

# ***SOCIAL MARKETING – Military and Low Income***

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Dana D'Souza  
Skumatz Economic Research  
Associates Inc 303/494-1178

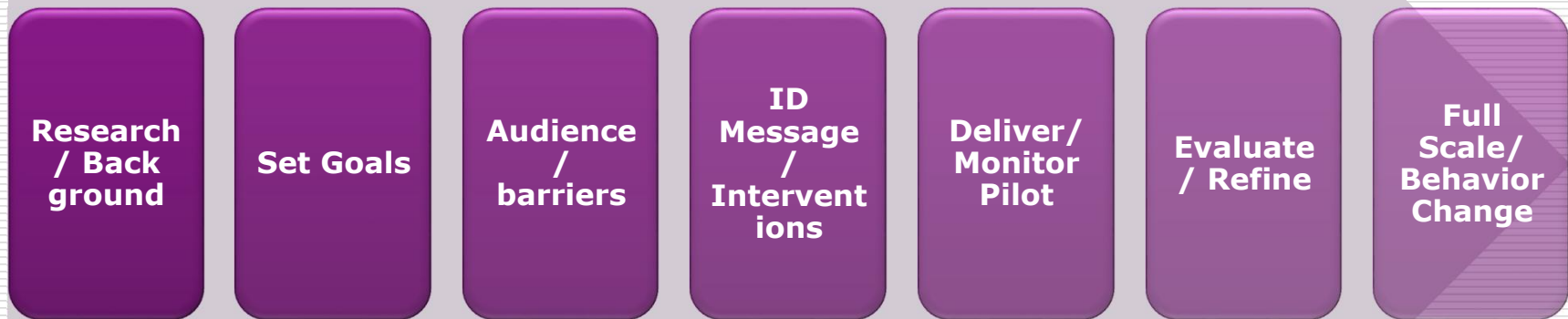
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BECC 2014

# ***THE CHALLENGE – MOTIVATING "GREEN BEHAVIORS"***

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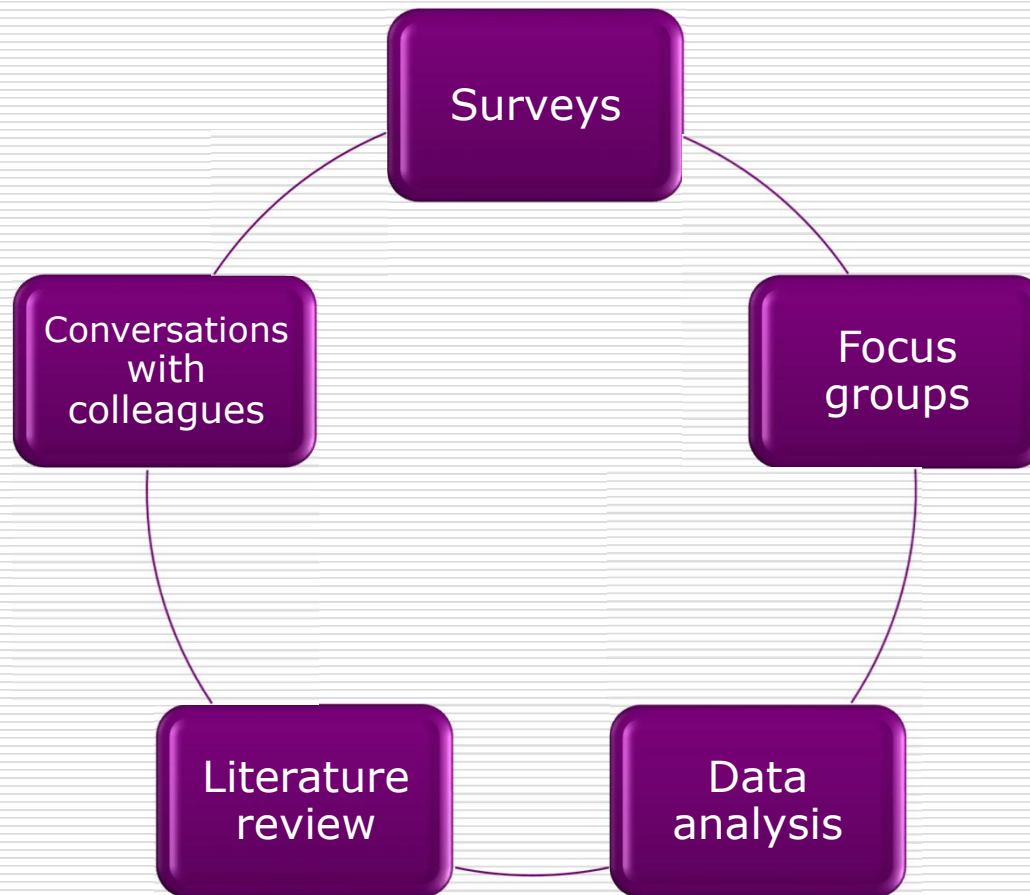
## **CBSM Approach**



