

Refining governance scenarios: Building blocks of change

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Patrick Bitterman

Postdoctoral Associate, Vermont EPSCoR
Postdoctoral Fellow, Gund Institute for Environment

patrick.bitterman@uvm.edu
www.patrickbitterman.com

Getting to where we want to go

Current state of the system

Bumpy terrain of resilience practice: multiple objectives, priorities, uncertainties, and tensions

THE CHAMPLAIN SEVEN-DIGGER-TIMES INDEPENDENT DAILY
FREE NEWS PRESS.NET

Visions of the future

Write your headline here

1. Does the conceptual map need to change to fit your story? If so, how?
2. What are the primary factors that led to your story?
3. What possible new ideas might be created in your story?
4. In your stories, what don't you know enough about? Where do we need to increase our knowledge?

Construction of Winooski dome remains on schedule despite tragic accident
Local residents complain about potholes on Pine Street
Self-driving car gains sentence, driver lack of fine-tune as AI's French Fry

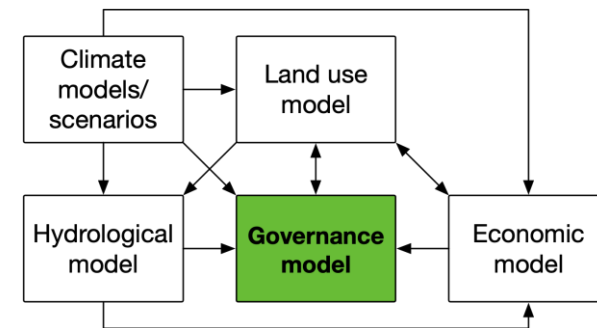
Navigating the bumpy terrain...

How (and what) we govern reflects our priorities and values

- What are the big issues or problems?
- How do we feel about trends in society, our environment?
- What do we find most important? How do we express those values?
- How do we react to surprises?

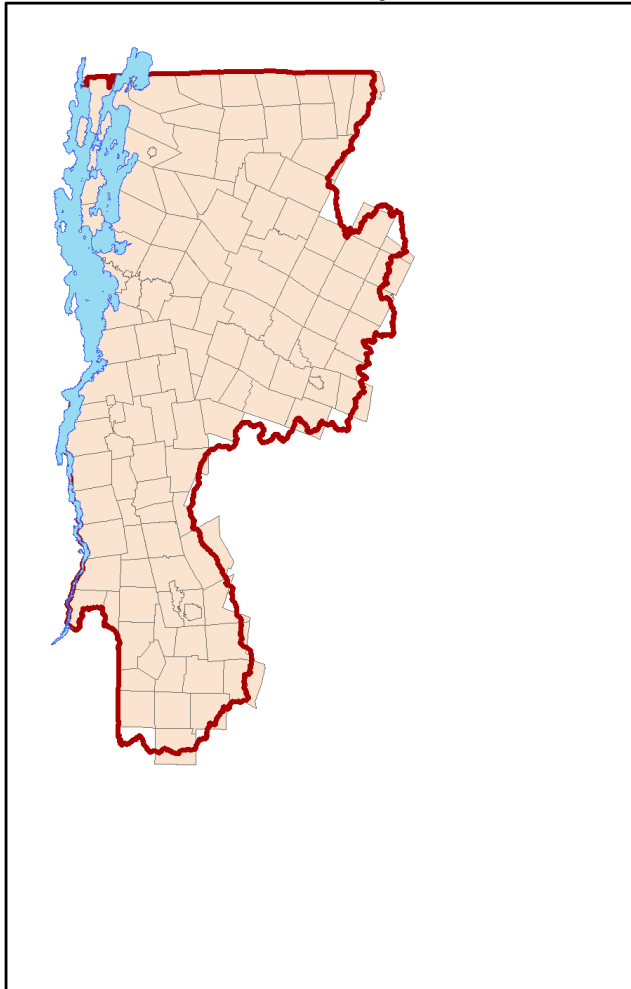
Governance model functionality: a refresher

1. Models the construction & impacts of alternative policy tools
2. Translate policy priorities → spatially-explicit environmental targets
3. Model effects of alternative policy design on phosphorus loads exported from the landscape
 - **Regionalization:** what is the right scale to 1) measure loads, 2) distribute funds, 3) prioritize interventions
 - **Capacity:** municipal, regional, state agencies
 - **Funding:** how much is needed? Where and when?

