# A Summary of Findings from:

## "Tools for Environmental Protection:
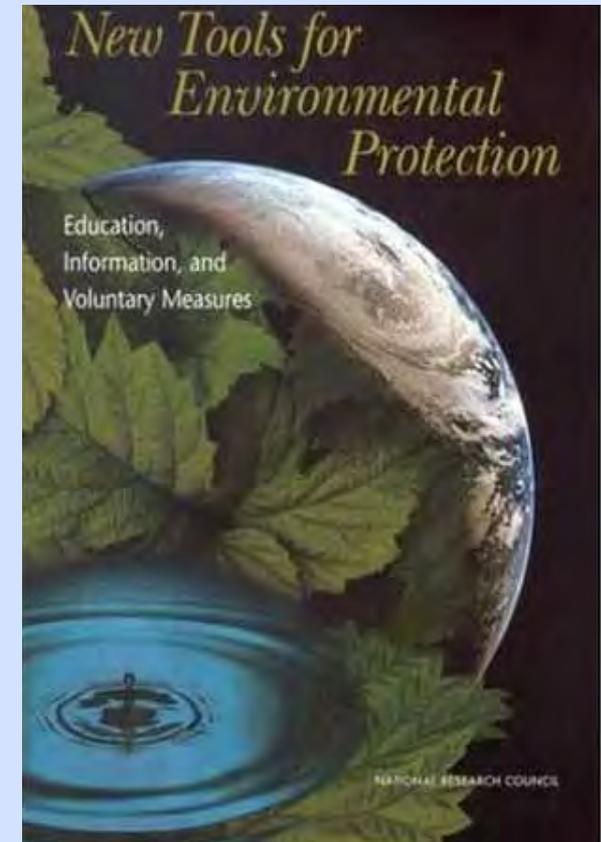### Education, Information and Voluntary Measures"

National Research Council (2002)

# New Tools for Environmental Protection

This Book:

- Studies effectiveness of various environmental planning tools

- Relies on empirical evidence

- Intended to provide guidance to those looking for effective tools

- Focuses on "new tools"

# Environmental Protection Tools

- <u>Old tools</u>:

  1) Command and control approaches (regulation)
  2) Market-based incentives

- "<u>New tools</u>"-- rely on voluntary behavioral changes:

  1) Education (encourages understanding, creates values and norms for behavior)
  2) Information (provides facts intended to change behaviors)
  3) Voluntary measures

# Current problems require "new tools"

- Needed because we've determined there are limits to command and control policies
- New tools must **supplement regulation** and market-based incentives
- Needed because nonpoint sources require different approaches
- New tools fit well with "devolution" of authority from federal ⟶ state ⟶ local governments

# New tools effective for addressing local environmental problems

Encourages use of a strategic combination of these approaches:

✓education and information
✓incentives
✓stakeholder involvement
✓inter-personal communication and persuasion
✓development of new social norms
✓peer pressure
✓removal of barriers to participation

Local, small scale focus

# What new tools can we use to change individual behaviors?

# What does the research tell us?

# What typically does NOT work

- Communication of information *by itself* cannot overcome other factors affecting behavior (inconvenience, expense, difficulty, legal barriers, trust, time, etc.)

- *Many communication efforts fail* because they do not address these underlying barriers to behavioral change

# What typically works well

Communication is most effective when it comes from an individual that someone knows personally --or that they care about
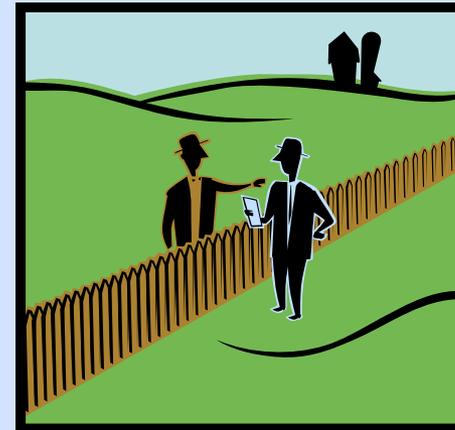


Relatives　　　Friends　　　Neighbors

Crop consultants

Impersonal efforts
(mass media campaigns, mailings, newsletters, etc.)
do little to effect long-term behavioral changes

# "Awareness" of a problem DOES NOT necessarily mean people will change behaviors

So, what might entice people to change???