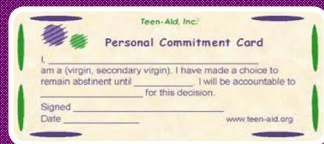
Focus on behavior change

# ***CBSM - DESIGN***

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# Common Elements



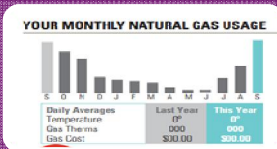
## Commitments

- Public
- Specific
- Memorable
- Leave behinds



## Prompts

- At the site of action
- Durable



## Feedback on Progress

- Door hangers
- Email/ phone calls
- Public newsletters



## Competitions / Challenges / Incentives



## Personal Interaction / messaging

# ***MILITARY- Operation XYZ***

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Region-wide conservation  
/ efficiency / sustainability  
program pilot

# ***OPERATION XYZ- How it started....***

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- ❑ Designed from literature by intern/ staff
- ❑ Comprehensive handbook
- ❑ Established table of 100+ behaviors
- ❑ Focused on water, energy, and trash
- ❑ Developed posters and a PowerPoint to deliver to installation command along with handbook

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Energy and Water Saving Actions	Recycling / Waste Reduction Actions
<p>Close all roll-up bay doors when HVAC is on</p> <p>Configure furniture to not hinder air flow thru registers</p> <p>Dress appropriately for comfort</p> <p>If you have thermostat access keep it set with applicable policy</p> <p>Keep blinds closed when extremely hot or cold</p> <p>Keep windows closed if HVAC is on</p> <p>Capitalize on daylighting</p> <p>Configure furniture to capitalize on daylighting</p> <p>Turn off lights in unoccupied rooms</p> <p>Set fridge to 38 and freezer to 5 degrees</p> <p>Unplug chargers after charging is complete</p> <p>Purchase ENERGYSTAR™ labeled equipment</p> <p>Avoid electric space heater use, if a space heater is used, provide documentation that a work order / complaint has been filed to address thermal comfort</p> <p>Set up computer power save</p> <p>Turn off computer at end of day and unplug any unneeded equipment over weekends</p> <p>Unplug unused equipment (Work station and Other Electronic Equipment)*</p> <p>Use laptops as opposed to desktop when possible and LCDs instead of CRTs</p> <p>Use standby instead of screen saver</p> <p>Request CFL for lamp desk and use lower wattage task lighting when possible</p> <p>Sign up for workspace energy audit conducted by local Energy Expert, recruit volunteers to assist in effort</p>	<p>Choose deconstruction and reuse first</p> <p>Design for longevity, durability, etc.</p> <p>Divert a minimum of 75% of all construction &amp; demolition waste</p> <p>Establish contracts for recycling in building and demolition</p> <p>Design spaces to be flexible</p> <p><del>Utilize deconstruction practices and reuse maximum amount of materials</del></p> <p>Utilize lean construction techniques</p> <p>First, determine if purchasing equipment is necessary for job</p> <p>Deliver undesired equipment to X facility</p> <p>Deliver old furniture to X facility</p> <p>Purchase furniture made with durable low maintenance materials</p> <p>Compost landscaping materials</p> <p>Utilize removed trees for mulch on site</p> <p>Dispose in accordance with protocol</p> <p>Look for non-hazardous options</p> <p>Reduce consumption of hazardous waste</p> <p>Recycle on site or bring to X facility</p> <p>Combine trash from bins into one bag</p> <p>Request supplies be shipped in the minimum number of shipments (janitorial supplies, office supplies)*</p> <p>Install low energy hand driers</p> <p>Minimize variety cleaners used on site</p> <p>Utilize washable cloths in lieu of paper towels</p> <p>Limit purchase of water bottles</p> <p>Compost food scraps</p> <p>Compost single use wares</p> <p>Donate unused food</p> <p>Bring a personal thermal mug</p> <p>Use personal non-disposable napkins</p> <p>Utilize washable plates, cups, utensils</p> <p>Utilize cloth rags in lieu of paper towels</p> <p>Consider requesting a free rechargeable battery storage container</p> <p>Recycle metal</p> <p>Recycle non-classified paper, only place classified in shredders</p> <p>Collect batteries and deliver to X facility</p> <p>If paper recycling is not available, collect on site and bring to X facility</p> <p>Install recycle bins at all desks</p> <p>Recycle all light bulbs and deliver to X facility (unless they are accepted in single stream locally)</p> <p>Reduce size of office trash cans</p> <p>Double sided printing as default</p> <p>Print only when absolutely necessary</p> <p>Purchase supplies from one vendor when possible (office &amp; janitorial supplies)*</p> <p>Reduce print defaults from 600 DPI to 300 DPI</p> <p>Utilize electronic documents whenever possible</p> <p>Buy in bulk</p> <p>Choose devices that don't use batteries</p> <p>Request minimal packaging (office supplies, janitorial supplies, furniture, equipment)</p> <p>Reuse office supplies</p> <p>Utilize rechargeable batteries</p> <p>Recycle all plastic; recycle cardboard</p> <p>Store pallets and request driver take them back, or store and deliver to X facility</p> <p>Unpack pallets and request driver take them back</p>
Water Savings Actions	
<p>Always run full loads in dishwashers and clothes washers</p> <p>Do not irrigate landscaping between 10am and 6pm</p> <p>Don't leave water running while brushing teeth or washing hands</p> <p>Keep water bottle in fridge instead of running water until it gets cold</p> <p>Limit time spent in shower</p> <p>Report leaks to building manager</p> <p>Take combat showers</p> <p>Use broom instead of hose to clean sidewalks</p> <p>Install water saving shower heads</p>	





