Spring into Action:

Dynamic Engagement!

February 24, 2018

Steve Raabe

President, OpinionWorks, LLC
Board Chair, Watershed Stewards Academy

Dynamic Engagement
Today's Objectives

1. Understand Basic Principles of Behavior Change

2. Know How to *Apply* the Social Science

3. Understand Anne Arundel County

4. Take It Down to the Community Level

OPINIONWORKS
PUBLIC SPIRITED RESEARCH

OpinionWorks Credentials

- Measure perceptions, behaviors
- Random samples, focus groups
  - *The Baltimore Sun* polling
  - University of Delaware
    - Ag/Residential response to Water Fee
  - Chesapeake Bay Trust
    - Extensive work assessing stewardship
  - City of Dayton, Ohio
    - Comprehensive survey of resident attitudes
  - West Virginia Department of Health
    - Barriers to cancer screening for low-income women
  - Virginia Cooperative Extension
    - Testing affinity for a sustainable lawn care program

OPINIONWORKS
PUBLIC SPIRITED RESEARCH

Behavior Change Starts with Listening

Element 1: Random Community Survey

- 530 interviews

- June 2017

- Telephone sample (394 interviews) Supervised, live interviewers; landline and cell

- Mail/Online sample (136 interviews)

- Deep look at attitudes

- ± 4.9% sampling error, 95% confidence

OPINIONWORKS
PUBLIC SPIRITED RESEARCH
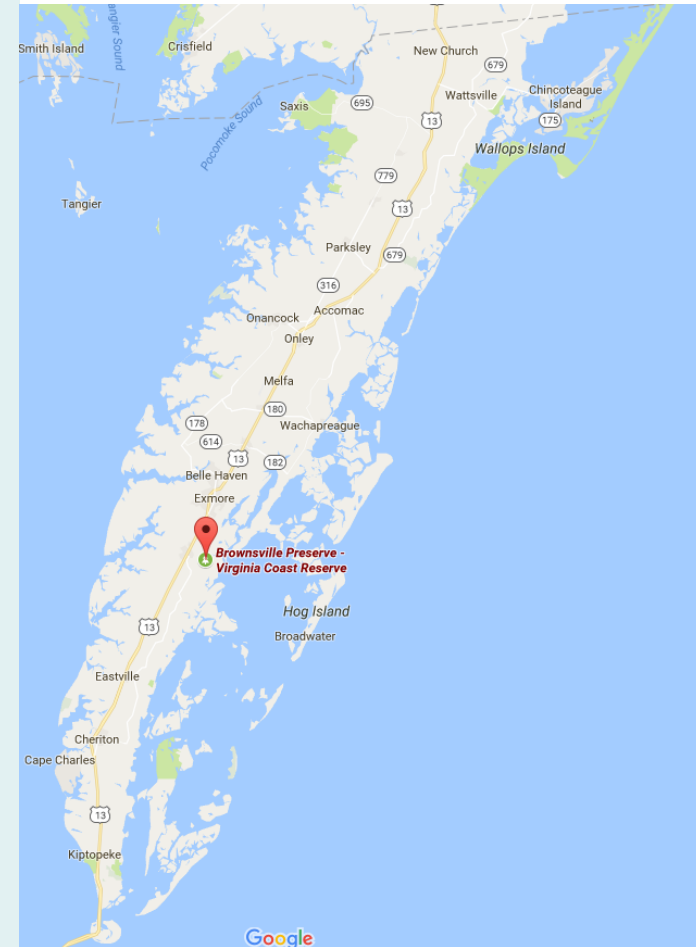
Citizen Stewardship Indicator
Sampling Methodology

Chesapeake Bay Counties

- State boundary
- County boundary
- Chesapeake Bay watershed
- Chesapeake Bay
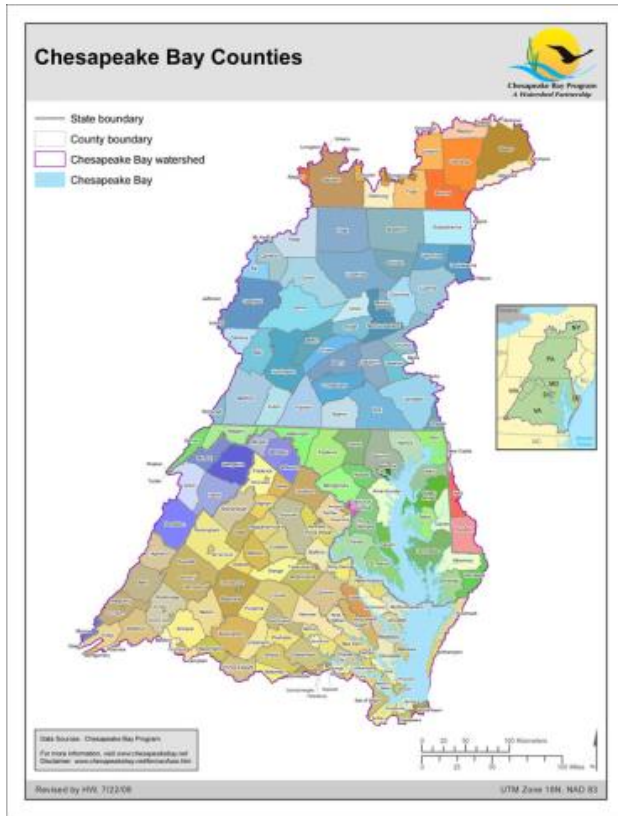
	2017 Baseline
678 in Anne Arundel County	All states statistically significant N=5,212
VA	1,001 (±3.1%)
MD	1,005 (±3.1%)
PA	1,003 (±3.1%)
DC	801 (±3.5%)
WV	600 (±4.0%)
NY	400 (±4.9%)
DE	402 (±4.9%)

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

Research Tools
Focus Groups

- Daily Life

- Living on the Eastern Shore

- Contact with the Outdoors

- Basic Impressions of TNC

- Reactions to TNC Programs & Priorities

- Building a Bridge to the Community

OPINIONWORKS
PUBLIC SPIRITED RESEARCH

Attitudes about Bay Restoration
Water Protection Ranks High

Maryland

17% Low Priority

44% High Priority

15%

Dec 2010:
44% High, 13% Low
Nov 2008
49% High, 12% Low

11%

6%

29%

37%

- At the top
- Above average
- Middle of the pack
- Below average
- At the bottom
- Not sure
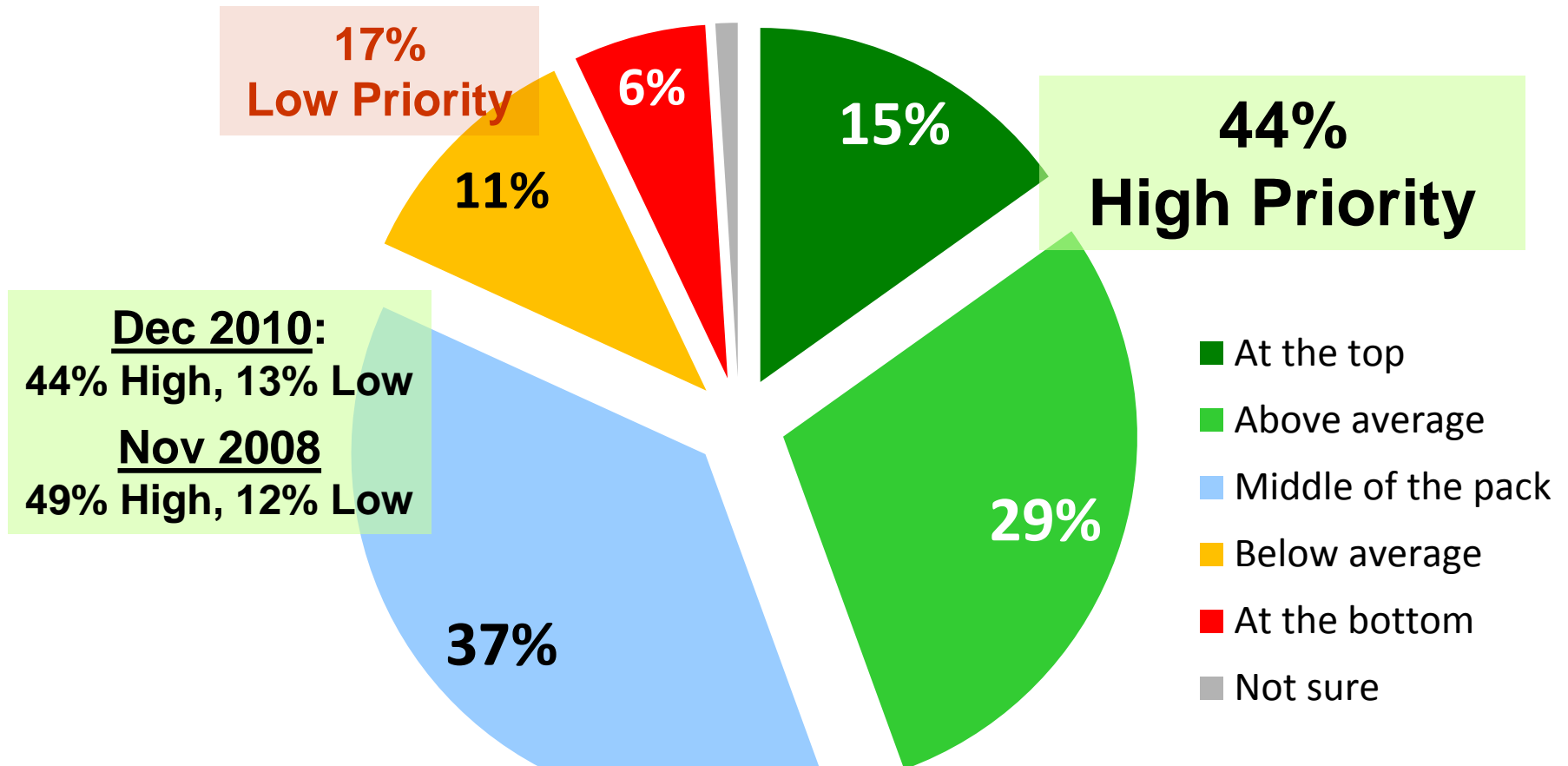
"If you were to consider all the issues and challenges facing Maryland today, where would (A/B split): [the health of our local waters/pollution in our local waters] rank on that priority list for you?"

