



Planning for Climate Change: The Conversations We Don't Have

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Stepping Back

- Recommendation to Read: Mike Hulme's book:

“Why We Disagree About Climate Change”

- To discuss: New Century of Forest Planning blog
- Roger Pielke, Jr.'s (University of Colorado) blog



This Presentation

- Climate Change- How Do We Think About It?
- KISS Adaptation
- Models- Take With a Dose of Caution OR
- Logic Disconnects To Consider
- What Does It Mean to Be a Game-Changer?



Climate Change: How We Think About Dealing With It (KISS)

- Just another stressor- handled the way we handle other stressors by the same people
- Changes environmental tradeoffs on energy production
- Something for us to talk about with the public in terms of scenarios for planning
- Makes more obvious that our future can't be attempting to replicate the past



Has Research Gotten Too Far Ahead of Practice?

- There needs to be more open and honest practitioner- academic dialogue
- Things that sound like good ideas, may not work, may cost too much, may not be good investment compared to other actions.
- KISS is not necessarily good for them



The Undiscussable



KISS Adaptation



The TU Approach

- Protect, Reconnect, Restore
- Conservation areas
- Connect streams and terrestrial linkages
- Restore the restoreable



The TNC Approach

- By applying proven conservation methods and *testing* new approaches to *make the natural systems we all rely on more resilient to climate change*, “ecosystem-based adaptation” can help secure food, water and safety for people in the face of climate change threats.



Managing Changing Landscapes in the Southwestern United States (January 2011) This regional assessment examines the impacts of temperature change from 1951-2006 on natural resources in Arizona, New Mexico, Colorado, and Utah. It documents that warming has already affected habitats, watersheds, and species in the Southwest, by influencing the timing of seasonal events or amplifying the impacts of natural disturbances such as wildfire and drought. *The report concludes that to begin adapting to climate change, natural resource managers should reevaluate the effectiveness of current restoration tools, modify resource objectives, learn from climate-smart adaptive management and monitoring, and share information across boundaries.*



Back to Basics

- Protect air, water and soil
- Plants and animals will adapt and/or move



Three KISS Strategies

- All no-regrets
- Do not require sophisticated analysis and predictions
- Some argue that we “need more analysis” for planning
- Do we?



Danger of Overanalysis and Underadaptation

- Researchers got a head start



The Curious World of Models

- Is it better to know you don't know or to think you do when you don't?
- The use of models in research compared to management.

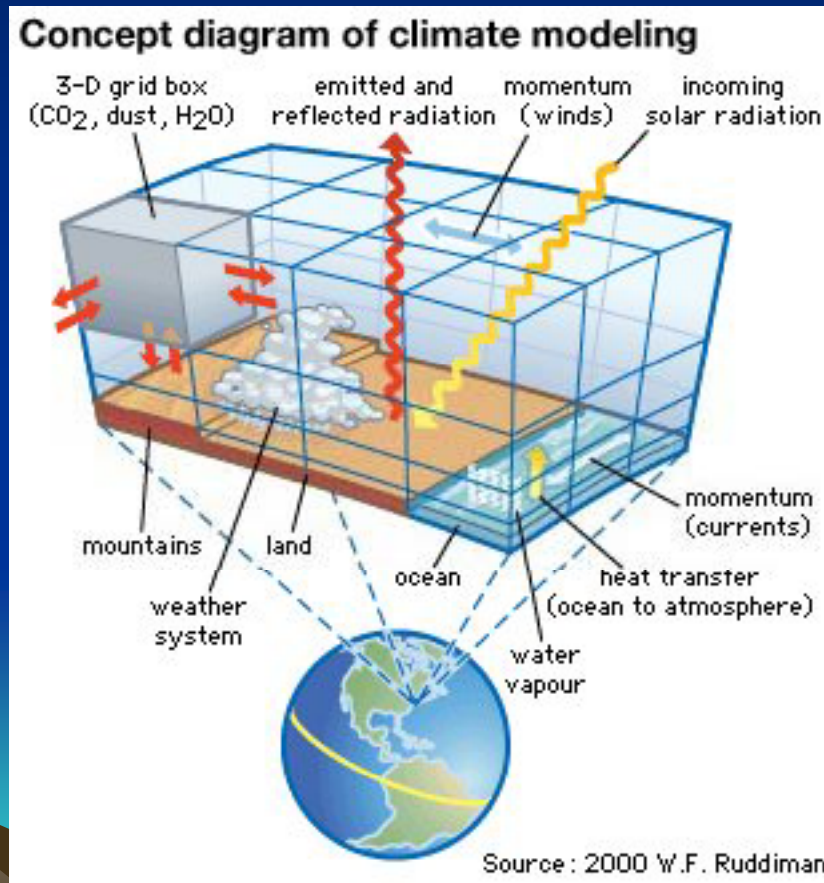


What Models Don't Know

- We don't really understand how plants respond to the environment
- We don't know how the offspring of those plants will respond to the environment
- We don't know how competitors, associates (mycorrhizae) consumers (insects, pathogens, viruses) will respond to the environment
- Non natives...

Climate Models

- We don't know if any will predict the future



For Planning

- So should we be spending money to model these things?
- What could we be connecting, protecting and restoring with the same \$?



Need for Rethinking- Disconnect

- “Climate change is unprecedented”
- Yet we can use existing models and historical records
- Example



Need for Rethinking

- “Ecosystems are more complex than we think; they are more complex than we can think”
- Yet
- We should spend time trying to predict outcomes



Climate Mitigation- the Game-Changer

- Coal, natural gas, biomass, solar, wind



Climate Dangers

- Beware of more and less obvious conflict of interest!



Conclusion

- Think about and talk about how we think and talk about climate



Questions?

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