## OPERATION XYZ

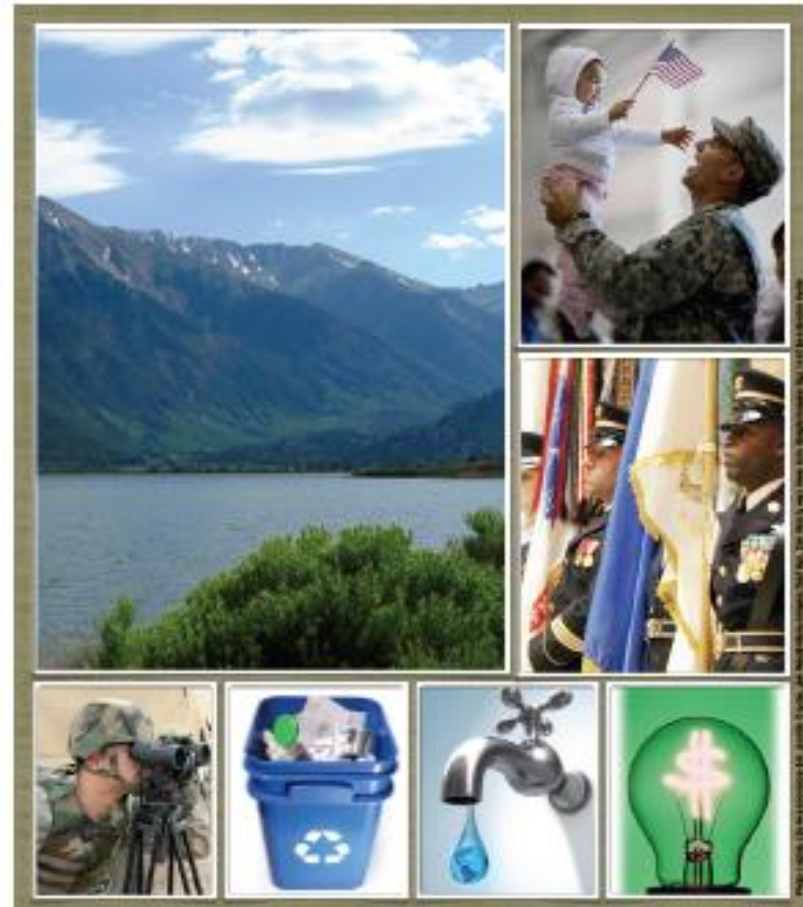
Save Our Water for the Fight!

