

MOVE IT OR LOSE IT?
HERITAGE AND COMMUNITY RELOCATION IN AN ERA OF COASTAL SEA LEVEL RISE

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Chapter 1: Introduction

As sea levels rise in the near future, greater numbers of people on the coastal regions of the United States will find their communities battered by periodic floods, higher tides, and eventually complete flooding. In general, communities try to stay in place where they have been established, adapting in place to ever growing changes in weather and climate. However, scientific studies have raised alarm bells: we may not be able to stay in place forever. The Intergovernmental Panel on Climate Change, an intergovernmental body of the United Nations, issued a special report on the importance of keeping global warming levels to 1.5C above pre-industrial levels, projecting that a warming of 1.5 would result in a global mean sea level rise of 0.26 to 0.77 meters (0.85 ft – 2.52ft) by 2100, and will continue to rise beyond 2100 and could result in multi-meter rise in sea levels over the next 100 years.¹ A greater warming could result in higher levels before 2100 – a study from the science journal *Nature Climate Change* estimates that a sea level rise of 3 feet will put 2.4 million people at risk of flooding worldwide; if it rises to 6 feet (assuming no human mitigating actions to reduce carbon emissions), the number increases to 13.1 million people.² While the projections may range, what is certain is that those communities living on the coast will be affected, and a number of them will face the need to move.

An emerging response to this need is managed retreat – the relocation of entire communities away from vulnerable areas. As opposed to relocations by individuals, who may choose to move to a new location on their own, managed retreat focuses on the possibilities of

¹ IPCC. Global Warming of 1.5 C: Summary for Policymakers. Intergovernmental Panel on Climate Change. October 6, 2018., 9.

² L Hauer, Mathew E., Evans, Jason M., Mishra, Deepak R. “Millions projected to be at risk from sea-level rise in the continental United States.” *Nature Climate Change* 6. (March 14, 2016). 692.

keeping a community together in making it a more resilient and sustainable one. Although this is usually envisaged as the course of last resort, as communities do not generally wish to pick up and leave their homes, the option is now being considered as a possibility and is entering into the language of resiliency and sustainability plans at national and local scales – from both small islands who run the risk of being completely inundated, to large metropolises along the eastern seaboard of the United States. As this is still in its infancy, the process of managed retreat has not yet been fully developed, and as such is lacking framework in many areas – one of which is heritage management and preservation.

Heritage management, the preservation of heritage, has in the past tended to be reactive to threats of natural (or man-made) hazards – we come in once the damage has occurred and try to patch it up, or we try to put up protective barriers to prevent hazards from coming back once damage has already occurred. In recent years, a robust literature on preventive conservation techniques and disaster preparedness has been developed and refined, leading to diverse solutions in the face of weathering disasters. At a small scale, we elevate individual structures above waterlines, such as homes in the aftermath of Hurricane Sandy in New Jersey, or the elevation of the Farnsworth House due to continuous flooding. Rarely, we relocate the individual structure – as in the case of lighthouses up and down the eastern seaboard of the United States, or homes in the aftermath of earthquakes in New Zealand. At a larger scale, the predominant narrative in the United States has been rebuilding what was destroyed. Galveston Island, Texas, is the prime example of such an event: a massive storm in 1900 destroyed over 3,600 homes (a monetary loss of \$30 million, about \$700 million

in today's dollars).³ Instead of leaving, the town immediately began to rebuild, and in order to avoid another disaster, both built a seawall and decided to raise the city 17 feet at the seawall and slope downward at 1 foot for every 1,500 into the bay, dredging sand from the ship channel and pumping it into sections of the city.⁴ Although it came at a high cost (about \$16 million, and only part of it financially supported by the county, state, and federal governments), the raising was a success, and proved itself during August of 1915 when a hurricane of equal strength blew across the island: those structures behind the seawall and on the raised grade fared well.⁵ Arguably, this success of rebuilding, of adapting in place rather than relocating, holds a certain power in that it has been established as the dominant narrative, and one that even today resonates in the U.S., avoiding discussions of relocation with such a successful example of engineering and ingenuity in the arsenal. As such, preservation is not the only field late to the game of relocation: we all are.

Protection at a larger scale is found across the globe as well. Venice, for example, began the Mose project in 2003 as endeavor to create a flood barrier and isolate the Venice Lagoon, in an attempt to reduce the constant flooding the city faces (and will face in greater quantities in the future). As the price tag has climbed to about \$6.3 billion however, questions of stability in the face of sea level rise have arisen, creating division and doubt about whether this approach can be effective in the long term.⁶ Recognizing the threat of exponentially mounting sea level rise, new plans are being developed for large communities that are facing the possibility that

³ McComb, David. Galveston: A History”

⁴ Ibid

⁵ Ibid

⁶ Bendix, Aria. “A 6.5 billion sea wall was supposed to stop Venice flooding, Now, most of the City is Underwater.” *Business Insider*. Nov 2, 2018. Accessed January 2018.
<https://www.businessinsider.com/venice-mose-flood-gates-storms-2018-11>

they may not be able to maintain their historic edges, employing techniques such as individual buyouts in order to change waterfront properties into retaining basins, as in the case of Miami Beach, Florida, or considering ways to turn waterfront areas into protective wetlands barriers, as in the case of New York City's "The Big U" project. The hard line edge that we have so long claimed for our coastal cities are now acknowledged as flexible, forcing heritage planners to engage in and make decisions about how to incorporate preservation into these approaches.

Preservation of heritage is billed as important not only for our history, but as a part of the social fabric of communities, allowing communities to be more resilient and adaptable to change. Thus we protect heritage – whether tangible or intangible – as much as possible. But at this large scale, heritage professionals have not yet faced the worst case scenario, implied above: what if a community – were it Venice or a small island nation - were to completely flood and force the community to move? If the soft edge of coastlines moves a mile inland, what happens to heritage in those areas?

Although sea level rise may seem slow, it is an exponentially growing threat, one that will only get more pressing as time passes. In the face of such a threat, reaction is no longer an option – anticipation is required. Envisaging the worst case scenario – the complete loss of a community's original locale, impacts both tangible and intangible heritage – but do we have a plan for it? This thesis asks the question: do we have methodologies in place to integrate heritage into the planning of managed retreat of entire communities? Do we, who claim that heritage is an important part of sustainable and resilient communities, have plans in place for how we can use this argument to find ways of preserving heritage even when a city is completely flooded? Although the profession has found a myriad of adaptation methods for

heritage in place, do we have adaptation methods heritage, or methodologies to decide what to do, when faced with the disappearance of a key component of heritage: place.

Chapter 2: Methodology

2.1 Aims

This research's primary aims were initially to uncover the extent to which preservation methodologies are incorporated into the planning of managed retreat of coastal communities, and how effectively they are being employed. Through the use of literature reviews surveying overlaps between heritage, sea level rise, and relocation, the aim (and thus the questions asked) narrowed, as it became clear that this is still a nascent topic in the both the preservation and planning fields. The research shifted and targeted one specific case study, the in-progress Isle de Jean Charles relocation, in an effort to understand in a more focused manner how heritage can be intertwined with managed retreat, and what lessons can be pulled and applied at a larger scale. By investigating this case in greater detail, the questions asked during this research shifted to three main areas: heritage as applied to new design, heritage as a method for facilitating community engagement, and heritage's involvement at the levels of planning and policy.

The aims of the research thus refined into understanding the following:

- How can heritage inform new design in order to better help communities adjust to their new surroundings?
 - o How can the tools of heritage conservation (or preservation) be leveraged to reintegrate traditional spatial arrangements and attributes into new design?
 - o How can preservation professionals better prepare in order to investigate the potential for heritage to inform new design?

- How can the preservation enterprise facilitate community engagement in heritage related-values and the decision-making process?
- How can preservation professionals articulate the importance of heritage and heritage-related values at planning and policy levels in order to communicate heritage's importance to community resilience?

By examining these questions, this research hopes to further an understanding of how preservation can and should play a greater role in the planning of managed retreat and emphasize the importance of facing this problem head-on in the professional community. This thesis aims to expand upon and suggest new methodologies for heritage professionals involved in this process, with an understanding that the issue of sea level rise is the new reality, and that in order to continue to protect heritage and remain involved in future decision-making, the profession needs to anticipate future issues and come up with solutions before they become too large to tackle.

As will be expanded upon later, this thesis does not seek to answer the above questions absolutely. Instead, it aims to flesh out the challenges and opportunities for preservation in order to further a larger inquiry into the intersection of heritage and managed retreat. By looking in depth at one specific case study, that of the Isle de Jean Charles, this thesis investigates the following questions as a way to further inform and refine the over-arching questions previously articulated:

- What stakeholders are involved in the decision-making process and do their values include heritage?
 - o In what way are heritage-related values being put forth, or set aside?

- What preservation tools and methodologies are being employed in the project?
- Are there any preservation professionals involved in the project? Any government agencies that have a direct mandate to preserve heritage?
 - o To what extent are these parties involved and what tools are they employing?
- Has heritage informed part of the selection or design of the new site in any way?

By looking more closely at these smaller-scale questions, this thesis seeks to draw out conclusions that can then further inform the larger questions being asked of the field in an effort to further refine and understand how preservation can prepare for this coming problem.

2.2 Methodology

Early research was developed using a literature review in two phases. First, it surveyed existing literature relating to overlaps between sea level rise and heritage. The results of this review demonstrate that the overlap between sea level rise and heritage is a limited one, primarily relating to identification of heritage at risk, adaptation strategies at a small scale, and analyses of policies and potential challenges. Risk-assessments begin to sound the alarm, looking at sites at risk, but beyond simply identifying them, they propose no solutions. Adaptation strategies, while valid and very useful methods of fighting climate change, do not consider relocation as an option, and avoid the question of the worst-case scenario (that of total abandonment) entirely. Similarly, analyses of policies and potential changes identify barriers to the process of implementing solutions relating to heritage, but do not confront head-on the need to better integrate preservation into planning and design efforts at a much broader policy level in order to effect large-scale change. Research in these overlapping topics leaves large gaps, highlighting the lack of current research about planning for locations where sea level rise will inevitably cause areas to be irreversibly flooded.

The second half of the review focused on relocation of heritage, finding that literature relating to such focuses on the moving of individual buildings, material investigations, and policies regarding the moving of tangible heritage. Although the review revealed that there are some larger scale relocations at work, most notably the case of Kiruna, Sweden, where an entire town is being moved – the time frame for this type of move is a long one (over 100 years), and while these types of cases are useful as base points, they lack the urgent time factor that exponentially growing sea level rise can and will have in the coming years. Those pieces of

literature examining the policies relating to heritage do not juxtapose them with shifting attitudes towards the need to adapt to rising sea levels – instead focusing on previously established charters that allow (under tight restrictions) the relocation of heritage at an individual level. While these provide an important base for the profession and theoretical thought, they fail to consider elements of intangible heritage or how heritage can be incorporated into new sites in the event of a required move – focusing instead primarily on the need for heritage to remain in place as much as possible, promoting a “hold the line” attitude without considering other alternatives.

The next step was an overall survey of communities at risk of sea level rise, using a mix of extant literature relating to communities and sites at risk and mapping comparisons, in order to gain a broader understanding of the issues facing various locales and in order to identify researchable cases. A case-based methodology would allow for a broad range of investigations – as previously noted this is still a nascent field, and thus looking at a broad range would allow incorporation of a variety of different solutions to the problem of managed retreat. This resulted in an initial matrix as a vehicle for comparison of a series of case studies, establishing the following criteria:

- Coastal communities and river populations directly connected to sea level rise: as previously stated, although there are a few examples of relocations, these tend to lack the crucial time dimension, or are in response to an already occurring natural disaster.
- Range of settlement scales – from 100 (tribal scale) to 100,000 (small countries): equally important was the range of scales in order to pull a representative view of different

approaches, as this is a phenomenon that will affect communities of all scales, each of which will have to confront issues relating to relocation differently.

- Communities that are either in the process of moving or who have laid out a plan for potential relocation in the future: beyond assessing simple risk, communities identified needed to have recognized that this was a potential threat and begun to take action of some sort, in order to be able to draw observations about the methods they have or are beginning to employ.
- Managed retreat plans or proposals that do, or will, impact heritage – whether tangible or intangible in some way: these proposals may or may not in fact recognize heritage as a component of the process, but impact varying types of heritage, which may or may not call for different approaches to the issue.

The above criteria was then parsed out further within the matrix, again to identify more clearly the issues at hand and to further narrow down case studies to researchable ones, using the following headings:

- Population Size
- Heritage Type
- Sea Level Rise Severity/Timeline
- Probability of required move
- Alternatives to moving
- Community willingness to move
- Government Involvement
 - o Local

- National
- Funding Sources
- Stage of Move (if any)
- Current Conflicts and/or observable outcomes

The following cases were then compared through the matrix table (see Appendix A):

- Isle de Jean Charles, Louisiana
- Kiribati
- Vunidogola, Fiji
- Carteret Islands, Papa New Guinea
- Newtok, Alaska
- American Samoa
- Maldives
- Tuvalu
- Tangier Island

Through this comparative analysis it became even clearer that the issue at hand it still in its infancy, and that information about many of these cases is limited, resulting in a single deep-dive case study of the Isle de Jean Charles, Louisiana, and using the series of other aforementioned cases as vignette studies that illustrate complementary or contrasting approaches towards different elements of the process, from funding to community involvement, to approaches to heritage. In the case of the Isle de Jean Charles, relocation has been in discussion for more than 20 years and although the process is still ongoing, it has been

openly publicized and relatively well-documented, allowing for a more thorough analysis of the involvement of heritage than in other cases where the time frame is much shorter or where the need for relocation has not yet been fully acknowledged by all stakeholders. By using the single case study, a more detailed investigation of how preservation is involved in the process, and where it is lacking, is possible. The strong presence of community involvement in the process allows a more fine-grained look at how preservation can facilitate establishing community heritage values and decision-making, and where it falls short. The fact that the design of the new community has already gone through several iterations additionally serves as a way to investigate how heritage can be better involved in new design – where spatial arrangements can be considered in light of preservation, how memorialization can be re-examined, and how important community involvement in this process is.

2.3 Limitations

This thesis' purpose is to explore a new realm of inquiry, whereby heritage engages questions of spatial dynamics. As previously stated, due to the nascent nature of this topic, this thesis cannot engage in an evaluation of the success of relocations, and does not seek to do so. While it does intend to understand what tools preservationists use and whether or not these are successful, the project seeks to understand how heritage can be more anticipatory and how heritage can be reconsidered as a tool to create more adaptable communities.

Chapter 3: Literature Review

In performing this literature review, the goal was to establish what sort of overlap existed between heritage, sea level rise, and relocation. The actual overlap among these three is nonexistent – overlaps exist between sea level rise and heritage, avoiding the question of relocation, or exist between relocation and heritage, with no reference to sea level rise and how its exponential rise may force us to re-evaluate our theoretical approaches towards relocation of heritage as a whole. Further, in both cases literature infrequently examines large-scale issues of entire communities in conjunction with heritage – relocation tends to reference individual moves of structures, or in other fields looks at the question of climate refugees, those fleeing from climate change, without including heritage of any kind within. Although the overlaps are encouraging, the resulting array of literature surveyed indicates that heritage professionals and theoretical discourse have not truly engaged in the process of anticipating issues of sea level-rise and relocation on a large scale.

3.1 Sea Level Rise and Heritage Literature

There is a large amount of literature related to climate change at the time of this writing, one of the most recent examples in the form of the *Global Warming of 1.5 C: Summary for Policymakers* by the Intergovernmental Panel on Climate Change – indicating the potential disastrous effects of climate change on society as a whole if no action is taken in the near future.⁷ The large majority of such publications, gaining much public notice, do not include discussions of heritage – whether to identify risk or call for the inclusion of it in discussions of

⁷ IPCC. *Global Warming of 1.5 C: Summary for Policymakers*. Intergovernmental Panel on Climate Change. October 6, 2018. http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

solutions. Of the literature that does in fact focus on intersection of climate change and heritage, and specifically that of sea level rise and heritage, can be divided into risk analysis, adaptation strategies, policy analysis, and framework proposals.

Risk Analysis

Articles and analyses relating to risk analysis primarily serve to identify the locations of discrete monuments of heritage that will be faced with the need to grapple with this new reality. At a large scale there are several alarm-sounding studies that look at heritage on larger levels, such as potential losses in the Mediterranean found in “Loss of Cultural World Heritage and Currently Inhabited Places to Sea Level Rise” by Ben Marzeion and Anders Levermann, along the eastern seaboard of the United States, or at a global level; these studies show case-based scenarios of what could be at risk given different potential sea level rise.⁸ These range from assessments of individual buildings to landscapes, as in the case of the Dupont, Lien and Veerle Van Eetvelde article assessing impacts of climate change on traditional landscapes in the Flanders basin of Belgium⁹ to archeological sites, such as the article “Coastal Changes and Cultural Heritage (1): Assessment of the Vulnerability of Coastal Heritage in Western France.”¹⁰ Many of these studies are conducted by UNESCO or academic institutions, using mapping or

⁸ Marzeion, Ben & Levermann, Anders. “Loss of Cultural World Heritage and Currently Inhabited Places to Sea Level Rise.” *Environmental Research Letters*.

⁹ Dupont, Lien, & Veerle Van Eetvelde. “Assessing the potential impacts of climate change on traditional landscapes and their heritage values on the local level: Case Studies in the Dender basin in Flanders, Belgium.” *Elsevier, Land Use Policy*, vol 35, 179-191. November 2013.

¹⁰ Daire, Marie-Yvane, Elias Lopez-Romero, Jean-Noel Proust, Hervé Regnauld, Soazig Pian & Benheng Shi. “Coastal Changes and Cultural Heritage (1): Assessment of the Vulnerability of the Coastal Heritage in Western France.” *Journal of Island & Coastal Archaeology*. Vol 7, 168-182. 2012

simulation software.¹¹ Some additionally provide methods for evaluating vulnerability at various scales, as does the article by Leslie A. Reeder Meyers, examining coastal archeological sites and assessing their vulnerabilities, but again do not propose solutions.¹² On smaller scales, local and national newspapers also serve as sources to sound the alarm about discrete sites at risk, such as the potential loss of archeological sites in the Scottish highlands.¹³ These analyses are all related to tangible heritage – using built fabric as the alarm bell and do not generally take intangible heritage into account in their analyses. Another gap in the risk assessment analyses is that they do not often overlay the risk to heritage with risks identified in other studies looking at the social vulnerability of populations, which begin to identify communities particularly vulnerable to sea level rise and therefore likely to be at higher risk of losing heritage due to lack of funds or other forms of support.¹⁴

Adaptation Strategies

Adaptation strategies are another large component of the current literature relating to heritage and sea level rise. The majority of these approach the problem by looking at individual case studies –individual buildings, archeological sites, cities as a whole,¹⁵ and in some cases

¹¹ Nedvedova, Klara & Pergl, Robert. "Cultural Heritage and Floods Risk Preparedness." *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, vol XL-5/W2, 2013.

¹² Reeder-Myers, Leslie A. "Cultural Heritage at Risk in the Twenty-First Century: A Vulnerability Assessment of Coastal Archeological Sites in the United States." *Journal of Island & Coastal Archaeology*. Vol 10, 436-335. 2015

¹³ Dwyer, Jim. "Saving Scotland's Heritage from the Rising Seas." *The New York Times*. September 25, 2018. Accessed November, 2018.

¹⁴ Kashem, Shakil Bin, Bev Wilson & Shannon Van Zandt. "Planning for Climate Adaptation: Evaluating the Changing Patterns of Social Vulnerability and Adaptation Challenges in Three Coastal Cities." *Journal of Planning Education and Research*, vol. 36(3), 304-318. 2016.

¹⁵ Jacob, Klaus H. "Sea Level Rise, Storm Risk, Denial, and the Future of Coastal Cities." *Bulletin of the Atomic Scientists*. 2015.

drawing out larger lessons for adaptation of tangible heritage globally.¹⁶ They do not, for the most part discuss relocation as anything other than a last-ditch option that will hopefully never have to be implemented. Instead, most of the literature of adaptation relates to remaining in place, discussing material impacts of changing water levels (salinity, moisture content, etc). Although many of these do also discuss the importance of advocating for the social and cultural protection integrated with the physical protection, as in the case of Rachel Isacoff's thesis "Raised or Razed: The Challenge of Climate Adaptation and Social Equity in Historic Coastal Communities", they avoid the question of what to do if abandonment becomes necessary.¹⁷

Policy Analyses

A number of policy-related articles focusing on climate change and heritage identify barriers and difficulties in implementing solutions. Most observe the barriers and difficulties in implementing solutions – examples of the difficulties of getting various stakeholders to sign onto policies, the inherent social equity issues related to such policies, etc.¹⁸ Rachel Isacoff's thesis for example, includes analyses of the 2005 planning guide from the Federal Emergency Management Agency - *Integrating Historic Property and Cultural Resource Considerations into Hazard Mitigation Planning* - as well as the *National Park Service Climate Change Response Strategy* in order to analyze issues of social equity in responding to heritage adaptation to

¹⁶ Harman, B., Heyenga, S., Taylor, B., & Fletcher, C. (2015). Global Lessons for Adapting Coastal Communities to Protect against Storm Surge Inundation. *Journal of Coastal Research*, 31(4), 790-801. Retrieved from <http://www.jstor.org/stable/43432895>

¹⁷ Cassar, May. Sustainable Heritage: Challenges and Strategies for the Twenty-First Century. *APT Bulletin: The Journal of Preservation Technology*, Vol. 40, No. 1 (2009), pp 3-11.

¹⁸ Avrami, Erica. Making Historic Preservation Sustainable, *Journal of the American Planning Association*, 82:2, 104-112, DOI: [10.1080/01944363.2015.1126196](https://doi.org/10.1080/01944363.2015.1126196) 2016.

climate change.¹⁹ Although the thesis does identify relocation as a possibility, and identifies several policies that impact this route – such as the FEMA buyout program, and the exclusion of historic properties from the National Register – and concludes with the importance of the community in being a part of this decision, it does not delve deeply into methods by which heritage could be better integrated into the planning stages of relocating a community. Other articles generally limit themselves to reporting barriers and challenges as limited guidance and a lack of political will to adapt to changing climate.²⁰ The barriers identified however, do not generally address economic and other potential financial barriers, areas that could use further investigation in better integrating heritage into communities’ reactions to climate change.

Of the variety of articles surveyed however, a solid subset identify the importance of involving the community and engaging them strategies relating to confronting sea level rise and heritage.²¹ Some look at the issues of climate change as related to cultural landscapes using primarily communities’ values, attitudes, and traditions.²² Indigenous peoples seem to be the point of primary investigation when one looks at the impact upon traditional knowledge and cultural identity in relation to climate change, such as those in the Arctic²³, the Solomon Islands²⁴, and Canada²⁵, among others. These articles do look at coastal communities for the

¹⁹ Isacoff, Rachel B. (2014). Raised or Razed: The Challenge of Climate Adaptation and Social Equity in Historic Coastal Communities. (Masters Thesis). University of Pennsylvania, Philadelphia, PA.

²⁰ Breen C (2007) Advocacy, international development and world heritage sites in Sub-Saharan Africa. *World Archaeology* 39(3):355–370

²¹ Elizabeth Brabec and Elizabeth Chilton. "Toward an Ecology of Cultural Heritage." *Change Over Time* 5, no. 2 (2015): 266-285.

²² Walter, R. K., and R. J. Hamilton. 2014. A cultural landscape approach to community-based conservation in Solomon Islands. *Ecology and Society* 19(4): 41.

²³ Crowley, P. Interpreting ‘dangerous’ in the United Nations framework convention on climate changes and the human rights of Inuit. *Regional Environmental Change*, 11(Suppl 1): 2011, 265-274.

²⁴ Leon JX, Hardcastle J, James R, Albert S, Kerseka J, Woodroffe CD. Supporting local and traditional knowledge with science for adaptation to climate change: lessons learned from participatory three-dimensional modeling in BoeBoe, Solomon Islands. *Coastal Management*, 43(4), 2015, 424-438

most part, but do not offer much in the way of suggested methodologies, rather they look primarily at the impacts of climate change (sea level rise among them) on such traditions and emphasize how important it is to involve these groups in decision-making about these issues, but offer few insights into precisely how to do so.

Framework Proposals

Some literature attempts to confront the dearth of methodologies available for heritage professionals dealing with climate change in general. These frameworks look at how to assess vulnerability, such as in the case of Cathy Daly's article looking at the conservation of archeological sites.²⁶ Others focus on assessing the capacity for adaptation of cultural heritage sites in order to create a conceptual framework.²⁷ Still others provide targeted solutions for specific locales (such as Norway²⁸ or the UK²⁹) and focus on integrating the need for better communication with the private and public sectors. Throughout, literature focusing on frameworks highlights the fact that individual methodologies, tailored for unique sites or types of sites, are the norm – there are no articles that attempt to combine already developed methodologies into more generally applicable frameworks for the general heritage community.

To some extent this makes sense – all heritage has its own set of unique circumstances and

²⁵ Ermine, W and Pittman J. Nikan oti (the future) adaptation and adaptive capacity in two first nations communities. In: Filho WL (ed) *The economic, social, and political elements of climate change*. Springer, Beline Heidelberg, 2011, 69-80.

²⁶ Daly, Cathy. A Framework for Assessing the Vulnerability of Archeological Sites to Climate Change: Theory, Development and Application. *Conservation and Management of Archeological Sites*, Vol 16, No. 3, August 2014, 268-282.

²⁷ Phillips, Helen. The capacity to adapt to climate change at heritage sites – The development of a conceptual framework, *Environmental Science & Policy*, 47, 118-125. 2015

²⁸ Haugen, A., & Mattsson, J. (2011). Preparations for climate change's influences on cultural heritage. *International Journal of Climate Change Strategies and Management*, 3(4), 386-401.

²⁹ Howard AJ, Kinsey M, Carey C (2015) Preserving the legacy of historic metal-mining industries in light of the water framework directive and future environmental change in Mainland Britain: challenges for the heritage community. *Hist Environ Policy Prac* 6(1):3–15

possible approaches; however there has not been a broad survey of methodologies applied to how to handle climate change (or even specifically sea level rise) in relation to heritage. As previously mentioned in other sections, there are no analyzed frameworks that relate directly to relocating heritage in the face of sea level rise – while this is unsurprising, it results in a lack of direction for those who will have to face this necessity in the future, and additionally does not poise heritage professionals to be prepared to answer the questions that will arise, or to even have a voice in the process.

3.2 Relocation Literature

As mentioned above, literature relating to the adaptation in place of heritage in the face of sea level rise is varied – what is of minimal mention is the relocation of heritage in the face of climate change. Some literature relating to migration does exist – as seen in Victoria Herman’s article about cultural heritage considerations in relation to climate-driven migration.³⁰ In general however, literature that looks at heritage relocation generally focuses on the moving of individual buildings, material investigations into the fragility and strength of materials, and policies regarding the moving of tangible heritage. At the other end of the scale, guidelines exist for the relocation of large groups of people, but do little to incorporate heritage within these guidelines.

Examples abound of individual examples of buildings that have been moved for various reasons – from flooding and other natural disasters, human interventions such as dams, and even simply in fits of pique. Actual examples of larger community moves that include a

³⁰ Herrmann, V. S. (2017). Culture on the move: Towards an inclusive framework for cultural heritage considerations in climate-related migration, displacement and relocation policies. *Archaeological Review from Cambridge*, 32 (2), 182-196. <https://doi.org/10.17863/CAM.23647>

discussion of heritage are rare. There are studies of large scale moves of communities, identifying who was the initiator, what the reasons for the move were, and whether it has actually taken place – but these particular studies are broad scale ones that do not include a discussion of heritage as a factor.³¹ Other studies at smaller scales have also been carried out, but again tend to leave out the question of heritage and focus on traditional infrastructure discussions.³² The case of Kiruna, Sweden, for example, the move of an entire village 2 miles east, including parts of its heritage – picked by vote of the community – is to be effected over a period of 100 years, and is due to a man-made mine that has the potential to collapse.³³ While this example provides a potential useful framework, and literature around this topic has begun to be disseminated, the timeframe is a much longer one than what will be available to those suffering the effects of sea level rise, and to a large extent lacks the urgency that is faced due to the exponential rise of sea levels.

