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DISASTER RESEARCH CENTER

Create incentives for state & local govts to stop building in floodplains

Create governance for community relocation

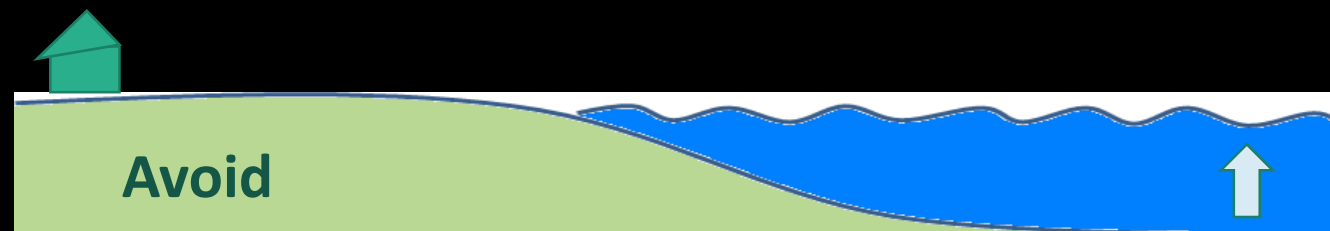
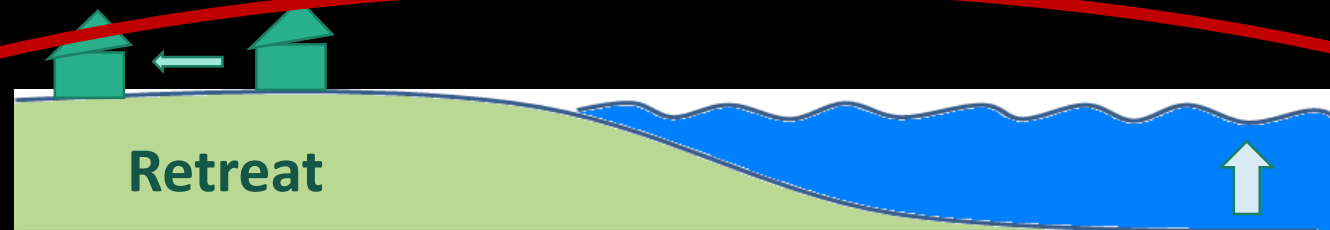
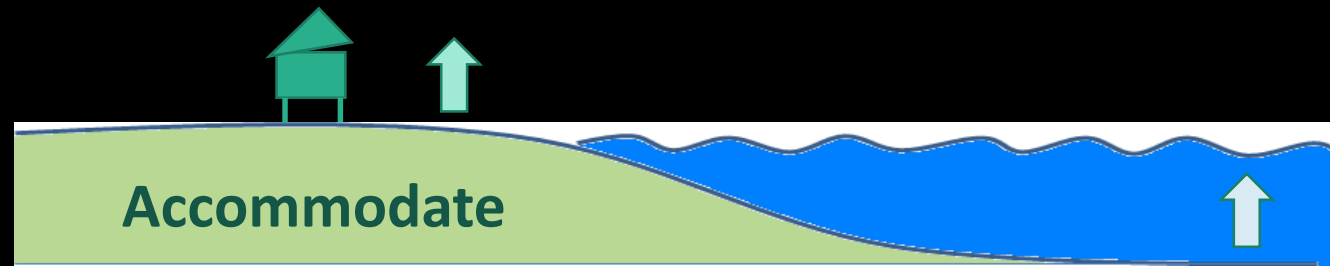
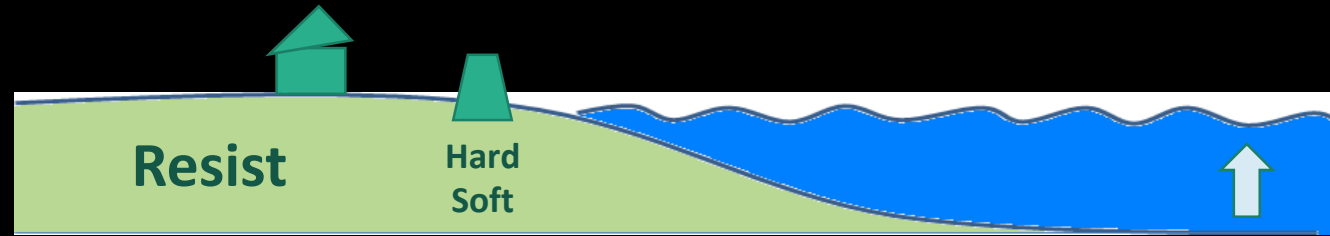
Coordinate multiple agencies involved in buyouts