### Did You Know?

LOGO

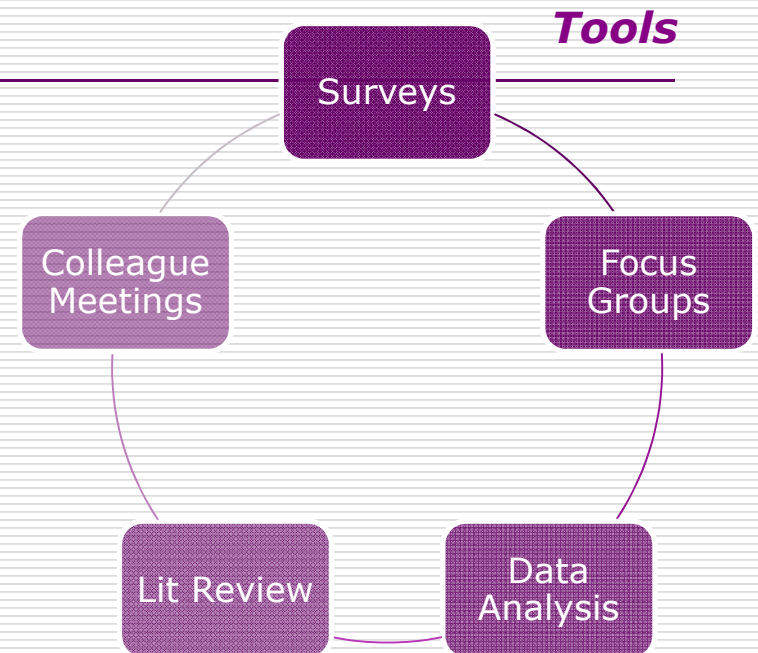
1. All our facilities have low-flow shower heads
2. All of our gray water gets reused
3. Our high efficiency toilets use 20% less water
4. We've saved more than 1,800 gallons of water in the last six months!
5. Less than 3% of the Earth's water supply is fresh water

# THE POSTERS



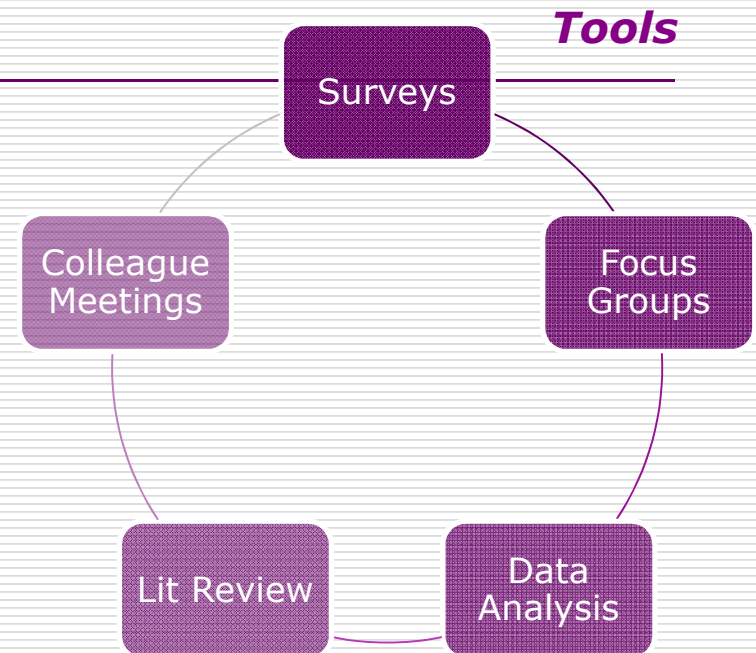
# ***OPERATION XYZ: When we came in..***

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# ***OPERATION XYZ: When we came in..***

1. Meetings/ Training
2. Reviewed documents / Tours
3. Organized focus groups
4. Current data and control group
5. Surveys- Pre and Post
6. Pre- billing data
7. Revisions of program / design / outreach\*
8. Recommended program & manual changes\*
9. Post data



***\*Recommendations NOT  
implemented before pilot.***

# ***FOCUS GROUPS – PRIORITY BEHAVIORS***

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Feedback: Already doing many... More manageable list!!

