

# Community-Based Social Marketing: Promoting Sustainable Behavior Change

Liz Ross, M.S., Colorado State University

# Agenda

- Overview of the CBSM methodology
- Description of the CBSM steps (with examples)

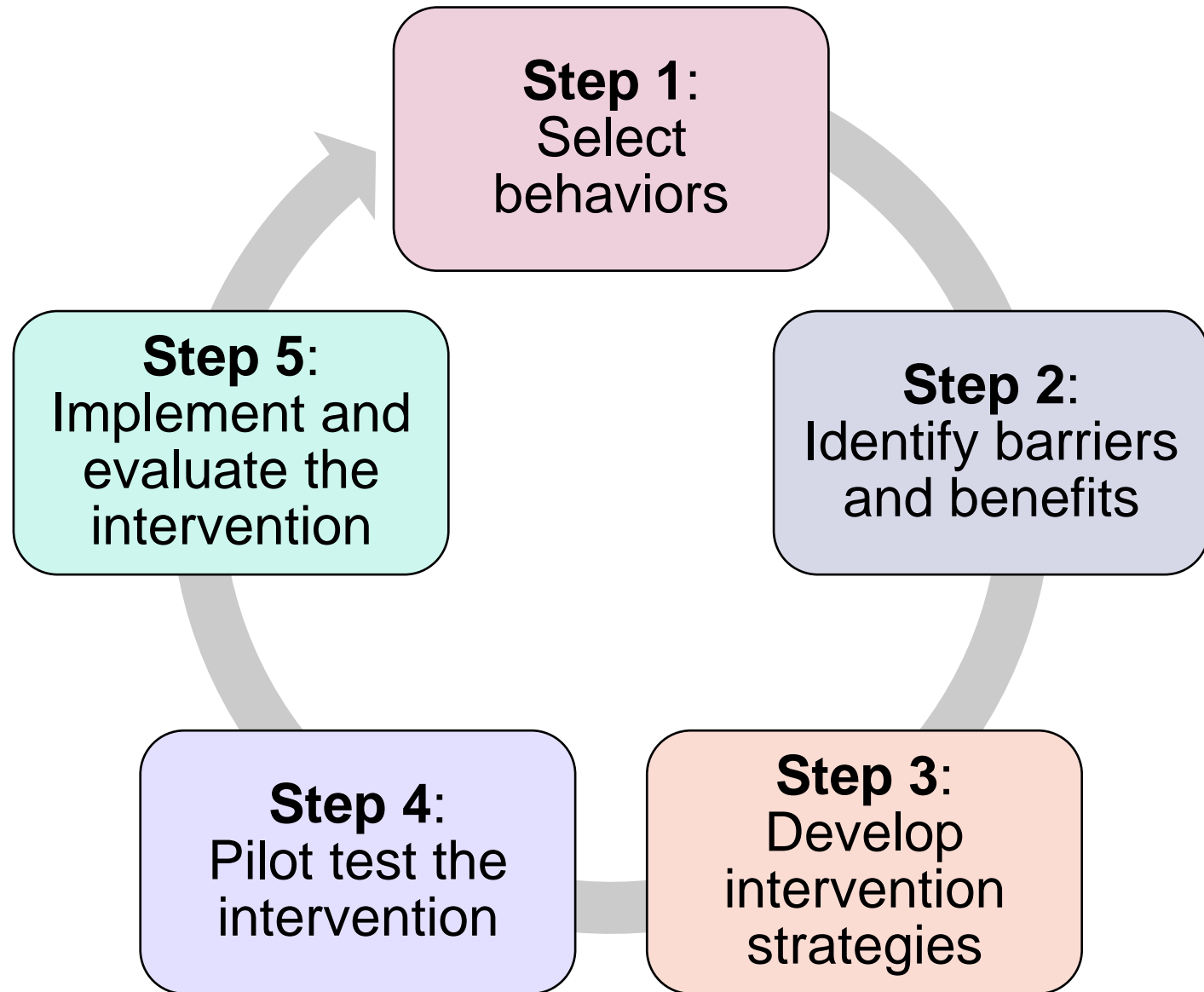
What is the CBSM  
methodology?



# Overview of CBSM

Community-based social marketing (CBSM)

