



The dumpsters in Anaktuvuk Pass are painted with slogans that reflect community values. Paxson Woelber / [CC BY SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)

Community-Based Social Marketing for Tribal Environmental Professionals





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The dump in Igiugig before and after a waste backhaul operation.
Alaska Department of Environmental Conservation

Welcome

- Community-Based Social Marketing (CBSM) Overview
- Tribal Perspectives
- Q&A



What Is Community Based Social Marketing (CBSM)?

- CBSM is a concentrated effort to **change or start a behavior** in a group of people by creating motivation and helping them to overcome specific barriers.
- A CBSM program has 5 steps:

1. Select audience and behaviors to promote.

2. Identify barriers to and benefits of behavior.

3. Design a behavior change strategy.

4. Pilot the strategy within target community.

5. Evaluate impacts of strategy.


Where does CBSM come from?

- Dr. Doug McKenzie-Mohr is the founder of CBSM, former Professor of Psychology, and author of three CBSM books.
- His work incorporates scientific knowledge into design and delivery of community programs to change behavior, specifically around sustainability and environment.
- CBSM draws from psychology research that shows efforts are most effective when they involve direct engagement with people at the community level.

www.cbsm.com



Where does CBSM come from?

- Research has shown that just using outreach (like advertisements or flyers) to encourage a change in behavior isn't enough.
-  A Dutch study showed that providing homeowners with info about energy conservation did not reduce energy use.
- Outreach is a CBSM tool! It just isn't the entire thing.
 - Outreach can create awareness and understanding.
 - Without CBSM, it rarely leads to measurable or sustained action.



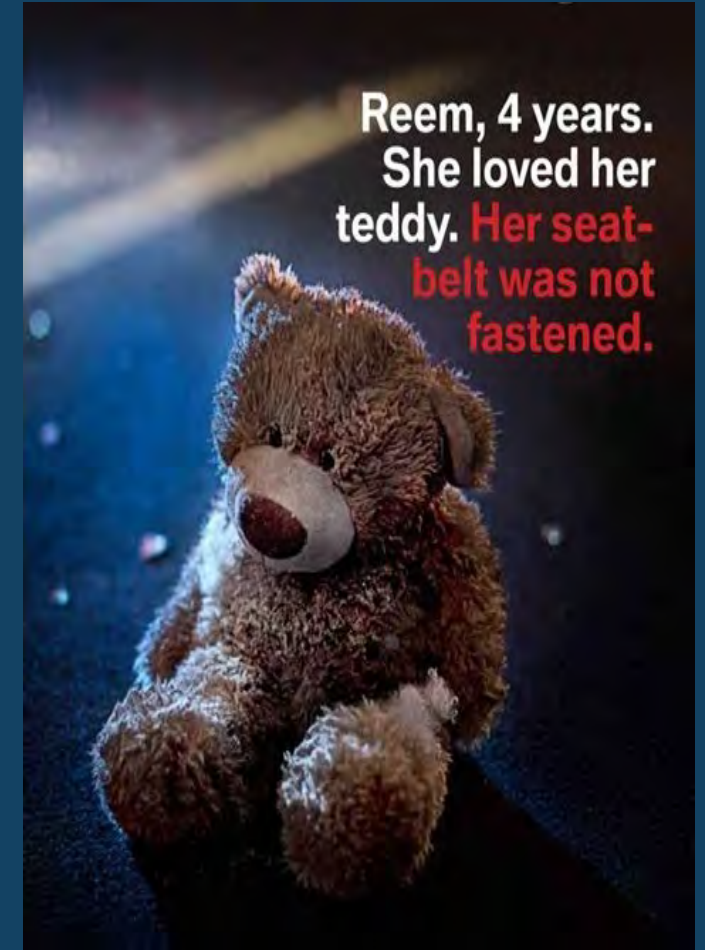
How is CBSM different than outreach and communication?

Behavior change outreach:

- Preventing forest fires
- Wearing seatbelts

What could make these CBSM:

- A focused pilot around campfire safety at one National Park
- A concentrated outreach effort in one school district to increase use of seatbelts by parents carpooling





CBSM – Campfire Safety Example – Audience, Barriers, Benefits

- **Behavior:** Do not leave a campfire or camping stove lit and unattended.
- **Audience:** Individuals and families (with kids!) staying at Campground X.
- **Barriers:**
 - **Internal:** Needing to take kids to the bathroom or gift shop; getting sleepy and just forgetting; wanting it to be easy to restart the fire later
 - **External:** Don't have a container to get water; language barrier to read instructions
- **Benefits:**
 - **Internal:** My kid will get a Smokey the Bear sticker if we comply; I won't get a fine
 - **External:** I'm protecting fellow campers; I'm protecting the environment

This will require a lot of research!



CBSM – Campfire Safety Example – Strategies and Techniques

Barriers	Example Strategy Tools
<u>Structural / External Barriers</u> – “Can’t collect the water to put the fire out”	<u>Convenience</u> – place a bucket at campsites with a reminder and instructions attached
<u>Lack of Motivation</u> – “If I leave it unattended no one will do anything”	<u>Incentives</u> – implement a fine, OR a reward – if a ranger sees a responsible family, they can give the kids a Smokey the Bear badge
<u>Forget to Act</u> – “I got sleepy and just forgot to put it out”	<u>Prompts</u> – place a sticker on the mirror of the campground bathroom they may see at night
<u>Lack of Social Pressure</u> – “No one else here cares”	<u>Commitments, Social Norms</u> – have families sign a pledge to be fire safe when they check in and leave a certificate on the dashboards of their car
<u>Lack of Knowledge</u> – “I didn’t know there were fires around here”	<u>Communication</u> – put notices on bulletin boards and a sign when entering the campground



