



Inspire Local Stewardship with “Chesapeake Behavior Change”

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Local Leadership Workgroup
August 30, 2022

Inspiring Stewardship Behaviors:

How we used the stewardship outcome and stewardship indicator to develop a resource for local government and communities to inspire stewardship



- Stewardship Outcome
- Stewardship Survey / Indicator
- Chesapeakebehaviorchange.org
 - Step by step process
 - Resources for partitioners
- New data to be collected in 2022, opportunities for localities to acquire data
- Anne Arundel County, Maryland example
- LLWG feedback on 2022 behaviors



AFFIRMATION

As Chesapeake Bay Program Partners, we recognize the need to accelerate implementation of actions necessary to achieve the Goals and Outcomes outlined herein and realize our shared Vision of a healthy and vibrant Chesapeake Bay watershed.

As Chesapeake Bay Program Partners, we acknowledge that this Agreement is voluntary and subject to the availability of appropriated funds. This Agreement is not a contract or an assistance agreement. We also understand that this Agreement does not pre-empt, supersede or override any other law or regulation applicable to each signatory.

We, the undersigned members of the Chesapeake Executive Council, re-affirm our commitment to support the Goals of this Agreement and to work cooperatively in its implementation. We agree to work both independently and collaboratively toward the Goals and Outcomes of this Agreement and to implement specific Management Strategies to achieve them. Every citizen of this great watershed is invited to join the Partnership, uniting as a region and embracing the actions that will lead to success.

Date: June 16, 2016

For the Chesapeake Bay Commission



Ronald E. Miller

For the State of Delaware



Jill Markell

For the District of Columbia



Vernon C. Gray

For the State of Maryland



Arthur H. Hahn

For the Commonwealth of Pennsylvania



Tom Corbett

For the State of New York



Andrew Cuomo

For the Commonwealth of Virginia



Lee D. Hall

For the State of West Virginia



Earl Ray Tomblin

For the United States of America



John F. Kennedy

on behalf of the Federal Government and the Federal Leadership Committee for the Chesapeake Bay:
 U.S. Environmental Protection Agency
 U.S. Department of Agriculture
 U.S. Department of Commerce
 U.S. Department of Defense
 U.S. Department of Homeland Security
 U.S. Department of the Interior
 U.S. Department of Transportation



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 Science. Restoration. Partnership.

Stewardship Outcome

Increase the number and diversity of trained and mobilized citizen volunteers with the knowledge and skills needed to enhance the health of their local watersheds.



OpinionWorks Credentials

- Measure perceptions, attitudes, behavior
- Surveys, focus groups, in-depth interviews
- Grounded in social science best practices

