preparedness, restoration after a storm, cleaning mold, the dangers of standing water, etc. Laminated cards in three languages were made available. They contain emergency contact information.

In the Boca Raton study area, the oral collectors tended to be women from the community churches. They had relationships within the community, and could use those relationships to extract information. Part of the oral history training was to make these collectors aware of their role, and to have them assume that those reading or listening to the interviews would know nothing about the community, so ask everything.

In Delray Beach a different approach was taken. Haitian students from the local high school were recruited and trained to interview within the Haitian community, which is the part of town with the lowest elevation. They spoke the language, but more importantly they became conduits between the city and the community on emergency preparedness. They also found that their engagement was empowering, and several are planning to serve as community liaisons for emergencies. Other project team members worked within the Bahamian community of Delray Beach. In all cases the object was the same; gather information about water and health and levels of awareness; and then provide sound information on health and welfare, the dangers of standing water, remediation, etc.

This approach to community awareness could become a national model on how to engage communities which are often trapped in poverty and weather endangered land. By bringing the community members into active participation and greater result can be expected, the information provided was welcomed from neighbors rather than being suspect from outsiders. Neighbors

talking to and educating each other is one of the most effective methods available with long lasting results. The folk who conceived of and promoted this project are committed to justice and sustainability, and this is a clear example of community justice and awareness in action.

## **Oral History Protocol**

Thirteen Oral Histories were recorded. The English version of the Oral History Protocol appears in Appendix E in English, Spanish and Creole. Oral History Protocols are also available on <a href="https://www.ReACTToolkit.net">www.ReACTToolkit.net</a> The protocol was developed by Environmental Historian Dr. Sandra Norman. Some Oral Histories were recorded with a GoPro camera, and others were audio only; recorded on smart phones or cassette recorders.

# **Transcripts of Boca Raton Oral Histories**

All Boca Raton Oral Histories are compiled in a video available at <a href="https://vimeo.com/album/4115829/video/175469080">https://vimeo.com/album/4115829/video/175469080</a> Contact Project Director Janice T. Booher <a href="mailto:JJLBooher@comcast.net">JJLBooher@comcast.net</a> for the video password.

### Content

# Lois Martin Community Center (video by Janice T. Booher, MS) May 19, 2016

Interviewer	Dr. Debra Weiss-Randall
First Resident	BR01F57
Second Resident	BR02M65
Third Resident	BR03F53
Fourth Resident	BR04F71
Supervising Scholar	Dr. Sandra Norman

# Lois Martin Community Center (audio recording by Marjorie O'Sullivan) May ?, 2016

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Interviewer	Marjorie O'Sullivan
First Resident	BR05F (incomplete)
Second Resident	BR13F50
Supervising Scholar	Dr. Sandra Norman

# Macedonia AME Church (audio recording by Dr. Debra Weiss-Randall) June 6, 2016

Interviewer	Dr. Debra Weiss-Randall
First Resident	BR06F88

Second Resident	BR07F81
Third Resident	BR08F75
Fourth Resident	BR09F72
Supervising Scholar	Dr. Sandra Norman

## **August 18, 2016** (audio recording by Dr. Debra Weiss-Randall)

Interviewer	Dr. Debra Weiss-Randall
First Resident	BR10M60
Second Resident	BR11F49
Third Resident	BR12F74
Supervising Scholar	Dr. Sandra Norman

Note: The interviewer's words appear in grey. The responses appear in black. All statements related to flooding appear in blue.

BR01F57 NE 15<sup>th</sup> Terrace Boca Raton, FL 33432

# Transcribed by Janice T. Booher, MS

Q: Hello, welcome. My name is Dr. Debra Weiss-Randall, and I'm the project manager for this EPA grant, and thank you for agreeing to do this oral history. Would you please tell me your full name?

#### A: BR01F57

Q: Um hmm. And where were you born?

A: Ft. Lauderdale, Florida. I'm a Floridian.

Q: Ok, I hope you don't mind answering this. When were you born?

A: A long time ago. 57 years ago. 1959.

Q: You look great.

A: Thank you.

Q: And where did you grow up?

- A: Right here in the City of Boca Raton.
- Q: Do you have any brothers or sisters?
- A: Yes, I do. Um.. Four brothers and two sisters.
- Q: Oh, where are you in that line up?
- A: I'm the second oldest.
- Q: Now, you've grown up in the area here. Would you mind sharing some of your favorite memories? Maybe with families? Friends? Whatever comes to mind.
- A: Well, several things come to mind. Um..As kids we played in the yard a lot. We played in the street with other kids in the community and um..sometimes we would take like a brick and a board and make what we call a string board, you know or we just....we did different things to just make life happen. So I look back and say I had a happy childhood. You know, we didn't run to the store to buy things...we'd make things happen. I would cut out dolls in the Sunday newspaper or we made kites and we just had fun, you know. And, um, my parents were hard workers. My dad. My mom was pretty much a stay at home mom, and...um...we made life happen. So, when I went off to college I look back and I thank God my parents did a wonderful job and (I'm grateful for my childhood???)
- Q: I think in the olden days, because I can remember too, kids used their imagination a lot. Now they've got all the digital toys and all that stuff, but imagination's important to me.

### A: Right.

Q: So, now we get to the part of the interview that has to do with sea level rise, and its possible impact on your life. So, where is your home located, BR01F57?

#### A: Lincoln Court. 15 Terrace.

Q: OK. Do you ever have problems when it storms like with water coming in or dampness in the house? Or the yard around the house?

A: Mmm...we don't have problems with dampness in the house, but recently we had um flooding in the street, you know where...and it...I mean like last night and yesterday we had a bunch of rain and it came in the house, you know, so... but, you know, it doesn't last long. It doesn't cause any permanent damage or anything like that, so it just depends on how bad the flooding is.

Q: Do you notice water pooling? Like water that stays there for a couple days after a storm?

A: No. I haven't seen that. I think we have a pretty good drainage system...

Q: (That's good?)

A: ...on our streets.

Q: Have you ever had a problem with mold in your house?

A: No.

Q: Um...do you or anyone in your family have breathing or lung problems like asthma, COPD, any kind of respiratory problems?

A: No.

Q: OK. Have you ever had to evacuate your home because of storms?

A· No

Q: Are you interested in learning more about how to protect your family and your home from water, storm and damp issues?

A: Yes. Of course I am. I'm a caregiver. I take care of an elderly parent, therefore I need to be educated on what to do, not only for myself but for him as well, whenever that weather occurs. I want to know, not at the moment happens, but be proactive and...

Q: Great, because elderly people are the most vulnerable.

A: Yes.

Q: Sometimes we (have to???) help them to get out.

A: Um hmm...

Q: So we have a wonderful sheet here called "Rising Together: Temperature, Water, Health and Strength." This is in English. We also have it available in Creole or Spanish. Which language would you prefer for your household?

A: The most important part of it is all of the numbers you call in an emergency, so, right here.

Q: So, you're welcome to take this back and put it on your refrigerator, and I want to thank you so much for agreeing to be interviewed. Is there anything else you'd like to add?

A: No, I don't have any questions right now. Um...this is great. All the numbers and the contacts are on here and everything, so, um, it's great I know what to do.

Q: And I'll be happy to give you my contact number if you should think of anything else you want to add. Feel free to call me. OK?

A: OK. Thank you.

Q: Pleasure (to know??) you.

BR02M65 NE 15<sup>th</sup> Terrace Boca Raton, FL 33432

Transcribed by Janice T. Booher, MS

Q: Hello, welcome.

A: Thank you.

Q: My name is Dr. Debra Weiss-Randall, and I'm the Project Manager for this EPA grant, and I want to thank you for participating in this interview. So, let's start by um..., could you please tell me your full name?

A: BR02M65

Q: OK. And where were you born, BR02M65?

A. Hawaii

Q: Oh, and when were you born?

A: (laughs)

Q: If you don't mind me asking.

A: 1951

Q: OK And where did you grow up?

A: In Hawaii.

Q: And where in Hawaii?

A: Oahu.

Q: So, when did you come to Florida?

A: I've been here now since 1978. No, 'scuse me -74.

Q: Quite awhile.

A: Yeh.

Q: Do you have any brothers or sisters?

A: Yeh. There are seven of us.

Q: And where do you fall in that line up.

A: I'm in the middle.

Q: Now, when you think about growing up in Hawaii and in Florida, um...what are some memories that come to mind? Pleasant memories of family and friends. Anything pop into your mind?

A: Florida reminds me a lot of Hawaii. A lot because the same climate...the same everything like this ...the only thing... it's flat. Everything else is just like Hawaii. I love it here. That's why I've been here this long. Reminds me a lot of Hawaii. My brothers and sisters, they live in Orlando and Ft. Pierce, so my immediate family's here, but my aunts and uncles and cousins are all in Hawaii

Q: Yes. Very good. So, it's a bit of a plane ride from here to Hawaii. Yes.

A: (Not so often??)

Q: Oh, do you go there often?

A: We have a family reunion every two years. I make it every eight.

Q: (Oh,my...yeh it's hard.????) So, let's get to the next part of our interview, which is about climate change and sea level rise. Um for you and your community. So, where is your home located?

A: I'm located right down the street at 15<sup>th</sup> Terrace, Boca Raton.

Q: Un hmm... Do you ever have problems when it storms with water or with dampness inside your house or outside your house in the yard?

A: Recently yes, because again when the um when the drains get clogged up from all the garbage coming from like our next door neighbor two houses down he has these chips all over. Well, chips...the water came up so high all the chips came out of his yard ... ended up in the storm drains clogging up the storm drains cause it couldn't run down the drains 'cause there's so much of 'em laying around. So then that's when we flooded out. And I have chips in my yard and everybody else's yards too and we're not mad, it's just something that just happened... it's ...we just didn't know.

Q: Have you ever noticed standing water that pools and stays there for a period of time?

A: Not that long, but some places there are some low areas like in the...right down the street there's, um.. apartments that's kind of a little low right there. But besides that not too many.

Q: Have you ever had problems with mold in your house?

A: Yes. We do.

Q: Yeh...How did you deal with that?

A: Well, we're just doing the best we can to kind of, you know, keep it from...I don't know ...the air conditioner ...keep it on to stop It from molding as much. But that's all we got.

Q: Um hmmm...Do you or anyone in your family have breathing or lung problems like asthma, COPD or any kind of airway issues?

A: My son does and both my brothers do.

Q: OK, so mold can certainly be a problem when you have that, right? Um. Is it controlled? Is it managed? Do they have asthma?

A: They have asthma. It's controlled. I've been helping him how to breathe... I show him new techniques and stuff like that, so it's not as bad. He plays football, so...and it makes it worse, but once he learns how to breathe and relax himself I can get him out of it.

Q: OK. Have you ever had to evacuate your home because of storms?

A: No. Well, recently, no but before when when the hurricanes hit, yes. But that was in Ft. Lauderdale

Q: Do you remember about when that was?

A: Than was two thousand..., 2005 when the big hurricane hit down here. You know, I just left. Me and a bunch of people, so. Then I came back and helped clean up. What's that company they did? FEMA... Yeh I was here with FEMA helping clean all this stuff up... throwing it away.

Q: OK. Are you interested in learning more about how to protect your family and your home from water, storm or dampness issues?

A: Absolutely. That's why I'm here.

Q: Right. I figured. (laughs)

## A: Yeh.

Q: So, we've created this information sheet in three different languages: English, Spanish and Creole, and what is spoken in your household?

## A: English.

Q: English. Then we'll do it in English. It's called Rising Together: Temperature, Water, Health and Strength. And I think you can read it at your leisure, but I think the most important part is here in case you have a water related emergency. So, um...there are numbers to call. Contact numbers and radio stations and emergency information and contacts at the county, so please take a copy of this and put it up on your refrigerator and read it over. If you should have any questions feel free to call me. And if there's anything else you'd like to add. Please feel free to do so.

A: Well, I do. I can't thank you guys enough for what you're doing here because this is what our community really needs to be safe because there are so many people that don't know where to go. I'm one of them. And then there's old people and there's young people and again, they're really in the dark, so this will make a difference. I can't thank you enough.

Q: Thank you. We want to keep the community safe and healthy.

A: Thank you.

Q: You're welcome.

BR03F53 NE 11<sup>th</sup> Street Boca Raton, FL 33432

Transcribed by Janice T. Booher, MS

Q: Thank you so much for agreeing to do this oral history interview. Um...let's start by finding out your name. Would you please tell me your full name?

A: My full name is BR03F53.

Q: And where were you born?

A. I was born in Boca Raton

Q: And when were you born? If you don't mind my asking.

A· 1963

Q: Where did you grow up?

A: I grew up in Pearl City, Boca Raton, Florida. And I moved away later and moved to New York and then I came back to Florida.

Q: Do you have any brothers and sisters?

A: I have two older sisters. They live in West Palm and Ft. Lauderdale.

Q: OK. Now, when you think about your growing up when you were a kid growing up, um...what are some of your favorite memories, maybe around family and friends? Or things you like to do.

A: Going fishing. Going down to a little pier down in Boca Raton and also going to the beach and having picnics at Spanish River Park.

Q: Umm. That's a beautiful park. I agree. Now we come to the part of the interview that has to do with sea level rise. So, where is your home located?

A: Um Boca Raton. NE 11<sup>th</sup> Street, Boca.

Q: So, you're in the east part?

A: Yeh. I'm right in the east part.

Q: Uh huh. Right. Have you ever had problems or do you have problems now in the water storms with water or dampness in the house or around the house?

A: No, because I have a house that was built in 1928 and it's built up on pillars so it really doesn't have a foundation, so it's up above sea level or whatever, so I never had puddling or flooding.

Q: That's great. OK, have you ever had any problems with mold in your home?

A: No.

Q: OK. Do you or anyone in your family have any breathing or lung problems like asthma or COPD, any kind or airway problems?

A: No. No.

Q: Have you ever had to evacuate your home because of storms?

A· No

Q: OK. Are you interested in learning how to protect your home from water, storms and dampness?

A· Yes

Q: OK. We have a wonderful information sheet here called "Rising Together: Temperature, Water, Health and Strength. I have it in three different languages: English, Creole and Spanish. Which would you prefer for your home?

### A: English.

Q: English. OK. This has a lot of information on both sides. I think the most important part that you want to keep facing you if you put it up on your refrigerator would be the contact numbers in case there should be an emergency such as flooding. Um if you need to contact a county agency or any emergency number here. So please take this with our compliments, and use it to help, and I wanted to thank you so much for participating in this interview.

A: Thank you for having me, and you have a great afternoon.

Q: You too.

BR04F71 NE 11th Street Boca Raton, FL 33432

Transcribed by Janice T. Booher, MS

Q: Hello. Welcome. My name is Dr. Debra Weiss-Randall. I'm the Project Manager for this EPA grant, and I want to thank you so much for agreeing to participate in this oral history. Could you please tell me your full name?

A: My full name, I'm a minister. My name is BR04F71. I was born and raised here in Boca Raton.

Q: Oh, very nice. Do you mind telling me when you were born?

A: I was born in 1945.

Q: Oh, and you grew up here also?

A: Yes.

Q: Do you have any brothers and sisters?

A: Yes. My mother had 13 children.

Q: Wow! And where were you in that line up? Are you one of the older or the younger?

A: I'm in the middle part.

Q: That's a big family. Wow! Would you mind sharing with us maybe a couple of your favorite memories from growing up? Your family...your friends.

A: I liked it on Sunday morning when my Dad would walk us to Sunday school right down the street from the house where we're in now to Macedonia AME Church. And I liked it when I was going to school...elementary school and then I liked it when I was going to the middle school and then I liked when I was going to high school and I graduated in 1966. And I did home health care at FAU and I sewed. I went to cooking school and then I went to home health care at Lake Worth High School. I had to take a course there and I like to (??????) go there then and help the elderly people. I'm liking that. And after that I went to school for (surin?) theological and became a minister.

Q: That's great. You had several careers. What's your favorite? When you said you took cooking, what's your favorite food to cook?

A: I love to bake. I used to bake. I worked at Spanish River High School for 13 years. I was a baker and a cook. I didn't like serving on the line though and I used to (transfer the food that all we had to Verde Elementary School??) I used to drive a truck to transfer food. Yep. And I worked for Florence Fuller taking care of children childcare. I went to school for taking care of children and I went to (Sebring?) and I became a foster parent. Yeh. I took care of children.

Q: It sounds like you really love children.

A: I do, and on the fourth Sunday at Ebeneezer we have a Youth and I teach little children about the Bible and about the Lord.

Q: Um hmm. So, where is your home located exactly?

A: Pearl Street. They call it Pearl Street now. It was NE 11<sup>th</sup> Street and they changed it to Pearl Street right over by the fire station.

Q: OK. Do you have problems when it storms with water or dampness in your house or around your house?

A: Yes. When I came from church. I believe it was the first of the year. It could'a been.(?) It rained (?) and the ceiling in the top of my bedroom fell in and it isn't fixed yet. And then...

Q: They didn't fix it yet? That's terrible.

A: no. And then in the hallway there's a leak. There's a leak and the whole house needs fixing up, so I don't know. And this year the first, no January, I was in the hospital New Year's Eve . I take dialysis 3 days out of the week. I have a port right here. But everybody say I don't look like it. I walkin well..

Q: That's right, but it's very unhealthy, though to not have a proper ceiling. Let's see if we can talk about that later if we can help you with that.

A: It (?) was leaking when it rained last night. I just put a garbage can right there to catch the water. Yeh. So I guess they gonna work on it. That leak been up in my bedroom (up over my bin?) I look right up (through?) the ceiling. And it's leaking in there when it rained last it was leaking. ??? Oh I don't know why I told them when it happened and they looked it over and I got a sister. Me and my sister stay together and she had open heart surgery. 20 percent of her heart is working. She can't hardly do nothing. She has to have air, you know, all the time. I'm livin' in Alaska 'cause it's cold in that house. (That's what I'm about???I have to go through the part of going ???floor) she needs air, but I don't need no air. 'Cause I'm (???) I go through a lot, you know?

Q: Sounds horrible. Do you get mold in your house from all this dampness?

A: Well, you know, but one of the rooms we don't go in because it makes me sick.

Q: It sounds like the health department should be contacted and the housing authority should take care of this especially for you and your sister's health.

A: But when we...I went to Habitat. I really got pissed off with them. They goin' to do everybody else house. My ceiling fell in that Wednesday, I mean that Sunday. That Thursday we havin' a meetin' at (??) I came in here and I told em. I said,"ya'll need to fix the roof on there. It just fell in on me on Sunday," but my brother came down and he put some wood or somethin over there and put that (rubs port area in pain) blue paper. And you come back there you'll see blue paper's still up a house. (rubbing chest where the port is)

Q: Are you OK, ma'am?

A: Yeh. It hurts. (??) I had dialysis today and (an' I had too much grapes ???)

Q: Have you ever had, well it's not that you should have evacuated your home, but have you ever had to evacuate because of a storm? To leave?

A: When we was comin' up long long time ago. (I mean ??)' the lady's talkin' about the flood when we was stormin 'long time ago. That was a real storm. When we was small. When I was small. We was small. It was a flood here. We got a big old tin tub. Remember tin tubs? We got in a tin tub swim over cross the street to my cousin.

Q: Wow! Um hmm. When was that? Do you remember?

A: That's been a long time ago. That's been a long time. I was a li'l child.

Q: Um hmm. Are you interested in learning more about how to protect your home from water, storm or dampness?

A: Yeh. They need to come an fix it up. (laughs.)

Q: Yes. They should. Absolutely. What I can offer you now is this information sheet, but I want to talk to you after this interview about who to call. But for emergencies that come up like a storm there are numbers to call here.

What language is spoken in your home? Do you speak mostly English? Creole?

A: Yes we speak English.

Q: OK. This information sheet is in English. We also have it in Creole and Spanish and it tells you emergency numbers to contact in case of flooding, fire and so forth and I will tell you after the interview so you can get some help with your roof.

#### A: OK. OK. OK.

Q: Is there anything else you wanted to add?

## A: Oh...no, I think I tol you the good part.

Q: Yes, you had some good memories and I hope you have a lot more when I try and help you get that fixed. OK? Thank you so much for doing the interview.

A: You're welcome. OK.

# Pearl City May, 2016

Interviewer: Marjorie O' Sullivan

First Resident: BR05F??

Transcribed by Janice T. Booher, MS

Q: Thank you for meeting with me. Could you tell me your name?

A: BR05F??

Q: BR05F??. And your last name?

A: BR05F??

Q: Ah. Where were you born, BR05F???

A: In Mexico.

Q: In Mexico, OK. Where did you grow up?

A: In Mexico, but later my father bring me here (with boat?).

Q: When, about? How old were you?

A: Oh, (I was 6? Years old) small.

Q: OK.

A: I was in Chicago.

Q: And first in Chicago. Do you have brothers and sisters?

A: Oh, I have 2 brothers and only 3 (??)

Q: OK. OK. (laughs) How long have you been here?

A: In America?

Q: Well, no, In Dixie Manor.

A: In Dixie Manor, I almost maybe 17 years.

(???)

Q: Yeh. You're a good tenant. Yeh. Um, do you have any favorite memories of growing up? When you were growing up.

A: Well, yes. My favorite memory is when I was little and ??? eight years old ?? because we was living in the country and I love it. ???in my mother's city

Q: Did you have a lot of grass and trees?

A: My mother mother and I and my father went over there because my mother make a cheese and my father had cows. So we had various cows. All kinds of animals.

Q: A farm! On a farm, yes.

A: A farm. Yes. Memory my grandfather, their father, pass away no more. Nothing...bad

Q: So this says 'Where is your home now?' Well, we know. Number (Dixie Manor)...?

A: When I was... my first home was in West Palm Beach. (Because we come from Monte Carlo to West Palm Beach???) But later we moved. (???) And later I moved around here. Later I applied for this place and I accepted.

Q: Very good. Have you had any mold problems with this apartment?

A: No. Not really, no.

Q: You have not. You have not. Um... does any, do you...Now, do you live with anybody or is there any...?

A: Well, my son. Now he's 14. He leaves mess for me.

Q: That's typical 14. Yes, I know...

A: ???You know...(Do you have a son who is 14)????

Q: I have 4 children, and they're all grown ups now. But they still need people to pick up after them, I think. Do any of them have any breathing problems like asthma or anything like that...problems?

A: No.

Q: Have you ever had to evacuate, like leave here, because of a storm?

A: Well (???)

- Q: Yes. Hurricane Andrew. Yes, we were here then too.
- A: ...when we was living in West Palm Beach. And.... we are leaving to a shelter...
- Q: To a shelter...
- A: ... we afraid...
- Q: And did anything happen to your home?
- A: No... (she tells a story about how her son didn't want to leave and said the rest of the family could go to the shelter without him, but they made him go.)
- Q: OK Last week you came to the center for the survey, and you got a card...
- A: Yes. ...and let me be honest with you. I didn't read because I have too many things to do...and I don't have time...
- Q : But you still have it?
- A: Yes.
- Q: So, do you work every day?
- A: No, not every day, but ...
- Q; Do you work Saturday and Sunday?
- A: ....
- . . . .
- Q: Well, you know, the weather report is saying we may get heavy rains.
- A: Yeh...
- Q: So maybe some of those tips about the flooding and everything you might want to read.
- A: Yeh...I know
- Q: What would help you? How would I say...Do you think if you were in a group of people and we went over it again that might be helpful?
- A: Well, I don't have many friends.
- Q: You don't? Now, do you know Anita Gonzalez? (ed. Anita Gonzales is the English-Spanish translating volunteer)
- A: Yes. She was talking to me about the same thing....she said she will come talk to me about it...)
- Q: I thought she already came. Because she is from Mexico also.
- A: Yeh...right.
- Q: Say, how many friends do you have?
- A: Well...
- O: One? Or...
- A: .... (she names a couple of people, and reaches the conclusion that people keep to themselves)
- Q: But if there was an emergency, do you think people might work together.
- A: Well, you know what happens (she explains that neighbors had to help neighbors and work hard to communicate in past emergencies)
- Q: You don't do it because someone tells you you have to do it. You have to want to do it.
- Q: So, what do you think would be a good way of getting people together? A lot of people came Saturday.
- A: ... ( she says that many people only get together to speak about religion and to convert people...)

Q: So, are you worried about these storms that might come?

A:... (she talks about lightning and an experience of losing power during a storm. She did not have TV or radio....)

Q: I thank you very much.

#### **BR13F50**

Transcribed by Janice T. Booher, MS

Q: First of all, thank you. Could you tell me your full name?

A: BR13F50

Q: And where were you born?

A: Florida

Q: Uh huh...

A: West Palm Beach County

Q: When were you born?

A: In '66.

Q: Where did you grow up?

A: In Delray Beach.

Q: Delray. Do you have brothers and sisters?

A: Yeh...I have three other brothers and two other sisters.

Q: OK. Do you have a favorite memory from growing up?

A: Oh yeah, my mom used to take us to the lake all the time. Used to go swimming... in the summer time...that's time I remember.

Q: I can remember going to the beach. So, where is your home? So,

It's here in Dixie Manor?

A: Yes, it is.

Q: How long have you lived here?

A: Thirteen years.

Q: Thirteen years. OK. Do you have any problems when it storms with water?

A: Yeh. Flooding.

Q: Flooding?

A: Yeh

Q: Do you have any problem with damp in your home?

A: No. Thank God.

Q: ...or your yard?

A: No, just the flooding in the street.

Q: Have you ever had a mold problem with your house?

A: Yeh. One time

Q: What did you do about that?

A: They moved me out and fixed it.

Q: They moved you out of Dixie. Could you say about how many years ago that was?

A: Five years ago. Between five to eight years ago.

Q: OK. Do you live alone?