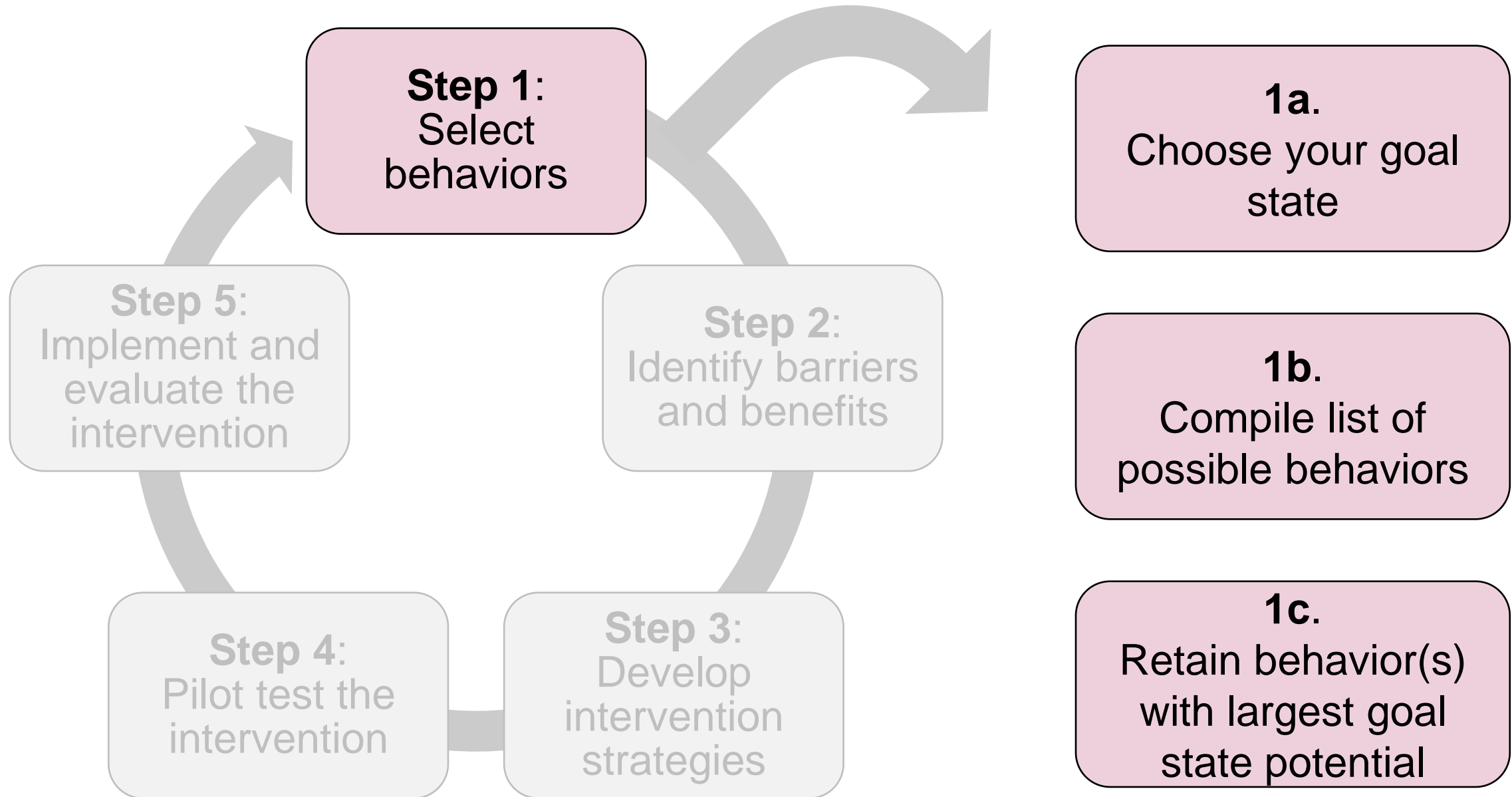
- **Promote behaviors** to achieve a specific goal with **systematic** and **audience-specific** decision-making





# Step 1: Select behaviors

# Step 1: Select Behaviors





# Step 1a: Choose a goal state

What's your goal state?

- NOT a specific behavior. Instead, think about what you want to achieve through adoption of the behavior.



Reduce emissions



Support pollinators



Divert waste from landfills



Bicycling



Gardening



Composting

# Step 1b: Compile list of possible behaviors

- Which behaviors will help achieve our goal state?
- Which behaviors make sense for our audience?
- Be sure behaviors are non-divisible and end-state



# Step 1b: Compile list of possible behaviors

- Which behaviors will help achieve our goal state?
- Which behaviors make sense for our audience?
- Be sure behaviors are **non-divisible** and end-state



Bike to work



Drive car less



Compost



Reduce food waste



Use efficient clothes dryer



Use less energy

# Step 1b: Compile list of possible behaviors

- Which behaviors will help achieve our goal state?
- Which behaviors make sense for our audience?
- Be sure behaviors are non-divisible and **end-state**



Bike to work



Rent a commuter bike



Compost



Buy a compost bin



Grow specific plants



Receive seeds

# Step 1c: Find the largest goal state potential(s)

Goal state potential = Impact x Probability x (1 – Penetration)



# Step 1c: Find the largest goal state potential(s)

$$\text{Goal state potential} = \text{Impact} \times \text{Probability} \times (1 - \text{Penetration})$$

- **Impact** = How well does each behavior help to achieve the goal state?

<u>Goal:</u>	<u>Impact</u>
<u>Supporting pollinators</u>	
Plant native plants	5
Eliminate pesticide use	4
Reduce GHG emissions	2

# Step 1c: Find the largest goal state potential(s)

$$\text{Goal state potential} = \text{Impact} \times \text{Probability} \times (1 - \text{Penetration})$$

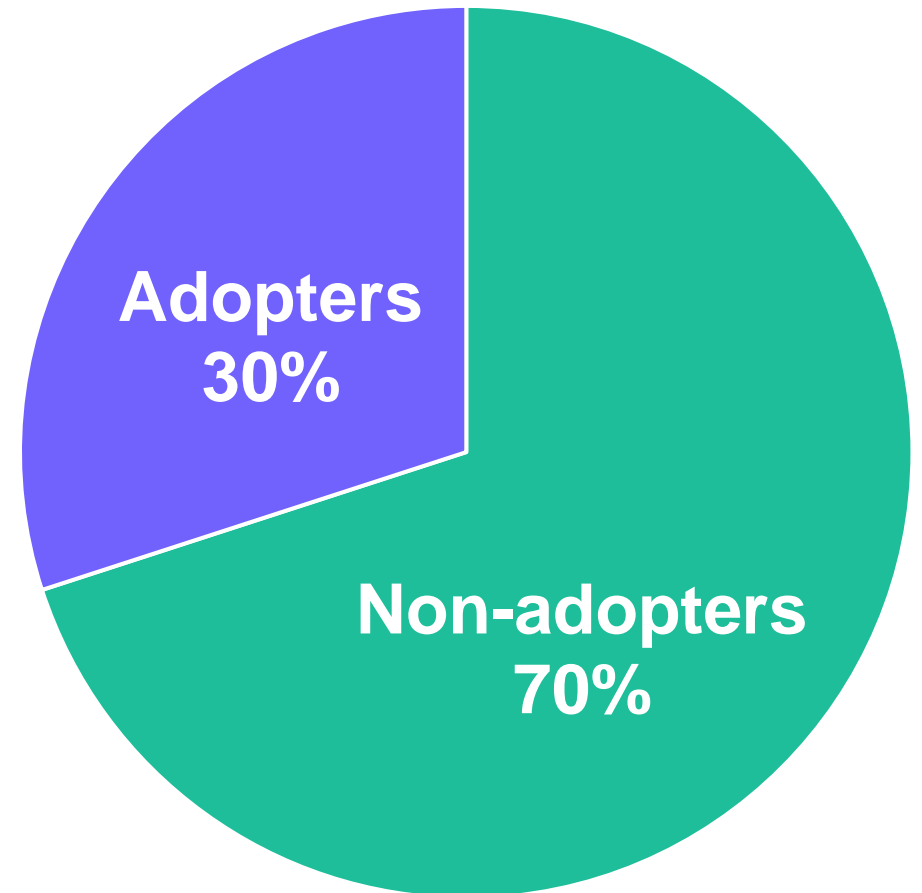
- **Probability** = What's the probability that the audience will engage in each behavior?

