COMMUNITY RELOCATION IN THE FACE OF RECURRING INUNDATION

A Preliminary Framework

A Collaboration Of

UVA School of Architecture
UVA Institute for Environmental Negotiation
ODU Virginia sea Grant Climate Adaptation
and Resilience Program

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*2016
Coastal
Focus Group*

Acknowledgements

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- City of Chesapeake: Robb Braidwood, Emergency Manager
- City of Hampton: Aaru Ma'at, Chief Development Officer, Community Development
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- City of Hampton: Jonathan McBride, Housing & Neighborhood Services Division
- City of Norfolk: Robert (Bobby) Tajan, Floodplain Manager
- City of Portsmouth: Meg Pittenger, Floodplain Manager
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- Wetlands Watch: Skip Stiles, Executive Director College of William & Mary: Elizabeth Andrews, Director, Virginia Coastal Policy Center

Virginia Oyster Trail (photo credit - artisanscenterofvirginia.org)

Planning:**Future Possibilities**
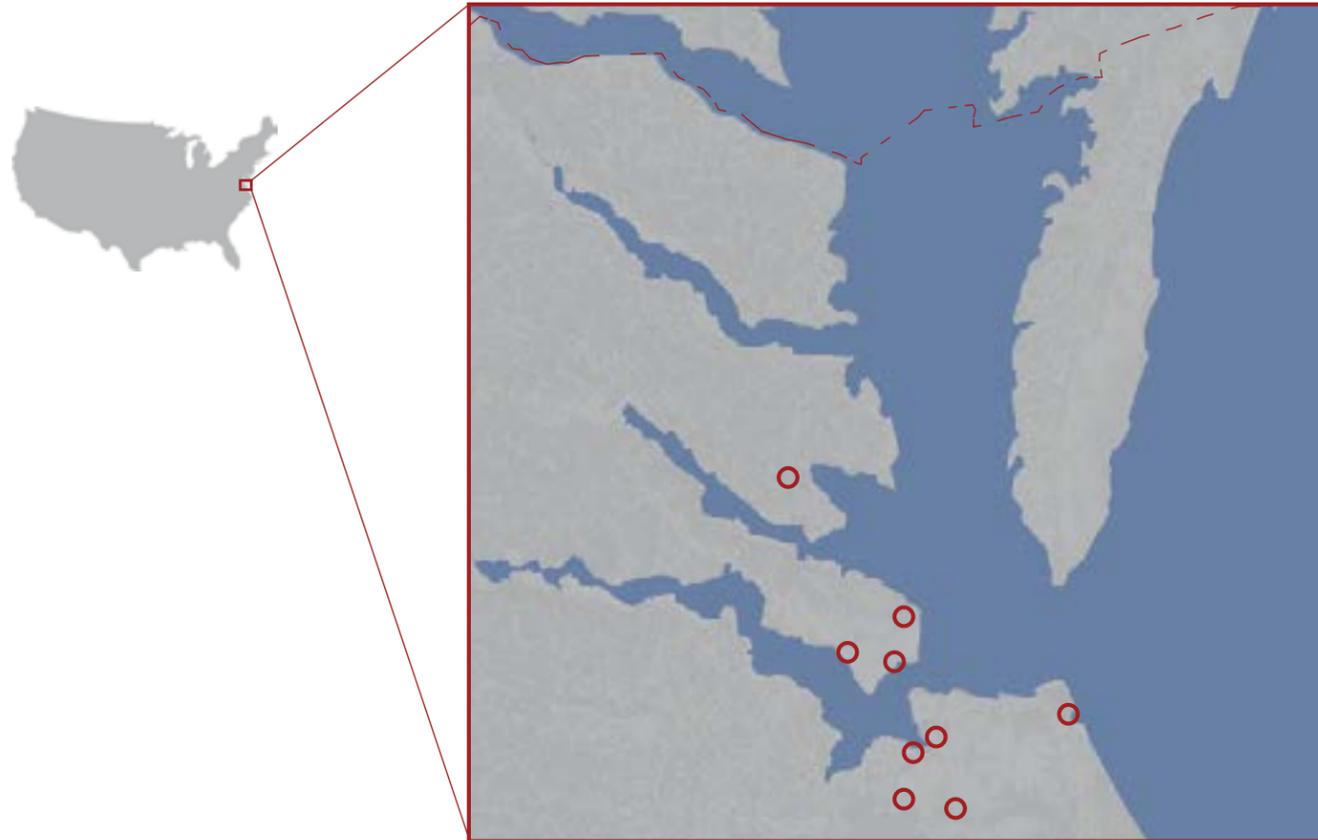
To initiate a conversation, and to begin outlining a helpful way that communities might approach the difficult (and dire) topic of relocation, a Focus Group was convened at Old Dominion University. Experts from coastal communities were invited to think about how communities might conceptualize, plan, and implement the undesired and unwanted relocation of a neighborhood or community.