Invest in local & state capacity building

Reform buyout policy – faster & better compensation & track data to evaluate

Support affordable housing

COASTAL ADAPTATION STRATEGIES



managed retreat* is:

**purposeful, planned,
(government) supported
movement of people or assets
that reduces hazard exposure**

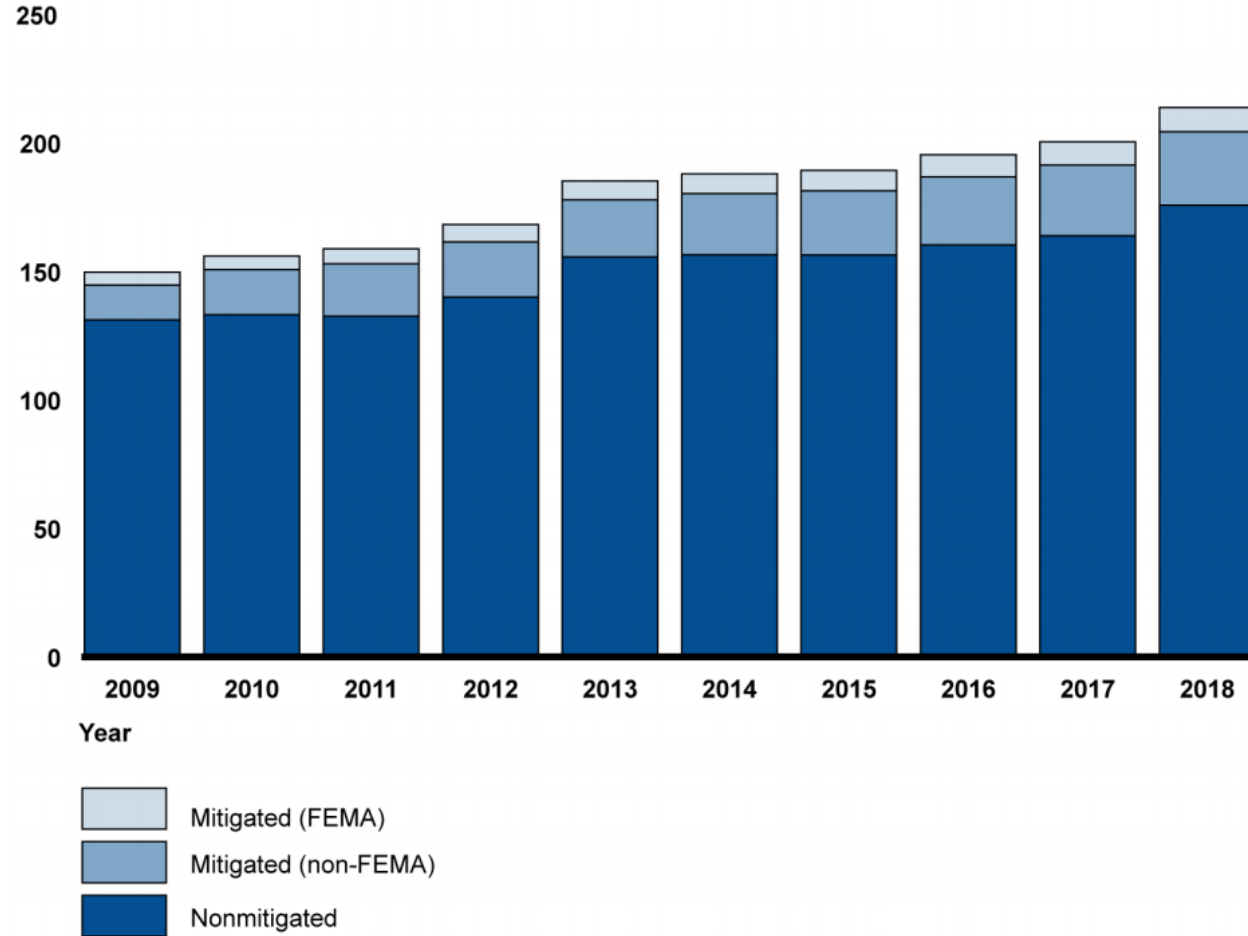


Managed retreat:

- 1. Reduces disaster costs (reduces government expenses)*
- 2. Protects families*
- 3. Creates space for healthy coasts*

Figure 6: National Flood Insurance Program, Cumulative Number of Mitigated and Nonmitigated Repetitive Loss Properties, 2009–2018

Number of repetitive loss properties (in thousands)



Source: GAO analysis of Federal Emergency Management Agency (FEMA) data. | GAO-20-508