<u>Goal:</u> <u>Supporting pollinators</u>	<u>Impact</u>	<u>Probability</u>
Plant native plants	5	2
Eliminate pesticide use	4	3
Reduce GHG emissions	2	1

# Step 1c: Find the largest goal state potential(s)

Goal state potential = Impact x Probability x (**1 – Penetration**)

- Penetration = What proportion of the audience already engages in the behavior?
- **1 – Penetration** = What proportion of the audience *doesn't* engage in the behavior?





# Step 1c: Find the largest goal state potential(s)

$$\text{Goal state potential} = \text{Impact} \times \text{Probability} \times (1 - \text{Penetration})$$

- **1 – Penetration** = What proportion of the audience **doesn't** engage in the behavior?

<u>Goal:</u> <u>Supporting pollinators</u>	<u>Impact</u>	<u>Probability</u>	<u>1 – Penetration</u>
Plant native plants	5	2	4 (.70)
Eliminate pesticide use	4	3	4 (.70)
Reduce GHG emissions	2	1	5 (.90)

# Step 1c: Find the largest goal state potential(s)

**Goal state potential** = Impact x Probability x (1 – Penetration)

- Which behavior(s) has the largest goal state potential?

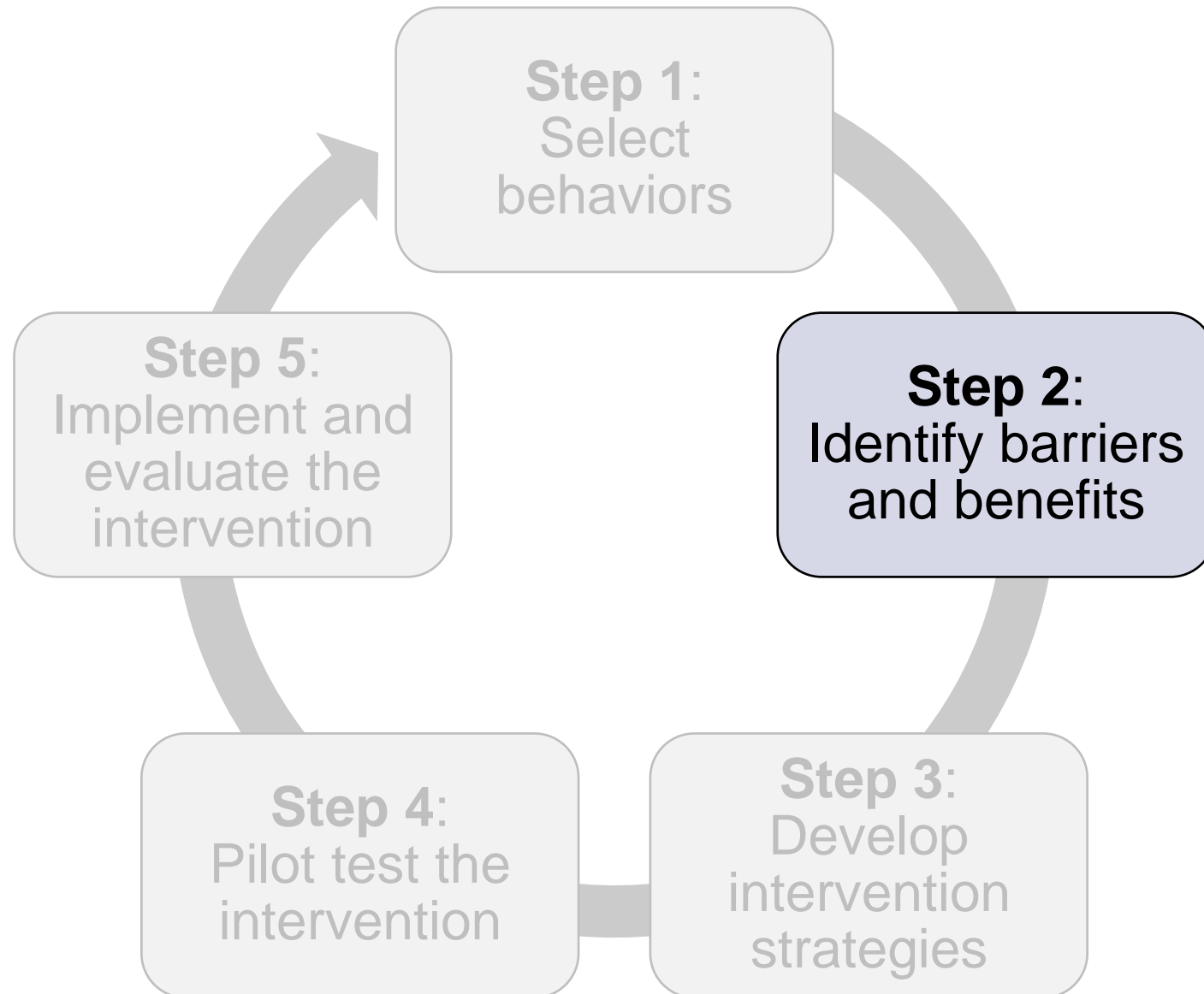
<u>Goal:</u> <u>Supporting pollinators</u>	<u>Impact</u>	X	<u>Probability</u>	X	<u>1 – Penetration</u>	=	<u>Goal state potential</u>
Plant native plants	5	X	2	X	4	=	40
Eliminate pesticide use	4	X	3	X	4	=	48
Reduce GHG emissions	2	X	1	X	5	=	10



# Step 2: Identify barriers and benefits



# Step 2: Identify Barriers and Benefits



# Step 2: Identify Barriers and Benefits

Why?