Literature relating to policies about moving buildings focus on examples such as Australia and New Zealand, which do have actual policies in place to allow for the moving of buildings.³⁴ In this case it is because both countries have a history of natural disasters such as earthquakes as well as a history of moving communities out of harm's way due to the creation of dams by the government. In New Zealand, the heritage charter specifically states that so long as either the building itself has a history of being moved or the building no longer relates

³¹ Hino, M., Field, C. B., & Mach, K. J. (2017). Managed retreat as a response to natural hazard risk. *Nature Climate Change*, 7(5), 364-370.

³² Niven, Rhiannon J. & Douglas K. Bardsley. "Planned Retreat as a Management Response to Coastal Risk: A Case Study from the Fleurieu Peninsula, South Australia." *Regional Environmental Change*, vol 13, issue 1, 193-209. 2013.

³³ Bromwich, Jonah. How do you Move a City? Ask Kiruna, Sweden. *New York Times (Online)*. New York: new York Times Company. May 20, 2016.

³⁴ Gregory, Jenny. "Reconsidering Relocated Buildings: ICOMOS, Authenticity, and Mass Relocation." *International Journal of Heritage Studies*, vol 14, issue 2, 112-130. 2008.

to its context (either because the context has been irreversibly altered over time or destroyed) permission to physically move the building is given. In Australia, studies have been carried out about the need for significant collaboration between all sectors (community, government and planning practitioners) during recovery and resettlements – but this study in particular relates to recovery of a rapid man-made natural disaster that had not been anticipated, unlike the forecasted sea level rise.³⁵

On the other end of the spectrum of relocation literature are those that relate directly to the relocation of communities. The Nansen Initiative, produced in conjunction with the United Nations High Commissioner for Refugees, produced a set of guidelines for planned relocations, and within suggests that “additional factors for success include taking into account community ties, cultural values, traditions, and psychological attachments to their original place of residence.”³⁶ However, the guidelines do not further provide suggestions for how to actually do this, leaving them less robust in their protection of heritage than they might be. Other initiatives have begun to recognize this gap – such as the report generated for the First Peoples Convening on Climate-Forced Displacement conference in October 2018, which emphasized that most climate research “continues without considering traditional knowledge or even fully engaging and consulting with indigenous communities.”³⁷ This, despite the fact that the UN Special Rapporteur of the Rights of Indigenous Peoples has stated: “climate change solutions

³⁵ Okada,T., Haynes,K., Bird,D., vandenHonert,R. & King,D. Recovery and resettlement following the 2011 flash flooding in the Lockyer Valley. *Int.J. Disaster Risk Reduct.*8,20–31(2014)

³⁶ The Nansen Initiative. Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change. The Nansen Initiative: Disaster-induced Cross-Border Displacement. June 10, 2015. 5

³⁷ h UUSC. One Story: A report of the First Peoples Convening on Climate-Forced Displacement. Girdwood, Alaska. October 1-4, 2016. 14

[...] must include indigenous people's traditional knowledge, innovations, and practices."³⁸

Again, this statement does not include suggestions or guidelines in how to do this, leaving a gap in how to proceed and losing some of the emphasis on incorporating cultural heritage into the process of relocation.

One further area related to relocation is literature examining the psychological impacts of moving and the psychology of sense of place. This literature however is primarily investigated in the realms of psychology and other behavioral sciences.³⁹ Literature in the area of anthropology begins to make the connection between sense of place and the trauma faced in involuntary relocations, due to the disruption of routine and familiar surroundings, as in the examination by Theodore Downing and Carmen Garcia-Downing in chapter 11 of Development & Dispossession: The Crisis of Forced Displacement and Resettlement.⁴⁰ It is rarely directly connected to an analysis of heritage and the value of heritage, thus never making the data-driven case that heritage provides an important function as a psychological grounding force for communities at large, providing a sense of home and therefore making them more resilient to change.

³⁸ UN Office of the High Commissioner for Human Rights, Report of the Special Rapporteur on the Rights of Indigenous Peoples, November 1, 2017, 10, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G17/330/97/PDF/G1733097.pdf?OpenElement>

³⁹ Doherty, Thomas J., Clayton, Susan. The Psychological Impacts of Global Climate Change. *American Psychological Association*, Vol 66, no 4, 2011, 265-276.

⁴⁰ Downing, T and C. Garcia-Downing 2009. "Routine and Dissonant Cultures: A Theory about the Psycho-socio-cultural Disruptions of Involuntary Resettlement and Ways to Mitigate Them without Inflicting Even More Damage, In *Development and Dispossession: The Crisis of Forced Displacement and Resettlement* edited by Anthony Oliver-Smith, Santa Fe: SAR Press. 225-254

3.3 Conclusion

As noted in many of the above examples, there are some large gaps in the literature relating to heritage and sea level rise. To some extent, some of this is due to the timely nature of this thesis – at the time of this thesis writing, articles and investigations into the phenomenon and its potential impacts are still underway, and therefore less literature is available on the topic. However, the literature mentioned above still indicates that most studies are being carried out about adaptation of heritage in place – from a material and built perspective. The literature rarely looks at the social aspect of heritage – the fact that although preserving the built fabric is what heritage professionals often look at, the reason for which it should be done is that it helps to promote resilient communities – of which there is very little quantified data to substantiate this statement. In effect, there is little investigation into the community perspective of why they wish to maintain this and how they want to go about the process. Although this thesis does not seek to answer this question, the lack of detail about how heritage can in fact help communities be more resilient makes the integration of heritage into climate change planning all the more difficult.

Another gap identified is a lack of investigating heritage that will not be able to adapt in place and where one will need to consider triage and relocation approaches. As stated previously, much of the literature surrounding climate change and sea level rise primarily serves to sound the alarm about locations potentially under threat or to suggest how some structures might be adapted in place – none look at the potential need to abandon these sites or to relocate them and then how to deal with these necessities. In the same vein, there is little, if any, discussion about how heritage can potentially be spatialized and used as a basis for

design of a new community when it will be relocated – although there are as of yet few examples of full community relocations occurring, there is very little literature available to suggest a framework for thinking about heritage in terms of how it could be used to help relocated communities be more resilient. Although there are psychological and social science investigations into the feeling of belonging and place, these investigations have not been applied to heritage – whether tangible or intangible – as a method of alleviating the resulting trauma of mass relocation from a home site.

Finally, literature about heritage and climate change in general is a very reactive one – alarms are sounded, potential solutions for saving places are suggested, but very few are reactive in attempting to incorporate heritage planning at a larger policy level in an anticipatory measure. Most of the literature identifies the barriers in place to getting different stakeholders to work together, or the barriers to different government agencies to working together, etc. Few however propose new frameworks for methods of getting past these barriers, or potential solutions.

Although this thesis cannot answer all of the above identified gaps, it does make it clear that there is a need for further investigation in order to incorporate heritage into the larger climate change discussions, particularly as cities, municipalities, and countries begin to make plans to combat sea level rise – which may include plans to relocate entire populations and thus impact the heritage in those areas.

Chapter 4: Heritage under threat

The Isle de Jean Charles and its fight to maintain tribal culture

4.1 Isle de Jean Charles background

The Isle de Jean Charles is a narrow island located in Terrebonne Parish, Louisiana (fig 1), situated between Bayou Terrebonne and Pointe-aux-Chene.⁴¹ The Terrebonne (French for “good earth”) Parish is the second-largest in Louisiana, with about 111,000 residents, bordered by the Mississippi River to the East, the Atchafalaya Basin to the West, and the Gulf of Mexico to the south.⁴² The geography of the parish itself is a constantly changing landscape of lakes, bayous, and eroding channels; the Island de Jean Charles sits squarely in this ever changing landscape, with Bayou Jean Charles running squarely down the middle of the island, and subject the risk of rising sea levels due partly to its proximity to the Gulf of Mexico and partly due to previous human interventions in the landscape that have weakened the surrounding ecosystem, impacting the ability of the community to maintain their home and heritage in an environment subject to rapid deterioration.

⁴¹ Isle de Jean Charles, Louisiana, official website. Accessed December 2018.

⁴² Simms, Jessica R.Z. “Why Would I live Anyplace Else?” *Journal of coastal Research*. Vol 33, no 2 (March 2017), 408



Fig 1: Isle de Jean Charles Region Map⁴³

⁴³ Davenport, Coral and Roberston, Campbell. "Resettling America's first 'climate refugees' in Louisiana." *New York Times News Service*. May 3, 2016.



Fig 2: Isle de Jean Charles, present day, Aerial photo ⁴⁴

The island is home to descendants of the Biloxi, Chitimacha, and Choctaw tribes – at the time of this writing approximately 70 people live on the island.⁴⁵ Around 600 people actually constitute the larger tribal community, but due to conditions that will be described later in this chapter, the population of the island has decreased exponentially over the last 20 years. This tribe is a component of the diversity of the coastal Louisiana population, which includes Native American tribes (such as the Biloxi-Chitimacha, United Houma Nation, and Pointe-au-Chien), Acadians, Isleños (descendants of colonists from the Canary Islands), Vietnamese, Cambodians, Croatians, and Creoles, among others.⁴⁶ These social groups are highlighted (as opposed to the various Caucasian groups that also population coastal Louisiana) because they tend to share a

⁴⁴ Haner, Josh. Aerial image for “Resettling America’s first ‘climate refugees’ in Louisiana.” Davenport, Coral and Roberston, Campbell. *New York Times News Service*. May 3, 2016.

⁴⁵ Isle de Jean Charles Resettlement website. <http://www.coastalresettlement.org>. Accessed December 10, 2018.

⁴⁶ Simms, Jessica R.Z. “Why Would I live Anyplace Else?” *Journal of coastal Research*. Vol 33, no 2 (March 2017), 410

common experience of forced relocation – in both the recent and more distant past, which defines elements of their cultural heritage and should inform how preservation professionals interact with these communities.⁴⁷ The residents of the Isle de Jean Charles are no exception. Oral history of the island residents explains that the founding families are descended from Jean Marie Naquin (a Frenchman) and Pauline Verdin (a Native American), whose descendants married other Native Americans of tribes who had resettled to the area following the Indian Removal Act of 1830.⁴⁸ Dated May 28, 1830, the Indian Removal Act passed “an act to provide for an exchange of lands with the Indians residing in any of the states or territories, and for their removal west of the river Mississippi.”⁴⁹ This act allowed the president of the United States to induce Native American tribes to give up their lands in exchange for new lands to the west of the Mississippi River. Almost more importantly the act stated that the federal government would not prevent states from forcibly removing Native Americans in their borders – tacitly giving permission to states to force these communities out.⁵⁰ Thousands of indigenous people were forced out of ancestral lands across the Mississippi. Ancestors of the Isle de Jean Charles were pushed farther south, down into present-day Terrebonne and Lafourche Parishes, using the bayous as a source of refuge as swampland was considered to be land of marginal value, and therefore not a target of state government seizures. Additionally, it provided a condition of anonymity – at the time the bayous were also considered difficult to navigate and

⁴⁷ Kromm, C. and Sturgis, S., 2008. Hurricane Katrina and the guiding principles on internal displacement. Institute for Southern Studies, 36(1-2), 1-40.

⁴⁸ Maldonado, J.K., 2014b. Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation, 295p. Ledet 1982

⁴⁹ U.S. Congress. Twenty-First Congress. Session I. Chapter 148. Statute I. May 28, 1830. In A Century of Lawmaking of a New Nation: U.S. Congressional Documents and Debates, 1774-1875, Statutes at Large, 21st Congress, 1st session. <http://memory.loc.gov/>, Accessed February 2019.

⁵⁰ Maldonado, J.K. 2014 Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation

easy to get lost in, providing an escape for these communities. It is not insignificant that these residents have a history of marginalization, disenfranchisement, and forced relocation in their history, and are now faced with the need to relocate from their homes of the last 100 years.

The tribe primarily grew out of four main families, listed in Terrebonne Parish census records as the first land buyers: Jean-Baptiste Narcisse Naquin, Antoine Livaudais Dardar, Marcelin Duchils Naquin, and Walker Lovell.⁵¹ By 1910 the area was officially called Isle a Jean Charles (named for the first settler's father). Occupations listed were primarily those of fishermen, oystermen, or trappers. Tribal families in the early twentieth century still relied heavily on catching seafood and maintaining gardens – both as a subsistence necessity, but also as a part of community life and sense of pride.⁵² Crops including butter beans, green beans, cantaloupe, peas, carrots, corn, and rice were grown as crops between every house.

This emphasis on subsistence farming and self-reliance meant that members of the tribe primarily kept to themselves, and did not venture very far out of the bayous. In 1938, the Department of Interior conducted a survey of the education of the Houma Indians of southern Louisiana – which included the Isle de Jean Charles (incorrectly grouping all Native American tribes as one in their survey). The findings placed the population of the area on the lowest end of the economic scale and concluded that educational opportunities were nearly non-existent.⁵³ Children of the Isle de Jean Charles attended the Catholic Mission School and the Live Oak Baptist School by pirogue, a small boat carved out of cypress, but only attended school

⁵¹ Prior to 1876 the land was considered uninhabitable swampland until the State of Louisiana began selling the land to private individuals – finally making it legal for Native Americans to purchase land. Isle de Jean Charles, Louisiana, official website. Accessed December 2018

⁵² Maldonado, J.K. Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation. 2014.

⁵³ Campisi, Jack. Houma. In *The Handbook of North American Indians*. Vol. 14, Southeast. Raymond D. Fogelson, ed. Washington, DC: Smithsonian Institution Press. 638

for two to three months of the year in order to help trapping or shrimping with their families, so these findings are not unsurprising.⁵⁴ Even today, most residents have grown up learning to shrimp since a young age – a continued element of the way of life, the intangible heritage of the community.⁵⁵ Gardening however, is mostly gone, and with it a component of tradition. Due to land loss, constant flooding, and intrusion of saltwater, the tradition of gardens behind and in between houses, and the element of community interaction that came with it have all but disappeared today. As a result, communal trading of resources, another element of the complex community web has also diminished – again due to lack of available resources.

4.2 Heritage

Living connected to, physically and economically, nature and the landscape was and still is a major component of the residents' identities, and continues to be emphasized in the community's approaches towards relocation. Heritage in the case of the Isle de Jean Charles is primarily characterized as intangible heritage.⁵⁶ Tangible heritage is practically non-existent today. Original dwellings on the island were built of bousillage (a mixture of mud and moss), with walls about 6 inches thick and then covered with palmetto.⁵⁷ Called "mud houses" these had dirt floors of clay – made higher than ground level to keep out moisture – with floor mats made of palmetto (a type of small palm tree) and dome shaped roofs also covered in

⁵⁴ Maldonado, 2014. Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation

⁵⁵ Ibid.

⁵⁶ For the purposes of this thesis, tangible heritage is defined as any extant structure or physical location that is of cultural value to this community. Intangible heritage is defined as any custom, language, skill, or identity that continues to be practiced by the community – in this case the identity of the tribe, which incorporates customs, languages, skills and produces a shared identity is considered intangible heritage.

⁵⁷ Isle de Jean Charles, Louisiana, official website. Accessed December 2018.

palmetto.⁵⁸ Although these faded from use in the early 1900s (as they required constant repairs and had little protection from hurricanes or flooding) the use of the palmetto tree is still considered central to the tribal culture and sense of place of the residents, and has been suggested as a key symbol in the potential design of the new relocation site.⁵⁹ The only other form of extant tangible heritage are the cemetery and ancestral burial mounds at risk of inundation, a major component of the daily life there, as it serves as a reminder of ancestry and a connection to the past.



Fig 3: Original bousillage dwellings on the Isle de Jean Charles⁶⁰

⁵⁸ Isle de Jean Charles, Louisiana, official website. Accessed December 2018.

⁵⁹ The Lowlander Center. "Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles."

⁶⁰ Official Isle de Jean Charles Website. Accessed October 2018. <http://www.isledejeancharles.com/>

The intangible heritage of the Biloxi-Chitimacha consists of the customs and traditions of the tribe and includes traditional skills such as the knowledge of carving pirogues – traditionally used as methods of transportation and fishing – making cast nets, and basket weaving from the heart of palmetto trees. Shrimping and fishing, using the previously mentioned skills, are still a part of the collective knowledge of the tribe, although used less and less as people have moved away from the island. Prior to land loss, as previously mentioned, sustenance farming via gardens in between houses was also a traditional activity, and served a double purpose: it also encouraged community interaction that is so central to the social identity of the tribe. This social identity also includes traditions of meeting at the tribal center, the appointment of a head chief, communal activities such as pow-wows, and language. These are all elements of the identity of the tribe as one cohesive social group, and that identity is their intangible heritage that they seek to preserve. “Tribal existence is formed through a persistent extended family network around indigenous ancestry and social identity as an Indian group.”⁶¹ As will be discussed later, this extended network is being threatened in large part because of rising sea levels and erosion, which have caused large swaths of the tribe to move off and away from the island, and has been a large reason for the push to move the entire community to a new settlement, bringing along with them those members of the tribe who have left the island already.

⁶¹ Maldonado, 2014. Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation. 92.

4.3 Rising Sea Levels

Coastal Louisiana as a whole is particularly susceptible to changes in coastal climate: it contains approximately forty-one percent of the country's coastal wetlands but is also experiencing ninety percent of total coastal wetland loss throughout the continental United States.⁶² In the last eighty years, the state has lost approximately 1,880 square miles of land – which amounts to about twenty-five percent of land area since 1932, and continues to lose twenty-five to thirty-five square miles a year.⁶³ Fig 4 illustrates the land loss that has already occurred between 1932 and 2011 over the southern coast of Louisiana as a whole – impacting the Isle de Jean Charles in the process.

When originally settled in the 1830s, the island was about 5 miles wide and 11 miles long. As of 2016, 98% loss of land has occurred: only 320 acres remain of the documented 22,300 acres in 1955 and the island is about one-quarter mile wide and two miles long.⁶⁴ Figures 5a and 5b illustrate the enormous loss of land between 1963 and 2008 in the immediate region surrounding the Isle de Jean Charles – these are severe levels of land loss that are already occurring, and can only be exacerbated by rising sea levels.

⁶² Turner, R.E. "Wetland Loss in the Northern Gulf of Mexico: Multiple Working Hypotheses." *Estuaries* 20(1): 1-13. 1997. ; Couvillon et al. 2011. In the last eighty years, the state has lost 1,880 square miles of land.

⁶³ Couvillon et al, Land Area Change in Coastal Louisiana from 1932 to 2010: U.S. Geological Survey Scientific Investigations Map 3164. 2011.

⁶⁴ The Lowlander Center. "Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles." Accessed December 2018.

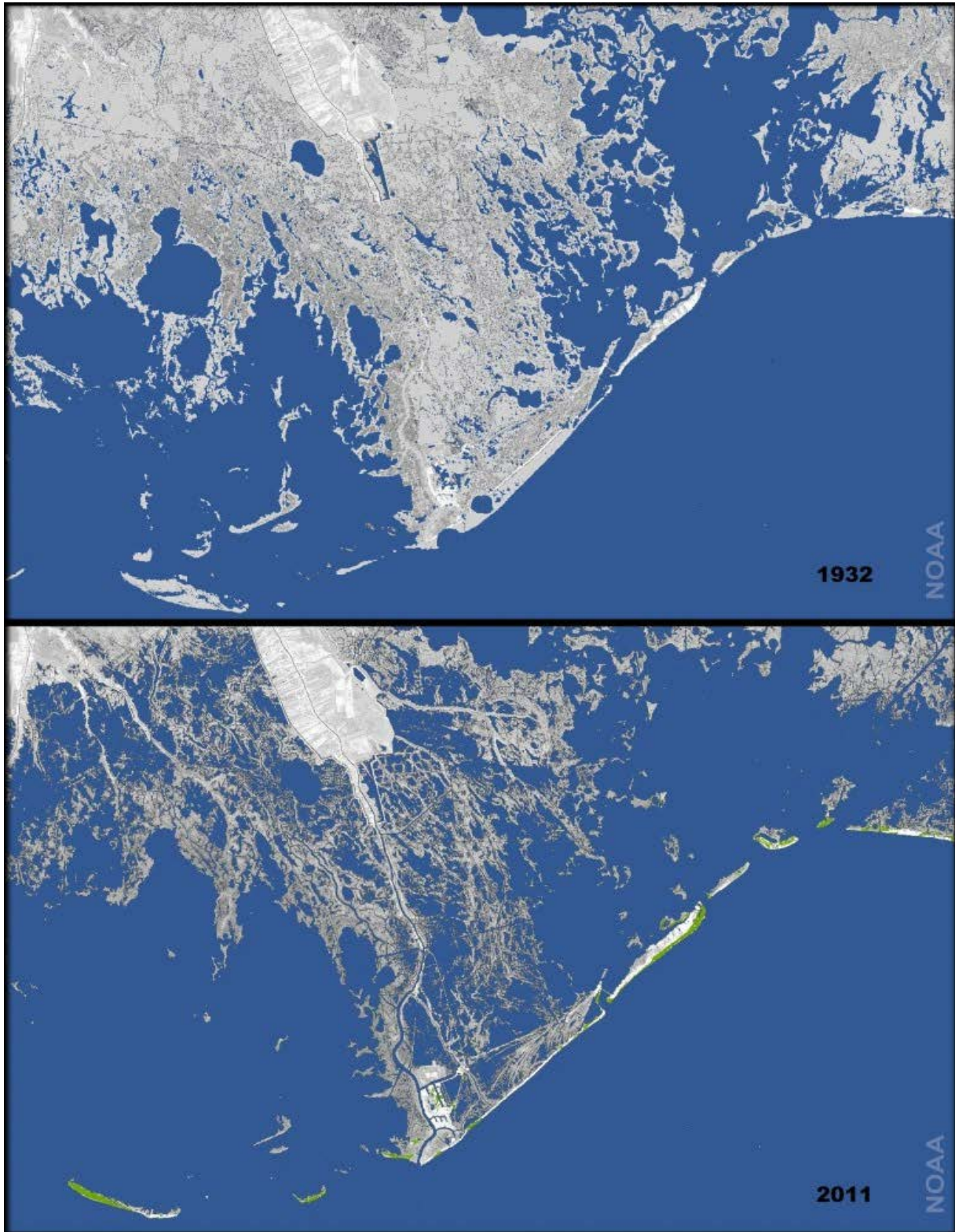


Fig 4: NOAA satellite imagery comparing coastal Louisiana's land coverage in 1932 and 2011⁶⁵

⁶⁵ Wernick, Adam. "Louisiana's coastline is disappearing at the rate of a football field an hour." *PRI*. September 23, 2014.



Fig 5a: Isle de Jean Charles, February 5, 1963⁶⁶

⁶⁶ U.S. Geological Survey. Isle de Jean Charles, Louisiana, USA, February 5, 1963, Aerial Photo. WorldView Satellite. <https://earthshots.usgs.gov/earthshots/node/102#ad-image-2-0> Accessed March 2019.



Fig 5: Isle de Jean Charles, October 1, 2008⁶⁷

⁶⁷ U.S. Geological Survey. Isle de Jean Charles, Louisiana, USA, February 5, 1963, Aerial Photo. WorldView Satellite. <https://earthshots.usgs.gov/earthshots/node/102#ad-image-2-0> Accessed March 2019.

Losses of wetlands in Louisiana as a whole are not attributable to one single cause. Natural disasters, such as hurricanes, do cause severe problems for the region. However, many of the effects of these natural disasters have been exacerbated by human action, which have further made the region more vulnerable to sea level rise. Beginning in the 1920s, levees and water diversion systems (built to ease flooding along the banks of the Mississippi) were constructed, and have lead to a decrease in sedimentary load – essential to form the basis of new coastal land and regenerate existing marshes.⁶⁸ Without this replenishing of sediment, coastal edges are more easily eroded and plant life decreases, further reducing the area’s natural defenses. Early twentieth-century cypress logging, canal dredging, and oil and gas extraction and drilling (continued well into the late twentieth and twenty-first centuries) have carved all around the island, allowing greater saltwater intrusion, and reducing the number of wetlands and barrier islands to the south, further damaging the freshwater marsh.⁶⁹ These effects have damaged the natural resilience of the area, leaving it further vulnerable to future disasters.

Increased sea level rise is already a concern in how it will impact the already high rate of land loss – for example future forecasts of a 3.3 foot rise would effectively turn New Orleans into an island, and immediately submerge what is left of Isle de Jean Charles.⁷⁰ According to a National Oceanic and Atmospheric Administration (NOAA) report, the area of southeast coastal Louisiana will face the highest rate of relative sea level rise worldwide – with up to an additional 4.3 feet of water rise by the end of the century.⁷¹ Other reports, such as that of U.S.

⁶⁸ Turner, R.E., “Wetland Loss in the Northern Gulf Of Mexico: Multiple Working Hypotheses.” *Estuaries* 20(1):1-13. 1997

⁶⁹ Isle de Jean Charles, Louisiana, official website. Accessed December 2018.

⁷⁰ Burkett, Virginia, and Margaret Davidson, eds. *Coastal Impacts, Adaptation and Vulnerability: A Technical Input to the 2012 National Climate Assessment. Cooperative Report to the 2013 National Climate Assessment.* 2012

⁷¹ Marshall, Bob. “New Research: Louisiana Coast Faces Highest Rate of Sea-Level Rise Worldwide.” *The Lens.* February 21. 2013

Global Change Research Program, concur with these estimates, placing SLR at between 2 to 6 feet by 2100; they all concur that SLR is expected to continue well beyond this century.⁷² Fig 6 and 7 from Louisiana's 50 year Sustainability Master Plan illustrate the low and high predicted land loss and flood depths of the next 50 years based on these and other reports. Important to keep in mind is that even in the low scenario outcomes, the Isle de Jean Charles will continue to lose land at an ever-increasing rate, and will be even further vulnerable to natural phenomenon, such as hurricanes and high-tide flooding. This future flooding has impacts that reach far beyond just the island and the immediate community. Researchers in 2010 estimate that the Mississippi River Delta (south Louisiana), provides at least \$12 billion to \$47 billion in benefits to people each year.⁷³ Seventy-five percent of Louisiana's commercial fin and shellfish species depend on wetlands for spaying, nursery habitat, and feeding, and Louisiana is the 2nd highest commercial finish landing in the United States - meaning that reduction in land and rising flooding directly impacts not just the economy of Louisiana, but of the United States as a whole.⁷⁴ Further, rising sea levels will impact tourism in Louisiana, which relies on its natural wetlands as a destination, generating a \$16.8 billion industry, with 46.7 million visitors a year.⁷⁵ Rising sea levels is a larger problem than just one group in an isolated setting, and it will continue to impact larger groups of people as they are forced to move due to not only physical

⁷²Melillo, Jerry M., Terese (T.C.) Richmond, and Gary W. Yohe, Eds., 2014: Climate Change Impacts in the United States: The Third National Climate Assessment. U.S. Global Change Research Program, 841 pp. doi:10.7930/J0Z31WJ2. Pp 45

⁷³ Batker, D., I. Torre, R. Costanza, P. Swedeen, J. Day, R. Boumans, and K. Bagstad. (2010). Gaining Ground. Wetlands, Hurricanes and the Economy: The Value of Restoring the Mississippi River Delta. Earth Economics. Tacoma, WA.