Chesapeake Bay Trust

- Perceptions studies for the Trust and its grantees

William Penn Foundation for the Circuit Trails

- Assessing equitable access to trails in Greater Philadelphia

The Baltimore Sun

- Elections and issues polling since 2007

Chesapeake Bay Program

- Development of a Baywide indicator of stewardship behavior

The Recycling Partnership

- National consumer research on response to recycling initiatives

211 Maryland

- Branding and outreach related to behavioral health helpline

Virginia Coastal Zone Management Program

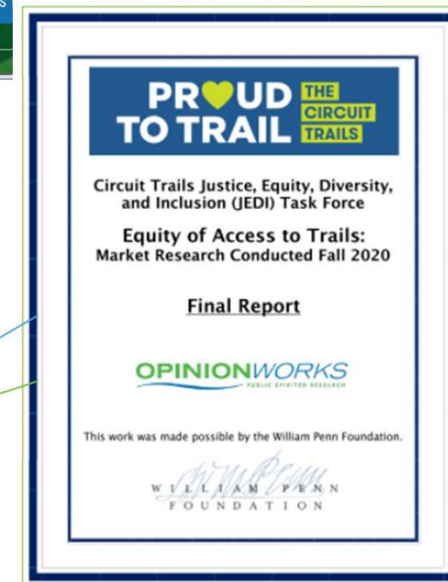
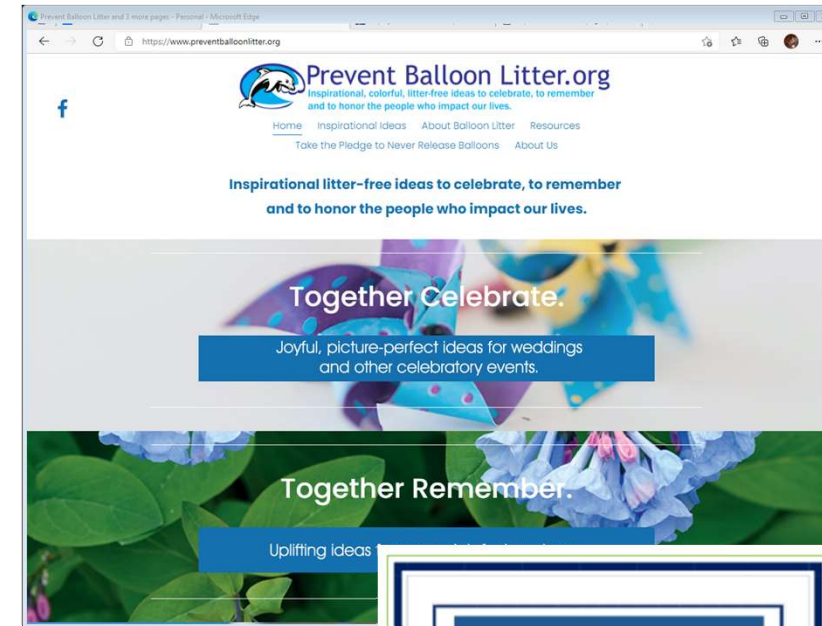
- Behavior change related to marine debris

Waterfront Partnership of Baltimore

- Perceptions and visitation of Baltimore's Inner Harbor

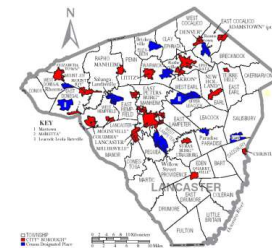
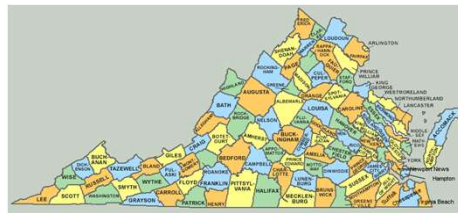
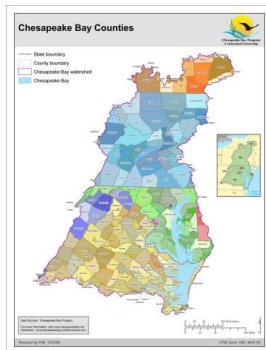
Los Angeles County, California

- Evaluation of media campaign encouraging proper disposal of batteries



What This Survey Tool Can Do

- ✓ Measure and track Stewardship progress.
- ✓ Inform smart behavior selection for practitioners.
- ✓ Segment data by major jurisdiction, demographic.



- ✓ Be a resource for other Bay Program priorities:
Access, Diversity.

What This Survey Tool is *Not*

- ✓ The citizen stewardship index will NOT verify implementation of behaviors or practices per Bay Program protocols. Other tools like the Smart Tracker exist for this purpose.
- ✓ It will NOT answer why questions.
- ✓ It will NOT measure public policy preferences.
- ✓ It will not measure perceptions and attitudes, except those that directly drive stewardship behavior.



**Inspiring Action,
Fostering Stewardship**
A new tool for behavior change practitioners
Sharing of resources and best practices
Campaign planning template
Case study database

Thousands of Chesapeake Bay watershed residents were surveyed about their stewardship behaviors that impact the Bay's health.

[Learn about the survey](#)

What Is Chesapeake Behavior Change?



