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AMERICA

# “Downstream” Perspectives on Climate Change Communication

*Climate Variability and Impacts to South  
Natural Resources Conference  
Wednesday, December 5, 2012*

*David C. Shelley, Ph.D.*  
Old-Growth Bottomland Forest Research  
Education Center, Congaree National Park



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## Outline

1. **Let's be realistic...**
2. **Three Paradigms**
3. **Be of Good Courage**



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# Part I: Let's be Realistic



# National Park Service Climate Change Response Strategy

September 2010

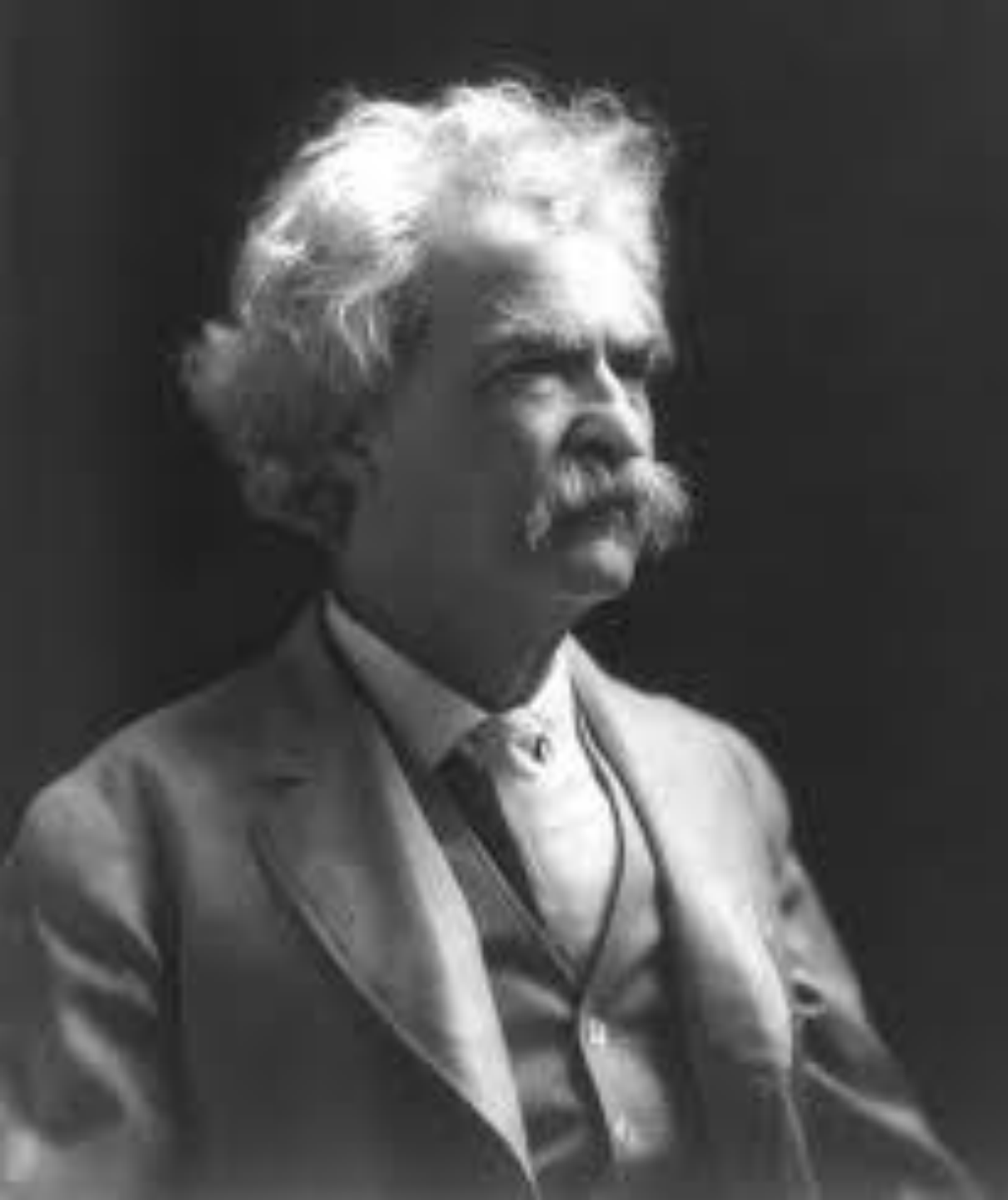




Randy Olson  
*Don't Be Such a  
Scientist*

*Science, from the beginning of time, has always consisted of two parts. First is the obvious part, the doing of science...*

*But there is a second part that isn't so immediately obvious, and that is the communicating of science...*



*“A classic is something that everybody wants to have read and nobody wants to read.”*

*~ Mark Twain*

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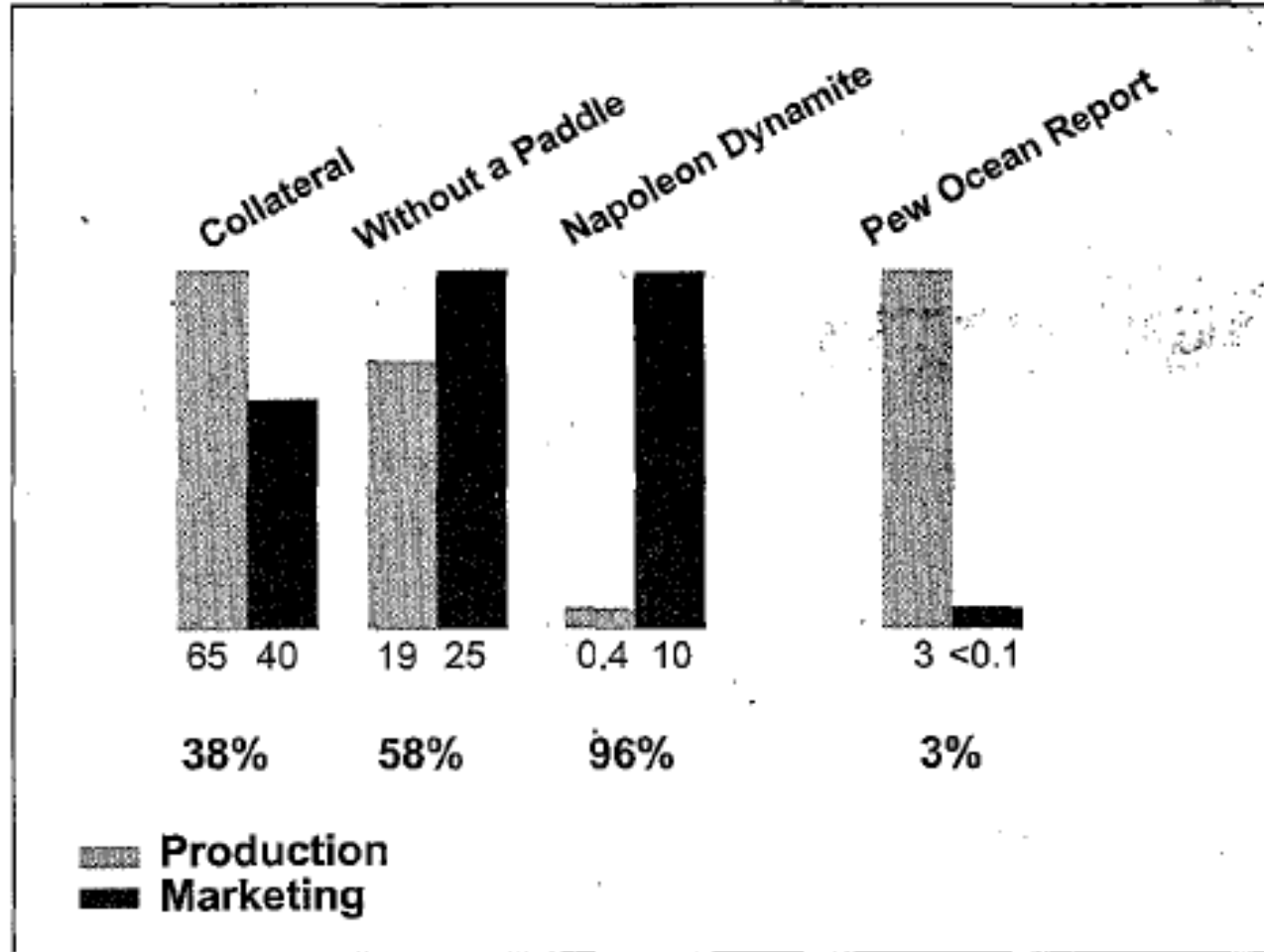


