7-20-2018

Making Designs Fit On The Ground

Skip Stiles

Follow this and additional works at: https://digitalcommons.odu.edu/hraforum_21
MAKING DESIGNS FIT ON THE GROUND

Conventional Solutions Won't Work

Designing for Resilience
Skip Stiles
Executive Director, Wetlands Watch
Adaptation Design Work Needs to Include a Range of Disciplines/Range of Factors Affecting Implementation.

Adaptation Design is a retail operation at this point – goal is to develop typologies that allow some efficiencies.

Adaptation work – novel approaches – need to identify disincentives/barriers to implementation and find solutions.

Novel Adaptation work demands % of funding for baseline and ongoing monitoring to develop performance standards.
Adaptation Design Touches a Range of Issues

Shelly Jules Plaag
Conventional Solutions Won't Work
Adaptation in Built Environments is Challenging

Social Factors Are Critical to Implementing Designs:

• Intact civic structure?
• Willingness to engage in planning?
• Experience with flooding?
• Owner occupied/rental housing?
• Relationship to Water (both bad and good)?
• Tolerance for changes?
• Partnerships with non-government entities?
Community Engagement BEFORE Engineering
Adaptation in Built Environments is Challenging

Physical Factors:

• Availability of data/physical information
• Soil, depth to groundwater, etc.?  
• Infrastructure status? 
• Housing age and type? 
• Extent of regulatory floodplain?
Adaptation in Built Environments is Challenging

Legal Factors Affecting Implementation:

- Historic status?
- Land ownership (any public land)?
- CBPA RPA/regulated floodplain/etc.?
Undersized, outdated stormwater pipes were installed so long ago they are underwater at low tide! Stormwater solutions must involve holding water and infiltrating.
CHESTERFIELD HEIGHTS - SHORELINE COMMON AREA, STREET ENDS PUBLIC LAND, many NRHA PARCELS
Poplar Hall - Little Public/Common Land
SAME CHALLENGES, DIFFERENT SITUATIONS
HAMPTON, VA ADAPTATION PLANS

Rural/Open Space

Suburban/Beach front

Historic Town of Phoebus ca. 1900
Novel Approaches will Challenge Existing Government Programs

Legal, Financial, Regulatory Challenges to Implementation:

- Do building codes/engineering standards allow?
- Does regulatory system allow?
- How do you do work on historic structures/in historic districts and not lose tax credits?
- Can you qualify for credits under MS4/WIP or CRS?
- Can you use public funds for project?
Novel Approaches Require Baseline and Performance Data

Performance Standards for Novel Approaches Need Development:

• Need to include baseline and monitoring as part of project implementation.
• Need for clearinghouse or collection point for knowledge and experience developed – we cannot get the job done at current, one-by-one pace.
We need a clearinghouse or repository for information on design implementation:

What worked, what didn’t work, lessons learned

What regulatory, legal, financial issues emerged

Can we begin to develop best practices and community typologies that will accelerate this process
QUESTIONS?

Skip Stiles
skip.stiles@wetlandswatch.org