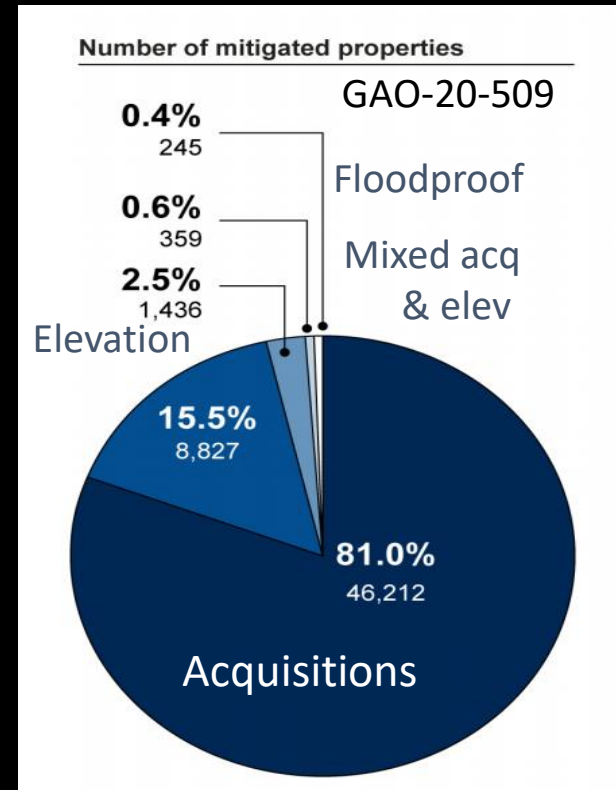
Note: FEMA provided these data as of June each year.

GAO-20-509

People helped

64,101 NEW repetitive loss properties (2009-2018)

People still at risk



BUILT TO FLOOD

Brutal Choice in Houston: Sell Home at a Loss or Face New Floods

By Audra D. S. Burch

March 30, 2018



Houston Chronicle

Developing Storm | Part 2

Build, flood, rebuild: flood insurance's expensive cycle

By David Hunn, Ryan Maye Handy, and James Osborne



Resist

Accom

Retreat

Avoid

seawalls
levee
retention ponds
breakwaters
beach nourishment
dune building
living shorelines
wetlands
...

autonomous retreat
migration
community relocations
buyouts
life estates
leasebacks
smart / targeted growth
eminent domain
nudges (setbacks, rolling easements)
...