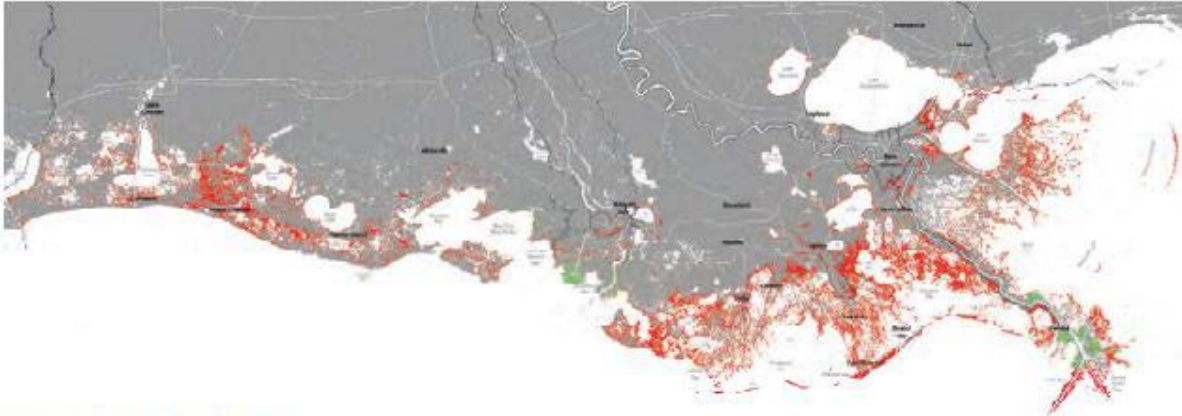
⁷⁴ Coastal Protection and Restoration Authority of Louisiana. "Louisiana's Comprehensive Master Plan for a Sustainable Coast." State of Louisiana. June, 2 2017. 12

⁷⁵ Department of Culture, Recreation and Tourism. "Louisiana Office of Tourism 2016 Annual Report." State of Louisiana Department of Culture Recreation & Tourism Office of Tourism. 2016.

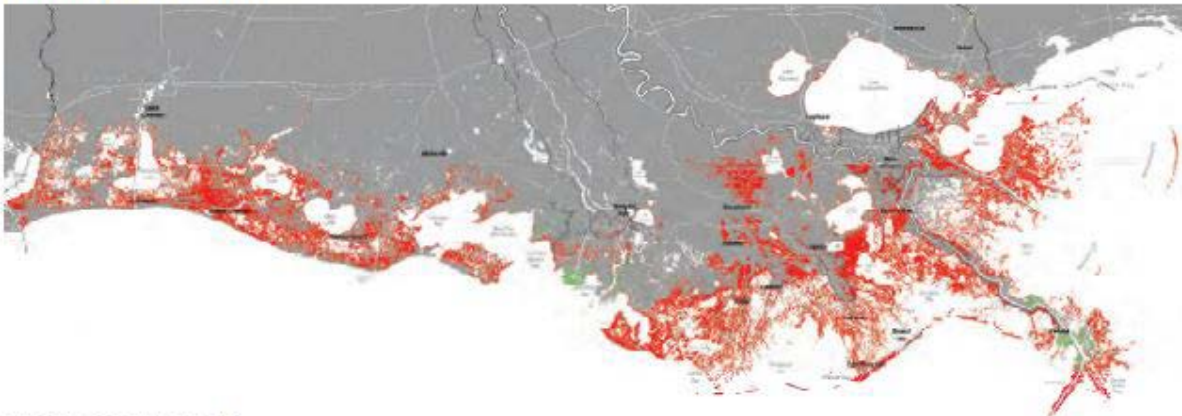
https://www.crt.state.la.us/Assets/Tourism/research/documents/2016-2017/LOT1730_AnnualReport-FINAL_2017-04-06_Digital.pdf Accessed April 2019. 3

land loss but also loss of economic possibilities. The Isle de Jean Charles is in many ways the testing ground for future relocations that will likely occur.

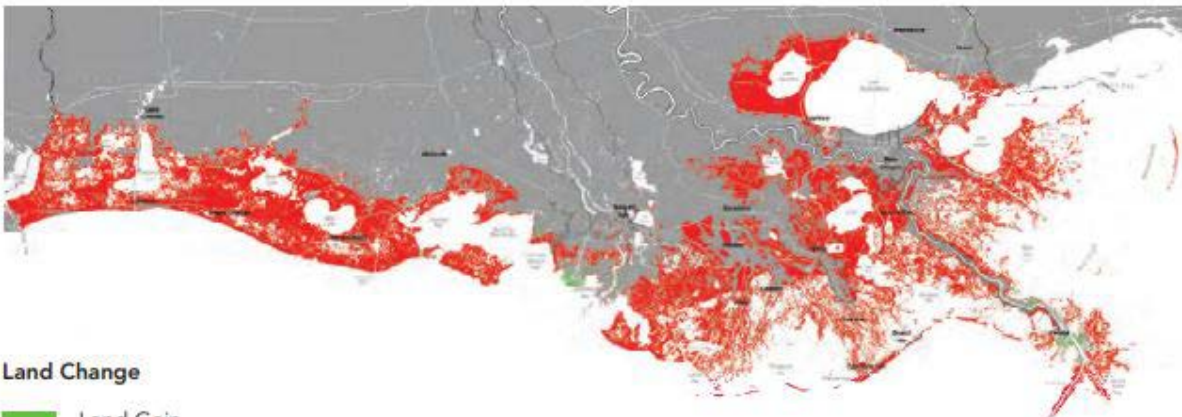
LOW SCENARIO



MEDIUM SCENARIO



HIGH SCENARIO

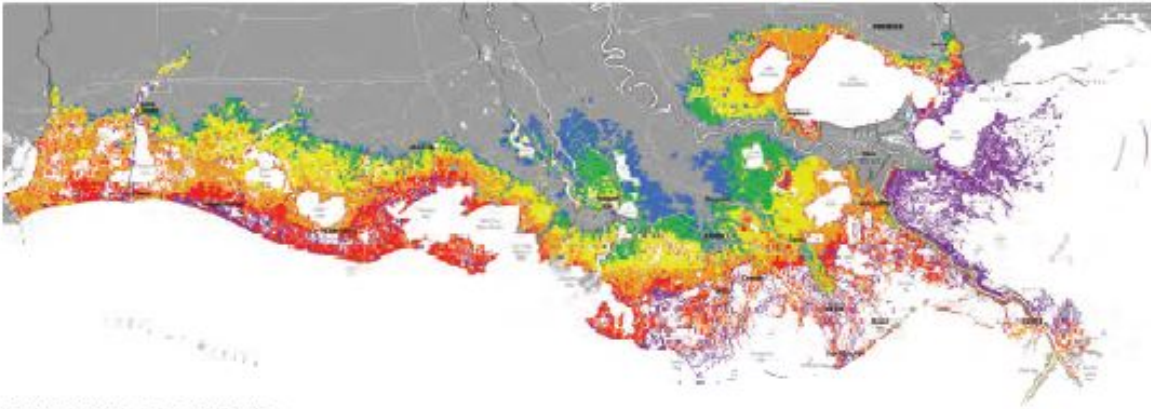


Land Change
Land Gain
Land Loss

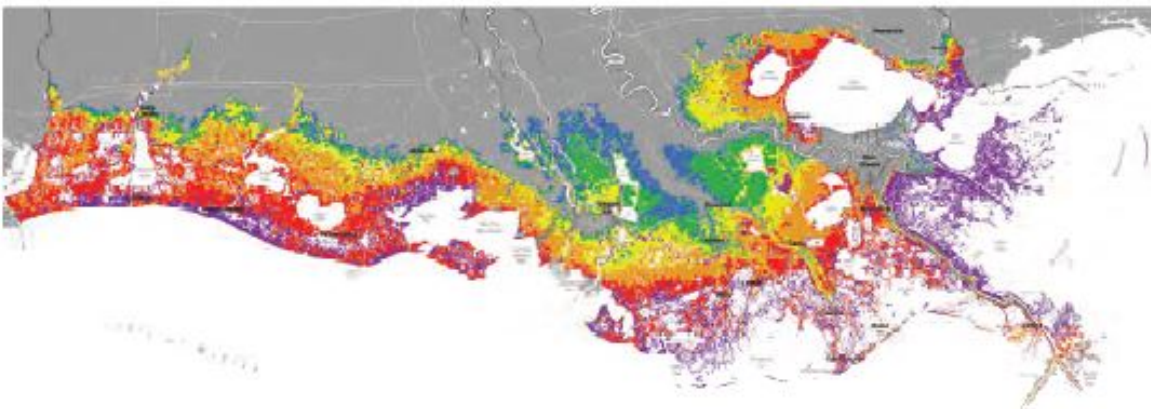
Fig 6: Estimated Louisiana Land Loss over the next 50 years – low and high probability scenarios⁷⁶

⁷⁶ Coastal Protection and Restoration Authority of Louisiana. "Louisiana's Comprehensive Master Plan for a Sustainable Coast." State of Louisiana. June, 2 2017. 43.

LOW SCENARIO



MEDIUM SCENARIO



HIGH SCENARIO

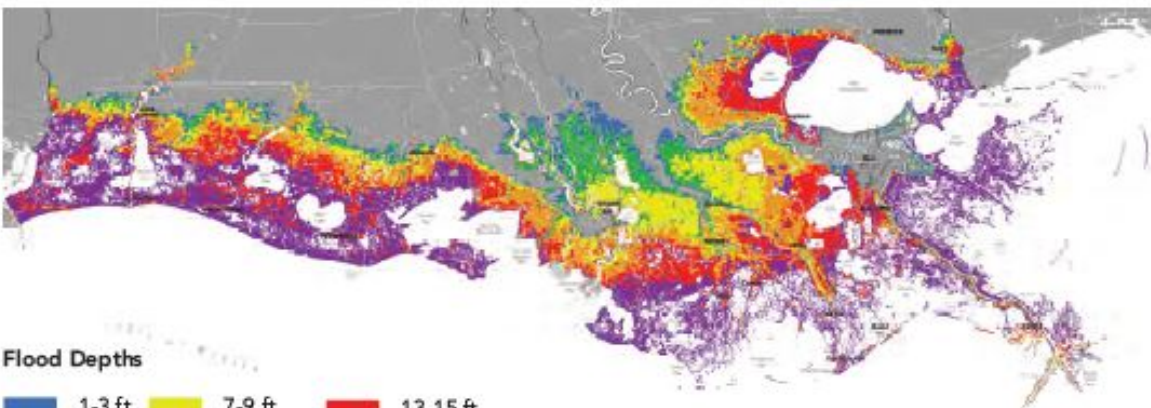


Fig 7: Estimated Flood Depths over the next 50 years – low to high probability scenarios⁷⁷

⁷⁷ Coastal Protection and Restoration Authority of Louisiana. “Louisiana’s Comprehensive Master Plan for a Sustainable Coast.” State of Louisiana. June, 2 2017. 44

While the disappearance of land is not attributable to a single cause, it is clear that continued sea level rise will soon make the island uninhabitable – not only because of the actual loss of land, but also because the resulting decrease in marshland reduces plant and animal biodiversity, which impacts the residents’ way of life. As previously noted, part of the cultural heritage of the tribe residing on the island includes fishing and shrimping – traditional activities that residents have tried to keep alive. Higher sea levels will further cause saltwater intrusion on the marshland, killing off the remaining ecosystem of fish and plants that the tribe has historically interacted with. Rising sea levels not only present a threat to the tribe’s physical home, they also present one to their way of life.

4.4 Effects of Land Loss on Community and Heritage

Land loss over time has taken a toll on the cultural heritage of the tribe – in the loss of physical presence as people move away from the site, in the loss of tangible elements of heritage, and in the loss of a cohesive network that the tribe has traditionally relied upon. Although resilient and determined to hold onto their roots, the tribal ecosystem has suffered, to the point of loss of identity as a whole, causing mental and emotional stress to both residents remaining and those who have moved away from their original homes on the island.⁷⁸ This evident trauma however, makes it clear that the relocation of the tribe must take into account their heritage values and how the move away from this place, their last (though rapidly eroding) symbol of heritage will impact the community’s ability to adapt to the new site. Heritage professionals, who focus as much on the memories connected to a place as much as

⁷⁸ Maldonado, J. Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation. 2014. 176

the physical place itself, should be a part of this process, not only to preserve heritage, but to use it to provide the community with a new anchor, one that re-integrates their heritage values with the new site.

Despite the close-knit nature of the residents – both through tribal culture and bloodlines – the rapid shrinkage of the island has caused many individuals with the means to do so to move to outlying areas; census data suggests that the destinations are usually within the coastal zone, but further north.⁷⁹ This move away by residents has been slowly eroding the tribe's traditions and social network, endangering its heritage, but also making it more difficult for the community to continue to have a support system in order to weather the continued changes, which has contributed to the decision to relocate en-masse. One of the traditions being lost is language. Although it began in the early 1900s, when children were forced to speak English in school, losing both the Choctaw language and the Cajun French, the relocation of the younger generation especially has continued to speed up the process.⁸⁰ Traditional skills such as the art of carving pirogues, making cast nets, and basket weaving from the heart of palmettos are also being lost. Further is the loss of sense of community. As explained by residents, they were used to being surrounded by family, but with so many people relocated, the feeling of closeness and social networks has faded.⁸¹

In addition to these intangible heritage components, the very limited remaining tangible heritage, those of the ancestral ceremonial mounds and the cemetery on the island are at risk

⁷⁹ Bailey, Conner, Robert Gramling and Shirley Laska. Complexities of Resilience: Adaptation and Change within Human Communities of Coastal Louisiana. In, J. Day, P. Kemp, A. Freeman, and David Muth (eds.). *The Once and Future Delta*. New York: Springer. 2014.

⁸⁰ Maldonado, J. *Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities*. Washington, D.C.: American University, Ph.D dissertation. 2014.

⁸¹ Maldonado, J. *Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities*. Washington, D.C.: American University, Ph.D dissertation. 2014. 176

of complete inundation. Interviewed tribal members indicate that the mounds are a part of their people – “people talked about going to the cemetery to visit their family members who had passed away and feeling a sense of peace and comfort when talking to them.”⁸² The loss of this sense of comfort is potentially a source of intense negative consequences for the ability of the community to weather resettlement as a whole, and needs to be addressed in the plans moving forward.

At the crossroads of intangible and tangible heritage loss is the missing community center. Originally a store served as a center – where dances, school lessons, services, etc. took place – but today there is nowhere left on the Island to provide for one, leaving residents without a centralized gathering space that forms the basis of their social network. Also straddling the line were the presence of gardens in between homes (mentioned in the preceding section). These tangible spaces, gone today, served as a further means of continued social interaction (on top of providing subsistence food); due to saltwater intrusion and continued flooding, these spaces no longer exist and have made it even more difficult for residents to continue to keep a hold of their traditions and sense of community alive.

A large swath of social science literatures has documented many negative consequences for individuals, families, and communities impacted by forced displacement and resettlement – including marginalization, loss of resilience, livelihoods and traditional skills, break up of family, social groups and communities, and the mental stress of living in a strange place.⁸³

“Root shock, the traumatic stress reaction to the destruction of all or part of one’s emotional ecosystem [...] is a profound emotional upheaval that destroys the working

⁸² Maldonado, J. Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation. 2014. 170

⁸³ Ibid 170.

model of the world that had existed in the individual's head [...] at the level of the community [it] ruptures bonds, dispersing people to all the directions of the compass. Even if they managed to regroup, they are not sure what to do with one another."⁸⁴

People experience a "collective loss" as a result of forced displacement "the loss of a massive web of connections – a way of being."⁸⁵ This "way of being" is a part of what heritage professionals recognize as intangible heritage – traditional skills, actions, and social identity that are at the core of communities' abilities to be adaptable towards change. None of the social science literature specifically refers to any of these components as "heritage," but they already make the case that traditional skills and social identity are a part of the core of what makes a community resilient – that intangible heritage as much as tangible heritage can be a key component to alleviating some of the negative consequences of forced displacement. This supports the idea of place attachment – "the sense of place as a connection between people and the places they repetitively use, in which they dwell, in which their memories are made and to which they ascribe a unique feeling."⁸⁶ Or as one Isle de Jean Charles resident put it "the place you were born [...] but it's more than just a place where you were born. Your ancestors were here. The people before you were here. The genealogy, the tradition, everything, this is where you belong right here."⁸⁷

Root shock is of concern to most coastal communities facing sea level rise, even if it is not directly identified as such. In a similar case, on the island of American Samoa, for example, it is

⁸⁴ Fullilove, Mindy Thompson. *Root Shock: How Tearing Up City Neighborhoods Hurts American and What We Can Do About It*. New York: One World Press. 2005. 14

⁸⁵ *Ibid*, 4

⁸⁶ Morgan, David W., Nancy I. M. Morgan, and Brenda Barrett. "Finding a Place for the Commonplace: Hurricane Katrina, Communities, and Preservation Law." *American Anthropologist*. 108(4). 2006., 706.

⁸⁷ Excerpt from resident interview, Maldonado, J. *Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities*. Washington, D.C.: American University, Ph.D dissertation. 2014

articulated as a fear that the sea, once a symbol of culture and pride, will become a symbol of fear and that they will lose their way of life due to forced relocation. Over the last fifty years, sea levels have risen in the archipelago by a rate of 0.8 inches per decade.⁸⁸ Estimates suggest that by 2050 the water level will rise another six inches, and by 2100 may reach fifteen inches above current levels.⁸⁹ To make matters worse, the island itself is also sinking – the volcanoes that created these islands are silent, and lack of thermal uplift, deflation of magma chambers, and increased island weight are causing subsidence: where the low-lying coastal areas become submerged, which are where most villages and infrastructure are also located.⁹⁰ At the moment, the island community has erected a concrete sea wall along the major road that provides access to essential infrastructure – but this will likely not be enough in the coming years, forcing these communities to consider relocating inward. Myron Thompson, consultant to the Secretary of Samoan Affairs, articulates the current situation as one that will require them “to change our identity from ocean to mountain people.”⁹¹

⁸⁸ Hermann, V and Keene, E. “100 times stronger: Sea Level rise, Subsidence, and Storms in American Samoa.” *Saving Places*. June 1, 2016. <https://smartgrowth.org/100-times-stronger-sea-level-rise-subsidence-storms-american-samoa/>

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Ibid.

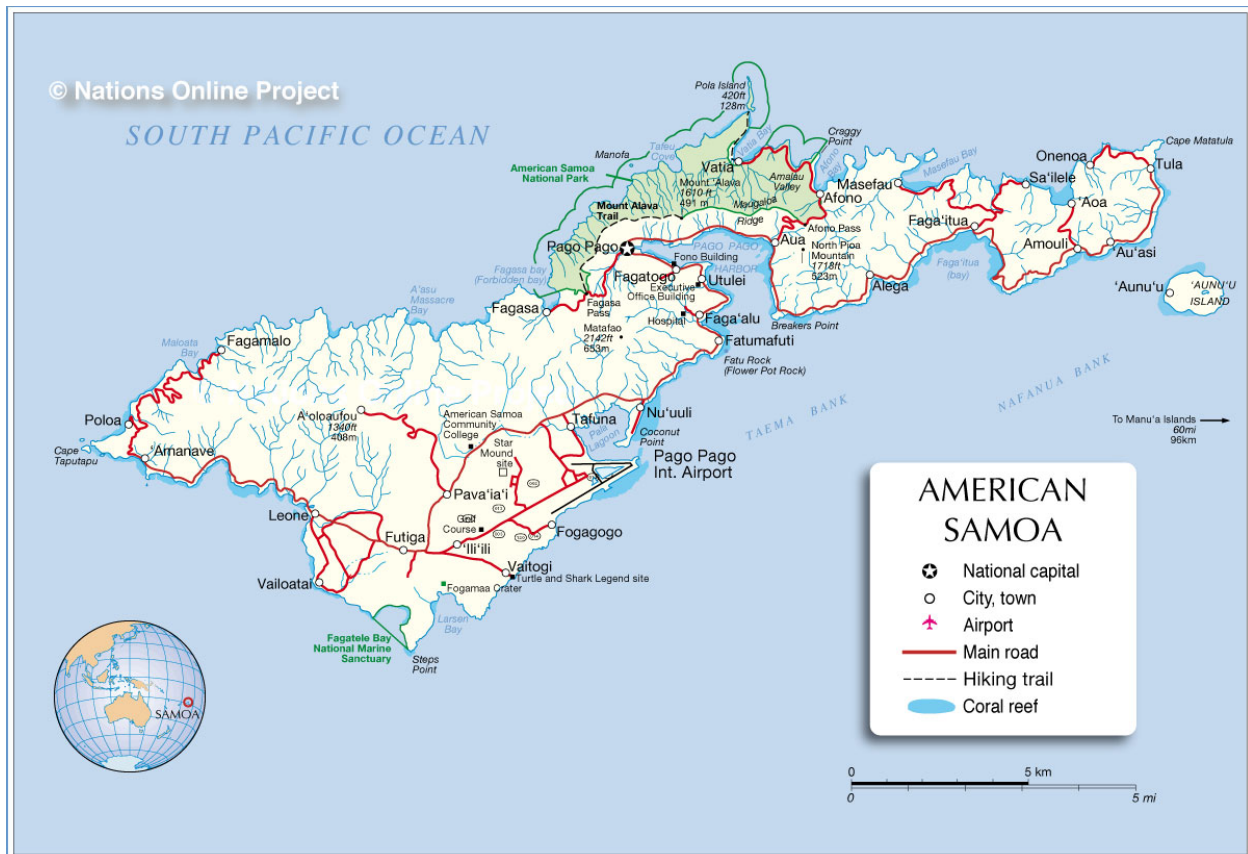


Fig 8: American Samoa, South Pacific Ocean⁹²

Most of the people on the island look less at the impacts of rising sea levels on their landscape and more on their culture, identities, livelihoods, languages, and futures – having always lived with the Pacific as their neighbor the need to move away from it causes concern about how much their culture as a whole will be affected. How can they continue to keep a hold of their identities, and not lose them in the midst of losing their land as well? Root shock, although not articulated as such in this situation, is a very real and present fear - and one that needs to be addressed in the process of relocating a community, especially one with such a strong connection to their environment through their cultural traditions. Heritage

⁹² “Map of Tutuila, American Samoa.” Nations Online Project. 2019.
<https://www.nationsonline.org/oneWorld/map/tutuila-map.htm> Accessed April 2019.

professionals have the opportunity to combat this shock and trauma through their understanding of people’s “sense of place.”

In the case of the Isle de Jean Charles tribal community, root shock is already extant due to the gradual move away from the island of the majority of the tribal population, which numbers around 600 people total (this number includes people who have already been forced to relocate off of the island).⁹³ The primary purpose of this move, aside from escaping sea level rise, is to rebuild their tribal network that they feel has been lost over the years – to rebuild their eroding cultural heritage. As one of the relocations most directly linked to cultural heritage, the Isle de Jean Charles process helps to elucidate how preservation professionals and communities can potentially approach questions of preserving and maintaining heritage under threat by sea level rise.

⁹³ Richard, C.E. “The long goodbye: A native tribe tries to take their coastal home with them.” *Currents*. Baton Rouge Area Foundation. 2016. 37.

Chapter 5: Stakeholders & Stakeholder Values

The process of the relocation of the Isle de Jean Charles is one that has spanned over 20 years in the making, and as a result, the entities involved have morphed and multiplied over time, evolving the stakeholder map. For the purposes of this section, stakeholders have been grouped together chronologically in phases: early-stage stakeholders, mid-stage stakeholders, and late-stage stakeholders. From the start, the primary (and original “early stage”) stakeholders of this process are the Isle de Jean Charles Biloxi-Chitimacha tribe, both residents and non-residents, who wanted to find a way to reinvigorate their tribal heritage and to find ways to combat rising sea levels. Initial efforts, from 1994-1998, focused on the hopes that they would be able to stay on the island, involving entities such as the U.S. Army Corps of Engineers and other communities of Terrebonne Parish, who make up the remainder of the “early stakeholders group” of this chapter. When this failed, the tribe turned towards several non-profit organizations, such as the Lowlander Center the Rural Design Institute to develop their own plans, involving them in 2010. Realizing that the costs of accomplishing such a move were astronomical, the tribe then sought support from the federal and state governments in 2014, in the form of funding and overall support, expanding the number of “mid-stage stakeholders”. The final group of stakeholders, including local parish authorities, the engineers and designers hired by state agencies, and future neighbors of the future development site, make up the “late-stage stakeholders”, whose involvement began in 2016. Increasing the number of entities involved in the project has expanded the various values and priorities being brought to the fore, resulting in an amalgam of priorities as each stakeholder continues to advocate for their own priorities and values. Unfortunately, this brings to light the lack of

stakeholders related to preservation involved in the project, and highlights the fact that preservation professionals need to re-think existing institutional frameworks in order to make them applicable to projects of managed retreat.

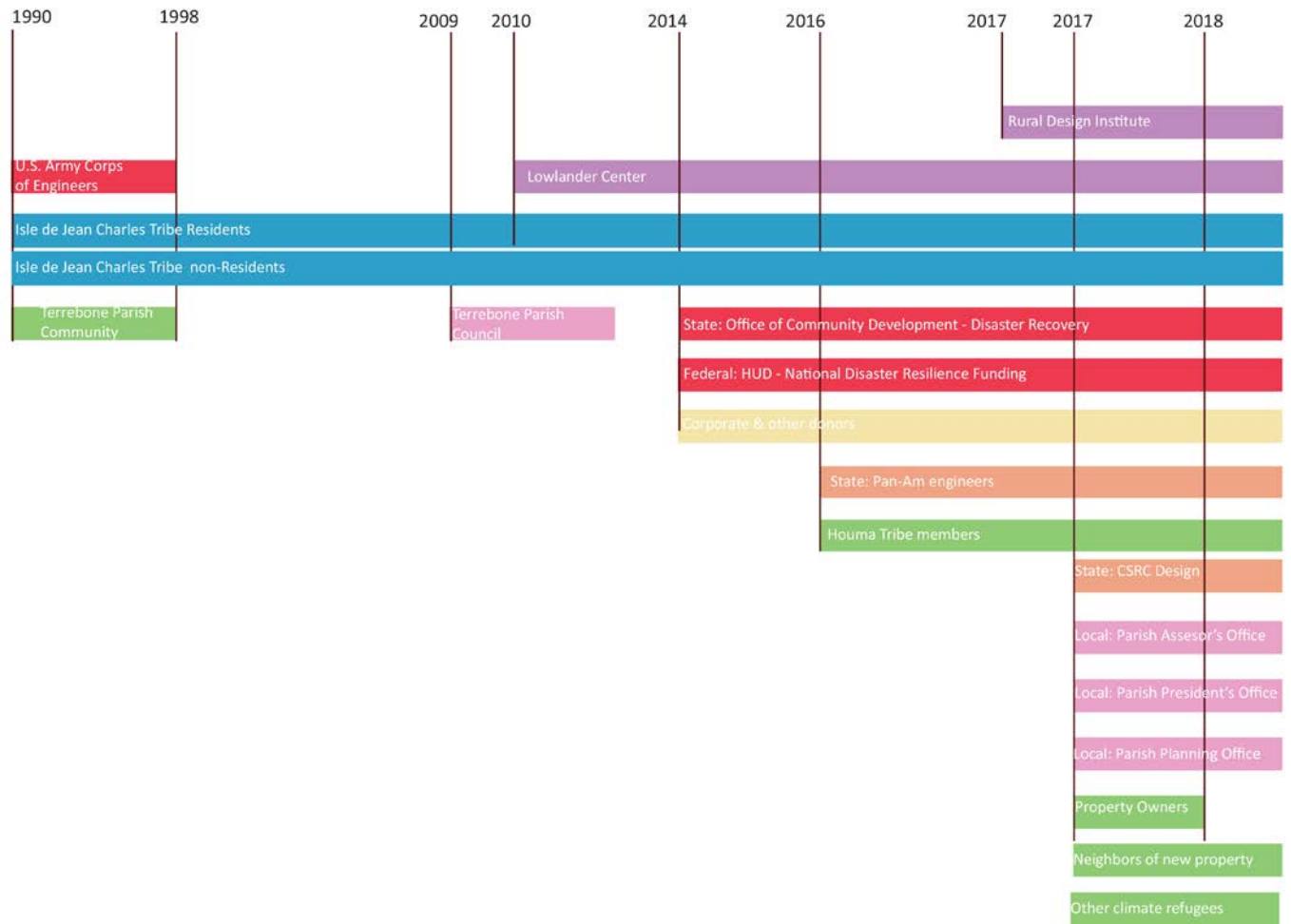


Fig 9: Timeline mapping of stakeholders involved in the project



- - - - Lines of Funding
 ——— Lines of responsibility

Fig 10: Stakeholder Mapping

5.1 Early Stakeholders

The Tribe, Terrebonne Parish, and the Army Corps of Engineers

Originally, the residents of the island refused to leave when relocation was discussed in early the 1990s. There was a sense of “why would I live anywhere else” inherent in many discussions taking place at the time. Other studies conducted of residents in the Terrebonne Parish area revealed a similar mentality throughout coastal groups of the region: “resident’s narratives of place reveal a strong degree of place attachment where ideas of fragility and uniqueness are employed to frame the place in which they live.”⁹⁴ Along coastal Louisiana – including the Isle de Jean Charles – “the marsh and wetlands are depicted as a linchpin for the regional economy, culture, and quality of life.”⁹⁵ This attachment to place is embedded in resident’s identities, perhaps partly influenced by previous forced migrations that have made it imperative to hold onto a place that one calls “mine.” As previously noted, forced migrations and feelings of marginalization likely contributed to a desire to not be forced out again – and should be remembered as the remainder of this process is discussed in this thesis, as these histories impact interactions between stakeholders. Other studies investigating residents along the coast of Louisiana have made it clear through interviews that residents are continually aware of land loss – this is not a case of denial that land loss is occurring. This associated fragility heightens the appreciation of their connection to the land.⁹⁶ An underlying stubbornness and belief that they could find ways to adapt to the changes, as well as an

⁹⁴ Burley, D.; Jenkins, P.; Laska, S., and Davis, T., 2007. Place attachment and environmental change in coastal Louisiana. *Organization and Environment*, 20(3), 347-p 347

⁹⁵ Glick, P.; Clough, J.; Polaczyk, A.; Couvillion, B., and Nunley, B., 2013. Potential effects of sea-level rise on coastal wetlands in southeastern Louisiana. In: Brock, J.C.; Barras, J. A., and Williams, S.J. (eds.), *Understanding and Predicting Change in the Coastal Ecosystems of the Northern Gulf of Mexico*. *Journal of Coastal Research*, Special Issue No. 63, pp. 211

⁹⁶ Burley, D.; Davis, T.; Jenkins, P., and Laska, S., 2004. Losing ground in southern Louisiana. *Contexts*, 3(2), 56.

appreciation for strength in the face of adversity, made it very difficult for residents to truly face the option of leaving.