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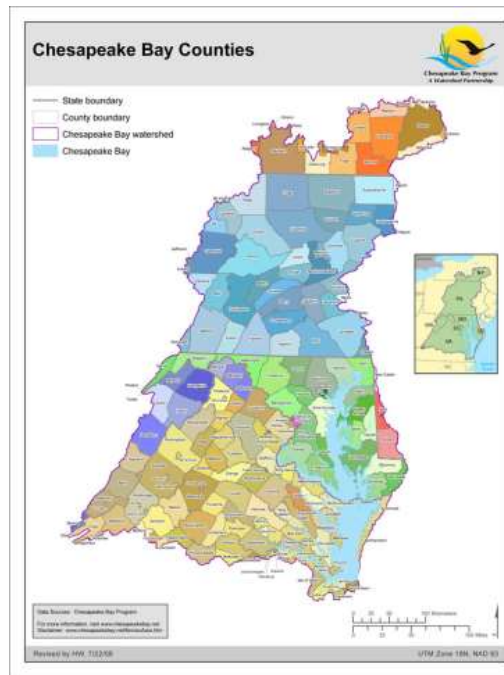


Photos Courtesy Chesapeake Bay Program

Chesapeake Bay **Stewardship Indicator**

Stewardship Indicator

Sampling Methodology

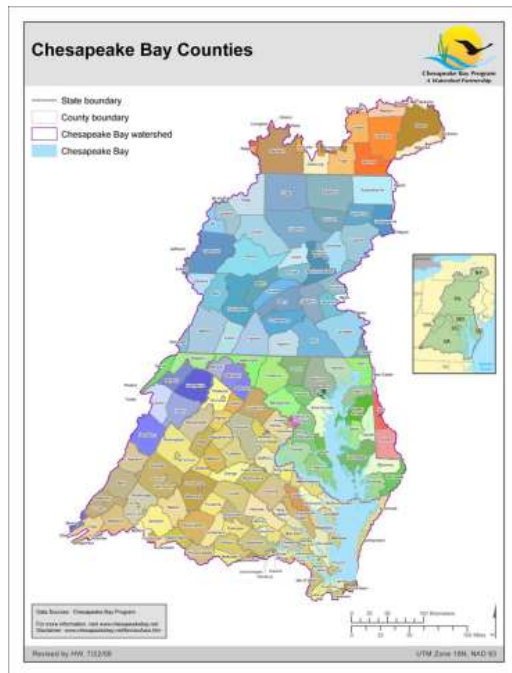


	2017 Baseline
	All states statistically significant N=5,212
MD	1,005 ($\pm 3.1\%$)
PA	1,003 ($\pm 3.1\%$)
VA	1,001 ($\pm 3.1\%$)
DC	801 ($\pm 3.5\%$)
WV	600 ($\pm 4.0\%$)
DE	402 ($\pm 4.9\%$)
NY	400 ($\pm 4.9\%$)

Fielded March – May 2017
 13-minute interview
 Wireless and Landline
 Spanish language interviewing

Stewardship Indicator

2022 Tracking



New Data Collection Wave in 2022

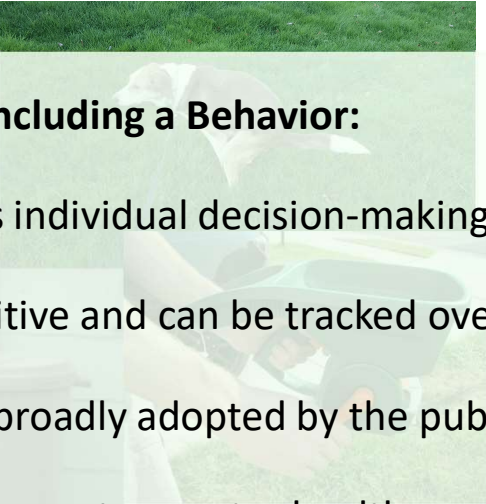
**Behavior & Likelihood Measures
Updated**