OPINIONWORKS
PUBLIC SPIRITED RESEARCH

Attitudes about Bay Restoration
Still Interested in Hearing about the Bay?

Maryland

Category	Percentage
More interested	42%
Just as interested	44%
Less interested	12%
Not sure	2%
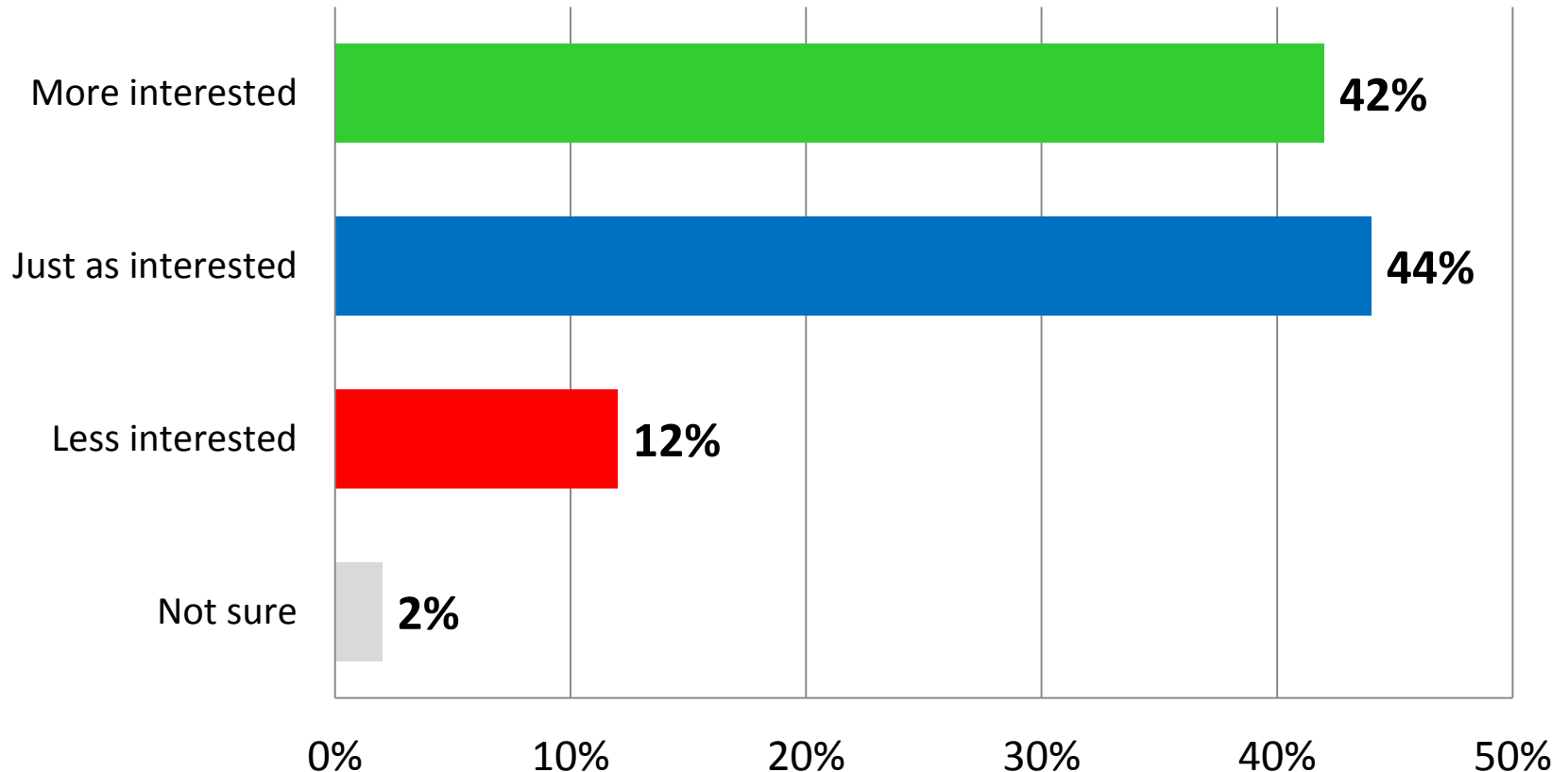
"Compared to a few years ago, would you say you are (randomize): [more interested, less interested, (or) just as interested] today in hearing about the health of the Chesapeake Bay?"

OPINIONWORKS
PUBLIC SPIRITED RESEARCH

Understanding Anne Arundel County
Environmentally-Minded

State Avg: 3.39
Anne Arundel Avg: 3.46

Rating	State	Anne Arundel
5 (Strong)	17%	18%
4	23%	21%
3 (Average)	47%	50%
2	5%	7%
1 (Not at all)	7%	2%
Not sure	2%	2%

■ State ■ Anne Arundel
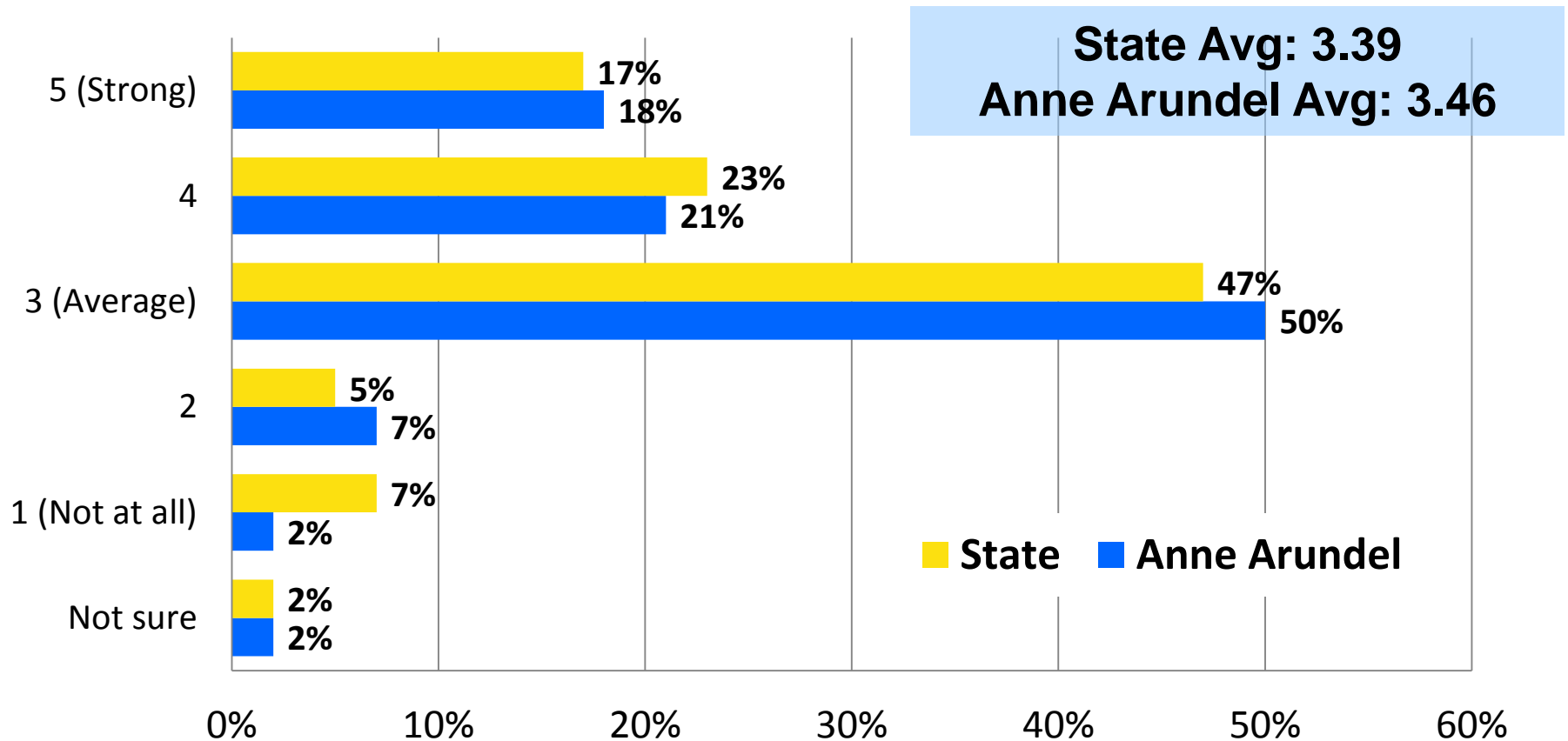
"On a scale of 1 to 5 where 5 is a strong environmentalist, 3 is average, and 1 is not an environmentalist at all, where would you put yourself?" (Oct 2014)

"If I knew what to do
to help clean up
local waters,
I would do a lot more."