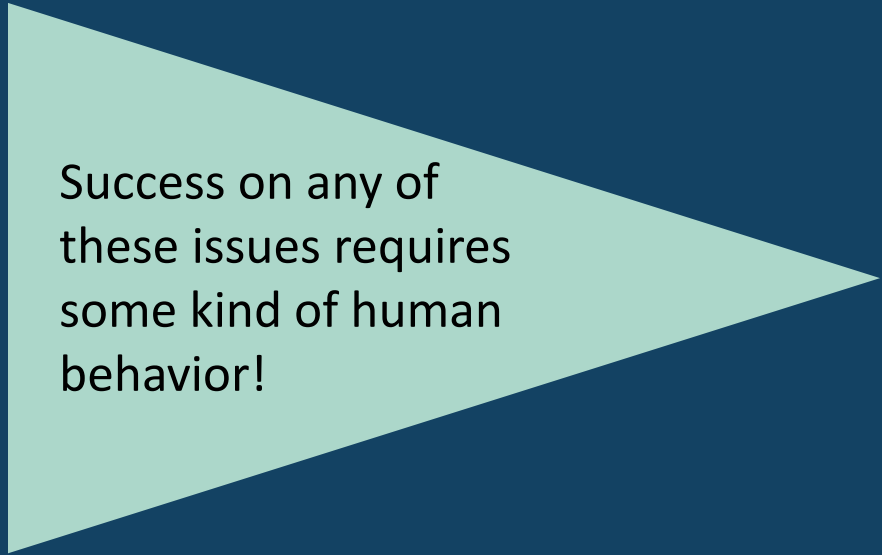
CBSM – Piloting before a Program

- CBSM asks you start with a pilot, or test run, of a plan before you commit to a Tribe-wide or long-term strategy. You:
 - ✓ Can work out bugs or issues.
 - ✓ Won't waste funds or resources on an investment that doesn't work.
 - ✓ Can adjust your approach as needed.
 - ✓ Should feel confident when you expand to a full program, because you did the legwork and now have a plan that can create change!
- Dr. Mckenzie-Mohr says, “you should plan on there being problems” – even if a pilot ‘fails’, you learn a lot and can improve.
- Only when a pilot shows measurable evidence of behavior change, should you expand to broad implementation.



What behaviors does CBSM target?

- CBSM.com features resources and case studies about all kinds of CBSM projects – especially Sustainability projects!
 - Pesticide Use
 - Managing Invasive / Native Plants
 - Energy Efficiency
 - Carpooling / Mass Transit
 - Composting
 - Recycling / Reusing
 - Water Efficiency / Landscape Watering
- CBSM can also be used for Health and Safety campaigns (e.g., healthy diets, cancer screenings, flood safety, distracted driving), but this training focuses on environment.



Success on any of these issues requires some kind of human behavior!



Should you use CBSM?

- If you:
 - ✓ Have an environmental or sustainability problem,
 - ✓ Know that solving this problem requires people in the community to act,
 - ✓ Haven't yet done outreach, or did outreach that was ineffective,
 - ✓ Want to make sure you are confident in the way to solve the problem before investing too much in money or resources, and
 - ✓ Have passionate people that will work hard on this effort...
- **You should try CBSM!**



Recap – A 5-Step Approach

1. Select audience and behaviors to promote.

2. Identify barriers to and benefits of behavior.

3. Design a behavior change strategy.

4. Pilot the strategy within target community.

5. Evaluate impacts of strategy.

Recap – What Is (and Isn't) CBSM?

✓ What CBSM *Is*: ✓

- Encourages behavior change
- Focuses on overcoming barriers to a certain behavior
- Identifies motivations and enhances benefits of a behavior
- Targeted to specific audiences
- Starts with small pilot programs and evaluation to assess effectiveness


✗ What CBSM *Is NOT*: ✗

- Just advertising or outreach
- Only an information campaign (remember: information alone doesn't change behaviors!)
- An immediate solution
- Only based in economics
- Primarily attempting to change attitudes or increase knowledge



Pala's CBSM Adventures

How we used social marketing to
improve our recycling program and
beyond...



Pala Band of Mission Indians

San Diego County, California

~12,000 acres

Valley/Village Area ~ 5 square miles

Population ~ 1,000 (tribal/non-tribal)

Weekly Curbside Trash & Recycling

Transfer Station

**Tribal Members –
do NOT pay for trash/recycling**

Pala
Background
Info





PALA ENVIRONMENTAL DEPARTMENT

RECYCLING CHALLENGE

THIS SPRING, RECYCLE
FOR PALA YOUTH!



APRIL 15 - JUNE 15

RECYCLE EVERYTHING YOU CAN!



CANS



GLASS



PAPER



CARDBOARD



STYROFOAM



PLASTIC

HELP OUT THE KIDS AND COMMUNITY

MONEY THE TRIBE RECEIVES FROM
RECYCLABLES WILL BE PUT TOWARD
THE PALA YOUTH GARDEN.