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## Good Communications Require...

- **Training, Skill, and Expertise**
- **Planning / Coordination**
- **Professionalism**
- **Time**
- **A BUDGET!**





**Figure 2-1.** The relative expenditure on creation of a product versus the marketing of the product. The first three pairs of bars are representative Hollywood movies in the summer of 2003, for which the expenditure on marketing ranged from 38% to 96%. The last pair show the Pew Oceans Commissions report, released in 2003, for which about 3% of the budget went to marketing (i.e., communication). Needless to say, the Pew report had the societal impact of a Hollywood dud.



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## On Civic Engagement...

- Three Audiences – Staff, Partners, and the Public
- Concrete, simple, relevant, and recursive
- Think long-term and aim for the middle
- Maintain trust and credibility
- Frames are critical – but they can cut both ways
- Reverse engineer your plan from your objectives
- Read and study about communication
- Plan on evaluating your communication



## In Addition to All of This, Good Communications Require...

- Some deliberate, significant, personal reflection on our own affective response to the topic\*
- Room and opportunity for audiences to do the same



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## Part II...

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For  
Science  
Communication



# Interpretation

The art of making **INTELLECTUAL**  
and **EMMOTIONAL**  
**CONNECTIONS**  
between visitors and a resource

*\*Eppley Institute for Parks and Public Lands (Eppley.org)*



## The Interpretive Equation

$$(KR + KA) \times AT = IO$$

- **KR = Knowledge of Resource**
  - *Knowledge of climate change at your site*
- **KA = Knowledge of Audience**
  - *YOUR experience + social science + standards*
- **AT = Appropriate Techniques**
  - *Standards + unique opportunities from you and your site*
- **IO = Interpretive Opportunity** *to make intellectual and emotional connections between visitors and a resource*
  - *To inform and inspire resource stewardship*

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**T**angibles – Objects, Places, or Events. Tree, Rock, Water, Air, Feather, Fin, Scale, Bridge

**I**ntangibles – Systems, Processes, Values, or Relationships. Wilderness, Phenology, Freezing, Self-Reliance, Democracy, Suspense, Boundary, Signal, Average, Profit

**U**niversal Concepts – Broad intangibles. Life, Death, Love, Hope, Change, Fear, Legacy

SPECIAL INVITED PAPER—YEAR OF SCIENCE

## WHAT'S NEXT FOR SCIENCE COMMUNICATION? PROMISING DIRECTIONS AND LINGERING DISTRACTIONS<sup>1</sup>

MATTHEW C. NISBET<sup>2,4</sup> AND DIETRAM A. SCHEUFELE<sup>3</sup>

<sup>2</sup>School of Communication, American University, 4400 Massachusetts Avenue, NW, Washington, D.C. 20016 USA; and

<sup>3</sup>Department of Life Sciences Communication, Hiram Smith Hall, 1545 Observatory Drive, University of Wisconsin, Madison, Wisconsin USA 53706-1215

