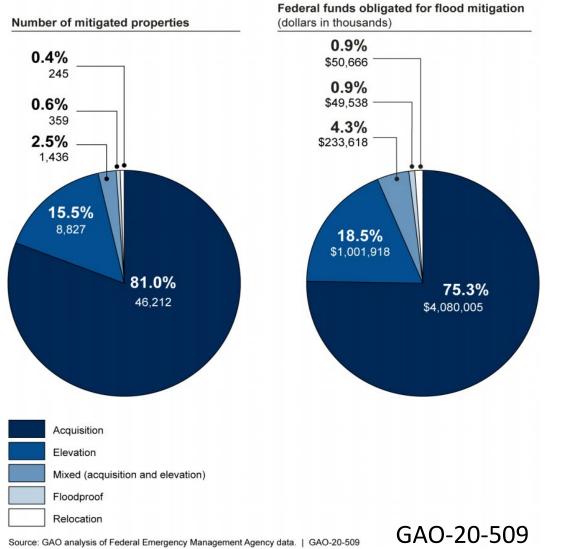
# MANAGED RETREAT

HOW

A.R. SIDERS, JD, PHD @SIDERSADAPTS SIDERS@UDEL.EDU DISASTER RESEARCH CENTER Figure 3: Federal Emergency Management Agency Hazard Mitigation Assistance, Number of Properties Mitigated and Funding by Mitigation Method, Fiscal Years 1989–2018



Note: Federal funds obligated were adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index for All Urban Consumers.



#### Coordinated

Organized relocation of whole community



#### Assisted

Support in moving, including identifying or creating housing options



**Resources required** 

#### Funded

Compensation for loss of property and moving costs



#### Nudged

Incentives to relocate to safe areas at own cost

#### Siders, Hino, Mach, 2019

#### Keys to Retreat

## Vision

#### Equity Leadership (and Expertise) Plan

"Retreat, Hell! We're just advancing in a different direction." - USMC General Oliver P. Smith

# What do you want your city / community / coast to look like in 100 years?

@sidersadapts

Positive Vision > Avoiding Fear

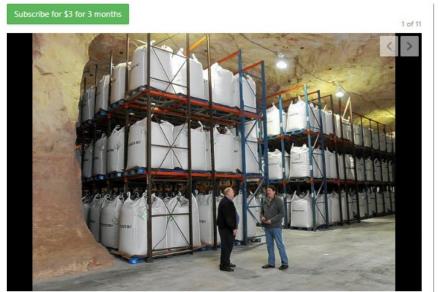


Local Illinois News

# Cave

#### Will Valmeyer cave become business hub?

Jan 14, 2011 🔍 0



JOHN SWISTAK JR. / JOURNAL Gateway Cold Storage owner David Macheca and developer Joe Koppeis in the Rock City cave in Valmeyer last week. John Swistak Jr.