# Create new social norms of behavior

- Internalization of norms most likely to occur as a result of personal contact
- For norms to influence the behavior of others, they must be visible
- New norms have to be promoted actively
- We need to report on progress to the community regularly

# Use peer pressure to change behaviors

- Peer pressure *can and does* cause people to change behaviors

- Most effective when the expectations and opinions of others matter

# Create something that can benefit the individual

- People are more motivated if it will benefit them personally

  - financially

  - prestige

  - sense of duty

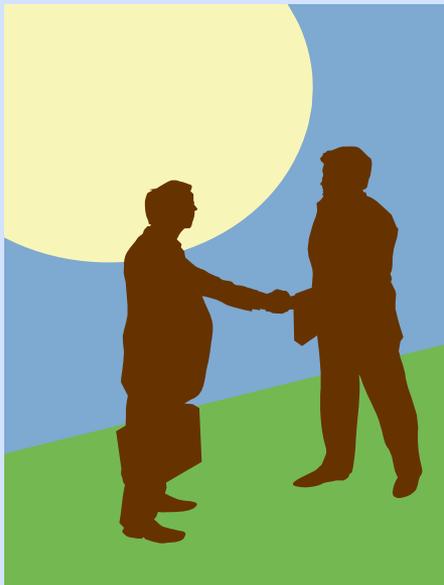  - personal growth/career growth

  - etc.

# Getting commitments

- **Get people to commit to changes in stages**

- **Start with a small commitment to change**

- **With small change accomplished, people begin to see themselves differently**

- **People want to be seen as consistent in their behavior over time**

# Getting commitments

- Ask for public commitments (most effective)

- Seek commitment in groups of people that are cohesive (churches, clubs, etc.)

- Actively involve the person – help them to see themselves as environmentally aware

# Provide feedback loops and prompt the right behaviors

- People often forget to do the right thing
- Prompts have to be visual and eye-catching and directly tied to the change you want to see
- Prompts must be given often over time

# Actively work to understand and remove barriers to change

- Identify barriers to change
- Understand the relative importance of barriers (prioritize them)
- Brainstorm ways to overcome them
- Test ideas with focus groups
- Assess whether you have the resources to overcome the barriers

# Intervening to Change Behaviors: Summary

1. **Use multiple approaches** to encourage new behaviors (make it clear, make it easy, make it popular)

