



# Citizen Stewardship

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*Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...*



## Goal: *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.

# **Our Chesapeake Bay**

**64,000 square miles**

**6 states + DC**

**1,800 local governments**

**18 million people**

**150,000 move into the Bay watershed per  
year**



## How You Can Help



- **Make social science a priority.**
- **Invest** in consistent and useful data collection.
- **Provide leadership** to utilize social science frameworks and stewardship data to better design public engagement, education and behavior change programs.

## What does it look like for CBP to make “Social Science a Priority”?

1. Model social science integration within the partnership
  - a. Appoint lead on social science integration
  - b. Assess existing partnership structure/function
  - c. Dedicate time for training for staff
2. Serve as a capacity builder for social science integration
  - a. Train the trainers within workgroups
  - b. Support technical assistance
  - c. Accelerate collaboration locally and regionally
3. Function as a catalyst for social science frameworks
  - a. Ex. Health impact assessments (HIAs), Community Based Participatory Research (CBPR)



# Learn

*What have we learned in the last two years?*





## Successes and Challenges

- Many challenges in developing and sustaining effective stewardship.
- Workgroup has strategically focused on behavior change approaches to building stewardship.
- Additional stewardship efforts need to be elevated but workgroup capacity challenges exist.



## **What is our Expected and Actual Progress?**

1. Currently have stewardship behavior data collected in 2017 on 21 behaviors – no trend data available yet

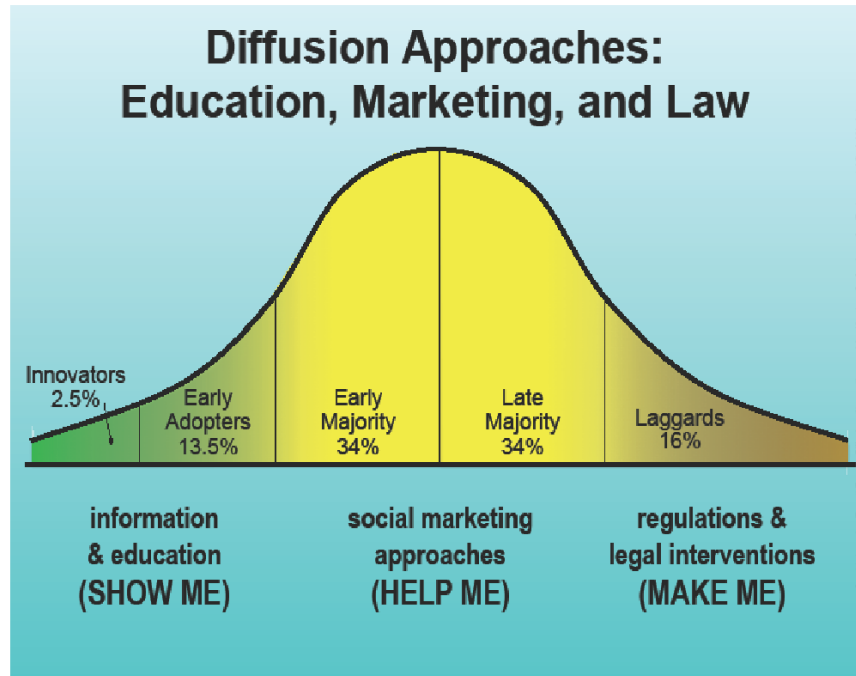


## Stewardship Behaviors

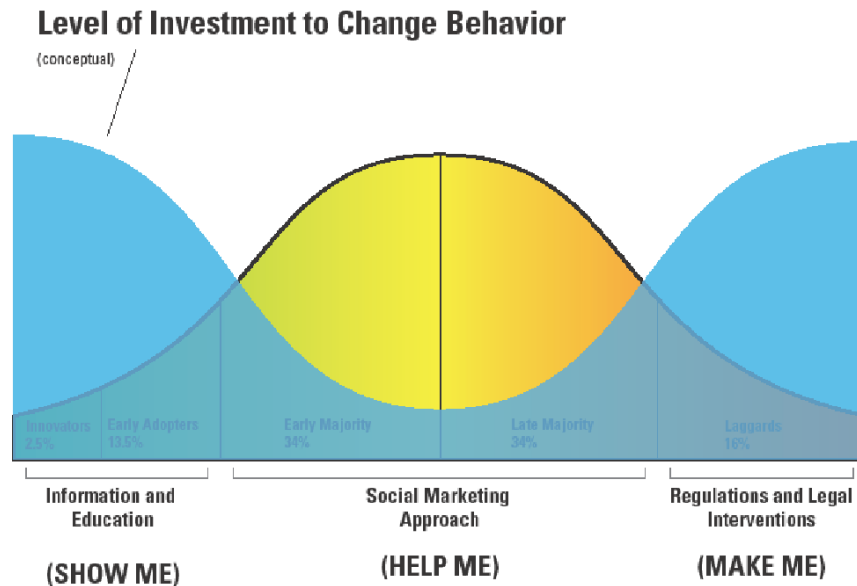