1. Informs intervention

- How can we help the audience **overcome the barriers** and **realize the benefits**?

2. It's also crucial during the behavior selection process

- Are there significant barriers that can't be addressed in the intervention?

<b>Plant native plants</b>	<b>40</b>
----------------------------	-----------

<b>Eliminate pesticide use</b>	<b>48</b>
--------------------------------	-----------

# Step 2: Identify Barriers and Benefits

Why?

1. Informs intervention

- How can we help the audience **overcome the barriers** and **realize the benefits**?

2. It's also crucial during the behavior selection process

- Are there significant barriers that can't be addressed in the intervention?

**Plant native plants**

40

**Eliminate pesticide use**

48

# Step 2: Identify Barriers and Benefits

Why?

1. Informs intervention

- How can we help the audience **overcome the barriers** and **realize the benefits**?

2. It's also crucial during the behavior selection process

- Are there significant barriers that can't be addressed in the intervention?

**Plant native plants**

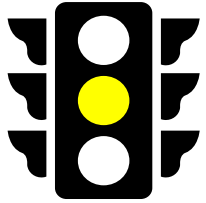
40

**Eliminate pesticide use**

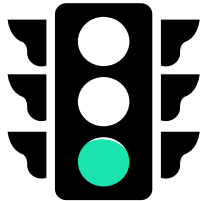
48

# Step 2: Identify Barriers and Benefits

How?



- Personal experience, “hunches”
- Interventions in other neighborhoods/with different audiences



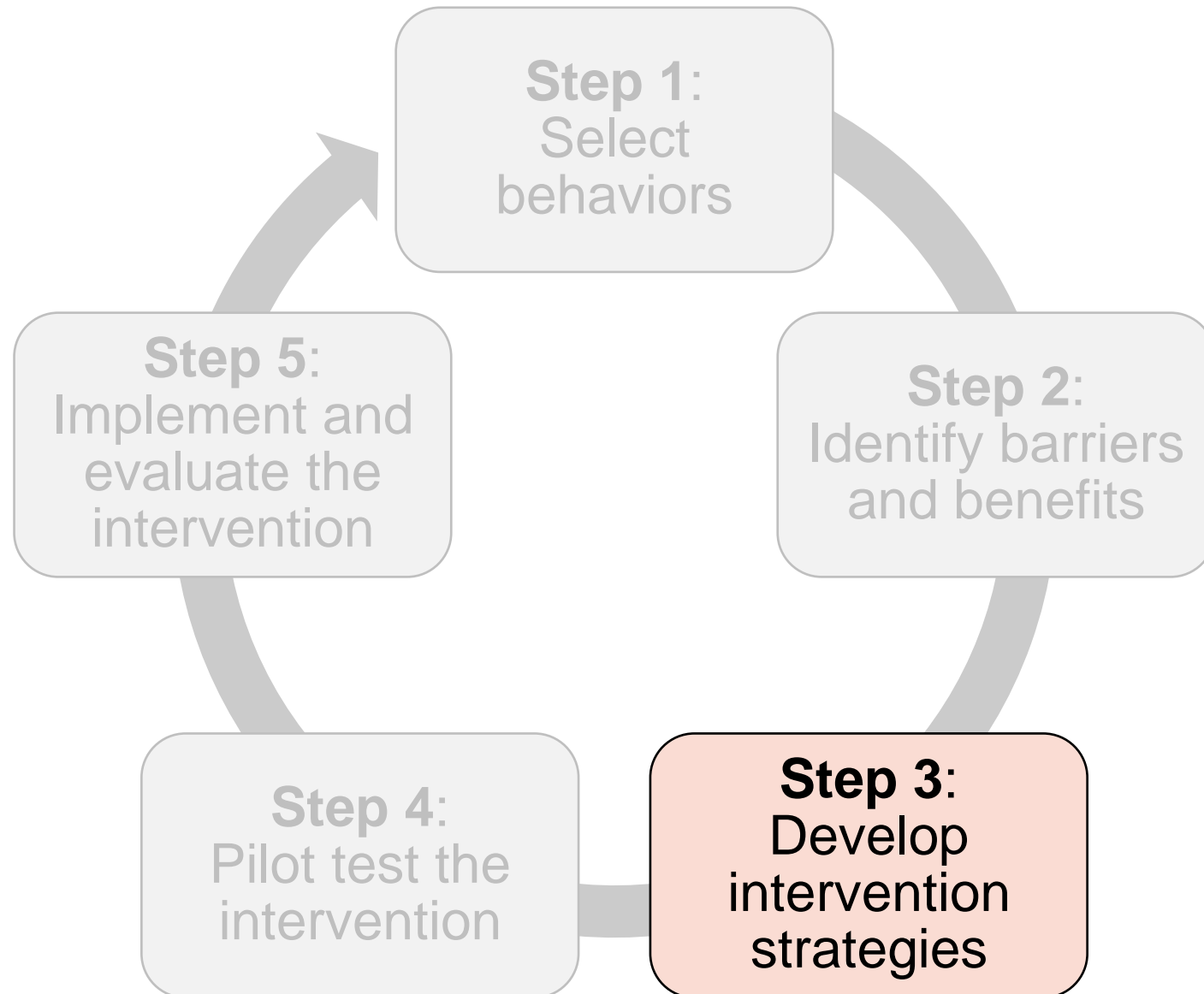
- Ask your target audience
- Observe your target audience





# Step 3: Develop intervention strategies

# Step 3: Develop Intervention Strategies



# Step 3: Develop Intervention Strategies

What should our intervention look like?