On August 30, 2016, eleven knowledgeable "thought leaders" from coastal localities, universities and nonprofits gathered to tackle this topic. Participants were asked these questions:

1 Terminology: What words are best used to describe this issue?

2 What are the key big issues, concerns, or needs for the community that is to be relocated?

3 What are the key big issues, concerns, or needs for the destination community, where the relocated people will land?

4 Who should be engaged at the highest levels for early preparations and planning?

5 How should the at-risk communities be informed and educated about their risks and future?

6 What kinds of information are needed that will help high level people identify and prioritize the highest at-risk neighborhoods?

7 How can/ should the communities be engaged in determining their future?

8 How should the relocating and the destination communities work together to create a smooth transition for all?

9 Beyond the typical community engagement best practices (e.g., early, inclusive, informed), what additional principles relating to relocation should guide community engagement?

Many developments are built over drained and filled creek and wetland areas. **Norfolk, Virginia Beach, Portsmouth, Chesapeake, Suffolk, Hampton, Poquoson, Newport News and Gloucester** are all just feet above sea level.

Relocation: **Rising Seas**

Settlement Issues

Change is slow, coastal communities are grappling with the legacy of past patterns of settlement, as many developments were built over drained and filled creek and wetland areas. Many of Virginia's coastal communities can be considered high risk areas prone to repeated flooding, and are projected to become permanently wet, creating new landscapes of standing water.

The historic settlement paradigm in Virginia's coastal region has been changing as newer wetlands and stormwater rules affect community infrastructure.

Short Term or Long Term Responses

In response, communities are necessarily focusing on short-term measures such as raising the level of dwellings and roads. The City of Poquoson has raised 600 homes, a full 15 percent of the city, above flood levels. The City of Norfolk is exploring how it can become a national leader and expert in sea level rise and mitigation and adaptation, by launching a $12 million "Coastal Resilience Laboratory and Accelerator Center" in hopes of making Norfolk (and Virginia's coast) a national leader and expert on sea level rise mitigation and adaptation.

Yet, for the long term, the cumulative effects of repetitive flooding point toward a dimension of change that has yet to be embraced, effectively communicated, and planned for—the possibility that homes, businesses or entire neighborhoods may need to be moved and replaced with landscapes that accommodate the rising waters.

Virginia Flooding (photo credit - bloximages.com)

An Unfortunate Extreme

Given the emotional and physical upheaval associated with the possible need to relocate a neighborhood, or a small community, it is hardly surprising that the topic is not yet part of everyday conversation in Virginia's coastal region or local governments. To stay, or to go, is a last-ditch question that few communities want to have to answer. Yet some communities are already grappling with this extreme prospect as their land is being reclaimed by rising waters. The City of Norfolk released in August 2016 its Vision 2100 in which it foresees the need for new urban centers to shift to the east, away from high risk inundation areas. The residents of Tangier, where the shoreline is receding at the rate of about 14 feet a year, may need to abandon their island in less than 50 years. Some say it is only a matter of time before the issue of relocation touches many, if not most, of our coastal communities in some large or small measure.

Establishing Coastal Resilience

*Thinking in **Short Term***
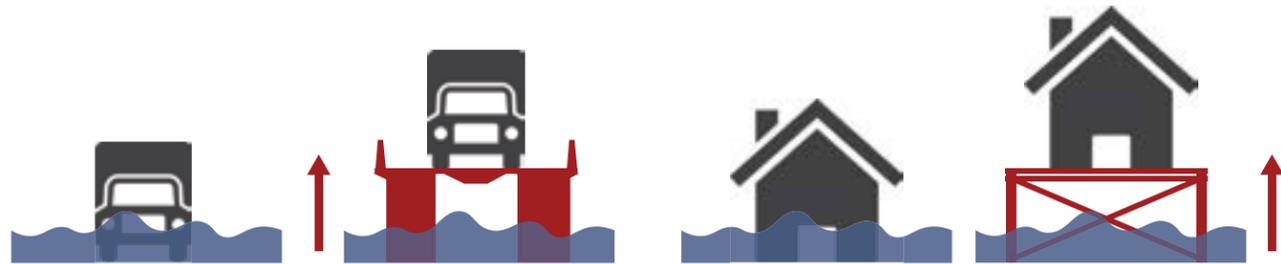
Virginia Flooding (photo credit - bloximages.com)

High risk areas are prone to repeated flooding, projected to become permanently wet, **creating new landscapes of standing water.**

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Case Study - **Newtok, Alaska**

The village of Newtok, Alaska is attempting to pioneer a shift in the capacity of the United States Disaster Relief Programs to deal with the gradual impacts of climate change.