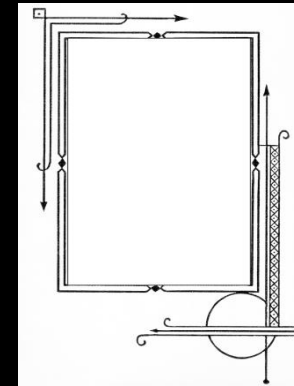
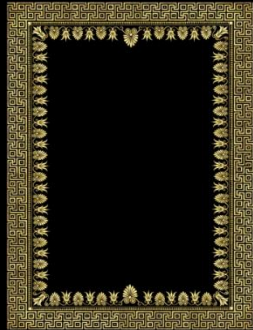
In this essay, we review research from the social sciences on how the public makes sense of and participates in societal decisions about science and technology. We specifically highlight the role of the media and public communication in this process, challenging the still dominant assumption that science literacy is both the problem and the solution to societal conflicts. After reviewing the cases of evolution, climate change, food biotechnology, and nanotechnology, we offer a set of detailed recommendations for improved public engagement efforts on the part of scientists and their organizations. We emphasize the need for science communication initiatives that are guided by careful formative research; that span a diversity of media platforms and audiences; and that facilitate conversations with the public that recognize, respect, and incorporate differences in knowledge, values, perspectives, and goals.

**Key words:** informal learning; popular science; public engagement; science and society; science communication; science literacy; science policy.





## Common Frames (Nisbet and Scheufele, 2009)



- Social Progress
- Economic Development
- Moral / Ethical
- Scientific Uncertainty
- Public Accountability
- Pandora's Box
- Middle Way
- Conflict / Strategy
- Legacy

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## Promising Directions

(Nisbet and Scheufele, 2009)

- Communications training for scientists
- Invite significant, early, and genuine public involvement
- Use social science data
- Focus beyond “elite,” predictable audiences
- Participate in local media
- Plan multi-faceted communications campaigns
- Facilitate training in science media literacy
- Use “Opinion Leaders” to bridge audience gaps

the  
**DEBUNKING**  
handbook



John Cook  
Stephan Lewandowsky

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# The Psychology of Climate Change Communication

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**A Guide for Scientists, Journalists,  
Educators, Political Aides,  
and the Interested Public**

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Center for Research on  
Environmental Decisions

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# Part III: Be of Good Courage



## Skeptics

- **Skeptics can be intimidating**, but don't fret
- **Arguments vary** by virtue of intent, scope, sophistication, and ideology
- **Four basic types of arguments:** Naïve, Misinformed, Ideological, and Cherry Picking
  - *Not hard and fast categories, but useful*
- **There are common strategies** to watch for
- **Don't** get baited, deceived, or overwhelmed
- **Pay attention** to who might be listening...



## This is Heavy Stuff...

- We must acknowledge that we need to spend time with the affective dimensions of values, fear, faith, ethics and hope in climate change
- This takes courage, introspection, reflection, dialogue, soul searching, and engagement
- Keep yourself grounded through faith traditions, volunteering, hobbies, arts, humor, study, recreation, community events, eating local, visiting friends...



## Hope is a VERB

- Hope is an action verb that describes living in a state of tension between guilt, apathy, vanity, and delusion.
- NOT a thing or panacea or path or guarantee

*An ethics of fear sees the crises; an ethics of hope perceives the chances in the crises. In the exuberance of hope, the temptation is utopianism; in fear, the temptation is alarmism. ~Jurgen Moltmann, 2010*

*Hope has two beautiful daughters; their names are Anger and Courage. Anger at the way things are, and Courage to see that they do not remain as they are. ~ St. Augustine of Hippo (5<sup>th</sup> Century)*



# CLIMATE SUMMIT

WHAT IF IT'S  
A BIG HOAX AND  
WE CREATE A BETTER  
WORLD FOR NOTHING?

