

Are Your Building and Zoning Codes Ready for Climate Change?

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Breathe. Then Find and Refine

- Cave man or Kindergardener?

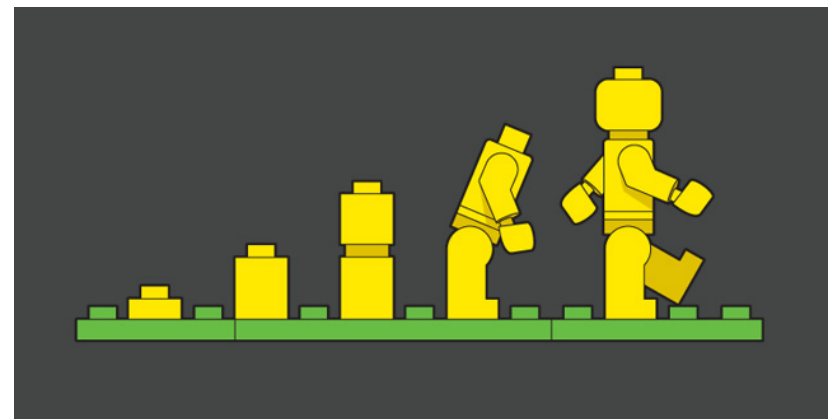


- The QC trouble with trendy




Projecting Your Local Climate Issue

- How have you handled it so far?
- What communities have your climate issue in a more extreme/ consistent way?
- How do they handle this issue?
- State or federal barriers
- What approach suits your community?




Where to Regulate: Traditional


- General Provisions
- Zone Districts
 - Uses and Use Standards
 - Dimensional Standards
- Development standards/PUD
- Subdivision Regulations (if “unified” code)
- Procedures
- Enforcement & Penalties
- Definitions



What can you do and what are the restrictions?



How to (or not to) design it



How the city/county/town/ village/ other is involved

Where to Regulate: Form-Based

- Regulating plan
- Building form and function standards
- Public space standards

- Administration

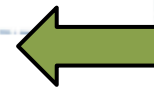
- Architectural standards
- Landscaping standards
- Environmental resource standards
- Signage standards



What can (shall) you build?



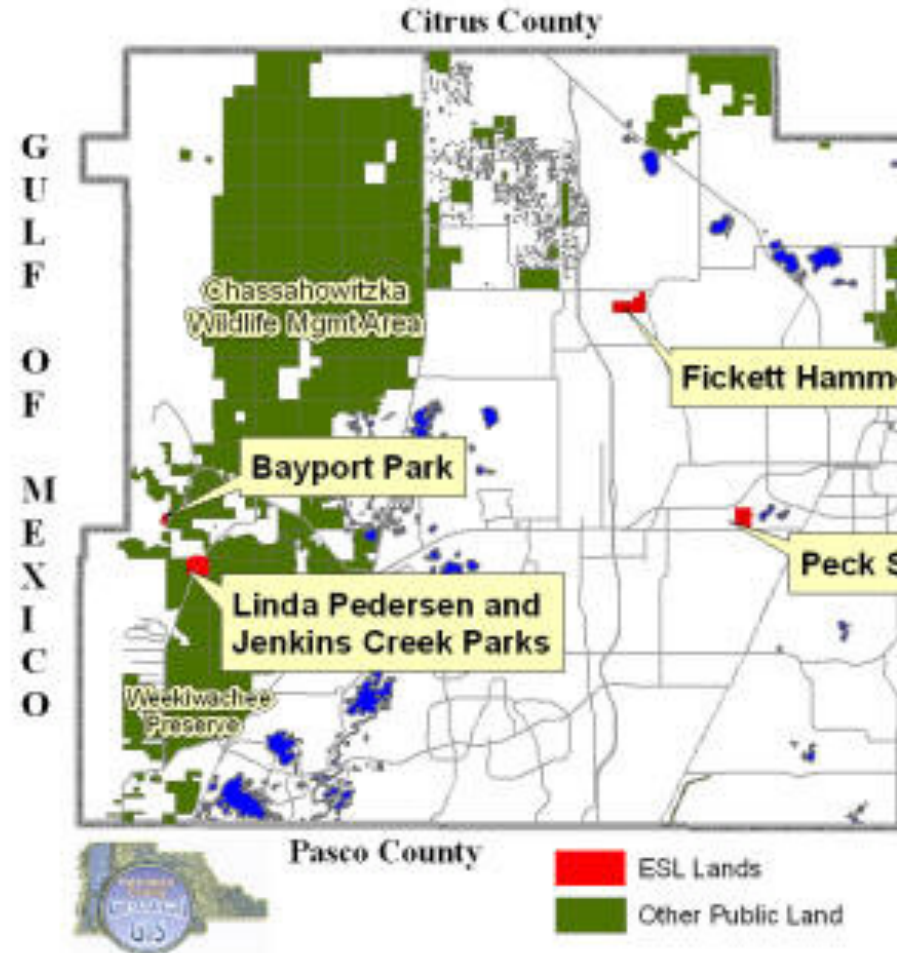
Does it get reviewed /who reviews it?