Influencing Behavior:

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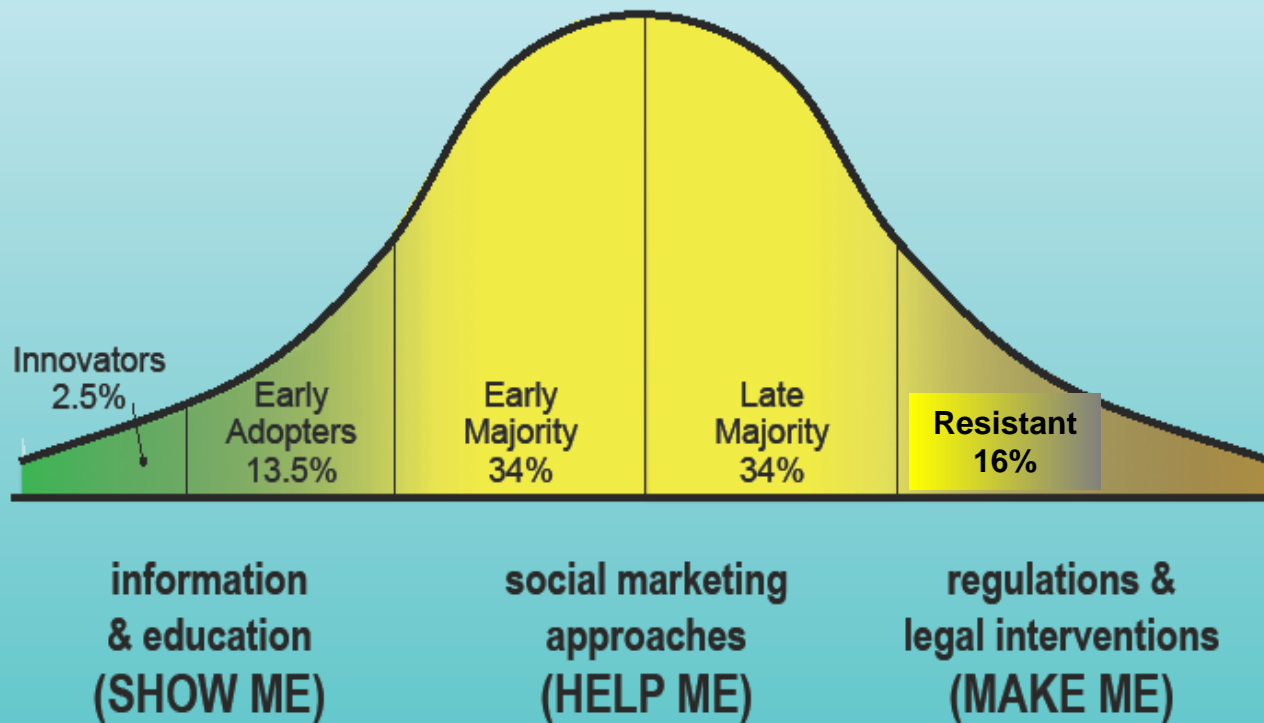
Credit: Nancy R. Lee, University of Washington & Puget Sound Partnership
Adapted from Everett Rogers, Jay Kassirer, Mike Rothschild, Dave Ward, Kristen Cooley

Level of Investment to Change Behavior

(conceptual)

Traditional Public Education
- Websites
- Brochures
- Community meetings

Compulsory Actions
- Regulations
- Fees & Fines
- Legal action

Innovators 2.5%
Early Adopters 13.5%
Early Majority 34%
Late Majority 34%
Laggards 16%

Information and Education

Social Marketing Approach

Regulations and Legal Interventions

(SHOW ME)

(HELP ME)

(MAKE ME)

Example Tool: Pledge

"Free Upgrade"

A/B Test:
A. Flooding
B. Water quality

50% of homes visited signed the pledge

Taking Action for Clean Water in Capitol Heights

Am I contributing to water pollution?

Unfortunately, we all are. Every day, trash, oil, sediment, chemicals and other pollutants collect on our roofs, roads, parking lots and driveways. When it rains, the pollutants travel over these hard surfaces and flow into our creeks and rivers.

How Can I Help?

There are simple things we can do in our own yards to help reduce pollution in our local creek and the Anacostia River.

Disconnecting your downspout means redirecting your roof runoff away from hard surfaces like streets and driveways and onto planted areas where the water will soak in. This simple action can provide a BIG reduction in the amount of pollution.

Helping is easy, and it's FREE!

Capitol Heights residents can get **FREE downspout redirectors** including pipe extenders and splash pads, and a **FREE visit from someone who can help you install them.**

Take the Pledge!

We know you care about your home and want the waters to be cleaner. Sign the pledge card and become part of the solution for your community.

I commit to helping reduce the impact of stormwater runoff in the Anacostia River by completing

_____ *on my personal property.*

Signature_____ Date_____

What Happens Next?

Based on your availability, we will contact you to arrange follow up and installation.

MORE INFORMATION:

Prince George's Department of Environment Stormwater Management Division: *bit.ly/PGDOESW*
Stormwater Fee FAQ: *bit.ly/PGDOESWFAQ* · Rain Check Rebate Program: *bit.ly/PGDOESWREBATES*

Outcome:
50% of homes signed the pledge.
24% followed through.

Help Me Do What I Can Do

- One or two actions, not 10!

  Too many choices = Overwhelmed

  Too many choices = Inaction

- Show the "five dollar action" the average person can take, not just costly actions.

The Social Marketing Process
Reaching the Help Me Group

1. Know your campaign's **purpose and focus**

2. Pinpoint your **target audience**

3. Identify the **specific behavior** you want the audience to take

4. Assess the **barriers** to the action

5. Find the **benefits and motivators** that will overcome those barriers

The Social Marketing Process
Reaching the Help Me Group

6. **Refine your <u>messages, incentives, and tools,</u> and determine <u>where and how</u> you will deliver them to the target audience**

   - Product: Social Marketing Tools, Benefits
   - Place: Convenience for the Audience
   - Price: Incentives, Rebates
   - Promotion: Messages, Delivery Channels

7. **<u>Evaluate and measure</u> your progress**

Photos Courtesy Chesapeake Bay Program

Chesapeake Bay Stewardship Indicator

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."

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 with the Partnership, uniting as a region and embracing the actions that will lead to success.

Date: June 16, 2014

For the Chesapeake Bay Commission

For the State of Delaware

For the District of Columbia

For the State of Maryland

For the Commonwealth of Pennsylvania

For the State of New York

For the Commonwealth of Virginia

For the State of West Virginia

For the United States of America
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

Chesapeake Bay Program
Science. Restoration. Partnership.

Chesapeake Bay Watershed Agreement

10 broad goals for Bay restoration

Sustainable Fisheries
Vital Habitats
Water Quality
Toxic Contaminants
Healthy Watershed
Climate Resiliency
Land Conservation
Stewardship
Public Access
Environmental Literacy

https://www.chesapeakebay.net/what/what_guides_us/watershed_agreement

Citizen Stewardship Framework
Increasing citizen actions for watershed health

Community Leaders/ Champions

Volunteerism/ Collective Community Action

Individual Citizen Actions and Behaviors

Increasingly Environmentally Literate Population (Elit Goal)

Knowledge & skills

Mobilize/Increase

Stewardship Behavior Criteria

1. Involves individual decision-making

2. Is repetitive and can be tracked over time

3. Can be broadly adopted

    A.   Not just by experts

    B.   Not pre-emergent

4. Has an impact on water health

5. And/or will engage the public

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**
- **Tree planting**
- **Downspout redirect**
- **Rain barrel/Connected, emptied (2)**
- **Water conservation**

Citizen Stewardship Indicator

My actions contribute to water pollution where I live.