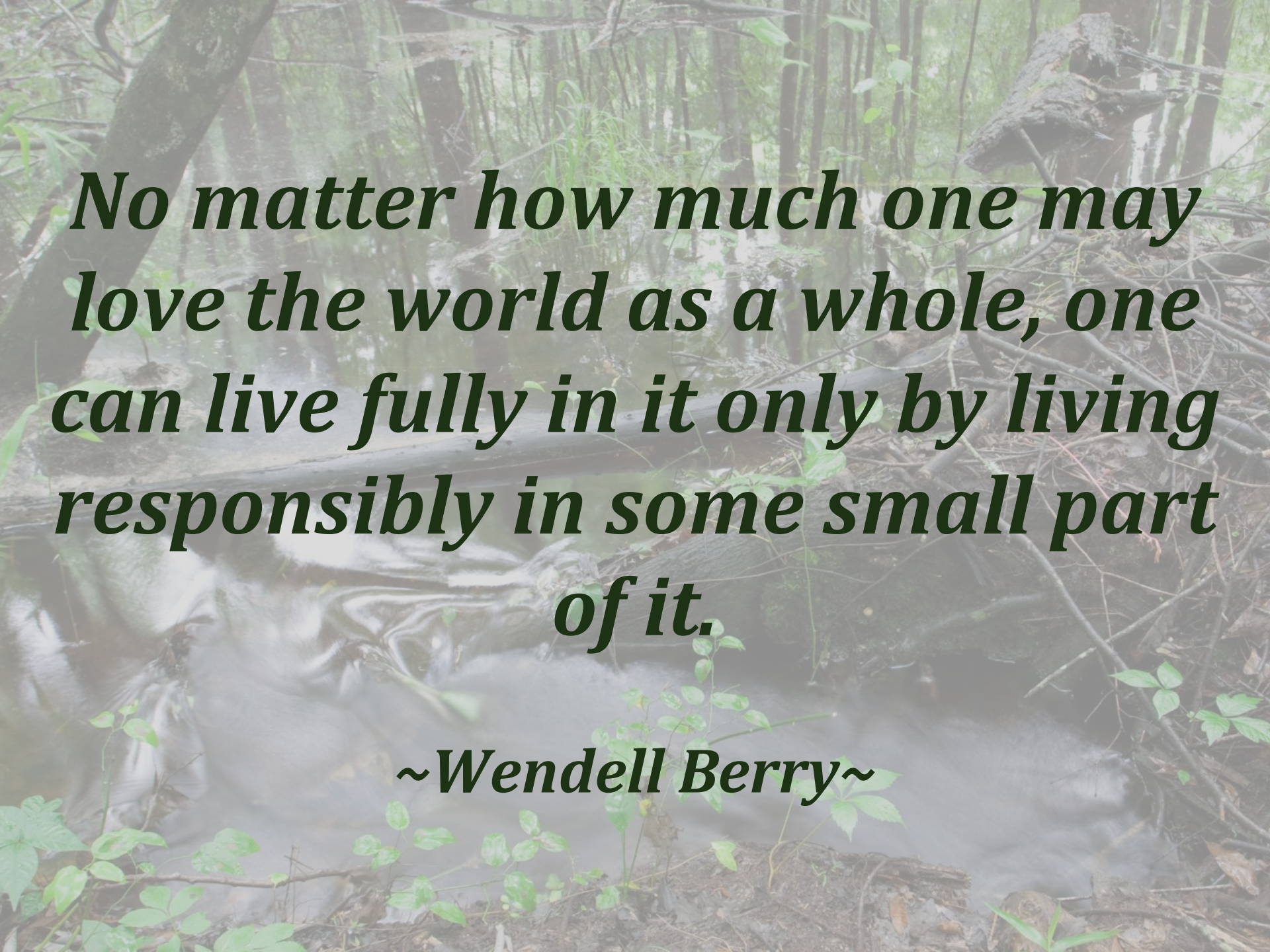
- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- etc. etc.



12/19 USA TODAY

JOEL  
PITT





*No matter how much one may  
love the world as a whole, one  
can live fully in it only by living  
responsibly in some small part  
of it.*

*~Wendell Berry~*