## **Highest ranking energy use reduction strategies**

- Turn off lights in occupied rooms
- Avoid space heater use
- Turn off computers at end of day / set up computer powersave
- Lower-ranked strategies included: Capitalizing on daylighting and closing rolldoors when HVAC is on

## **Highest ranking water conservation strategies**

- Don't leave the water running while brushing teeth or washing hands
- Limit time spent in shower
- Report leaks to building manager
- Take combat showers (tie).

## **Highest ranking waste reduction strategies**

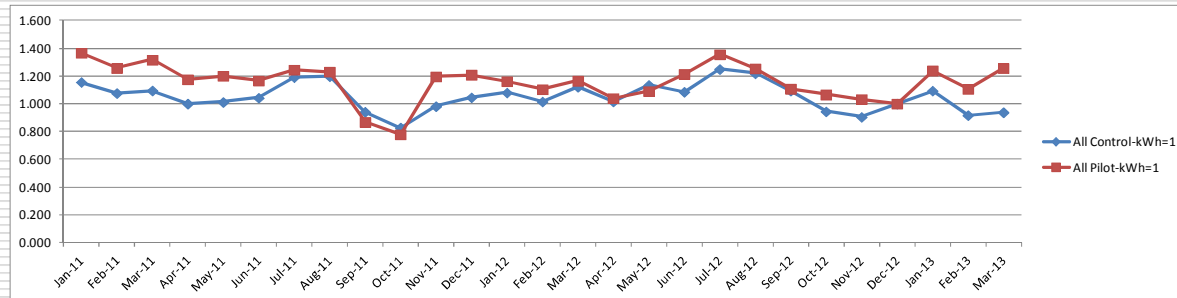
- Double sided-printing as default
- Recycling plastic
- Utilizing electronic documents when possible

# PRE/POST SURVEY RESULTS (SELF-REPORT)

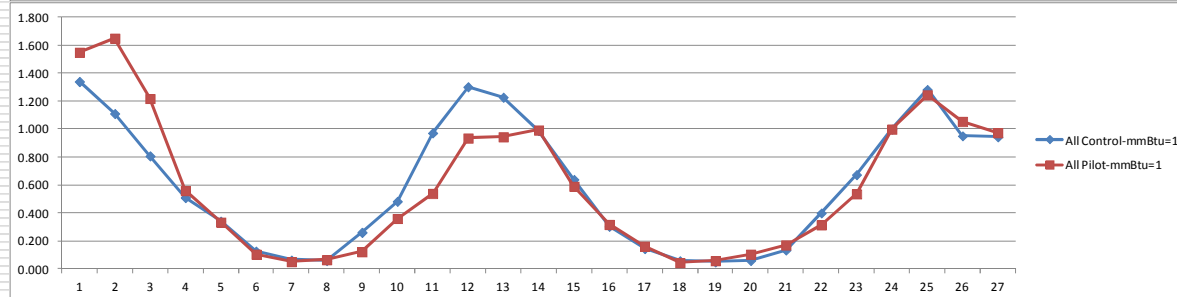
Action	Pre (n=73)	Post (n=29)	Control (n=17)	% Change Post vs. Pre	% Diff. Post vs. Control
Took a combat shower or a shower that was less than five minutes long.	29%	36%	14%	24%	-61%
Used washable plates, cups, utensils as opposed to single use disposable options.	49%	66%	65%	35%	-2%
Used a recycling container on the Drill floor area.	67%	73%	58%	9%	-21%
Capitalized on day-lighting (open blinds in day and turn off lights)	48%	64%	71%	33%	11%
Used a broom instead of a hose to clean sidewalks.	65%	69%	72%	6%	4%
Used a space heater.	28%	16%	12%	-43%	-25%
Used a recycling container in the office area.	76%	84%	63%	11%	-25%
Recycled paper and cardboard.	81%	86%	81%	6%	-6%
Turned off lights in unoccupied rooms.	76%	80%	78%	5%	-3%
Closed all roll-up bay doors when HVAC is on.	82%	85%	85%	4%	0%
Printed double sided documents.	49%	48%	70%	-2%	46%
Kept water off when brushing teeth/ shaving	68%	71%	70%	4%	-1%
Unplugged any unneeded equipment over weekends.	38%	41%	30%	8%	-27%
Recycled plastic containers and/ or aluminum cans.	74%	81%	70%	9%	-14%