Instead, they tried other avenues, involving the Army Corps of Engineers, one of the early (but not continuing) stakeholders in initial efforts. The Army Corps of Engineers established officially on March 16, 1802, carries out (among other things) natural and cultural resource management programs at federal water resource projects and regulates wetland activities.⁹⁷ At the time, they were engaged in the Morganza to the Gulf Flood Protection System. The primary purpose was to provide hurricane and storm damage risk reduction by creating a 98-mile alignment consisting of grass-covered earthen levees, 22 floodgates, 23 environmental water control structures, nine road gates, and printing protection for four existing pump stations.⁹⁸ The full cost was estimated at \$10.3 billion, and was considered “economically justified, environmentally acceptable, and engineeringly sound.”⁹⁹ However it was decided in 1998 that it would pass north of the Isle de Jean Charles because the Army Corps of Engineers determined it was not cost effective to include the island.¹⁰⁰ The Morganza Environmental Impact Statement acknowledged one of the indirect impacts of the project on areas that include all of the Isle de Jean Charles was “the potential to raise water levels in several communities located outside the levees by several feet during storm events. Present day surges

⁹⁷ USACE. “A Brief History: Introduction.” <https://www.usace.army.mil/About/History/Brief-History-of-the-Corps/Introduction/> Accessed March 2019..

⁹⁸ USACE – Team New Orleans. “Morganza to the Gulf.” U.S. Army Corps of Engineers. February 2015. <https://www.mvn.usace.army.mil/Portals/56/docs/PD/Projects/MTG/117.pdf> Accessed February 2019

⁹⁹ Schliefsstein, Mark. “The Corps of Engineers concludes \$10.3 billion, 98-mile-long Morganza to the Gulf levee is ‘economically justified’”. The Times-Picayune. May 28, 2014. https://www.nola.com/environment/index.ssf/2013/05/corps_of_engineers_concludes_1.html Accessed March 2019.

¹⁰⁰ USACE , Louisiana Coastal Protection and Restoration Authority Board, and Terrebonne Levee and Conservation District 2013a Final Post Authorization Change Report. Morganza to the Gulf Of Mexico, Louisiana.

of 7 to 10 ft could increase by as much as 3 to 7 ft more than the sea level rise increase in the future.”¹⁰¹

The report concluded that relocating the tribe would be more cost effective:

[...] the 2002 feasibility report determined that a relocation plan was economically justified, however it was not recommended because the proposed plan was not supported by the Isle de Jean Charles community. Instead, the TLCD constructed an earthen levee to approximately elevation 6 ft. In addition, the only road to the island was raised to provide a better evacuation route.¹⁰²

This construction has proved to be of limited use – the road has continued to flood since then. The last restoration of the road was in June of 2011, for \$6.24 million – Terrebonne Parish restored and elevated the road via local funds, but indicated that this would be the last time they would fix it and that further funds would no longer be available for its maintenance.¹⁰³ The earthen levee has also proved to be a short term solution, and residents claim that it was not placed properly to begin with, chosen more to protect a Louisiana Wildlife and Fisheries area, as opposed to the island itself.¹⁰⁴

As for the original relocation plan, the rejection from the residents of the island came primarily from the lack of understanding by the USACE and government authorities to understand local tribal politics and the socio-historic context. As previously mentioned, the history of the Trail of Tears as well as other marginalization histories is still heavily present

¹⁰¹ USACE , Louisiana Coastal Protection and Restoration Authority Board, and Terrebonne Levee and Conservation District 2013a Final Post Authorization Change Report. Morganza to the Gulf Of Mexico, Louisiana 8.

¹⁰² Ibid, 30.

¹⁰³ Ibid, 30

¹⁰⁴ Maldonado, J. Facing the Rising Tide: Co-Occurring Disasters, Displacement, and Adaptation in Coastal Louisiana's Tribal Communities. Washington, D.C.: American University, Ph.D dissertation. 2014. 219

within the tribe itself – to have the idea of relocation come first from government officials, and especially after being excluded from the Morganza project, raised resentment and fear about letting go of their homes. Additionally, outside residents of the island raised concerns about property values if members of the tribes moved nearby – raising again the issue of marginalization and exclusion the tribe had already been subject to throughout its history. Thus it is unsurprising that the initial vote went against relocation, resulting in the phasing out of the Army Corps of Engineers as a stakeholder in the relocation efforts.

Despite this initial setback, in an internal tribal vote in 2002 the tribe concluded that relocation as a community was necessary, and continued to take steps through their own channels and on their own terms to proceed in that direction, to find a way that would allow for the community as a whole to move together. In 2009, the tribe presented a new resettlement plan to the Terrebonne Parish council, in the hope of establishing local and regional partnerships.¹⁰⁵

¹⁰⁵ Isle de Jean Charles. Resettlement website. <http://www.coastalresettlement.org> Accessed December 10, 2018.

5.2 Developing Outreach: Non-profit Organizations, State Entities, and Potential Donors

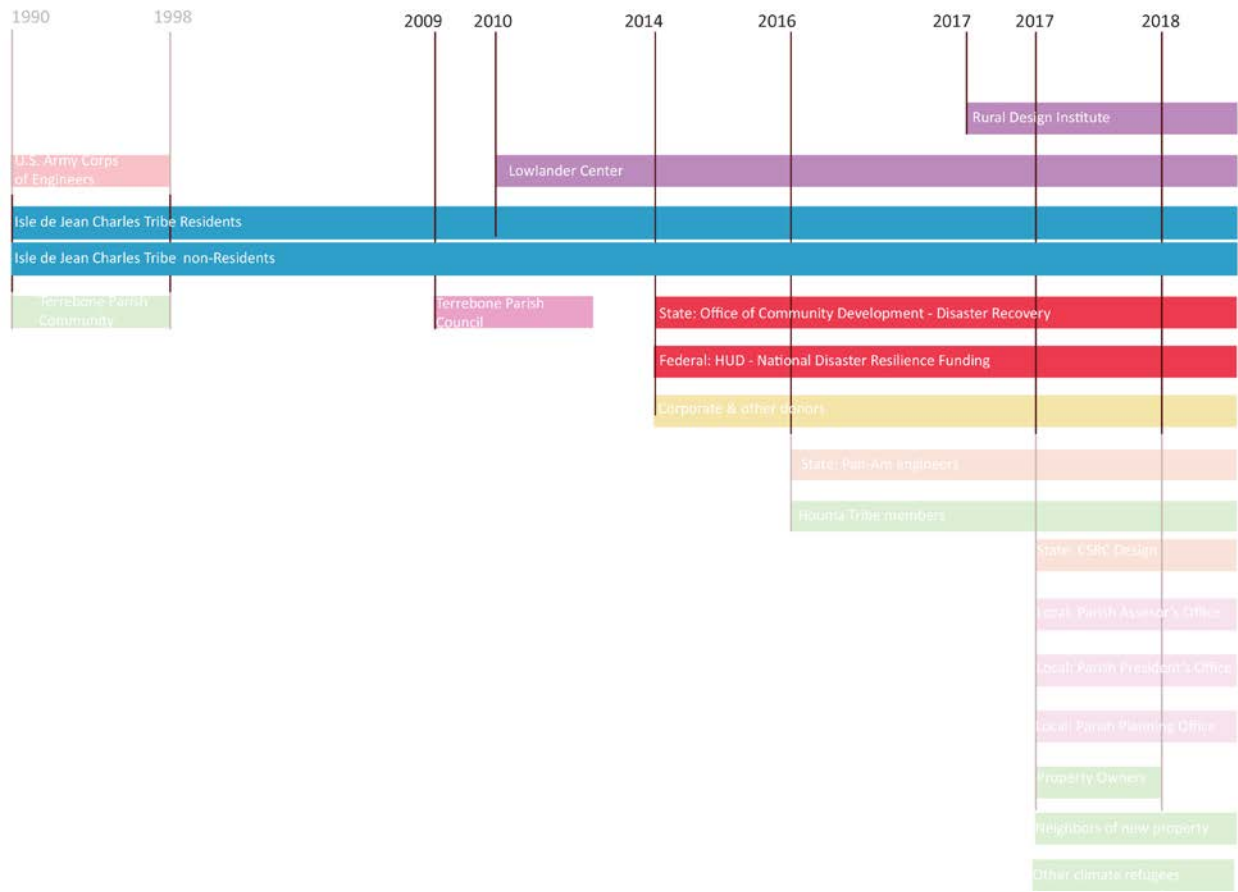


Fig 11: Mid-stage stakeholders

Important to note in this narrative is the fact that the Biloxi-Chitimacha tribe is not a federally recognized tribe, and as such has had to work outside of many of the established structures that would have provided them with some support. The Isle de Jean Charles Biloxi-Chitimacha tribe is a part of an alliance known as the Biloxi-Chitimacha Confederation of Muskogee, composed of three ancestrally related (but independent state-recognized) tribes in the Terrebonne and Lafourche parishes. The alliance has an overarching governing body (made

up of representatives from each of the three tribal communities) that works together, but each community – as in the case of the Isle de Jean Charles – has a separate tribal government, history, and traditions. Originally the tribe applied for federal recognition on October 17, 1995.¹⁰⁶ They intended to use the original Technical Assistance (TA) letter and Proposed Finding (PF) submitted by the Houma Nation, Inc in 1986 and 1994, respectively, claiming that they could be covered by previous documented petition.¹⁰⁷ However, in 1996, the Department of the Interior (Office of Federal Acknowledgement), notified them that as a result of the split, they were treating the BCCM as a separate petitioner and that the TA letter did not apply to them directly.¹⁰⁸ The BCCM then re-submitted their proposal, and in 2008 the Department of Interior declined to acknowledge the confederation, citing that the “petitioner does not meet four of the seven criteria.”¹⁰⁹ They concluded that the tribe met point 83.7(a) “requires that a petitioner be identified as an American Indian entity since 1900, 83.7(f) “requires that a petitioner be composed of persons who are not members of any already acknowledged North American Indian tribe, and 83.7(g) “which prohibits the Department from acknowledging petitioners with congressional legislation forbidding a government to government relationship

¹⁰⁶ Biloxi, Chitimacha Confederation of Muskogees, Inc. “Letter of Intent to Petition.” Tuesday, October 17, 1995. https://www.bia.gov/sites/bia.gov/files/assets/as-ia/ofa/petition/056A_bccmsk_LA/056a_loi.pdf Accessed March 2019.

¹⁰⁷ Biloxi, Chitimacha Confederation of Muskogees, Inc. “Where is the BCCM Technical Assistance (TA) letter and Proposed Finding (PF)?” Tuesday, October 17, 1995. https://www.bia.gov/sites/bia.gov/files/assets/as-ia/ofa/petition/056A_bccmsk_LA/056a_ta_letter.pdf Accessed March 2019

¹⁰⁸ United States Department of the Interior, Office of Federal Acknowledgement. “Receipt of Petition for Federal Acknowledgement of Existence as an Indian Tribe.” Federal Register. Vol 61, No 85. Wednesday May 1, 1996. https://www.bia.gov/sites/bia.gov/files/assets/as-ia/ofa/petition/056A_bccmsk_LA/056a_loi_fr.pdf Accessed March 2019.

¹⁰⁹ Office of the Assistant Secretary – Indian Affairs. “Skibine Announces Publication of Proposed Finding to Decline Federal Acknowledgement of Group Known as Biloxi, Chitimacha Confederation of Muskogees, Inc.” U.S. Department of the Interior. May 30, 2008. https://www.bia.gov/sites/bia.gov/files/assets/as-ia/ofa/petition/056A_bccmsk_LA/056a_apf_pr.pdf Accessed March 2019.

with them.”¹¹⁰ However, they concluded that the BCCM petitioner does not meet four other criteria:

- 83.7(b) “requiring the petitioning group to comprise a distinct community from historical times until the present”
- 83.7(c) -“ [...] requiring that groups show political influence and authority over members from historical times to the present (evidence does not show that the BCCM meet this criterion before 1830). Supposedly the Isle de Jean Charles subgroup met the criterion only since 1990....
- 83.7(d) “required petitioners to submit governing documents
83.7€ “requiring that petitioners submit an official membership list and demonstrate that its members descend from a historical Indian tribe or tribes that combined and functioned as an autonomous political entity (BCCM did not certify the membership lists)

The Petition (#056A) is still in process, as there have been acknowledged 2015 revisions to the criteria, which the government is still awaiting the petitioner to respond to.¹¹¹ The result, however, is that in order to find support to move the relocation forward, the tribe has had to find partners outside of government institutions, such as ones in the non-profit realm before being able to return to government partnerships, taking the project even further as a pilot case in community relocation.

¹¹⁰ United States Department of the Interior, Office of Federal Acknowledgment. “Amended Proposed Finding Against Acknowledgemnet of the Biloxi, Chitimacha Confederation of Muskogees, Inc. (BCCM) of Louisiana.” Federal Register. Vol 73, No 105. May 30, 2008. https://www.bia.gov/sites/bia.gov/files/assets/as-ia/ofa/petition/056A_bccmsk_LA/056a_apf_fr.pdf Accessed March 2019.

¹¹¹ Office of Federal Acknowledgement. “Petitioner #056A: Biloxi, Chitimacha Confederation of Muskogees, Inc., LA.” U.S. Department of the Interior. <https://www.bia.gov/as-ia/ofa/056a-bccmsk-la> Accessed March 2019.

Non-Profit Partners

The Lowlander Center

In order to move forward to move the community as a whole, the leaders of the tribe partnered with the Lowlander Center in 2010, a nonprofit organization whose mission is to “support lowland communities and places, both inland and coastal, for the benefit of both people and environment.”¹¹² The Lowlander team incorporates a variety of local leaders, heritage activists, disaster recovery academics and professionals, sociology professors, and coastal ecology experts. Although an impressive array of expertise, there is no professional on staff who is a heritage expert – sociology and local residents provide advocacy for the preservation of traditional cultural practices. They additionally collaborate with the Rising Voices initiative, as well as the First People’s Conservation Council, both strong advocates for tribal culture in the face of natural and man-made disasters. Their methodology advocates Participatory Action Research (PAR), which is characterized as the “study with and for rather than of a community, [recognizing] the importance of people’s lived experiences, approaches the gather of knowledge as a collaborative process, and centers social and individual change.”¹¹³ Although framed as a sociological approach, this recognition of people’s lived experiences is inherent in the work that heritage professionals do on a regular basis – acknowledging the intangible heritage, the daily experiences, of a community as worth preserving. The fact that the tribe already acknowledges the importance of their heritage may make up for the lack of actual heritage professionals in the process, but it should still be noted that despite the need, there is a missed opportunity for the involvement of heritage

¹¹² The Lowlander Center. “Mission.” <http://www.lowlandercenter.org/mission>. Accessed December 2018.

¹¹³ Lowlander center. Methodologies <http://www.lowlandercenter.org/mission>. Accessed December 2018.

professionals in the process. Through a series of workshops and knowledge-sharing sessions related to sustainable tribal resettlement in 2013 to 2014, under the Clinton Global Initiative Proposal Planning, the tribe and the Lowlander Center developed the framework for a proposal that would eventually lead to submission to the National Disaster Resiliency competition, discussed in later in this chapter.¹¹⁴

Citizen's Institute for Rural Design Institute

After the award of the National Disaster Resiliency competition, the community was selected for a workshop with the Citizen's Institute for Rural design, to take place January 27, 2017.¹¹⁵ This non-profit organization, was founded in 1991 (originally called Your Town: the Citizen's Institute on Rural Design™) as a partnership among the National Endowment for the Arts (NEA), the National Trust for Historic Preservation, and the State University of New York (SUNY) at Syracuse.¹¹⁶ Their purpose is to facilitate the development of locally-driven solutions, recognizing that few rural communities (which it defines as communities with populations of 50,000 or less) have access to design expertise or assistance to tackle the challenges of building up the vitality of their communities. They offer competitive funding - \$10,000 stipend and technical assistance and design expertise valued at \$35,000 - to small towns (up to 6 a year) to host a two-and-a-half day community design workshop, involving "design, planning and creative placemaking professionals" as well as "local leaders from non-profits, community organizations, and government to help develop actionable solutions to the community's

¹¹⁴ Isle de Jean Charles Resettlement website. <http://www.coastalresettlement.org> Accessed December 10, 2018.

¹¹⁵ Citizen's Institute on Rural Design. "Workshop: January 26-28, 2017, Isle de Jean Charles, Executive Summary." National Endowment for the Arts. February 2017.

¹¹⁶ Citizen's Institute on Rural Design. "About CIRDS". National Endowment for the Arts. 2019 <https://www.rural-design.org/about> Accessed February 2019.

pressing design challenges.”¹¹⁷ Additionally, they provide “capacity building conference calls and webinars on key rural design and planning topics” as well as web-based access to a wide array of design resources.¹¹⁸ Among their goals include:

- Empower citizens to play a role in guiding and determining appropriate development for their communities, including best use of available federal and state funding
- Equip participants with the tools and techniques to identify, value, protect, and enhance the unique aspects of their towns and landscapes
- Provide participants with access to best practice approaches to place-based architecture, landscape architecture, heritage tourism, cultural development, arts-based civic engagement, historic preservation, and land management

The workshop that took place incorporated all of these goals, gathering consulting professionals of varied backgrounds (landscaping, architecture, planning, etc), tribal members, local, state, and federal government representatives to “support the Tribe through the visioning, planning, and design process.”¹¹⁹ The presentations of the consulting professionals continually related back to ideas of tribal heritage. Kelly McHugh, Objects Conservator at the National Museum of the American Indian, and Sue Herne, representative of the Mohawk, Bear Clan (Akwesasne, NY), for example, addressed the issues of differences between “memorializing and actively living Tribal traditions and culture” looking at both the National Museum of the American Indian and the Awkesasne Cultural Center as potential inspirations for

¹¹⁷ Ibid

¹¹⁸ Ibid

¹¹⁹ Citizen’s Institute on Rural Design. “Workshop: January 26-28, 2017, Isle de Jean Charles, Executive Summary.” Citizen’s Institute on Rural Design. February 2017. 2.

the Isle de Jean Charles Tribe's proposed community center.¹²⁰ Other professionals touching on heritage in this phase included representatives from the Sustainable Native Communities Collaborative (Joseph Kunkel,) which "focuses on culturally and environmentally sustainable development with American Indian, First Nations, and Indigenous communities world-wide."¹²¹ Additionally, organizational partners included Cynthia Nikitin, the Senior Vice President of Project for Public Spaces (based in New York), whose mission is to help people "create and sustain public spaces that build strong communities" as well as representatives from the Lowlander Center.¹²² For this particular workshop, the ratio of heritage and preservation professional involved was quite high, possibly because of the heavy emphasis on tribal culture by the community from the start of the process. Unfortunately, it does not appear that any of these professionals have been consulted in later community meetings or by the government agencies administering the project going forward.

The entirety of this workshop was geared towards advocating a community-led process, whereby the tribe would become the true client of the process, and be continually consulted going forward. The next steps developed by the workshop and subsequent report encouraged the creation of focus groups that would continue the involvement of outside professionals with community members, the need for continued and constant communication between government agencies and the tribe, and the need to advocate for the tribe's autonomy. In large part, this was an attempt to avoid or at least mitigate the conflicts that have risen in the

¹²⁰ Ibid 9

¹²¹ Sustainable Native Communities Collaborative. "About".

<http://roadmap.sustainablenativecommunities.org/wp-content/uploads/2017/08/SNCC-PAMPHLET-7.24.17.pdf> Accessed March 2019.

¹²² "Our Mission." Project for Public Spaces. 1975-2019. <https://www.pps.org/about> Accessed March 2019.

process once all levels (local, state, and federal) government agencies were re-involved upon the awarding of the National Disaster Resilience Competition.

Federal & State Entities

Although the involvement of non-profit partners helped to expand and develop the tribe's vision for its relocation, and gave it access to outside expertise and workshops, these partners could not provide the large quantities of funding that they eventually concluded they would need for the project. Large funding opportunities are uncommon, and unsurprisingly, they often come from state and federal authorities. This project is no different, and although the community steered clear of government involvement for a while after the U.S. Army Corps of Engineers faded from the scene, and they found ways in which to cobble together partial funding from alternate sources, they turned again to both federal and state agencies in order to supply funding – resulting in a multiplication of stakeholders involved in the project, and of course, new values that did not necessarily match either those of the community or heritage.

National Disaster Resilience Competition

On June 14, 2014, President Obama announced the National Disaster Resilience Competition (NDRC), where states that experienced a presidentially-declared major disaster between 2011-2013 could compete for the \$1 billion federal funding to help communities rebuild and increase resilience.¹²³ The competition, administered by the United States Department of Housing and Urban Development (HUD), was opened to applications by state

¹²³ Louisiana Division of Administration. "National Disaster Resilience Competition." January, 25, 2016. Accessed February 2018. <https://www.doa.la.gov/Pages/ocd-dru/Isaac/NDRC.aspx>

agencies only, meaning that although the tribe and the Lowlander Center were keen on applying, they had to submit a prospectus to the state of Louisiana to be included alongside the state’s proposal, rather than being able to apply on their own. The competition itself “promoted risk assessment and planning, and would fund the implementation of innovative resilience projects to better prepare communities for future storms and other extreme events.”¹²⁴ A two-phase competition process, it included a series of resilience workshops – offering eligible applicants tools, concepts, and to develop strong applications for the NDRC.¹²⁵ The second round invited 40 states and communities to tie their proposals back to the eligible disaster from which they were recovering and to complete a benefit-cost analysis for the proposed projects. It directed participants to consider the definition of resilience, encouraging “American communities to consider not only the infrastructure to become resilient, but also the social and economic characteristics that allow communities to quickly bounce back after a disruption.”¹²⁶ In 2016, the state of Louisiana was awarded over \$92 million; with \$48 million directly earmarked for the relocation of residents in the Isle de Jean Charles.¹²⁷

Although the proposal submitted by the Isle de Jean Charles tribe and the Lowlander Center directly asked for the funds to perform this relocation, the award is technically given to the state, and requires that a state agency be the administrator of all funds. The primary administrator on the state side is the Louisiana Office of Community Development – Disaster Recovery Unit (OCD-DRU). This agency was primarily established to help residents of Louisiana

¹²⁴ Ibid.

¹²⁵ Ibid.

¹²⁶ National Disaster Resilience Competition, Phase 2 Fact Sheet. United States Department of Housing and Urban Development. 2015. 3.

¹²⁷ HUD Exchange. “National Disaster Resilience.” United States Department of Housing and Urban Development. 2018. <https://www.hudexchange.info/programs/cdbg-dr/resilient-recovery/> Accessed December 2018

recover from various hurricanes (Katrina, Rita, Gustav, Ike, and Isaac) and floods of 2016. “As the state’s central agency for disaster recovery, OCD-DRU managed the most extensive rebuilding efforts in American history, working closely with local, state, and federal partners to ensure that Louisiana’s recovery is safer, stronger, and smarter than before.”¹²⁸ The OCD-DRU is responsible for administering Community Development Block Grant-Disaster Recovery funds for 2005, 2008, 2012, and 2016 storms, and include projects just as the Louisiana Watershed Initiative (Mitigation Recovery), Restore Louisiana (Recovery from the Great Floods of 2016), and LA SAFE (Louisiana’s Strategic Adaptations for Future Environments).¹²⁹ As one of the primary actors in this continued process, it is important to understand the priorities of this agency: rebuilding and recovering from disasters, with an emphasis on providing people with safe, flood-proof housing. Additionally, the guidelines that the agency follows do not necessarily include heritage as a priority. Although recovery from disasters is the priority, this is often in the context of providing shelter, as opposed to rebuilding a community’s sense of place.

¹²⁸ “OCD-DRU.” Louisiana Division of Administration. 2019. <https://www.doa.la.gov/Pages/ocd-dru/Index.aspx> Accessed February 2019.