ALASKA PUBLIC MEDIA
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$150 to $300 million

The city estimates a minimum of $150 million dollars to move the entire village and all necessary structures, including the drinking water facility, sewage plant, landfill, airport, homes, schools and businesses.

Coastal Erosion and Thawing Permafrost

Six homes are in immediate risk of being overtaken by coastal erosion. The town has lost its sewage plant, barge landing and landfill.

The Stafford Act

After a declined grant request submitted to the Federal Department of Housing and Urban Development the village has now turned to the Stafford Act, a Law addressing disaster relief organized by FEMA (Federal Emergency Management Agency).

Newtok asks: Can the U.S. deal with slow-motion climate disasters?

By Rachel Waldholz, Alaska's Energy Desk - Anchorage   January 6, 2017
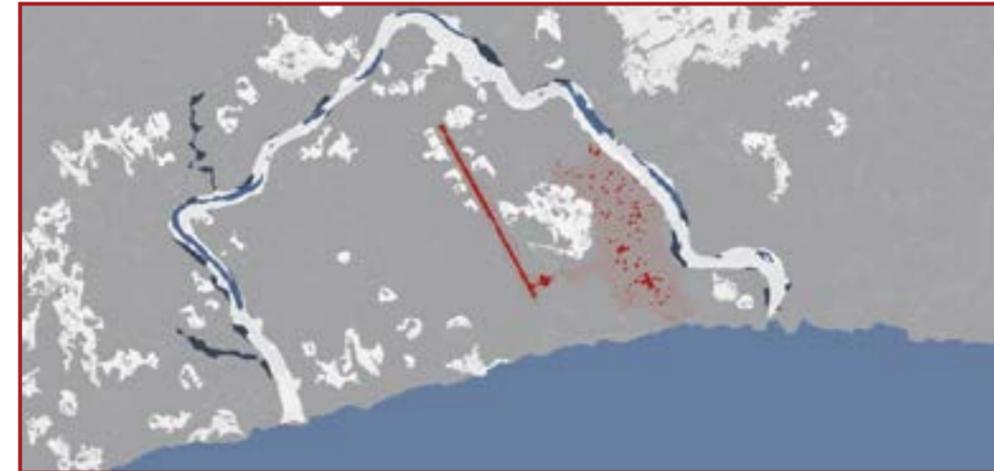
Newtok Alaska (photo credit - citydata.com)

Establishing Coastal Resilience

*Focusing on **Long Term***

Our hope is that we, and others, will jointly build on this beginning framework to assist communities to find the higher ground, both literally and metaphorically. What most would consider a dire outcome – the prospect of abandoning one's home to rising seas – also holds the possibility for new opportunities. This beginning framework is but one step of many that will need to be taken to help communities decide and design their own future.

Osprey with Fish (photo credit - Kim Taylor)

The ideas developed by the 2016 Coastal Focus Group Participants, represented in the following sequence, are a beginning framework for how communities might approach the process of relocation, not an end.

1 *Discussions in Long Term*

2 *Creating Conversations*

3 *Community Education*

4 *Establishing Goals*

1 Discussions in Long Term

Talk with neighborhoods in a way that is meaningful, respectful, and preserves both dignity and hope.

Engage the community in planning for itself.

Who needs to be part of this planning effort?

- At least one elected representative, and the county/city attorney, who can focus on fairness and satisfaction for all involved.

- Local organizations that are active in disasters and know how to help groups of people relocate successfully: relief organizations, faith-based organizations; volunteer and nonprofit organizations; the International Rescue Committee; the military.

- Voices of experience: people who have organized, and who have participated in similar situations – here in Virginia or other states.

- A "resource facilitator:" someone who can help put the pieces together and marshal resources.

- Academic community: e.g., a residential planning "Think Tank"; faculty who can provide historical documentation through photography and oral accounts.

What are some key issues we should prepare to assist with, and provide information about?

- Overriding importance of current and future safety: maps for today, tomorrow and beyond.

- Options for where people might move, how they might move, and possible phases.

- Beginning ideas and options for transportation of possessions, large and small.

- What are some key questions to ask the neighborhood or community?

- Housing needs: what qualities are most important for the future location (views, access to water, proximity to schools, parks, amenities, etc.)

- Continuity of services: how can we ensure continuity of medical, retail, and financial services?

- Continuity of specific social networks: schools, religious institutions, athletics, what else?

- Continuity of identity: does the neighborhood have a distinct identity that it wants to retain? Does the community want to stay together, or move individually? Where does the community end, and what does the "whole community" mean in this situation?

- Other special needs that we must prepare for: our elderly, youth, animals, gardens, what else?

- What other issues might be important for the larger community to discuss?

- Preservation of cultural resources: what cultural resources might need to be moved, or protected in place? (e.g. religious facilities, graveyards, monuments, other)

- Access to resources: will there be mitigation for losses? How can it be done fairly, to reduce cultural conflicts over resource distribution?