Key Attitudes Measured

Opportunity for Deep Local Sampling

19 Measured Behaviors

- Pet waste (2: on property/off property)
- Leaves/Lawn clippings (2)
- Litter (2: drop/pick-up)
- Fats, grease/Medicines down the drain (2)
- Fertilizer use/keep off hard surfaces (2)
- Pesticide/Herbicide use (2)
- Conservation landscaping
- Rain garden installation
- Septic system inspection/pump out
- Tree planting
- Downspouts redirected
- Rain barrel connected, emptied (2)
- Water conservation



Criteria for Including a Behavior:

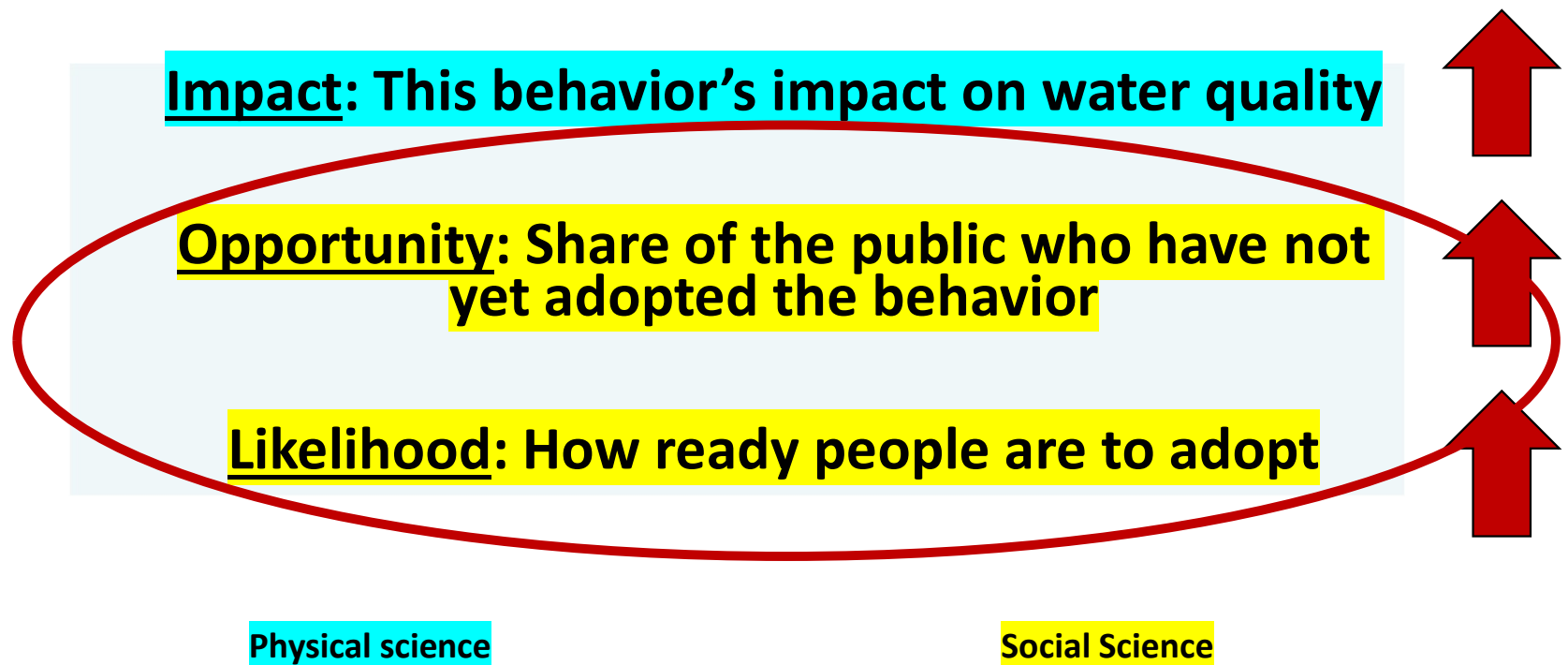
1. Involves individual decision-making
2. Is repetitive and can be tracked over time
3. Can be broadly adopted by the public
4. Has an impact on water health
5. Can engage the public