Level of Agreement

- ■ Strongly agree
- ■ Somewhat agree
- ■ Neutral
- ■ Somewhat disagree
- ■ Strongly disagree

37% agree

49% disagree

| 19% | 18% | 13% | 16% | 33% |

0%   20%   40%   60%   80%   100%
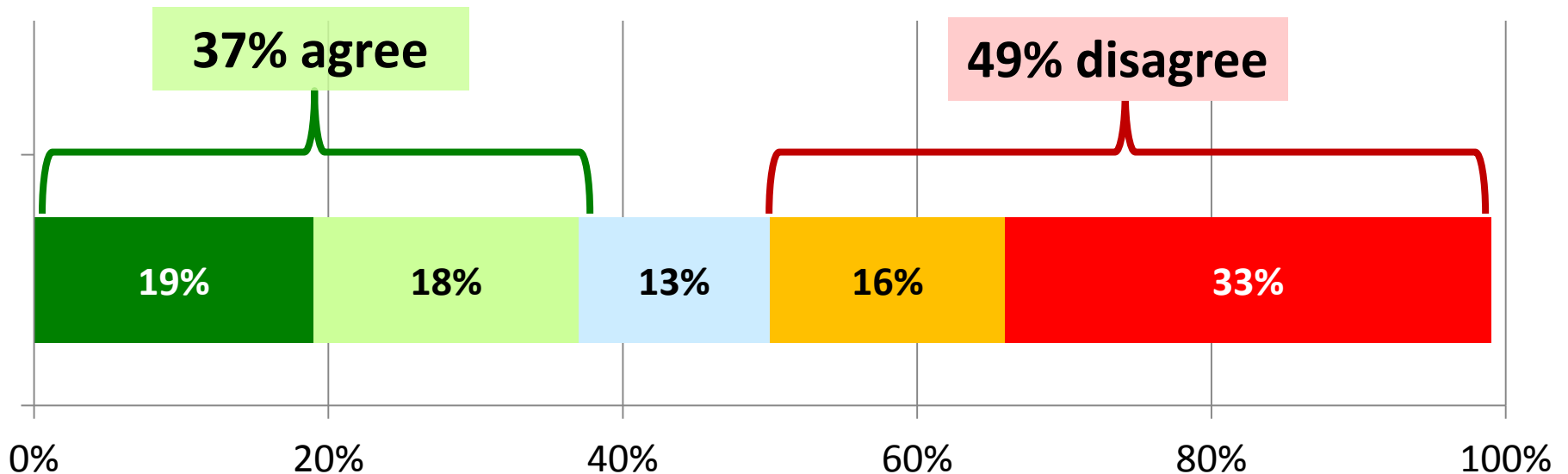
Baywide: 35% Agree/51% Disagree

Citizen Stewardship Indicator

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

Level of Agreement

■ Strongly agree ■ Somewhat agree ■ Neutral ■ Somewhat disagree ■ Strongly disagree

87% agree

5% disagree

| 65% | 22% | 7% | 2% | 3% |

0% 20% 40% 60% 80% 100%
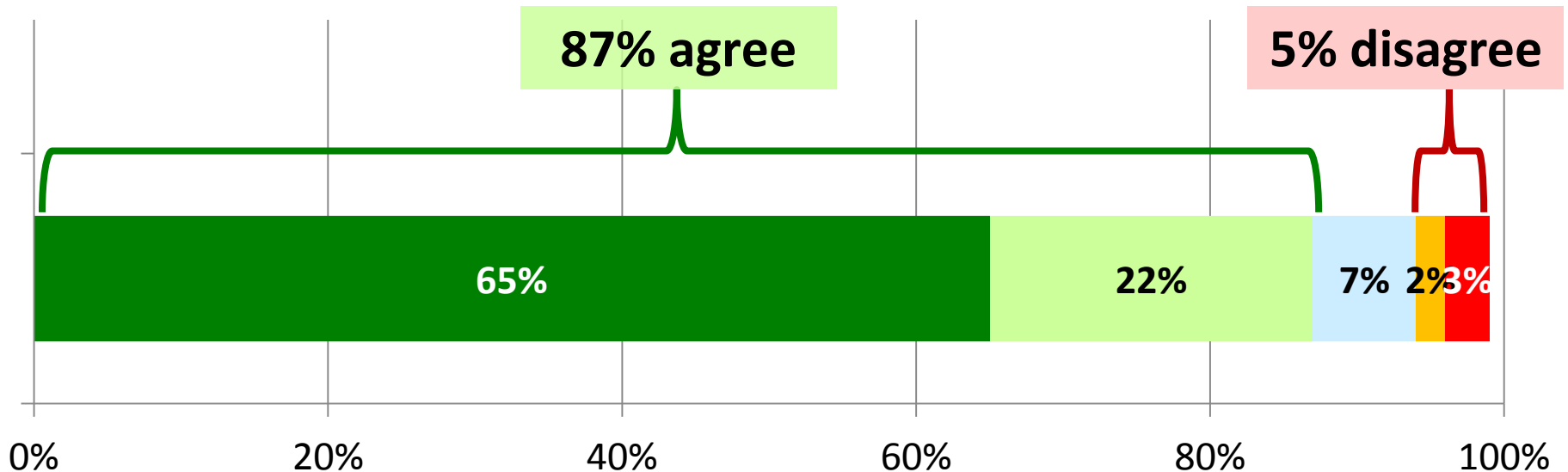
Baywide: 86% Agree/5% Disagree

Citizen Stewardship Indicator: 2017 Final Baywide Data

Anne Arundel County Data

Volunteerism

Legend: ■ Very Frequently/Yes ■ Frequently ■ Sometimes ■ Seldom ■ Never/No ■ Not sure

Volunteered for the waters/environment
- 5% (Frequently)
- 16% (Sometimes)
- 18% (Seldom)
- 61% (Never/No)

Donated for the waters/environment
- 4% (Very Frequently/Yes)
- 10% (Frequently)
- 25% (Sometimes)
- 16% (Seldom)
- 44% (Never/No)

Can name a local water protection group
- 43% (Very Frequently/Yes)
- 57% (Never/No)

X-axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
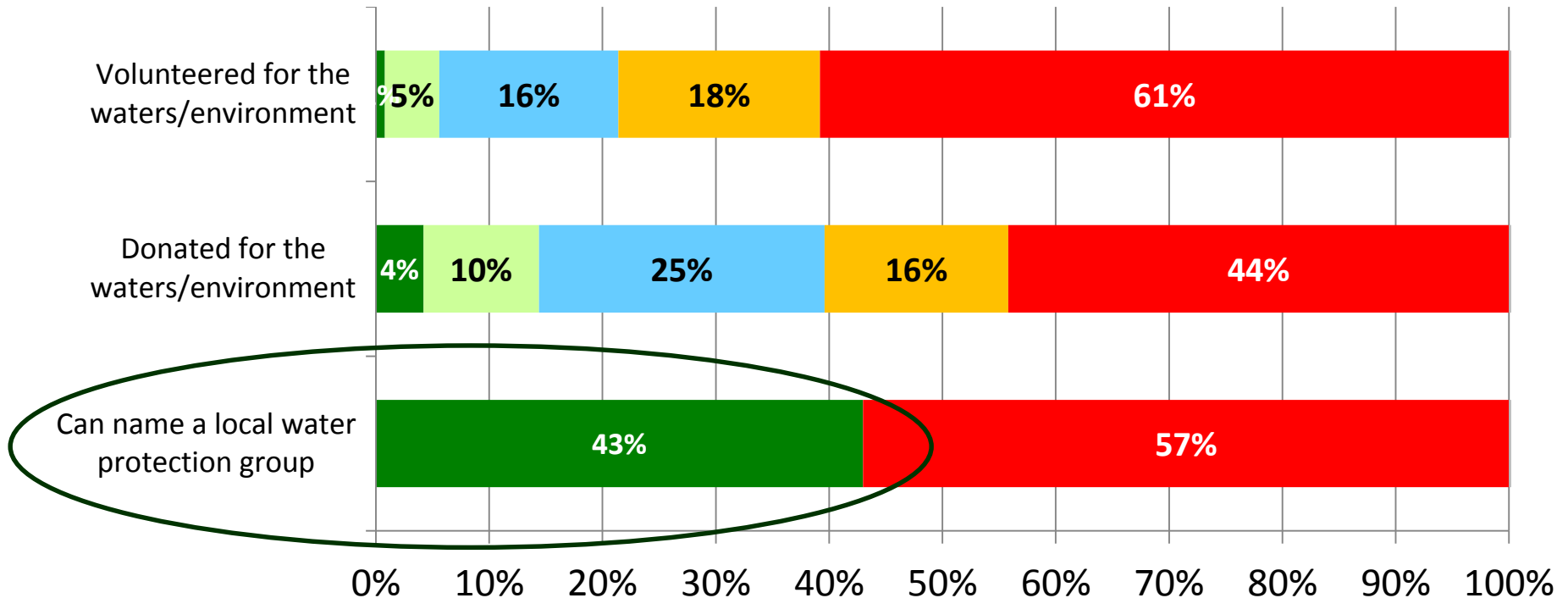
Never No	Seldom	Sometimes	Frequently	Very frequently Yes
0	25	50	75	100
100	75	50	25	0

