Framing climate change risks to enhance effective communication

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What is a frame?

• An interpretive storyline...
• Communicates why an issue or decision matters...
• Highlights which options or actions should be considered over others...
• Pares down information...
• Simplifies technical details to make them more accessible and persuasive...

Nisbet and Newman, 2015 “Framing, the Media and Environmental Communication”
Framing and climate change

• For issues favored by the status quo in policy making...
  – Highly technical, scientific, legalistic

• For issues disadvantaged by the status quo...
  – Moral ways (e.g., the Pope)
  – Dramatic risks/costs (e.g., NCA)

Nisbet and Newman, 2015 “Framing, the Media and Environmental Communication”
Framing and climate change

• Motivating risks
  – Psychologically near (space, time)
  – Public health threats
  – Extreme weather events
  – Economic costs ??

CRED and ecoAmerica, 2014 “Connecting on Climate”
Framing and the NCA

• Supporting decision making across scales
  – Cannot do it all

• Two key aspects to consider
  – What risks to present?
    • i.e., Framing the chapters
  – How to present the risks?
    • i.e., Framing the data
Framing the chapters

• NCA3 varies quite widely in the approach
• Need to be decision or problem-focused
  – Link the science/impacts to values, alternatives, & tradeoffs
• Need to tie impacts to actions
  – Focus on the benefits of action & past success
  – Highlight the probability of particular outcomes given action/inaction
Framing the data

• Practices identified for NCA3
  – Provide numeric (not just verbal) estimates
  – Use standardized likelihood ranges
    • Very likely = >9 out of 10 chance
  – Provide the 90% confidence range for confirmable conclusions
  – Highlight low prob/high consequence events outside that range
Framing the data

• Other practices to consider
  – Present expected changes in absolute not relative risk terms
    • 10 to 5% versus 50% reduction
  – Use pictographs to show change in risk
    • Status quo versus added/reduced risk
  – Consider different temporal frames
    • Present lifetime risk versus annual risk
How do we put this in to action?

Define chapters based on users or decision problems within regions or sectors
How do we put this into action?

Integrate explicit decision support examples into each chapter and links to additional resources.
How do we put this in to action?

Require standard representations of the probability of particular impacts relative to some reference point
How do we put this into action?

Provide a clear framework to help implement chapter and risk framing guidance.
How do we put this into action?

Moser and Davidson, 2016 “The third national climate assessment’s coastal chapter”

Fig. 2  Simplified Risk Framing Used in the Coastal Chapter (explanation in text) (Source: S. Moser)
How do we put this in to action?

Include social and behavioral scientists as co-authors on chapters
Thank you!

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