A: Yeh

- Q: OK, because do you have any breathing or lung problems?
- A: Not as I know of.
- Q: Did you ever have to evacuate your house because of storms?
- A: No, you know they give us the regular evacuation route if we want to leave, but some of us don't leave.
- O: You haven't left? OK
- A: No.
- Q: So, are you interested in information about how to protect yourself?
- A: All the time. I know now! I'll be 50 in 3 months. I'm old....
- O: 76.
- A: My mom keeps sayin' you think you're old! I'm old.
- Q: So, you have the sheet?
- A: Yes, I have it on my refrigerator.
- Q: OK, and so once in awhile maybe take a look at it because we might have a big storm.
- A: Yeh...I've been looking at the newspaper and they've been predicting between eight to twelve major storms and fourteen to sixteen unnamed storms.
- Q: How would you get information? Would you use your television or do you have a radio too?
- A: I have like one of them crank radios.
- Q: Oh, that's good. OK. Did you ever sign up for Code Red at all?
- A: No. Not yet.
- Q: There should be some people in the complex that signed up for Code Red, and then they could be communicating to everybody else.
- A: Right.
- Q: OK. Is there anything else you can think of to tell me about this? About storms or flooding?
- A: It's just that we have a very poor drainage system. I'm not gonna' even fabricate. It's very poor.
- O: Yeh
- A: The last rain we had, I had the water oh, up here.
- Q: Yeh, so that's probably about 8 inches.
- A: Yeh, she'll tell you.
- O: Do you live here, too?
- Observer: Yes.
- A: Yeh. She lives right across from me. Yeh, it's bad! ...really bad! ...really really bad!
- Q: Well, you're not the only that has that problem. And actually even in other neighborhoods, and I think the drains get clogged and whoever was supposed to unclog them isn't doing their job. OK, thank you.
- A: Thank you.

## **Macedonia AME Church**

### June 6, 2016

Interviewer	Dr. Debra Weiss-Randall
First Resident	BR06F88
Second Resident	BR07F81
Third Resident	BR08F75
Fourth Resident	BR09F72
Supervising Scholar	Dr. Sandra Norman

#### **BR06F88**

Deerfield Beach, FL

# Transcribed by Dr. Debra Weiss-Randall

The questioner: "Hello, it is June 6 and we are here at the Macedonia AME Church in Boca Raton. My name is Dr. Debra Weiss-Randall and I here to do an oral history, and thank you so much for agreeing to participate! Would you please tell me your full name?"

Respondent: BR06F88

Q: "Thank you. BR06F88, where were you born?"

R: "Milan, GA."

Q:"When were you born?"

R: "2, 1928."

Q:"Where did you grow up?"

R: "Pearl City. Right here in Pearl City."

O: "Do you have any brothers or sisters?"

R: "Three sisters."

Q: "When you think about growing up here in Pearl City, what were some of your favorite memories of family, or activities you did, church, anything that comes to mind?"

R: "Well, activities in church...we had to come to Sunday service. We had morning and night service."

Q: "Were there any other memories of your family?"

R: "My mother used to be a Methodist. When my father became minister at the Baptist Church, my mother moved her membership over to Ebeneezer Baptist Church."

Q: "Where do you live now?"

R: "In Deerfield Beach, Florida."

Q: "Historically, when you were living here in Pearl City, did you ever have problems when it stormed with water or dampness in the house or yard?"

R: "No."

Q: "Have you ever had a mold problem with your house?"

R: "No."

Q: "Do you or anyone in your family have breathing or lung problems like asthma, bronchitis, COPD, anything like that?"

R: "Not that I know of."

Q: "Have you ever had to evacuate your home because of storms?"

R: "Once, I can remember."

Q: "Do you remember when that was?"

R: "Oh, we had a bad hurricane right here in Pearl City across the street. It took part of the kitchen off."

Q: "How long did you have to leave for?"

R: "Oh, not for long. I don't just remember how long. We went on the next street where my sister-in-law lived and stayed for a little while."

Q: "Was anyone hurt?"

R: "No."

Q: "Are you interested in learning more about how to protect your family and your home from water, storm and dampness?"

R: "Well, I guess I could, yes."

Q: "Good, because we have a wonderful sheet here that tells you about how to deal with storms, water, mold, and you're welcome to take this and keep it. And I think the most important thing I want to point out is that on the front here it gives emergency contacts, should anything happen, if you have an emergency of any kind, especially weather-related, but any kind of emergency. It's good to keep this handy. So please put it somewhere—your refrigerator or wherever a handy place is—so you can remember to use it if you need it. I want to thank you so much for agreeing to be interviewed. Is there anything else you want to add?"

R: "Nothing else, but I am the oldest member of the church....I've been here all my life."

#### **BR07F81**

"in the neighborhood"

## Transcribed by Dr. Debra Weiss-Randall

Q: "Hello, it is June 6 and we are here at the Macedonia AME Church in Boca Raton. My name is Dr. Debra Weiss-Randall and I am here to do an oral history, and thank you so much for agreeing to participate! Would you please tell me your full name?"

#### R: BR07F81

Q: "Where were you born, BR07F81?"

R: "Boca Raton, Florida."

Q: "When were you born?"

R: "September 10, 1935."

Q:"Where did you grow up?"

R: "Boca Raton, Florida."

Q: "So you've been here all your life?"

R: "No, I left after [I] graduate[d] [sic]."

Q: "Oh, okay, and when did you come back?"

R: "1984."

Q: "Do you have brothers or sisters?"

R: "I have one sister living. The others are deceased."

Q: "I'm sorry. How many were you, all together."

R:" Uh, six."

Q: "When you were growing up here in Boca Raton, are there any favorite memories that come to mind, maybe about family, community, cooking, church?"

R: "Family...family and the church."

Q: "Anything you can think of specifically, or just general kind of—"

R: "Just general, family and church."

Q: "Well, that's what's important in life—definitely! Where is your home now?"

R: "Boca Raton."

Q: "What part. Are you here in the neighborhood?"

R: "Yeah."

Q: "Have you ever had any problems when it storms with water or dampness inside or around where you live?"

R: "No."

Q: "Have you ever had a mold problem with your house?"

R: "No."

Q: "Do you or anyone in your family have breathing or lung problems like asthma, COPD, emphysema, anything like that?"

R: "No."

Q: "Have you ever had to evacuate your home because of a storm?"

R: "Once."

Q: "Do you remember when that was?"

R: "No."

Q: "Was it a hurricane?"

R: "Yes."

Q: "Uh-huh. How long did you have to stay out?"

R: "Well, I went to my daughter's. I lived alone. So she didn't want me to be alone. It was overnight. I went to my daughter's. She had a different address."

Q: "Are you interested in learning more about how to protect your family and your home from water, storms, and dampness?"

R: "Not really. I'm too old for that."

Q: "Okay, you sure?... (R nods) okay, that's fine."

R: "No, I don't need to know nothing about it. I'm going to leave it right where it sits."

Q: "You know what to do."

R: "That's right!"

Q: "I can see that. You're an old pro! Okay, I want to thank you so much for agreeing to be interviewed."

R: "Ok, thank you."

Q: "Is there anything else you would like to add before we sign off?"

R: "I think this is a great thing that you are doing."

Q: "Thank you so much."

R: "Nice meeting you."

BR08F75 N.E. 11<sup>th</sup> Street Boca Raton, FL

## Transcribed by Dr. Debra Weiss-Randall

Q: "Hello, it is June 6 and we are here at the Macedonia AME Church in Boca Raton. My name is Dr. Debra Weiss-Randall and thank you so much for agreeing to participate in this oral history interview! Would you please tell me your full name?"

**R:** BR08F75

Q: "OK, BR08F75, where were you born?"

R: "Boca Raton."

Q: "Right here in this neighborhood?"

R: "Uh-huh."

Q: "When were you born?"

R: "January 16, 1941."

Q: "Uh-huh, and where did you grow up?"

R: "Right here in Boca."

Q: "Do you have any brothers or sisters?"

R: "Yes."

Q: "How many?"

R: "Six sisters and one brother."

Q: "Ah, big family! So, when you were growing up here with your family, does anything come to mind, a favorite memory of things you used to do?"

R: "Pearl City, Northeast 11<sup>th</sup> Street. We played with all of the children on our street. We did not leave off this street."

Q: "Mm-hmm."

R: "We had to play. We went to church right here."

Q: "You played outside?"

R: "Outside, right outside, with the neighborhood children."

Q: "Right, I used to play outside, too. I think kids today are very busy with their video games. But we used to play outside."

R: Yeah, they don't come outside anymore."

Q: "So where is your home now?"

R: "In Delray Beach."

Q: "When did you leave Boca?"

R: "In 1979."

Q: "Do you, or did you historically, have any problems when it storms with water or dampness in the house or yard?"

R: "No."

Q: "Have you ever had a mold problem with your house?"

R: "None."

Q: "Do you or anyone in your family have breathing or lung problems like asthma or COPD, bronchitis, anything like that?"

R: "No."

Q: "Have you ever had to evacuate your home because of a storm?"

R: "Back in 1947 we did."

Q: "Was that a hurricane? What was that event?"

R: "We had a hurricane and a flood. We had a flood."

Q: "Do you remember, where did you go?"

R: "To the next street, to my cousins....we went in a tin tub, my mother put us in a tin tub and rolled us right over to the next street to my cousins' house."

Q: "And how long did you have to stay out?"

R: "Three days...two or three days."

Q: "And then they cleaned it up...the water?"

R: "Then they cleaned, the water went down and my mother went home and cleaned it up and we went back home."

Q: "Was a lot of stuff really damp? Did you have to throw things out?"

R: "I don't remember."

Q: "Yeah, you were so little. Are you interested in learning more about how to protect your family and your home from water, storms, and dampness?"

R: "Not really."

Q: "No, you know it all already, I know. That's okay, we have an information sheet if you're interested just so you know the emergency numbers to call if anything should happen. You are welcome to have one if you would like."

R: "Ok, I will."

Q: "Is there anything else that you would like to add?"

R: "No, honey. No thanks."

Q: "Thank you so much for agreeing to be interviewed"

#### **BR09F72**

#### Fort Lauderdale

## Transcribed by Dr. Debra Weiss-Randall

Q: "Hello, it is June 6 and we are here at the Macedonia AME Church in Boca Raton. My name is Dr. Debra Weiss-Randall and I want to thank you so much for agreeing to participate in this oral history interview! Would you please tell me your full name?"

R: "My name is BR09F72."

Q: "Thank you, and where were you born?"

R: "I was born right in this neighborhood, Pearl City, on 11th Street."

Q: "When were you born?"

R: "August 7, 1944."

Q: "Where did you grow up?"

R: "I grew up right in this neighborhood of Pearl City."

Q: "Do you have brothers or sisters?"

R: "My mom had 14 children, she had nine girls and five boys, and now we is six of us living. Six girls and one boy, seven of us living."

Q: "Are they in this area still?"

R: "Three sisters are living in this area, live right in Pearl City—KG, BR04F71, and JM

Q: "So when you think back to growing up here, do you have any favorite memories, things you did with your family or friends?"

R: "Oh, we had a lot of fun. We used to always--when they put the street light up--that was my favorite time cause we used to sit outside and play under the light a little while 'cause you know your parents watched you strong back then and the neighbors watching. And so we always had a lot of fun playing ball. I used to do all the things boys did—climb trees, shoot marbles, you name it, we did it!"

Q: "Right, kids could use more outdoor activity these days. So, where is your home now?"

R: "My home now is in Fort Lauderdale."

Q: "Uh-huh, have you ever had problems in your home when you were living in Boca Raton, did you ever have problems with storms, with water or dampness in the house or yard?"

R: "Well, the only thing I can remember was just the flood in 1947. That was some flood! I'll never forget that, as long as I live! I remember when the water was so high. That was the only time I remember the water ever coming in our house. We never had a problem because it looked like--I don't know, something about those houses--looked like they was always, it was just that the water, I guess we was on too low a land, the water just came up high then and I remember that my father and I never can remember who the other man was, but they put us in tin tubs and somehow or other got us across the street to our cousins' house and they started with the young children first and got to older....other than that, when they had hurricanes, nothing never happened to our house. So that's the only thing that I can remember that ever happened to our house was the flood of 1947. And it didn't destroy the house, it's just that water came in 'cause it had risen so high."

Q: "Have you ever had a mold problem with your house?"

# R: "No, in the house back then no we didn't, we didn't, cause we was the cleanest people in the world, so you didn't have it."

Q: "Do you or anyone in your family have breathing or lung problems like asthma or emphysema--?"

R: "No, no we didn't."

Q: "Have you ever had to evacuate—well you told me have you ever had to evacuate—just that one time you had to evacuate because of that big storm."

R: Yeah.

Q: "Are you interested in learning more about how to protect your family and your home from water, storm and dampness issues?"

R: "Oh yeah, always."

Q: "Okay, cause I have a wonderful sheet here that tells you about how to deal with storms, and I think the most important thing is on the front--it gives you all these emergency numbers and on the back it just tells you what to do, how to stay safe, be careful about standing flood water, when you might need to boil water. So you can keep it in a safe and convenient place in your home."

R: "Okay."

Q: "I want to thank you so much for participating."

R: "Thank you. And, you know, this is a great observation you're doing and I really enjoyed this."

Q: "Thank you so much."

#### August 18, 2016

Interviewer	Dr. Debra Weiss-Randall
First Resident	BR10M60
Second Resident	BR11F49
Third Resident	BR12F74
Supervising Scholar	Dr. Sandra Norman

#### **BR10M60**

NE 15<sup>th</sup> Terrace

Boca Raton, FL 33432

Transcribed by Janice T. Booher, MS

Q: Hello, my name is Dr. Debra Weiss-Randall. It's August 18<sup>th</sup>, and I am so glad you have agreed to do this oral history interview. Would you please tell me your full name?

#### R: BR10M60

Q: Thank you, and where were you born, Marion?

### R: Tampa, Florida

Q: And when did you move to the Boca area?

R: Uh, 2002

Q: OK, and when were you born, if you don't mind my asking?

R: 18, oh, 16 '56

Q: (Laughing) So, um, where would you...where did you really grow up? Where would you say you spent most of your time? Was it up in Tampa?

### R: Tampa, Florida

Q: In Tampa. Uh hmm. And do you have any brothers or sisters?

R: No. My brothers are passed.

Q: Oh, I'm sorry to hear that.

R: Yeh

Q: OK, so when you think back to growing up, or maybe we should stick to Boca because they want to know your memories here. When you think about when you first moved to Boca do you have any favorite memories of things you did with family? Friends? The community?

R: No, because the only one that died here was my wife. OK, but I did a lots with her. OK, and it was just great being in Boca. Boca is a good city to be in.

R: It is.

R: Yeh. Very good. I goin in areas like Vegas and stuff like that, but when I mention about Boca, they say "Oh, my God! That's a great place to be. You know what I'm sayin'?

Q: It is. It's unique.

R: You know, they say Boca's the second city in America with everything that's in Boca.

O: It's beautiful here. Yeh.

R: It's beautiful. Yeh.

Q: So, where is your home now?

R: Right here in Boca now.

Q: And where? In Pearl City? Dixie Manor?

R: Pearl City

Q: Pearl City?

R: Um hmmm. Yes

Q: In the historic area. So now, where you live, do you have problems when it storms with water or dampness in the house or around in the yard?

R: No, with the flood? When they have the floods?

O: Um hmmm.

R: No, it's with the uh... with the sewers and stuff like that.

Q: Yeh. Does it back up, or what happens?

R: Yeh it...it's overflowing, you know what I'm sayin'. It backs up, then it won't go out until another day or something like that when it goes down.

Q: Does it come in the house?

R: No, it doesn't come in the house.

Q: ...just around on the outside.

R: Yes

Q: Um, have you ever had any problems with mold in your house?

R: No.

Q: OK. Do you or anyone in your family have breathing or lung problems like asthma or anything like that?

R: No.

Q: OK. Um.. Have you ever had to evacuate your home because of a storm?

R: Yes, I have.

Q: Do you remember when?

R: Uh... it was uh 2005? Sandy? (ed: This was most likely Hurricane Wilma.)

O: Uh huh

R: We had to evacuate for about 2, uh... three weeks

Q: Wow! That's a long time. So, what happened?

R: When we had the storms, you know what I'm sayin', the hurricanes and all that and knock all the wires. You couldn't use nothin', no food and nothin' like that. Yeh, so my wife and I, we went to Orlando to stay in Orlando for awhile.

O: Wow!

R: 'Til the lights and all that came back on.

Q: So ther was no electricity?

R: No electricity at all.

Q: Was the water...probably the water was turned off too, right?

R: Yes. All of that. All of that was turned off too. Yes.

Q: Oh, that's terrible. Did they fix it up? When you went back was everything repaired?

R: Yes. Yes they did.

Q: That's good. So, are you interested in learning more about how to protect your family and your home from water, storm and dampness?

R: Yes.

Q: OK, we have a wonderful sheet here that tells you about how to deal with storms, water, mold. I don't know if you've received one from the door to door surveyors, but you are welcome to take one. Please take it and put it somewhere handy like your refrigerator, and on the front

there are lots of good contacts. Emergency numbers. ..local ones. And on the back it just tells you a little more about climate change -related problems like, you know, heat waves and storms and floods and what to be careful about. What to be aware of.

#### R: OK

Q: So, is there anything else you'd like to add? Anything maybe that this didn't cover that you wanted to comment on?

R: No, I believe that we, what do you call it? Uh... I have a problem, you know, because I went through with a stroke. So, Have to get my words, get my words...

O: Oh.

R: With climate change it's lots about climate change. For lots, right?

Q: Yeh. Well, we're trying to help people stay safe during climate change. We're not gonna'... It's not gonna' go away. Some people still say it's not happening, but it is. The scientists have all shown that it is happening, so we want people to stay safe and to sign up...Did you sign up for Code Red?

#### R: Yes, I did.

Q: That's great. To stay safe... To know what to do. Well, you already went through that horrible evacuation for three weeks. I mean, that's pretty bad. That's a long time to be out of the house.

R: Yeh

Q: Yeh, but you kow, they took care of you, so you're a veteran. You know what to do already. Um. And I think that this whole, you know, community here is very proactive, which is great.

R: Right.

Q: And so I'm here to find out if there are any other issues that haven't been mentioned or that you wanted to say, and maybe we've covered them all. I don't know.

R: Now, uh, you deal with Habitat, right?

O: Yes.

R: OK. Probably can do some things, know what I'm sayin', with Habitat with the houses and stuff like that, you know.

Q: Yeh. Some of the houses need repair. I've talked to some people that have leaks and so forth, and they're working on it.

R: Right

Q: There's a waiting list, but they're working on it.

R: OK

Q: So...

R: Other than that, that's it, right?

Q: Alright. Well, thank you so much for agreeing to be interviewed.

R: Thank you very much.

Q: You're very welcome.

BR11F49 NE 10th Street Boca Raton, FL 33432

Transcribed by Janice T. Booher, MS

Q: Hello, my name is Dr. Debra Weiss-Randall. It I s August 18<sup>th</sup>, and I am so glad you have agreed to do this oral history interview. Would you please tell me your full name?

R: BR11F49

Q: Thank you. And where were you born, BR11F49?

R: I was born in a little place called Azucla in Belle Glades.

Q: Um hmm..

R: That's where I was born, but I was raised in Ellerton. My mother just birthed me there and then took me to Ellerton, Florida.

O: Um hmm..

R: On the west coast.

Q: And when did you come back to the Boca area?

R: I came to the Boca area in '67.

Q: OK, it's been awhile. So, where did you actually spend your childhood?

R: I spent my childhood in Ellerton and...Palmetto.

Q: Ellerton, Palmetto, and then you came here a little later, right?

R: Un hmm...

Q: Do you have brothers or sisters?

R: I had six brothers and two sisters, but they all gone but two brothers and myself.

Q: Oh, sorry to hear that. When you think back to when you were younger, do you have any favorite memories from around Boca? with family? Friends? Church? Anything like that?

R: I had memories around Boca. Like I said, when I worked at Boca Hospital for thirty years and a half and when I retired I started doing church work for all the older peoples. And I got so attached to one of the ladies. At least all of them, but these two: Clara Crocket and Laura Barta.

Q: Um hmm..

R: That I just took them every place. They think nobody couldn't take 'em no place, but...

O: Um hmm...

R: ...but, so I got really acquainted with them and that's what I love to do. I love to take care of older peoples.

O: That's wonderful.

R: And when I was comin' up I was bein' around people that was older than I am, so (am an I's?) retired, that's what I did.

Q: OK. Can I ask you when you were born?

**R:** Uh, born in '34.

Q: Um hmm...

R: April the 28th

Q: OK, and where is your home now?

R: My home's here. Here in Boca.

Q: It's right in the area? Pearl City or Dixie Manor?

R: I'm...I'm in Pearl City.

Q: In Pearl City

R: In Pearl City on Sapphire Street.

Q: OK. Do you ever have any problems where you live now when it storms with water or dampness inside or outside your home?

R: Well, like I said, It's just that one...well little storms, but the bigger storm like I said was in "03. (Ed. the big storm in Boca was Wilma in 2005.)

O: Um hmm..

R: And that's when the roof went off the top..part of the house...one side of the house, all the front of the house and there got a lot of damage in there then. But that's the only time I got damage. Like you say I lost pictures and stuff like tat in there with that. And it was really bad in '03.

Q: Did you have to evacuate?

R: We didn't have to evacuate, but like I said, just the front part went, you know, that (just took the) top off then it started leaking then it rained. You know how it rain after: the day after the storm go through.

Q: Right

R: And a lot of wetness in there, so, but, uh...

Q: That must have been scary.

R: Yeh. You see they put those tops, blue tops on top of the house an' all.

Q: Yeh..

R: Kinda kept the rain out, 'so... Still had a dry room to sleep in...

Q: (Laughing) So, have you ever had any problems with mold in your house?

R: No. Not that I can remember.

Q: Do you or anyone in your family have asthma or other breathing or lung problems?

R: Well, my brother who died in September gone, well, uh, he had a breathing problem. And some of 'em said it come from smoking, and I don't know what it come from. But then they said well "you should have it" because you you was in the house where all of 'em were smokin' at. I said, but God took care of me, and thank God I haven't had any breathing problem.

O: Good.

R: And he died in September. He went 3 years fightin' back and forth with that breathing problem.

Q: Did he have to go on oxygen?

R: Yeh. He had oxygen. Had to wear the mask all the time.

Q: That's rough, yeh. Um..., well I asked you this, but have you ever had to evacuate because of a storm?

R: No.

Q: You're a brave woman. Even when the roof blew off you said, "I'm stayin'."

R: (Laughs) ...just had to move to the other side.

Q: Are you interested in learning more about how to protect your family and your home from water, storm and dampness?

R: Yes.

Q: OK. I don't know if...have you already received our information sheet when they went door to dor, or no? We have a wonderful information sheet tells you about how to deal with storms, water, mold...

R: I think when they came down to give their card...?

Q: Yeh. You still have that?

R: sometime I forget, but I think they gave me...

Q: If you need another one I'll be happy to give it to you.

R: I... I have it.

Q: If you keep it someplace handy, it has all the emergency numbers if anything should happen, you know.

R: Yeh. On the refrigerator, yeh.

Q: Wonderful! Is there anything you would like to add about your experience with storms, weather, anything?

R: No. Just the noise in Boca was kinda' bad when I moved over there in Sapphire St.

O: Um hmm...

R: Because that filling station was right there where there's that surgery center place is now on Federal Highway. ...and, you know going back and forth and right by the house and right back of me. And the wall wasn't too high like they put it up, so...After they sold it then I asked the city to help (??) put something else to put up some high wall there, so they did.

Q: And that helped?

R: That kinda helped, and then the surgery center wasn't like the filling station people wasn't goin'...you know...

Q: (laughing) Right, Right.

R: So the traffic...the noise is not quite as loud as it was then.

Q: That's good.

R: That's the only kinda problem that I think I really had in Boca.

Q: OK. Thank you so much for agreeing to be interviewed.

R: Um hmmm. You're welcome.

BR12F74 NE 15<sup>th</sup> Terrace Boca Raton, FL 33432

#### Transcribed by Janice T. Booher, MS

Q: Hello, my name is Dr. Debra Weiss-Randall, and its August 18<sup>th</sup> and we're here at Dixie Manor Community Center, and I am very glad that you have agreed to do this oral history interview with me. Thank you so much. Would you please tell us your full name?

R: My name's BR12F74.

Q: And, BR12F74, where were you born?

R: Uh,,,I'm from Georgia.

Q: Uh huh.

R: A town called Louisville, Georgia.

Q: And when did you move to this area?

R: Uh, in the early sixties. '63. 1963, I think.

Q: And, when were you born, if you don't mind my asking?

R: October 27, 1942.

Q: And where...Where in Georgia did you grow up before you came here?

R: Louisville, Georgia.

Q: Do you have brothers or sisters?

R: I have two brothers. One died in '95, and, uh, 3 sisters.

Q: Um hmm... Did they live around here?

R: Uh...One lives in Georgia and two live around here.

Q: Uh huh. Do you have any favorite memories growing up? Especially about the Boca area. What you did with the family? Friends?

R: I was grown when I came here, so...

Q: Uh huh...or maybe what you did with your kids?

R: It's been so long ago I can't remember.

Q: That's OK. All right. So where is your home now?

R: Um. I'm living on 15<sup>th</sup> Terrace.

Q: Uh huh...

R: In Boca Raton.

Q: Do you have problems when it storms like with water or dampness around the house?

R: Uh...yes. Uh I guess it's been about 2 months ago there was a storm. I don't know. I didn't know it was a storm until I went outside, 'cause I was in the house and I must have fallen asleep when the rain started. And when I went outside there was debris from the street from down the street from up the street. All had washed into my yard. And I said, "Wow! Where'd all this stuff come from, you know?