Individual Behavior Measurement

Choosing the Right Behavior to Influence

Behavior Weighting:

Impact of the Behavior on Water Quality

x

Inverse of the Penetration (Level of Adoption) in the Community

x

Likelihood the Public will Adopt the Behavior

Citizen Stewardship Indicator: Anne Arundel Data
Positive Behaviors: Higher Tier

Desired = Always/Very Frequently/Yes ➡ **Sometimes**

Legend: ■ Always/Very Frequently/Yes ■ Usually/Frequently ■ Sometimes ■ Seldom ■ Never/No ■ Not sure

Behavior	Always/Very Frequently/Yes	Usually/Frequently	Sometimes	Seldom	Never/No
Pick up other people's litter	28%	21%	37%	7%	7%
Septic system inspected/pumped out	87%				9%
Pick up dog waste	58%	8%	6%	4%	24%
Bag, mulch, compost leaves	41%	12%	18%	8%	20%
Conserve water at home	61%				36%
Planted a tree	40%				60%

Citizen Stewardship Indicator: Anne Arundel Data

Positive Behaviors: Lower Tier

Desired = Always/Very Frequently/Yes ⟶ Sometimes

■ Always/Very Frequently/Yes ■ Usually/Frequently ■ Sometimes ■ Seldom ■ Never/No ■ Not sure

Behavior	
Keep fertilizer off hard surfaces	9% / 11% / 7% / 10% / 59%
Replaced an area of grass lawn	31% / 68%
Created a rain garden	17% / 82%
Have a rain barrel	17% / 82%
Rain barrel connected, emptied	11% / 84%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
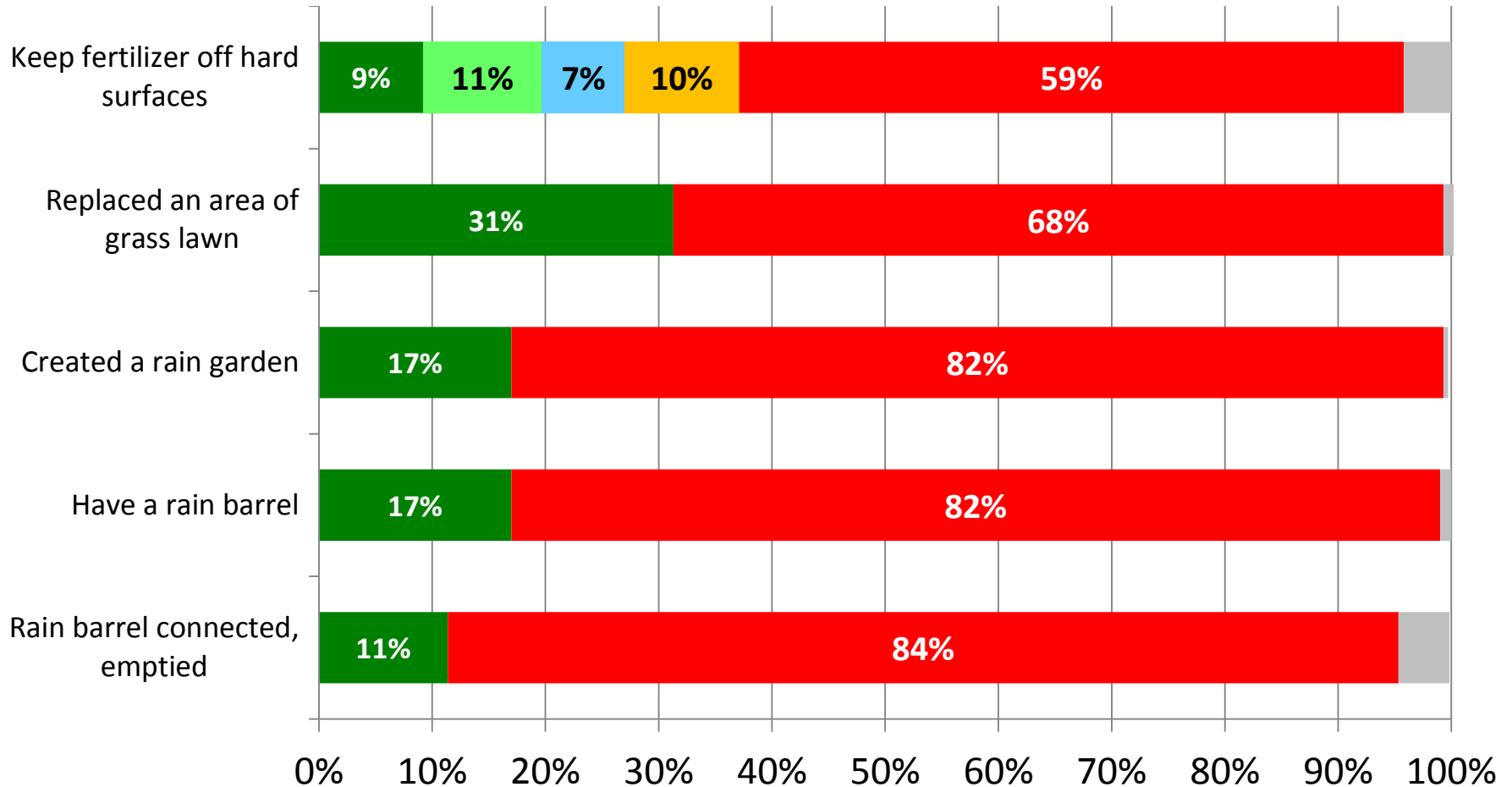
Citizen Stewardship Indicator: Anne Arundel Data
Negative Behaviors
Desired = Never/No, or Seldom

Legend: ■ Never/No ■ Seldom ■ Sometimes ■ Usually/Frequently ■ Always/Very Frequently/Yes ■ Not sure
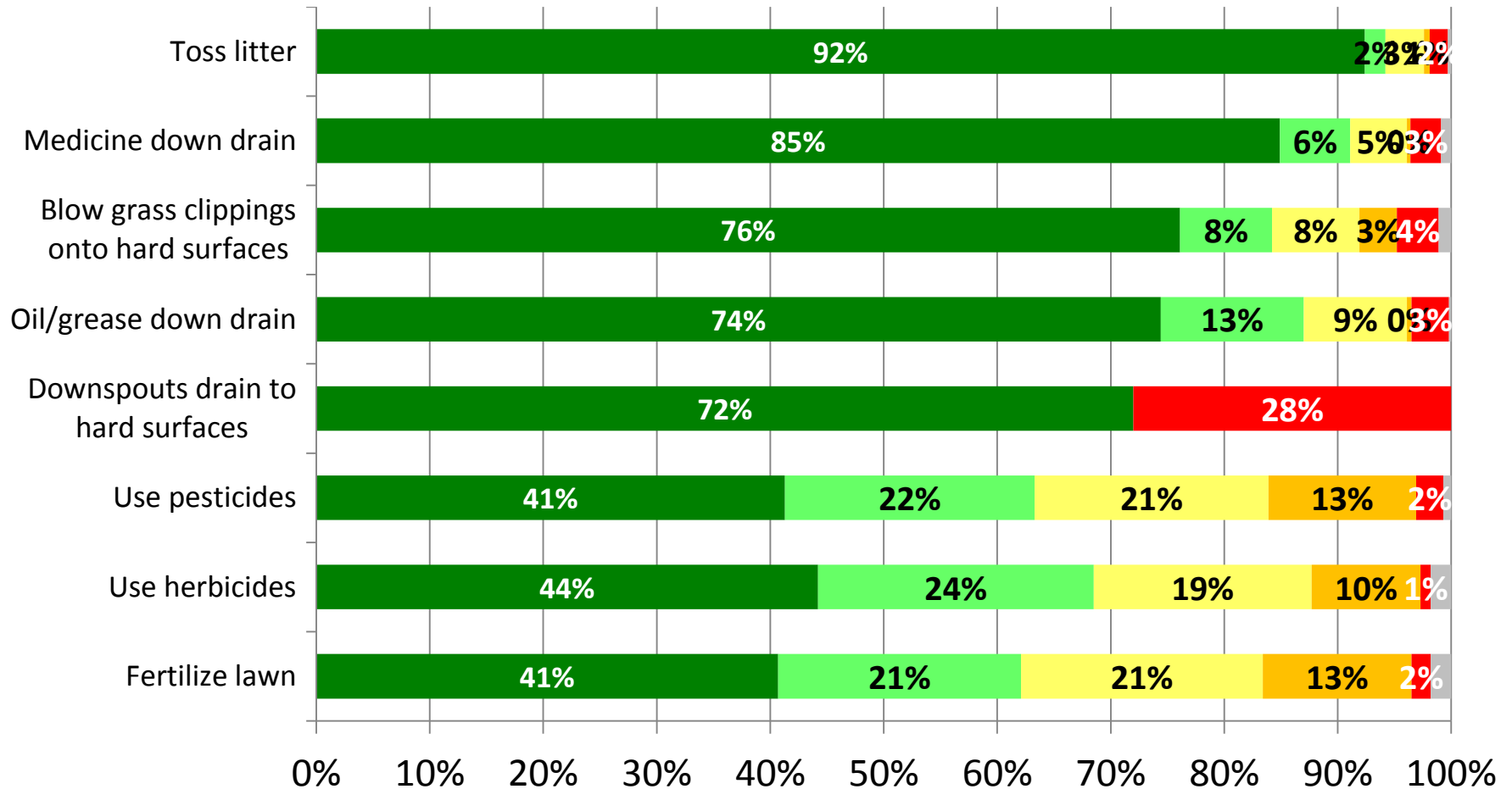
Behavior	Never/No	Seldom	Sometimes	Usually/Frequently	Always/Very Frequently/Yes
Toss litter	92%	2%	3%	1%	2%
Medicine down drain	85%	6%	5%	0%	3%
Blow grass clippings onto hard surfaces	76%	8%	8%	3%	4%
Oil/grease down drain	74%	13%	9%	0%	3%
Downspouts drain to hard surfaces	72%				28%
Use pesticides	41%	22%	21%	13%	2%
Use herbicides	44%	24%	19%	10%	1%
Fertilize lawn	41%	21%	21%	13%	2%