2 Creating Conversations

Help communities formulate relevant questions.

Start with the known and move into future possibilities.

What questions are important to propose to communities?

- How are communities impacted at home and work? This may involve preparing maps on current and future flooding, for community identification and description.

- How are neighborhoods defined? This may involve preparing maps of different relevant locals, for community identification and description.

- Information on how other communities have successfully relocated, and their lessons learned.

- What are a communities biggest needs and concerns about relocation? For example, is it important to them to move together as a neighborhood, or with key services?

What questions might communities propose, answers that might be given?

〜 Are we going to be forced to relocate? (participant)
No! But there is no need for flooding to occur unprepared. (i.e. a local government planner)

〜 So who will decide – and when?
There may be a series of important decisions that must be made – some are decisions communities make, and some are decisions experts make. Decisions about whether relocation is necessary, and if so, when and where. Decisions about whether rebuilding is allowed, whether certain public services can still be provided, and similar things that government is responsible for. Information and education are critical for making informed decisions.

3 Community Education

Educate communities about critical concepts.

What concepts are critical for communities to understand?

〜 County/city codes will be important in supporting efforts towards relocation. This suggests a need to identify all the codes that might support relocation, and those that might work against relocation.

〜 Relocation of businesses may need different types of support.

How might communities react to information delivery techniques?

〜 Maps and drawings can provide useful visual references.

〜 Information handouts can be alternatives to overwhelming mappings, and can be taken home.

〜 Materials should include general digestible concepts supplemented by scientific materials.

〜 A variety of individuals, from experts to local leaders and important community participants allow for a trusting and collaborative atmosphere.

What education techniques might be useful for connecting with communities?

〜 Education should be a two-way street that enables planners and residents to learn from each other.

〜 Use different media to enable people to learn, share, and build understanding: presentations, videos, handouts, maps, field trips, case studies, panel discussions, mobile apps, and more.

〜 Present information from trusted sources, multiple sources, and precedents or communities that have already experienced relocation.

〜 Initiate the analysis of costs/ benefits and risks/rewards of relocation, and adapt the analysis to include additional community inputs to these calculations.

〜 Marshall city resources to encourage relocation, to enable the commercial market to shoulder the burden of the relocation task.

〜 Facilitate word-of-mouth communication.

4 Establishing Goals

Consider long term impacts and supportive processes.

What long term processes might be relevant?

〜 How will infrastructure (e.g.,schools, hospitals, roads) support the new populations?

〜 How will governing jurisdictions change (e.g. voting districts, no. of representatives)?

〜 How will unique cultural qualities be retained and celebrated with the influx of new people?

〜 How will social networks and services be influenced – schools, social services, courts? Are there new social issues that will emerge with regard to diversity?

〜 How will the experience of "community" change?

〜 How will our financial structures be affected – banks, insurance, taxation?

〜 How can communities be engaged to help create a warm welcome for the people who will be joining the new community?

Guiding Principles: Relocation

Guiding Principles for Community Engagement

1. Expect the process to take one or more years, to build trust and relationships.

2. Enlist informal community leaders in designing the engagement process.

3. To build relationships, meet people face to face in different types of meetings.

4. Engage residents of all ages and groups.

5. While embracing the existing social structure, provide space for residents to vision one that is familiar yet new.

6. Use principles of "change management" to inform the process and content.

Guiding Principles for Planning, Communication and Education

7. Engage relevant community groups to guide communication and education (professional, social, faith-based).

8. Define and clearly communicate costs and benefits of staying vs. relocation, whether individual or collective.

9. Prioritize the most vulnerable areas to be engaged about relocation.

10. Develop a menu of proactive and reactive funding to incentivize relocation and avoid unplanned abandonment or loss of homes and businesses.

11. Prepare for the worst case scenario (military involvement), and plan for the best scenario (successful relocation, minimal loss of value).

Guiding Principles for the Destination Community

12. Use all of the same guiding principles as for the relocating community.

13. Engage experts in housing, transportation, social services, education, financial and other services and resources to activate a network of support.

Virginia Beach Pier (photo credit - vbbound.com)

Citations

1) The Virginian-Pilot. "Poquoson Takes Action To Outpace Rising Sea Levels," Nov 16, 2014. http://pilotonline.com/news/local/environment/poquoson-takes-action-to-outpace-rising-sea-levels/article_f18106b0-7d96-51c2-b1c6-47b3b34a58c8.html

2) PRI.org. Science, Tech & Environment, "How One Virginia Community is Re-framing Sea Level Rise as an Opportunity," June 27, 2016. http://www.pri.org/stories/2016-06-27/how-one-virginia-city-re-framing-sea-level-rise-opportunity

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