Valmeyer, IL: The Documentary 12,560 views

# national seashore

It. Y .... The start

**Rosetta Elkin** 

Eas in 1122

D. Stone Essex Heritage

**@SIDERSADAPTS** 

Padre Island National Seashore, Heydere Flickr Semaphore, Vincent Callebaut

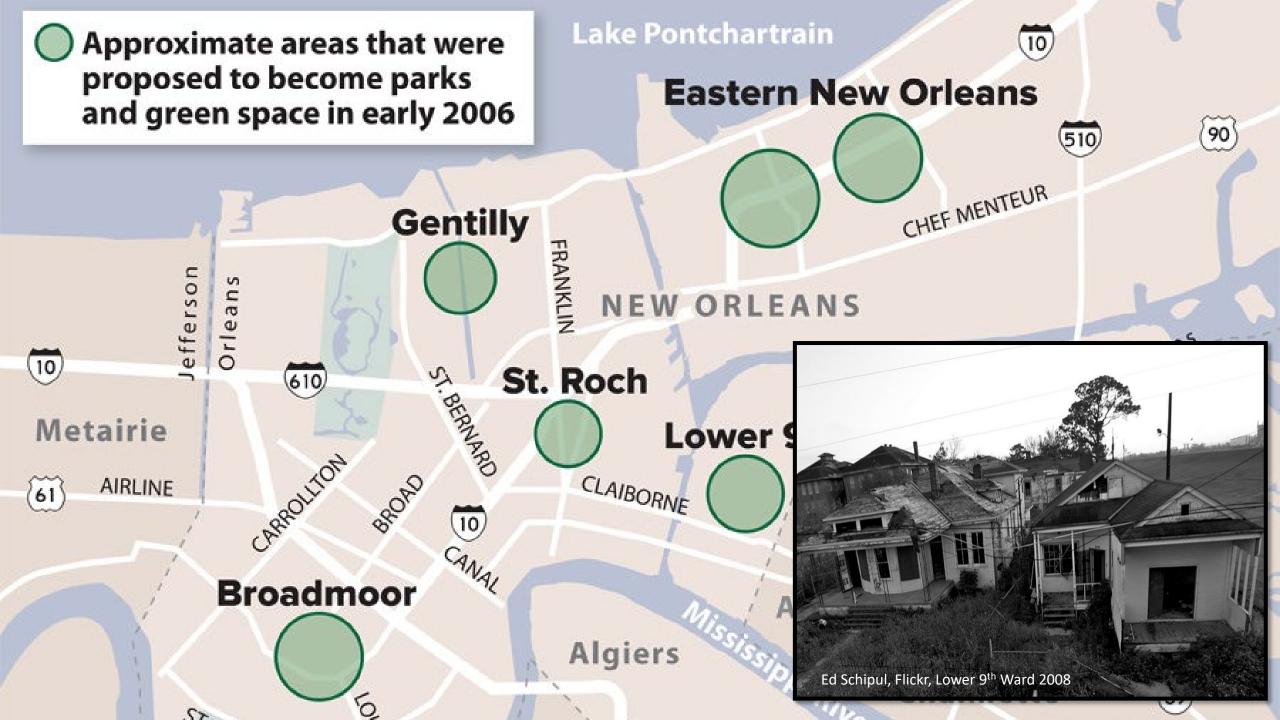
Tennessee Vailey Authority USA 20c

Stefano Boe

# Keys to Retreat Vision **Equity** Leadership (and Expertise) Plan

# What does equity mean for your community?

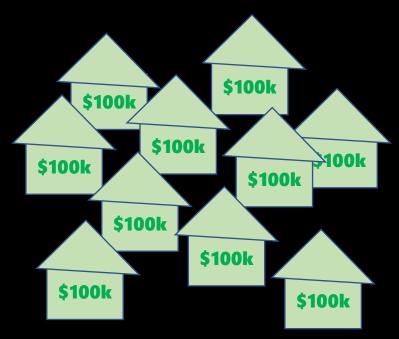
• Take race, income, historic injustice into account explicitly · Be skeptical of CBA • Account for difference in local capacity



Grand Forks, North Dakota

#### **COST-BENEFIT CHALLENGE**

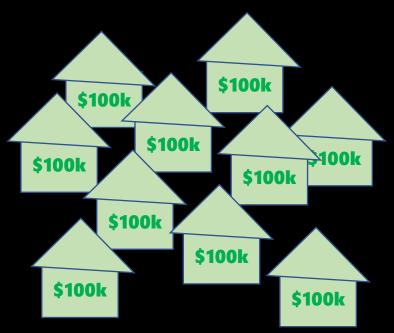
# WHERE WILL YOU BUILD THE FLOODWALL?