# *Monthly Usage* Pre v. Post (Jan 2013) – Aggregated Pilot and Control Usage – normalized

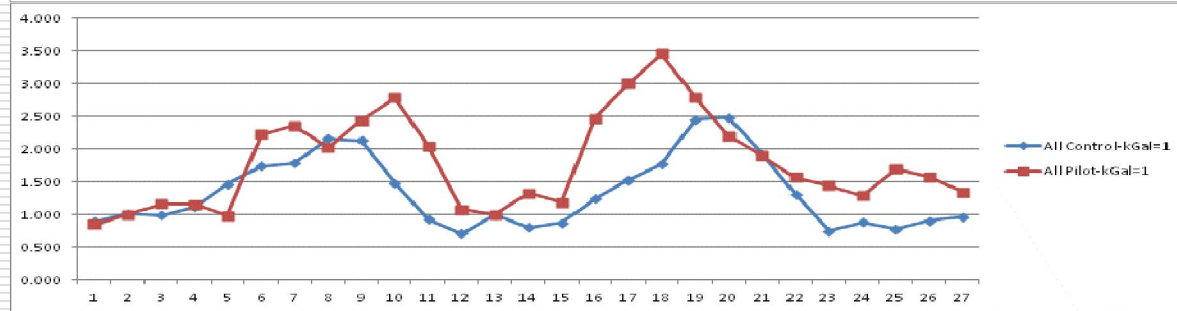
ELEC



GAS



Water





# ***ELECTRICITY & GAS SAVINGS ANALYSIS***

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Pre-Post vs. Control Pre-Post Results. Q1 2013 (Post) Use compared to ==>	Post compared to Average Q1, 2011&2012	Post compared to Q1 2012	Post Compared to Q1 2011
Net Pre-post change in Electricity Use	11.6%	18.7%	5.7%
Net Pre-post change in Gas Use	-2.1%	18.3%	-13.7%
Net Pre-post change in Water Use	13.2%	4.1%	22.7%

The pre-post vs control pre-post show net reductions in the gas bill, but not electricity or water.

# FOCUS GROUP RESULTS



## Motivations

- ☐ Right thing to do; easy/convenient;
- ☐ Mandates
- ☐ Facility savings / rewards
- ☐ Feedback (if sensible metrics); Saving a soldier's job; safety
- ☐ Environment (for outdoor soldiers)
- ☐ Applies to facility
- ☐ Explored slogans – *"Save Resources for the Fight"* best response

## Barriers

- ☐ Split incentives / lack of incentives
- ☐ Already behind in labor
- ☐ Not "Mission Critical" or contrary
- ☐ Convenience
- ☐ Training day soldier buy-in (short term)
- ☐ ILLEGAL (contracts, more windows!)
- ☐ Credibility - who gets savings
- ☐ Unclear who's responsible

# ***FOCUS GROUPS: POSTER COLLATERAL FEEDBACK...***

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- Unclear desired behaviors; photos don't reinforce;
  - "Would like to see pictures of soldiers saving resources / doing the recommended- targeted"
- Makes it look like already done
- Message and photos need to be localized, relatable
- Random pix
  - "Insulting...why is the Humvee stuck in the mud"
  - "Posters are a joke, we just cleaned 10 years off walls"
  - "No one takes them seriously"
- Not at site of activity



# ***SUMMARY RECOMMENDATIONS***

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- ☐ Capitalize on peer-to-peer conversations
  - ☐ Focus on program brand / positive perception
  - ☐ Focus on options that minimize workload
  - ☐ Prompts need redesign
  - ☐ FEWER BEHAVIORS
  - ☐ Feedback; local benefits
  - ☐ Better metrics
  - ☐ Credibility w/mission
  - ☐ Revise Handbook & Rollout
- 
- ☐ Recommended delay of roll-out to incorporate

# ***LOW INCOME-***

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*In Sink Food Waste  
Diversion Project*



# PROGRAM SET UP



- City in upgrading and expanding wastewater treatment plant.
- In this community the Streets Department collected more than 500,000 tons of residential waste each year,
- Some 10 percent of the city's residential waste was food waste.
- It delivers to disposal facilities at a cost of about \$59 per ton.
- Demonstration project, installing disposers in 173 homes.
- Selected two neighborhoods of owner occupied housing.
- Free for participants
- Citywide education campaign
- Offered all residents citywide incentive to purchase or upgrade disposals.