¹²⁹ *ibid*

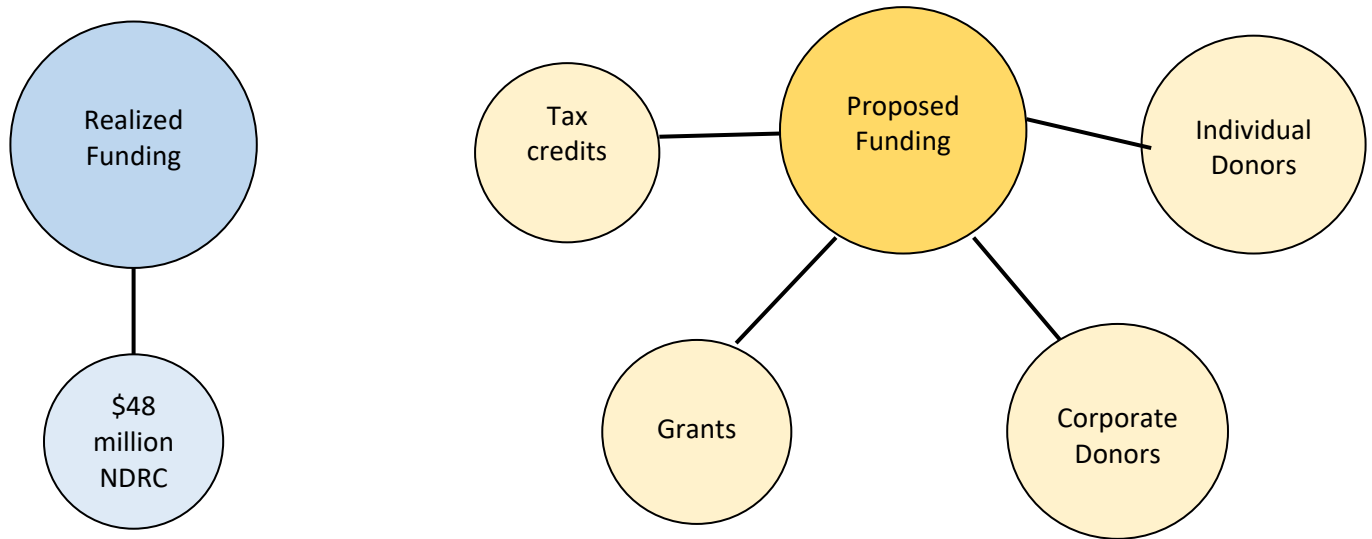


Fig 12: Funding mapping – Realized vs. Proposed Sources

Funding Stakeholders & Entities

Although the \$48 million award from the National Resiliency Design competition is a significant milestone forward, this cost only accounts for a little less than half of the estimated budget for the total relocation process. The total cost of relocation is estimated at about \$100 million, and thus requires funding from varying sources.¹³⁰ Within the original proposal, (developed by the Isle de Jean Charles leadership and the Lowlander Center) other sources of funding were been identified, and although not all of these have materialized, they have expanded the web of potential stakeholders in the process. They include commitments from the Insurance Institute for Business and Home safety, the Intertribal Agriculture Council, the Association of State Flood Plain Managers, the First Presbyterian Church Bayou Blue, Engineers

¹³⁰ Office of Community Development, Disaster Recovery Unit. “National Disaster Resilience Competition, Phase II Application.” State of Louisiana Division of Administration. October 27, 2015.

without Borders, and individual donors, with commitments totaling over \$500,000.¹³¹ Other sources include government and foundation grants, totaling over \$8,000,000, such as the pre-disaster mitigation program through the Federal Emergency Management Agency (FEMA) and the Shakopee Mdewakanton Sioux Community Grants.¹³² Loans such as the Renewable Energy America Program Loans and Grants—utilized to purchase renewable energy systems, or the Single Family Home Ownership Direct Loans¹³³ through the USDA Rural Development Agency were also explored, potentially totaling over \$6,000,000. Finally, tax credits ranging from the New Markets Tax Credits (NMTC)¹³⁴ federal program, the Low-Income Housing Tax Credit Program¹³⁵, and the Residential Renewable Energy Tax Credit¹³⁶ are also listed, totaling up to \$35,000,000.¹³⁷ The proposal indicates a graduated approach to the move, and that any design will have to take the graduated approach into account when it comes to not only designing the new facilities, but for the move to actually take place – as well as the receipt of funding.

This diverse type of funding is rather common in the field of preservation, and often works out well in projects using various types of tax credits, but for a community trying to move, this

¹³¹ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 30

¹³² This grant could potentially provide \$100,000 towards each phase of the development

¹³³ These loans are granted to individuals and can be used to finance the construction of new homes

¹³⁴ Enacted as part of the Community Renewal Tax Relief Act of 2000 in order to encourage investment in low-income communities, NMTC can be used for a wide range of purpose, including infrastructure, reforestations, waterway restoration, and alternative energy, so long as it is used on qualifying projects, usually required to be located in low-income census tracts or projects that serve or employ low-income persons. Typically the size of the NMTC is 39% of the capital assembled by the certified Community Development Entity, taken over seven years – tax credits result in a subsidy for projects typically in the range of 17-22% of the total capital raised by the CDE.

¹³⁵ LIHTC is a tax incentive intended to increase the availability of low-income rental housing – the prospectus identifies that the project will qualify because it involves new construction of units that will be occupied by low-income individuals and families.

¹³⁶ RRETC is a federal tax credit for residential energy property initially applied to solar-electric systems, solar water heating systems and fuel cells, and now covers small wind-energy systems and geothermal heat pumps. The project intends to claim a credit of 30% of qualified expenditures.

¹³⁷ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 30

cobbled-together approach may actually cause larger problems down the road. Many of the above grants and loans have specific requirements associated with their disbursement – for example the RRETC tax credit is applied to solar electric system, solar water heating systems and fuel cells; if the project is not designed appropriately and with minimum requirements met (and as will be discussed later, this may be entirely out of the hands of the community), this funding may be lost. The Shakopee Mdewakanton Sioux Community Grants, for example, are aimed at tribal groups and requests from tribal councils, and are meant to be directly given to a community –but if the project is not administered by the community, but by another authority, there may be conflicts in how the money can be spent, what it can be spent on, and even who can spend it. Cobbled-together funding only functions if those bringing the funding together all agree on the path forward and establish a methodology together – which is why in developer-projects involving LIHTC tax credits as well as Historic Preservation Tax Credits, this works out, because there are fewer stakeholders and the funding is centrally managed by one entity even though it involves many actors. Here, the potential funding has been established by the community, but the controlling force at the moment is the Disaster Recovery Unit, which may in fact jeopardize some of the above commitments. As such, this would already suggest that funding for this type of move really needs to come from a centralized source, such as a government agency, in order to remove the possibility of funding donors or sponsors from pulling out and forcing the community to scramble at the last minute to cover these costs.

Other Native American tribes, such as the residents of Newtok, Alaska, have encountered the same lack of institutional framework when it comes to funding availability. The Isle de Jean

Charles is unique in that it has been earmarked for federal funds of this magnitude. In the case of Newtok, Alaska, a coastal community of approximately 350 people who have been trying to relocate since 1994, and are losing land at a rate of 70 feet per year, any kind of funds remained elusive until 2018.



Fig 13: Newtok Alaska, Aerial image¹³⁸

¹³⁸ Garrison, Mark. In "Evicted by Climate Change." Foster, Madeline. *Hakai Magazine*. June 1, 2016. <https://www.hakaimagazine.com/features/evicted-climate-change/> accessed April 2019.



Fig 14: Newtok, Alaska, Aerial View¹³⁹

Due to the spending bill passed by Congress in 2018, Alaska’s Denali Commission’s budget (whose purpose is to fund rural infrastructure projects) increased to \$30 million, half of which it has earmarked for Newtok’s relocation.¹⁴⁰ This funding, of course, is not enough to complete the relocation. Estimates by the Army Corps of Engineers put the total cost neared to \$130 million – similar in magnitude to that of the Isle de Jean Charles.¹⁴¹ Up until this very recent point however, funding of any kind has been difficult to come by, because of the way most

¹³⁹ Andrew Burton, Getty Images. In: Mandel, Kyla. “In Alasak, a town threatened by climate change gets federal funding to relocate.” *ThinkProgress*. March 23, 2018. <https://thinkprogress.org/newtok-alaska-gets-relocation-funding-35b4434242a6/> Accessed February 2019.

¹⁴⁰ Mandel, Kyla. “In Alasak, a town threatened by climate change gets federal funding to relocate.” *ThinkProgress*. March 23, 2018. <https://thinkprogress.org/newtok-alaska-gets-relocation-funding-35b4434242a6/> Accessed February 2019.

¹⁴¹ U.S. Army Corps of Engineers, Alaska Village Erosion Technical Assistance Program: An Examination of Erosion Issues in the Communities of Bethel, Dillingham, Kaktovik, Kivalina, Newtok, Shishmaref, and Unalakleet (Alaska District: April 2006).

government agencies are structured. Government agencies that provide housing will not build and invest in areas that do not have infrastructure, while agencies that provide funding for infrastructure will not do so where there are no homes – logical if you consider that they were structured to help improve extant communities, rather than entirely new ones. However, this does put communities looking to relocate in a bind – they do have an existing community, but they need a new location. Despite this, representatives from state, federal, and nongovernmental organizations have forged ahead in creating the Newtok Planning Group in order to identify agency resources and to establish overall strategy to assist the community in relocation efforts. Formed in May 2006 after the assessment by the Army Corps of Engineers estimating the cost anywhere between \$80 – 130 million, it is composed of the Newtok Traditional Council, the Newtok Native Corporation, nine Alaska state departments and offices, nine federal departments, commission and offices, and five Alaska regional organizations.¹⁴² The group has worked since 2006 to strategize ways in which the community can move forward with planning the move despite the lack of funding, including completing a community layout plan, layouts of water and sewer infrastructure at the new site, geotechnical studies, housing market surveys for the purposes of grant proposals, and environmental assessments. The \$15 million recently made available is hoped to open up other funding streams by having a more established community living in the area so that other government agencies that then provide funding to improve the new community. This latest achievement illustrates another roadblock to funding: inter-governmental agency coordination – without it, most government funding,

¹⁴² United States Government Accountability Office. “Alaska Native Villages: Limited Progress Has Been Made on Relocating Villages Threatened by Flooding and Erosion.” Report to Congressional Requesters. June 2009. 29.

unless it comes in the form of a large block such as the National Disaster Resiliency Competition, is unlikely to materialize.

The difficulty in establishing a central source for funding relocations has led the Isle de Jean Charles and others to look for creative solutions to the issue of funding – with some success. However, the bulk of funding, in order to be stable, and not dependent upon so many actors at once, will need to come from government entities, who are not yet equipped to deal with the inter-agency cooperation required to gather this kind of funding and then administer it. Institutional funding structures, whether they be related to preservation or not, all have this key challenge to face in the coming future of relocations, and need to look ahead to establish not only funding streams, but how they will then administer them in the future.

5.3 Late-Stage Stakeholders: An ever-growing field

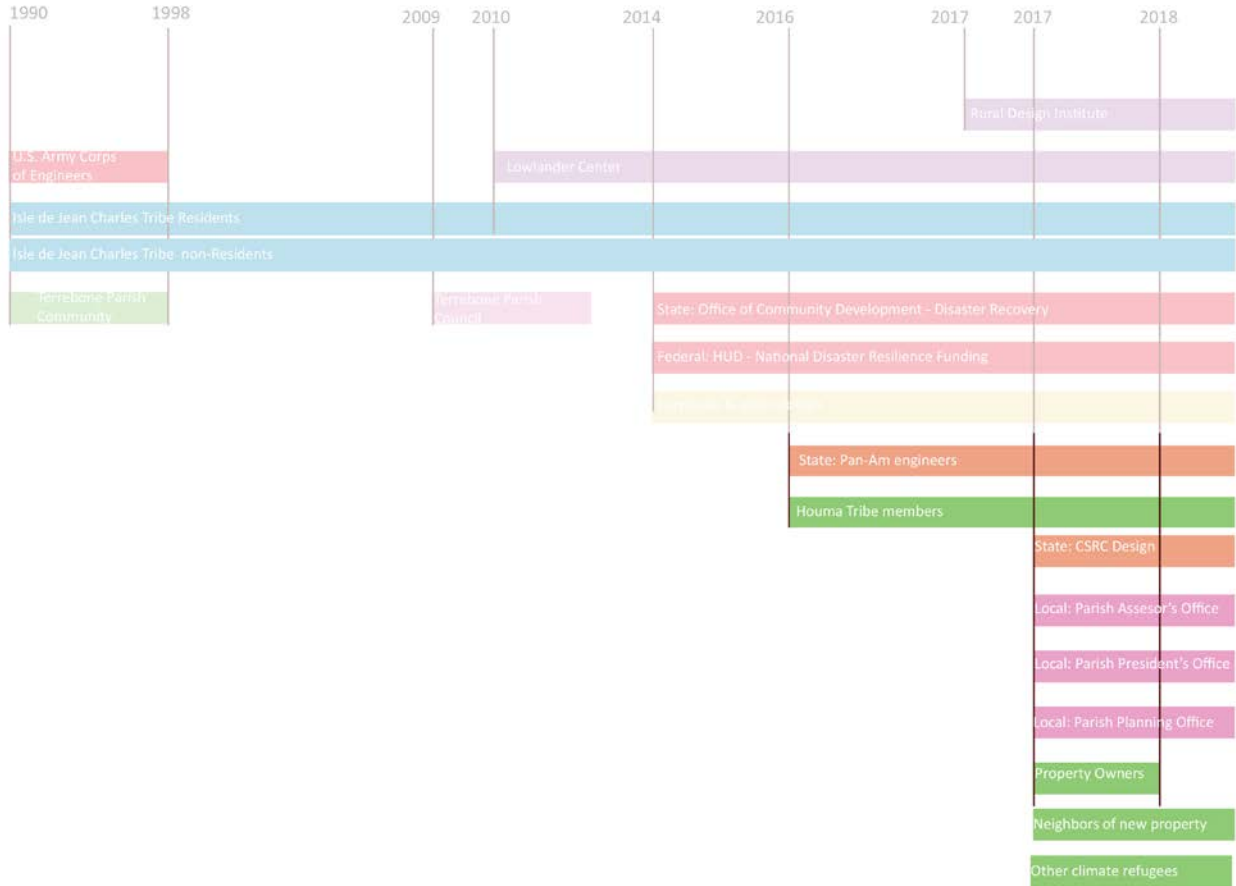


Fig 15: Late Stage Stakeholders

As the project has moved forward, the field of stakeholders has grown ever-wider, leading to ever more values and goals added to the project. As part of the process of administering the funds, the OCD-DRU hired the initial engineers, Pan Am Engineers, to perform phases 1 and 2 of the project, the information-gathering and site selection phases (covered in the following chapter). September 25, 2017, Louisiana’s OCD announced that CSRS Inc would

serve as the master planned to design a new community for the residents, via a competitive proposal process.¹⁴³ As the master planners, their services include preliminary architectural design of the resettlement, including “community meeting spaces, single-family and multi-family residences, civil works development plans, and technical guidelines [as well as] plans that address the future of the island.”¹⁴⁴ CSRS is an architectural and engineering firm that specializes in facility and infrastructure program management, site design and surveying, and architecture and land planning services.¹⁴⁵ Some of their previous projects in the area include program manager for the Recovery School District in post-Katrina New Orleans, development adviser for the LSU Foundation-Nicholson Gateway Development in Baton Rouge; and project manager/architect for Raising Cane’s nationwide restaurant development program. The firm, though particularly experienced in areas of disaster recovery and coordination with government entities such as FEMA, does not appear to have very much experience in heritage management, nor do any of its leadership figures appear to have ties to the heritage professional community – their work primarily lies in the realm of infrastructure.

As the process has advanced, other stakeholders have also been added to the project, including local parish officials – such as the parish assessor’s office, the parish president’s office, and the parish planning office, all of whom are involved in the acquisition of new land for the relocation. In a similar vein, potential site owners have become stakeholders, as have the neighbors of these potential site locations, some of whom have protested at what they view as

¹⁴³ State Names CSRS Inc As Master Planner to Oversee Design of Isle de Jean Charles Resettlement Community Office of Community Development Disaster Recovery Unit. “State Names CSRS Inc. as Master Planner to oversee Design of Isle de Jean Charles resettlement community.” September 25, 2017. [https://www.doa.la.gov/comm/State%20Names%20CSRS%20Inc.%20As%20Master%20Planner%20For%20IDJC%20News%20release%20FINAL%20\(links\)%209-25-17.pdf](https://www.doa.la.gov/comm/State%20Names%20CSRS%20Inc.%20As%20Master%20Planner%20For%20IDJC%20News%20release%20FINAL%20(links)%209-25-17.pdf) Accessed January 2019.

¹⁴⁴ Ibid

¹⁴⁵ CSRS website

an intrusion and possible changes in their own land values. Finally, due to the state's approach to the relocation, another category of potential residents at the new site has been identified: other climate refugees that have suffered disasters and have a pressing need to relocate. This last group is a relatively new addition to the increased number of stakeholders, and has met with resistance from the Isle de Jean Charles tribal community, who views this relocation as one meant to rebuilt their tribe and networks, and not as a housing development open to anyone in need of a new place to live. In this last group of stakeholders the major differences between the community and state approaches to the process, which are covered in the following chapter, come to the fore.

The sheer number of stakeholders in this process has grown exponentially (as seen in the attached graphic) ever since the community officially decided to make their move. It has brought out disparate groups and entities that all have their own specific priorities – in the case of the Isle de Jean Charles community, it is rebuilding their tribal community, while in the case of the OCD-DRU it is to build better-equipped and safer housing stock to recover from disasters. While each group's priorities are valid, they often come into conflict, or at the very least have aims that do not always overlap with one another, leading to difficulties in communication down the line. For preservation professionals, this is a larger problem, because heritage does not get as large a seat at the table as it could – its champion is the community and its nonprofit partners alone, and they lack support in maintaining this heritage as a core reason for initiating the move as well as demanding it be preserved and recognized by other stakeholders.

Further, the fact that the community has weaved in and out of interacting with government agencies and structures indicates that there is a core problem at hand – that they

and their values cannot work within existing institutional structures as currently established. The lack of involvement of any heritage agencies for example is in large part because the tribe is not federally recognized, and thus is forced to not only find creative ways to plan the process, but also to fund it. This also leads to a reduction of involvement by heritage professionals in the process – especially on the state and federal agency side, where they have no seat at the table, because they neither have the flexibility to make current structures work, nor do they bring in any funding. It is notable, and a glaring problem, that none of the outside funding cobbled together by the community and Lowlander Center proposal involve any funding by preservation groups or agencies. As already pointed out, those who hold the purse strings on this project are those with the greatest say in how the project moves forward – already a source of contention between the community and the state agency. If heritage cannot get a seat at the table because of lack of funding, then preservation professionals need to find alternate ways of articulating why heritage is important to the process and explaining that its values need to be incorporated.

While disparate stakeholder values are to be expected on a project, and one of the skills of designers and heritage professionals is to in fact mediate these different values, if certain values are not even getting a seat at the table because they cannot find a way to establish themselves, there is a clear problem in the way institutional preservation structures are established and being used for projects of relocation. The onus is on preservation professionals to find ways in which heritage can get a seat at the table, and get involved in projects of managed retreat, by re-thinking our current structures, how we work within them, and where they fail and thus need to be re-worked or completely redeveloped.

Chapter 6: Characterizing Approaches & Priorities

As discussed in the previous chapter, a wide array of stakeholders are, or have been, involved in the project over the years, and each bring to the table a differing set of priorities and values, which may or may not include heritage-related ones. As a result, they approach the project in differing ways that do not always align in values or results. For the purposes of this research, the discussion will focus on two primary groups of stakeholders – the tribal community of the Isle de Jean Charles and their supporting non-profit partners, and the Louisiana Division Office of Community Development Disaster Recovery Unit and their partners – who have generally had differing priorities and approaches to the process over the years. Their approaches to information gathering and interaction with the community at large, new site selection, and new design highlight a lack of dialogue and compromise between the values brought to the table by each of these groups. Generally, the approach and priorities by the tribal community have emphasized the necessity of incorporating heritage into all aspects of the project as well as continued communication with the community, whereas the state priorities have leaned towards tackling the issues of flooding and finding ways in which to reduce that risk above all – causing disagreements and putting up roadblocks to the process of relocation. Further, it has brought up a dangerous issue – that the community, and thus its values (heavily intertwined with heritage), are potentially being sidelined and pushed out of the process – and thus limiting the role of heritage in the process of relocation, setting a dangerous precedent for future relocations. This conflict indicates that there is a missing link – such as a mediator or advisory council – in the process, one in which preservation professionals might have a role to play in order to avoid being sidelined.

6.1 Approaches: Forms of Information Gathering & Differing Methodologies

Lack of Historic or Contemporary Frameworks

When the Isle de Jean Charles tribal community officially voted to relocate in 2002, they quickly realized that there was little to no available precedent for them to work with, setting off a research phase of their own and resulting in a partnership with the Lowlander Center to develop a process that could be implemented for the relocation.

There are few examples of relocation of communities in all of the United States – and more to the point, the resettlement of a coastal community at risk to sea level rise in the lower 48 states has never occurred, leaving little to no framework to base a move due to sea level rise of any size upon.¹⁴⁶ Most examples of community relocation in the United States deal with the aftermath of flooding and immanent domain seizures due to federal government projects. Examples of relocation due to floods in the early 20th century in Louisiana include St. Malo, Manila Village, Old Shell Beach in Plaquemines, and the St Bernard Parishes – but none of these were organized or clustered relocations. In the case of St. Malo, a small community of Filipino fishermen in the Biloxi Marshes of east St. Bernard Parish was destroyed due to a major hurricane.¹⁴⁷ As this pre-dated the modern systems of disaster relief and federal involvement, the community members were completely on their own in attempting to relocate and rebuild as a whole, and resulted in their gradual assimilated into other existing communities in the S. Bernard, Orleans, and Jefferson Parishes – therefore not a helpful precedent. Old Shell Beach,

¹⁴⁶ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 4.

¹⁴⁷ Dalbom, Christopher, Scott A. Hemmerling and Joshua A. Lewis. Community Resettlement Prospect in Southeast Louisiana: A Multidisciplinary Exploration of Legal, Cultural, and Demographic Aspects of Moving Individuals and Communities. Tulane Institute on Water Resources Law & Policy. 2014. 18

home to nine resident families in 1961, was impacted both by hurricane flooding in 1956 (Hurricane Flossie) and by the excavation of the 75 mile Mississippi River Gulf Outlet (MRGO) between 1958 and 1965 by the federal government, which severed their road connection inland.¹⁴⁸ Originally, ferry service was suggested, in order to avoid relocation, but due to cost concerns, the New Orleans Port Authority (or Dock Board), instead chose to purchase the properties and provide new properties on the inland side of the MRGO, paying for most of the relocation costs.¹⁴⁹ The new community is known as Shell Beach, but because of the loss of businesses (primarily fishing businesses) as many used their homes as their business centers and the disruption of fisheries as a canal was dredged through the area, many residents instead decided to transition to new industries or leave the region altogether – again not maintaining community cohesion, which is the aim of the Isle de Jean Charles community.¹⁵⁰

Other examples that could be examined are the New Deal innovations: Green Hills, Ohio or Greenbelt, MD – administered by the Works Progress Administration. However, these were aimed at middle income families, which created an artificial settlement dynamic – and certainly not the aim of the Isle de Jean Charles residents.¹⁵¹ They are useful, to the extent that they included heavy importance on a centrally located community center – and therefore a precedent of use in the design phase. However, none of the design decisions were made by the town’s eventual residents – therefore these cases are of little to no use in working out a framework of community involvement in the process of designing for relocation. Further, none

¹⁴⁸ “Shell Beach Exodus” New Orleans Times-Picayune. May 21, 1961.

¹⁴⁹ Dalbom, Christopher, Scott A. Hemmerling and Joshua A. Lewis. Community Resettlement Prospect in Southeast Louisiana: A Multidisciplinary Exploration of Legal, Cultural, and Demographic Aspects of Moving Individuals and Communities. Tulane Institute on Water Resources Law & Policy. 2014. 19

¹⁵⁰ *ibid*

¹⁵¹ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 4.

of these examples have any sort of connection to heritage whatsoever, and for that reason alone are insufficient examples to pull from.

There are no guidelines truly set up within resiliency plans across the United States to model the move on either. Louisiana's 2012 50 year Master Plan for a Sustainable Coast, for example, mostly leaves out tribal communities in its discussion of culture.¹⁵² The 2017 update does not make very many strides in either the direction of including tribal communities specifically or heritage in general. The plan does identify cultural heritage as one of the 5 objectives and principles, defining it as "sustaining the unique cultural heritage of coastal Louisiana by protecting historic properties and traditional living cultures and their ties and relationships to the natural environment."¹⁵³ However, it does not go into what specifically is unique about the cultural heritage of Louisiana, instead turning back to the beauty of its landscape and its economic value due to tourism and fishing. It also does very little to define "traditional living cultures" – nor does it clarify "their ties and relationships and to the natural environment." As already discussed, these ties are incredibly important (to the Isle de Jean Charles residents, but also to other communities), both to traditional skills (such as net-making, shrimping, gardening) and to the identities of these groups that incorporate a direct connection to water and marshlands.

Interestingly, the plan does note in one place that there are communities at risk of being displaced – and includes the Isle de Jean Charles in the list of those particularly vulnerable in the next 25 years.¹⁵⁴ However, beyond stating the need for a move, and simply stating that the

¹⁵² Coastal Protection and Restoration Authority of Louisiana. "Louisiana's Comprehensive Master Plan for a Sustainable Coast." State of Louisiana. June, 2 2017.

¹⁵³ Ibid.

¹⁵⁴ Ibid.

residents and government will have to work together, the plan does not elaborate on what the state will do in order to help these groups move as a community. Elsewhere in the document, relocation is mentioned only in the context of buyouts – the state has identified properties where it will individually buy out from owners.¹⁵⁵ Per Title II of the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 “displaced persons are entitled to reimbursement for actual and reasonable moving of personal property, differential housing 220 payment, and incidental costs associated with the relocation.”¹⁵⁶ These buyouts are done at the individual level, they are not meant to support communities as a whole, which would be necessary in order to preserve the social networks of the Isle de Jean Charles residents. Further, these plans do not account for loss of livelihood, social networks, or place attachment – these elements of intangible heritage are given no value – despite that these are more than incidental costs of relocation, as previously mentioned. The solution in the 50 year master plan is a limited one, and while the fact that cultural heritage and historic properties are even mentioned in the plan and partially addressed is a step forward, it is symptomatic of the large majority of coastal resiliency and sustainability plans across the United States. Heritage, whether tangible or intangible, fails to have a larger seat at the table in relation to the question of how it impacts communities’ abilities to be resilient and sustainable; instead, it often falls behind tourism and other economic concerns. As a result, not only is there little to no framework available to base the Isle de Jean Charles relocation off of, there is additionally no real framework in place for incorporating heritage into the process.

¹⁵⁵ Ibid

¹⁵⁶ USACE et al 2013c

Lowlander Center & Community Collaboration

Keeping in mind the lack of historic frameworks to model themselves on, the tribe turned to the Lowlander Center in 2010 to collaborate on planning the move and developing a framework, culminating in a report in October 2015. The report they developed highlighted from the start that their framework revolves around a community-driven approach. “Without the full engagement of the community’s residents in all phases of the process described herein from the very first step of considering resettlement through the future evolution of the new community over decades, the resettlement will fail.”¹⁵⁷ Their framework revolves around a complex-systems planning approach, emphasizing direct and frequent engagement of community members in all aspects of the process. It highlights some of the downfalls of the current framework used by the U.S. Army Corps of Engineers – using the master plan for the relocation of the town of Kivalina, Alaska as an example. While the U.S. Army Corps of Engineers has a framework in place for its decision-making – steps include identification of problems, opportunities for risk reduction, alternate plans, evaluation of plan effects, etc – it only requires community engagement on the back end of the process, once plans are formulated, as opposed to throughout the process.¹⁵⁸ The complex-systems planning method the tribe and the Lowlander Center has focused on requires the identification from the start of every stakeholder, and that they be engaged as planning and implementation goes forward.¹⁵⁹ The process is meant to be an iterative one, where continual analysis of planning efforts is

¹⁵⁷ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 1.

¹⁵⁸ U. S. Army Corps of Engineers, Alaska District. 2006. Relocation Planning Project Master Plan: Kivalina, Alaska. <http://www.poa.usace.army.mil/Portals/34/docs/civilworks/reports/KivalinaMasterPlanMainReportJune2006.pdf>

¹⁵⁹ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 15.

undertaken, requiring constant review by stakeholders. At its core, the proposal developed is geared towards creating a “teaching-learning community, a pilot site for climate change relocation with tribal livelihoods enhanced by innovation, teaching and sharing activities.”¹⁶⁰ In developing this proposal, the goal was not only to find a methodology for the Isle de Jean Charles, but also to be a model for other community-driven relocations, thus the steps outlined in the introductory section are more general ones, although geared primarily for communities in coastal Louisiana.

Additionally, the proposal made use of the “Ethical and Moral Principles of Resettlement” proposal, written by Anthony Oliver-Smith. These ten principles attempt to propose a basis for the development of policies to guide and produce “effective, developmental and humane resettlement projects for people affected by climate change effects and associated natural hazard triggered disasters.”¹⁶¹ Of particular relevance to this research are points 3, 4, 5, and 7, which all reference in some way cultural heritage:

“3. Removing people from their known environments separates them from the material and cultural resource base upon which they have depended for life as individuals and as communities. A sense of place plays an important role in individual and collective identity formation, in the way time and history are encoded and contextualized, and in interpersonal, community and intercultural relations.