TOOLS



SEEDS



SUPPLIES



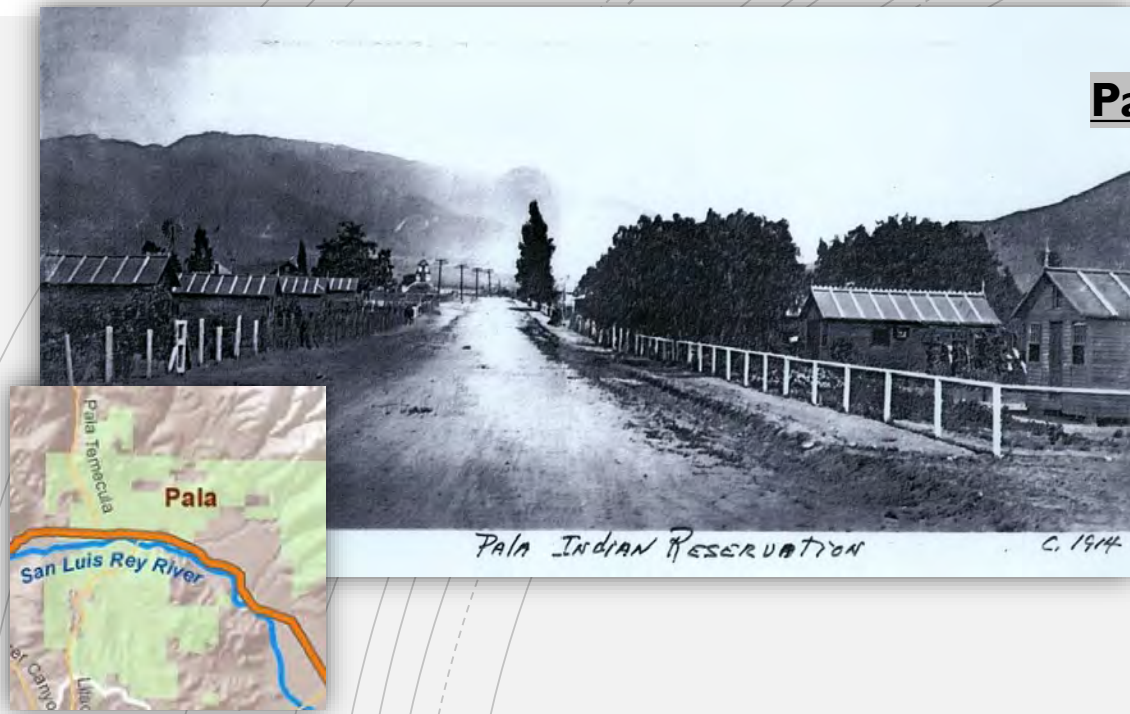
T-SHIRTS

FOR MORE INFORMATION ABOUT HOW YOUR DAILY HABITS CAN HELP OUR COMMUNITY AND ENVIRONMENT, VISIT PED.PALATRIBE.COM

Pala's First Steps

Pala partnered with the USEPA & Booz Allen Hamilton to improve our curbside recycling efforts using the CBSM tool – *Community Based Social Marketing*.





Pala's Curbside Trash & Recycling Pick-Up:

- **Free** for tribal members (cost for non-tribal)
- **Pick-up is once/week**
 - **Trash** brought to nearby vendor 1/week
 - Costs = fuel, disposal, salary/equipment
 - **Recycling** is brought to our transfer station & sorted
 - CRV (\$ goes to tribe), cardboard, non-CRV
- Approximately **450 homes participate in trash**
- Approximately **120 homes recycle**

2018 Recycling Pilot

Some Barriers:

Low participation in curbside recycling

- Non-tribal members often do not curbside recycle
 - Bring CRV to transfer station, to get paid

Contamination of recyclables in curbside

- Trash is often mixed in with blue recycling bins
- Blue bins used entirely for trash

Lack of tracking/data in tribe

- Only #'s tracked are cost / transfer station income
- Total program costs were not being tracked

Our CBSM Steps

Select Behavior Change (Goal)

- Increase # homes using blue bins
- Increase amount of recycling in bins
- Cleaner recycling stream
- Reduce amount of trash to landfill

ID Barriers

- Confusion over what is allowed in recycling bins
- Lack of blue recycling bins
- Reality vs. Perception
- Most non-tribal residents recycled at home

ID Benefits

- Outreach campaign
- Incentivize participation
 - Extra \$\$ earned would go back to our tribal youth garden

Start Pilot

- ID Lessons Learned
 - Track all data, early & often
- Scale Up & Next Steps



PALA ENVIRONMENTAL DEPARTMENT

MAKE A DIFFERENCE



IF **YOU** RECYCLE



2 BOTTLES
A DAY

x



7 DAYS
A WEEK

=

730

BOTTLES
A YEAR

IF **EVERY** MEMBER OF PALA DID IT



918 PEOPLE

=

670,140

BOTTLES A YEAR



AND THE TRIBE COULD

EARN MONEY \$35,000
FROM CRV

RECYCLE TODAY AND PAY IT FORWARD!

INCLUDE BOXES, PLASTIC, PAPER, GLASS, AND CANS THAT SHOULD ALSO BE RECYCLED



FOR MORE INFORMATION ABOUT HOW YOUR DAILY HABITS CAN HELP OUR
COMMUNITY AND ENVIRONMENT VISIT PED.PALATRIBE.COM

Pala's Results

- Created outreach specific to our tribe
- Increased curbside recycling
- Raised money for the youth garden

NEXT STEPS...

- Rolled it into an HHW Pilot
- Built new logo/brand – Planet Pala

Outreach & More Outreach & Even More Outreach

We should have done more outreach.....more often, more in person/meetings, & in more ways/delivery methods....

Takeaways....

Accurate tracking is **ESSENTIAL** to measuring success
[before, during, & afterwards]

Before = we only tracked recycling at the transfer station

- *Tracked = CRV Recycling / income & miscellaneous waste streams*
- *Not Tracked = Non-CRV & curbside recycling (at all!)*

During = we tracked weight of curbside recycling

After = we track all of it

- *Curbside quantity*
- *Non-CRV & CRV at transfer station*

Need for 'Outside the Box' Ideas ...when
your community doesn't pay for trash/recycling

Similar to water conservation....

It can be difficult to spark change when it doesn't hit
peoples' wallets.

Going forward, we need to:

- look more closely at the barriers within our community
- target those more specifically, per sub-communities.



HHW Curbside Pilot

Using the existing recycling info...

- Used EXISTING curbside info
- Used NEW outreach techniques
- GOAL – increase household hazardous waste collection on the reservation
- PILOT – try out curbside HHW collection

SUCCESS!!

Recycling Pilot

MAKE A DIFFERENCE PED

IF **YOU** RECYCLE

2 BOTTLES A DAY x 7 DAYS A WEEK = **730** BOTTLES A YEAR

IF **EVERY** MEMBER OF PALA DID IT

910 PEOPLE = **670,140** BOTTLES A YEAR

AND THE TRIBE COULD EARN **EXTRA MONEY** FROM CRV **\$35,000**

RECYCLE TODAY AND PAY IT FORWARD!

INCLUDE BOXES, PLASTIC, PAPER, GLASS, AND CANS THAT SHOULD ALSO BE RECYCLED

A SIMPLE DAILY CHANGE CAN HELP OUR COMMUNITY AND ENVIRONMENT



DID YOU KNOW? PED

YOU CAN RECYCLE MORE THAN JUST CRV ITEMS \$ AND EARN THE TRIBE EXTRA MONEY WHEN YOU DO \$

YES, PALA DOES RECYCLE:

- CANS** ALUMINUM
- GLASS** BOTTLES AND JARS OF ALL COLORS
- STYROFOAM** JUST PACKAGING
- CARDBOARD** FLATTENED
- PAPER** NEWSPAPER, PLAIN PAPER, FOLDERS, JUNK MAIL, MAGAZINES, PAPER BAGS
- PLASTIC** MARKED #1-7 OR LABELED "A RECYCLATION VALUE"

NO, PALA DOES NOT RECYCLE:

- CANS** STEEL OR TIN
- PLASTIC BAGS** GROCERY BAGS, NEWSPAPER BAGS, OR BAGS HOLDING ITEMS
- STYROFOAM PEANUTS** PACKAGING
- DISHES** GLASS OR CERAMIC
- PAPERWARE** PLATES, CUPS, OR TOWELS

Pilot Programs

HOUSEHOLD HAZARDOUS WASTE "NOT ALL WASTE IS CREATED EQUAL"

HOUSEHOLD HAZARDOUS & UNIVERSAL WASTE CURBSIDE COLLECTION

What is Household Hazardous Waste (HHW)?
HHW items are products that can catch fire, react, or explode under certain circumstances or that are corrosive or toxic.