### Data on current adoption and willingness to adopt in the future for:

- 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

## How do we affect change on these Stewardship behaviors?



# How do we affect change on these Stewardship behaviors?





## What is our Expected and Actual Progress?

1. Currently have stewardship behavior data collected on 21 behaviors in 2017 –no trend available yet
2. Progress in developing website that will share stewardship behavior data with practitioners



## Choose a Target Location ▾

## Explore Map



## Explore States and Regions

Delaware	+
Maryland	+
New York	+
Pennsylvania	+
Virginia	+
Washington, DC	+
West Virginia	+

## Filter by Demographic

Age ▸

Education ▸

Children in the Household ▸

Home Ownership ▸

Housing Type ▸

Community Type ▸

Family Involved in Agriculture ▸

Religious Affiliation ▸

Race or Ethnicity ▸

Income ▸

[Home](#) > [Explore the Data](#)

## Explore the Data

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem

## SURVEY

Strength of Data ⓘ  
**99**

[Download Methodology](#)

Current Sample  
**5,212**  
PARTICIPANTS

[Download This Data](#)

Bay-wide Sample  
**5,212**  
PARTICIPANTS

[Download All Data](#)

## CURRENT LOCATION

## Chesapeake Bay Watershed

The Chesapeake Bay Watershed consists of...Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. vero eos et accusam et justo duo dolores et ea rebum.

[View Demographics](#) ▾

## BEHAVIORS

## All Behaviors

Explainer text here...Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum.

Select Behavior Type:  Sort by: 

YARD	Replaced an area of grass lawn with native low-maintenance plants.	HIGH IMPACT	89 SCORE	<a href="#">View Behavior Data</a>
YARD	Created a rain garden, or an area specifically designed to capture and	HIGH IMPACT	89 SCORE	<a href="#">View Behavior Data</a>
SEPTIC	Had your septic system inspected or pumped out.	HIGH IMPACT	89 SCORE	<a href="#">View Behavior Data</a>
YARD	Planted a tree.	HIGH IMPACT	89 SCORE	<a href="#">View Behavior Data</a>