## 1. Address the barriers and benefits

- Make the sustainable behavior **more** desirable
- Make the unsustainable behavior **less** desirable

## 2. Use social science methods

- Commitments
- Social norms
- Prompts
- Feedback
- Convenience
- Social diffusion



# Step 3: Develop Intervention Strategies

## Commitments

- Individuals who commit to engaging in a behavior are more likely to follow through
  - **Written commitments** are more effective than **verbal commitments**
  - **Public commitments** are more effective than **private commitments**
- How?
  - Signed or verbal commitments in neighborhood meetings, door-to-door, over the phone, or in online forums

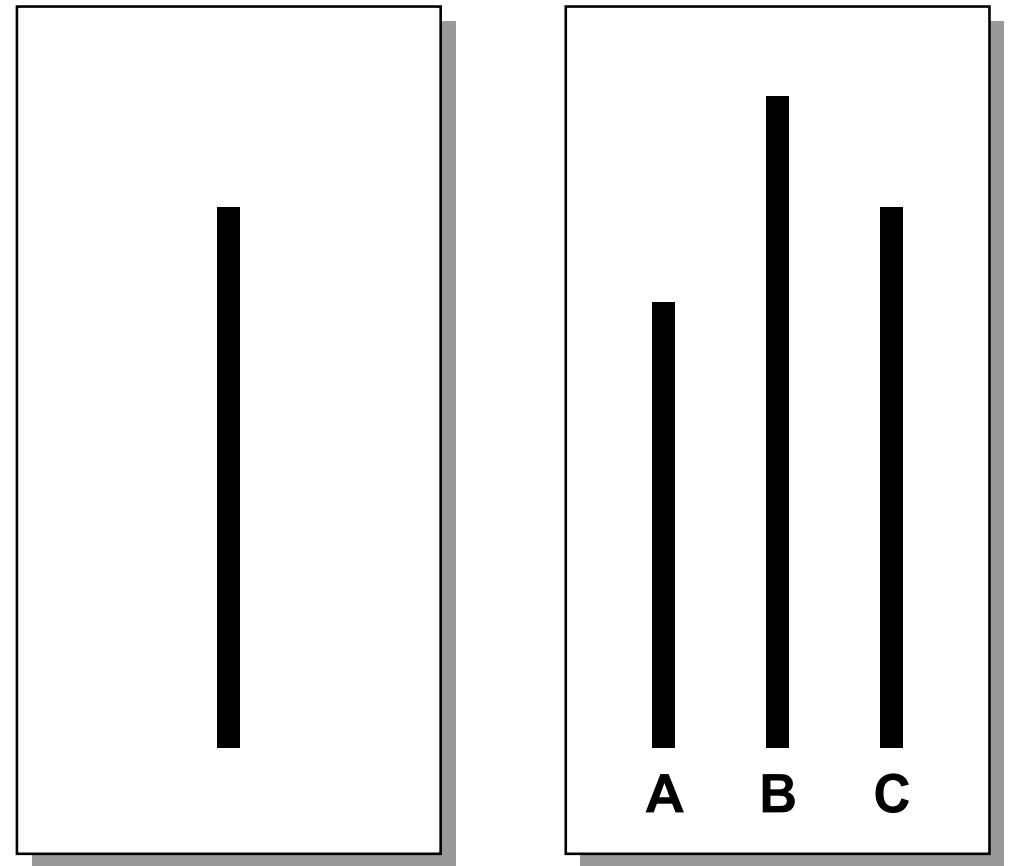
“I, [name], agree to grow only native plants in my yard.”

# Step 3: Develop Intervention Strategies

## Social norms

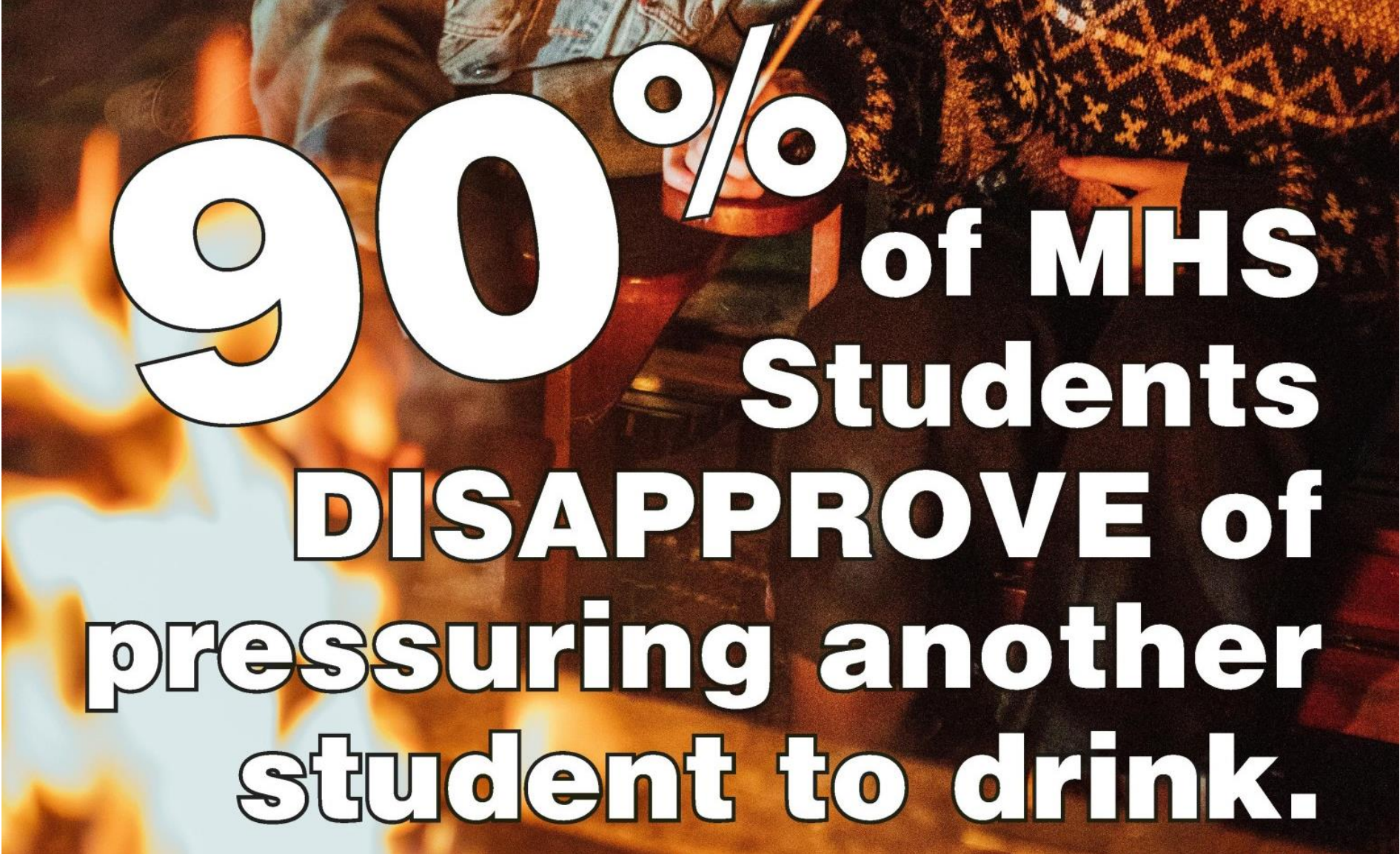
- When individuals believe that a behavior is normal and common, they are more likely to engage