What is Universal Waste (UW)?
There are 4 categories of UW materials:

- batteries
- pesticides
- mercury containing equipment
- lamps (light bulbs)

What is PED doing for you?
We will be starting curbside household hazardous waste collection in the new year! We will be delivering special bins for you to place your hazardous materials in for regular pickups. More information will be provided before we start this curbside pickup project!

Examples of HHW:

- Motor Oil / Filters
- Scrap Metal
- Pool Chemicals
- Nail Polish
- Appliances
- Furniture
- Paint/ Tint
- Cleaning
- Used Pesticides
- Drain Cleaners
- Antifreeze
- Solvents

Examples of UW:

- Batteries
- Pesticides
- Thermometers
- Fluorescent Bulbs
- LED bulbs

PALA ENVIRONMENTAL DEPARTMENT (PED)
For more information:
Call us at 760-891-3537 or 760-891-3510
OR
Email us at awalick@pala-tribe.com



HHW Curbside Pilot

It's Time for Spring Cleaning!

When you're going through your home & trashing all that clutter, take a second look at some of the items you're getting rid of. Before discarding these materials, consider whether they are household hazardous waste (HHW) or recycling. If so, place them in your **red HHW bin** or **blue recycling bin**.

WHAT IS HHW?

- Motor oil & Filters
- Scrap Metal
- Pool Chemicals
- Nail Polish
- Paints/Turpentine
- Cleaning Products
- Plastic Pesticides
- Thermometers
- Drain Cleaners
- Antifreeze
- Solvents
- Batteries
- Fluorescent Bulbs
- LED / CFL Bulbs
- E-Waste

WHAT IS RECYCLABLE?

- Writing Paper
- Computer Paper
- Newspaper
- Cardboard
- File Folders
- Junk Mail
- Phone Books
- Magazines
- Paper Bags
- Styrofoam Packaging
- Aluminum Cans
- Glass Bottles & Jars
- Steel (Dry) Cans
- Plastic Bottles & Jugs

Household Hazardous Wastes: What's the Danger?

Flammable: Gasoline, oil, paint, and other liquids that can catch fire easily.

Corrosive: Drain cleaners, antifreeze, and other liquids that can damage skin, metal, or the environment.

Reactive: Some chemicals that can explode or catch fire when mixed with water or other substances.

Toxic: Pesticides, herbicides, and other chemicals that can harm people, animals, or the environment.

Explosive: Some chemicals that can explode when heated, shaken, or mixed with other substances.

HAZARDOUS WASTE



Planet Pala Brand

Learning about our community
helped us build a brand

- Asked OURSELVES – what did we want our department to be known for
- Asked our COMMUNITY– what natural resources do they value
- **BRAND** = shows what we're trying to protect here at Pala when we our community to make a behavior change

Start with ideas, elements, colors
that are important to your community.



Mission Style Basket



Chokla/ Gregory Mountain



Bob T. Cat



When developing a new brand/ logo...

- Combine environmental & cultural themes
 - Keep it simple, attractive, & meaningful
- Use symbols that mean something to your community
 - Clan name (eg: coyote & wildcat)
- Use the language (if appropriate)
 - Tukve'esh (sky); pal (water); temal (land); 'etax'em (people)



PLANET PALA
KiDS



PLANET PALA
KiDS



Thank You

For More Info...

Contact Pala Environmental Department

<http://ped.palatribe.com/>



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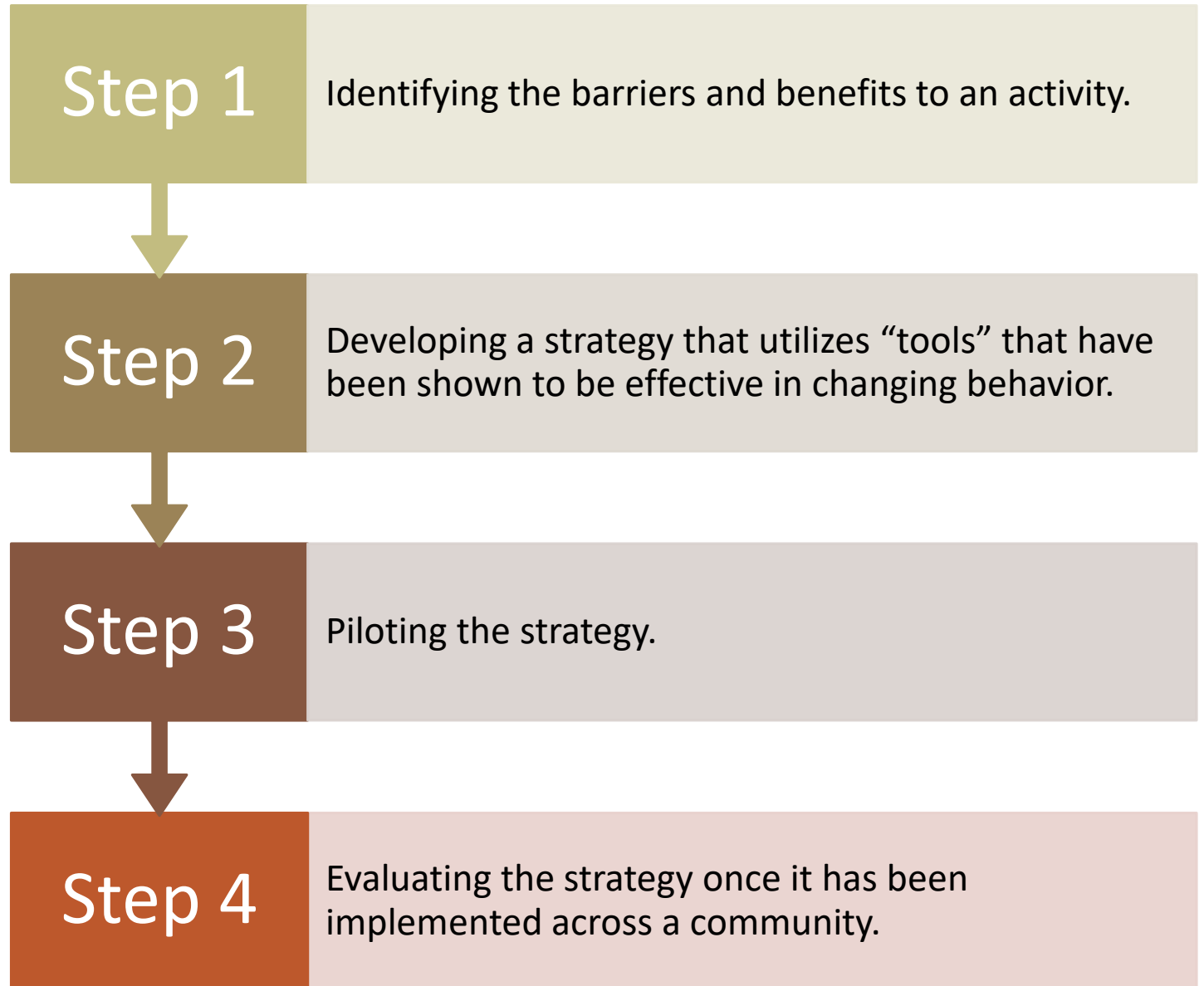
✉ hbrow@palatribe.com