Citizen Stewardship Indicator: Anne Arundel Data

Focus Behavior: Picking up Dog Waste

Legend: ■ Always ■ Usually ■ Sometimes ■ Seldom ■ Never ■ Not sure

On your own property: 65% (Always), 11% (Usually), 6% (Sometimes), 4% (Seldom), 14% (Never)

Off your property: 51% (Always), 5% (Usually), 5% (Sometimes), 4% (Seldom), 34% (Never)

For each of the following things, please tell me if you never, seldom, sometimes, usually, or always do it.
Pick up your dog's waste and dispose of it in the trash when you are…
…On your own property.
…Off your property.

Citizen Stewardship Indicator: 2017 Final Baywide Data

Focus Behavior: Picking up Dog Waste

Legend: ■ Always ■ Usually ■ Sometimes ■ Seldom ■ Never ■ Not sure

State	Always	Usually	Sometimes	Seldom	Never
DC	75%	7%	7%	2%	8%
Maryland	62%	12%	5%	4%	16%
Pennsylvania	58%	6%	7%	4%	24%
Baltimore City/County	57%	8%	4%	3%	26%
Virginia	54%	8%	7%	6%	25%
Delaware	53%	7%	8%	3%	29%
New York	50%	9%	6%	2%	33%
West Virginia	35%	7%	6%	6%	46%

X-axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

For each of the following things, please tell me if you never, seldom, sometimes, usually, or always do it.
Pick up your dog's waste and dispose of it in the trash when you are…
…On your own property.

Citizen Stewardship Indicator
Picking up Dog Waste (Aggregated On & Off Property)

■ Always   ■ Usually   ■ Sometimes   ■ Seldom   ■ Never   ■ Not sure

Anne Arundel County Data

28% Not Performing Behavior

| 58% | 8% | 6% | 4% | 24% |

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Likelihood among Non-Performers:

■ Very likely   ■ Somewhat Likely   ■ Not likely   ■ Not sure

| 17% | 14% | 67% |

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
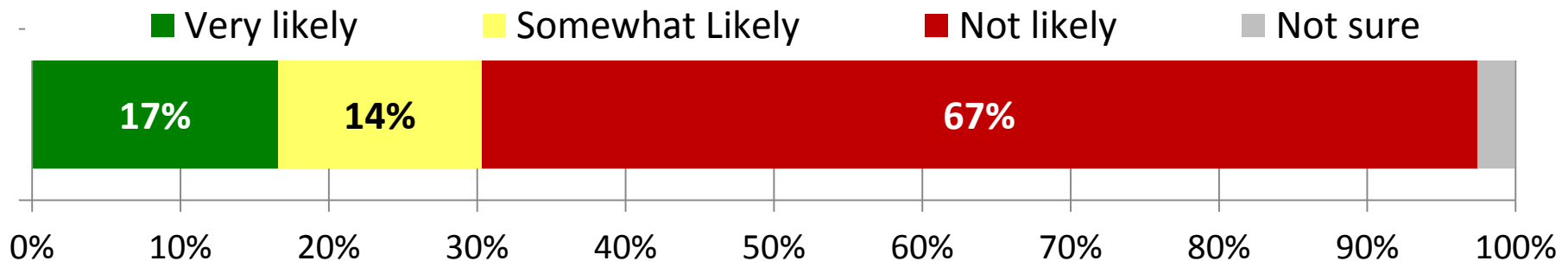
(Asked of those with a dog):
"For the next few things, please tell me if you never, seldom, sometimes, frequently, or very frequently do it.…Pick up your dog's waste and dispose of it in the trash when you are…on your own property/off your property."

(If seldom or never): "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?
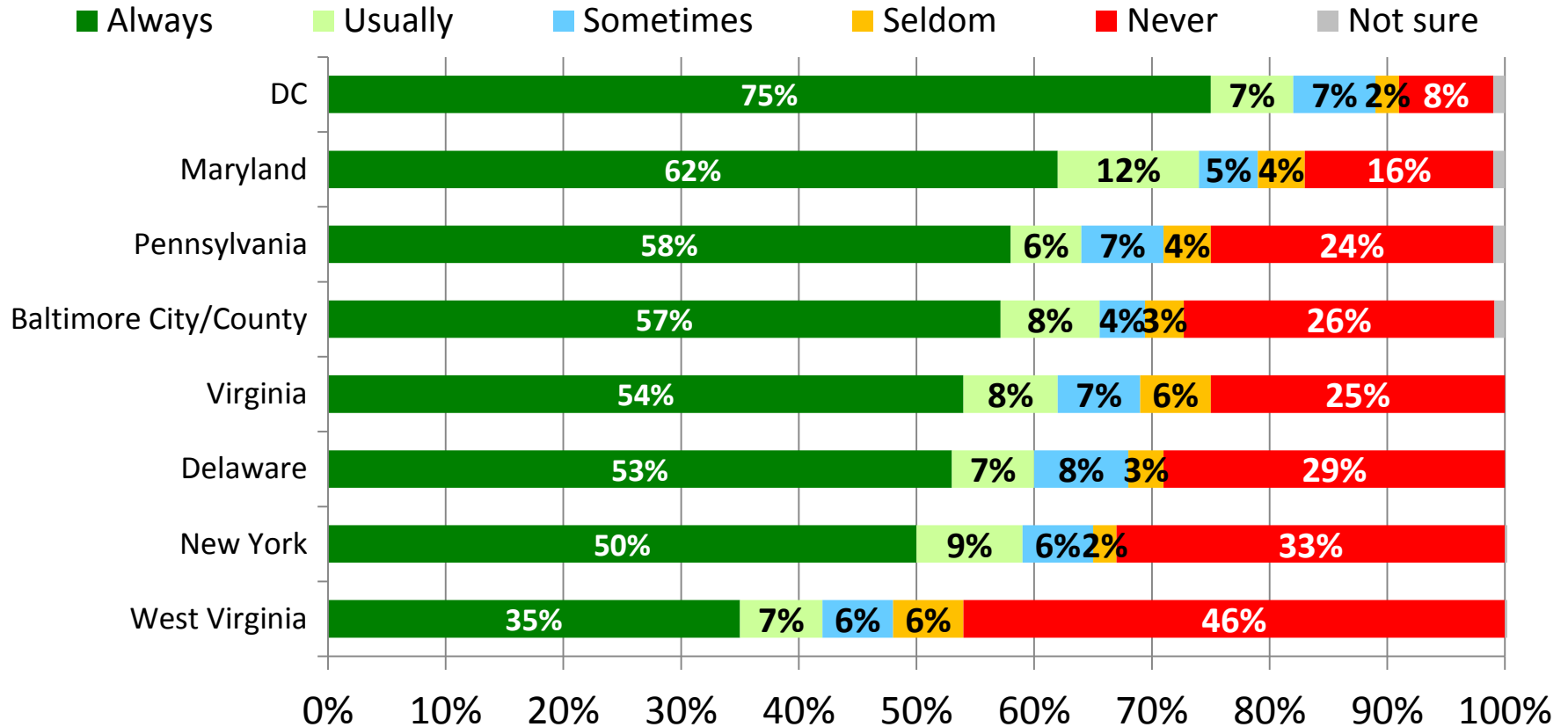…Pick up your dog's waste and dispose of it in the trash while you are…on your own property/off your property."