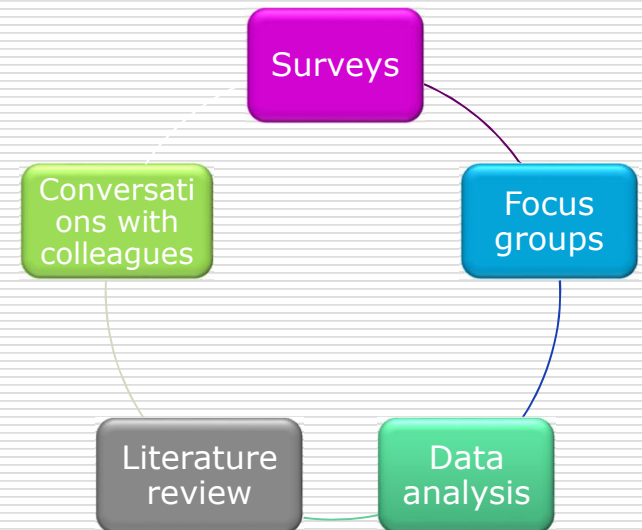




# Process

## Design

- ❑ City partnered with disposal company
- ❑ Worked with community groups in each area to help with initial identification and continued outreach
- ❑ Asked disposal recipients to participate in action and data collection
- ❑ Outreach- door to door, local events, information through street department and disposal company
- ❑ Set up surveys and focus groups



## Measurement

- ❑ Waste composition audit before and 1 year later.
- ❑ Water dept monitored water usage in neighborhoods
- ❑ 75 Post surveys assessing self-reported activities and behavioral changes
- ❑ Conducted two focus groups



# *Surveys and Focus Groups*

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- ❑ Disposal usage patterns, amount and frequency
  - ❑ Program Impacts
  - ❑ Trash
  - ❑ Cooking oil
  - ❑ Back yard composting
  - ❑ Satisfaction
  - ❑ Outreach
  - ❑ Barriers
  - ❑ Additional benefits
- ❑ Focus groups also addressed motivations by participants and non participants.
  - ❑ Messaging exercises



*'Once you have a disposer you can't live without one'.*

# ***PARTICIPATION***



## **Motivations**

*"They are beautiful."*

- ☐ Thought that they could reduce trash
- ☐ The program was free
- ☐ Help reduce odors in the trash / kitchen / house
- ☐ Stop freezing food before setting it out for trash day
- ☐ Buy less bleach for the trash cans
- ☐ Reduce issues with pests and rodents

*"I used to put out trash every day and now I only put it out every other day".*

## **Barriers- why might not participate**

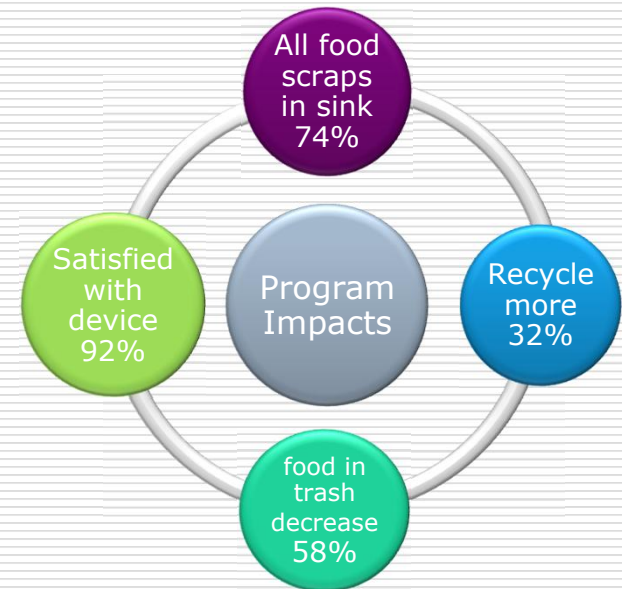
- ☐ Did not believe it was really free
- ☐ Wanted to know what was the 'catch'
- ☐ In order to get the disposer installed they would have to make major and costly upgrades to their plumbing, and spend lots of money to get something that was free
- ☐ Did not trust the City
- ☐ Did not want strangers in their home doing the installations
- ☐ Did not own their home
- ☐ People are just lazy