4. The separation or fragmentation of community that frequently accompanies uprooting may cause stress and suffering.

¹⁶⁰ Coastal Protection and Restoration Authority of Louisiana. “Louisiana’s Comprehensive Master Plan for a Sustainable Coast.” State of Louisiana. June, 2 2017.

¹⁶¹ Oliver-Smith, Anthony. “Resettlement Principles.”

https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/resettlement_principles-2.pdf Accessed February 2019.

5. The design, materials and construction of resettlement projects are often more expressive of goals of economic efficiency and elite perceptions of the poor and minorities than the needs of the displaced.

7. Cultural transmission and socialization activities become difficult to sustain given that what is being taught and learned is disarticulated from the present situation. Social arrangements that allow sharing of common goods become insignificant because the common resource is disappearing or gone. Involuntary displacement directly threatens a people's agreements on the social geometry – their temporal, spatial and social arrangements.”¹⁶²

The above extracted principles underscore previously mentioned issues of psychological trauma as related to the loss of heritage and place, and underline the fact that the tribal community's values are completely intertwined with their heritage, and thus require that any plan take these values into account. As such, baked into the methodological approach by the community and the Lowlander Center was a vested interest in heritage and how it could be maintained and revitalized in order to create a more resilient community.

The development of the proposal was coordinated by the Lowlander Center, who has developed their own methodology for helping communities. “Local community and tribal members are sponsored to attend professional and academic meetings and presentations to share their traditional practices and to learn from others.”¹⁶³ They also created a series of planning teams, always including tribal members, in the following areas: site selection, site and

¹⁶² Oliver-Smith, Anthony. “Resettlement Principles.” https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/resettlement_principles-2.pdf Accessed February 2019.3.

¹⁶³ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 30. 13

infrastructure development, housing, tribal community center, and funding and resettlement. Teams included specialists of diverse skills and individuals from the tribe.¹⁶⁴ Emphasized in the proposal is that although there was a Core team that facilitated planning and implementation for other teams, they reported directly to the Director of the planning process who was directly responsible to the Chief of the Tribe (Albert Naquin). The Tribal Council and larger meetings of tribal members were also included in a series of seven meetings held between mid-July to mid-October.¹⁶⁵ This is key, because at its core, the proposal was a community-driven and community-consulted process, and reflected the desires of the community, incorporating their values in the process throughout – and while requiring large amounts of coordination and effort, meant that the community as a whole could agree on the plan. This proposal, developed by the community and Lowlander Center, became the core piece of the application to the National Disaster Resiliency Competition the state of Louisiana participated in (discussed in the previous chapter). The ideas discussed within were then developed even further through private design charettes through the Citizen’s Institute on Rural Design.

The Citizen’s Institute on Rural Design workshop expanded on the Lowlander proposal, and developed a series of well-thought out next steps, that advocated for a community-driven process, careful evaluation of data, establishment of focus task groups (that would focus on particular elements and include both Tribe members and outside experts), as well as the establishment of a network of experts and community members. In addition, the workshop came away with key elements that the Tribe wanted to be emphasized in the Request for Proposals that the state government would then issue, including that there would be an

¹⁶⁴ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 15

¹⁶⁵ Ibid. 15

opportunity for the Tribe to experience the site “before solidifying design or planning approaches, followed by an incremental, phased implementation.”¹⁶⁶ Its methodology was in line with the Lowlander methodology – panel presentations by experts and discussions with the larger tribal community in attendance, encouraging members to participate fully in the process and articulate their values and priorities.

The information gathering process of the community and Lowlander Center was a time-consuming but transparent one, and reflected the priorities of the Isle de Jean Charles tribe – the original initiators of the process. As will be discussed later, the heritage values of the tribe were heavily present and articulated in the proposal, because these were articulated as important in the original methodology of the planning process. This plan was then taken up by the State Division Office of Community Development Disaster Recovery Unit, who approached the process of information gathering with a different set of criteria and methodologies, resulting in a different plan from the original, and exacerbating tensions between the two groups of stakeholders.

State Approach

With the award of \$48 million from the federal government, state and local governments came back into the picture. The primary administrator on the state side is the Louisiana Office of Community Development – Disaster Recovery Unit (OCD-DRU), who, as previously mentioned, is responsible for administering the \$48 million grant awarded by HUD through the National Disaster Resiliency Competition. The OCD-DRU developed a document

¹⁶⁶ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 12.

titled: “Isle de Jean Charles Resettlement Program Guidelines Framework”, and includes three identified phases (1) Data Gathering and Engagement, (2) Site Selection, Acquisition, and Master Planning and (3) Construction and Development. This section will focus on the Data Gathering and Engagement phase, in direct comparison to the methodology employed by the Lowlander Center and tribal council in the preceding section.

Phase I began in 2016, and was characterized as a way to begin a “long-term, extensive outreach and engagement process with the Isle de Jean Charles community {attempting} to capture an early sense of the community’s needs leading up to its eventual resettlement.”¹⁶⁷ This phase and the following one were coordinated by Pan American Engineers, hired by OCD-DRU. The established methodology consisted of in-home surveys and interviews, community meetings, weekly calls with the tribal council, and a land survey of the Island that were meant to provide a baseline for a more robust master planning effort in phase II.¹⁶⁸

The initial community meeting took place on August 6, 2016 and had residents and community members attending participating in two activities. The first asked a series of open-ended questions about life on the island and general reactions to the idea of resettlement.¹⁶⁹ According to the report, most groups gave similar feedback: that they highly value their sense of community, the ability to live off the land and water (particularly crabbing, fish, and shrimping) and relative seclusion and sense of safety from the outside world.¹⁷⁰ The second

¹⁶⁷ Isle de Jean Charles Resettlement: Program Guidelines. Louisiana Office of Disaster Recovery Unit. December 2017. https://www.doa.la.gov/comm/Isle%20de%20Jean%20Charles/Draft_IDJC_Guidelines_v3.pdf. Accessed February 2019. 7

¹⁶⁸ Ibid. 5.

¹⁶⁹ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report of Data Gathering and Engagement Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf>. Accessed February 2019. 5

¹⁷⁰ Ibid. 3

phase of the community meeting discussed and evaluated the vision developed by the tribe and the Lowlander Center. The report found that “many residents broadly agreed with the basic concept of previous visioning efforts: a secluded community with plenty of natural resources and open space.”¹⁷¹ Unsurprising, considering the extent of involvement by the tribe in the earlier visioning process. Areas for gardens, plenty of open space, and many trees headed the list of important features. A desire for water was made clear – “all groups want plenty of water on site for fishing, crabbing, and aquaculture.”¹⁷² The report also found that residents “unanimously wanted the site to emulate the land use pattern on the Isle de Jean Charles in terms of house spacing and yard size.”¹⁷³ Access to traditional medicine, community gathering spaces, spaces for continuing culture, traditions and arts, were all emphasized. Yet the executive summary of the report barely reflects any of this information, and emphasizes instead that residents are split on issues of water (which they may have been in individual interviews), despite the fact that as a group they indicated strong desire for a connection to it. Individual responses overall additionally indicate heritage, or “culture” as a major component of their reactions to the plan as it stood and what was important to them – yet again these responses appear in the appendix, but do not appear to be very well formulated in the summary elements.

This was then followed up by land use surveys and a physical assessment of the island, as well as a series of individual interviews, which residents had signed up for at the end of the first community meeting. In addition to these, the team also visited all other residential households, although these residents had never requested these interviews; according to the

¹⁷¹ Report on Data Gathering and Engagement Phase, 13

¹⁷² Report on Data Gathering & Engagement, A-6

¹⁷³ 13

report, these secondary interviews tried to prioritize understanding what the residents knew about the project and whether they wanted to resettle with the community. The interview questions used to survey the residents included questions of “what will you miss the most” or “how would you like to celebrate your culture when the Island is no longer accessible by land?” but fail to investigate core concepts of identity. The questions lack in-depth investigation into why water might be desired, or why a secluded community is important. They provided data, such as how culture is celebrated on the Isle de Jean Charles, but little understanding behind the motivations and desires of the community, which have the potential to marginalize the importance of intangible heritage to this move, despite the fact that the initial prospectus developed by the Isle de Jean Charles tribal council and the Lowlander Center clearly highlights it as a key component. Additionally, highlighted responses are individual sound bytes – individual responses as opposed to group responses, and ones that may not reflect the priorities of the entire community.

This emphasis reflects a difference in methodologies that result from a differing understanding of community dynamics. The state’s (and Pan Am Engineer’s) approach, heavily relies on individual responses to surveys, whereas the Lowlander report developed over a series of multi-person dialogues, reflective of the culture of the tribe – which makes its decisions as a group. While it is in the mandate of the OCD-DRU to be absolutely certain that they are getting input from all stakeholders, and they state “engagement is also crucial to building trust with Island residents, as the state will lean heavily on Islanders to define many of the attributes of the future resettled community,” they do not appear to have thought through

the approach they were taking, which only solicited responses from individuals, thus in fact separating them from their identity as a community that wants to move as a whole.¹⁷⁴

In a further methodological difference, the definition of whom the relocation is for was modified. As per the original proposal by the Lowlander Center and the Tribe, the relocation and resettlement was for the Biloxi-Chitimacha-Chocataw tribe only, and its purpose to help the tribe as a whole regain its tribal customs and networks, trying to draw the nearly 600 members of the tribe scattered along coastal Louisiana back together. However, immediately following the award of the grant, the state modified this in response to a letter from the Houma Nation (a neighboring tribe) claiming that several of their tribe members lived on the island and had not been consulted.¹⁷⁵ Additionally, the state became aware that in 2010 a non-tribal member had moved to the island, and felt that they had not been sufficiently involved in the process. The framework program guidelines were updated to identify that infrastructure to be built on the site will be for:

- a. Current permanent Island residents;
- b. Permanent Island residents displaced from the Island on or after the date of Hurricane Isaac's landfall (August 28, 2012);
- c. Permanent Island residents displaced from the Island before Hurricane Isaac, but who were living in areas impacted by Hurricane Isaac at the time of the Qualifying Disaster event; and

¹⁷⁴ Isle de Jean Charles Resettlement: Program Guidelines. Louisiana Office of Disaster Recovery Unit. December 2017. https://www.doa.la.gov/comm/Isle%20de%20Jean%20Charles/Draft_IDJC_Guidelines_v3.pdf. Accessed February 2019. 6.

¹⁷⁵ Krol, Debra Utacia. "In Louisiana, A Plan to Relocate the First 'Climate Refugees' Hits a Roadblock." *Environment*. March 23, 2018. https://www.huffpost.com/entry/louisiana-climate-refugees-plan-roadblock_n_5ab402ade4b008c9e5f55c1b. Accessed March 2019.

d. Other families and/or individuals interested in moving to the new community.

It is this last point that has given rise to major conflicts between the Tribe and the OCD-DRU. As previously established, the Isle de Jean Charles community has a history of a private, almost isolated setting that is a part of their traditions and how they continue to live their lives. They “worry that Louisiana’s vision for a resettlement is assimilationist and more about moving people from the coast without taking care to preserve and strengthen social relationships and distinct traditional ways of life that have been strained throughout this intergenerational crisis of land loss.”¹⁷⁶ It is a justified concern. This process was initiated by a community that wished to move and maintain its identity, who proactively engaged in the process and has maintained that this relocation is about their traditions – for the state to begin to open up this new resettlement for just anyone they deem acceptable means that the focus on the tribe’s heritage may no longer become the focus, the social networks and way of life the community is trying to maintain may well be lost. It may well cause more trauma, by forcing a community to not only move from one locale to another, but to then open it up to strangers to their way of life before they have been able to adapt to the new place. It also denies that this is about creating sustainable and resilient communities, but rather about how to move large numbers of people inland with as few resources as possible.

For this and other reasons that will be discussed in the following sections, the Tribe is considering refusing the \$48 million and attempting to find a way to make the original intent work without help from the state. As of February 2019, negotiations between the two parties

¹⁷⁶ Isle de Jean Charles Biloxi-Chitimacha-Choctaw Tribe and Tribal Council. “The Isle de Jean Charles Tribal Resettlement: A Tribal-driven, whole community process.” January 15, 2019. <https://static1.squarespace.com/static/5672cfb1d82d5e366e753691/t/5c425ac4c74c507d878e696a/1547852484564/IDJC+Press+release+1-18-19.pdf> Accessed February 2019.

are still ongoing, but representatives from the tribe have indicated that they are still willing to walk away from the partnership. However, it is important to remember again, that the funding by the National Disaster Resiliency Competition was awarded to the state, and earmarked for the relocation, so the refusal of the tribe to participate in the partnership will not actually change whether or not the state goes ahead with the project, despite the tribe being one of the main stakeholders in the project. The differing methodologies, from the start have created tension and dissension among stakeholders, causing a disconnect in the process, and potentially marginalizing the role of heritage in the process as well.

6.2 Site Selection Approaches

The selection of a new site is one of the most crucial parts of the process – and also the part fraught with the most conflicts in this project. Conflicting values and priorities have already been established previously in this thesis, however they truly come to the fore when looking at the approaches to site selection and what to do with the original site. At the core are two divergent priorities: maintaining tribal culture and providing sites that are flood-proof (or at least less likely to flood). Of course these should not be conflicting aims – the ideal would be to marry the two – however the methodologies employed by the community and lowlander center versus the state agency’s approach have varied widely, and priorities of the state appear to be superseding those of the community, and ultimately heritage values.

Community & Lowlander Center Proposal

Although put together prior to having any concrete funding available for the project, the original proposal by the Isle de Jean Charles tribe and Lowlander Center did consider aspects of site selection. Of primary importance was that the site “must conform/reflect the tribe’s culture and their preferences while also incorporating the most advanced state-of-the-art practices in order to assure that the community represent physical and economic resiliency along with cultural.”¹⁷⁷ Although at the time of writing the prospectus (2015), there was as of yet no decided site, the prospectus assumed that the site would be “sufficiently inland to be behind the flood protection systems and within an AE Flood Zone.”¹⁷⁸ The new site location,

¹⁷⁷ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 18

¹⁷⁸ Ibid. 19

however, must be close enough to the original site in order to retain traditional livelihood and cultural practices – the residents, although they recognize they will no longer be able to live on site, do not want their original site to be sold off or open to other potential activities for as long as it is above water. This point is a particular problem, as in the state proposal any mention of the original site’s ownership has been eliminated, leaving questions about what will actually happen to the island when residents leave. As previously expanded upon, allowing access to the site would provide a method of memorialization, and help maintain a link to their ancestral home despite the need to leave.

The proposal also stipulates that the new site must have characteristics as similar to the original home as possible, and that the evaluation of the site must be done in conjunction with the community.¹⁷⁹ An additional important part of this was the identification of the need to create and manage wetlands, simulating the environment that the tribe had traditionally lived in on the isle de Jean Charles. The prospectus identified that most available inland sites would be covered in sugar cane fields and devoid of trees and water features, thus requiring interventions in order to create similar conditions and connections to water necessary to the prolonging of cultural traditions. The Isle de Jean Charles community “treats water as a resource to be managed, rather than a problem to eliminate.”¹⁸⁰ Water features, runoff, and topography are identified as especially important to the site, indicating a preference for already extant bayou conditions, but that new bayous can be created, and that water bodies could continue to be used for crawfish cultivation – a traditional occupation. This underlines again

¹⁷⁹ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. Accessed February 2019.

¹⁸⁰ Ibid.

the priorities of their proposal: to reflect the tribe's cultural heritage, and to incorporate it into every aspect of the project.

State approach

The OCD-DRU's phase 2, Site Selection, Acquisition, and Master Planning, was approached similarly to phase 1, with community meetings and some interviews. The results stand in stark contrast to that of the previous visioning proposal, and highlight the priorities of the state agency: flood protection and prevention. Although a worthy goal, by emphasizing this above all else, other key factors identified in the previous visioning proposal were not presented during the community meeting dealing with site selection, most importantly leaving out the connection between the new site and cultural heritage. These resulted in a skewed presentation of sites to the community, and a constrained set of choices.

The community meeting provided community members with summaries of the land use and interview data collected, as well as nominated an Island representative to the Selection Committee for the IDJC master Planning Group (which will evaluate and select the master planning team to carry out the project).¹⁸¹ The meeting also looked at site selection and preferences. One of the activities included having residents place their preferences as dots on a flood risk map (fig 16), and the team asked residents to consider the risk before suggesting their possible site locations.¹⁸² In this context, it is unsurprising that the vast majority of

¹⁸¹ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. "Isle de Jean Charles Report of Data Gathering and Engagement Phase." Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019. 7

¹⁸² Ibid. 14

responses placed dots “in the northernmost area around Schriever, which was the safest area available on the map.”¹⁸³

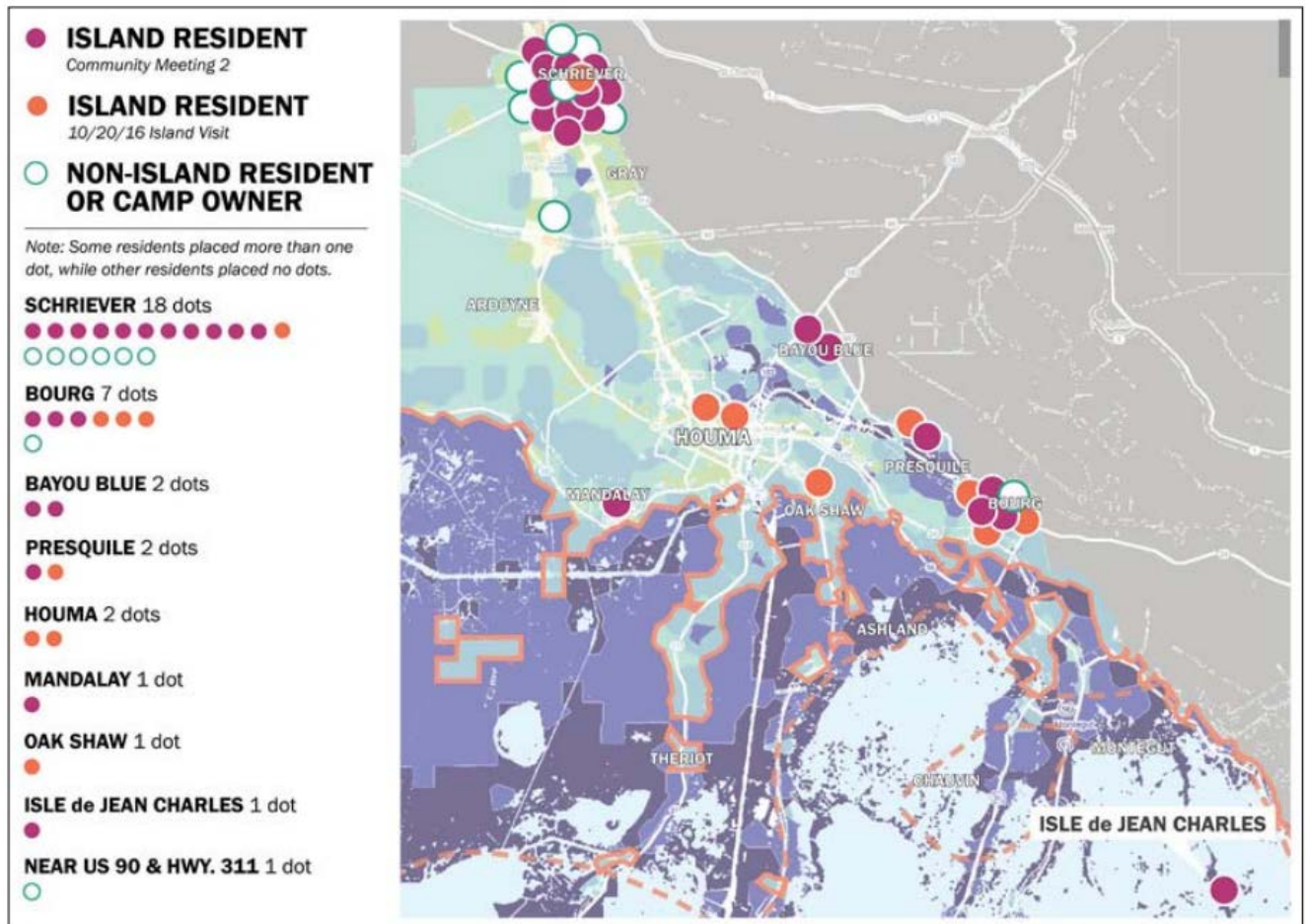


Fig 16: Summary map of sites suggested at the second community meeting¹⁸⁴

For residents who have seen their houses flood and land lost continuously over the past twenty years, and are then faced with picking a site based on flood risk it makes a lot of sense to choose the safest location – but it also presents an unrealistic view of what the residents are actually looking for, as the team did not ask them to take anything else into consideration, despite knowing that for a number of them access to water was still important. Further, in

¹⁸³ Ibid. 14

¹⁸⁴ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report on Site Selection Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019.

presenting a map in this way, there is no real indication of what the landscape is like – residents indicated that connection to the natural landscape of the bayou is a part of their memories and history, based on this map, they could be picking a landscape entirely the opposite of what they have lived in their entire lives.

Phase 2 also included data collection on tracts of land throughout Terrebonne Parish and lower Lafourche Parish in order to identify potential sites to relocate to, correspondence with Terrebonne Parish officials and realtors, continued community meetings and resident interviews, and securing appraisals of identified selected sites.¹⁸⁵ The report’s methodology reports bi-monthly calls with the Isle de Jean Charles leadership and several in-person meetings in order to collaborate on the initial review of sites and content and planning for the third community meeting. At this meeting the project team presented five identified suitable tracts – giving information about the site’s location, size, appraised price, asking price, elevation, flood risk, and utilities available.¹⁸⁶ After the presentation, residents were given time to discuss the options and complete site preference survey forms.

Initial site selection began with site visits to Terrebonne Parish for reconnaissance of any potential tracts of land by members of the OCD-DRU, with meetings with Terrebonne Parish officials, including representatives from the parish Planning Department, the Parish President’s office, and the Parish Assessor.¹⁸⁷ The report indicates that the project team collaborated with the Isle de Jean Charles leadership to come up with criteria for the needs of future residents, but only highlights the points relating to site that would limit future floor

¹⁸⁵ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report on Site Selection Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019. 6

¹⁸⁶ Ibid. 7

¹⁸⁷ Ibid. 7

prone risks and economic viability of the resettlement community. “These initial criteria required the site to be over 300 acres, not susceptible to flooding, and preferably be located in the Schriever or Bourg area of Terrebonne Parish.”¹⁸⁸ As previously mentioned, this appears to be primarily based upon the earlier community meeting asking residents to point to where they would like to resettle based on a flood risk map, and does nothing to mention the site’s suitability for the cultural heritage of the community or the community’s ability to adapt to this new location. Continued close reading of the report indicates that initially nineteen sites were selected, then whittled down to nine, then finally the five that were presented at community meeting 3 – with three labeled as preferred sites (fig 17).

¹⁸⁸ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report on Site Selection Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019. 7

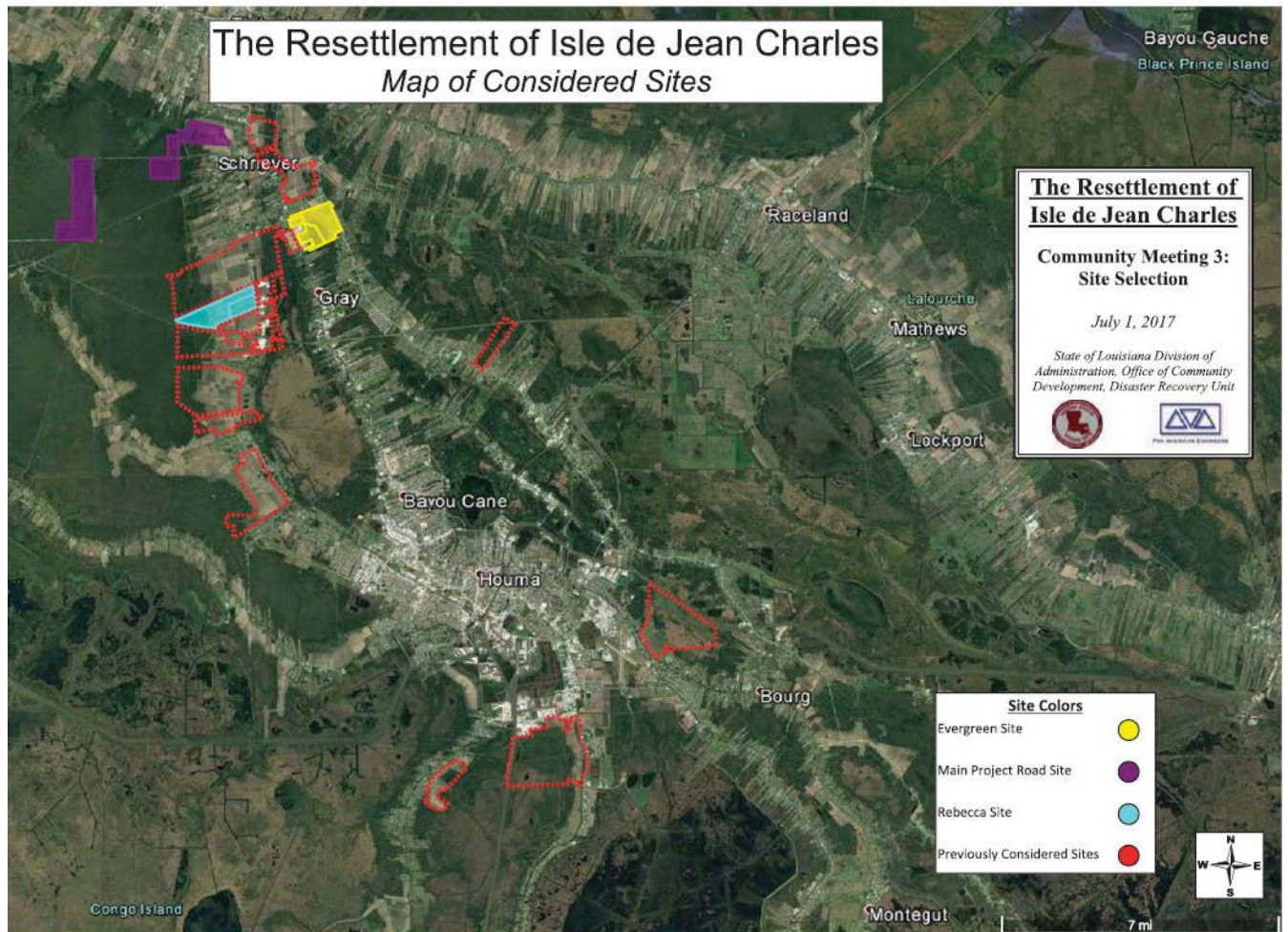


Fig 17: Map of Considered Sites at Community Meeting 3¹⁸⁹

According to the report, most of the eliminating factors were due to flood risk, although it also indicates that the tribal leadership noted that there was also interest in a site located north of LA Highway 90.¹⁹⁰ Again, however, these choices appear to be primarily driven by state agency priorities, as none of the presentations particularly emphasize how these sites would be beneficial to the tribe’s heritage and rebuilding of networks, which was the original purpose of the project. The three main sites are listed below:

¹⁸⁹ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report on Site Selection Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019.15

¹⁹⁰ Ibid. 8

- The Evergeen Site (in yellow)
 - o Configuration A: 367-acre portion of the original 570 acre tract of land, excluding high priced frontage land in the hopes of reducing the price
 - o Configuration B: the total 570 acre tract of land
- The Main Project Road Site (in purple)
 - o Originally a 603-acre tract, of which a substantial portion is swamp and wetlands, which the owners then added 800 acres of additional swamp and wetlands – which was being considered as a “donated open space area to enhance the possible tribal access to the recreational and outdoor spaces”¹⁹¹, for a total of 1,403 acres
- The Rebecca Site (in cyan)
 - o Configuration A: 603-acre original offer
 - o Configuration B: 457-acre tract that excluded high value acreage fronting LA Highway 311

Site preference surveys were handed out to residents before and after Community Meeting 3, July 1, 2017, and over a period of several weeks the project team collected thirty-six of the forty household surveys. Important to note however is that eighty-one people attended community meeting 3, including not only current and former residents of the Isle de Jean Charles, but also members of the Isle de Jean Charles Band of Biloxi-Chitimacha-Choctaw, United Houma Nation, and the Pointe-au-Chien Indian Tribe – discussions were not only limited to the Isle de Jean Charles tribe. Of the resident responses, nineteen resident surveys selected

¹⁹¹ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report on Site Selection Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019. 9

the Evergreen Site configuration A as a first choice and nine selected it as a second choice, nine selected Evergreen Site Configuration B as a first choice and eighteen as a second choice.¹⁹² Per the report, once OCD reviewed the preference survey, they decided to move forward with the selection of Evergreen Site Configuration B, the 570-acre tract of land. However, due to the \$15,000,000 price tag, the OCD internally decided it would expend too much of the funds received of the original \$48 million, and thus in order to lower the price they chose to only move forward with the 515-acre panel of the 570 original acres (removing 55 acres on the north end, having decided that the added value of the parcel of land was not critical to the overall relocation effort).¹⁹³ The OCD officially announced the purchase January 9, 2019, for \$11.7 million from Acadia Agricultural Holdings.¹⁹⁴

The tribal leadership was aware of the potential purchase of the land, but had manifested reservations about it, and expected to be consulted again on the process before the sale of land occurred – which was not the case.¹⁹⁵ Notification of the purchase of land occurred via publicly emailed press release, without direct notification, which the tribal council argues is further proof that they are being marginalized and removed from the process. Prior to this Chief Albert Naquin issued a letter (dated October 29, 2018) addressed to Stan Gimont (director of the Office of block Grant Assistance at HUD), recommending that its grant funds be returned to the committee because the changes the State has made to the original plan no longer reflected

¹⁹² Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report on Site Selection Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019. 11

¹⁹³ Ibid. 11

¹⁹⁴ Isle de Jean Charles Resettlement Program. “State of Louisiana Buys Land for Isle de Jean Charles Resettlement.” State of Louisiana. March 2018. <http://isledejeancharles.la.gov/article/state-louisiana-buys-land-isle-de-jean-charles-resettlement> Accessed March 2019.