Citizen Stewardship Indicator: 2017 Final Baywide Data

Focus Behavior: Picking up Dog Waste
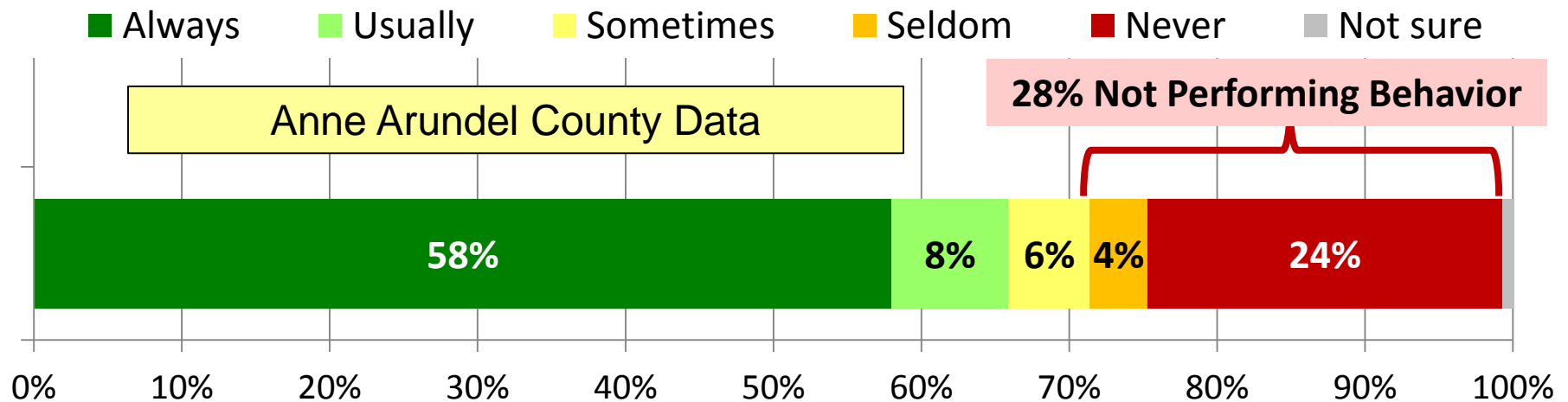### *"Very Likely" to Begin Picking Up*
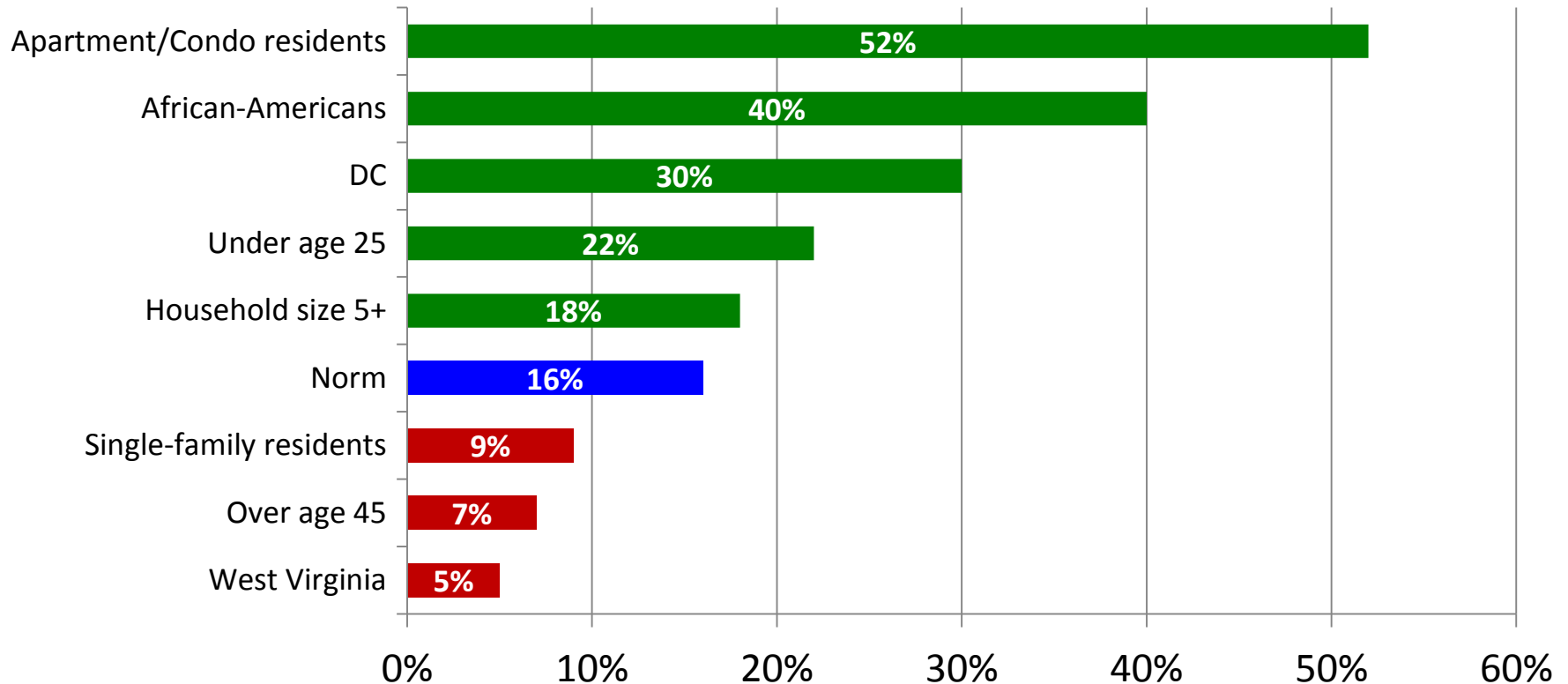
Category	Percentage
Apartment/Condo residents	52%
African-Americans	40%
DC	30%
Under age 25	22%
Household size 5+	18%
Norm	16%
Single-family residents	9%
Over age 45	7%
West Virginia	5%

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?
Pick up your dog's waste and dispose of it in the trash when you are…
…On your own property.

Segmentation Opportunities

- **Jurisdiction**

- **Age**

- **Educational attainment**

- **Health status (self-assessed)**

- **Household size, presence of children**

- **Home ownership**

- **Housing type**

- **Community size**

- **Agriculture**

- **Religious affiliation, worship frequency**

- **Race/ethnicity**

- **Household income**

- **Gender**

Citizen Stewardship Indicator: 2017 Final Baywide Data

Behaviors More Susceptible to Change
Asked Only of Those Not Taking the Desired Action Today

Behavior	Value
Toss food wrappers/cups/cigarette butts	59.70
Wash oil/grease down the drain	51.25
Blow grass clippings onto hard surfaces	46.25
Empty your rain barrel between storms	45.30
Wash medicines down the drain	44.35
Use herbicides	36.40
Have your septic inspected/pumped	35.90
Use pesticides	34.30
Pick up other people's litter	34.25

	Very	Somewhat	Not
	100	50	0
	0	50	100

Axis: 0 10 20 30 40 50 60 70 80

Looking forward over the next year or so, how likely are you to do each of these things using the scale (rotate high to low/low to high): [very likely, somewhat likely, (or) not likely]?