O: Um hmm...

R: But someone said it must've been a storm. The rain, you know, so much, it got so high it was just all up to my house. And when they redid the street, I lived at the lower part of the street, and, uh (let me take this out for a minute) and, uh, it shouldn't have risen that high,

you know? So I guess the drainage is pretty bad, right? There's like one drain for that whole area and everything comes into that drain.

Q: Do you feel that something might be clogging the drain? Like if something...

R: I'm sure there is 'cause when they, um, come along like once a week and cut the median, and they blow all that debris, I'm sure that goes in, you know, in that drain.

Q: Yeh...several other people mentioned that problem. Have you ever had any problems with mold in your home?

R: No.

Q: Did you or anyone in your family, do you have asthma or any kind of breathing or lung problems?

R: No. My daughter, when she was a baby, she had asthma, you know...she was...I still live in the same house.

Q: Well asthma can flare up again, you know. Even though you might not have symptoms you always have to be aware.

R: She had it really really bad. She had to use the vaporizer and all that stuff, and she...it was terrible. But now she's grown older and I don't think she has as regular or as bad.

Q: Once in awhile, maybe?

R: Yeh.

Q: I'm glad it's gotten better.

R: Yeh, so am I.

Q: Have you ever had to evacuate your home because of a storm?

R: I never have.

Q: Are you interested in learning more about how to protect your family and your home from water, storm and dampness?

R: Of course. Who won't be?

Q: Because we have a wonderful sheet here that tells you about storms, water, mold, and so on. So we'd like you to take it and put it somewhere where you won't lose it, and you can refer to it so the next time there's a storm going on you can look at it. It has a lot of handy numbers on it.

R: Um hmm. OK.

Q: All right.? Good.

R: OK. This looks like the same sheet that they gave us when they (put in the rise???)

Q: Oh yeh, you have it already. Wonderful.

R: It's on the refrigerator.

Q: Good! You're a step ahead of me. You've got it on your refrigerator already.

OK. So is there anything else you wanted to add?

R: I'd like to add that, um, the City of Boca Raton could do more about cutting back the trees, because, you know, they put all these trees in on our street, but they haven't been cuttin' them back since they put 'em there, and they're growing wild.

O: Um hmm...

R: You know, like I usually walk to church on Sunday. I can't walk down the sidewalk 'cause the tree limbs are low and they're hittin' me on my head.

Q: Oh, that's not good.

R: So I have to walk in the road. I,uh, called the city, uh numerous times...multiple times before they came out to cut these trees.

Q: It's also safer if there's some dead wood to trim it before a storm so it doesn't blow.

R: Exactly, because some of them are leaning. And you know, I know, um... Like I said, long ago the city used to trim the trees. Shape the trees.

Q: Right.

R: Make it look nice, you know. But now the guy said they don't do that any more.

Q: Well, it's not just to look nicer, it's nicer, too. You don't bump yourself. All the branches don't crack in the wind and fall in your yard. It's trimmed nicely.

R: Yeh, so anyway finally they came out and uh cut some of the lower branches, but still, they're still all over the place like in the road...all over the sidewalk, but I could walk. They still need to be trimmed more, and the palm trees. You know how palm trees look. They're dead and look like a forest.

Q: That's a good point.

R: So they finally came out and they cut those up. That calling for the city three or four times before they could get out.

Q: Gotta be persistent, right?

R: Yes. It seems that way.

Q: Because we're itemizing also all the problems that people bring to our attention. So, the more people tell us, the more we can help you, right?

R: Yes. Yes. So the guy that came out, you know I went out there and was takin' to him and I said, "Why don't they trim the trees like they used to?" He said, "Oh.no. They don't do that nnymore." I said, "Why not? We're still payin' the taxes. "You know, he said, "This is not even our job. We're helpin'. This is the Beautification Department, and they just asked us to come and help them catch up. I guess they were behind some, I don't know. I had complained too much, or whatever. I said, "So, what are going to tell them when you go back down there. Are you going to tell them that they need to come and trim the trees more or what? He said, "No." I said, "You're not going to tell them anything?" "No." That's not right. I said you're out here helpin' them out cuttin' the trees. You should go back and tell them that BR12F74 were complaining about the trees need to be trimmed. Need to be shaped.

O: Well, you're on record right now. So, people are gonna' know.

R: Yeh. All right.

Q: Thank you so much for agreeing to be interviewed.

## **Contributors to Project Success: Boca Raton**

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**UUFBR** Green Sanctuary Committee

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## APPENDIX B:

Results of Climate Resilience Building Outreach South Delray Beach, FL

## **Results of Climate Resilience Building Outreach**

## South Delray Beach Florida

November 5, 2016



In Partnership with



Toussaint L'Ouverture High School for Arts and Social Justice

Project Director
Project Manager Phase I
Project Manager Phase II
Academic Oversight: Surveys
Academic Oversight Oral Histories

Janice T. Booher, MS Dr. Ana Puszkin-Chevlin

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The Green Sanctuary Committee The Unitarian Universalist Fellowship of Boca Raton 2601 St. Andrews Blvd., Boca Raton, Florida 33434

## **South Delray Beach Findings**

Climate resilience was increased by:

- Registering 26 residents with the emergency notification system: Code Red
- Building relationships in the community by training residents to educate their neighbors
- Reaching across linguistic barriers to reach immigrants living in the community. Bilingual students (English/Creole) served as translators for households surveyed, and outreach materials were distributed in English and Creole.
- Training leaders living in the community, and supporting them in acquiring the
  experience of conducting a successful public health campaign. Although one of the
  Outreach Leaders moved out of state after the survey was completed, the school
  administration, the second Outreach Leader, and the trained students remain in the
  community.
- Educating a total of 106 residents, living in 77 households in the study area: South Delray Beach east of I-95 and 13 additional households west of I-95, outside of the study area, about the public health impacts of climate change, including heat waves, poor air quality, safety during a flood, contaminated flood and standing water, contaminated drinking water, indoor mold, vector borne disease and algae blooms
- Distribution of specific information in English and Creole on protecting health and safety in the face of climate change

A survey of 77 households in the study area augmented with 19 oral histories revealed two key areas of opportunity for South Delray Beach to increase climate resilience:

- Further education about Sea Level Rise, with emphasis on residents' strongest concerns: Insurance and Property Value, followed by Extreme Weather and Water Quality.
- Strengthen the relationship between the police responsible for evacuation and disaster management and the residents of South Delray Beach

Some Creole speakers preferred written materials in English, and verbal explanations in Creole. Haitian Creole speakers, who had experienced natural disasters in Haiti, were very receptive to information on preparedness

## Delray Beach Executive Summary by Janice T. Booher

**Funding** A \$30,000 Environmental Justice Small Grant from the U.S. Environmental Protection Agency (EPA) was awarded to the Unitarian Universalist Fellowship of Boca Raton (UUFBR)

for the project titled: Replicable and Scalable Community Climate Resilience Building in Two Communities in Palm Beach County, Florida. The Unitarian Universalist Fellowship was one of 40 non-profit and tribal organizations selected for awards of nearly \$1.2 million in competitive grants for work to address environmental justice (EJ) issues nationwide. UUFBR used the grant money to create a Resilience Adaptation Community Toolkit (www.ReACTToolkit.net), and use it in community led neighborhood canvassing and at community meetings to provide education and training to reduce public health risks associated with increasingly severe storms and sea level rise associated with climate change in South Delray Beach and the Pearl City, Lincoln Court and Dixie Manor neighborhoods of Boca Raton.

**Delray Beach Community Partners** In Delray Beach, UUFBR partnered with Toussaint L'Ouverture High School for Arts and Social Justice. Toussaint L'Ouverture High School for Arts and Social Justice (TLHS) provided a letter of commitment that was attached to UUFBR's January 2016 EPA grant application. TLHS provides motivated students of diverse ability levels a unique secondary school experience using arts as a vehicle for social justice and individual change. The St. Matthews Episcopal Church Elders supported the project by participating in the survey at one of their regularly scheduled meetings. The founder of Sow Share, a non-profit that establishes and runs community gardens, contributed the name "Rising Together: Temperature, Water, Health and Strength," after a discussion of the goals of the project.

Resident Engagement EPA notification of funding was received in November 2015, and organizing meetings began in the community in January 2016. Dr. Diane Allerdyce, the Co-Founder of the Florida-based non-profit organization Center for Education, Training & Holistic Approaches, Inc. (CETHA), which operates TLHS, served as liaison to UUFBR's Green Sanctuary Committee. She located personnel, and secured outreach and translation opportunities. A series of meetings at TLHS provided feedback for the simplification of outreach materials. Mr. Dieunet translated the Health and Climate Change handout that appears in Appendix B into Creole. Project Director Dr. Ana Puszkin-Chevlin conducted a training session at TLHS on the causes and public health effects of climate change, and Dr. Sandra Norman conducted an oral history training session on the same day. Both sessions were simultaneously translated by faculty member Mr. Demosthene Dieunet. Twelve of Dr. Ashley Ridley's TLHS students were trained to survey their parents and neighbors about their perceptions and concerns related to sea level rise, and to educate them about strategies to protect themselves from the health impacts of climate change. Seven of the trained students participated in further outreach.

Professional Supervision Project Manager Phase I, Dr. Ana Puszkin-Chevlin, a hazards mitigation specialist, conducted a training session at TLHS on the causes and public health effects of climate change. Dr. Sandra Norman, an environmental historian, conducted an oral history training session on the same day. Both sessions were simultaneously translated by faculty member Mr. Demosthene Dieunet into Haitian Creole. Project Director Janice T. Booher, conducted training on the forms and tracking methods used in the project. Project Manager Phase II, Dr. Debra Weiss-Randall, a Certified Health Education Specialist, conducted additional field training on the protocol for information collection, and supervised all information collection; she worked together with Project Director Janice T. Booher on preliminary information analysis, and presented a PowerPoint with preliminary outreach results at the community meeting (see Rising Together South Delray Beach Presentation Sept. 22, 2016). Dr.

Weiss-Randall also prepared a Delray Beach Community Meeting Flyer, a Delray Beach Press Release, and a Program of the Delray Beach Final Community Assembly.

#### **Information on EPA Environmental Justice Small Project Grants**

2015 Environmental Justice Small Grant recipients and project descriptions: http://www3.epa.gov/environmentaljustice/resources/publications/grants/ej-smgrants-recipients-2015.pdf

Environmental Justice Small Grants Program, including descriptions of previously funded grants: http://www3.epa.gov/environmentaljustice/grants/ej-smgrants.html Connect with EPA Region 4 on Facebook: www.facebook.com/eparegion4 And on Twitter: @EPASoutheast

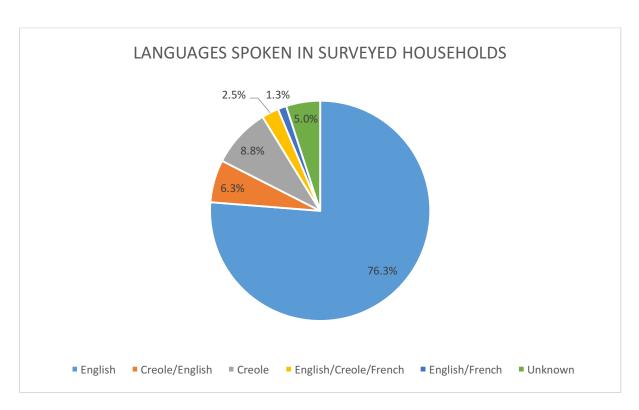
### **Delray Beach Survey Outreach and Education**

- In South Delray Beach, 106 residents were surveyed. Of these, 77 households were in the study area, 13 households were out of the study area (west of I-95 in South Delray Beach), and several households were in Boynton Beach. The study area was in South Delray Beach in zip code 33444, east of I-95. Residents were surveyed regarding their perception of risk from sea level rise, and their household's experience with flooding, mold, asthma, and water contamination. The Sea Level Rise Risk Perception Survey was developed by sea level rise expert Dr. Keren Bolter, and modified to support objectives of this project by Project Director Janice T. Booher. The neighborhood canvass, information retrieval, and recording was supervised by Project Manager Phase II Dr. Debra Weiss-Randall. The survey can be viewed in Appendix C in English, Spanish and Creole. The Surveys are also available on www.ReACTToolkit.net
- In South Delray Beach, 106 residents were educated about the health effects of climate change and how to stay safe as climate changes. Of these, 77 households were in the study area, 13 households were out of the study area (west of I-95 in South Delray Beach), and several households were in Boynton Beach. The study area was in South Delray Beach in zip code 33444, east of I-95. The Health and Climate two-sided outreach sheet was developed by Project Manager Phase I, Dr. Ana Puszkin-Chevlin. The English version can be viewed in Appendix D in English, Spanish, and Creole. Health and Climate outreach sheets are also available on www.ReACTToolkit.net

## Languages Spoken in Surveyed Households

One of the primary reasons that Toussaint L'Ouverture High School was recruited as a community partner was that the composition of its student body represents the demographics of South Delray Beach. This means that the school serves the Creole speaking community. Approximately twenty percent of the residents surveyed in South Delray Beach reported that Creole or French was spoken in their household.

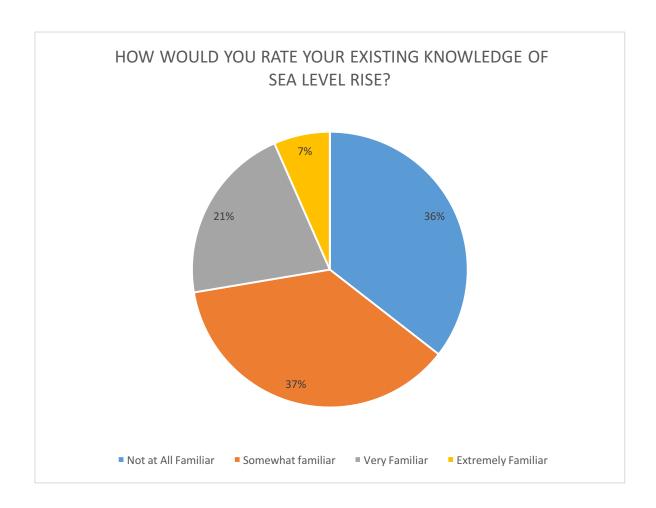
Bilingual members of the Outreach Team reported that some Creole speakers preferred written materials in English, and verbal explanations in Creole. Haitian Creole speakers, who had experienced natural disasters in Haiti, were very receptive to information on preparedness. There was cooperation from TLHS on translating the Health and Climate Training, and the Creole training video.



**Figure 1.** Prior to completing the survey, residents were asked what languages were spoken in their household. Responses reflected demographics of the community. English was spoken in 76.3% of households and Creole in 8.8% of households. A combination of Creole and English was spoken in 6.3% of households, a combination of English, Creole and French was spoken in 2.5% of households. English and French were spoken in 1.3% of surveyed households. 5.0% of households did not report languages spoken in the home.

## Residents' Self-Reported Familiarity with Sea Level Rise

Residents completed the survey prior to hearing information about the public health effects of climate change from Outreach Team members. The survey question was: How would you rate your existing knowledge about sea level rise?



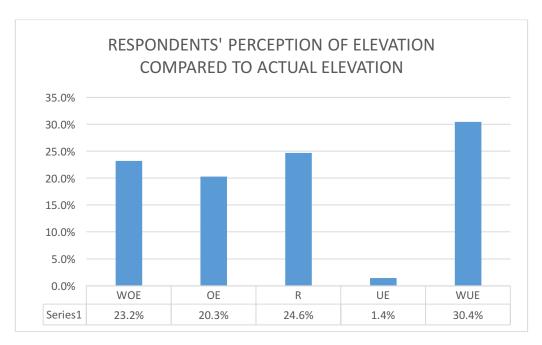
**Figure 2.** Of all Delray Beach residents surveyed, 35% reported that they were *not at all familiar* with sea level rise, while 37% reported that they were *somewhat familiar* with sea level rise. 21% reported being *very familiar*, and 7% *extremely familiar*, with sea level rise.

Because 35 percent of residents responded that they were not at all familiar with sea level rise, more education about sea level rise is needed in South Delray Beach.

## How Many Feet Do You Estimate Your Home to Be Above Mean Sea Level?

Respondents' responses to the question, "How many feet do you estimate your home to be above mean sea level?" were compared against the actual elevations of their homes. The actual elevations were obtained by entering the address into the Eyes on the Rise<sup>9</sup> "Find your location" dialogue box at this link http://www.eyesontherise.org/app/#tab1

The difference between the actual elevation and the elevation entered by the respondent was calculated. Respondents who responded with an elevation higher than their actual elevation were found to underestimate their risk. Respondents who entered an elevation lower than the actual for their address were found to have overestimated their risk. The differences were grouped into: WUE=Widely under-estimated Risk, UE=under-estimated Risk, R=Realistic, OE=Over-estimated Risk , and WOE=Widely over-estimated Risk.

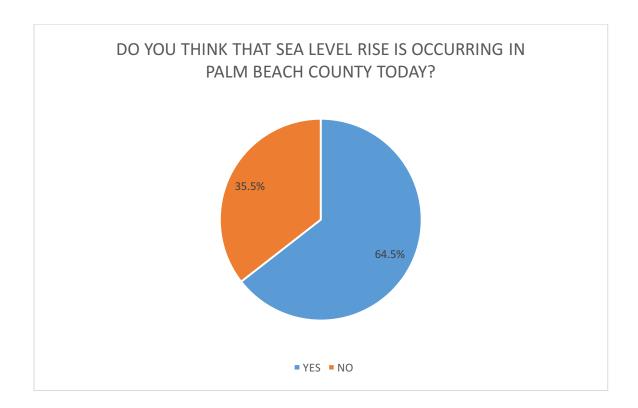


**Figure 3.** 23.2% of South Delray Beach residents widely overestimated their risk. 20.3% overestimated their risk. 24.6% realistically stated their risk, while 1.4% underestimated their risk, and 30.4% widely underestimated their risk.

Roughly a quarter of the respondents realistically stated their risk. Although more respondents overestimated rather than underestimated their risk, those respondents who underestimated their risk tended to widely underestimate it. This suggests that there is a need to locate and educate those who are widely underestimating their risk, so they will protect their health, and respond appropriately in hazard situations. The range of responses, from 0 feet to 4,000 feet above sea level reflect a lack of understanding that the neighborhood's proximity to the beach is relevant to the determination of elevation above sea level.

## Do You think that Sea Level Rise is Occurring in Palm Beach County Today?

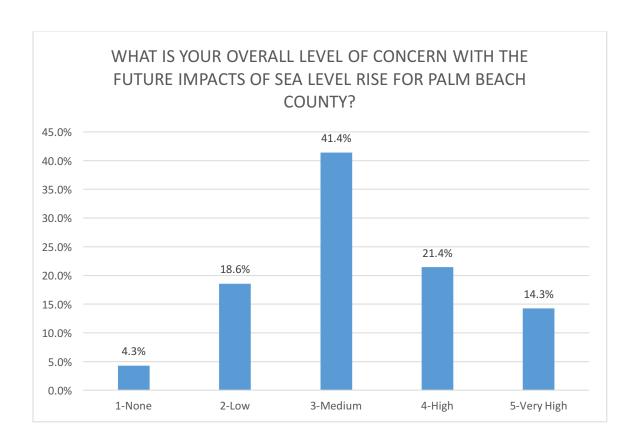
Canvassers were instructed to give the survey to residents prior to educating them about the health effects of sea level rise. Therefore, this result documents residents' perceptions prior to outreach education.



**Figure 4.** 36% of the 77 respondents living east of I-95 in South Delray Beach did not think that sea level rise is occurring in Palm Beach County today. 64% of respondents responded affirmatively.

# What is Your Overall Level of Concern with the Future Impacts of Sea Level Rise for Palm Beach County?

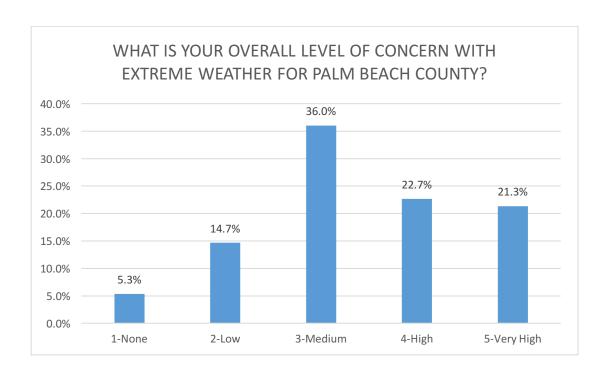
Respondents were asked to rate their overall level of concern with the future impacts of sea level rise in Palm Beach County. They chose from the following responses: 1-None, 2-Low, 3-Medium, 4-High and 5-Very High.



**Figure 5.** Most South Delray Beach respondents had a "medium" level of concern about sea level rise. 4.3% of respondents selected 1-None, which indicates no concern. 18.6% of respondents selected 2-Low, 41.4% selected 3-Medium, 21.4% selected 4-High, and 14.3% responded 5-Very High.

# What is Your Overall Level of Concern with Extreme Weather for Palm Beach County?

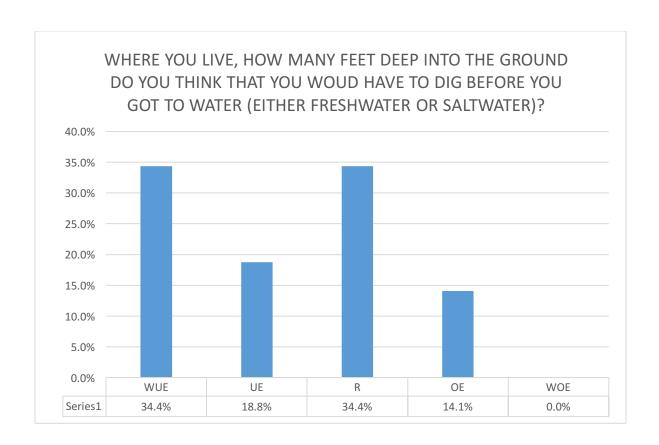
Respondents were asked to rate their overall level of concern with extreme weather for Palm Beach County. They chose from the following responses: 1-None, 2-Low, 3-Medium, 4-High and 5-Very High.



**Figure 6.** Level 3-Medium (36.0%) was the most common overall level of concern among South Delray Beach respondents. This was followed by a 4-High rating (22.7%), a 5-Very High rating (21.3%), and a 2-Low rating (14.7%). The 1-None rating, indicating no concern among South Delray Beach respondents with extreme weather for Palm Beach County, was selected by the lowest percentage of residents (5.3%).

# Where you live, how many feet deep into the ground do you think that you would have to dig before you got to water (either freshwater or saltwater)?

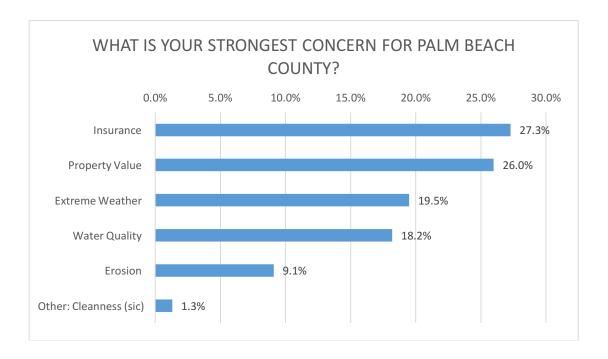
The difference between the actual depth to groundwater and the depth to groundwater entered by the respondent was calculated. Responses with a depth to groundwater greater than their actual depth to groundwater were found to underestimate their risk. Respondents who entered a depth to groundwater that was less than the actual for their address were found to have overestimated their risk. The differences were grouped into: WUE=Widely under-estimated Risk, UE=under-estimated Risk, R=Realistic, OE=Over-estimated Risk , and WOE=Widely over-estimated Risk.



**Figure 7.** Most South Delray Beach respondents either widely underestimated their risk (34.4%) or realistically estimated their risk (34.4%). No residents widely overestimated their risk. 18.8% of respondents underestimated their risk, and 14.1% of respondents overestimated

## Residents' Strongest Concern for Palm Beach County

The Sea Level Rise Risk Perception Survey asked respondents to choose their strongest concern for Palm Beach County from six multiple choice options: Water Quality, Insurance, Erosion, Property Value, Extreme Weather and Other, with a blank to record Other concerns.



**Figure 8.** The top concern reported by South Delray Beach respondents surveyed was Insurance (27.3%), followed by Property Value (26.0%), Extreme Weather (19.5%), Water Quality (18.2%), and Erosion (9.1%). One respondent to the survey entered Cleanness as the primary concern.

## **Comments Explaining Residents' Strongest Concerns**

A comment box on the Survey asked respondents to explain their chosen concern. Residents' Comments are listed below, grouped under the related primary concern from the prior question. Spelling is recorded unaltered.