COMMUNITY-BASED SOCIAL MARKETING (CBSM) PROJECT – PROMOTING SUSTAINABLE BEHAVIORS AT THE FOND DU LAC TRIBAL COMMUNITY COLLEGE



What is CBSM?



Why do this project?

Barriers & Frustrations

Why don't we recycle?

- We didn't know!
- Behavior did not match college values
- Mixed support from administration

What is preventing you from doing it?

- Needed baseline information
- Needed feedback from faculty, staff, and students

The Recycling Pilot Project - Background

As a Tribal College, our mission encompasses the vision of sustainability as we seek to become more conscientious stewards of resources while promoting the language, culture, and history of the Anishinaabeg.

The Fond du Lac Tribal and Community College, staff, and students all came together to improve recycling across the campus.

Steps:

- Focus Group held to select priorities and targeted behavior
- Researched projects
- Conducted a waste characterization pre-project
- Developed pre-questionnaire
- Analyzed questionnaire results and developed pilot project
- Implemented Pilot Project
- Conducted Post-Pilot Questionnaire and waste characterization

Targeted Behavior

- Recycling on campus and in dorms

Target Audience

- Students

The Pilot Project – The Plan



Pre-pilot questionnaire: don't assume you know what your audience thinks and feels



Pre-pilot waste characterization to evaluate – the baseline



Implement pilot based on research



Post pilot questionnaire to measure behavior change



Post pilot waste characterizations



Disseminating the pilot through social diffusion – the next steps

Pre-Pilot Waste Characterization Results

- Recyclables found in trash consisted of mostly aluminum cans, plastic bottles, and paper
- The commons area and classrooms /offices had the highest percentage of recyclables in trash.
- Classroom and office trash consisted of over 46 % recyclables in the trash.
- Behavior/observation data collected through student volunteers in the commons areas.

Table 1
Waste Characterization Results at FDLTCC (May 2014)

Location	Number of Bags	Weight of Recycling (lbs)	Weight of Trash (lbs)	Total Weight (lbs) ¹	Percentage of Recycling in Trash
Conference/Event	4	11.2	32.6	46.6	24%
Bathroom/Offices	1	0.0	6	7.4	0%
Upstairs	1	0.8	5.2	7.2	11%
Law Enforcement/Upstairs	1	11.2	31.2	42.4	26%
Commons	4	5.6	18.4	27.0	20%
Lil Thunder Daycare	3	2.0	94.2	95.4	2%
Offices	1	2.8	6	11	25%
Faculty	1	2.4	4.8	7.4	32%
Art Room	1	3.4	12.4	16.2	21%
Arrowhead Room	1	0.4	13.4	16.2	2%
Auditorium	1	0.4	7.0	8.0	5%
Maintenance/Offices	2	0.8	12.0	31.4 ²	3%
Bathroom	1	0.0	12.8	13.4	0%
Commons/Lab	1	2.2	12.6	16.0	14%
Classroom/Offices	1	15.4	16.4	33.8	46%
Offices/Commons	1	5.8	12.4	19.2	30%
TOTAL	25	64.0	297.4	398.6	

Notes:

Step 1: Identifying Barriers and Benefits

- Pre-pilot on-line questionnaire sent out to 420 students enrolled on campus
- 17% of students completed questionnaire
- Drawing for a bookstore gift certificate for incentive to complete the questionnaire
- Pre-pilot waste characterization