Proposed New Behaviors

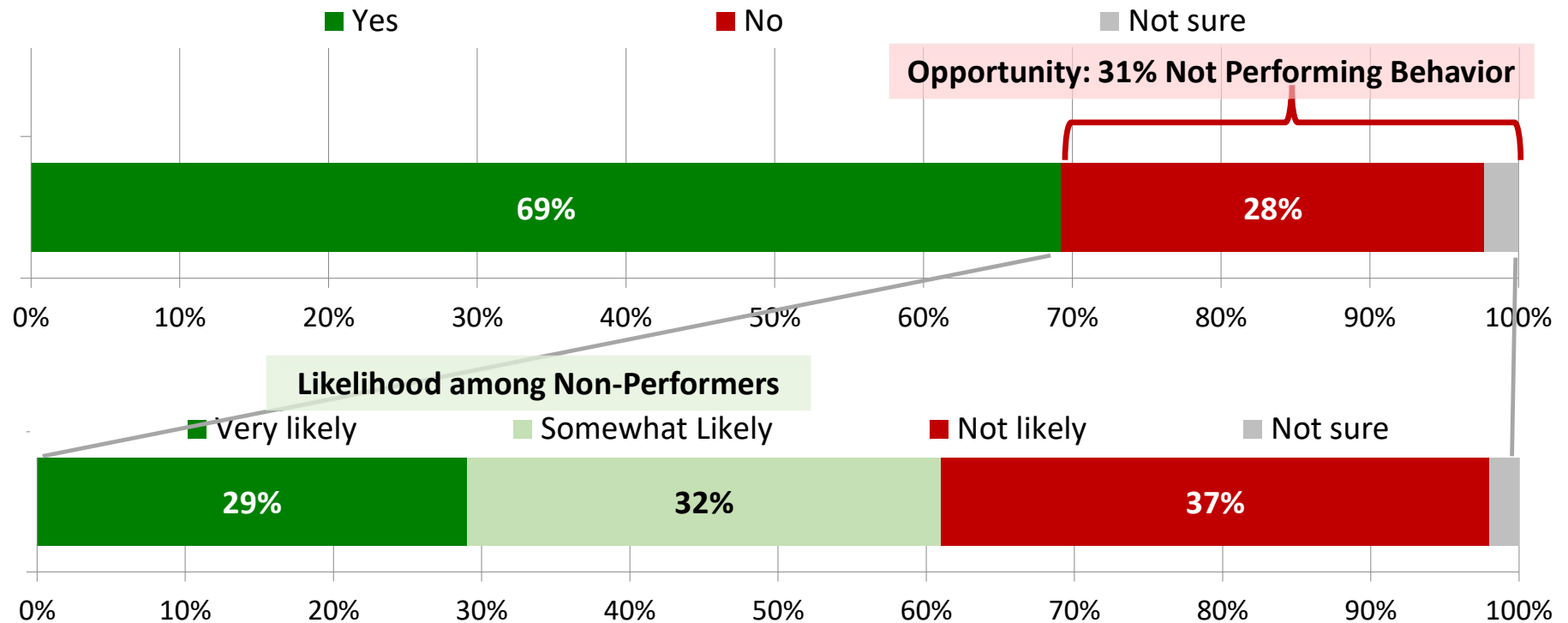
- Single use plastics
- Energy use
- Car washing
- Food choices (sourcing food locally)
- Others?



Choose the Right ONE Behavior to Influence



Rain Barrel is Connected and Emptied Between Rainstorms



(Asked of those with a rain barrel):

“Is your rain barrel connected to a downspout and being emptied between rain storms?”