#### **Water Quality Comments**

- NW 2<sup>nd</sup> Ave: Water quality is of high concern
- SW 2<sup>nd</sup> St: It is a health risk
- NW 3<sup>rd</sup> St: We need to keep our fresh water clean
- SW 4<sup>th</sup> Ave: Paska Li ka fx dxzod. Meaning "the water is dirt"
- **SW** 8<sup>th</sup> Ct: Current water quality is already compromised by development of Agriculture and Everglades. Changing regulations & reduced regs for Water Quality is a concern. Lack of adequate monitoring and maintaining high standards is the reason.
- SW 9<sup>th</sup> Ct: How healthy the water quality is
- SW 9<sup>th</sup> Ct: High tide flooding
- **Auburn Circle E:** If your H<sub>2</sub>0 quality is poor, your overall health will be poor leaving you able to function at your fullest potential. I filter my tap water. There is a definite difference in water quality here as compared to where I'm from.
- S Swinton Ave: Problem with my drinking water would be a issue

#### **Extreme Weather Comments**

- NW 4<sup>th</sup> Ave: Hurricanes
- SW 4<sup>th</sup> Ave: Heavy rains and winds cause damage to homes
- SW 7<sup>th</sup> Ave: I am afraid that if a hurricane comes my street will be under water
- SW 9<sup>th</sup> Circle: Heat and rain
- **NW 10<sup>th</sup> Ave:** Weather and sea level
- SW Linton: Police
- Reigle Ave: It's always different
- Washington Ave: Flooding is dangerous
- Washington Ave: I really don't know but I know it's bad

#### **Property Value Comments**

- NW 2<sup>nd</sup> St: Lots of water property goes down
- NW 4<sup>th</sup> Ave: Not much affordable property
- SW 4<sup>th</sup> Ave: I think property value is very important for community success
- SW 5<sup>th</sup> Ave: Flooding
- SW 9<sup>th</sup> Ave: House because I believe it needs to increase
- SW 12<sup>th</sup> Ave: Don't want to buy a house then can't sell it
- SW 15<sup>th</sup> Ave: Conditions that makes property value go down-upkeep -of homes.

- Auburn Ave: Police
- Washington Ave: In the Black community the property value is lower than other areas.

#### **Insurance Comments:**

- SW 3<sup>rd</sup> St: Too much money
- SW 4<sup>th</sup> Ave: Police
- SW 9<sup>th</sup> St: Concern is insurance
- W 12<sup>th</sup> Ave: Too high, the cost of living is very high
- Auburn Circle West: Police
- **Lindell Blvd:** Ins. take most everything that happens. If you don't have ins. your in trouble.
- Southridge Road: Police
- Washington Ave: Insurance is far more. Highest in Black areas.

#### **Erosion**

- SW 5<sup>th</sup> St: Like an example: People that stay on the beach and the water wash away sand from the property
- SW 6<sup>th</sup> Ave: Too many trees are being removed to build structures
- SW 12<sup>th</sup> Ave: Beach erosion. Too high, the cost of living is very high
- SW 14<sup>th</sup> Ave: Erosion tends to tear apart our buildings which creates more money needed to be spent to rebuild

## **Residents' Comments Regarding Police**

There was no mention of police on the Sea Level Rise Risk Perception Survey form. None of the questions on the survey were about the police. However, there were 7 responses related to police written in by respondents in the study area. This represents 8.9% of survey responses, in spite of the fact that there was no survey prompt regarding police.

In their 2006 analysis of Hurricane Katrina, Kristen Henkel et. al. <sup>10</sup> concluded that, "It is likely that Blacks' distrust of government contributed to their decisions not to heed the warnings to evacuate." In their article in the journal *Policing*, Mathieu Deflem and Suzanne Sutphin <sup>11</sup> stated, "The long-standing distrust towards the New Orleans police additionally contributed to the law enforcement breakdown during Katrina as deficiencies in police legitimacy hindered cooperation with residents."

The comments on this subject were cryptic and difficult to interpret. They are presented here in the spirit of information sharing to shape future efforts to clarify the climate resilience challenge that could be addressed in South Delray Beach. Scans of surveys are available to researchers on request. Email Janice T. Booher at <a href="mailto:JJLBooher@comcast.net">JJLBooher@comcast.net</a> Because police are critical to public safety, particularly during storms, strengthening the relationship between the police, who are responsible for evacuation and disaster management, and the residents of South Delray Beach would likely increase climate resilience. Police were invited to the community meeting in Delray Beach. A Creole-speaking officer spoke to the assembly about preparedness. Following are the South Delray Beach respondents' comments about police.

**NW** 3<sup>rd</sup> **St:** A comment was written in the primary concern box and then crossed out, "They shoot black people. RIP Corey Jones." The comment was replaced with one relevant to the survey," We need to keep our fresh water clean. (English Survey)

**SW 4th Ave:** The strongest concern listed was Insurance. "Police" was written in the box to further explain the concern. (Creole Survey)

**NW** 6<sup>th</sup> St: The strongest concern listed for Palm Beach County was insurance. The explanation of the chosen concern was "Police ensuring my safety." (English Survey)

**NW 4<sup>th</sup> St:** Police not servicing the community by filing reports for my insurance (English Survey)

**SW 12<sup>th</sup> Ave:** In the response to "strongest concern for Palm Beach County,) the respondent wrote and then crossed out," police shootings." Then they circled Property Value as their primary concern. (English Survey)

**SW** Linton: The strongest concern listed was Extreme Weather. "Police" was written in the box to further explain the concern. (Creole Survey)

**Auburn Ave:** The strongest concern listed was Property Value. The explain your concern box said Police. (English Survey)

**South Ridge Rd:** The strongest concern listed for Palm Beach County was insurance. The explanation of the chosen concern was police. (English Survey)

## What Flood-Related Impacts have you Experienced in Your Neighborhood?

A Link to Google Map with all comments from Surveys and Oral Histories within the study area with addresses recorded has been created, and will be made available on request to researchers. Email Janice T. Booher at JJLBooher@comcast.net for the password and link. Comments made on the Google map by residents regarding flooding are available by clicking the icons on the interactive map.



**Black**: No experience with flooding reported.

**Blue**: Reported experience with flooding

**Figure 4** This is a still shot of an interactive Google map that documents survey and oral history responses related to flooding. There were 23 reports of experience with flooding in the study area east of I-95.

## **Residents' Comments Regarding Flooding**

NW 2<sup>nd</sup> ST: Not much

SW 3<sup>rd</sup> St: Sometimes floods when it rains SW 3<sup>rd</sup> St: Water flooding when it rains NW 4<sup>th</sup> Ave: Flooding from hurricanes

SW 4<sup>th</sup> Ave: Flooding after storms

SW 4<sup>th</sup> Ave: Krazx Kay a k sadxn K. (best understanding of what was written on form)

SW 5<sup>th</sup> Ave: Heavy Rain for 6 or more hours

**SW** 6<sup>th</sup> **Ave:** Standing water soon after

**NW** 7<sup>th</sup> **Ave:** Flooding when it rains constantly (somewhat)

SW 7<sup>th</sup> St: Hurricanes

SW 7<sup>th</sup> Ave: My road is always covered with water after it rains

NW 8<sup>th</sup> Ave: Standing water SW 8<sup>th</sup> Ave: just flood from rain

SW 8<sup>th</sup> Ct; Sewer and water line affected by severe rain. All are affected. City treatment plant

Delray is already affected by weather and sea level rise

SW 9th Ave: Flooding with no rain

SW 9<sup>th</sup> St: Street level flood with hard rain NW 10<sup>th</sup> Ave: Flood and standing water

SW 12<sup>th</sup> Ave: Storm, high tide

SW 14<sup>th</sup> Ave: It rained for 3 hr and I stepped into 3 ft of water because of erosion to the road

SW 15<sup>th</sup> Ave: Water not draining – nowhere to go when there is heavy rain

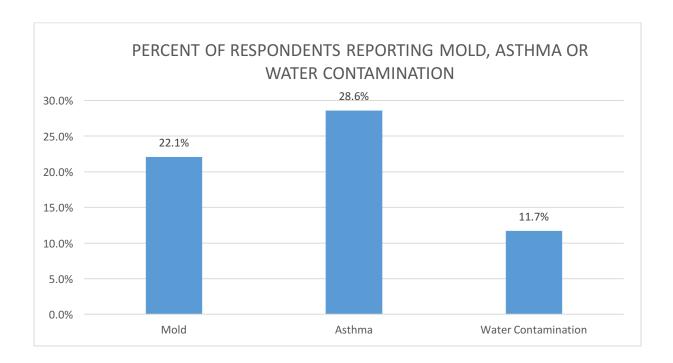
Lindell Blvd: Low ground low in everywhere

S Swinton Ave: Disaster

Washington Ave: Some heavy rains

## Mold, Asthma, and Water Contamination

Residents were asked, "Have you or anyone in your household experienced any of the following at your current address?" Respondents circled Yes or No in response to Mold, Asthma and Water Contamination.



**Figure 6.** Mold was experienced by 22.1% of the 77 respondents surveyed in South Delray Beach east of I-95. Asthma in the household was reported by 28.6% of survey respondents; more than 2½ times the County asthma prevalence of 10.4% (Florida CHARTS)<sup>8</sup>. 11.7% of responding residents reported that they have experienced water contamination in their current home

## **Using Oral History**

By Dr. Sandra Norman

It is a common argument that when there is a disaster, impending or imminent, experts are sent in, plans made, and the public is told what to do. Seldom is the public asked what has happened. This project was so different. With the clear proof that global warming is happening, and that sea level rise is occurring now, not maybe, this project was designed to inform endangered populations of the need for self-awareness and community protection.

But when did water and mold and asthma and allergies become a problem in these communities? What do we know about housing, families, illness, awareness? We know by asking. Other key features of this project are described elsewhere, but one key was to introduce communities to the formal practice of Oral History. In each of these communities the informal practice of oral storytelling and community history has long been practiced, but this was a project to train people in formal technique and then have them engage their own communities in the telling of health and weather related stories.

Inhabitants of Delray Beach and the Boca Raton study area, were questioned on standing water, wet in their houses, damp and mold, allergies, asthma and other lung diseases, early deaths from lung diseases. These questions had never been asked of these communities, and this project provided significant data for health officials and city engineers. The number of lung related problems, including asthma and allergies, was multiples over what the average for the area stands at. Some people were embarrassed to talk about mold in their houses after storms, as they felt it indicated that they weren't good housekeepers. This just isn't true.

In conjunction with the interviews, and even for those households that did not wish to be interviewed, information was presented on disaster preparedness, restoration after a storm, cleaning mold, the dangers of standing water, etc. Laminated cards in three languages were made available. They contain emergency contact information.

In the Boca Raton study area, the oral collectors tended to be women from the community churches. They had relationships within the community, and could use those relationships to extract information. Part of the oral history training was to make these collectors aware of their role, and to have them assume that those reading or listening to the interviews would know nothing about the community, so ask everything.

In Delray Beach a different approach was taken. Haitian students from the local high school were recruited and trained to interview within the Haitian community, which is the part of town with the lowest elevation. They spoke the language, but more importantly they became conduits between the city and the community on emergency preparedness. They also found that their engagement was empowering, and several are planning to serve as community liaisons for emergencies. Other project team members worked within the Bahamian community of Delray Beach. In all cases the object was the same; gather information about water and health and levels of awareness; and then provide sound information on health and welfare, the dangers of standing water, remediation, etc.

This approach to community awareness could become a national model on how to engage communities which are often trapped in poverty and weather endangered land. By bringing the community members into active participation and greater result can be expected, the information

provided was welcomed from neighbors rather than being suspect from outsiders. Neighbors talking to and educating each other is one of the most effective methods available with long lasting results. The folk who conceived of and promoted this project are committed to justice and sustainability, and this is a clear example of community justice and awareness in action.

## **Oral History Protocol**

Twelve Oral Histories were recorded. The English version of the Oral History Protocol appears in Appendix C in English, Spanish and Creole. The Oral History Protocol is also available available on <a href="https://www.ReACTToolkit.net">www.ReACTToolkit.net</a> The protocol was developed by environmental historian Dr. Sandra Norman. Some Oral Histories were recorded with a GoPro camera, and others were audio only; recorded on smart phones or cassette recorders.

## **Transcripts of South Delray Beach Oral Histories**

All South Delray Beach Oral Histories are compiled in a video. Researchers interested in the video can contact Project Director Janice T. Booher <a href="mailto:JJLBooher@comcast.net">JJLBooher@comcast.net</a> for the link and password.

### **Content**

## **Pompey Park Community Center** (video by Janice T. Booher, MS and Leah Booher) **March 19, 2016**

Interviewer	Janice T. Booher, MS
First Resident	DRB01F44
Second Resident	DRB02F60
Third Resident	DRB03F63
Supervising Scholar	Dr. Sandra Norman

#### **DRB01F44**

**Delray Beach** 

Transcribed by Janice T. Booher, MS

Q: So, we're so happy that you're willing to participate with us on this oral history. Can you tell me your full name, please?

A: Sure. My name is DRB01F44.

O: Nice to meet you. Where were you born?

- A: I was born in Athens, Georgia.
- Q: And when were you born?
- A: And I was born in 1972.
- Q: Where did you grow up?
- A: I grew up in Georgia. Mainly in (Warner Robbins?), Georgia, which is the middle part of Georgia.
- Q: Do you have brothers and sisters?
- A: I have one older sister. She, um, my mother passed when I was young. My sister's 15 years older than me, so stepped in as a parent figure in my life.
- Q: So, what are your favorite memories growing up?
- A: Um..my favorite memories growing up are spending time with my family. Um...participating in family activities that, You know, we'd go to Atlanta where the major part of our family was for Christmas and holidays. That was the best.
- Q: OK, where is your home now?
- A: Um...my home now is Delray Beach.
- Q: And do you have problems when there are storms or water or damp in the house or yard?
- A: We have had some problems with dampness, um, in the bedrooms. There's been a bit of a mold issue in the closets.
- Q: What do you do about that?
- A: What I have done since discovering it is I use a lot of baking soda to absorb moisture, and um I spray down things with tea tree oil and a lot of citrus stuff. I run box fans in my closets so that moisture won't accumulate and affect our clothes.
- Q: Wow! That's quite a bit that you're doing. Do you or anyone in your family have breathing or lung problems?
- A: No, fortunately we don't.
- Q: That is fortunate. Have you ever had to evacuate because of a storm?
- A: No. Fortunately. We have not lived in Florida for long, so I have not been here through any storms or floods.
- Q: Are you interested in learning about protecting your family and your home from water and storm damage issues?
- A: Yes. Definitely.
- Q: Well, wonderful. We have a great sheet, and you're welcome to keep it. And um yes. Please keep it and put it somewhere you can remember these things if needed, and thank you so much for agreeing to take an interview.
- A: Yes. Thank you.

#### **DRB02F60**

**Delray Beach** 

Transcribed by Janice T. Booher, MS

- Q: Well, thank you so much for participating today.
- A: You are so welcome.
- Q: Could you please tell me your full name?
- A: DRB02F60.
- Q: Well, how do you do? Where were you born?
- A: I'm a Northwesterner originally from the state of Montana.
- Q: Oh, when was that? When were you born?
- A: (Laughs) Oh, my gosh. Do I actually have to give my age? I turned 60 this year.
- Q: Well, where did you grow up?
- A: I grew up in Northwestern United States primarily, and quite different than Florida.
- Q: Do you have brothers and sisters?
- A: Most are in that area. Some are scattered around the United States.
- Q: And what were your favorite memories growing up?
- A: Uh, being able to be outdoors and really take advantage of the gorgeous environment that I lived in.
- Q: Well, where is your home now?
- A: I do live in Florida. South Florida in Delray, right here.
- Q: And do you have problems when it storms with water or damp in the house or yard?
- A: Um...I feel like I get some effects from the heavy rains, and I'm south of the treatment plant so I feel like that the sewer and water lines are overloaded by our water treatment facility and the way that they're constructed, so I've discussed some of this with my neighbors and it seems like um... a number of us have some uh water problems coming back up in the home when we have heavy rains and flooding.
- Q: Well, have you ever had a mold problem with your house?
- A: I haven't had a mold problem, but I do worry about it with this, so I think it's entirely possible it could eventually happen.
- Q: Do you or anyone in your household have any problems breathing or lung problems?
- A: No.
- Q: And have you ever had to evacuate because of a storm?
- A: Actually during one of the hurricanes a couple years ago. Isaac, I think it was. I actually had to leave 'cause I had no electricity for three ...three or four days.
- Q: Are you interested in learning more about how to protect your family and your home from water, storm and damp?
- A: Sure.
- Q: Well, we have a wonderful handout that we can give you to take home, and I'd like to thank you for agreeing to be interviewed.
- A: You're very welcome.

#### **DRB03F63**

**Delray Beach** 

Recorded by Leah Booher

**Transcribed by Janice T. Booher, MS** (Parts of the transcript remain to be translated.)

Q: So, thank you so much for participating today. Could you please tell me your full name?

A: I'm DRB03F63.

Q: Can you tell me where you were born?

A: I was born in Bryan, Texas.

Q: Um hmm...and when were you born?

A: January 18, 1953.

Q: And where did you grow up?

A: I grew up in Bryan.

Q: Oh, and do you have brothers or sisters?

A: I'm an only child.

Q: What are your favorite memories growing up?

A: Um...my favorite memory is my grandmother. My parents and my grandmother (..?)

Q: Where is your home?

A:

Q: Do you have problems when it storms with water or damp in the house or yard?"

A:

Q: Have you ever had a mold problem with your house?

A:

Q: Do you or anyone in your family have breathing or lung problems?

A:

Q: Have you ever had to evacuate because of storms?

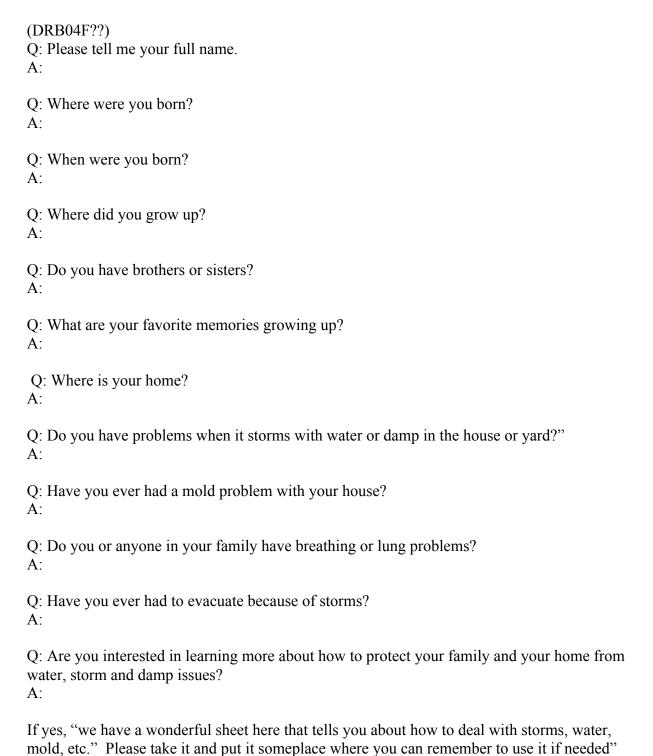
A:

Q: Are you interested in learning more about how to protect your family and your home from water, storm and damp issues?

A:

If yes, "we have a wonderful sheet here that tells you about how to deal with storms, water, mold, etc." Please take it and put it someplace where you can remember to use it if needed" "Thank you so much for agreeing to be interviewed"

Delray Beach Oral Histories (recorded in Creole on cell phone and not translated yet) TLHS Health Fair



"Thank you so much for agreeing to be interviewed"

### **Delray Beach Oral Histories**

## **Pompey Park Community Center** (Recorded with a GoPro Hero camera by Janice T. Booher) **June 4, 2016**

Interviewer	Janice T. Booher, M.S.
First Resident	DRB05F58
Second Resident	DRB06F30
Third Resident	DRB07M57
Fourth Resident	DRB08F25
Fifth Resident	DRB09F28
Sixth Resident	DRB10F34
Seventh Resident	DRB11F25
Eighth Resident	DRB12M29
Ninth Resident	DRB13F37
Tenth Resident	DRB14M34
<b>Eleventh Resident</b>	DRB15F39
Twelfth Resident	DRB16F30
Thirteenth Resident	DRB17F38
Fourteenth Resident	DRB18F51
Fifteenth Resident	DRB19M??)
Supervising Scholar	Dr. Sandra Norman

First Resident: DRB05F58

Transcribed by Janice T. Booher, MS

Q: Please tell me your full name.

A: DRB05F58

Q: Where wee you born?

A: In Miami.

Q: And when were you born?

A: 1958

Q: Where did you grow up?

A: In Homestead, Florida

Q: Do you have brothers or sisters?

A: Yes.

- Q: What are your favorite memories growing up?
- A: Oh...playing outside.
- Q: Where is your home now?
- A: In Delray Beach, Florida
- Q: Do you have problems when it storms with water or damp in the house or yard?
- A: Years ago. There's no drainage here, so we used to have a lot of flooding.
- Q: Have you ever had a mold problem with your house?
- A: Um...no.
- Q: Do you or anyone in your family have breathing or lung problems?
- A: My brother.
- Q: Have you ever had to evacuate because of a storm?
- A· No
- Q: Are you interested in learning more about how to protect your family and your home from water, storm and damp issues?
- A: Yes. Yes, I am.
- Q: Do you know what kind of respiratory problems your brother has?
- A: He has diabetes, and plus he had his heart replaced with a... you know he has that, you know for his heart (motions as if to indicate a pacemaker). He has that. So, yes, he has sometimes breathing issues because of that. Diabetes growing up. He has that thing they put on your heart. He has one of those. But then he's doing OK. Better.
- Q: Thank you so much.
- A: Oh, that was it!? Oh, that wasn't long at all!

**Second Resident: DRB06F30** 

Transcribed by Janice T. Booher, MS

Q: Please tell me your full name.

**A: I'm** DRB06F30.

Q: And where were you born?

A: I was born here in South Florida, at Bethesda Memorial Hospital.

Q: When were you born?

A: May 23<sup>rd</sup>, 1986

Q: And where did you grow up?

A: Um, here. Right here in Delray.

Q: Do you have brothers or sisters?

A: Um, yes.

Q: How many?

A: I have one sister and three brothers.

Q: Where do you fit in the line up?

A: I'm ...I'm second to last.

Q: Almost the baby.

A: Almost.

Q: What are your favorite memories growing up?

A: Dancing. I love dancing. I'm a dancer.

Q: Where is your home now?

A: I now reside in Boynton Beach, Florida.

Q: Do you have problems when it storms with water or dampness in the your house or in your yard?

A: Um, no.

Q: Have you ever had a mold problem with your house?

A: No.

Q: Do you or anyone in your family have any breathing problems, lung problems?

A: Um, my dad has asthma. Has asthma...so...

Q: Do you have asthma?

A: No.

Q: Have you ever had to evacuate because of a storm?

A: No. Never ever.

Q: Are you interested in learning more about how to protect your family and your home from water, storm and damp issues?

A: Of course. Of course.

Q: OK, well, wonderful. We have a sheet we would like to go over with you.

A: OK.

Q: Thank you.

A: You're welcome.

Third Resident: DRB07M57

Transcribed by Janice T. Booher, MS

Q: Please tell me your full name.

# A: DRB07M57

Q: Well, how do you do. Where were you born?

# A: I was born in Miami, Florida.

Q: And when were you born?

A: 9/11/59

Q: Where did you grow up?

# A: I grew up in Florida City, Florida, and I grew up in Delray Beach, Florida.

Q: Do you have brothers and sisters?

A: I sure do.

Q: How many?

# A: There was a total of ten siblings in my family.

Q: Were you in the middle, or...

# A: I'm one of the last two. I have a twin brother.

Q: Cool. What are your favorite memories growing up?

# A: I loved the beach.

Q: Where is your home now?

A: Colorado.

Q: Do you have problems when it storms with water or damp in the house or yard?

A: Yes.

Q: And how about where you're visiting here in Delray. Is it a family home?

# A: No. It's a trailer park.

Q: OK. So, in that location in Delray Beach when it storms are there problems with water in the house or yard?

A: No.

Q: OK, and have you ever had a mold problem with your house?

A: No.

Q: Do you or anyone in your family have breathing or lung problems?

A: No.

Q: Have you ever had to evacuate because of a storm?

A: No.

Q: Are you interested in learning more about how to protect your family and your home when there are storms or flooding or dampness issues?

A: Yes.

Q: Well, good, because Lyanna's going to do that with you now. Thank you so much.

# A: You're welcome.

Fourth Resident: DRB08F25

Transcribed by Janice T. Booher, MS

Q: Can you please tell me your full name?

**A:** DRB08F25

Q: Hi DRB08F25. Where were you born?

A: Um. Boynton Beach.

Q: And when were you born?

A: 3/25/91

Q: Where did you grow up?

A: In Delray Beach.

Q: Do you have brothers or sisters?

A: I had three brothers. I have two now.

Q: Are you older?

A: No. I'm in the middle.

Q: In the middle...and what are your favorite memories growing up?

A: Um...wow! I probably would have to say summer, um...when my cousins would come down to Grandma's house.

Q: And where is your home now?

A: In Delray. In the same home.

Q: Do you have problems when it storms with water or dampness in your house or in your yard?

A: In the cul-de-sac, like when it rains we get a pool.

Q: How long does it stay there after the rain?

A: Like 2 or 3 days.

Q: Have you ever had a mold problem with your house?

A: No.

Q: Do you or anyone in your family have breathing or lung problems?

A: I have asthma and my stepdad has asthma.

Q: Is it worse when there are storms or rain?

A: Um...when it rains a lot it's a little harder.

Q: Have you ever had to evacuate because of a storm?

A: No.

Q: Are you interested in learning more about how to protect your family and protect your home from water and storms?

A: Sure. Sounds good.

Q: Thank you.

A: You're welcome.

Fifth Resident: DRB09F28

Transcribed by Janice T. Booher

Q: Can you please tell me your full name?

A: DRB09F28.

Q: Hi. Where were you born?

A: Delray Beach, Florida

Q: And when were you born?

A: July 8, 1988

Q: Where did you grow up?

A: grew up in Delray.

Q: Do you have brothers or sisters?

A: Yes. I have five brothers, and I'm the only girl. I'm the baby girl.

Q: Oh, my! What are your favorite memories growing up?