¹⁹⁵ Dermansky, Julie. “Isle de Jean Charles Tribe Turns Down Funds to Relocate first US ‘Climate Refugees’ As Louisiana Buys Land Anyway. January 11, 2019. <https://www.desmogblog.com/2019/01/11/isle-de-jean-charles-tribe-turns-down-funds-relocate-climate-refugees-louisiana> Accessed March 2019.

the goals the Tribe originally outlined in its application.¹⁹⁶ He additionally sent a letter to the Louisiana Office of Community Development, dated September 25, 2018, expressing the same sentiment in the following points:

1. The efforts to design a tribal community have been replaced with: “As such, the IDJC Resettlement is an initiative led by the State of Louisiana’s Office of Community Development (OCD)”
2. The project that was supposed to be led by the Isle de Jean Charles Community and Tribe is now just “in close collaboration.”
3. The project that was supposed to build the capacity of the Tribe and community now places it in the hands of a housing authority and a new non-profit corporation.
4. The project was to ensure the Culture and life-ways of the community would survive to live on into the future is no longer even mentioned in the master plan.
5. The project was to bring justice to a marginalized community by not valuing them or their land to be protected. The new plan allows for camp owners to have more rights and privileges than land owners.¹⁹⁷

In addition to the feelings of marginalizing of the community’s involvement in the process, conflicts have arisen over the potential use of the original site once the Tribe has left. Part of the initial proposal developed by the Tribe and the Lowlander Center involved maintaining the original Island, or what will be left of it, under resident ownership as a way of being able to

¹⁹⁶ Dermansky, Julie. “Isle de Jean Charles Tribe Turns Down Funds to Relocate first US ‘Climate Refugees’ As Louisiana Buys Land Anyway. January 11, 2019. <https://www.desmogblog.com/2019/01/11/isle-de-jean-charles-tribe-turns-down-funds-relocate-climate-refugees-louisiana> Accessed March 2019.

¹⁹⁷ Isle de Jean Charles Biloxi-Chitimacha-Choctaw Tribe and Tribal Council. “The Isle de Jean Charles Tribal Resettlement: A Tribal-driven, whole community process.” January 15, 2019. <https://static1.squarespace.com/static/5672cfb1d82d5e366e753691/t/5c425ac4c74c507d878e696a/1547852484564/IDJC+Press+release+1-18-19.pdf> Accessed February 2019.

return to former memories, sites, and have a connection to the past. The current framework developed by the OCD-DRU makes no mention of what will happen to the island once the residents leave, leaving speculation as to whether the state will then sell the land to oil developers or other interests, as the maintenance of the site as under resident ownership has not been confirmed.

The importance of keeping an original site available for visiting, mourning, and memorialization can be corroborated by other examples of relocation – notably the relocation of the village of Vunindologa, Fiji, in 2014. Located in the province of Cakaudrove, 40 kilometers from Savu Savu (the second largest city on the island of Vanua Levu), the village is made up of 26 houses and a population of approximately 140.¹⁹⁸ Due to continued loss of land to rising sea levels and erosion, the several houses already had to be moved several times in an effort to avoid systematic flooding.¹⁹⁹ As a traditional Fijian village, the community relies on subsistence activities primarily revolving around fishing – directly affected by environmental degradation due to sea level rise, storms, and erosion; this, and its remoteness from the main road culminated in the villagers formally asking for relocation assistance from the government in 2006. Moving away from their home village raised significant concerns in the traditional Pacific context, where the concept of land (*vanua* in Fijian) refers to “the profound link between the people and the land, the land steeped in cultural heritage, transmitting identify to

¹⁹⁸ Tronquet, Clothile. “From Vunindogoloa to Kenani: An Insight into Successful Relocation.” In *The State of Environmental Migration 2015: Review of the Year 2014*. Ed Francois Gemenne, Caroline Zickgraf, and Dina Ionesco. SciencesPo. 2015. https://publications.iom.int/fr/system/files/pdf/state_environmental_migration_2014_0_0.pdf Accessed March 2019. 125.

¹⁹⁹ Sovaraki, Ana. “Vunindogola Relocation Mooted in the 50s.” *Fiji Sun*. August 20, 2014. <https://fijisun.com.fj/2014/08/20/vunindogoloa-relocation-mooted-in-the-50s/> Accessed March 2019

the people through their ancestors.”²⁰⁰ In this context, moving away from the original site is understood as a threat to cultural identity and history – as it would require leaving behind the cemetery containing the remains of their ancestors in a vulnerable location.²⁰¹



Fig 18: Aerial image of original and new location of Vunindogola village²⁰²

²⁰⁰ Tronquet, Clothile. “From Vunindogoloa to Kenani: An Insight into Successful Relocation.” In *The State of Environmental Migration 2015: Review of the Year 2014*. Ed Francois Gemenne, Caroline Zickgraf, and Dina Ionesco. SciencesPo. 2015. https://publications.iom.int/fr/system/files/pdf/state_environmental_migration_2014_0_0.pdf Accessed March 2019. 123.

²⁰¹ In the end, the villagers chose to move the cemetery to the new location, which seems to suit them: “the new cemetery is now more convenient, and we save time going to visit there compared to accessing the old site.” Edwards, J. “Bula Bulletin: Relocation Revisited: Vunindogola Village.” 2014. <http://www.methodist.org.uk/downloads/wcr-julia-edwardsfiji-newsletter-aprilmay2012.pdf> Accessed March 2019.

²⁰² Tronquet, Clothile. “From Vunindogoloa to Kenani: An Insight into Successful Relocation.” In *The State of Environmental Migration 2015: Review of the Year 2014*. Ed Francois Gemenne, Caroline Zickgraf, and Dina Ionesco. SciencesPo. 2015. https://publications.iom.int/fr/system/files/pdf/state_environmental_migration_2014_0_0.pdf Accessed March 2019. 124.

Although sketchy, details about the process report that the choice of site selection was performed by the inhabitants of the island. Nearly two kilometers inland (fig 18), the five-acre site was owned by one of the Vunindogola residents, who apparently donated to the effort it without compensation.²⁰³ The community did move as one, maintaining even their former arrangement (neighbors at the old site remained neighbors at the new site), but just as importantly the old site was not demolished and still stands in its original location.²⁰⁴ Villagers still regularly visit the old site, especially the older generations, providing a connection back to their original roots and helping to moderate the difficulties of the move.²⁰⁵ Although generally considered a successful migration – villagers are reportedly very happy with their new location and services, it should be noted that the relocation site was not very far away from the original one – much closer than the intended site of the Isle de Jean Charles relocation – and that the government had no designs on the original site, allowing it to stay standing as a symbol, rather than forcing villagers to give up ownership rights.

As of January 2019, the Isle de Jean Charles tribal council has issued an official statement delineating its concerns about the process as it currently stands.

“Since the HUD award was announced in early 2016, state planners have steadily erased our role as leaders of the resettlement process, excluded our tribal leadership from decision-making, disregarded Tribal protocols during community engagement activities, proposed we

²⁰³ Taleitaki, Siteri. “Vunindogoloa Relocation Praised.” *Fiji Sun*. January 2014.

<https://fijisun.com.fj/2014/01/07/vunindogoloa-relocation-praised/> Accessed March 2019.

²⁰⁴ Tronquet, Clothile. “From Vunindogoloa to Kenani: An Insight into Successful Relocation.” In *The State of Environmental Migration 2015: Review of the Year 2014*. Ed Francois Gemenne, Caroline Zickgraf, and Dina Ionesco. SciencesPo. 2015. https://publications.iom.int/fr/system/files/pdf/state_environmental_migration_2014_0_0.pdf Accessed March 2019. 16.

²⁰⁵ *Ibid.* 124

give up our Island home and that the new land be opened to public auction or to house other so-called climate refugees from throughout the coast.”²⁰⁶

Although discussions are still on-going, the current impasse creates a major stumbling block in the progress of the project, and raises issues of communication between stakeholders, marginalization of communities in the process, and the difficulty of incorporating heritage values into the process when it is clear that the priorities of the state agency do not reflect either those of the community or of preservation professionals. Especially, it highlights a missing link between preservation professionals and planning agencies: that there is insufficient dialogue between the two. Without this dialogue, the focus readily shifts towards the state priorities as long as they remain the primary holder of funding. Were dialogue to take place, and preservation professionals to be involved at higher levels of policy and planning, the conflicts and roadblocks observed in this process might be smoothed out, providing both communities and heritage a greater voice in the process.

²⁰⁶ Isle de Jean Charles Biloxi-Chitimacha-Choctaw Tribe and Tribal Council. “The Isle de Jean Charles Tribal Resettlement: A Tribal-driven, whole community process.” January 15, 2019. <https://static1.squarespace.com/static/5672cfb1d82d5e366e753691/t/5c425ac4c74c507d878e696a/1547852484564/IDJC+Press+release+1-18-19.pdf> Accessed February 2019.

6.3 Design Approaches

The design of a new site should be the area full of potential and opportunity to involve heritage and traditional spatial arrangements in the process. It requires an overall master plan that has the potential to incorporate traditional spatial arrangements, as well as individual design elements of housing and community gathering spaces that can be informed by traditional knowledge. Although this process has only just begun – now that the sale of land has been finalized – again divergent priorities and emphases are rising to the fore. On one hand the previous visioning proposal emphasized the community center above all else, as a focal point of tribal culture; on the other, the current state master planner approach emphasizes the design of housing. Both elements are of crucial importance to the site as a whole, however it remains questionable whether tribal culture is being fully utilized to inform the final design of individual elements and spatial arrangements.

Community Focus: Community Center

The prospectus put forth by the Isle de Jean Charles tribe and Lowlander Center identifies certain central themes and symbols of importance to the community that they believe should be incorporated into the design of the new site. The first of these is the saw palmetto tree (*tala* in Choctaw). The saw palmetto is a short palm tree that grows up to 10 feet with a long taproot, whose branches radiate from the inner spines from a single point at the end of the branch. Due to its sturdiness, the leaves can be woven for a variety of purposes – including thatching for roofs, children’s toys, and baskets. In the prospectus, the visual of the

palmetto (selected by the tribe) is used as a design guide for the community.²⁰⁷ Landscape architects consulted suggested that this visual could be used in a variety of elements of the community, including:

- placing the town center at the center of the fan image of the palmetto with the homes radiating from the center
- shifting the palmetto spines horizontally to represent levels of community privacy from front gate to publicly accessible pow wow grounds, to community forest, and finally to private residents
- the town green (public pow wow) at the base of the branch
- as a symbol for the community (weaving)
- as a symbol for the home (thatching)

Although these could be argued as simply symbolic or superficial approaches to the design of a community's layout, it should be remembered that these ideas were generated in conjunction with the tribe members, who have identified this visual symbol as important to them, and thus it should not be discounted in designs going forward.

The second theme is that of water features on site – previously noted as being particularly important to the tribe and its continued identity and ability to practice traditional skills. The below diagram shows the use of water as a surrounding element of the residences, reminiscent of the desire for privacy and isolation from the outside world. Additionally the intent is to

²⁰⁷ The Lowlander Center. "Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles." Version 1.0. October 2015. 20.

provide water at the back of the houses for crawfish ponds and thus continued traditional skill usage (shrimping).²⁰⁸



Fig 19: Lowlander Center Master Plan Proposal²⁰⁹

In the above image (fig 19), the visual of the palmetto was used to place the community center at the front of the property facing a public green space for “public services and commerce, recreation, and pow wows open to the public.”²¹⁰ This community center is meant to serve as an anchor point – serving as a museum, an early childcare development center, senior recreation center, health center, worship center, tribal office space, powwow space,

²⁰⁸ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 21

²⁰⁹ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 25

²¹⁰ Ibid 22.

garden, and a market.²¹¹ Behind it are theorized a private ritual space, a cemetery, and recreational fields. Below is an image (fig 20) of the theorized community center, based on tribal input and designs with the architects, meant to provide interior flexibility so that a number of program activities could be incorporated into one efficient space. The elements of programming within the community center reflect the priorities and the tribe's customs, and reflect what a community-driven relocation design would incorporate.



²¹¹ Citizen's Institute on Rural Design. "Workshop: January 26-28, 2017, Isle de Jean Charles, Executive Summary." Citizen's Institute on Rural Design. February 2017.

Fig 20: Proposed Community Center, aerial (above) and section (below)²¹²

The proposal includes a discussion of energy, water, heating, and cooling infrastructure, aiming to “achieving a self-sufficient, sustainable and resilient community that will have a minimal impact on the environment.”²¹³ Included in this is the design of water – which the tribe considers as a resource to be managed, rather than a problem to eliminate – considering it a part of their daily lives and a source of both sustenance and identity as a tribe. Thus the design focuses on managing runoff, with the goal of retaining all storm water, and incorporates rain gardens and bioswales to accumulate further runoff.²¹⁴

Although the primary focus of the prospectus is the community center and the larger master plan, there is a large section spend on the housing arrangement and types on the new site. Discussions with tribal members indicated a preference for single-family houses.²¹⁵ Houses would be elevated on pilings, in order to exceed 50-year base flood elevations, and designed to the Fortified for Safer Living Standard.²¹⁶ The proposal goes into detail about the variety of resilient materials that could be potentially used, in order to maintain their goals of a sustainable community, but do not present actual designs for the homes, stating that “housing designs are still to be examined for a ‘flavor’ of earlier tribal homes on the island as well as the regional Cajun designs that have endured coastal conditions.”²¹⁷ While the wording may seem to imply a superficial approach, investigating traditional forms of housing that have proved to

²¹² The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 26

²¹³ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 22

²¹⁴ Ibid. 22

²¹⁵ Ibid. 29.

²¹⁶ Code plus standard developed by the Insurance Institute for Building an Home Safety

²¹⁷ The Lowlander Center. “Resettlement as A Resilience Strategy, and the Case of Isle de Jean Charles.” Version 1.0. October 2015. 29

be resilient over the course of centuries is a valid approach to incorporating heritage into new design.

The Citizens for Rural Design workshop built upon the Lowlander proposal and came out with a series of takeaways, not the least of which was to “respect the tribal approach to land settlement” – by which it emphasized community-driven, place-oriented planning and design, so that the Tribe would have time to spend with the new land, “engage with the land through traditional practices,” and to explore it before any decisions would be made.

Recommendations from the workshop also emphasized the need to incorporate cultural symbols – “physical manifestation of cultural principles” – such as the organization of community kitchens or the use of materials from the island for the actual construction of the Tribal Center.²¹⁸ The event highlighted the importance of incorporating both community and heritage values into the process, coming up with recommendations such as “the community center should be the most visibly prominent element upon entering the settlement,” and that “all elements should be designed for flexibility of use, and uses should be clustered rather than segregated.”²¹⁹ While some of these could simply be considered superficial, they also emphasize the need to develop programs to strengthen Tribal traditions, including educational programs and various economic activities related to identified traditional activities such as crabbing and fishing.

In either case, the focus was primarily on larger master plan themes, the community center, and integrating cultural symbols, traditional spatial arrangements, and elements of traditional activities into the design of the new site. Although unfinished, the proposal and later

²¹⁸ Citizen’s Institute on Rural Design. “Workshop: January 26-28, 2017, Isle de Jean Charles, Executive Summary.” Citizen’s Institute on Rural Design. February 2017. 10

²¹⁹ *Ibid* 10.

recommendations were based on community values intertwined with heritage, and sought to propose designs that would suit the purpose of the tribe: to reinvigorate tribal customs. Were the project to move forward in this direction, it would be a perfect example of a method of integrating heritage into new design.

State Focus: Housing

Despite steps forward with the Lowlander Center proposal and the initial ideas for design, the ODC-DRU appears to take a different approach – focusing primarily on housing in its design approaches. CSRC, hired by OCD to lead the master planning efforts, has been leading the ongoing community meetings taking place, focusing on master planning once the site was narrowed down to a few options (and now officially purchased). Community Meetings 4 and 5 (which took place December 9th, 2017, and May 4th, 2018, respectively), stated the following goals:

- To gather preferences on new site design and record questions about design
- Inspire hope and excitement surrounding the new community
- Provide detailed, concrete, and transparent information on the project's progress

The format of the two were similar – a presentation by the project team, about overviews and analysis of the Evergreen site, including drone footage, locations of nearby infrastructure such as schools, churches, clinics, etc, and the new physical development constraints; following this stations were set up focusing on different aspects of the potential design. In community meeting 4, they looked at visual preference of homes – collecting responses about preferences of porches and outdoor living space, proximity to neighbors, elevation of homes; site analysis –

which included concerns about the ownership structure of the new community; community visions and guiding principles; and former resident contact information.²²⁰ In Community meeting 5, stations were divided into the home, the land, the community, and the economy. While these are laudable in that they attempt to engage the community as much as possible, they do call into question whether the project team at all paid attention to the work done previously by the Lowlander Center and the Isle de Jean Charles tribal council prior to OCD’s involvement in the process – a fair number of responses are a repetition of what was previously established: a desire for privacy, water features and proximity, a mixed use community center, etc.

Current sketch renderings of the project paint an idyllic picture of residents on porches walking along paths etc (fig 21, 22).



²²⁰ Concordia, LLC, Chicago Bridges & Iron Company & Pan American Engineers. “Isle de Jean Charles Report on Site Selection Phase.” Louisiana office of Community Development – Disaster Recovery Unit. November 28, 2016. <http://isledejeancharles.la.gov/sites/default/files/public/IDJC-Final-Report-Update.pdf> Accessed February 2019.

Fig 21: Concept rendering from resident's front porch²²¹



Fig 22: Louisiana Office of Community Development – concept rendering of market space²²²

The in-progress site-plan (fig 23) appears to conform to one element of community desires – that of privacy, where homes are set further away from the “public” side of the site, and certainly far away from areas labeled as “light industrial.” However, there appears to be no centralized connection between the houses and the community center, unlike in the lowlander proposal. While perhaps the design based on the palmetto tree would not have worked practically, the current design seems to completely ignore the lessons one could learn from traditional organizations – rather than placing the community center (identified as incredibly

²²¹ Isle de Jean Charles Resettlement Program. “Resettlement Plan.” State of Louisiana. <http://isledejeancharles.la.gov/resettlement-plan> Accessed April 2019.

²²² Isle de Jean Charles Resettlement Program. “Resettlement Plan.” State of Louisiana. <http://isledejeancharles.la.gov/resettlement-plan> Accessed April 2019.

important to the tribal community's identity and rebuilding network), it isolates it, developing almost an isolated suburb within the site, where there are only residences in one section of the site.



Fig 23: Latest site plan iteration – Louisiana Office of Community Development²²³

Although the site plan provides a large section of wetlands, and a water feature running through the housing developments, it still appears to separate out identified key elements of heritage that would traditionally have been grouped all together. Further, it does not appear that the community has yet had any input in these designs, or been consulted beyond the initial

²²³ Isle de Jean Charles Resettlement Program. "Resettlement Plan." State of Louisiana. <http://isledejeancharles.la.gov/resettlement-plan> Accessed April 2019.

community meetings identifying themes and features important to them – and there are concerns that the State’s plans for the new community (expected by March 2019) will not resemble those of the tribe.²²⁴ The tribe worries that instead of a model sustainable and disaster-resilient community, the development will end up being a resettlement subdivision – which is exactly what the Terrebonne Parish President Gordon Dove called it during a meeting on January 4, 2019 between state, parish, and tribal officials.²²⁵ Statements like these, in addition to the lack of constant involvement by the tribe in the design of the master plan continue to give rise to fears that tribal cultural heritage will not be respected in this latest iteration.

6.4 Conflicts and Missing Links

As touched upon in previous sections, the entirety of this process has been one fraught with conflicts and mis-communication. Originally a community-driven process, the involvement of state and federal government agencies has fragmented the process, driving a wedge between the community and government entities. The involvement of the state was certainly necessary - although the actual application for the Isle de Jean Charles for the National Disaster Resiliency competition was written by the tribal leaders and the Lowlander Center, it had to be incorporated into a larger state application, requiring coordination with state and local officials. Additionally, the funding itself, awarded by the federal government, must be administered by a

²²⁴ Dermansky, Julie. “Louisiana and Isle de Jean Charles Tribe Seek to Resolve Differing Visions for Resettling ‘Climate Refugees.’” *Desmog*. February 5, 2019. <https://www.desmogblog.com/2019/02/05/louisiana-isle-de-jean-charles-tribe-plans-resettlement-climate-refugees> Accessed March 2019.

²²⁵ Yohonis, Scott. “Island residents’ concerns over relocation discussed.” *HoumaToday*. January 27, 2019. <https://www.houmatoday.com/news/20190127/island-residents-concerns-over-relocation-discussed> Accessed March 2019.

state agency, as a way of regulating the distribution of federal funds, thus requiring the involvement of the state agencies. This actual block grant award is to the state, however, and although it is earmarked for the resettlement of the Isle de Jean Charles, the award itself lacks any sort of requirements as to how involved the community needs to be in the process in order for it to proceed forward, and as such, disbursement of these funds, and therefore control of the process are entirely within the purview of the state.

In addition, the community lacks access to certain important support systems that already exist in the realm of institutional preservation structures, because they are not a federally-recognized tribe, although they were recognized by the State of Louisiana in 2005. As a result, they do not have the same level of support that other federally recognized tribes do. Other tribes, such as the Chitimacha tribe actually have their own Tribal Historic Preservation Officer (THPO) appointed, who takes on responsibilities of the State Historic Preservation Officer. These officers are “officially designated by a federally-recognized Indian tribe to direct a program approved by the National Park service and the THPO must have assumed some or all of the functions of State Historic Preservation Officers on Tribal lands.”²²⁶ These officers, in conjunction with the tribe, would develop a tribal historic preservation plan, which have often emphasized oral tradition, and given emphasis to traditional cultural properties (TCPs), “places that are eligible for inclusion on the National Register of Historic Places because of their association with cultural practices and beliefs that are (1) rooted in the history of the community, and (2) important to maintaining the continuity of that community’s

²²⁶ National Association of Tribal Historic Preservation Officers. “What are Tribal Historic Preservation Officers?” December 6, 2014. <https://www.nathpo.org/thpos/what-are-thpos/> Accessed March 2019.

traditional beliefs and practices.”²²⁷ However, as the tribe is not federally recognized, it cannot work within already existing strictures of preservation, and thus loses out on resources and support, and has thus had to find other avenues (such as the involvement of non-profit entities who do not have the same authority as a state agency) to push their values forward.

As highlighted in preceding sections of this chapter, the state and community proposals differ in values and focuses, and from this a lack of trust and cohesiveness has resulted. For example, the tools that were used by the Lowlander Center and Rural Design Institute – such as community design workshops and community discussions directly with experts, do not appear to be used by the state – rather, the approach is a more traditional design one, where the planner is responsible to a single client developer who then provides this new design for their tenants. The model being used by the state is one that assumes the dispenser of the funds is the sole client who mediates desires of other stakeholders, as opposed to the model of a partnership, whereby the state (as dispenser of funds) collaborates with the community to come up with a mutually agreeable solution that meets both state requirements and the objectives of the community.

The result of this is a lack of accountability to the final users when federal funds are earmarked for community projects – the state is the ultimate decision-maker, and does not mandate close collaboration with the community. Missing from this is an acknowledgement that these funds were originally applied for because of a community-driven initiative, and that this project will tremendously impact the community’s way of life – as such, there is a missing element in the mandate and disbursement of federal funds, which would require both legal

²²⁷ Ibid.

language requiring community consensus and approval, as well as a series of methodological guidelines explaining what kinds of engagement should be required when using these funds, possibly modeled on the Lowlander Institute and Rural Design workshop methods above. In this case, design workshops that directly put experts and designers in the room with the community. The result would be the involvement of professionals who have a direct expertise relating to elements of the project – in this case, Native American tribal customs, landscaping experts, water management experts, museum or memorialization experts, etc.

Just as important, the manifested distress, and potential trauma, over losing a home is not being incorporated into the proposal as it stands – the current method still relies upon individual buy outs and individual resettlements while the new design is taking place, fragmenting the community further. Even the approach of information gathering targets the individual over the tribe – individual interviews and surveys appear more prominently in the reports than the community discussions, and little to no information was released about state and tribal leadership discussions outside of the public meetings. The methodology used by the state is in direct contrast to the traditions of the community, lacking in both research into the customs of the community and into history and the previous injustices committed towards a marginalized group of people. If nothing else, it indicates a lack of input from those whose expertise lies in the area of Native American tribal customs or even those whose expertise lies in the area of assessing the importance of heritage. There appears to have been no involvement by the National Parks Service or State Historic Preservation Office in the process (in all likelihood because of the lack of federal recognition of the tribe), and the planning firms hired have no dedicated expertise in the realm of community engagement or heritage planning.

This highlights a missing link: an advisory council that could act as both a mediator between the state and community as well as bring in outside expertise that might not be present in either of the stakeholders' toolboxes. Made up of an interdisciplinary group of experts, as well as representatives from government agencies and the community, the council could provide expertise on missing areas, such as heritage, tribal customs, the effects of trauma and displacement, as well as balance these with practical considerations of taxpayer money and flooding issues. Although this would potentially add an additional actor to the already large set of stakeholders, it would provide an opportunity to gather experts together to provide an interdisciplinary approach and expertise that does not answer solely to whomever holds the purse strings. From the perspective of preservation professionals, this would provide a way in for individual practitioners as well as already existing agencies (such as the National Parks Service), to play a larger role in the process, and one that would have direct access to the discussion at hand. It would also allow greater latitude, especially in the case of the Isle de Jean Charles project, in finding ways to work outside of existing institutional structures, or to find creative ways to use them (such as the application for a Tribal Cultural Property). In addition, an advisory council would provide the function of a mediator – a source of two-way communication between the community and the state, and potentially bring together the currently disparate visions for the site by communicating more clearly the values of stakeholders to one another. Further, this would set up a clearer structure for future relocations, and provide a level of accountability when money is to be spent, as it would require the advisory council weigh in on the process.

