

Climate Change Adaptation & Conservation

A New Paradigm

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Climate Change Adaptation

Helping human and natural systems cope with:

- the effects of climate change
- human responses to climate change



Conservation . . .

- . . . used to be focused on preservation and restoration
- . . . must now be based on future conditions

Future projections can't be based solely on past conditions

How Will Species Respond to Climate Change?

- Deal with it
- Move
 - North
 - Higher elevation
- Die out



Determine which species will be most affected

- Climate Change Vulnerability Index
- Factors considered:
 - Dispersal ability
 - Genetic variation
 - Documented response to climate change
 - Habitat vulnerability & specificity
 - Others



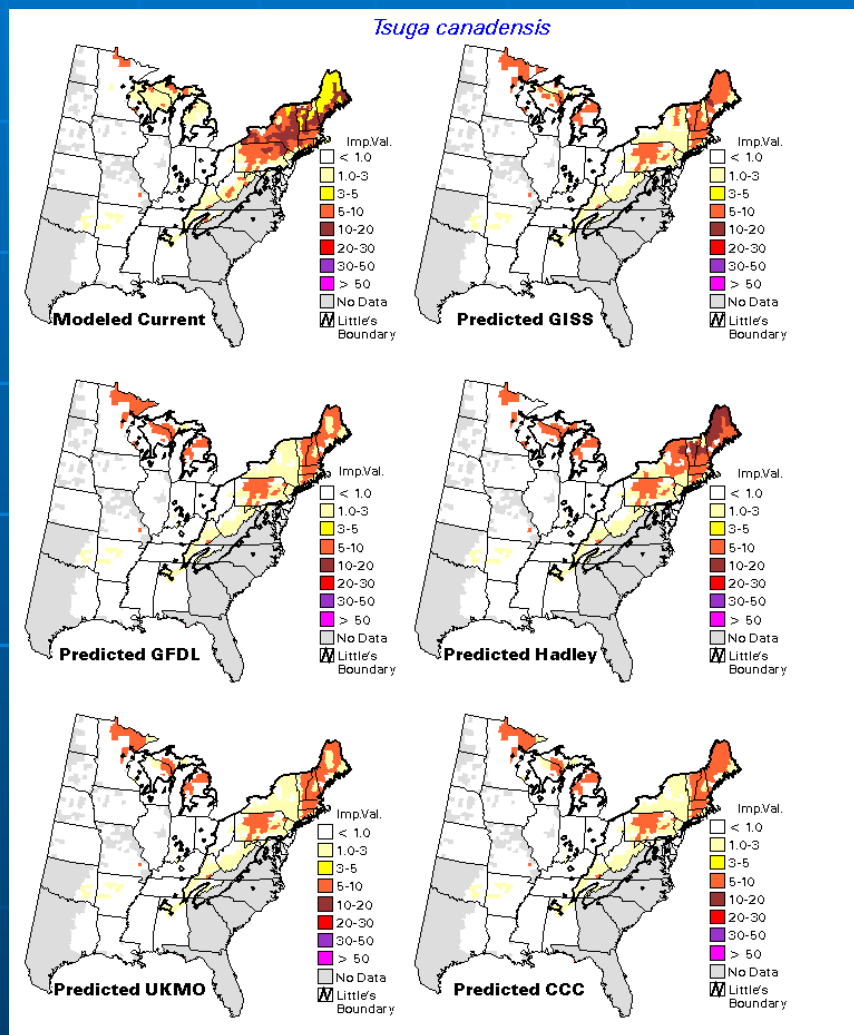
Shift emphasis from inventory to monitoring

- Knowing where things are now or where they once were is no longer as important as evaluating how they're responding to climate change
- Major federal focus and likely to be well funded in the future



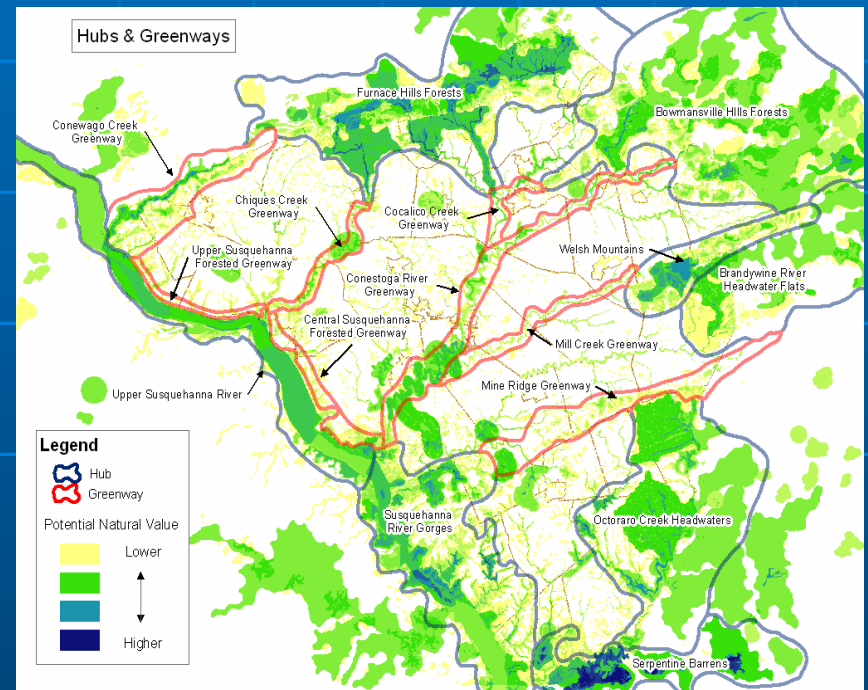
Predict distribution changes

- Maps predict where favorable conditions will exist for a species
- Species move - habitats & communities don't
- No guarantee that a species will move



Identify priority conservation areas

- Refuges & corridors
- Public lands will be a critical component
- Could help prioritize grant funding for acquisition & easements



Manage for ecosystem function & resilience

- Reduce other stresses



Work across borders

- Geographic
- Organizational
- Internal



A new approach to conserving PA's biodiversity

- Identify those species most at risk
- Shift emphasis from inventory to monitoring
- Model distribution changes
- Identify priority conservation area
- Manage for ecosystem function & resilience
- Work across borders

PABS Climate Change Adaptation Standing Committee

■ Why?

- Voice in developing adaptation plans (DCNR, PA, SWAP)
- Inform PABS members of latest research and policy issues
- Integrate CCA into the work of our technical committees

PABS Climate Change Adaptation Standing Committee

- Structure:
 - Chairs of each of the Tech. Comm.
- Meetings:
 - As needed (primarily via teleconference)
 - Communicate news and issues via:
 - E-mail
 - CCA section on PABS website