A: Um...my one favorite memory...every time my mother would cook something and give me my plate first, my brother would always grab and say, "Oh! It's poison. Let me taste it." And then by the time it's finished it's like I don't have nothin' left. (laughs)

Q: You'll remember it forever!

A: Yes.

Q: OK. Where is your home now?

A: It's in Delray.

Q: And do you have problems when there are storms with water or dampness in the house or vard?

A: In the yard at my Mom house, like right at the end of our driveway the whole street usually floods. They sorta' kinda' fixed it, but we still get a little after amount of flooding.

Q: How long does it usually stay?

A: It stays probably like if it rains at 6, I'll say 9 o'clock it'll be clearing up a little bit.

Q: Have you ever had a mold problem in your home?

A: No.

Q: No...and do you or anyone in your family have breathing problems or lung problems?

A: I had asthma at a small age, but I grew up. I grew out of it.

Q: Was it ever worse with rain or storms?

A: No. No. Just with colds.

Q: Have you ever had to evacuate because of a storm?

A: No.

Q: Are you interested in learning more about how to protect your family and your home from water and storms and the damp issues like we have on our sheets here?

A: Yes.

Q: Well, thank you so much.

A: Thank you too, Jan.

Sixth Resident: DRB10F34

Transcribed by Janice T. Booher

Q: Could you please tell me your full name?

**A:** DRB10F34

Q: Where were you born?

A: Here in Florida.

Q: And when were you born?

A: The year or the whole thing?

Q: Well, whatever you want to say.

A: 1982

Q: And where did you grow up?

A: Right here in Delray.

Q: Do you have brothers or sisters?

A: Yes, I do.

Q: How many?

A: (laughs)

Q: And where do you fall in the line up?

A: I'm the baby of all of 'em. I have four sisters and...8 brothers. (laughs) And I'm the baby outa all.

Q: The baby... What are your favorite memories growing up?

A: Uh....just doing family things and doing...learning a lot of stuff ...doing stuff with my Grandma. So... yeh

Q: Does your Grandma live here in Delray?

A: She passed, but yeh. She did. She did grow up here.

Q: OK. Where is your home now?

A: Right here in Delray.

Q: And do you have problems when there are storms with water or dampness in your home or in your yard?

A: Not in the home, but ...um...like in the yard like. And then the street's that's kinda close by floods.

Q: How long does it usually stay?

A: It stays probably like if it rains at 6, I'll say 9 o'clock it'll be clearing up a little bit.

Q: Have you ever had a mold problem in your home?

A: No.

Q: No...and do you or anyone in your family have breathing problems or lung problems?

A: I had asthma at a small age, but I grew up. I grew out of it.

Q: Was it ever worse with rain or storms?

A: No. No. Just with colds.

Q: Have you ever had to evacuate because of a storm?

A: No.

Q: Are you interested in learning more about how to protect your family and your home from water and storms and the damp issues like we have on our sheets here?

- A: Yes.
- Q: Well, thank you so much.
- A: Thank you too, Jan.

Seventh Resident: DRB11F25 Transcribed by Janice T. Booher

- Q: Could you please tell me your full name?
- A: My name is DRB11F25.
- Q: And where were you born?
- A: I was actually born in Anchorage, Alaska.
- Q: Oh, and when were you born?
- A: January 1991.
- Q: And where did you grow up?
- A: I grew up in Delray Beach.
- Q: Do you have brothers or sisters?
- A: I have 2 sisters.
- Q: Are you...?
- A: Including myself, I'm the baby.
- Q: You're the baby... What are your favorite memories growing up?
- A: Oh...my favorite memories growing up would be playing outside and getting ice cream from the ice cream truck.
- Q: OK. So now, where is your home?
- A: I actually live in Delray Beach on Swinton.
- Q: And do you have problems when there are storms with water or dampness in your home or in your yard?
- A: No.
- Q: Do you have, or have you ever had a mold problem in your house?
- A: No.
- Q: And do you or anyone in your family have breathing or lung problems?
- A: No.
- Q: Have you ever had to evacuate because of storms?
- A: No.
- Q: Are you interested in learning more about safety during storms or floods?
- A: Yes.
- Q: All right. Thank you so much.
- A: Thank you.

**Eighth Resident: DRB12M29** 

- Q: There we go. All right (mechanical sound). Could you please tell me your full name?
- A: DRB12M29.
- Q: Hi DRB12M29. Where were you born?
- **A:** Boynton Beach (...indecipherable)
- Q: When were you born?
- A: December 22, 1987.
- Q: Where did you grow up?
- A: I grew up in Delray Beach, mostly.
- Q: Do you have brothers or sisters?
- A: Yes. 5 brothers and...5 brothers and sisters and I was the youngest.
- Q: What are your favorite memories growing up?
- A: Oh, just family and always having good times. Sports, really... I always traveled playing baseball.
- Q: Oh, you played baseball on a travelling team?
- A: Yes.
- Q: Where is your home?
- A: Right now I'm west of Delray.
- Q: Um hmm...and do you have problems when it storms with water or damp in the house or yard?"
- A: Well, the yard. The yard is sometimes flooded.
- Q: And on the rainiest, during the rainiest time of a storm what amount of time would you say it takes for the yard to clear?
- A: Uh, probably a good day.
- Q: Uh huh...and have you ever had a mold problem with your house?
- A: No.
- Q: Do you or anyone in your family have breathing or lung problems?
- A: My Dad grew up with asthma, but he grew out of that (..?..)
- Q: Did you have it as a child?
- A: No.
- Q: Have you ever had to evacuate because of storms?
- A: Um, I mean not usually. A pretty bad hurricane (...?.. and they said we could evacuate ....?)
- Q: Did you decide to leave or did you stay in your home?
- A: We staved in the home.
- Q: Are you interested in learning more about how to protect your family and your home from storms and when there are water, or dampness issues?
- A: Yes. Thank you so much for what you're doing. (...the more we know for a program like yours the less damage we will have as possible...)
- Q: For sure. Thank you so much.
- A: Thank you.

**Ninth Resident: DRB13F37** 

- Q: Could you please tell me your full name?
- A: My name is DRB13F37.
- Q: Where were you born?
- A: In Boynton Beach, Florida.
- Q: And when were you born?
- A: November 25, 1979.
- Q: Where did you grow up?
- A: Here in Delray Beach, Florida.
- Q: Do you have brothers or sisters?
- A: Yes.
- Q: How many?
- A: Um...26.
- Q: 26 brothers and sisters?
- A: (giggles) Yes.
- Q: Where do you fit in that order? Do you have step brothers and sisters?
- A: Yes. My father has the majority.
- Q: And what are your favorite memories growing up?
- A: I don't have any.
- Q: No good favorite memories? Good times? Fun times? Nice people?...too many people?
- A: (laughs) Family reunions.
- Q: Family reunions. OK, where is your home now?
- A: Delray.
- Q: And do you have problems when it storms with water or dampness in your house or yard?"
- A: Um...no. Not at the current time.
- Q: And have you ever had a mold problem with your house?
- A: No.
- Q: Do you or anyone in your family have breathing or lung problems?
- A: No.
- Q: And have you ever had to evacuate because of storms?
- A: Um, yes.
- Q: How did you get the news that you needed to evacuate?
- A: Um...through my cell phone.
- Q: And then how long did you stay away from yosur home?
- A: Um...it was under code, so I had to move.
- Q: Are you interested in learning more about how to protect your family and your home from water, storms and dampness?
- A: No.

**Tenth Resident: DRB14M34** 

- Q: Could you please tell me your full name?
- A: DRB14M34.
- O: DRB14M34?
- A: DRB14M34.
- Q: Nice to meet you. Where were you born?
- A: Delray Beach, Florida.
- Q: And when were you born?
- A; March 19<sup>th</sup>...'82.
- Q: Where did you grow up?
- A: Delray Beach.
- Q: Right here. Do you have brothers or sisters?
- A: Yes.
- Q: How many?
- A: 4 brothers. Three sisters.
- Q: Where do you fall in the line up?
- A: I'm the baby on both sides.
- Q: What are your favorite memories growing up?
- A: Uh, Pompey Park.
- Q: Yeh...Did you play sports?
- A: Football. Baseball. Basketball.
- O: Yes!
- A: Yes.
- Q: OK, where is your home now?
- A: Still Delray Beach.
- Q: And do you have problems when it storms with water or dampness in the house or yard?"
- A: Not the house, but probably the yard flooding.
- Q: And how long does the water tend to stand after it rains?
- A: Um...I would say close to three hours. It depends how bad it rains.
- O: Like 3 hours?
- A: Yeh.
- Q: OK, and have you ever had a mold problem with your house?
- A: In the house? Yes.
- Q: And what did you do about it
- A: Um...get the bleach. Bleach kinda you know...
- Q: Uh huh...Do you or anyone in your family have breathing or lung problems?
- A: Um...my son do. He got asthma.
- Q: Is there anything about the weather that causes asthma episodes?
- A: Sometimes when it get real hot. Yeh.
- Q: Uh huh, and have you ever had to evacuate because of storms?
- A: One year. One year did about... about almost a week.

- Q: Almost a week. And how did you get the news that you needed to evacuate?
- A: UH...the phone and the news and the radio. So really all three.
- Q: All three. Yeh. OK, and are you interested in learning more about how to protect your family and your home from storms and water flooding?
- A: Not really 'cause I kinda know a little bit 'cause I've been through it a lot, so, like I'm really prepared.
- Q: Have you been through a lot in Delray?
- A: Yes.
- Q: Great. All right. Thanks so much.
- A: You're welcome.

**Eleventh Resident: DRB15F39** 

- Q: Could you please tell me your full name.
- A: DRB15F39
- A: Nice to meet you. Where were you born?
- A: Delray
- Q: And when were you born?
- A: On February 11, 1977.
- Q: Where did you grow up?
- A: In Delray
- Q: Do you have brothers or sisters?
- A: Yes. One sister and one brother.
- Q: Are you in the middle?
- A: No. I'm the oldest.
- Q: What are your favorite memories growing up?
- A: Um...going to the pool.
- Q: Going where?
- A: To the pool in the summertime.
- Q: Near 8<sup>th</sup> Street on the other side?
- A: Here.
- Q: Oh, here at Pompey Park. Oh. Nice.
- A: Yeh
- Q: OK, where is your home now?
- A: It's in Delray.
- Q: Do you have problems when it storms with water or dampness in the house or yard?"
- A: Yes
- Q: What kinds of problems do you have?
- A: Um... Because of the rain, the house underneath is kind of like eroded, and it causes water to come inside of the house when it rains.
- O: Does it leak into a particular room or is it...
- A: Yes. In the master bedroom.
- Q: OK, and have you ever had a mold problem with your house?
- A: Yes, we're just beginning to get one.
- O: And what are you doing about it?
- A: We're having it remodeled, so...
- Q: So, professionally...you're having it done.
- A: Yes.
- Q: OK, and do you or anyone in your family have breathing or lung problems?
- A: No.
- Q: And have you ever had to evacuate because of storms?
- A: No. Not yet.

- Q: Are you interested in learning more about how to protect your family and how to protect your home from storms and water flooding?
- A: Of course!
- Q: Well, thank you so much for your interview.
- A: Thank you.

**Twelfth Resident: DRB16F30** 

- Q: Could you please tell me your full name?
- **A: Um...** DRB16F30.
- Q: And where were you born?
- A: I was born in Ft. Lauderdale, Florida
- Q: And when were you born?
- A: 1986
- Q: Where did you grow up?
- A: I grew up in Ft. Lauderdale and now I'm residing in Delray.
- Q: Do you have brothers or sisters?
- A: Um...I have 2 brothers.
- Q: Are you older or younger?
- A: Middle.
- Q: And what are your favorite memories growing up?
- A: Uh...my favorite memories growing up was family trips.
- Q: Where is your home now?
- A: My home now...oh, the address? Oh...my home now is in Delray. I've been living here for about 6 months, um, and I'm enjoying the new community.
- Q: And do you have problems at your home when it storms with water or dampness in the house or yard during this rainy season?"
- A: Um...not that I can say. It hasn't been as rainy as it usually is in South Florida for me, so not, I guess, comparatively to things I've experienced.
- Q: And do you have any experience with mold in your home?
- A: I think one time growing up we had mold on the top of the bathroom, but my Dad sprayed it with bleach and it was gone.
- Q: And was that in Ft. Lauderdale?
- A: Ft. Lauderdale, yeh
- Q: And do you or anyone in your family have breathing or lung problems?
- A: Uh... I've had asthma. I have asthma. I've had asthma since childhood.
- Q: Do you think there's anything in particular with the weather that triggers it?
- A: Um...for sure pollen season. When I used to live in Tallahassee for school and then sometimes the changes in the weather: hot to cold very quickly can affect it.
- Q: OK, and have you ever had to evacuate because of storms?
- A: No.
- Q: Are you interested in learning more about safety, with storms and flooding and dampness?
- A: Yes. I actually have the flyer that has been very informative for me, actually.

Q: Well, great. Thank you so much.

A: Oh, OK. No problem.

Thirteenth Resident: DRB17F38 Transcribed by Janice T. Booher, MS

- Q: Please tell me your full name.
- A: DRB17F38
- Q: Nice to meet you. Where were you born?
- A: Bahamas
- Q: In the Bahamas. And when was that? When were you born?
- A: I was born in 19...the year? The year, right?
- O: Yes.
- A: OK. I was born in 1978.
- Q: Uh huh, and where did you grow up?
- A: In Orlando, Florida.
- Q: Uh huh...Do you have brothers or sisters?
- A: Yes.
- Q: How many?
- A: Well, on both sides I have 8.
- Q: Are you the oldest?
- A: No, I'm the youngest on both sides.
- Q: What are your favorite memories growing up?
- A: Um...getting the dreamers and doers award in fifth grade.
- Q: Oh! What island are you from?
- A: My parents are from the Bahamas and Haiti.
- Q: Where is your home now?
- A: In Delray.
- Q: Do you have problems when it storms with water or dampness in the house or yard?"
- A: Ves
- Q: You do, And have you ever had a mold problem in your house?
- A: Yes.
- Q: And what have you done about it?
- A: I pretty much use the bleach and the water and try to pat it.
- Q: And the water that's outside your house or yard. How long does it stay after a storm?
- A: Well, depending on how heavy the storm is. If the storm is not that heavy, within a day or two.
- Q: And do you or anyone in your family have breathing or lung problems?
- A No
- Q: Have you ever had to evacuate because of storms?
- A: No.
- Q: And are you interested in learning more about how to protect your family and your home from storms and flooding?
- A: Yes.
- Q: All right. Thank you so much.
- A: Thank you.

Fourteenth Resident: DRB18F51 Transcribed by Janice T. Booher, MS

- Q: Could you please tell me your full name?
- A: DRB18F51
- Q: Thank you, and where were you born?
- A: Uh...Hollywood, Florida
- Q: And when were you born?
- A: June 23, 1965
- Q: Where did you grow up?
- A: Hollywood, Florida
- Q: Do you have brothers or sisters?
- A: Yes. One sister, three brothers
- Q: Where do you fit in that line up? Were you the youngest or the oldest?
- A: I'm the oldest out of 5.
- Q: What are your favorite memories growing up?
- A: Oh, just little growing up...uh...doing all kinds of things. Some good things. Some bad things, and I did pay for the bad things. And it was good. Yeh.
- Q: OK. Where is your home now?
- A: My home now is in...here in Delray.
- Q: And do you have problems when it storms with water or dampness in the house or in the yard?"
- A: Yes.
- Q: And if there's a really big storm how long does it take for the water to go away?
- A: Anywhere from 3 to 5 days it start proceeding.
- Q: And have you ever had a mold problem with your house?
- A: No.
- Q: And do you or anyone in your family have breathing or lung problems?
- A: Yes.
- Q: What kind of breathing or lung problems?
- A: My grand daughter. She has asthma.
- Q: Is there anything you know of that triggers an asthma episode.
- A: Yes. The dust, pets, and you know, the weather itself. Yeh.
- Q: Is it mostly cold and heat or is there dampness that's associated with episodes?
- A: Cold
- Q: OK, have you ever had to evacuate because of storms?
- A: Yes.
- O: Where did you...how did you receive notice about evacuation?
- A: Well..started with the city commission and then, uh, law enforcement.
- Q: Did you hear over the television?
- A: television

Q: Are you interested in learning more about how to protect your family during storms and from water and dampness?

A: Yes

Q: Thank you so much

A: You're welcome

Fifteenth Resident: DRB19M??

Transcribed by Janice T. Booher, MS

(There is too much background noise on the recording. Most of it is indecipherable.)

Q: Where did you grow up?

A: Delray Beach

Q: Do you have problems when it storms with water or damp in the house or yard?"

A: Yes

Q: Have you ever had to evacuate because of storms?

A: No

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# APPENDIX C

Sea Level Rise Risk Perception Survey
Developed by Dr. Keren Bolter
Modified for *Rising Together* By Janice T. Booher, MS

# Sea Level Rise Risk Perception Survey

Thank you for your interest in taking this brief survey. It may take about 5 minutes to answer the questions below. Your participation in this survey is completely voluntary and your responses will remain confidential. The purpose of the survey is to measure perceived risk to sea level rise in Palm Beach County, FL. Sea level rise is an increase in sea surface height relative to land. A potential benefit that you may receive from participation is consideration of how you evaluate your risk to sea level rise. The results will give Palm Beach County educators information about demographics and locations where risk is underestimated or overestimated. If you have questions about the study, please contact: Dr. Keren Bolter at kbolter@fau.edu. By completing the survey, you give consent to participate in this study.

# Section A-Background Information

1)	What is	your zi	p code	

- 2) What city do you live in? \_\_\_\_\_
- 3) What is the first line of your address?

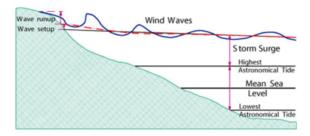
\_\_\_\_\_

- 4) How would you rate your existing knowledge about sea level rise?
  - a. Not at all familiar
  - b. Somewhat familiar
  - c. Very familiar
  - d. Extremely familiar

# Section B-Land Elevation, Water Levels, and Storms

Sea level rise is an increase in height of the sea's surface relative to land.

Mean Sea Level (MSL) is the average surface height of the ocean, about halfway between low and high tide. Land elevation is measured as a height above MSL.



Developed by Dr. Keren Bolter

1)	level? (If y		i estimate your h		above mean sea or that seems		
2)	Do you th today?* a. Yes b. No	ink that sea	level rise is occu	urring in Pal	m Beach County		
3)	Where you live, how many feet deep into the ground do you think that you would have to dig before you got to water? (either freshwater or saltwater)						
ection xtreme	C – Focus Weather	ing on Risks	s Associated w	ith Sea Lev	el Rise and		
What is your overall level of concern with the full level rise for Palm Beach County?					re impacts of sea		
	None 1	Low 2	Medium 3	High 4	Very High 5		
What is your overall level of concern with the future in extreme weather for Palm Beach County?				re impacts of			
	None 1	Low 2	Medium 3	High 4	Very High 5		
3)		oose your stater Quality	rongest concerr	n for Palm B	each County:		
	b. Erd	osion					
	c. Ins	urance					
	d. Pro	perty Value					
	e. Ex	treme Weath	er				
	f. Oth	ner:					
	f. Oth	ner:		_			

Developed by Dr. Keren Bolter

Please explain your ch	nosen d	concern (optional)
		ave you experienced in your aclude high tide flooding, flooding with no
rain, or saltwater in ret		
		, , , , , , , , , , , , , , , , , , , ,
		r household experienced any of the
following at your curr	rent ad	idress?
Mald	Vaa	No
Mold	Yes	No
Asthma	Yes	No
Water Contamination	Yes	No

Developed by Dr. Keren Bolter

# Encuesta de Percepción del Riesgo de Subida del Nivel del Mar

Gracias por su interés y participación en este estudio. Llevará aproximadamente 5 minutos contestar las preguntas abajo. Su participación en este estudio es completamente voluntaria y sus respuestas permanecerán confidenciales. El propósito de este estudio es establecer y medir el percibido riesgo del aumento del nivel del mar en Palm Beach County, FL. El levantamiento del nivel del mar se debe a un incremento de la superficie del mar en relación a la tierra. Uno de los potenciales beneficios de su participación es la consideración de como usted evalúa los riesgos del cambio de los niveles del mar. El resultado de estos estudios darán a los educadores de Palm Beach County la información necesaria demográfica y de localización de los riesgos adonde hubo una sub/y o/sobre-estimación. Si usted tiene preguntas acerca de este estudio, por favor contacte a: Keren Bolter kbolter@fau.edu. Se entiende que al responder a estas preguntas Ud. está dando su consentimiento para participar en este estudio.

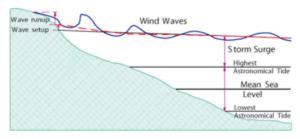
# Sección A - Información General

1) Escriba su Codigo Postal
2) Ciudad de Residencia.
3) Calle de su Residencia Permanente.
1) Como clasificaria su conocimiento acerca del incremento del nivel del ma

- no ciasincaria su conocimiento acerca dei incremento dei nivei dei mar
  - a) Completamente desfamiliarizado/a
  - b) Un poco de conocimiento
  - c) Muy familiarizado/a
  - d) Extremadamente familiarizado/a

# Sección B - Elevación de la Tierra, Niveles de Agua, y Tormentas El aumento del nivel del mar es el incremento de la altura del mar con respecto a la tierra.

Mean Sea Level (MSL) is the average surface height of the ocean, about halfway between low and high tide. Land elevation is measured as a height above MSL.



1) Cuantos pies estima usted que su casa está por arriba del promedio del nivel del mar?

Traducción par Dr. Ana Puszkin-Chevlin y Carlos Mejia

Redactor: Dr. John Hardman

# R

EACT Tool Kit						
2) Usted piensa que en este momento hay un aumento del nivel del mar er Palm Beach County.  a) Si  b) No						
3) En el área donde usted vive, cuantos pies de tierra tiene que excavar para encontrar agua (ya sea agua potable o agua salada)?						
Sección C- Concentrándose en los peligros asociados con el aumento del nivel del mar y climas extremos						
<ol> <li>En general, describa su grado de preocupación con respecto a los futuros impactos por los incrementos del nivel del mar en Palm Beach County.</li> </ol>						
Ninguno Bajo Mediano Alto Muy Alto 1 2 3 4 5						
2) En general, describa el grado de preocupación con respecto a los futuros impactos y los cambios de climas extremos en Palm Beach County?						
Ninguno Bajo Mediano Alto Muy Alto 1 2 3 4 5						
<ul> <li>3) Por favor elija su mayor preocupación para Palm Beach County.</li> <li>a) Calidad de agua.</li> <li>b) Erosión.</li> <li>c) Seguros de propiedad</li> <li>d) Valor de la Propiedad.</li> <li>e) Cambios de clima extremos.</li> <li>f) Otros</li> </ul>						
4) Por favor explique las razones de su preocupación?						
rducción par Dr. Ana Puszkin-Chevlin y Carlos Mejia Redactor: Dr. John Hardman						

<ul> <li>Qué impactos relacionados con experimentado en tu vecindario inundaciones de marea alta, inu salada en estanques de retencio</li> </ul>	? (Estos puede ndaciones sin	en incluir
	,	
6) ¿Usted o alguien en su hog lo siguiente en su dirección	•	nta cualquie
,	•	nta cualquie No
•	actual?	·

Traducción par Dr. Ana Puszkin-Chevlin y Carlos Mejia

Redactor: Dr. John Hardman

# Kisa ou panse sou nivo lanme kap monte a?

Mesi pou interese sou yon anket nap fe. Li tout kout. Li ka pran senk minit pou reponn ti keksyon yo ki anba. Repons ou konte epi li konfidansyel. Rezon pou anket sa a se pou mesyre kisa ou panse sou nivo lanme kap monte nan Palm Beach Kounte.

Nivo lanme vle di ogmantasyion nan nivo lanme avek wote l' vizavi ki kantite te lap kouvri.

Benefis wap jwenn nan anket sa a se konsiderasyon nan kijan ou evalue risk ou pou we kijan nivo lanme a ap monte. Resilta a ap bay moun nan Palm Beach jan pou yo konprann koumen pou yo fe pwop evaluasyon pa yo.

Si ou gen keksyon sou etud sa a, tanpri kontakte Dr. Keren Bolter sou email sa a: <a href="mailto:kbolter@fau.edu">kbolter@fau.edu</a>. Lew patisipe nan anket sa a ou bay pemisyon pou patisipe nan etid sa a.

# Posyn A se enfomasyn pesonel ou.

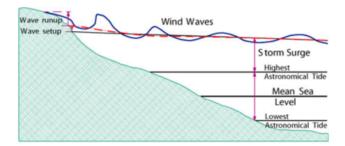
1)	Kisa ki zip code ou?
2)	Nan ki site ou rete?
3)	Kisa ki premye lign nan address ou?
4)	Kouman ou kalifiye nivo konesans ou sou nivo lanme?

- a) Ayen di tou
- b) Yon ti kras
- c) Mwen familye ave l'
- d) Mwen tre familye ave l'

Tradiksyon: David Collesano

# Posyon B - Elevasyon te avek nivo dlo avek tampet

Mean Sea Level (MSL) is the average surface height of the ocean, about halfway between low and high tide. Land elevation is measured as a height above MSL.



Le nivo lanme monte nan wote, li vin pi wo pase te a.

- 1) Konbyen pye ou sipoze kay ou ye anwo nivo lanme le lanme a normal?
- 2) Eske w kwe nivo lanme kap monte a ap fet nan Palm Beach jodi a?
  - a) Wi
  - b) Non
- 3) Kote w' rete a konbyen pye ou sipoze ou kapab fouye yon trou avan ou jwenn dlo?