How shall it be designed?

Issue is Bigger than a Lot

- Map it
- Area plan it
- Infrastructure extension and replacement policy
- Subdivision regulations
- Overlay district
- Development incentives
- Restrict development
- Buy it out



WILDFIRE



Where to Look:

- West/Southwest

Policy Issues:

- Applicability - new and/or existing development
- Space or structure
- Exemptions
- Water supply

What to Regulate:

- Hazard mapping
- Site-specific fire determination
- Vegetation/wildfire buffer
- Density/structure location
- Subdivision layout
- Roads/access/circulation
- Site maintenance
- Building materials

Flooding



Where to Look:

- Northeast (Sandy, Irene)
- Midwest

Policy Issues:

- Applicability - new and/or existing development
- Reconstruction or removal post-event
- No Adverse Impact (NAI) floodplain management pre-event
- Liability for permitting causing damage

What to Regulate:

- Floodplain zoning
- Building/use location
 - Surface parking
 - Freeboard/Ground floor uses
 - Location of structure on lot
- Reconstruction of nonconformities
- Flood-resilient obstructions (fences, porches)
- Stormwater management
- Building code



Extreme Heat

Where to Look:

- Desert Southwest
- Texas

Policy Issues:

- Managing demand surge on utilities
- Incentives for community cooling centers
- Community warning systems

What to Regulate

- Building location and orientation
- Provision of shade
 - Trees and green space
 - Shade structures
- Alternative energy
- Cool pavement
- Higher density development for lower utility costs/bills
- Building code and weatherization

Sea Level Rise

Where to Look:

Near an ocean

Policy Issues:

- Expectations and litigation
- Reconstruction or removal
- Historic preservation
- Fiscal impact to local government

What to Regulate:

- Places that are developed now but won't be in the future:
 - Downzone
 - Increase setbacks
 - Limit size and height
 - Restrict rebuilding
 - Protect sensitive areas
- Places we should develop in the future:
 - Increase density
 - Transfer development rights
 - Oversized infrastructure

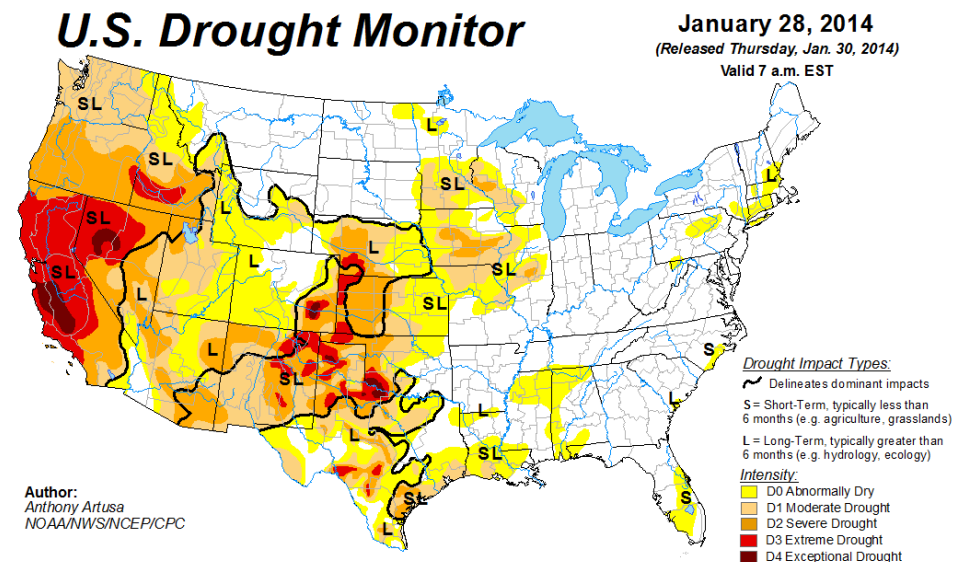
Drought

Where to Look:

- Nevada, Arizona, California

Policy Issues:

- Water availability for new development
- Agricultural water use
- Water rate structure with increased drought



What to Regulate:

- New construction
- Landscaping requirements and materials (no turf)
- Irrigation standards
- Conservation measures



Extreme Precipitation

Where to Look:

- Midwest

Policy Issues:

- Regulating for safety
- Identifying where water goes

What to Regulate:

- Development in flood-prone areas
- “Green” low impact development (LID) along with right-sized “grey” stormwater management systems
- Landscaping and stormwater infrastructure maintenance
- Location of infrastructure
- Building code/shelter