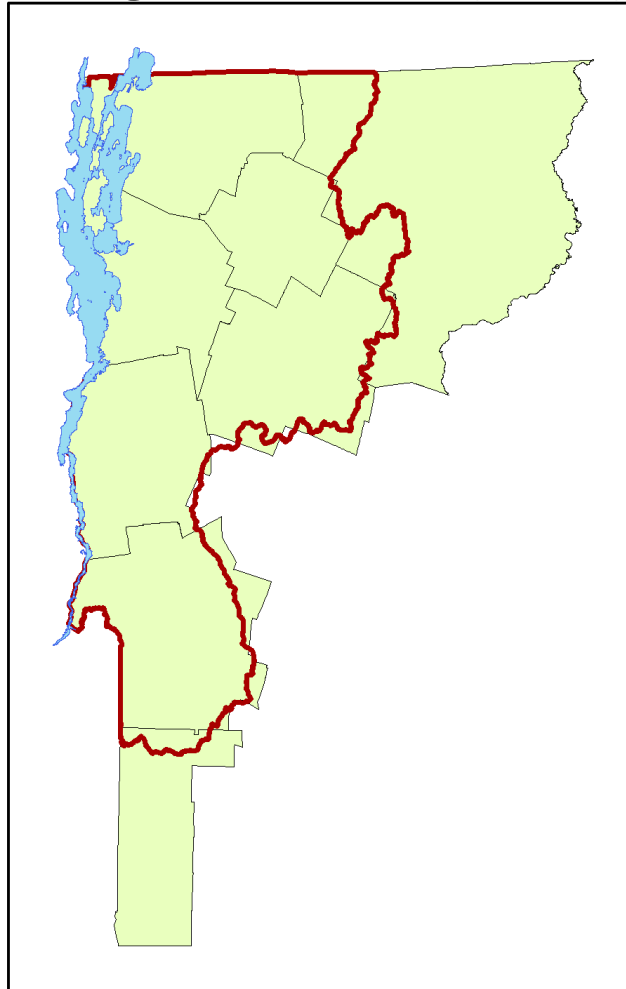


Identifying actors

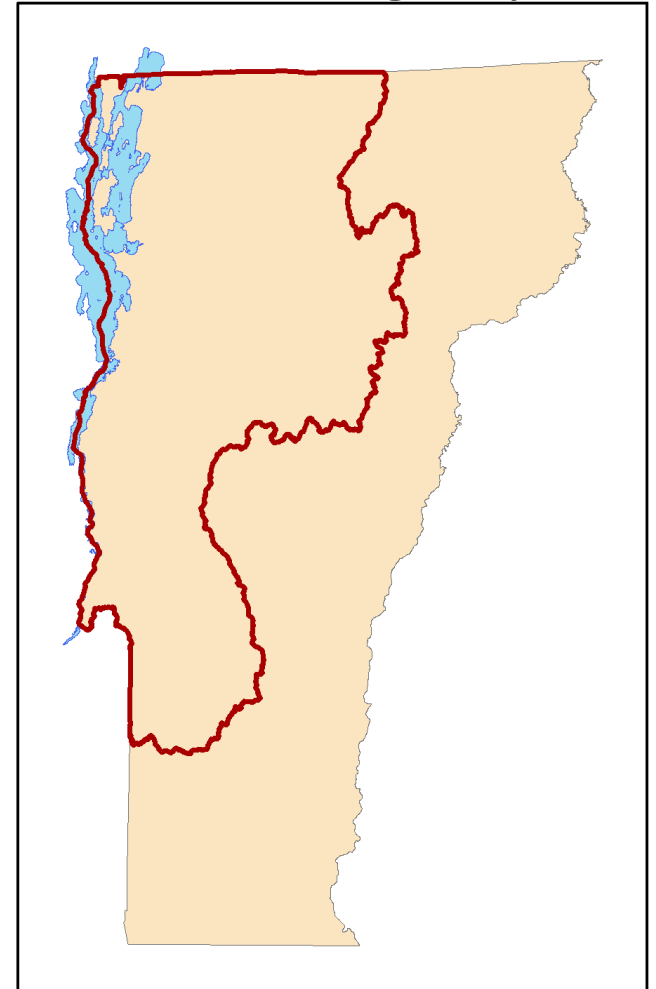
126 municipalities



8 regional actors (RPCs)