# **Posyon C**

# Focus nan dange asosye avek nivo lanme kap monte epi le tamperati a grave

- 1) Kisa ki pi preokipe w sou fiti konsekans nan nivo lanme kap monte nan Palm Beach?
  - a) Ayen b) Y
- b) Yon ti kras
- c) Plis o mwen
- d)Wo
- e)Tre wo
- 2) Kisa ki pi preokipe w sou fiti konsekans nan dange tampet nan Palm Beach?
  - a) Ayen
- b) Yon ti kras
- c) Plis o mwen
- d)Wo
- e)Tre wo

Develop pa Dr. Keren Bolter

3)Tanpri shwazi sa ki p	i fo, ki	pi konser	new pou Palm	Beach.	
a) Kalite dlo					
b) Ewozion					
c) Asirans					
d) Vale pwopriet	e				
e) Dange tampe	ati				
f) Lot bagay					
4) Tanpri, splike kisa w	' shwaz	zi ki pi kor	nsernew"		
5) Ki domaj dlo des	annn n	an vwazir	naj ou fe?		
6) Eske ou menm o	ubyen	moun lak	ay ou fe exper	ians kek nan bagay sa yo:	
Moul	wi	non			
Opresyon	wi	non			
Kontaminasyon dlo	wi	non.			
Develop pa Dr. Keren Bolter				Tradiksyon: David Colle	esano

# APPENDIX D

Health and Climate Change Pamphlet (two-sided)

Developed by Project Director Phase I Dr. Ana Puszkin-Chevlin

# Rising Together: Temperature, Water, Health and Strength

2016

Developed by Dr. Ana Puszkin-Chevlin

Green Sanctuary Committee of ULIFBR

EPA Grant #EQ-00D35415-0

# **Boca Raton & Delray Beach Contacts**

Boca Raton Fire Rescue 561 982-4000
Boca Raton Police Department 561 338-1234
Delray Police Department 561 243-7800
Delray Beach Fire Rescue 561 243-7400
Delray Beach Hurricane Information Hotline 561 243-7840
Boca Raton Citizen Emergency Info. Ctr. 561 982-4900
Dial 211 – For referrals to all types of Human Services



Sign Up for telephone alerts https://public.coderedweb.com

# Radio Stations with Emergency Information

Delray Beach Emergency Radio 1620 AM
Homeland Security Emergency Radio Stations
City of Boca Raton AM 1650 kHz
City of Boynton Beach – AM 1670 kHz
City of Delray Beach – AM 1700 kHZ

NOAA Weather Radio – KHB34 162.550MHz Coverage Miami/Dade, Broward, South Palm Beach County NOAA Weather Radio KEC50 162.475 MHz

# **Evacuation Zones and Routes**

# Palm Beach County Contacts

PBC Emergency Management\* (561) 712-6400 Get PBC DART free app with information to prepare for storm emergencies.

- Pre-register for emergency needs shelter at 561 712-6400
- Pre-register for Emergency Disabled Transportation Assistance at and Palm Tran Connection (561) 649-9848

PBC Emergency Mgmt. Flood Mitigation Assistance (561) 712-6325

PBC Water Utilities Emergency (561) 740-4600 Option 1 Report Disease to PBC Dept. of Health (561) 671-4184

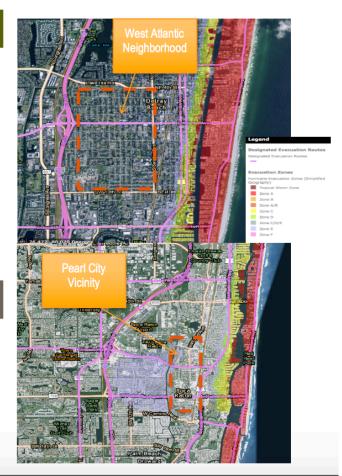
# Report Mosquito Infestations to

Mosquito Control Division (561) 967-6480 Air Spray HOTLINE (561) 641-8775 FPL Florida Power & Light (800) 226-3545 or (561) 994-8227

# State of Florida Contacts

Florida Emergency Information Line (800) 342 3557 Florida Department of Emergency Management (850) 413-9969 Hearing Impaired (800) 226-4329 Florida Dept. of Public Health –water testing (850) 245-4240

Report ALGAE Blooms to Dept. Environmental Protection, Bureau of Labs (850) 245-8159 or Dept. of Health, Aquatic Toxins Program (850) 245-4250 (850) 245-4250



# Watch for Heat Index and Air Quality Alerts

- Information about the heat index can be found at www.nws.noaa.gov/om/heat/heat-illness.shtml
- Get air quality reports from www.airnow.gov, or call 561 837-5092 to hear report.
- Heat Index over 103°, be cautious! Vulnerable populations are at risk with a the heat index of 91°
- Remain indoors in air-conditioned places during heat waves and poor air quality days.
- If outdoors, avoid strenuous activity, stay hydrated.
- If you shelter in place, stock 1 gallon of water, per person, per day, 3-day supply, plus food.

# The permitted (F) | Str. | March | Ma

# **Be Safe During Storms and Floods**

- Keep storm drains, canals and gutters clear of debris to prevent floods and water damage.
- Stay Informed. Create a plan with your family and an emergency kit prepared, before an emergency.
- Communicate with family, friends and neighbors about your emergency plan.
- If you shelter in place, stock 1 gallon of water per person, per day; a 4-5 day supply, plus food.
- STAY OUT of floodwaters. 6" of moving water can sweep you off your feet. Water depth is difficult to gauge and hazards could be submerged.



# **Assume Standing Floodwater is Contaminated**

- Floodwaters are often contaminated with fuel, chemicals, sewage and bacteria.
- · Avoid ALL contact with floodwaters, and avoid inhaling evaporating fumes.
- Clean all hard surfaces with a solution of 1.5 cup bleach to 1 gallon of water.
- · Wear rubber boots and gloves and a mask during cleanup.
- Do not expose open wounds to flood waters.

# **Heed the Boil Water Alert Guidelines**

- Don't drink, make ice, prepare food or brush teeth with tap water. Use bottled water if possible.
- . Don't wash dishes, glasses, or cutlery in tap water. Use boiled water.
- Don't wash hands, expose open wounds or bathe babies in tap water.
- Bringing water to a roiling boil for a minimum of 1 minute, or disinfect with 8 drops of unscented bleach per
- After a boil water alert is finished, run the water from all faucets for 5 minutes and change filters of water and ice systems.

# BOIL-WATER ADVISORY in EFFECT At of 3:50pm, Saturday Sept 27th

# **Minimize Mold Growth**

- Molds are allergens; some produce toxins or release volatile compounds from materials.
- Active mold is black, green or pink. Inactive mold is powdery and often white, but will reactivate with moisture.
- To prevent mold, dry things as quickly as possible.
- Throw out items that have been wet for more than 48 hours. Freezing deactivates mold.
- Homeowners can clean moldy areas less than 10 square feet with a solution of 1 cup bleach per 1 gallon of water.
   Wear gloves and a mask. Professionals should address larger mold areas and clean air-conditioning systems.



# **Limit Exposure to Mosquitos and Algae**

- Eliminate mosquito-breeding areas. Drain items that collect water outdoors including flowerpots, birdbaths, buckets, drums, child pools, etc.
- . Minimize mosquito bites. Wear long sleeves, long pants and socks outdoors, especial around dawn and dusk...
- Use insect repellent with DEET or oil of lemon eucalyptus. Limit DEET exposure in young children by washing it off before bed.
- Report algae blooms to Florida DEP, Bureau of Labs (850) 245-8159. Algae can be toxic and must be tested.





# Elevándonos Todos Juntos: Temperatura, Agua, Salud y Fuerza

2016

Desarrollado por Dr. Ana Puszkin-Chevlin Traductor Dr. John Hardman

Green Sanctuary Committee of UUFBR

EPA Grant # EQ-00D35415-0

# Contactos Boca Raton & Delray Beach

Estación de Bomberos Boca Raton (561) 982-4000 Departmento de Policía Boca Raton (561) 338-1234 Departmento de Policía Delray (561) 243-7800 Estación de Bomberos Delray Beach (561) 243-7400 Tel. Emergencias (Huracanes) Delray Beach (561) 243-7840 Centro Informativo Emergencias Boca Raton (561) 982-4900 Marque 211 – para todo tipo de Servicios Humanos



Registrese para alertas telefonicas https://public.coderedweb.com

# Contactos en Palm Beach County

Gestión de Emergencias (561) 712-6400

Obtenga el app gratuito PBC DART con información sobre como prepararse para emergencias.

- Pre-registro para refugio en caso de emergencias (561) 712-6400
- Pre-registro para traslados de emergencia para discapacitados y conexión con Palm Tran (561) 649-

Gestión de Emergencias y Asistencia por Inundaciones en PBC (561) 712-6325

Emergencias en Servicios de Agua en PBC (561) 740-4600

Reportar Enfermedades al Depto. de Salud de PBC (561) 671-

Reportar Infestaciones de Mosquitos a la División de Control de Mosquitos (561) 967-6480

Linea' de Emergencia pulverización aerea (561) 641-8775 FPL Florida Power & Light (800) 226-3545 o (561) 994-8227

# Contactos en Estado de la Florida

Linea de Información de Emergencias Florida (800) 342 3557 Depto. de Gestión de Emergencias Florida (850) 413-9969 Discapacitados Auditivos y Sordos (800) 226-4329 Depto. de Salud Publica de la Florida - Análisis de agua (850) 245-4240

Informe de Infestación de Algas al Depto. de Protección Medioambiental, Division de Laboratorios (850) 245-8159 ó Depto. de Salud, Programa de Aguas Tóxicas (850) 245-4250 (850) 245-4250

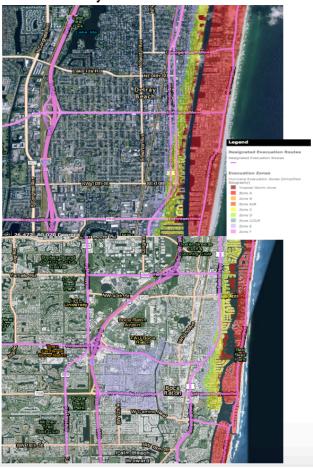
# Estaciones de Radio con Información de Emergencias

Radio de Emergencias Delray Beach 1620 AM

Radios de Emergencia, Depto. de Homeland Security Ciudad de Boca Raton - AM 1650 kHz Ciudad de Boynton Beach - AM 1670 kHz Ciudad de Delray Beach - AM 1700 kHZ

NOAA Radio Meteorológico - KHB34 162.550 MHz Cobertura: Miami/Dade, Broward, South Palm Beach County NOAA Radio Meteorológico - KEC50 162.475 MHz Cobertura: Norte de Broward, Palm Beach y Martin County

# Zonas y Rutas de Evacuación



# Alertas sobre el Indice de Calor y Calidad del Aire

- Información sobre el índice de calor: www.nws.noaa.gov/om/heat/heat-illness.shtml
- Información sobre la calidad del aire de www.airnow.gov, o llamar a (561) 837-5092
- Tenga cuidado cuando el índice de calor supera los 103°. Las poblaciones vulnerables corren riesgo cuando el índice de calor llega 91°
- Permanecer bajo techo en ambientes con aire acondicionado durante olas de calor y días de pobre calidad del aire.
- Evitar la actividad extenuante estando al aire libre y mantenerse hidratado.

# La Seguridad durante Tormentas e Inundaciones

- Mantener drenajes, canales y canalones libres de escombros para prevenir da
   ño por agua de inundación.
- Manténgase informado. Tenga preparado un plan y equipo de emergencia.
- · Comuníquese con familiares, amistades, y vecinos.
- Si permanece en su hogar, mantenga una reserva de 1 galón de agua por persona por día y para 4 – 5 días, y una reserva de alimentos no perecederos.

# Asuma que Aguas de Inundación Estancadas estan Contaminadas

- Las aguas de inundación a menudo están contaminadas con combustibles, productos químicos, residuos cloacales, y bacterias.
- Evite todo tipo de contacto con aguas de inundación, y evite inhalar gases en estado de evaporación.
- Limpie superficies duras con una solución de 1,5 tazas de lavandina en un galón de agua.



# Respete las Alertas Oficiales sobre Hervir el Agua

- No beber, hacer hielo, preparar alimentos, ni cepillarse los dientes con agua corriente. Use agua embotetallada si es posible.
- No lavar platos, vasos, o cubiertos con agua corriente. Use agua hervida.
- · No lavarse las manos, exponer heridas abiertas, ni bañar bebés con agua corriente.
- Hervir el agua durante un mínimo de 1 minuto, o desinfectarla con 8 gotas de lavandina por cada galón de agua, y aguardar 20 minutos antes de usar.
- Dejar correr el agua por la tubería durante 5 minutos una vez levantado el alerta de hervir el agua, y cambiar los filtros de agua y sistemas de hielo que se hayan contaminado.



# Controle el Desarrollo del Moho

- El moho es alergénico, algunos mohos producen toxinas y pueden liberar componentes volátiles de materiales de construccion.
- El moho activo es de color negro, verde o rosado. El moho inerte tiene aspecto de polvo y a menudo es blanco, pero se reactiva cuando toma contacto con la humedad.
- Para evitar el desarrollo del moho, seque objetos inmediatamente después de usarlos.



# Limite la Exposición a Mosquitos y Algas

- Eliminar áreas donde pueden reproducirse los mosquitos. Vacíe atefactos que recolectan agua afuera incluídas macetas, bebederos de aves, cubos, tambores, piscinas de niños, etc.
- Minimizar las picaduras de mosquitos. Use mangas largas, pantalones largos y medias cuando está afuera, especialmente al alba y al atardecer.
- Usar repelente para insectos con DEET o aceite de limón y eucalipto. Limitar la exposición al DEET de niños pequeños bañándolos antes de acostarlos.



# ReACT Tool Kit

# Monte Ansanm: Tanperati, Dlo, Sante ak Fòs

Devlope pa Dr. Ana Puszkin-Chevlin

Green Sanctuary Committee of UUFBR

EPA Grant #EQ-00D35415-0

adiksyon Koutwazi nan Toussaint L'Ouverture High School for Arts and Social Justic

2016

# Kontak pou Boca Raton ak Delray Beach

Boca Raton Ponpye 561 982-4000
Boca Raton Depatman Polis 561 338-1234
Delray Depatman Polis 561 243-7800
Delray Beach Ponpye 561 243-7400
Delray Liy enfòmasyon Dirèk pou Siklonn 561 243-7840
Boca Raton Sant Enfòmasyon I

Konpoze 211 - Pou referans ak tout sèvis pou moun



Siyen pou alèt telefon sou https://public.coderedweb.com

# Kontak Konte Palm Beach

PBC Jesyon Ijans\* (561) 712-6400 Resevwa PBC DART app gratis avèk enfòmasyon pou prepare pou ijans tanpèt:

- Pou anrejistre davans pou abri nan 561 712-6400
- Pou anrejistre davans pou transpòtasyon ijans pou moun ki andikape, rele Palm Tran Connection (561) 649-9848

PBC Jesyon Ijans pou Kontwòl Inondasyon Asistans (561) 712-6325

PBC Sèvis Piblik pou Dlo (561) 740-4600 Opsyon 1 Rapote maladi nan PBC Depatman Sante (561) 671-4184

# Rapòte Enfeksyon Marengwen nan

Divizyon Kontwòl pou Marengwen (561) 967-6480 Air Spray Liy Dirèk (561) 641-8775 FPL Florida Power & Light (800) 226-3545 oswa (561) 994-8227

# Kontak Pou Eta Florid

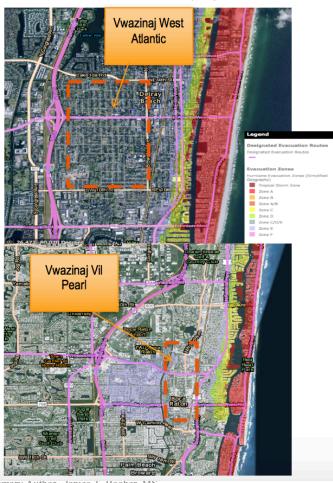
Liy Enfomasyon ijans pou Florid (800) 342 3557 Depatmant Jesyon Ijans pou Eta Florid (850) 413-9969 Moun ki mal pou tande (800) 226-4329 Depatman Sante Eta Florid - Pou teste dio (850) 245-4240

Rapòte alg kap fleri nan: Depatman pou Pwoteksyon Anvironman, Biwo Laboratwa (850) 245-8159 oswa Depatman Sante, Pwogwam Dlo Toksik (850) 245-4250 (850) 245-4250

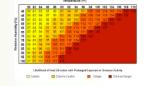
# Stasyon Radyo avèk Enfomasyon Ijans

Delray Beach Radyo Ijans 1620 AM
Homeland Security Stasyon Radyo Ijans
Vil Boca Raton AM 1650 kHz
Vil Boynton Beach – AM 1670 kHz
Vil Delray Beach – AM 1700 kHZ
NOAA Radyo pou Move Tan – KHB34 162.550MHz
Kouvri tout Miami/Dade, Broward, Sid konte Palm Beach
NOAA Radyo pou Move Tan KEC50 162.475 MHz
Kouvri tout Nò Broward, Konte Palm Beach ak Martin

# Wout ak Zònn Evakyasyon



- Nou ka jwenn enfômasyon pou endèks chalè sou www.nws.noaa.gov/om/heat/heat-illness.shtml
- Resevwa rapò sou kalite lè sou www.airmow.gov, oswa rele 561 837-5092 pou ka tande rapò-a.
- Endèks chalè ki depase 103°, Fè Atansyon! Popilasyon moun ki vilnerab yo gen gwo risk avèk yon endèks chalè ki rive 91°
- Rete andedan kote ki klimatize lè gen vag chalè epi jou kalite lè pa bon
- Si ou deyo, evite aktivite ki difisil epi bwa anpil likid pou ka byen idrate.
- Si ou rete yon sèl plas, mete nan depo yon galon dlo pou chak jou pou chak moun, ase resous pou twa jou ak manje.



# Rete an Sekirite Le gen Inondasyon

- Kenbe odtoki tanpèt, kanal ak goutyè klè san debri pou ka anpeche inondasyon ak domaj dlo
- Rete enfòme! Kreye yon plan ak fanmi ou e genyen yon bwat pou ijans, anvan emejensi a rive.
- Kominike ap fanmi ou, zanmi ou vwazen ou sou plan emejensi ou la.
- Si ou rete yon sèl plas, mete nan depo yon galon dlo pou chak jou pou chak moun ak manje.
- RETE LWEN dlo inondasyon. 6 pye dlo kap deplase ka koz ou pèdi pye. Li trè difisil pou konnen ki
  pwofondè dlo epi ka gen materyèl danje anba dlo a san ou pa konnen.

# Sipoze tout dlo kanpe, se dlo ki kontamine

- Dlo inondsyon souvan kontamine ak gaz, pwodwi chimik, dechè toksik ak bakteria.
- Evite tout kontak ak dlo inondasyon, epi evite vale vapè kap soti nan dlo sa yo.
- Netoye tout sifas ak solisyon 1.5 gode klorox pou chak galon dlo.
- Mete bòt kawoutchou ak gan epi yon mask lè ou ap fè netwoyaj.
- · Pa ekspoze okenn blese nan dlo inondasyon. Voye jete tout manje ki touche ak dlo inondasyon. Dezenfekte manje nan manmit.

# Obeyi ak Gid Avètisman pou Bouyi Dlo

- Pa bwè, fè glas, prepare manie oswa bwose dan ak dlo tivo. Itilize dlo nan boutèv si posib.
- Pa lave veso, vèsè tankou kiyè, kouto ak fouchèt. Itilize dlo ki bouyi.
- Pa lave men, ekspoze blesi, oswa benyen timoun nan dlo tiyo.
- Mete dlo a bouyi pou pi piti 1 minit, oswa dezenfekse li ak 8 gout klorox ki pa gen sant pou chak galon dlo.
- Apre yon avètisman pou bouyi dlo fini, ouvri tout fosèt ki nan kay ou e kite dlo a koule pou 5 minit epi chanje filtè dlo ou yo.

# **Diminye Limon kap Grandi**

- Limon se alèrjen ke yo ye. Se toksen kèk pwodi ki melanje ansanm oswa pwodi konpoze kek materyel.
- Limon ki aktif yo tou nwa, vèt, oswa roz. Sa ki pa aktif yo tankou poud, e yo kèkfwa blanch, men lè yo jween imidite, yo aktive ankò.
- Pou evite limon, seche tout bagay byen rapid.
- Jete tout bagay ki mouye pou plis pase 48 èd tan. Frizè ka deaktive limon.
- Moun ki gen kay ka netwaye kote ki gen limon ki mwen ke 10 pye kare ak solisyon 1 gode klorox pou yon galon dlo. Mete gan ak mask . Selman pwofesyonel sipoze netwaye kote ki pi gran

# Limite Ekspozisyon ak Marengyen ak Alg

- Elimine zon kote marengyen ka repwodwi. Vite tout atik ki ka kenbe dlo tankou po flè, kote zwazo benyen, bokit, tanbou, ak pisine timoun. ect.
- Diminye kout dan marengyen. mete bagay manch long, pantalon long ak chosèt lè nou deyò espesyalman lè li pral fè nwa.
- Itilize pwodi pou repouse moustik avèk DEET oswa lwil sitron eucalypsus. Evite kite DEET sou timoun, lave I sou yo anvan yo al kouche.





# APPENDIX E

Oral History Protocol Developed by Dr. Sandra Norman

#### Interviewing the community

Sound check your phone or the iPad before you begin to make sure the sound is picking up. Stick with audio if you are working alone. If you have a partner, one can do video and the other can ask the questions.

The questioner: Begin by introducing yourself and thanking the other for agreeing to participate.

"Please tell me your full name"

"Where were you born?"

"When were you born?"

"Where did you grow up?"

"Do you have brothers or sisters?"

What are your favorite memories growing up?"

#### Then to the meat of the interview

"Where is your home?"

"Do you have problems when it storms with water or damp in the house or yard?"

"Have you ever had a mold problem with your house?"

"Do you or anyone in your family have breathing or lung problems?"

"Have you ever had to evacuate because of storms?"

"Are you interested in learning more about how to protect your family and your home from water, storm and damp issues?" If yes, "we have a wonderful sheet here that tells you about how to deal with storms, water, mold, etc." Please take it and put it someplace where you can remember to use it if needed"

"Thank you so much for agreeing to be interviewed"

Make sure you listen to the interview as you go along. Don't be in a rush to ask the next question. You just might miss something interesting or important if you don't listen.

Make eye contact with your interviewee. Smile or nod, but don't interrupt.

When you are finished make sure you thank them for their participation.

#### Entrevista a la Comunidad

Antes de iniciar la entrevista asegurarse que el sonido (micrófono?) de su teléfono o iPad esta funcionando. Si está trabajando solo, use el sonido (micrófono?). Si está trabajando con otra persona, uno de Uds. puede filmar el vídeo mientras la otra hace las preguntas.

Entrevistador: Empiece por presentarse y agradecer su participación.

"Por favor, dígame su nombre completo.
Donde nació?
Cuál es su fecha de nacimiento?
Donde creció o se crió?
Tiene hermanos?
Cuales son los recuerdos favoritos de su infancia?

Entonces al meollo de la entrevista :

Donde está su hogar?

Cuando hay tormentas tiene problemas con agua o humedad en su casa o jardín?

Ha tenido problemas con moho en su casa?

Tiene usted o alguien de su familia problemas en los pulmones o con la respiración?

Ha tenido que evacuar su casa por causa de una tormenta? Está usted interesado en aprender cómo proteger a su familia y su casa de los estragos de tormentas, agua y humedad?

Si contesta que si, ofrezca la hoja informativa diciéndole que se trata de un folleto con información sobre cómo prepararse y responder en caso de tormentas, agua, moho, etc.

Por favor, tome el folloet y póongalo en un lugar que recuerde si la necesita. Muchas gracias por concedernos la entrevista."

Escuchar bien sobre la marcha de la entrevista. No se apure en hacer la próxima pregunta. Podría perder algo interesante si no escucha. Haga contacto visual con la persona. Sonría y/o asienta con la cabeza pero no interrumpa. Cuando termine, agradecerle de nuevo su participación.

Desarrollado por Dr. Sandra Norman

Traducción: Seyril Siegel

Redactor: Dr. John Hardman

#### Interview kominote a

Tcheke son telefon ou avan ou tande son an. Rete avek audio a si wap travay pou kont ou. Rete avek telefon si ou gen yon kamarad. Youn kapab rakorde video a e lot moun nan kapab mande keksyon yo. Koumanse avek presante tet nou. Di lot moun yo mesi pou dako pou partisipe.

Tanpri, di mwen ki non ou.

Kibo ou te fet?

Kile ou te fet?

Kibo ou te grandi?

Eske ou genven fre avek se?

Ki memwa ou genyen le ou tap grandi

Kibo lakay ou ye?

Eske ou gen pwoblem yo kan dlo desann lakay la oubyen tan mouye o lakay la o nan lakou ou?

Eskew nan pase te gen pwoblem avek moul lakay ou o lakay voisn ou?

Eskew menm o lot moun nan kay ou gen pwoblem respire o pwoblem poumon?

Eskew jan gen pou soti lakay ou paske siklon?

Eskew interese pou pwotege tet ou avek fanmi w kont dlo, tampet avek lot pwoblem dlo? Si wi nou genyen yon papiye isit la ki kapab montrew kisa pou fe avek pwoblem dlo, siklon o moul. Tanpri, pranl' e metel' nan yon plas kote ou kapab jwenn ni ninpot kile ou bezwen ni.