**How can the Stewardship  
Indicator data amplify our  
behavior change efforts?**

Identify the right behaviors

Select the right audience

## Behavior Selection

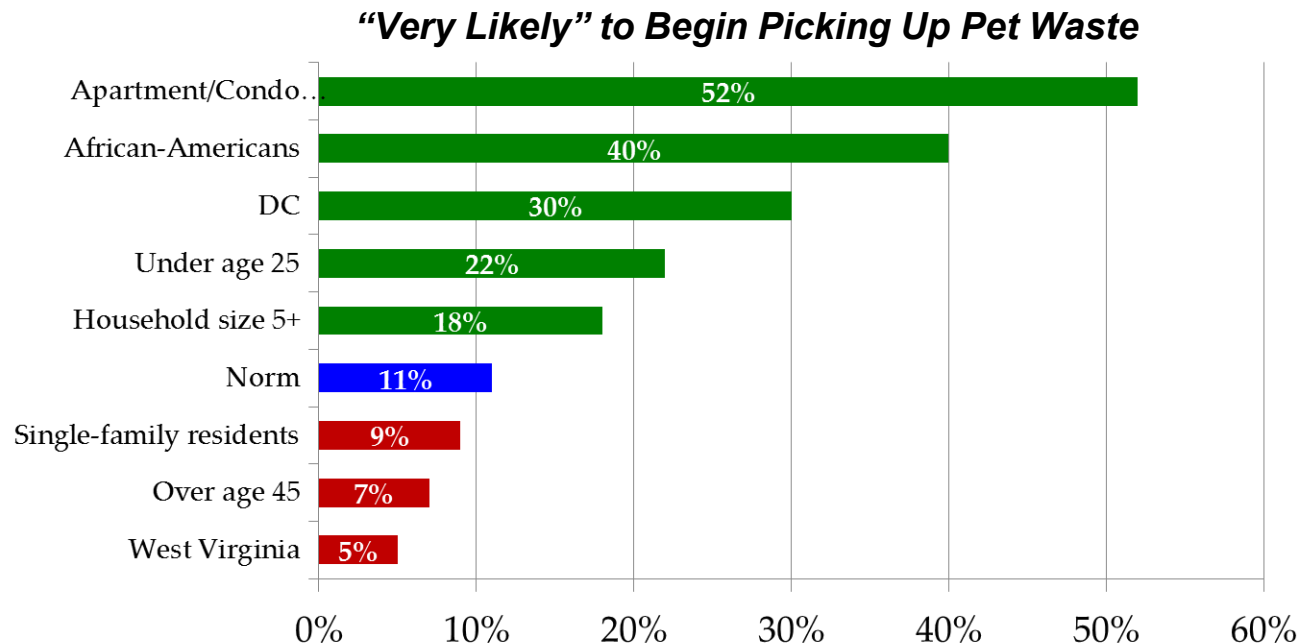
- **Impact:** How much will this contribute to improving water quality?
- **Opportunity:** How many in the community are *not* doing this?
- **Likelihood:** How willing/likely is your target audience to do it?



## Select the right audience

- **SIZE:** As a segment of a population, what is the actual or relative size of this segment?
- **Opportunity:** How significant is the contribution that this audience makes to the behavior? (i.e. are homeowners with small waterfront lawns making a larger or smaller impact than homeowners with large lawns far from the waterfront? )
- **Likelihood (READINESS TO ACT):** How concerned is the target audience with the problem issue/behavior? How likely are they to take action on this behavior?

## Citizen Stewardship Indicator: 2017 Final Baywide Data



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.



## What is our Expected and Actual Progress?

3. Accomplishments leveraging the stewardship outcome by partners:
  - Data being utilized by Anne Arundel Watershed Stewards Academy
  - Training provided at Baywide Stormwater Partners Retreat and Chesapeake Watershed Forum
  - Partnership established between Elizabeth River Project in Virginia and with HBCU Norfolk State University
  - Chesapeake Bay Trust uses citizen stewardship goal and outcome to advance consensus around funding and justify investment in DEIJ Guide and forthcoming plan for Funders Network.



## What is our Expected and Actual Progress?

1. Currently have stewardship behavior data collected on 21 behaviors in 2017  
–no trend available yet
2. Progress in developing website that will share stewardship behavior data with practitioners
3. Accomplishments leveraging the stewardship outcome by partners
4. Increased social science relevance within the partnership!



## On the Horizon

1. Increased investment in social science from the CBP
2. Continued funding for stewardship behavior data collection
3. Environmental impact data on behaviors

$$\begin{array}{ccccccc} \text{Behavior} & = & \text{Environmental} & \times & \text{Likelihood} & \times & \text{Current Adoption /} \\ \text{Score} & & \text{Impact} & & \text{Future} & & \text{Opportunity} \\ & & & & \text{Adoption} & & \end{array}$$

1. Political atmosphere and makeup of federal, state and local partners
2. Stewardship efforts becoming normalized



# Adapt

*How does all of this impact our work?*



## **Based on what we learned, we plan to ...**

1. Develop plan for incorporating social science into partnership
1. Incorporate other components of stewardship into workgroup
1. Develop complete stewardship behavior scores that include environmental impact
1. Support more information sharing and training





# Help

*How can the Management Board  
lead the Program to adapt?*



## Help Needed

1. Make social science a priority.
1. Continue to support future data collections.
1. Utilize social science frameworks and stewardship data to better design and connect public engagement, education and behavior change programs.



# Discussion