2. Understand the situation from public's perspective

3. Understand and address barriers

4. Build community and increase face–to-face interactions

5. Set realistic expectations for people

6. Be sensitive to public's tolerance for change

7. Continuously monitor progress and make changes

# Community- Based Environmental Improvements

**Ideas for change are most effective if they originate from within a community**
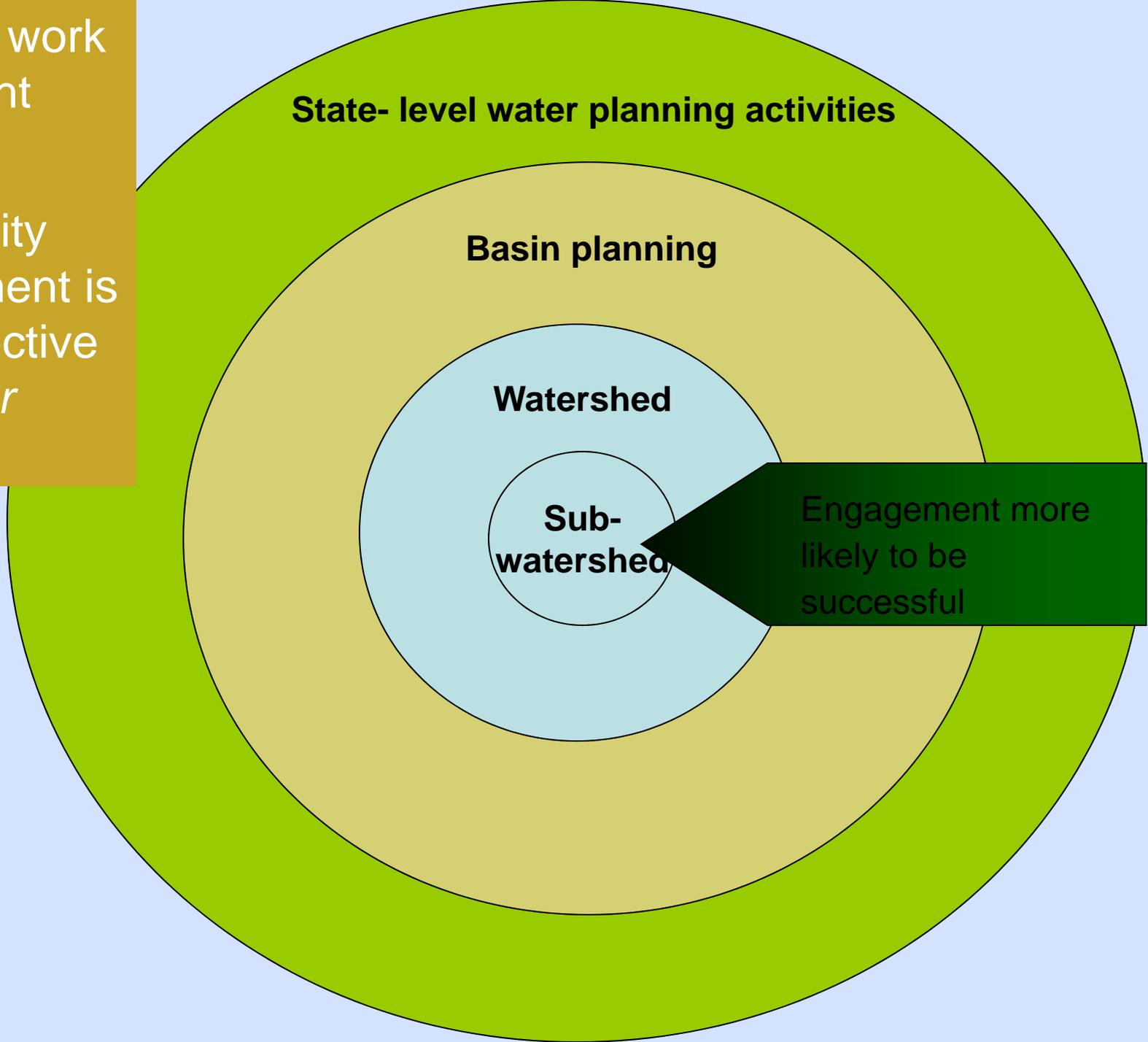
# Community-based environmental improvement

- The process of changing the community's idea of acceptable environmental behavior

- Built on the evidence that the most effective structure for managing watershed activities is a local, self-organized group

We must work at the right scale –

Community engagement is most effective at *smaller scales*

**State- level water planning activities**

**Basin planning**

**Watershed**

**Sub-watershed**

Engagement more likely to be successful

# This approach can be effectively used for:

1) information gathering (assessment)

2) resource restoration and protection planning (multi-year)

3) persuasion (citizen/stakeholder involvement)

4) personal or lifestyle changes (developing in-depth understanding of barriers to change, developing strategies)

All of these relate to TMDL Studies and Implementation Plans

# Community approach

Focus is on building local capacity, finding and developing local leaders, improving decision making and holding citizens <u>and</u> government accountable for results

Maintains that individuals are not motivated to learn/change unless issue is directly relevant to their lives and they have a sense of control over the process

# Community approach

- Inspired leader brings group together
- Establishes vision and goals
- Supports group goal of gathering and analyzing information
- Engage larger community in carrying out what it has learned
- Relies on systematic planning procedures

# Community approach

- Uses expert facilitation
- Promotes civic science
- Considers sociopolitical, economic, historical, cultural influences
- Relies on data about local conditions
- And much more….

# Community support key to environmental policy success

## Most effective when:

| | |
|---|---|
| Environmental problems locally visible | Local budget, technical expertise and resources relatively high |
| Community expectations for improvement are high | Political leaders sustain commitment over time |

# Conclusions

- Social change requires a complex, multi-level strategy to ensure success
- Traditional approaches (curriculums, training, meetings, mass media campaigns) will not support long-term or structural changes on their own
- Education materials, incentives, peer pressure and other approaches coupled with community planning sets stage for meaningful change

# Discussion Questions

1) What are your reactions to these findings?

2) What tools have worked best for you in encouraging the public?

3) What has not worked well to change behaviors?

4) What could we do differently to encourage behavior changes among targeted groups?