Mesi anpil pou kolaborasyon nan pwoje sa a.

Develop pa Dr. Sandra Norman

Tradiksyon: David Casellano

# APPENDIX F

Report Algae Blooms Developed by Dr. Ana Puszkin-Chevlin

Resilience Adaptation Community Tool Kit

# Report Algae Blooms

What is a Toxic Algae Bloom? Algae are simple plant-like organisms that grow in marine, estuarine, fresh water lakes, rivers, canal systems and even pools. Water with an oversupply of nutrients, such as fertilizer, which are warm and slow moving encourage an overgrowth of algae, called an algal bloom. (Picture 1) Algae can be as a green, red or yellowish brown scum that floats on the surface of the water.

Most algae is not harmful, but some "blue-green" algae, and algae that produce "red tide" make harmful toxins (picture 2). Algae scum will stop sunlight from reaching plant life below, killing it and the marine life that depends on it. The dead material on the bottom feed more algae and bacteria growth.

#### How is climate change related to algae blooms?

Heavy rain falls flush fertilizers from lawns and fields into the retention ponds and canals. This, along with warmer water temperatures create favorable conditions for algae blooms. Conversely, during droughts, lower water levels allow ponds and canals to get warmer and move less, creating favorable conditions for algae.

What residents need to know. It's not possible to distinguish between toxic and non-toxic algae by looking at or smelling the water. Report algae blooms to local or state authorities so the water can be tested.

- Don't swim or wade in water with algae and keep children and pets away from algae waters.
- Do not fish or eat shell fish from contaminated areas. Toxic algae can cause neurological liver and kidney problems in eaten.
- The algae toxins can be aerosolized by waves and wind and inhaled by people living around the ponds and streams. It will aggravate respiratory illnesses like asthma.

The bacterial concentration in algal water can poses a risk to humans and animals.





#### **Health Impacts**

Sore throat, coughing Difficulty breathing, wheezing Skin rashes Headaches Vomiting/diarrhea Tingling in fingers and toes Liver and kidney failure

## Who is at high risk?

- Children and pets that come it contact water and ingest it accidentally.
- Fisherman and people that catch or eat contaminated fish from toxic algae water.
- People with asthma or respiratory illness that inhale toxins that get into the air.

Report Algae Blooms to
Department of Environmental Protection
Bureau of Labs, Biology Section in Tallahassee
(850)245-8159 http://www.dep.state.fl.us/labs/
or the Department of Health Aquatic Toxins
Program (850) 245-4250
phtoxicology@FLHealth.gov

Key websites

http://www.epa.gov/nutrientpollution/harmful-algal-blooms http://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/algalblooms.

Developed by Dr. Ana Puszkin-Chevlin

# APPENDIX G

Asthma Developed by Dr. Debra Weiss-Randall

# Asthma

#### How does climate change impact asthma?

Climate change is creating warmer temperatures and more frequent heat waves, which, in turn, lead to increases in heat stress, respiratory illnesses, and heat-related deaths. Individuals with asthma are at risk of worsened symptoms and asthma attacks.<sup>1</sup>

#### Climate Change Increases Air Pollution

Rising temperatures increase the concentration of ground-level ozone, which pollutes the air. When ozone remains in the upper atmosphere (the stratosphere), it shields us from ultraviolet radiation. However, at ground level, ozone creates smog, which can cause breathing problems by damaging lung tissue, reducing lung function, and inflaming airways.<sup>1</sup>

#### Climate Change Increases Allergens in Air

Climate change increases the concentration of airborne allergens, as rising temperatures increase pollen levels. In addition, flowering starts earlier, resulting in a longer ragweed pollen season, and more time for exposure to airborne allergens.<sup>2</sup>

#### What can you do to stay healthy? Monitor the Air Quality Index Daily to Keep Healthy

The U.S. Environmental Protection Agency's (EPA) Air Quality Index (AQI) measures the level of pollution. The purpose of the AQI is to let you know when the air quality may be hazardous to your health. When the AQI is in the unhealthy range, stay indoors in airconditioning as much as possible; when you go outside, avoid exertion and heavily trafficked roadways and consider wearing a mask. Check local AQI daily at https://www.airnow.gov/.

#### Monitor the Heat Index (HI) Daily to Keep Healthy

The National Weather Service's Heat Index (HI) measures the "real feel" temperature, which combines heat and humidity. Young children, pregnant women, people who work outdoors, and older adults are vulnerable to heat exhaustion and heat stroke and should stay indoors in air-conditioning when HI rises above 91. Drink plenty of water and stay in the shade if you do go outside. Check the HI daily at

http://www.nws.noaa.gov/om/heat/index.shtml\_or Google Air Now AQI.

Carter, LM, et al. (2014). Ch. 17: Southeast and the Caribbean. Climate Change Impacts in the Unite States: The Third National Climate Assessment. Melillo, J.M., Richmond, T., & Yohe, G.W. Eds., U.S. Global Change Research Program: Washington, D.C., 396-417.

Global Change Research Program: Washington, D.C., 396-417.

\*\*USCRP (2016). Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Chimmins, Al., et al., 68. U.S. Global Change Research Program: Washington, D.C.

\*\*Luber, G., et al. (2014). Chapter 9: Human Health Climate Change impacts in the United States: The Third National Climate Assessment. In Mellilo et al. Eds. U.S. Global Climate Change Research Program, 228-229. http://lica.2014.global-hange\_gov/proprisectors/human-health.

\*American Academy of Pediatrics. (2007/2012). Global Climate Change and Children's Health. Pediatrics

\*American Academy of Pediatrics, 1200/72012). Global Climate Change and Children's Health. Pediatrics 120: 1149. http://dx.doi.org/10.1542/peds.2007-2645
\*Gamble, I., et al. 2013. Climate Change and Older Americans: State of the Science. Environmental

\*Gamble, IL, et al. 2013. Climate Change and Older Americans: State of the Science. Environmental Health Perspectives. 121:15–22; http://dx.doi.org/10.1289/ehp.1205223

#### Air Quality Index (AQI) and Your Health

AQI Values	Levels of Health Concern	Colors and Meaning
0 to 50	Good	Green: Satisfactory air quality; air pollution poses little or no risk
51 to 100	Moderate	Yellow: Acceptable air quality; moderate health concern for a few people who are unusually sensitive to air pollution
101 to 150	Unhealthy for Sensitive Groups	Orange: Health effects for members of sensitive groups
151 to 200	Unhealthy	Red: Health effects for all; more serious health effects for members of sensitive groups.
201 to 300	Very Unhealthy	Purple: Health alert! More serious health effects for all.
301 to 500	Hazardous	Maroon: Health alerti Serious health effects for all.

Source: US Environmental Protection Agency, (2016). Air Quality Index: Air Now. Available at: https://airnow.gov/index.cfm?action=aqibasics.aqi.

#### **Health Impacts**

Breathing problems Reduced lung function Inflamed airways Damaged lung tissue

#### Who is most vulnerable?

The American Lung Association (ALA) notes that all those with asthma and other lung diseases are particularly at risk from exposure to heat, air pollution, airborne allergens, and extreme weather events. In addition, the following populations are especially vulnerable to public health threats from climate change:

Low-income households and some communities of color, due to exposure to higher levels of pollution in their neighborhood, and inadequate access to medical care;<sup>3</sup>

Children, due to their immature lungs and immune system and their increased exposure to pollution due to breathing more air per pound than adults and spending more time outdoors;<sup>4</sup>

Older adults, due to medical conditions and depressed immune functioning associated with aging.<sup>5</sup>



Developed by Debra Weiss-Randall, EdD, CHES

# APPENDIX H

Contaminated Water Supply: Boil Water Alert Developed by Dr. Ana Puszkin-Chevlin

# Contaminated Water Supply: Boil Water Alert

#### How does water get contaminated?

Maintaining water quality and purity is critical to public health, as microbial or chemical contaminates can lead to serious disease or poising.

Contamination can occur if chemicals or bacteria leech into the water supply, if the treatment systems are compromised to due electrical outage, or if there is a decrease in pressure in the water mains, especially due to a rupture. (Pictures 1 & 2)

Homes on well systems can also get contaminated if the well cap is not tight, or sewage or chemicals leech into the aquifer. Wells less that 50"deep are particularly susceptible.

#### How does climate change impact water supply?

During a drought periods, low water supply may concentrate contaminates in aquifers and wells. During heavy rains, flooding may leech contaminants into water aquifers or well fields. Flooding may also damage well infrastructure or pipes. Overtime, sea level rise will cause saltwater to get into the fresh water aquifers, forcing wells to be moved inland. (picture 3)

#### What do residents need to know?

- Anytime water pressure drops, there may be a breech in the pipe; assume you are under a precautionary boil alert and notify authorities.
- Before a hurricane, stock bottled water, or set aside in containers a 3 to 5 day supply. Assume 1 gallon per person per day in a household. Keep in mind that bottled water typically has a 6 month expiration date.
- Sign up for alerts through CodeRed, to receive telephone notifications of emergency conditions automatically. City or county authorities will let you know of a boil water advisory by tagging your door or putting up street notices. If more than 300 homes are impacted, the media will be advised.
- If you suspect contamination, notify both the public utility or the Department of Health.



# Health Impacts Food Poisoning Parasite Infection Diarrhea Vomiting Wound Infection

### **Boil Water Advisories**



- Don't serve, use ice, prepare food, or brush teeth with tap water. Use bottled water for drinking if possible, especially for baby formula.
- Don't wash hands, or expose open wounds to tap water.
- Don't bathe babies in tap water.
- Don't wash dishes, glasses or cutlery with tap water. Use boiled water.
- Do boil water to roiling boil for a minimum of 1 minute. Boil water even if you have filters, filters don't kill bacteria.
- If you can't boil water, it can be disinfect with 8 drops unscented bleach per 1 gallon of water. Allow water to sit for 20 minutes.
- Do flush lines for 5 minutes after boil alert has been lifted.
- Change filters of water & ice systems that may have been contaminated.

#### Key website

http://www.cdc.gov/healthywater/emergency/dwa-comm-toolbox/tools-templates-main.html

https://safewater.zendesk.com/hc/en-us/categories/201454937-Fact-Sheets

Developed by Dr. Ana Puszkin-Chevlin

# APPENDIX I

Preventing Indoor Mold Developed by Dr. Ana Puszkin-Chevlin

# Preventing Indoor Mold

What is Mold? Molds, mushrooms, mildews, and yeasts are 'decomposers' that digest materials in which they live. There are about 100,000 kinds of mold, fewer than 500 are harmful to humans. Molds are allergens and some produce toxins or release volatile organic compounds in materials.

Active mold growth is usually green, black, orange, or purple and inactive mold is dry, powdery and may be white.

Molds spread by making spores, which are small, lightweight and travel through the air, on pets, and people. The spores are very resilient, and can dormant for a long time before activating when exposed to moisture. This makes mold difficult to get rid of

Why is climate change impact mold? Strong storms and flood events that may result in leaks and water damage in homes and businesses. There may also be increased humidity and warmer temperatures which create ideal conditions for mold growth.

What residents need to know.



# Health Impacts Asthma trigger Sinus and chest congestion Headaches Eyes and Throat Irritation Skin Irritations Liver Problems Wound Infections

### Who is at high risk?

People with asthma, allergies, respiratory illness. Infants and children and people with immune disorders or undergoing chemotherapy.

#### **Preventing Mold**

- Maintain roofs and windows in good repair and make sure gutters work properly.
- If a flood or leak occurs, open doors and windows, use fans or dehumidifiers. If necessary, open holes in the wall baseboard to allow drainage and drying.
- Disinfect surfaces with a solution of 1 cup bleach per 1 gallon of water. Wear rubber boots, rubber gloves, and goggles when working with bleach.
- Never mix bleach and ammonia, the fumes from the mixture can be fatal.
- · Wipe surfaces dry with paper towels, not cloth towels.
- Throw out porous, non-cleanable items that have been wet for longer than 48 hours and cannot be thoroughly cleaned and dried.
- Objects you can save should be dried or frozen as soon as possible. Freezing inactivates mold.

#### Addressing Mold

- Areas less than 10 square feet can sometimes be remediated by the resident, but larger areas require a professional.
- Heating and air conditioning systems need to be inspected and disinfected by a professional.
- Avoid disturbing mold by washing or dusting, it spreads. Water will active inactive mold.
- Eliminate mold by scrub it with brush and a solution of ½ cup bleach to 1 quart of water. Or, cut moldy section out of the wall board.
- Seal moldy items in plastic bags and remove them immediately from the house.
- Flood insurance covers these items unless no effort was made to clean or prevent damage.

Key websites:

//http://www.cdc.gov/mold/faqs.htm

http://www.floridahealth.gov/Environmental-Health/mold/index.html

Or www.cdc.gov/mmwr/preview/mmwrhtml/rr5508a1.htm

Developed by Dr. Ana Puszkin-Chevlin

Project Director and Primary Author Janice T. Booher, MS

Project Manager Phase I Dr. Ana Puszkin-Chevlin Project Manager Phase II Dr. Debra Weiss-Randall
This project was funded by EPA Environmental Justice Small Project Grant #EQ-00D35415-0,
Awarded to the Green Sanctuary Committee of the Unitarian Universalist Fellowship of Boca Raton.

# APPENDIX J

Storm and Flood Safety Developed by Dr. Ana Puszkin-Chevlin

# Storm & Flood Safety

What is the relationship climate change and storms? Climate change is predicted to increase the incidents of intense rain storms, as well as the severity of droughts. Warmer oceans temperatures will fuel stronger tropical storm systems. Sea-level rise will impact drainage capacity of our infrastructure, increasing incidents of flooding and the time it takes to subside.



#### **Health Impacts**

Car Accidents
Drowning Deaths
Injury/Lacerations
Electrocution

What residents need to do. Know your risk. Do you live or work in a flood zone, near a waterway or retention pond?

Stay informed by **sign up for CodeRed**, (Picture 1) an emergency notification service, or getting the PBC DART App which provides information on disaster preparedness.

Evacuate or Shelter in Place? Have a Plan!

- Know the evacuation route and which shelters are open.
- Pre-register for special needs shelter or transportation assistance.
   The information is on the card.
- Communicate with family members and neighbors about your plan for action. Have one contact person (out of the area), communicate with others who may be concerned about you.
- Have an Emergency Kit Prepared. Include copies of identification papers, insurance policies, medications, and irreplaceable keepsakes. During a declared emergency, prescription medication can be refilled early.
- Evacuate when told! Don't leave pets behind or tied-up. Countyrun pet shelters are available on a reservation basis.

Sheltering in place if appropriate.

- Prevent Damage Clear storm drains and gutters of debris. Use floodgates or sandbags to protect property. Unplug electrical devices, raise furniture and appliances on blocks.
- Plan to stay put for 72 hours. Stock food and 1 gallon of water per person per day for 4-5 day supply. Charge communication devices have batteries and flashlights.

#### During a flood event, move IMMEDIATELY to higher ground!

It is **NEVER** safe to walk into flood waters. It is difficult to gauge depth and 6 inches of moving water can sweep you off your feet. Concealed objects and uneven surfaces can cause injury or entanglement resulting in drowning. Downed electric cables cause electrocution.

"Turn Around, Don't Drown". DO NOT drive into flood waters. Don't push a stalled car! Just 12 inches of rushing water can carry away a small car and 2 feet will carry away most cars.

#### Key websites

http://emergency.cdc.gov/disasters/floods/

https://www.ready.gov/floods

**Warning Levels** 

1

A Severe alert 2012-06-29, 10:17 pm

Flash Flood Warning this area til 1:15 AM EDT. Avoid flood areas. Check local media. -NWS

Flood Advisory: Be Aware: weather event is forecast become a nuisance

Flood Watch: Be Prepared: Conditions are favorable for flooding. Flooding is possible.

Flood Warning: Take Action! Hazardous weather event is imminent or happening

Flash Flood Warning: Take Action! Flash flood is imminent or occurring. Move immediately to high ground.

# How Much Flooding?

5 to 6" of rain in 24 hours, standing water in yards, swales and itches. Crowns of community roads should remain dry and passable.

7 to 9" of rain in 72 hours

Swales, road, lawns and driveways flood as designed , but finished floors of home should remain dry.

15 to 23" or more in a 72 hours

Some businesses may experience finished floor flooding. Some Roads will be flooded.

Developed by Dr. Ana Puszkin-Chevlin

# Appendix K

Mosquito (Vector Borne) Diseases Developed by Dr. Ana Puszkin-Chevlin

# Mosquito (Vector Borne )Diseases

What is a Vector-borne Disease? A vector borne disease is an illness from a virus or bacteria that you get from contact with another living organism, usually a mosquito, tick, bird or rodent. Not every insect carries a disease, but you can not distinguish which ones may carry illnesses.

#### How does climate change impact vector born disease?

Warmer temperatures and rain patterns will change where certain disease-carrying species will live. Things found in the tropics will become more common in Florida. Without cold winter temperatures to kill off the insect populations or their eggs, they will increase in number, paying the way for higher rates of illness.

What do residents need to do? In South Florida we are particularly concerned about controlling mosquito populations that carry several diseases (listed to the right). County government monitor and spray areas that are mosquito breeding grounds, but they public cooperation to eliminate standing water on private property. Standing water is where mosquitos breed.(Picture 1)

- Drain standing water from buckets, flower pots, drums, plastic pools, clogged gutter or low areas around your property.(picture 2)
- Prevent bites by installing and fixing broken screens, wearing long sleeves, long pants, and socks when outdoors and insect repellent with DEET or oil of lemon eucalyptus.
- Be wary1 hour before and after dawn and dusk, when mosquitoes are more active.
- Contact the Dept. of Environmental Resources Management, Mosquito Control Division about mosquito infestations.

#### Report to:

#### Dept. of Environmental Resources Management Mosquito Control Division

9011 W. Lantana Road, Lake Worth, FL 33467 Phone: 561-967-6480 Air Spray HOTLINE: 561-642-8775

> Key website http://www.floridahealth.gov/diseases-and-conditions/mosquito-borne-diseases/





#### **Health Impacts**

Dengue Fever St. Louise Encephalitis Eastern Equine Encephalitis West Nile Chikungunya Fever Zika Virus

#### Who is at high risk?

Everyone is at risk of being bitten by mosquitos and becoming ill, but children, older adults and people that are immune compromised may be at risk of getting more seriously ill than others. Zika Virus poses a greater risk to pregnant women and the unborn fetus as it is thought to cause microcephaly in babies.

If someone develops symptoms, seek medical attention Immediately!

Developed by Dr. Ana Puszkin-Chevlin

# Appendix L

ReACT Tool Kit Links (November 5, 2016)

Climate and Health Training Video: This video can be shown at the first training session, or studied by a presenter to prepare for the training session. If this video is used at the training session, stop and pause after each topic. All participants, who should have the Health and Climate Outreach Sheet during the training session, then turn to each other to practice explaining the topic to the person sitting next to them. All Training Session participants should leave the training session with the experience of explaining the Health and Climate Outreach Sheet to another person.

English Creole Spanish (In production)

Climate and Health Training PowerPoint: This PowerPoint can be used at training sessions. The presenter can watch the Climate and Health Training Video to prepare. The presenter should stop and pause after each topic. All participants, who should have the Health and Climate Outreach Sheet during the training session, then turn to each other to practice explaining the topic to the person sitting next to them. All Training Session participants should leave the training session with the experience of explaining the Health and Climate Outreach Sheet to another person.

Climate & Health Powerpoint

**Oral History Training Video**: If you will be conducting Oral Histories, this video is an introduction. The Oral History Protocol and Oral History Consent Form below will be needed to train people how to conduct Oral Histories.

English with live Creole Translation

**Training Session 2 – Forms Training Video**: This video was prepared to help Outreach Leaders and Outreach Communicators in Boca Raton and Delray Beach review how to use the forms created for their neighborhood canvass, and what to do with them after they finished speaking with a resident. Note that these projects had an Oral History component, which you might not have.

English

#### **Outreach Leader Report Form**

Outreach Leader Report Word Template
Outreach Leader Report PDF

#### **Outreach Communicator Report Form**

Outreach Communicator Report Word Template Outreach Communicator Report PDF Health and Climate Outreach Sheet Templates: Download these templates that contain information for Boca Raton and Delray Beach, FL, and substitute emergency numbers and a hurricane zone map for your community. Ask your Public Health Department and Emergency Services Department to vet your Outreach Sheet before you print it for distribution in your community.

**English** Health and Climate Outreach Sheet

Spanish Folleto Comunidad

Creole ti liv Kominote

**Sea Level Rise Risk Perception Survey**: Download these templates that were prepared for Palm Beach County, FL, and modify it to reflect adaptation concerns where you live. Check with your county and municipal governments to see if they are soliciting input from residents in underserved communities on specific adaptation initiatives, or if they are gathering information on climate impacts experienced in the neighborhoods where you will be doing outreach. Incorporate their questions into your survey.

English Sea Level Rise Risk Perception Survey

Spanish Encuesta de Percepción del Riesgo de Subida del Nivel del Mar

Creole Kisa ou panse sou nivo lanme kap monte a?

**Oral History Protocol** If you plan to do Oral Histories, you can use this protocol. You can modify these questions that were used in Boca Raton and Delray Beach, FL to capture information about local history or current topics.

**English** Oral History Protocol

Spanish Protocolo de Historia Oral

Creole Interview kominote a

**Oral History Consent Form** Use these Consent forms when you record Oral Histories. These forms give people the choice of having their image used (such as on video) or only their words (in audio recordings or transcripts derived from the interview). This puts people at ease if they do not want to be on camera.

**English** Oral History Consent Form

Spanish Formulario de Consentimiento

Creole Pou konsanty

**Photograph and Video Consent Form** Use this form if you plan to take pictures or take videos of people, and use them on posters, social media or press releases to inform others about your project.

English

#### **Information Sheets on Specific Health Impacts**











A series of seven handouts was created on specific health impacts of climate change. These sheets give more information than the two-sided Health and Climate Outreach Sheet, and can be used by Climate Communicators for additional background information, or distributed to the public when your community is addressing specific health challenges. Templates for the PDF information sheets below are in this PowerPoint Template: Specific Climate Health Impacts , so you can modify the contact information for local services as needed.

Algae Blooms

Asthma

Contaminated Drinking Water Contaminated Flood and Standing Water Indoor Mold Vector Borne Diseases

**Pictures of Standing Water and Flooding** These pictures were taken in Palm Beach County, and are typical of tidal flooding in the area.

Pictures of Tidal Flooding in Palm Beach County PDF Pictures of Tidal Flooding in Palm Beach County Word Template

**Explanation of Mean Sea Level Rise** This information is included in the Survey template, but was excerpted for use on a poster at tabling events in Boca Raton, FL and Delray Beach, FL. Some people had difficulty understanding this concept, so people staffing tables can be trained to explain it by referencing this graphic on a poster.

Mean Sea Level Rise Explanation PDF Mean Sea Level Rise Explanation Word Template

**Pictures to Help Visualize Sea Level Rise** The photos show children standing in water at the level the sea level will reach in their lifetime. There is a link to the report of the effort to communicate sea level rise with images, which was conducted at FAU's Center for

Environmental Studies.

Sea Level Rise in Our Lifetime Pictures of Children PDF Sea Level Rise in Our Lifetime Pictures of Children Word Template

*Rising Together: Temperature, Water, Health and Strength* logo This logo was used on T-Shirts and posters used in Boca Raton, FL and Delray Beach, FL.

Logo PNG file

**Community Flyers** The Flyers that were used in Boca Raton and Delray Beach are included here as Word Templates you can use.

Boca Raton Community Meeting Flyer Word Template Delray Beach Community Meeting Flyer Word Template

#### **Press Release**

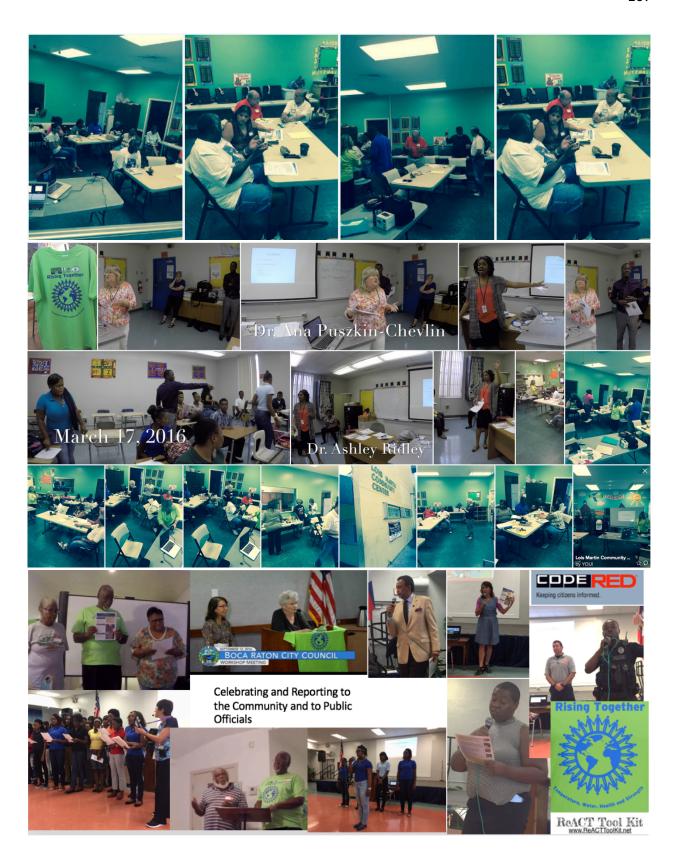
Boca Raton Press Release Word Template Delray Beach Press Release Word Template

# APPENDIX M

Photo Gallery
Pictures are available on FLICKR

https://www.flickr.com/groups/2950572@N23/

Email Janice T. Booher at JJLBooher@comcast.net if you have difficulty downloading photos.