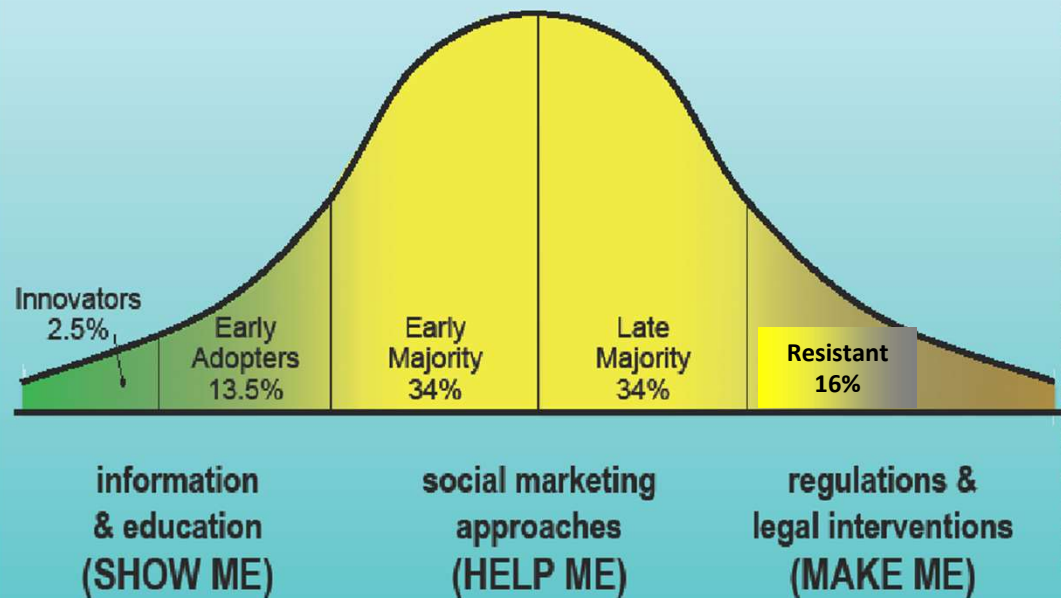
(If no or not sure): “Looking forward over the next year or so, how likely are you to do each of these things using the scale very likely, somewhat likely, or not likely?”

...Empty your rain barrel between rainstorms..”

Stewardship Indicator Survey

(N=5,212 Chesapeake Bay Watershed residents, 2017)

Diffusion Approaches: Education, Marketing, and Law



Credit: **Nancy R. Lee**, University of Washington & Puget Sound Partnership
Adapted from **Everett Rogers**, Jay Kassirer, Mike Rothschild, Dave Ward, Kristen Cooley

Level of Investment to Change Behavior

(conceptual)



Credit: Nancy R. Lee, University of Washington & Puget Sound Partnership
Adapted from Everett Rogers, Jay Kassirer, Mike Rothschild, Dave Ward, Kristen Cooley

A Step-by-Step Guide to Planning & Implementing a Behavior Change Campaign

Step 1

Identify a Single, End-State Behavior You Want to Change

Step 2

Identify your Priority Audience and Measure the Behavior Baseline

Step 3

Identify Barriers and Benefits

Step 4

Develop Your Campaign (Strategies and Tools)