Asch conformity study (1951)









**90%** of MHS  
**Students**  
**DISAPPROVE** of  
**pressuring another**  
**student to drink.**









The MSC/ASC certification contributes to sustaining marine resources

**28%**

of all customers buying  
seafood in our shop  
yesterday  
chose MSC/ASC

Richter et al., 2018

# BYO. BAG



More and more New Yorkers are carrying reusable bags.  
Join in! Remember to Bring Your Own bag when shopping.



# Step 3: Develop Intervention Strategies

## Prompts

- Help people remember to engage
- How?
  - Use decals, signs, stickers, notepads
  - Encourage a **specific** positive behavior
  - Make the reminder **noticeable** and **self-explanatory**
  - Place the reminder **near** the behavior (in space and time)



# Step 3: Develop Intervention Strategies

## Feedback

- Communicate a behavior's progress and impact
- Be specific!
  - How many native plants have been planted?
  - How many cans have been recycled?
  - How much energy has been saved?  
(And how much CO<sub>2</sub>?)

“Our neighborhood planted 25 native plants last summer!”

“This street has recycled over 500 cans this year!”

“Our complex has saved 2,400 kWh of energy this month!”

# Step 3: Develop Intervention Strategies

## Convenience

- Make the behavior as easy as possible by addressing external barriers
- How?
  - Give people as much help and social support as possible. For example:
    - Bike racks
    - Compost bins
    - List of native plants
    - LED bulbs
    - Recyclable materials decal
    - Bike-to-work events



# Step 3: Develop Intervention Strategies

## Social diffusion

- Behavior engagement spreads through **communication** and **visibility**
- Model the behavior