Winslow NE 2019, Photo by State of Nebraska

1960s & 70s
ad hoc funding
1979 Soldiers Grove



Valmeyer IL



Pattonsburg MO – St. Joseph Press Photo

The Stafford Act

Robert T. Stafford
Disaster Relief and Emergency
Assistance Act, as Amended

1980s & 90s

1989 FEMA buyout program
1990s Midwest town relocations





*Need: Government coordination for community relocation
(Suggest HUD Office for Coordination)*

*Consider: Changes to Fair Housing Act to support whole-
community relocations*



Grand Forks ND Buyouts



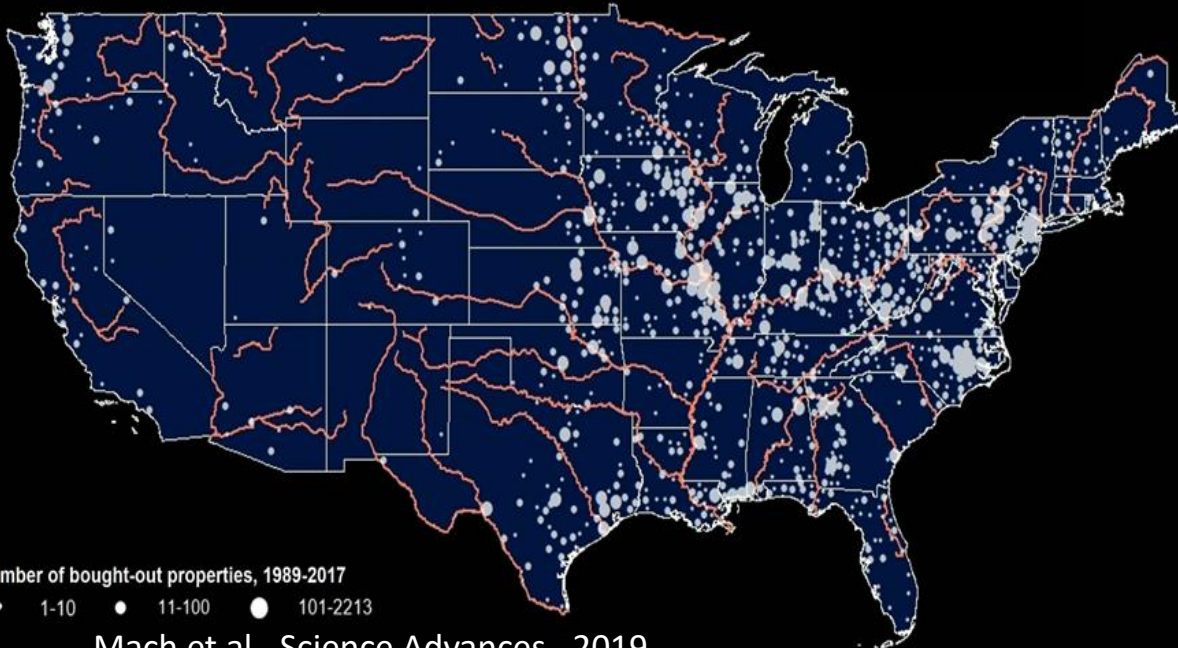
FEMA-FUNDED PROPERTY ACQUISITIONS

2000s

More, smaller buyouts

Buyouts Funded by:

- HUD
- FEMA
- USACE
- USDA
- State Funds
- Local Funds



Number of bought-out properties, 1989-2017
• 1-10 ● 11-100 ● 101-2213

Mach et al., Science Advances, 2019



1. Provide more funding
2. Provide funding faster – specifically, funding not tied to disasters (creating perverse incentives)
3. Build local & state capacity – and reduce paperwork burdens
4. Coordinate multiple agencies (HUD, FEMA, USDA, USACE)
5. Collect data on demographics
6. Collect data on where people move after to enable program evaluation
7. Increase the Increased Cost of Compliance & allow to be used for buyouts
8. Allow greater flexibility – e.g., support life estates & other types of acquisition
9. Offer “replacement cost” rather than “fair market value” (also more funding for people with limited mobility)
10. Encourage more affordable housing (outside floodplain) to enable relocation

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