Pre-Pilot Questionnaire: Establishing a Baseline

Student demographic information

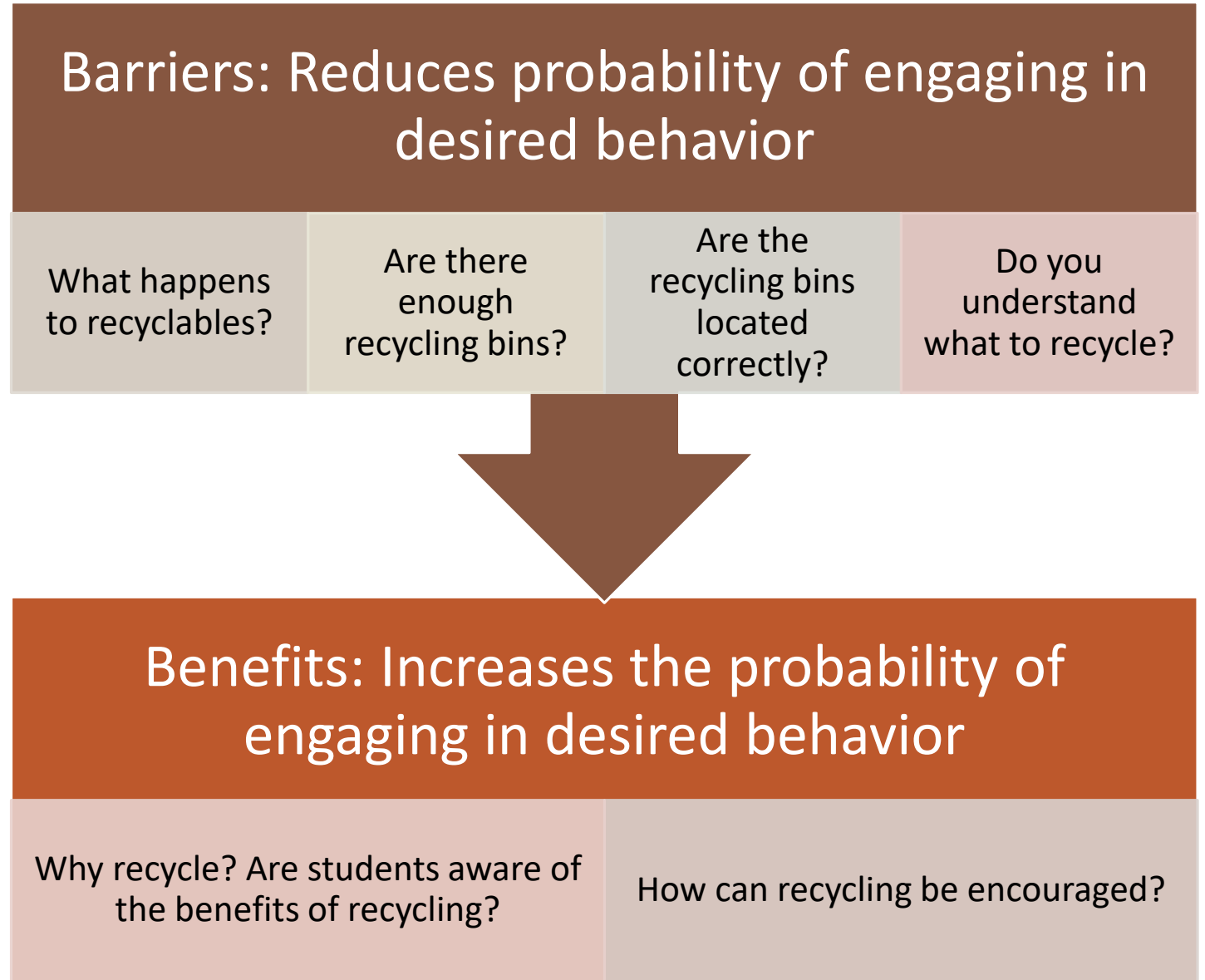
Identify level of understanding of the benefits from recycling

Identify barriers to recycling on campus

Identify methods and practices to increase recycling, such as behavior changes, bin placement, and signage

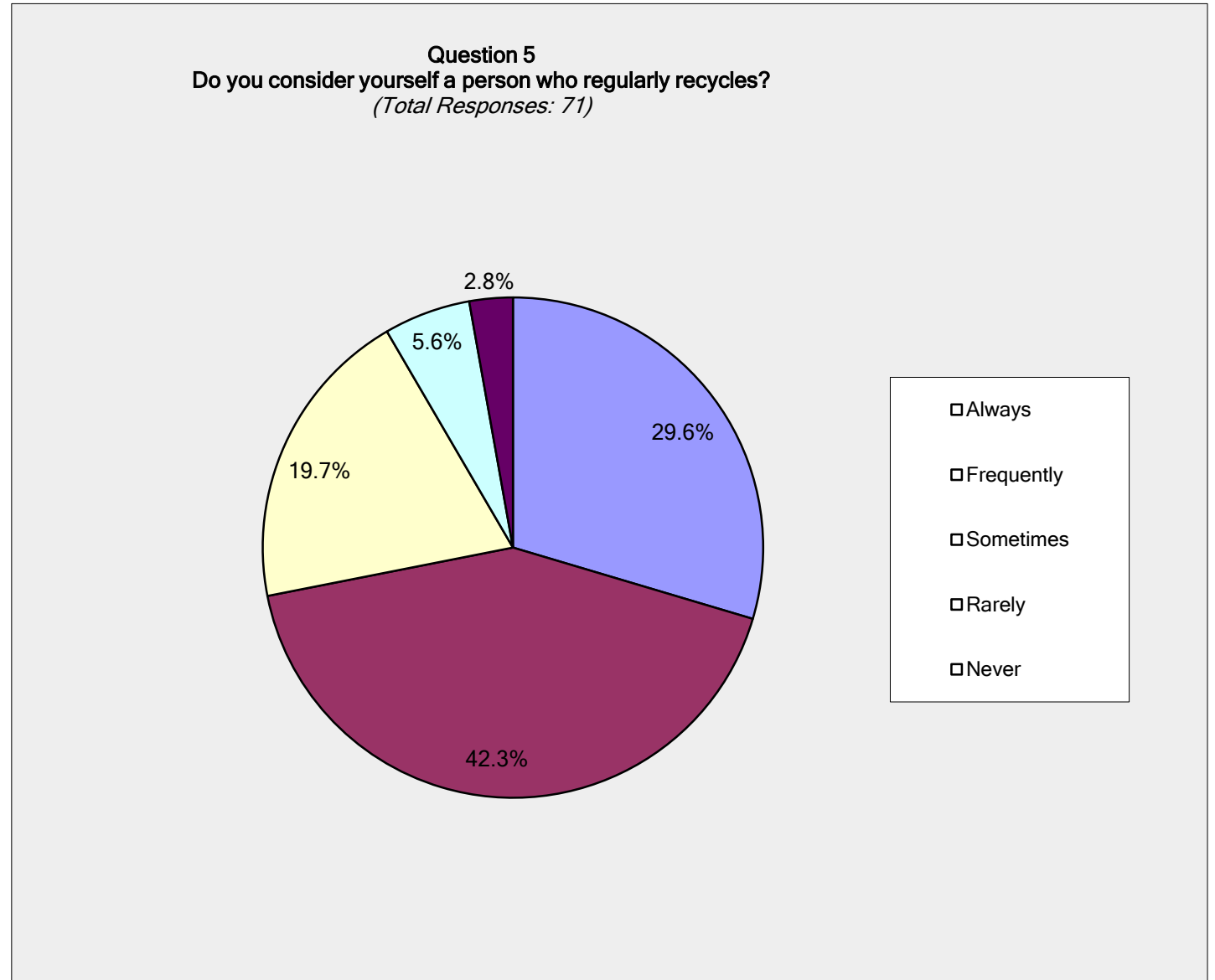
Identify methods of student communication that achieve highest retention and impact

Barriers and Benefits to Change



Awareness Level and Behavior Frequency

- Are you a recycler? Over 70% felt they always or frequently recycle
- How easy/difficult is it to recycle on campus?
- What is currently being recycled and how often?