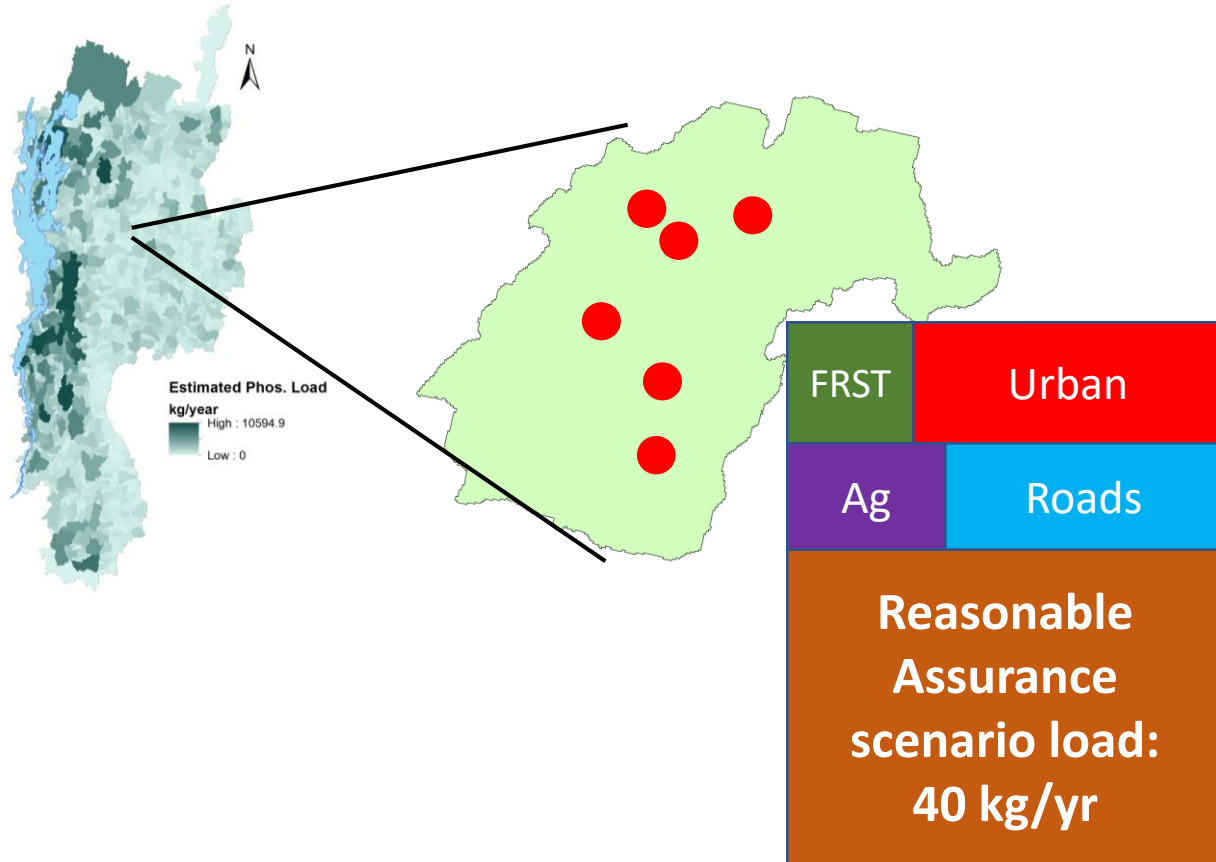


1 state agency



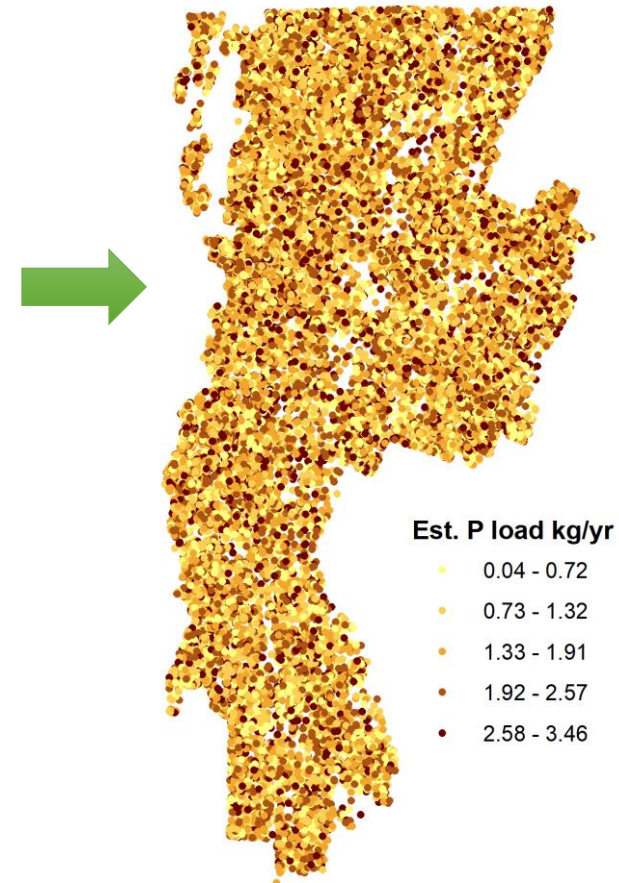
Assigning responsibilities