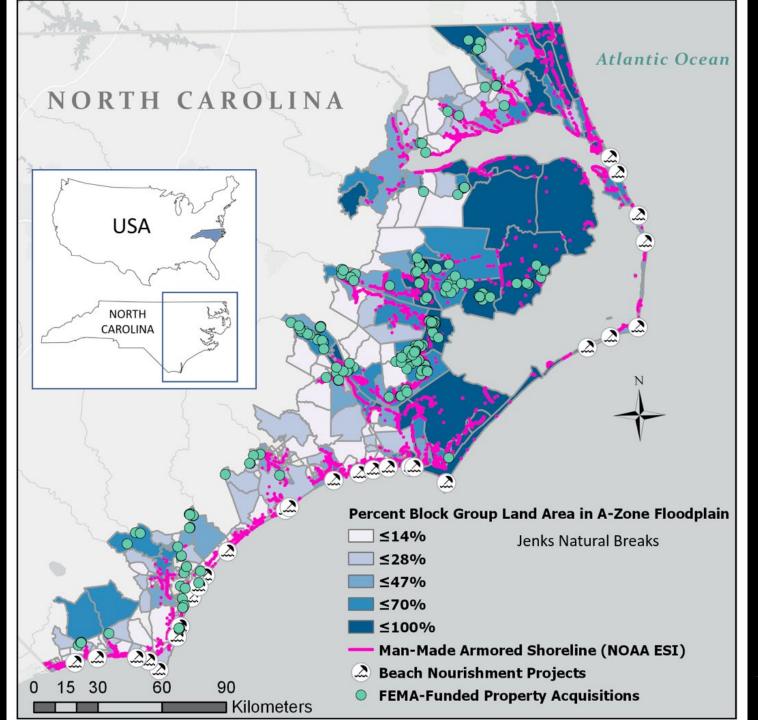


#### **COST-BENEFIT CHALLENGE**

#### WHERE WILL YOU OFFER BUYOUTS?







Siders & Keenan 2019

### Keys to Retreat

#### Vision Equity Leadership (and Expertise) Plan

Dennis Knobloch, Former Mayor of Valmeyer, IL

WELCOME

gettyimages"

John Zich EYE

25

## ELCOME TO VALMEYER

Lo . An and a

gettyimages 25 YEARS

Routen

#### Expertise

- Uniform Relocation Act
- Real Estate Agents
- Engineers to assess damage
- Environmental Site Inspectors
- Assessors for home value
- Cost-Benefit Calculation
- Willing to talk to people with prior experience ...

#### Learn but innovate

#### Funding

- Charlotte, NC- stormwater fee
- Harris county, TX fees
- Des Moines, IA sales tax
- Wisconsin state fund, water quality funds
- California adaptation fund

#### PARTICIPATION

Wapello

61

Franklin St.

(61)

G62

10% incentive in high-risk area

G62

99

- 5% incentive if move as a block
- Pair with real estate agent to find new house

H22

G62

99

X61

99

H22

X61

H22

Google

Toolesboro

X71

99

X71

X71

X71

Oakville

H22 99

- Help neighbors relocate together
- Purchase through non-profits (trust)
- Property swap (Wapello)

61

H22

(78)

#### Keys to Retreat

Vision Equity Leadership (and Expertise) **Plan** 

## PLAN

- What are you going to do with the land?
  - Who will own it? How will it be maintained?
- Where do people move TO? How does buyout relate to development?
- What happens to neighbors who stay?
- How will you decide who participates?
  - How will you communicate?
  - How will people decide? (How will decisions be made equitable?)
    - Have an integrated plan
      - Be totally transparent
    - Involve community members
      - Get creative!





# SE HABLAESPAIN



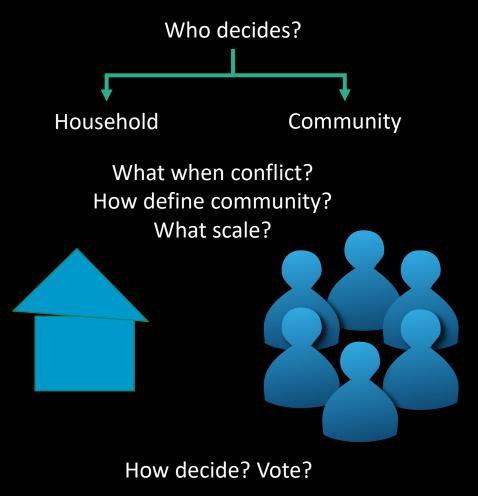
### "the community" decides

#### Louisiana and Isle de Jean Charles Tribe Seek to Resolve Differing Visions for Resettling 'Climate Refugees'

By Julie Dermansky • Tuesday, February 5, 2019 - 14:02

Read time: 13 mins







"When you walk through Ellicott City and when you discover what's inside of those buildings, you see where slaves were hidden on their path to freedom. You see a lot of things that connect you to our greater community...this place is worth sticking around and working for."

"If you pretend that human lives are worth less than historic buildings you're a despicable person. And I don't have any bones about saying that. You're absolutely despicable."

- Ellicott City, MD residents, quoted in Hersher, NPR, 2019 Jobs Programs Water Quality Partnerships Leasebacks / Life Estates Expiring Permits

Vision – Advance in a new (positive) direction
Equity – Actively work to undo historic injustices
Leadership (and Expertise) – Leverage others
Plan – Integrated, participatory, transparent, creative

## Questions?

siders@udel.edu @sidersadapts