Step 5

Implement Your Behavior Change Campaign

Step 6

Measure and Evaluate Behavior Change



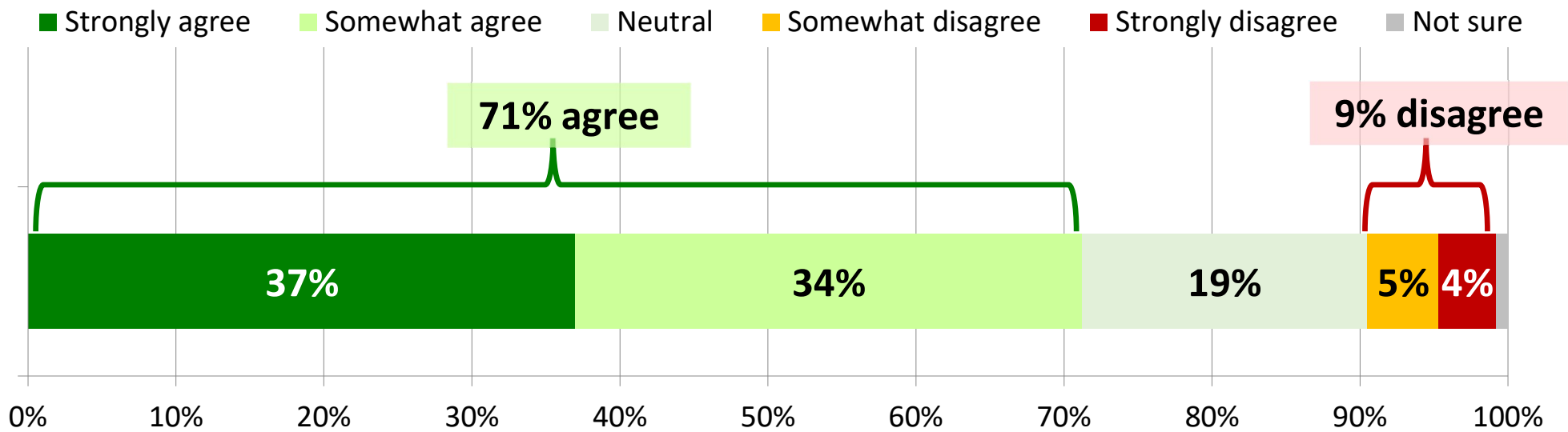
Chesapeake Behavior Change was developed in coordination with the Chesapeake Bay Program's Stewardship Workgroup. The goal of the Stewardship Workgroup is to grow the number of residents and organizations taking action from the ground up to encourage positive actions that protect and restore the health of the Chesapeake Bay.



A Public That Wants to be Engaged

I want to do more to help make local creeks, rivers, and lakes healthier.

Level of Agreement

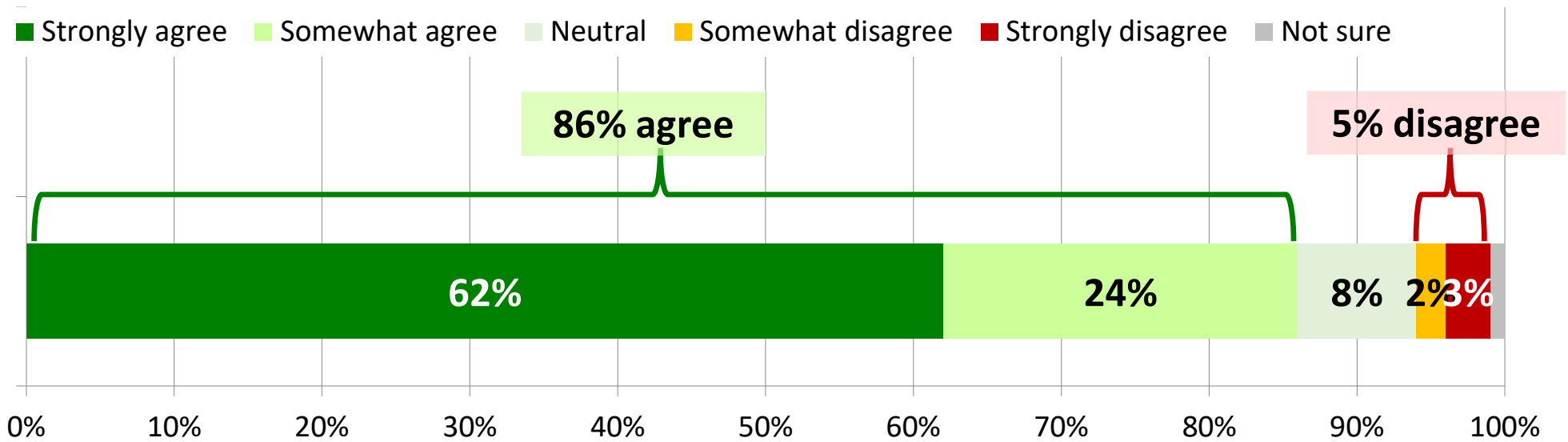


Stewardship Indicator Survey
(N=5,212 Chesapeake Bay Watershed residents, 2017)

Optimistic about Solutions

If people work together, water pollution around here can be fixed.

Level of Agreement



Stewardship Indicator Survey
(N=5,212 Chesapeake Bay Watershed residents, 2017)

<https://www.chesapeakebehaviorchange.org/>