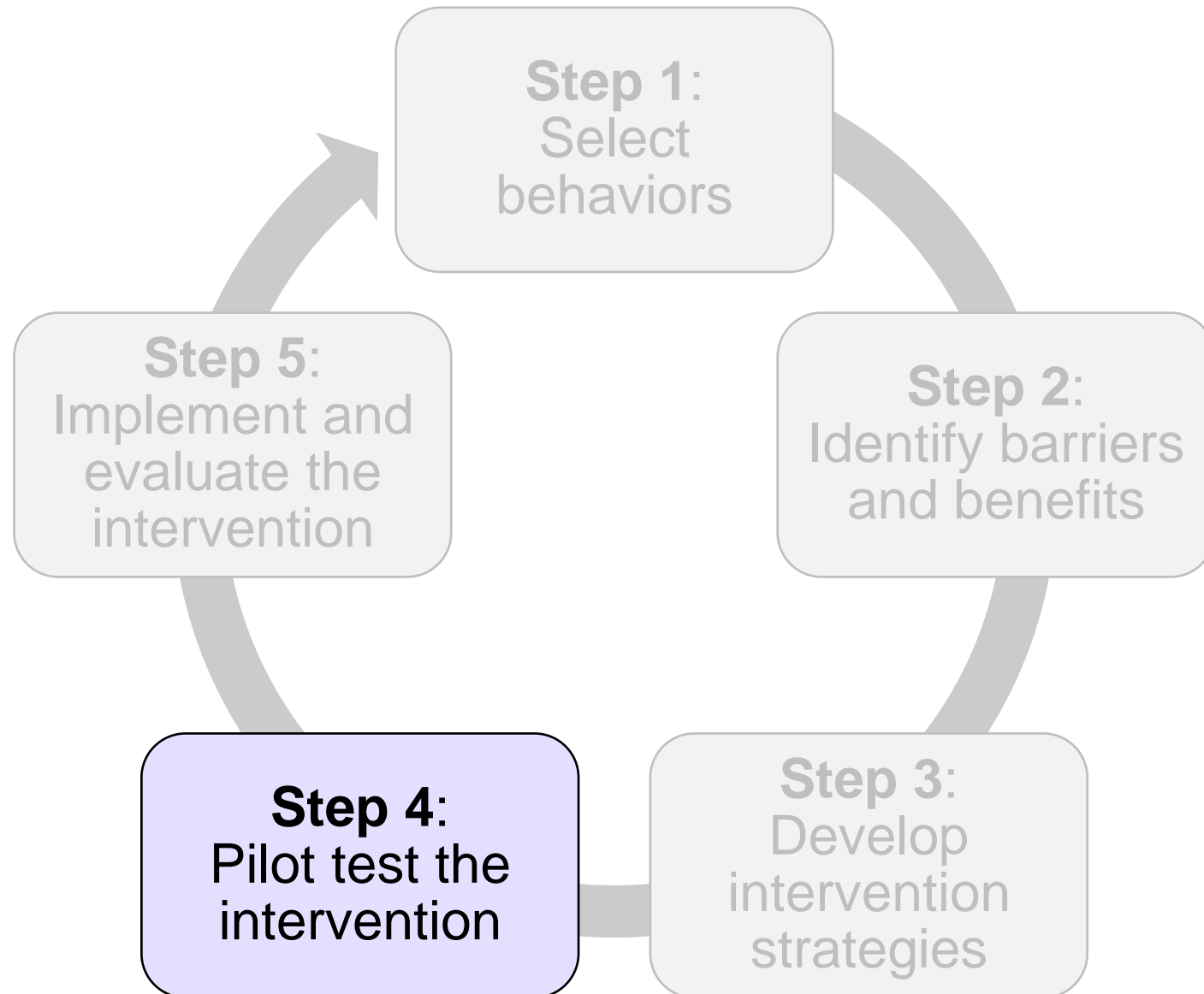




# Step 4: Pilot test the intervention



# Step 4: Pilot Test



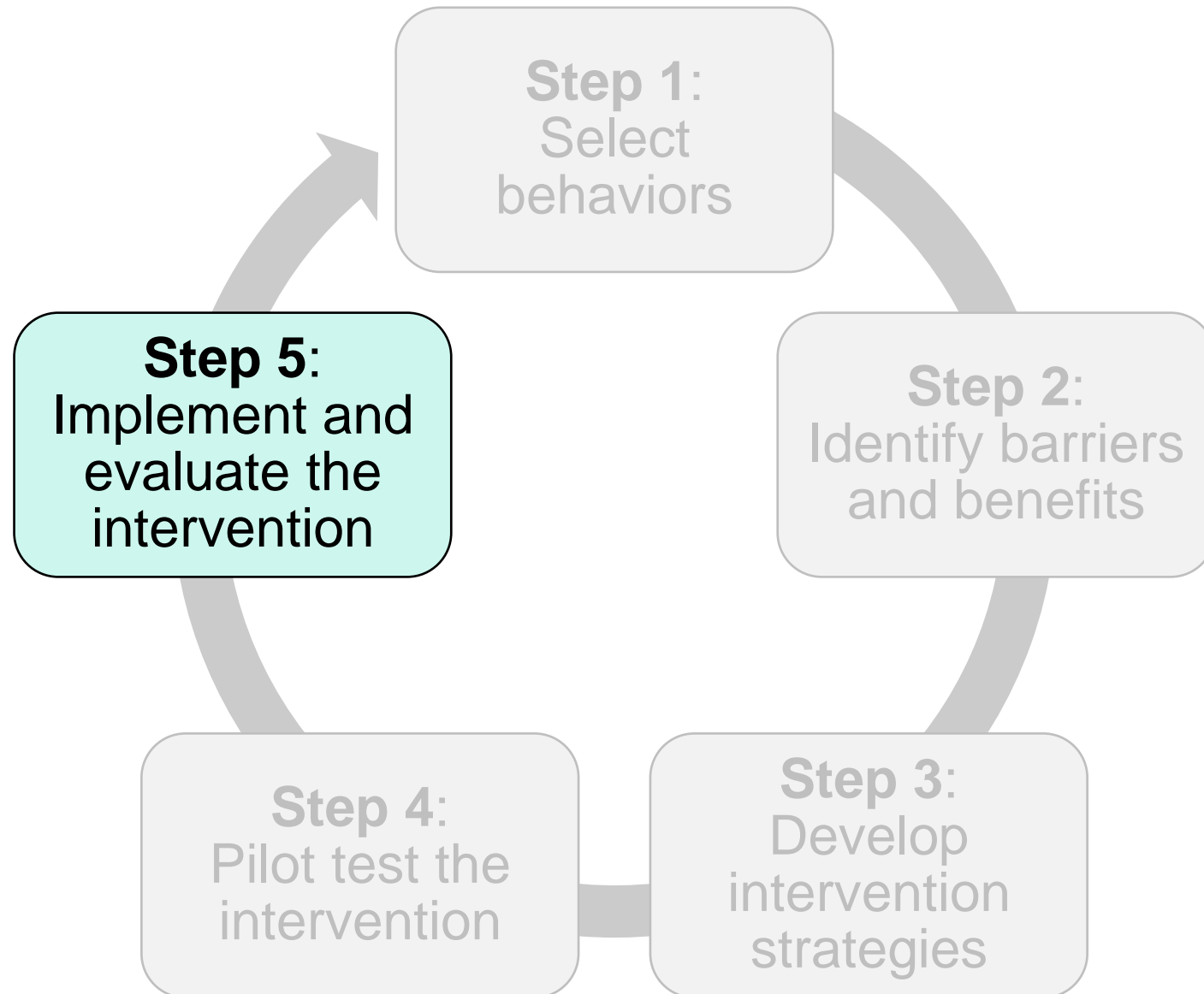
# Step 4: Pilot Test

- “Test run”
- Piloting takes time, but it will save time in the long run and will increase the impact of the intervention
- Ideally:
  - Small subset of audience, divided into two groups: intervention + control
- But at least:
  - Consistent, in-depth discussion and review of intervention

The background of the slide is a photograph of a garden. In the upper portion, there are branches of cherry blossoms with light pink flowers against a clear blue sky. The lower portion shows a gravel garden bed with various green plants and larger rocks. A dark, semi-transparent horizontal band is superimposed across the middle of the image, serving as a background for the text. In the bottom right corner, there is a thin, curved orange line and some faint, dashed white lines.