Estimates of P loads

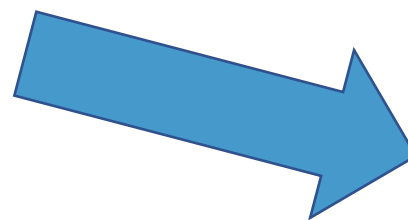
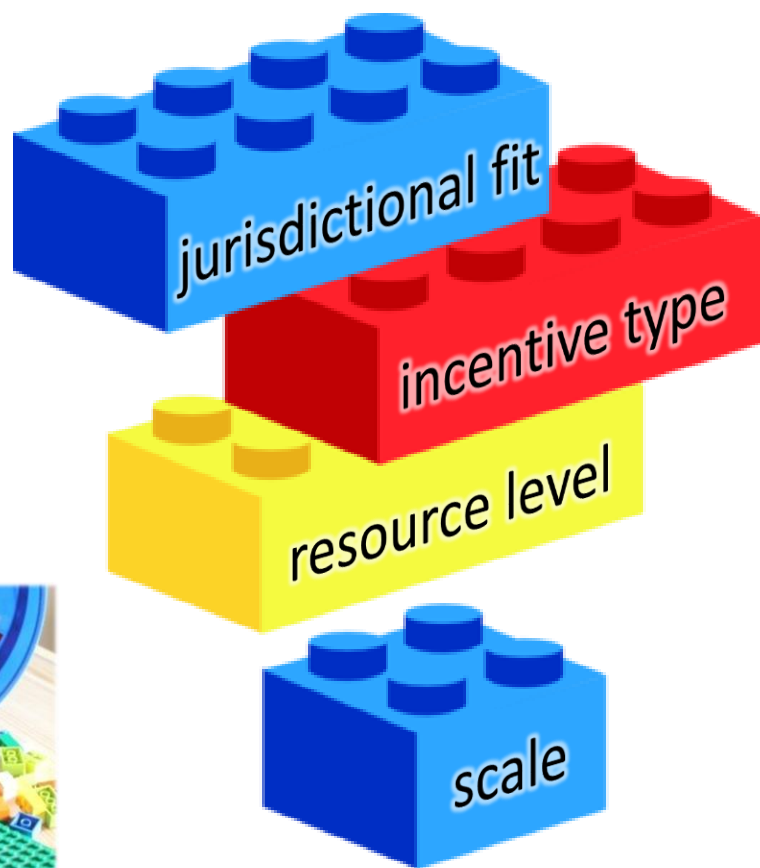