Although an advisory council is not the only solution to the problem of conflicts, the lack of interdisciplinary expertise being taken into account by those who hold the purse strings is a real problem for not only the community of the Isle de Jean Charles, but for preservation as a whole in the process of managed retreat, and one that needs to be addressed. The relocation process has been fraught with communication issues and conflicting values throughout, all of which highlights the difficulties of involving heritage values, and require that preservation professionals examine the current structures and approaches and consider whether these need to be re-evaluated in light of future needs.

Chapter 7: Challenges & Opportunities

Throughout the planning process of relocating the Isle de Jean Charles, various conflicts and successful moments have come to the fore, from which some conclusions can be drawn and used to inform the larger questions of this thesis. Heritage professionals still face barriers to articulating the importance of heritage and heritage-related values at planning and policy levels, due to lack of established methodologies and lack of involvement at critical levels of institutional structures. At the same time, there are very clear opportunities for expansion of the role of heritage professionals in this process, from informing new design to filling roles of communication and mediation in the process that have the potential to not only place greater importance on heritage values, but also have the potential to help community resilience as a whole in the future.

7.1 Key Challenges

Lack of established and agreed upon methodologies and tools at the institutional and community levels

As a result of sea level rise migration being a new issue, there have been no real examples available to model this process on. The Isle de Jean Charles is a pilot case, where the process is just as new as the problem, resulting in guesswork at all levels. Funding, for example, has historically tended to focus on one household at a time – in the FEMA-style approach -, buying out properties and leaving the choice of location up to the individual. As has already been stated, this is completely at odds with the desires of a community that values its network as much as that of the Tribe. Although there are a couple of creative methods of developing

funding, it is clear that much of it will have to come from government entities, rather than an amalgam of loans, grants, and other options. In the case of the Isle de Jean Charles, this came in the form of the National Disaster Resiliency grant – for which there was no precedent, and has caused a snowball effect in how to disburse these funds and who is responsible for their spending. Here, the state is the ultimate authority of how to disburse funding – with no accountability to the community in how it is being spent. The final choice of purchase of land, the retaining of official design and engineering firms, the purchase of materials, etc, are all in the purview of the state, with no required review by the community or other stakeholders before these purchases go forward. More to the point for the field of preservation, there are no directives established for how to treat heritage, or that heritage must even be considered before going ahead with this process. In this case study, conflicts over land choice, design approaches, and which values are being emphasized have already come to the fore. Cherry-picking elements of importance – such as choosing to prioritize the design of housing over the placement of the community center (and by extension the design of a cohesive tribal community) is a real danger, and is made easier because of the top-down approach that has historically been implemented. While the state may emphasize verbally the need to consult with the community to make decisions, the disbursement of funds and final decision-making lie with the state, and the project will continue to move forward even if the Tribe were to pull out of its partnership with the agencies.

At a larger scale, this illustrates a problem: those who have a real seat at the table are those bringing in the cash flow. This however, does not guarantee an interdisciplinary approach and expertise, instead giving greater weight to one party of values (in this case study,

the OCD-DRU and its emphasis on risk reduction), and potentially eliminating some voices and potential solutions from the process. Based on this model, heritage professionals would have to come up with a funding source that definitively aligns with heritage values for every project in the future in order to have their perspective heard. It places preservation on uneven footing, by default devaluing heritage-related values because the funding is simply not there to back them up. The same would be said of every single community that will be affected by sea level rise – which is both ludicrous and impossible, especially for those communities composed of marginalized and oppressed groups. If we continue to allow those gatekeepers to funding to be those who have the greatest voices in the project, we will continue to marginalize groups that we have already historically marginalized and continue to prevent historic preservation from having a seat at the table.

Lack of involvement of heritage professionals and barriers to communities' abilities to work within the existing structures of preservation

In the case of the Isle de Jean Charles, heritage professionals appear to have been involved in the non-profit realm, and in a limited capacity. Although the Lowlander Center partners with other institutions of cultural heritage there are no heritage professionals on staff. Those working on heritage are either activists or sociologists, both of which are valid inputs in the process and bring important viewpoints, but also highlight a missed opportunity on the part of those experienced in intangible heritage preservation professionally. In the case of the Rural Design workshop, heritage professionals were involved, but only for the limited duration of the workshop and production of the executive summary. Although part of the process was to build up some networks, there are no established methodologies that provide some form of support

for these professionals to continue to be involved in this process. This places the burden on the community to find and maintain relationships with individual heritage professionals, who, in any case, may not have any sway when it comes to impacting the government approach.

At the local, state, and federal government levels there are institutional structures in place that are meant to facilitate methods of preserving heritage in its various forms. In the case of tribal heritage, there are Tribal Historic Preservation Officers that can be appointed as liaisons to the National Parks Service, whose definition of heritage aligns more closely with the intangible heritage of tribal customs. Alternatively, applying to the National Register Bulletin for recognition as a Tribal Cultural Property (TCP) could also provide some level of protection and at the very least require the involvement of government agencies whose mandates, unlike that of the OCD-DRU, require considering heritage as part of their process. These are great mediators for communities, and have been employed successfully in other situations of preservation – although never actually tested in the case of relocation. However, as pointed out earlier, because the tribe is not yet recognized by the federal government (although it is recognized by the state), many of these opportunities are closed to them. Thus, these fantastic resources are useless to the community because they are not able to meet requirements set by another branch of agencies.

It is also worth mentioning that even the option of identifying the island as a Tribal Cultural Property is an incomplete solution at best. The National Register does not include intangible resources themselves: “the entity evaluated must be a tangible property, that is, a district, site, building, structure or object.”²²⁸ In which case, the island itself would have to be the one listed on the register, as a culturally significant landscape – a paradox,

²²⁸ Bulletin for TCP

because the island is disappearing. Because it is disappearing, the relationship with the island has deteriorated, as has its physical integrity, making it difficult to make the case for its continued condition. However, it would still be possible to list it, as a “property may retain its traditional cultural significance even though it has been substantially modified.”²²⁹ Examples such as the effort to preserve route 66, which has multiple layered narratives, as a TCP, prove that the definition of a TCP is constantly widening, and there is flexibility in how one can apply the definition in the future.²³⁰ As a method for potentially saving the island itself as a memorial, preserving it until it is completely inundated, this could be an option. Of course, this would require time and resources that may not be available to a non-federally recognized tribe. Without guidance from the SHPO or some heritage expert in the process, it would be both confusing and slow going. However, it does not solve the issue of preserving intangible heritage in the new location. While it gives some slight form of legitimacy, it does not require that any protection be applied to the tribal culture itself.

While this is perhaps a unique example – the vast majority of communities who will have to make decisions about relocation are not Native American tribes – it still highlights an issue: our institutional structures can act as mediators, but only within certain definitions and strictures. In effect, they are restricted in the scope within which they can act, inhibiting their ability to be flexible and creative in finding ways to work with all communities, possibly locking out swaths of groups from funding and support by inhibiting communities’ abilities to work within the existing structures of preservation. More often than not, this falls hardest on minorities and under-represented groups, who have historically faced neglect and oppression,

²²⁹ Bulletin for TCP

²³⁰ Route 66 article

and will continue to do so if we do not carefully examine the limits of our current institutional structures.

7.2 Opportunities for Change

Potential to more decisively identify that the link between trauma, place attachment, and resiliency are in the preservation bailiwick

Research that looks at the connections between trauma, sense of place, and displacement needs to be better examined and brought to light. Research about social cohesion already exists outside the field, providing evidence that sense of belonging and attachment to place are linked, and contribute enormously to the continued resiliency of communities. They establish that individual connection to place is how individuals construct their own identities, and that this connection is a part of the reason that individuals choose to remain a part of communities and often refuse to move.^{231, 232} Studies that directly identify this sense of place as a component of heritage however, are in short supply. Heritage professionals need to squarely identify that this research and the conclusions drawn from it are a direct part of why heritage is so important to planning for relocations. Firstly, in identifying that one of the reasons behind the unwillingness of communities to move from their original homes is this place attachment, preservationists can find ways in which to investigate how to bring elements of the original place (their heritage) with the community, and use this as one of the tools for two-way communication in their arsenal when mediating between stakeholders (such as

²³¹ Clark, William A.V., Duque Calvache, Ricardo, Palomares-Linares, Isabel. "Place Attachment and the Decision to Stay in the Neighborhood." *Population Space & Place*. March 2017, Vol 23, Issue 2, p 16.

²³² Fried, Marc. "Continuities and Discontinuities of Place." *Journal of Environmental Psychology*. Volume 20, Issue 3, September 2000, p 193-205.

between a state government and local community). Secondly, by emphasizing how important place attachment, and thus heritage, is to social cohesion, preservationists can then link the importance of heritage to questions of social justice, community resiliency, and even economy – providing broader links between fields and gaining more widespread support in its endeavors to be a part of the process, strengthening its base. Finally, establishing the connection between trauma and place attachment is more easily understandable to the everyday person – the trauma felt at the loss of a home, or an object, for example, is something that the vast majority of people understand, and is something that communities as a whole are more likely to be willing to take action to mitigate. By directly linking this research to heritage, preservation professionals can increase their base of support from the community as well as make it easier to communicate why preserving heritage is such an integral part of the relocation process to all stakeholders.

Heritage has the potential to be involved in new design by reintroducing traditional spatial arrangements

As heritage professionals, memorialization is a constant concern – how to remember the past when all that remain are vestiges. Often this is resolved by having a museum, a plaque, or some kind of marker that serves as a reminder, a memorial. In the case of the Isle de Jean Charles, initial plans focused on one type of structure, the tribal center, as having the greatest potential for direct memorialization; its design could incorporate symbols (such as that of the palmetto tree), its construction could use materials from the Island itself, and its function could incorporate a museum. The profession is comfortable with this approach – having a single central repository of memories that should be designed carefully; aside from cases of

new addition to historic buildings this is often the greatest overlap with design professionals. Yet there exist further possibilities, ones that incorporate heritage further into new sites, such as re-using traditional spatial arrangements.

Following this vein of reasoning, heritage professionals need to investigate the potential for integration of heritage into new design in planning new communities. In the case of the Isle de Jean Charles, the lost gardens that used to lie between each house, serving both as a traditional method of sustenance but also as a further element of the connected identity of the tribe, are a spatial arrangement that could be reintegrated into the new community planning. The discussions by both the Lowlander Center, the tribe, the government agencies, and the design entities have primarily focused on the community center and individual housing, but mostly lose sight of the potential for reintegrating gardens in between houses, or in some other form, as a means to not only provide a continuation of traditional skills, but also as a means of strengthening the network of the tribe as it moves to the new location. In much the same way, the arrangement of houses near bodies of water, despite the flood risks, has not been investigated fully. A major component of the traditional way of life of this tribe rests on its connection to the water – being surrounded by it. By moving away from that surrounding water, there is the question of how to preserve this aspect of heritage – can it be done so by arranging houses near smaller bodies of water? Is this really sufficient, given traditions of fishing and boating in the bayous? Or is there an acceptance that some elements of heritage are irrevocably lost and cannot be resurrected through spatial arrangements? Although this may be a component that cannot be incorporated into the new site, and thus asks questions about how much of the tribal culture is truly being salvaged, it is an avenue that should be

investigated more thoroughly from a heritage lens, in order to establish what spatial arrangements can be reused in order to design the new location. Traditional spatial arrangements, at a larger scale, have the potential to not only memorialize the past but to also provide a way forward in designing communities that are more resilient to change the trauma accompanying it.

Rather than simply providing a vehicle for memorialization, heritage professionals should seek to find ways in which traditional spatial arrangements can be repurposed, investigating how various spatial arrangements in each of these potential locales have previously withstood or adapted to change. Armed with this information, heritage professionals should then seek to be involved early on in the design process, informing architects, planners, engineers, etc, of previous tried and tested arrangements that both serve the needs of the community and also make sense for the future. By focusing on how heritage can inform the future, heritage professionals can insure that heritage will be recognized at higher levels of planning. By providing evidence that heritage is not only a memorial that must be preserved in place, but also a way of life or a spatial arrangement that can be adapted to the changing future, just as it has in the past, the argument to investigate heritage, and maintain it, will find greater sources of support from both communities and governments, in turn ensuring that heritage will have a seat at the table when decisions are made.

Greater involvement of heritage professionals within institutional structures

Although the main case study in this thesis touches upon involvement of heritage professionals early on in the process, they do so in a limited capacity (as mentioned in the Key

Challenges section). There is an opportunity here to try to link government agencies that already are involved in heritage – such as the National Parks Service – into the process. As governments at all levels will have to be involved, due to scale and funding issues, requiring the involvement of heritage professionals during the data collection phase, the planning phase, and the design phase is necessary. Heritage professionals have a unique strength in that they recognize the need for heavy community participation in preserving cultural heritage – whether it is tangible or intangible – and guiding this process is a part of heritage planning at all levels. Although outside consultants, such as non-profits like the Lowlander Center, are important in providing an avenue for community advocacy, a presence within the government structure is needed in order to mediate between government and community interests in the process.

At the macro-scale, this requires acknowledging the importance of heritage in large-scale documents such as sustainability and resilience plans, and highlighting it as a key component of the process, in order for it to then filter down to the micro-levels. This requires that heritage be presented by professionals as integral to the process of making communities sustainable and resilient to change (using the previous research linking trauma and place attachment as support, for example), as opposed to simply stating something that must be protected. Using case studies such as the Isle de Jean Charles gives basic grounding to this conclusion, as cultural traditions are so central to the reason the community is even initiating the move, but it needs to be developed further through more widespread studies that can provide further evidence for the claims of preservation. Preservation has a very strong advocacy component, especially in the United States, and this is one of its strengths – that the profession does know how to advocate and drum up support, especially at the grass-roots level.

However, the profession does tend to make a number of advocacy claims without always having the data immediately on hand to back it up, which makes it more difficult to be incorporated at larger government planning scales, which give more weight to those statements that have a greater set of supporting facts at their disposal.

In tandem, this also indicates a need for involvement of government agencies involved in heritage management to be included in the creation of these plans. As already mentioned, there are already institutional structures that can act as mediators – such as the Tribal Historic Preservation Officers, the identification of a property as a Tribal Cultural Property, the listing of a site on the National Register, etc. These structures however, come with their limitations (as already mentioned), but the fact that they are already established provides the opportunity to then stretch their boundaries further. As pointed out in the case of the Isle de Jean Charles, there are no local, state, or federal agencies whose mandate involves heritage directly involved in this process in any way. As such, there is a lack of legitimacy of the position of heritage from the government perspective – the support for preserving any kind of heritage is simply not there. Heritage-related institutional agencies need to be directly involved from the start in overarching plans for states and localities, and by extension on these individual projects, which is something that can only be done if we return to the first point – that heritage needs to directly make the connection between trauma, place attachment, heritage, and community resiliency, lending weight to the profession’s position and thus making the case that agencies dealing with heritage should be involved in efforts of relocation from the very start.

By doing so, emphasis can then be placed at state and local levels on efforts to collect heritage data and synthesize it in a meaningful and productive way, meaning making use of a

variety of heritage professionals during the process – from performing preliminary research, to training those surveyors performing interviews, to crafting questions that will result in both quantifiable and qualitative data. It can then additionally filter down to requiring that there be directives in requests for proposals (RFPs) for the planning and design of these new communities that emphasize the need to take heritage into account. None of this, however, can happen if those institutional structures that we already have in place cannot be pushed forward to have a seat at the table from the beginning.

Preservation as a means to better facilitate community involvement in heritage values & decision-making

One of the key issues across the project of the Isle de Jean Charles has been communication – particularly between the tribal community and the state government (in the form of the OCD-DRU). On the community side, the belief remains that the government agencies are not sufficiently involving them in the process, that they are being marginalized, and that their values are not being taken into account. On the state side, there is pressure to reduce risk as well as pressure to properly spend taxpayer money only once, rather than going back and rebuilding a few years later. Missing here, as mentioned earlier, is essentially a mediating force between the two – an advisory council that can act as an interface between these and other stakeholder interests. Within this mediating group, heritage professionals have the potential to play a larger role.

Preservationists are uniquely suited to facilitate community involvement in their own relocation, the identification of heritage values, and decision-making related to heritage. A large part of the profession has focused on preserving in-situ, maintaining memories related to

the “sense of place” that people also connect to, and make them so reluctant to move in the first place. By default, the preservationist mindset is well-equipped to provide a platform for dialogue with community members who feel a strong connection to their home and their heritage. Further, preservation professionals can bring support to the importance of preserving intangible heritage – helping communities to articulate how important it is that the new site provides ways of manifesting these traditional activities. By providing a space to articulate these ideas and giving them support heritage can then further involve communities in their decisions about the value of their heritage and bring weight to their decisions throughout the process, helping to prevent the marginalization that can occur.

At the same time, communication is a two-way street: we have to provide a platform for the community (in the case of the Isle de Jean Charles, providing a voice for the community that places emphasis on its heritage) but also provide a voice for the government and other actors to communicate their views and the opportunities that they provide to the community. Being able to balance the desire to protect heritage and heritage-related values with the pragmatic needs of government entities – such as flood risk reduction, taxpayer accountability, etc – is a skill that heritage professionals need to bring to the fore. While the voice of the community must be heard, it is the ability of heritage professionals and designers to be mediators in the process that may actually provide the greatest value.

This idea of becoming a mediator is not new, and has been evolving for some time now in how preservation professionals communicate and work with communities. Emphasis is placed more and more on local expertise and notions of eliminating gate-keeping – that the roles of heritage professionals (similarly to design professionals) should really be that of

mediators. However, it is important to emphasize that heritage professionals have specific training and capabilities that should be recognized and employed. Mediation in the realm of heritage does not simply mean turning over the responsibility for the design of the new site to either the community or the state. As seen in both designs for the new site, visual cues are either overly simplified (the layout of the site in the form of a palmetto leaf, which will never be seen when one is there in person) or ignore important elements (the layout of the site that completely ignores the need to have the community center be an anchoring force in the design). Mediation requires that heritage professionals establish their skills and credentials as well, balancing the fine line between stakeholder values and desires and what their experience and skills indicate will actually successfully embody these values and desires.

7.3 Conclusion

In the face of rising sea levels communities across the globe are beginning to grapple with the need for managed retreat away from vulnerable shorelines. Communities beginning to develop these plans face tremendous pressure to find ways to adapt to new locations and maintain resilience, while being forced to abandon ancestral homes and potentially drastically alter ways of life. In the face of this new reality, preservation has the opportunity to anticipate these problems and insert itself into the planning process. Rather than simply develop methods with which to adapt in place, preservation professionals have the ability to develop methodologies that will both cement heritage as an important component of the planning process for managed retreat, but also help form resilient communities by pulling from their heritage to ground them in a new location.

Although the example of the Isle de Jean Charles is as of yet incomplete, it allows preservation professionals to see that heritage values can and should be incorporated into community discussions, and that they may well become a driving force in relocation planning. The case study highlights the still extant barriers to preservation establishing itself as an important part of community resilience – due in large part to the fact that preservation has not yet claimed that the research connections made between trauma and place attachment (and thus heritage) are one of the strongest reasons for including heritage discussions in planned relocations. It also highlights the difficulties of using established institutional structures and tools when these are not yet as flexible as we imagine, and that the presence of preservation professionals in the planning for relocation is not guaranteed.

The study does however illustrate that there are opportunities for heritage professionals to investigate how traditional spatial arrangements – whether they are clusters of houses, placements of gardens, or centralized community centers – can be applied to new design that will help build community resiliency and create new methods of preserving heritage that may otherwise be lost. Preservation of heritage is a part of preserving the social fabric and identity of the Isle de Jean Charles tribe – by extension one can claim the same for all residents of communities across the globe. Preservation professionals have the opportunity to get out ahead of the problem and advocate for heritage-related values and their value to communities. They also have the ability to position themselves as mediators in the process – using professional training and expertise to provide an interface between different stakeholders, balancing community desires versus government priorities, for example. In doing so, not only

does the profession have the opportunity to better advocate for its values, it can provide evidence of its value to making the process work more smoothly as a whole.

As the case of the Isle de Jean Charles demonstrates, heritage professionals also need to advocate at upper policy levels to have heritage included in planning and design processes so that these ideas permeate to agencies who are working directly with these communities. Further, preservation needs to bend its formidable advocacy skills to expanding the mandate of existing agencies to provide greater flexibility in dealing with planning for relocations and how they can disburse funding and support to communities faced with these decision. Without greater participation in planning and policy decision-making, heritage advocacy will have less support in the long run, and the onus will fall on communities, who may find their values and priorities easily sidelined if government agencies' priorities do not shift.

Preservation of heritage is not only important for memorialization, but because it is a part of the social fabric of communities, and as preservation professionals we strive to protect this heritage. In the face of potential loss of place however, we have not yet pushed forward to formulate new ways to consider heritage and the ways it can be used to help communities in the face of these new realities. Sea level rise is an exponentially growing threat, and without the development of new methodologies that will give heritage a seat at the decision-making table, we will find ourselves relegated to making 'necessary sacrifices' due to natural causes. In an effort to avoid this, this thesis has sought to demonstrate the challenges and opportunities faced by preservation professionals and suggest methodologies that could be drawn from current examples of managed retreat, and provide insight into a larger inquiry of the problem at hand.

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Appendix

Fig A: Matrix comparison table

Case Study	Population Size	Heritage Type	Sea Level Rise Severity/Timeline	Level of required move	Alternatives to Moving?
Isle de Jean Charles, Louisiana	77 families (as of present)	Intangible - tribal heritage; environmental -- contextual location with heavy implications of previous tribal injustices at being forced to move	98% loss of land since 1950s, increase in storms reduce transportation abilities to the island, high urgency due to loss of individuals to mainland	Definite due to sea level rise and continued erosion	Remain in place for perhaps another 20 years, but eventually the island will disappear
Kiribati	113,000 people	Intangible - sovereign country moving away from it's borders; tangible; natural - phoenix islands protected area (2010)	"By 2050, 18-80% of the land in Buariki, North Tarawa, and up to 50% of the land in Bikenibeu, South Tarawa could become inundated,"	High-probability in the next 50 years	working to develop first-line defenses against the effects of sea-level rise, including planting mangroves to prevent coastal erosion and improving rainwater-collection systems to protect water quality.
Vunidogoloa, Fiji,	156 (village)	tangible -- lost during move	immediate -- since 1956 eroding shoreline; 2006 petition to the government for funds to move	move effected -- 2010-2014	watch it sink? Built a seawall, but it only slowed flooding down a little
Carteret Islands, Papa New Guinea	2,600 (2006)	Intangible - way of life	original estimate of total submersion by 2015 -- not yet happened, but increasingly high probability	high probability	planted thousand of mangroves to prevent erosion of the coastline; seawall construction
Newtok, Alaska	354 (tribe)	Intangible - tribal way of life	less due to sea level rise - primarily due to erosion and permafrost damage causing lowering sea level and therefore increasing flooding; high storm damage	high probability	
American Samoa		intangible -- "ocean people to mountain people"	sea levels have risen by about .8 inches over the last 50 years; by 2050 the water surrounding low lying villages is expected to be 6 inches higher; by 2100 waterline expected to be fifteen inches higher	high - at least retreat further inland	
Maldives	350,000 est.	Intangible & natural	potentially 75% underwater by 2100	medium	artificial islands to relocate low-lying parts of population; sea walls
Tuvalu	12,373 (2009 estimate)	tangible - community traditional meeting hall and church buildings; intangible - shell art, dance, & music; community system (salanga - individual task to perform for the community); fusi (community owned shops)	sea level has risen at 3.9 mm per year (twice global average) - create an increased transfer of wave energy across reef surfaces - estimated sea level rise of 8-16 inches in next 100 years could make Tuvalu uninhabitable	medium probability	
Tangier Island, Virginia	460 people; 727 in 2010 census	Intangible - way of life since the 1950s - soft shell crabbing; Tangible - Tangier Island Historic District; traditional watermen's community; late victorian (gothic, romanesque, revival), neoclassical revival, colonial revival, ranch style, etc (see nhp application - 2014)	67% reduction in landmass since 1850; expected loss of most remaining landmass in the mid-range sea level rise scenario in the next 50 years	High probability in the next 50 years	Remain in place for next 50 years before abandonment; no feasible shoring up of island (expensive)

Case Study	Community willingness to move	Government Involvement - Federal	Government Involvement - State	Government Involvement - Local
Isle de Jean Charles, Louisiana	As of 2017, community consensus achieved to move (prior, contested), assuming that community cohesiveness can be kept	National Disaster Resiliency Fund winners - US Department of Housing & Urban Development	Louisiana Division Office of Community Development - Disaster Recovery Unit	Terrebone Parish president, Terrebone Parish planning committee
Kiribati	The majority of the population doesn't actually believe the islands will sink; https://www.washingtonpost.com/news/posteverything/wp/2018/07/26/feature/this-is-what-happens-when-climate-change-forces-an-entire-country-to-seek-higher-ground/?hpid=hp_hp-top-table-main-climate-change-03%3Aclimate-change-forces-an-entire-country-to-seek-higher-ground%3Ahomepage%2Fstory&utm_term=.0c04b0bd9c10	Gov't purchased 8 square miles of the Fijian island of Vanua Levu for just under \$9 million; new government has not made relocation a priority	n/a	n/a
Vunidogoloa, Fiji,	100% -- eroding shoreline was observed since 1956	Federal government provided majority of funding and relocation planning in conjunction with the community	n/a	n/a
Carteret Islands, Papa New Guinea	some willing; although reports say that the population of the atoll continues to grow	none	none	grassroots group formed by Council of Elders once islands decided to establish their own relocation program - not the country government
Newtok, Alaska	voted to relocate 9 miles away in 2016	9 Federal Agencies		9 local agencies
American Samoa				
Maldives	low	2008 announcement to purchase land in order to relocate; current government is instead determined to stay put and resist rising seas with geoengineering; however current plan is to build on artificial islands in order to relocate low-lying island residents	n/a	n/a
Tuvalu	low	government focus is on mitigating climate change impacts - focus is still on avoiding the worst case scenario	n/a	n/a
Tangier Island, Virginia	Unwilling to move, rooted in way of life	none	none	none

Case Study	Funding Sources	Stage of Move (if any)	Conflicts
Isle de Jean Charles, Louisiana	National Disaster Resiliency - 48 million -- currently being turned down by the tribe due to state government handling of the process; other grants available due to tribal nature; business loans; tax credits	Land bought by government but heavily contested by locals -- therefore no move has taken place	Local plans and initiatives have been usurped by the state government agencies, who are now eliminating local involvement in the move
Kiribati	Central government	property purchased, no moves as of yet	This raises a new and frightening question: if a country no longer exists in physical form, can it still exist as a political entity? Can a nation just up and move?; As Maxine Burkett of the University of Hawaii, who has written extensively on the political dilemmas facing small island states, told me in 2014: "A number of us understand the modern notion of citizenship, where people have ties to more than one country. But the notion of that happening without a physical territory is quite novel."
Vunidogoloa, Fiji,	Federal government	complete	concerns about connection to land and heritage when move initially arose; residents refused to leave cemetery in place, wanted to move their ancestors with them - which they eventually did. Today the original site is left as-is to deteriorate slowly, and older generations of residents still visit.
Carteret Islands, Papa New Guinea	country governemtn provided 2 million kina (USD 736,00); UNICEF contributions	Secured land on the main island of the autonomous region of bougainville, east of mainland Papua New Guinea; initially secured 25 hectares form the Catholic Church (plus another 60 hectares later), enough for 100 ppl from 10 families plus another 25 families	Insufficient funding to actually build homes for the islanders
Newtok, Alaska	funded by Denali Commission -- currently \$15 million earmarked for the relocation; requires another 120 million to be successful	secured land, but no actual move yet	difficulties in securing funding
American Samoa			
Maldives		City of Hope - on artificial island of Hulhumale (sand pumping from surrounding atolls, sea wall fortifications 3 meters above sea level) to accommodate about 130,000 people;	
Tuvalu	n/a	n/a	
Tangier Island, Virginia	None	None	Locals unwilling to move, and do not believe that sea level rise is the cause of rising sea levels (attribute it purely to erosion) -- makes it difficult to convince them that they may have to move even though they reportedly feel the potential problems