Results showed....

- Students want to recycle and think it is important for protecting the environment.
- Most felt easy to recycle on campus and how to recycle.
- This awareness and desire did not translate into recycling most materials on a regular basis.
- Aluminum cans and plastic bottles are always recycled only 50% of the time and paper less than 10%.
- Open-ended questions indicated students want convenience – additional bins located in specific areas with easy to understand signage.



Not enough bins around campus
and none in dorms



```
graph TD; A[Not enough bins around campus and none in dorms] --> B[People just do not think to recycle]; B --> C[Too busy to find a recycling bin]; C --> D[Bin openings make it difficult]; D --> E[Preferred signage and bins were identified];
```

People just do not think to
recycle

Too busy to find a recycling bin

Bin openings make it difficult

Preferred signage and bins were
identified

Pre- Questionnaire Results

Step 2: Develop strategy shown to be effective in changing behavior.

- Increase recycling bins and improve locations
- Pilot a visually appealing, bilingual recycling bin
- Pilot new bilingual signage and posters that are culturally sensitive and easy to understand
- Expanded outreach at staff and student orientation
- Student workers in charge of collecting recyclables

Increase Recycling Bins and Improve Locations



BINS PLACED IN EACH
CLASSROOM

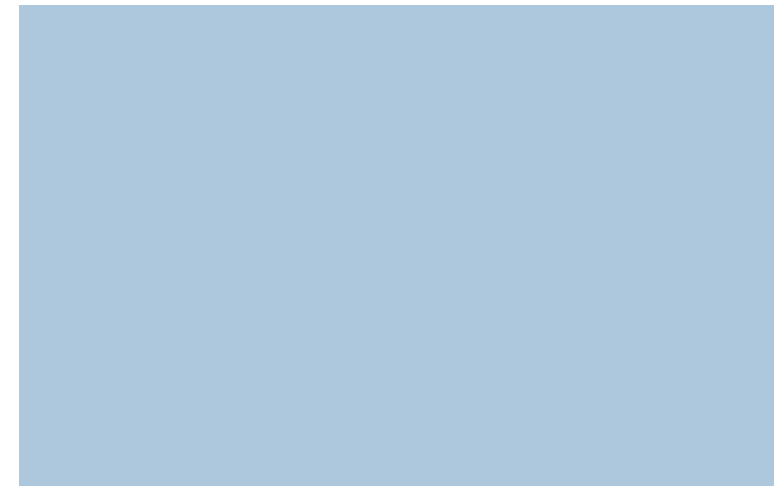


BINS LOCATED NEAR TRASH CANS



BINS ADDED TO OFFICE AREAS,
COMMONS, AND CONFERENCE
ROOMS

Pilot a visually appealing recycling bin



Pilot new signage and posters



Communication: Removing Barriers and Giving Perspective

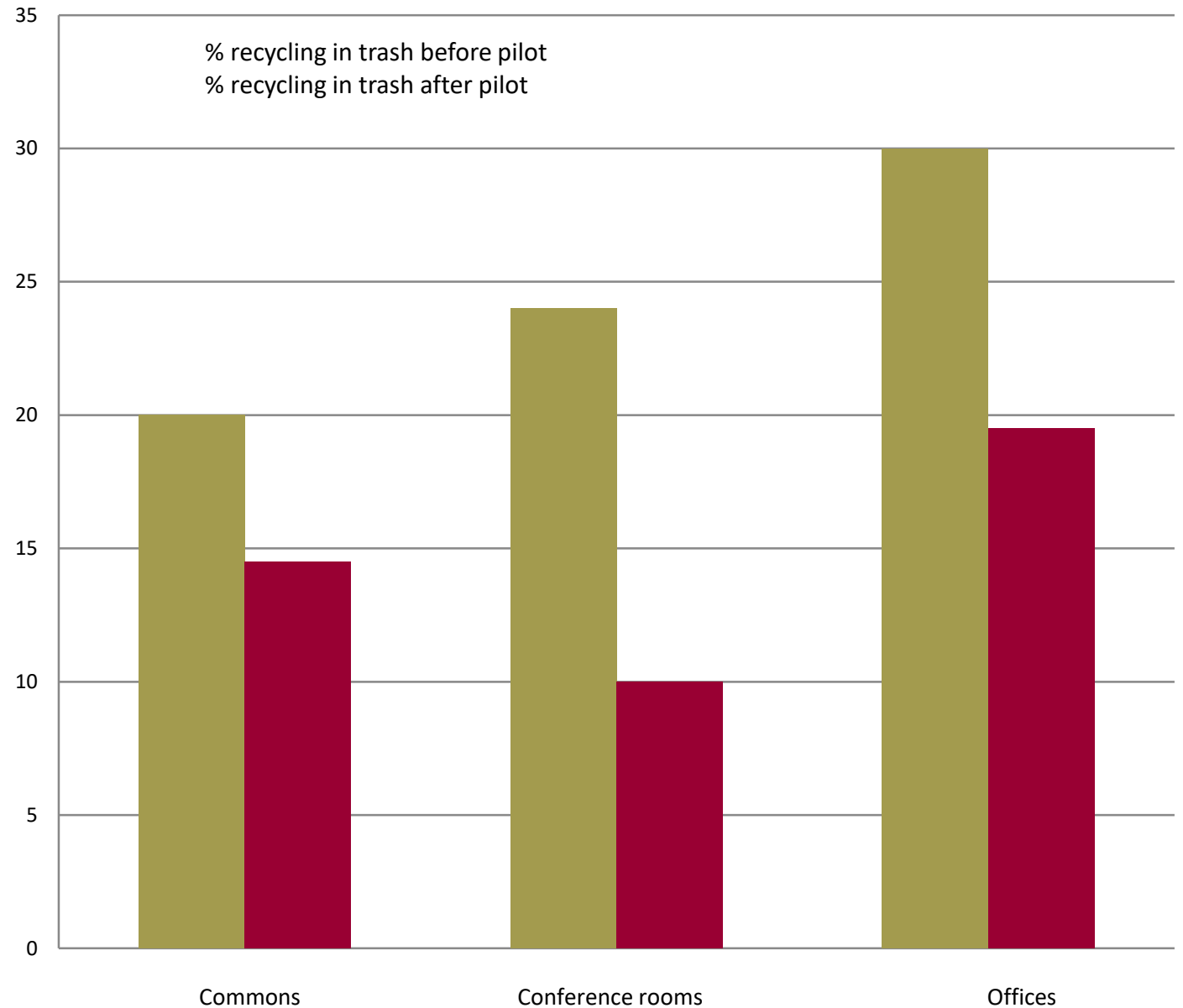
Bottle filling stations make it easy to fill water bottles.