1. DEC project database
 - Number of projects
 - Costs
 - Estimate load reductions
2. Link BPMs to projects to funding streams
3. Assign projects to municipal & regional jurisdictions

Opportunities for action/
interventions
(i.e., projects)



Modeling policy tools block by block



...different blocks can build a (policy tool)
spaceship

ecological “fit” of management

micro watersheds

tactical basin

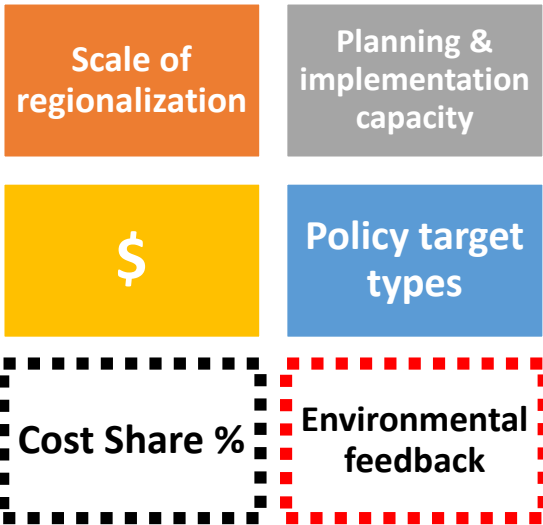
state-scale

federal



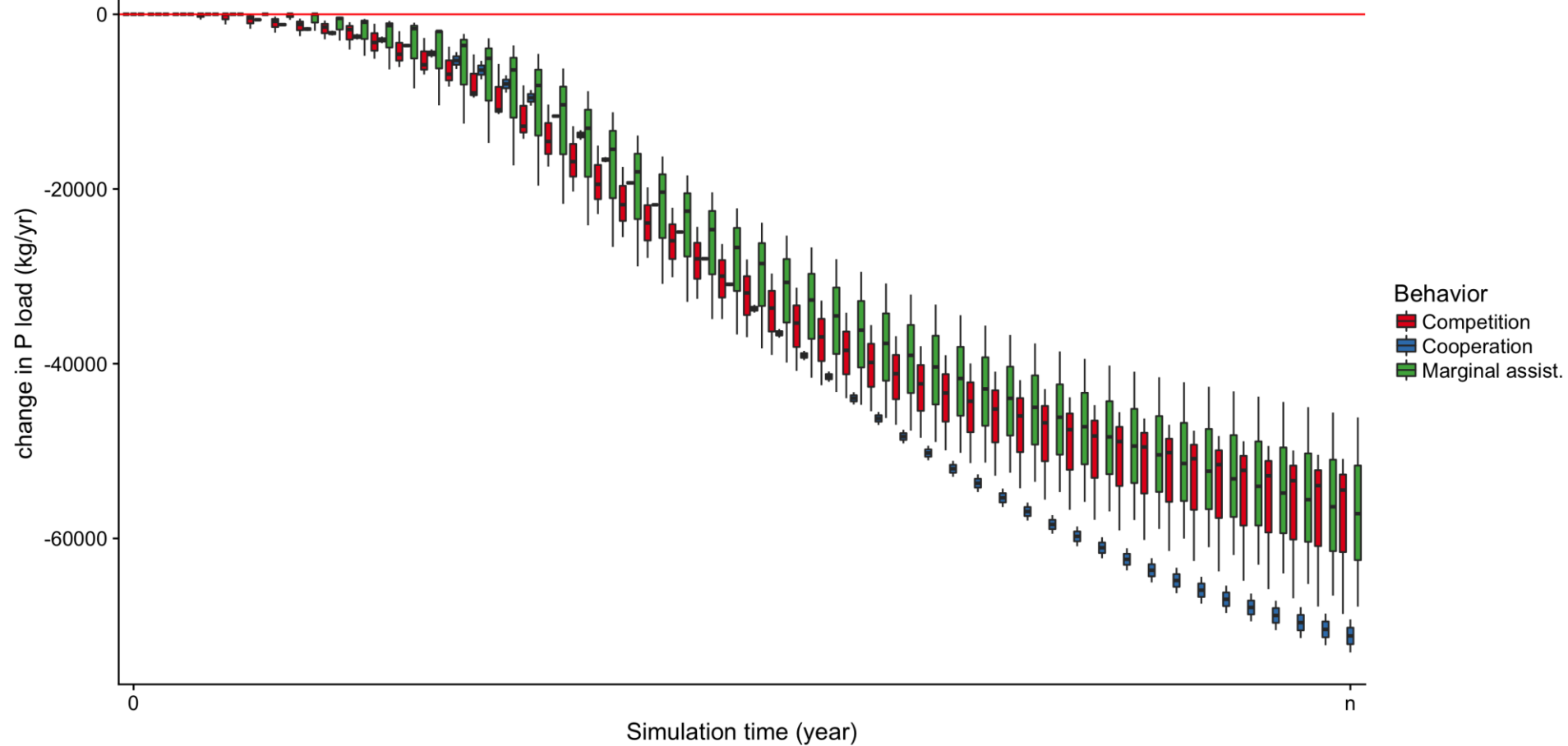
Previously-shown results

Scenario “levers”



Change in loads to Lake Champlain by Agent Behavior

Kg/year vs. baseline



Possible system gradients *(for activity)*

ecological “fit” of management

micro watersheds

tactical basin

state-scale

federal



degree of centralization

bottom-up local self-government

top-down planning



compliance

coercion

incentive-based

voluntary



Governance

Team #: _____



INSTRUCTIONS:

- Each worksheet has a gradient on the left-hand side.
- Identify important POLICY TOOL BUILDING BLOCKS and put them roughly along that gradient (top to bottom).
- For each building block, complete the rest of the row by describing the intervention, then scoring its acceptability, desirability, efficiency, compatibility, and potential for transformational change. CONSIDER THE CATEGORIES INDEPENDENT OF EACH OTHER
- Describe how **confident** you are for each score
- If you wish, comment on your scores or confidence levels

Scoring rubric:

- 1 :** Very low score or confidence (very high uncertainty)
- 2 :** Low score or confidence
- 3 :** Medium score or confidence
- 4 :** High score or confidence
- 5 :** Very high score or confidence (very low uncertainty)

Category Descriptions

REMINDER: treat these categories independently when scoring them! Something may be both highly efficient and undesirable

How well will the intervention (or the building block) be accepted by other actors or groups in the system? Consider those directly affected and those that are not

Relative to other possible interventions (or building blocks), how **desirable** is this type of intervention?

How **efficient** is this intervention (or type of intervention) in achieving its goals?