Project Director and Primary Author Janice T. Booher, MS
Project Manager Phase I Dr. Ana Puszkin-Chevlin Project Manager Phase II Dr. Debra Weiss-Randall
This project was funded by EPA Environmental Justice Small Project Grant #EQ-00D35415-0,
Awarded to the Green Sanctuary Committee of the Unitarian Universalist Fellowship of Boca Raton.



# Appendix N

8<sup>th</sup> Annual SE FL Regional Climate Leadership Summit Poster Developed by Janice T. Booher MS

(Note: The conference was cancelled due to Hurricane Matthew, but the poster was accepted by abstract, and therefore personnel associated with the conference were informed of this project.)



#### 8th Annual Southeast Florida Regional Climate Leadership Summit Resilient Communities, Prosperous Region

Climate Initiatives Showcase

# RISING TOGETHER TEMPERATURE, WATER, HEALTH AND STRENGTH







# **Quick Facts** & Statistics

- 193 residents in 168 households were educated about the public health risks of climate change in English, Spanish or Creole. 108 were signed up for Code Red, and 31 oral histories were recorded
- Census tracts served had 52%-95% minority populations, with 23% 27% below the poverty line.
- 26 Climate Communicators were trained within the 2 communities. Of those, 4 became Outreach Leaders in the neighborhood outreach campaign.

#### OVERVIEW

The Unitarian Universalist Fellowship of Boca Raton has supported the Regional Climate Action Plan since it responded to the draft plan during the comment period. In seeking Green Sanctuary status for the Fellowship, the Green Sanctuary Committee chose to support PO-1 by working to strengthen existing community partners in vulnerable communities.

#### APPROACH

Existing leadership in vulnerable communities is supported to become climate literate, to design and conduct a health and climate outreach campaign appropriate to their community, and to survey their neighbors about sea level rise related concerns. Results are presented to public officials responsible for the health and safety of the community.

A \$30,000 EPA Environmental Justice Small Project Grant was used to create an online tool kit www.ReACTToolkit.net and use it in community led neighborhood canvassing and community meetings to provide education and training to reduce public health risks associated with increasingly severe storms and sea level rise associated with climate change.



The EPA put out a press release in November 2015 to inform the country of grant recipients. Within the vulnerable communities, outreach was from neighbors speaking to neighbors, students speaking to parents, knocking on doors, or by tabling at community events. DISC created and distributed fliers to recruit canvassers. TLHS used

# **COMMUNITY BENEFITS**

- Identification and training of bi-lingual residents created a bridge between community partner (DISC) and the Creole and Spanish speaking sections of the neighborhood in Boca Rator
- Identification of residents' concerns related to sea level rise
- · Residents with climate literacy and leadership experience on a public health campaign
- · Funds spent in the community: Paid Outreach Leaders, stipends for canvassers and survey respondents

**PARTNERSHIPS** 

Lead community partners were recruited in late 2014 when the grant application was drafted, with letters of commitment from the partners appended to the application. Funds were received in November 2015 for a one-year project implementation time table.

The Green Sanctuary Committee's community partner in the Pearl City area of Boca Raton was Developing Interracial Social Change (DISC). The community partner in South Delray Beach was

Toussaint L'Ouverture High School for Arts and Social Justice (TLHS). Training support for canvassers was provided by Habitat for Humanity in Boca Raton. In addition to Project Manager

(Phase I) Dr. Ana Puszkin-Chevlin and Project Manager (Phase II) Dr. Debra Weiss-Randall, academic supervision was provided by Dr. Keren Bolter (FAU CES) for the SLR Risk Perception

Survey and by Dr. Sandra Norman (FAU-Dept. of History) for oral histories.

November 2015 - March 2016, Development and design of ReACT Tool Kit materials, with vetting by PBC Climate Change Coordinator Natalie Schneider, and both Public Health and Emergency Services Departments. Capacity Building meetings with community partners to identify leaders and canvassers, create tracking systems, and to translate and print tri-lingual outreach material. Climate Change and Health training sessions and Oral History training.

April 16-Summer 2016, Outreach Training. Neighborhood canvass with SLR Risk Perception Survey.

Fall 2016, Data entry and preliminary analysis Empowerment and Capacity Building: Opening dialogue with public officials and holding a public meeting in each community. Remaining work includes support for community partners in discussions with public officials regarding neighborhood climate resilience building, website completion with distribution of Tool Kit links to resources shared with organizers throughout Florida, and EPA Outputs and Outcomes reporting.







#### **QUESTIONS?**



#### APPENDIX O

ReACT Community Tool Kit Instructions for Organizers (November 10, 2016)

Instructions for Organizers developed by Janice T. Booher, MS with links to ReACT Tool Kit material developed by Dr. Ana Puszkin-Chevlin, Dr. Debra Weiss-Randall, Dr. Keren Bolter, Dr. Sandra Norman, and Janice T. Booher, MS

#### Introduction

The model for public health outreach and civic engagement presented here assumes that an organization outside a diverse vulnerable community partners with existing leadership in that community to educate about Health and Climate, and to survey 100 households in the community. The goals are to increase climate resilience and to empower an organization in a vulnerable community to speak to public officials about climate resilience concerns. If you are a member of a church or a non-profit organization that has acquired funding to reach out to vulnerable communities to build climate resilience, the materials and methods used in two pilot communities are available to you here. Word document templates on this website, with links included in this document, can be modified to include your local Emergency Service resources, and to reflect the climate challenges you face where you live. If you are a leader in a diverse vulnerable community, you can ignore some of the organizing that is necessary when there are partnerships involved, and focus on using the templates and videos in this Tool Kit to educate and survey your neighbors.

# **ReACT Tool Kit Outline**

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# **Steps of the Process**

The steps a non-profit organization can take to conduct a successful campaign that strengthens a community partner in an underserved community, and supports that partner to become capable of speaking to public officials about climate resilience concerns documented in a neighborhood survey are:

- 1. Form a partnership with one or more community organizations in the vulnerable community.
- 2. Work with the leadership in the vulnerable community to design an effective outreach plan, and to edit template materials included in this Tool Kit to be used in their community.
- 3. Conduct a Training Session on Climate and Health for Outreach Leaders, and for the the Outreach Communicators they recruit.
- 4. Conduct a Training Session for all Outreach Team members about How to Speak with and Survey Neighbors about Climate and Health.
- 5. Supervise a neighborhood canvass or arrange for
- 6. Outreach Communicators to staff tables at scheduled community events, or use other methods to reach 100 households.
- 7. Assemble all information collected in surveys and oral histories (of you choose to do oral histories) in to reports and a PowerPoint presentation.

Arrange for the Outreach Team to present the results of their outreach and survey at community meetings with public officials responsible for the health and safety of the community present.

Timeline Weeks 1 – 4

The non-profit organization assesses its institutional and personal history with leadership in local

vulnerable communities to determine potential community partners, while simultaneously

studying local climate change impacts together with local efforts to address them. An agreement

is made with a community partner(s) to cooperate on educating about the public health effects of

climate change and to survey the community. Printed copies of the Health and Climate Outreach

Template and the Survey Template can be used to help potential community partners understand

the project. The Oral History Protocol can be evaluated to decide if oral histories will be done.

You can share this video about Rising Together with prospective partners so they can understand

the project: <a href="https://vimeo.com/174229028">https://vimeo.com/174229028</a>

When partnering with existing leadership in a vulnerable community, you will look for a

community partner liaison. Some characteristics and responsibilities of the Community Liaison

are described below.

## **Community Partner Liaison Description**

A Community Partner Liaison is a person who either lives in the vulnerable community or works in an organization that serves the vulnerable community. This person is respected in the community and has long- standing relationships with elders and leaders. A Community Partner Liaison has access to resources to support the community, and knows where to find resources and talent within the community.

Characteristics of an effective Community Partner Liaison (sometimes called a "Gatekeeper"):

- 1. High Emotional IQ
- 2. Works for Consensus
- 3. Works to Build Organizational Capacity in the Vulnerable Community
- 4. Supports and Protects Members of the Community
- 5. Patience
- 6. Intuitive Analyst of Social Interaction
- 7. May have Founded a Community Organization in the Vulnerable Community
- 8. May help to Coordinate Social Events within the Community
- 9. Known to and Respected by Both Community Members and the Public Officials
  Responsible for the Vulnerable Community Important Responsibilities
  - Recruiting Outreach Leaders and Outreach Communicators
  - Securing locations for Community Meetings
  - Recruiting Additional Support When Needed (ie Educators or Additional Organizers)
  - Identifying Needs and Communicating them to ReACT Organizers
  - Mediating Conflict
  - Bottom Line Responsibility for Achieving Agreed Upon Outputs

# Links to Downloadable Word Templates Needed in Weeks 1 – 4

**Health and Climate Outreach Sheet Templates**: Download these templates that contain information for Boca Raton and Delray Beach, FL, and substitute emergency numbers and a hurricane zone map for your community. Ask your Public Health Department and Emergency Services Department to vet your Outreach Sheet before you print it for distribution in your community.

English Health and Climate Outreach Sheet

Spanish Folleto Comunidad

Creole ti liv Kominote

**Sea Level Rise Risk Perception Survey**: Download these templates that were prepared for Palm Beach County, FL, and modify it to reflect adaptation concerns where you live. Check with your county and municipal governments to see if they are soliciting input from residents in underserved communities on specific adaptation initiatives, or if they are gathering data on climate impacts experienced in the neighborhoods where you will be doing outreach. Incorporate their questions into your survey.

English Sea Level Rise Risk Perception Survey

Spanish Encuesta de Percepción del Riesgo de Subida del Nivel del Mar

Creole Kisa ou panse sou nivo lanme kap monte a?

**Oral History Protocol** If you plan to do Oral Histories, you can use this protocol. You can modify these questions that were used in Boca Raton and Delray Beach, FL to capture information about local history or current topics.

English Oral History Protocol

Spanish Protocolo de Historia Oral

Creole Interview kominote a

**Oral History Consent Form** Use these Consent forms when you record Oral Histories. These forms give people the choice of having their image used (such as on video) or only their words (in audio recordings or transcripts derived from the interview). This puts people at ease if they do not want to be on camera.

**English** Oral History Consent Form

Spanish Formulario de Consentimiento

Creole Pou konsanty

**Photograph and Video Consent Form** Use this form if you plan to take pictures or take videos of people, and use them on posters, social media or press releases to inform others about your project.

**English** 

# Timeline Weeks 5-12: Meetings and planning with leaders in the partnering vulnerable community

The purposes of this phase of activity are:

- to design an outreach campaign that leaders in the community feel will be effective
- to modify template outreach materials to reflect local adaptation concerns

Suggested agendas for these early meetings follow.

## **Pre-Meeting Proposed Agenda**

- All participating groups, , in the vulnerable community or based outside the community, discuss and understand the scope of the project, goals, funding, what is expected from the community, and how the community will benefit. Discuss the numbers of people that will be needed from within the community.
- Establish the systems that will be needed to support the project. This includes who will be tracking and reimbursing expenses, and the amount of money available in total.
- Discuss community events already on the calendar and things going on in the community, such as community gardens and health initiatives. Understand the social context for your project.
- Identify any existing networks in the community. Is there a block captain system? Has the health department set up a notification system that involves key leaders? Does a local school have an emergency telephone tree? Do the churches play a major role in the community, or are the members of local churches commuting in from outside the community?
- Next Steps:
  - o Finance systems set up
  - o Community leaders begin speaking to others in their community
  - o Prepare the Climate and Health presentation for Meeting 1
  - o Encourage all leaders to explore www.ReACTToolKit.net.
  - Leaders can watch the training videos

# **Meeting 1: Proposed Agenda**

Attendees: Leaders from all involved Organizations and people they invite

- Introductions
- Project Overview (Goals and Budget)
- Climate and Health Presentation & Feedback (Community members understand the educational level, language used in their community, etc. Their feedback is essential to create an effective campaign. It will be needed in writing scripting for canvassers and people staffing tables.)
- Opportunities and Challenges in the Neighborhood (Climate Change impacts already in the community, other health impacts, recent health campaigns that can be built upon, educators and retired educators interested in the project, active youth groups, etc.)
- Discussion of Everyone's thoughts and ideas, with particular attention to support needed and the community's concept of how the campaign would be most effective in their neighborhoods.
- Survey Purpose and Content
- Oral History Project Purpose and Content (If the decision to do oral histories is made.)
- What ReACT Tool Kit Materials must still be modified for the locality?
- Next Steps:
  - Print W-4 forms for Meeting 2 (if needed) in case the decision is to pay Outreach Leaders
  - Modify Tool Kit forms for the locality

# **Meeting 2: Proposed Agenda**

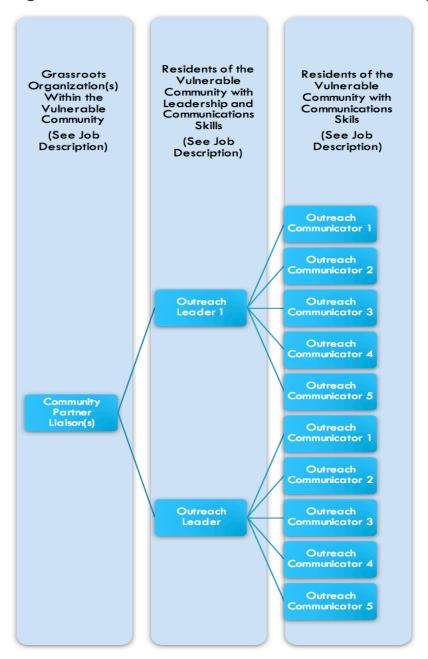
Attendees: Leaders from all involved Organizations and the people they invite

- Introductions
- Discussion of Objectives of each Partner present
- Consensus on Working Together: Campaign Design (Neighborhood canvass? Tabling at scheduled events? Town Hall event? Stipends to canvassers? Stipends to households? Combination of approaches? T-shirts for canvassers and table staffers? Name tags? Clipboards? Folders? Which printed materials? Etc.)
- Budget: Decide who will be paid, on what schedule and in what quantity. Identify any need for stipends.
- Next Steps:
  - Create job descriptions consistent with the campaign design
  - Print sufficient Climate and Health Information Sheets (2-sided Outreach Form) for
     Training Session 1.
  - Outreach Leaders recruit Outreach Communicators for Training Session 1 from within the community.
  - Give the materials to the Outreach Leaders, who will distribute them to the Outreach
     Communicators at Training Session 1.

## **Organization**

When deciding on responsibilities and who will be paid, a possible organizing structure with job descriptions is given here:

## Organization Chart Within the Community



Developed by Janice T. Booher

## **Community Outreach Leader Job Description**

Community Outreach Leaders are organized and responsible community members interested in a short-term leadership opportunity. (The Community Partners in your Community) are working on an environmental justice project to educate local communities about the relationship between health and climate change. Our goal is to contact and document outreach to 100 households in the community in either English, Spanish or Creole.

We are seeking two community members with strong community ties and organizational ability to manage an educational outreach initiative and survey data collection in their neighborhood. Each Outreach Leader will be responsible for the following tasks:

- Identifying 5-10 outreach communicators from the target area
- Ensuring and documenting that Outreach Communicators attend two training sessions offered by ReAct Tool Kit organizers.
- Approving Outreach Communicator plans.
- Distributing blank Outreach Reports, and collecting completed Outreach Reports from their team
- Ensuring that 10 reports (a total of 50 households) are contacted in the target neighborhood
- Entering the data from the paper surveys into an online survey using a computer, smart phone or tablet.
- Answering questions from their team of Outreach Communicators.
- Preparing 1-2 page "debriefing" report at the conclusion of the Outreach phase.
- Serving as a liaison between Outreach Communicators and ReAct Tool Kit organizers.
- Presenting information learned through this Outreach effort at a community meeting organized in partnership with ReAct Tool Kit organizers.

### **Minimum Skill Requirements:**

- Resident of the designated community or employed in it.
- Strong community connections, leadership and organizational skills
- Able to read and write English, Spanish or Creole at a high school level.
- Ability to supervise and manage 15-20 workers
- Computer literacy to complete input of survey data into a web portal
- Administrative and math skills to handle disbursement of gift card compensation to team members.
- Return all collected data to ReACT Tool Kit organizers
- Ability to present results at a community meeting.

**Time Commitment:** Approximately 50 hours total over the 12 weeks from mid-March through mid-June broken down as follows:

- 2½ hour Climate and Health training session
- 4 hours Forms used in the Project and Outreach communication practice
- Approximately 35 hours between managing and collaborating with Outreach Communicators to ensure output goal of 50 households is achieved.
- Approximately 7½ hours to input survey data and prepare de-briefing report
- Approximately 1 hour at a community meeting to present results.

Climate and Health Outreach Communicator Description

Climate and Health Outreach Communicators are enthusiastic community members interested in

a short-term leadership opportunity. (The Community Partners in your Community) are working

on an environmental justice project to educate local communities about the relationship between

health and climate change.

We are seeking 15 to 20 community members to talk to members of their neighborhood. Our

goal is to reach 100 households in the community.

**Minimum Skill Requirements:** 

• Able to read and write English, Spanish or Creole at a high school level.

• Able to speak and understand either English and Spanish or English and Creole.

• Resident of the designated community or employed in it.

**Skill Preferences:** 

• Strong community connections.

• Leadership skills.

• Strong interpersonal and communication skills.

• An interest in climate change and community health issues.

To be successful in this role:

**Attend Training:** 

Approximately 5½ hours total:

2½ hour training session

• 3 hours materials review and supervised practice speaking to community members

Project Director and Primary Author Janice T. Booher, MS

Project Manager Phase I Dr. Ana Puszkin-Chevlin Project Manager Phase II Dr. Debra Weiss-Randall
This project was funded by EPA Environmental Justice Small Project Grant #EQ-00D35415-0,
Awarded to the Green Sanctuary Committee of the Unitarian Universalist Fellowship of Boca Raton.

## Complete at least one "REACH OUT" report consisting of 5 households.

The opportunity to complete more Reach Out reports may be possible depending on participation. Each Reach Out encounter requires you to:

- Record household address, phone number and language spoken at household
- Present information on health and climate
- o Administer a 15-question survey
- Hand-out a 1-page information sheet
- Return a REACH OUT Report to a Project Outreach Leader

The households can be contacted individually, in a small group, or by staffing a table at a community event. A Project Outreach Leader must approve REACH OUT plans specifying how households will be contacted.

Links to Tool Kit Materials: Weeks 5 – 12

Climate and Health Training Video: This video can be shown at the first training session, or studied by a presenter to prepare for the training session. If this video is used at the training session, stop and pause after each topic. All participants, who should have the Health and Climate Outreach Sheet during the training session, then turn to each other to practice explaining the topic to the person sitting next to them. All Training Session participants should leave the training session with the experience of explaining the Health and Climate Outreach Sheet to another person.

English Creole Spanish (in production)

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Climate & Health Powerpoint

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English with live Creole Translation

187

Training Session 2 – Forms Training Video: This video was prepared to help

Outreach Leaders and Outreach Communicators in Boca Raton and Delray Beach

review how to use the forms created for their neighborhood canvass, and what to

do with them after they finished speaking with a resident. Note that these projects

had an Oral History component, which you might not have.

English

**Outreach Leader Report Form** 

Outreach Leader Report Word Template

Outreach Leader Report PDF

**Outreach Communicator Report Form** 

Outreach Communicator Report Word Template

Outreach Communicator Report PDF

Health and Climate Outreach Sheet Templates: Download these templates that

contain information for Boca Raton and Delray Beach, FL, and substitute

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Spanish Folleto Comunidad

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English

# Timeline Weeks 13-16: Community training sessions for people within the community who will be doing outreach

#### **Training Session 1**

- Pass out the Climate and Health 2-sided Information Sheets with local preparedness and emergency services information, as well as maps substituted in the Template on Page 1
- Use the Rising Together: Temperature, Water, Health and Strength PowerPoint or video
- Stop after each sub-topic, and have the participants explain the material to each other in their own words
- Next Steps:
  - Create a tabling or canvassing protocol
  - Assure that all materials are copied and stapled and put in order for the training session. They should be given to the Outreach Leaders to distribute to their team of Communicators



Delray Beach Pilot Project **Training Session 1** at Toussaint L'Ouverture High School for Arts and Social Justice. Project Manager Dr. Ana Puszkin-Chevlin presents the Climate and Health training material, which is translated into Creole by faculty member Mr. Dieunet Demosthene.

#### **Training Session 2**

- Pass out all forms and the Climate and Health Information Sheets to all participants and tell them that since they live in the neighborhood, they will each be their own first household reached
- Go through the protocol that Outreach Communicators will be expected to use in the neighborhood. They can work in pairs if needed during the workshop, this will help to prepare for a neighborhood canvass, where it is recommended that door-to-door canvassers work in pairs; this protocol provides protection and a witness for all exchanges with respondents."
- Speak with the Outreach Leaders after the Training Session. Make sure they understand
  the Outreach Leader Report forms and your procedure for tracking any stipends you will
  be giving to the Outreach Leaders, Outreach Communicators or residents.
- Next Steps:
  - o Check in with the Outreach Leaders periodically to see if they need any support.
  - Identify Outreach Communicators who missed Training Session 1. Support them
    by giving them the link to the training video, or getting them support to get up to
    speed.



Clipboards, Folders and forms prepared for **Training Session 2**, held at the
Unitarian Universalist
Fellowship of Boca Raton for both pilot project communities.

Outreach Leaders and Outreach Communicators learned how to speak to their neighbors, and to document information gathered.

#### Links to Tool Kit Materials: Weeks 13 – 16

In this phase of your designing your Outreach Campaign, you may have decided to reach residents by tabling at community events. Below you will find material you can print out and use on posters.

## **Information Sheets on Specific Health Impacts**



A series of seven handouts was created on specific health impacts of climate change. These sheets give more information than the two-sided Health and Climate Outreach Sheet, and can be used by Climate Communicators for additional background information, or distributed to the public when your community is addressing specific health challenges. Templates for the PDF information sheets below are in this PowerPoint Template: Specific Climate Health Impacts, so you can modify the contact information for local services as needed. The PDF files are accessible at the links included here:

Algae Blooms

Asthma

Contaminated Drinking Water

Contaminated Flood and Standing Water

Indoor Mold

Vector Borne Diseases

**Pictures of Standing Water and Flooding** These pictures were taken in Palm Beach County, and are typical of tidal flooding in the area.

Pictures of Tidal Flooding in Palm Beach County PDF

Pictures of Tidal Flooding in Palm Beach County Word Template

**Explanation of Mean Sea Level Rise** This information is included in the Survey template, but was excerpted for use on a poster at tabling events in Boca Raton, FL and Delray Beach, FL. Some people had difficulty understanding this concept, so people staffing tables can be trained to explain it by referencing this graphic on a poster.

Mean Sea Level Rise Explanation PDF

Mean Sea Level Rise Explanation Word Template

**Pictures to Help Visualize Sea Level Rise** The photos show children standing in water at the level the sea level will reach in their lifetime. There is a link to the report of the effort to communicate sea level rise with images, which was conducted at FAU's Center for Environmental Studies.

Sea Level Rise in Our Lifetime Pictures of Children PDF
Sea Level Rise in Our Lifetime Pictures of Children Word Template

**Rising Together: Temperature, Water, Health and Strength logo** This logo was used on T-Shirts and posters used in Boca Raton, FL and Delray Beach, FL.

Logo PNG file

#### **Timeline Weeks 17-20**

Execution of outreach plan to reach 100 households conceptualized in cooperation with the community partner (neighborhood canvass, small group meetings, tabling events, town hall or other outreach methods)

## **Meeting 3: Status Check Meeting**

- Any additional training support should be provided here
- Find out what is working and what is not. Listen to solutions proposed by the community, and make every effort to support them in making adjustments.

## Meeting 4: Data Aggregation Meeting with Community Partner Liaison and Outreach Leaders

- Collect data that is ready for collection.
- Record the narrative about lessons learned either about the community's climate resilience or the process itself.
- Discuss the data aggregation protocol and refine it to reflect community feedback.

#### Links to Tool Kit Materials: Weeks 17 – 20

At this stage of the project you are preparing for your Community Meeting to present your results to the community and to public officials.

**Community Flyers** The Flyers that were used in Boca Raton and Delray Beach are included here as Word Templates you can use.

Boca Raton Community Meeting Flyer Word Template
Delray Beach Community Meeting Flyer Word Template

#### **Press Release**

Boca Raton Press Release Word Template
Delray Beach Press Release Word Template

#### Timeline Weeks 21-24:

Reporting community concerns and priorities to adaptation planners and to public officials responsible for the health and safety of the community connects the community to resources and contacts that increase community climate resilience.

In the Boca Raton Pilot Project, the Liaison from the Community organization Developing Interracial Social Change (DISC) and the Project Manager public health expert Dr. Debra Weiss-Randall spoke to the City Council about the project. They begin speaking at 9:57 minutes into this video: http://bocaraton.granicus.com/MediaPlayer.php?view\_id=2&clip\_id=1276

## **Meeting 5: Community Meeting and Presentation Planning Meeting**

- Where and when will the results be reported & to whom?
- Plan what the Outreach Leaders will report, and assist them with preparation of their presentation.
- Which public officials or staff responsible for the community's health and safety will be invited, and who will invite them?
- Next Steps:
  - Create presentation materials
  - Practice
  - Meeting organization & Work for turnout
- Invite and follow up with public officials and staff



The pilot communities held public meetings that were attended by public officials responsible for the health and safety of the communities. The Outreach Leaders reported about their experiences and the results of their work, and Project Manager Dr. Debra Weiss-Randall reported on the Survey results.