Citizen Stewardship Indicator: 2017 Final Baywide Data

Behaviors Less Susceptible to Change
Asked Only of Those Not Taking the Desired Action Today
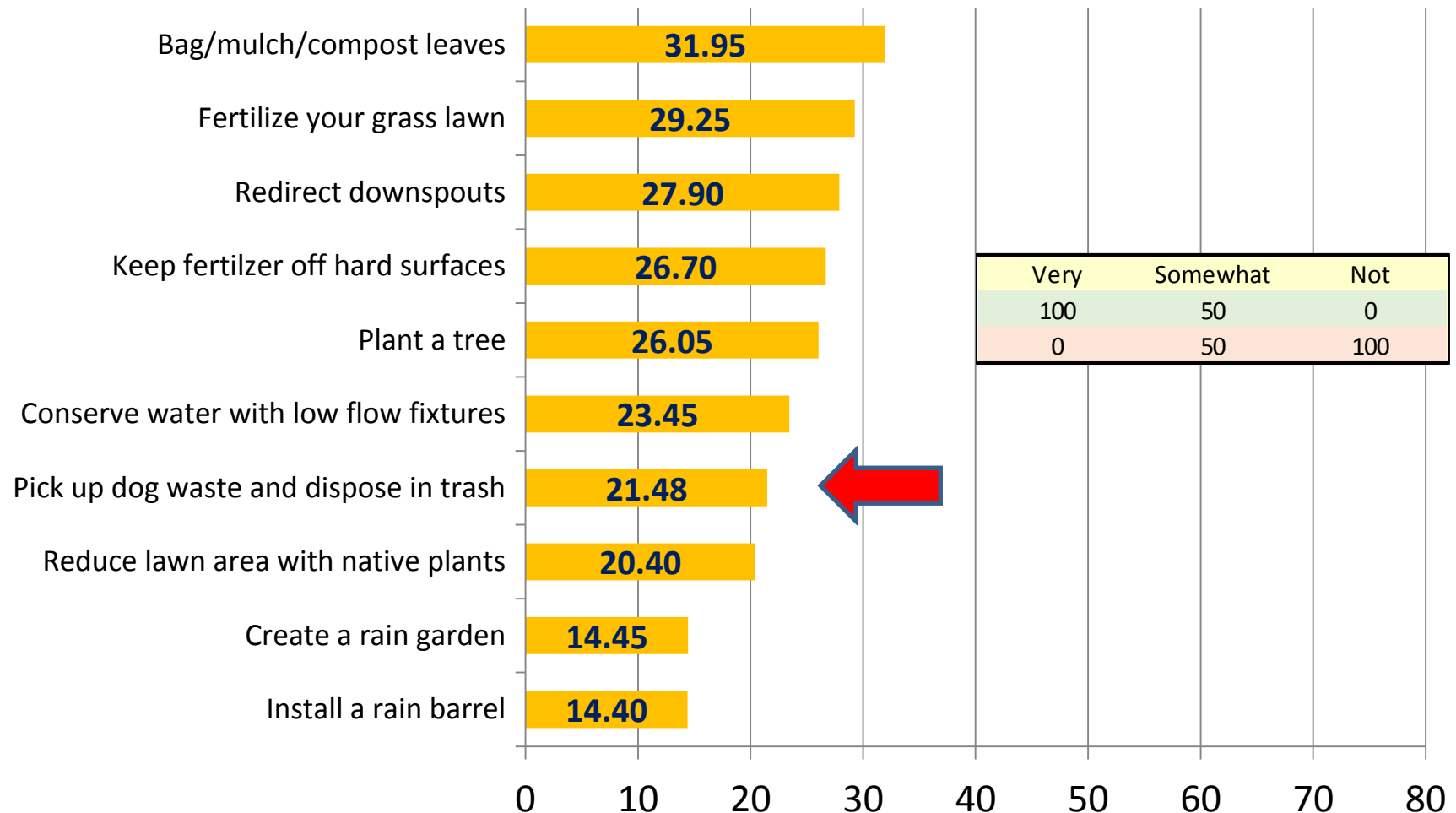
Behavior	Value
Bag/mulch/compost leaves	31.95
Fertilize your grass lawn	29.25
Redirect downspouts	27.90
Keep fertilzer off hard surfaces	26.70
Plant a tree	26.05
Conserve water with low flow fixtures	23.45
Pick up dog waste and dispose in trash	21.48
Reduce lawn area with native plants	20.40
Create a rain garden	14.45
Install a rain barrel	14.40

	Very	Somewhat	Not
	100	50	0
	0	50	100

Chart axis: 0 10 20 30 40 50 60 70 80

Looking forward over the next year or so, how likely are you to do each of these things using the scale (rotate high to low/low to high): [very likely, somewhat likely, (or) not likely]?

Citizen Stewardship Indicator: Anne Arundel County

Behaviors Susceptible to Change
Asked Only of Those Not Taking the Desired Action Today

Behavior	Value
Toss food wrappers/cups/cigarette butts	58.25
Wash oil/grease down the drain	45.60
Blow grass clippings onto hard surfaces	44.85
Empty your rain barrel between storms	38.35
Wash medicines down the drain	50.55
Use herbicides	32.90
Have your septic inspected/pumped	55.15
Use pesticides	29.00
Pick up other people's litter	33.95

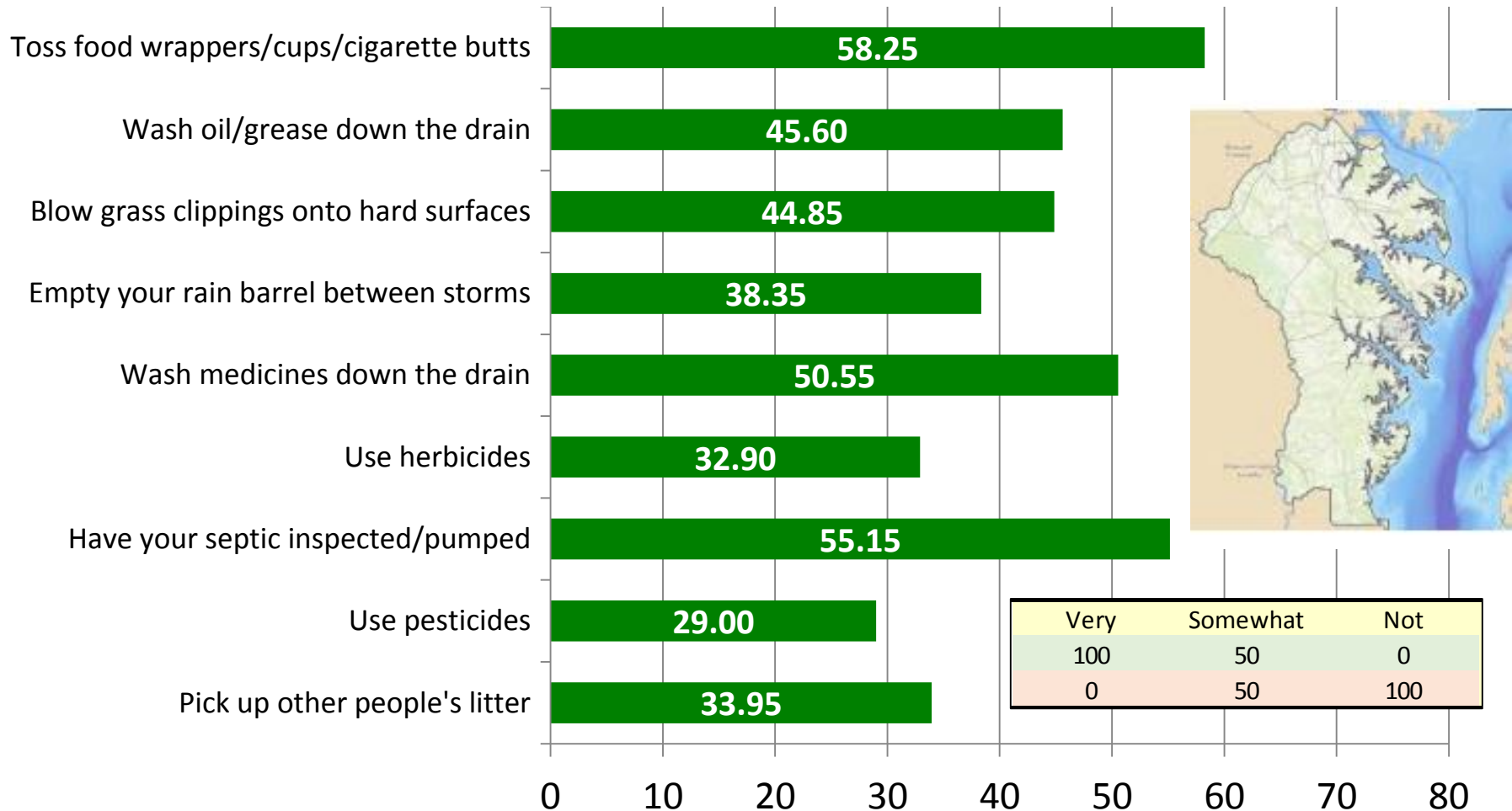| Very	Somewhat	Not
100	50	0
0	50	100

X-axis: 0 10 20 30 40 50 60 70 80

Looking forward over the next year or so, how likely are you to do each of these things using the scale (rotate high to low/low to high): [very likely, somewhat likely, (or) not likely]?

Citizen Stewardship Indicator: 2017 Final Baywide Data

	Adoption	Non-Adoption	Likelihood	Product
Lawn fertilizer off hard surfaces	33.1%	0.669	26.70	17.86
Plant a tree	39.9%	0.601	26.05	15.66
Replace an area of grass lawn with natives	25.9%	0.741	20.40	15.12
Empty rain barrel between rainstorms	69.2%	0.308	45.30	13.95
Use herbicide	63.8%	0.362	36.40	13.18
Create a rain garden	13.2%	0.868	14.45	12.54
Install a rain barrel	14.2%	0.858	14.40	12.36
Bag, mulch, or compost leaves	62.9%	0.371	31.95	11.85
Install low flow fixtures	53.4%	0.466	23.45	10.93
Fertilize a grass lawn	62.8%	0.372	29.25	10.88
Use pesticides	68.9%	0.311	34.30	10.67
Septic system inspected	71.7%	0.283	35.90	10.16
Blow grass clippings onto hard surfaces	79.6%	0.204	46.25	9.44
Downspouts directed to hard surfaces.	69.6%	0.304	27.90	8.48
Oil or grease down the drain	84.4%	0.156	51.25	8.00
Pick up dog waste	63.0%	0.370	21.48	7.95
Pick up other people's litter	79.0%	0.210	34.25	7.19
Medicine down the drain	92.5%	0.075	44.35	3.33
Toss litter on the ground	94.7%	0.053	59.70	3.16

Adoption = Percentage of the population performing a positive behavior
(at least sometimes) or not performing a negative behavior (seldom or never)

What Have We Learned?