How well does the intervention (or building block) interface with others components of a policy or program? For example, does a permitting process fit well with bottom-up regulation?

How likely is this intervention (or building block) to be part of transformational change in the system? Is it an incremental step, or a large "push" to the system?

| Gradient | Intervention building block | Intervention building block description | Acceptability | Desirability | Efficiency | Flexibility | Potential for transformational change |
|------------|-----------------------------|--|---|---|--|--|--|
| Compliance | Complete prohibition | State-imposed regulation that restricts any spreading of manure on fields between harvest and first thaw | Score: 1 Confidence: High Comments: Unacceptable to farmers, but may be very acceptable to everyone else | Score: 3 Confidence: High Comments: | Score: 4 Confidence: High Comments: Has the potential to greatly reduce manure run-off into waterbodies | Score: 3 Confidence: High Comments: Compatible - but imposing too many regulations on ag is politically problematic and could harm already burdened farmers | Score: 5 Confidence: Medium Comments: |
| | | | Score: Confidence: Comments: | Score: Confidence: Comments: | Score: Confidence: Comments: | Score: Confidence: Comments: | Score: Confidence: Comments: |
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| | | Voluntary participation | Published recommendations for best practices for applying fertilizer to golf courses | Score: 5 Confidence: Low Comments: Generally acceptable if it's simply education distributed by government | Score: 4 Confidence: Low Comments: | Score: 1 Confidence: Low Comments: Additional education is unlikely to change behavior - golf course managers already know they have impacts | Score: 5 Confidence: High Comments: |

For group discussion

1. What are the qualities of policies that have greater (or lesser) potential for transformational change?
2. Are these the correct dimensions (gradients) to focus on?
3. What are the key barriers to change?
4. What are the important challenges in overcoming them?

Thank you!