# **Step 5: Implement and evaluate the intervention**

# Step 5: Implement and Evaluate





# Real-world Example Intervention

- Goal state: Reduce residential water use
- 3 regions in Ontario, Canada: York, Durham, & Halton
- York

**What:** Information-based campaign

**How:** Gave water-efficiency brochures, rain gauges, and prompt tags to homeowners

**Result:** 1% reduction in water use

# Real-world Example Intervention

- Goal state: Reduce residential water use
- 3 regions in Ontario, Canada: York, Durham, & Halton
- **Durham**

**What:** CBSM-based campaign

**How:** College students went door-to-door  
Obtained public commitments by providing window stickers; placed prompts on outdoor faucets

**Result:** 32% reduction in water use



# Real-world Example Intervention

- Goal state: Reduce residential water use
- 3 regions in Ontario, Canada: York, Durham, & Halton
- **Halton**

**What:** CBSM-based campaign

**How:** Staff went door-to-door  
Obtained public commitments by providing window stickers; gave homeowners rain gauges




**Result:** 45% reduction in water use



# Summary

# Summary

## Choose a behavior

1. Identify your goal state
2. Compile list of behaviors that will help achieve the goal state
3. Select 2-3 behaviors with largest product of:  
 Impact       Probability       1 – Penetration
4. Identify the barriers and benefits of behavior engagement
5. Choose a behavior with manageable barriers



# Summary

## Design the intervention

6. Address the barriers

7. Use social science methods. Consider:

- Commitments
- Social norms
- Prompts
- Feedback
- Convenience
- Social diffusion

8. Pilot test to the extent possible

9. Run the intervention! (And don't forget to make notes for the future!)

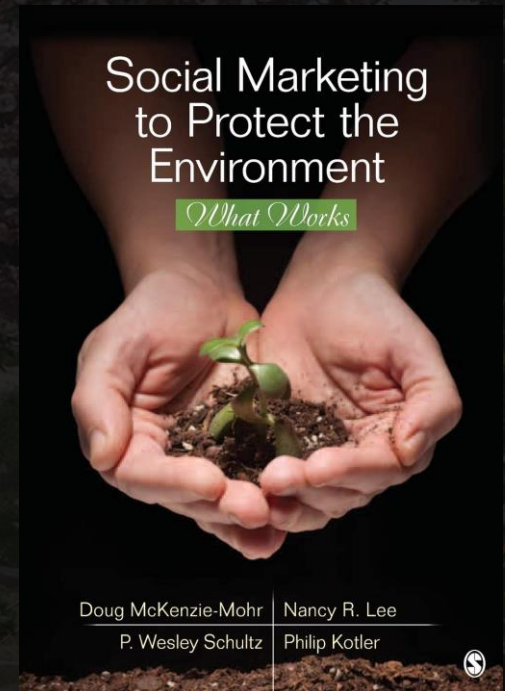
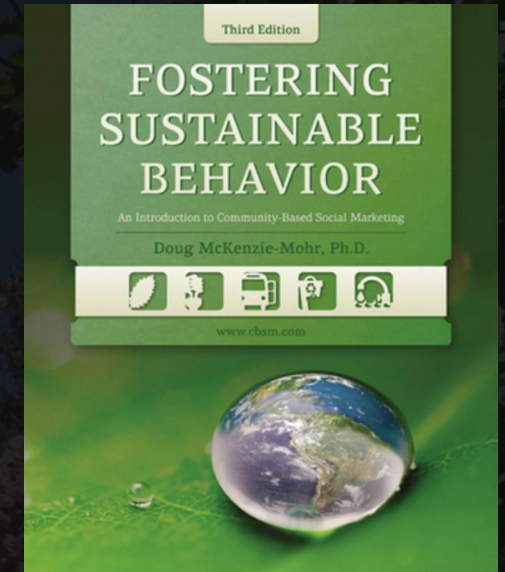
# Thank you! Questions?

Liz Ross, M.S.  
Colorado State University  
Elizabeth.Ross@colostate.edu


Fostering Sustainable  
Behavior: An Introduction to  
Community-Based Social  
Marketing, 3<sup>rd</sup> ed.  
by McKenzie-Mohr

Social Marketing to Protect  
the Environment: What Works  
by McKenzie-Mohr, Lee,  
Schultz, & Kotler

[www.cbsm.com](http://www.cbsm.com)







# Community-Based Social Marketing: Promoting Sustainable Behavior Change

Liz Ross, M.S., Colorado State University



# Step 1: Select Behaviors

## 2c. Retain behavior(s) with largest **goal state potential**

Goal state potential = **Impact** x Probability x (1 – Penetration)

- How well does each behavior help to achieve the goal state?

<u>Goal:</u> <u>Reducing emissions</u>	<u>Rating scale (1-5)</u>	<u>kg CO<sub>2</sub>-equivalent</u> <u>(per person per year)</u>
Eliminating car use	5	2,450
Plant-based diet	2	841
LED bulbs	1	170

# Step 1: Select Behaviors

## 2c. Retain behavior(s) with largest **goal state potential**

Goal state potential = Impact x **Probability** x (1 – Penetration)

- What's the probability that the audience will engage in each behavior?

<u>Goal:</u> <u>Reducing emissions</u>	<u>Impact</u>	<u>Probability</u>
Eliminating car use	5	1.8
Plant-based diet	2	2.0
LED bulbs	1	3.6

# Step 1: Select Behaviors

## 2c. Retain behavior(s) with largest **goal state potential**

Goal state potential = Impact x Probability x (**1 – Penetration**)

- **1 – Penetration** = What proportion **doesn't** engage in the behavior?

<u>Goal:</u> <u>Reducing emissions</u>	<u>Impact</u>	<u>Probability</u>	<u>1 – Penetration</u>
Eliminating car use	5	1.8	.79 (4)
Plant-based diet	2	2.0	.94 (5)
LED bulbs	1	3.6	.34 (2)