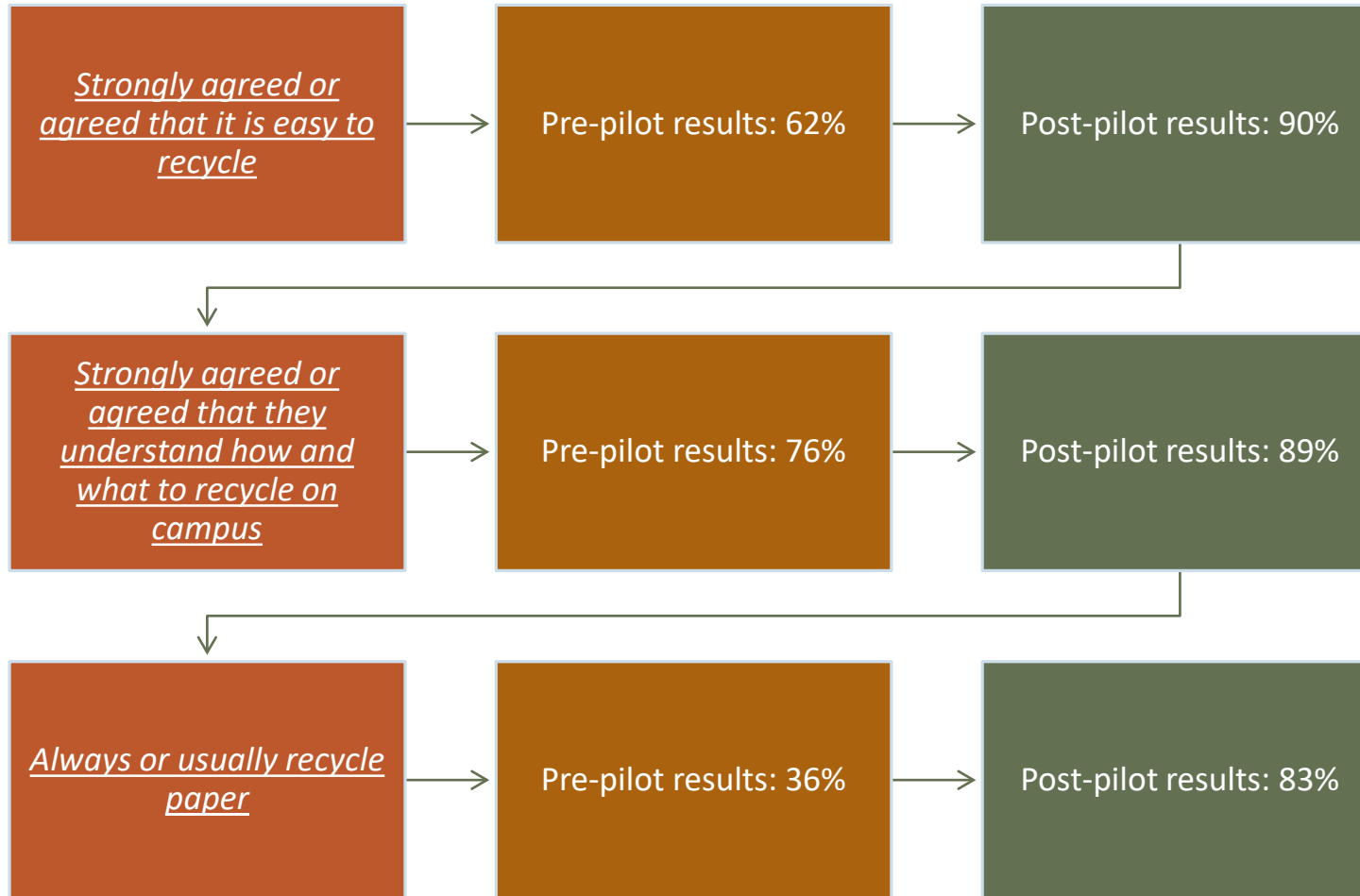
Bottle filling stations have a tally at the upper right that counts the number of bottles filled.



Pilot Project Results – Did Recycling Rates Improve?

After only 2 months of the pilot program, there was a significant decrease in the amount of recyclables found in the college's trash.





Post-Pilot Questionnaire Results

Lessons Learned



On going process! In a college setting you are evolving messaging every year



Buy in from administration and FACILITIES is crucial



Empower everyone to take ownership



Relying on students for recycling has benefits and problems



Dream big! Zero Waste!



Additional Resources

- Video – Sustainability and Beyond: The Fond du Lac Story:
<https://www.youtube.com/watch?v=sd-ajqYhrd4>
- Tribal CBSM Training Guide and Recycling Toolkit – Fond du Lac Band of Lake Superior Chippewa /EPA Region 5: <https://www.epa.gov/tribal-lands/tribal-community-based-social-marketing-training-guide>
- Presentation - General Outreach Tips and Tricks for Environmental Programs – Heidi Brow and Alexis Wallick, Pala Band of Mission Indians, 2020 Tribal Lands and Environment Forum:
https://mediaspace.nau.edu/media/0_4k8vhr2c



THANK YOU!

Angel Ip

ip.angel@epa.gov

To contact your Region's EPA Tribal
Waste program contacts:

<https://www.epa.gov/tribal-lands/forms/contact-us-about-tribal-waste-management>