# RESULTS

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## Participants

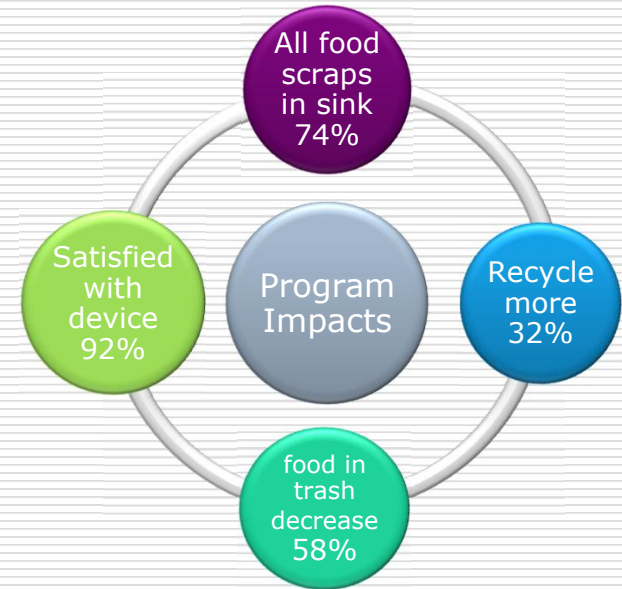
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- Overall, 92% of the respondents were *very* or *somewhat* satisfied with the program



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## City

- ❑ No significant change in water usage
- ❑ Reduced food waste weight by 34%
- ❑ Reduced food waste 1.4 pounds / hh/ wk
- ❑ 19,000 ton reduction
- ❑ \$1.1 million annual savings in disposal fees.

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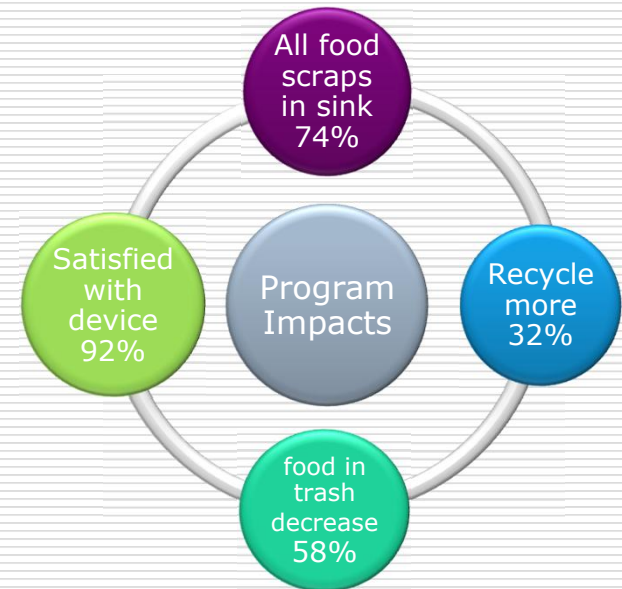
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Outreach Method	Worked best
Someone came to my door	75%
Flyers	66%
Neighborhood meetings and parties	39%
City's robo- calls	16%
City sponsorship	35%

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# ***Program Comparisons***

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## Similarities ?

- ☐ Not a lot of time/ resources
- ☐ Not sure personal benefit (split incentives)
- ☐ Lack ability to control
- ☐ Peer to peer conversations effective
- ☐ Captive audience
- ☐ Design and measurement workshops early on
- ☐ Focus groups provided critical feedback
- ☐ Control group important for evaluation and analysis
- ☐ CBSM steps and tools are applicable to both populations!

# Program Comparisons

## Differences

- ☐ Targeted behaviors
- ☐ Direct contact
- ☐ Participant status
- ☐ Attitudes / Perceptions
- ☐ Outreach materials
- ☐ Ease of subject analysis
- ☐ Feedback

*"Resource conservation is contrary to greater production"*

*"We don't need another state mandated mandatory training for our soldiers."*



*"Helps me to keep a much cleaner kitchen. I truly thank you and the city so much. I appreciate it every day."*



***THANK YOU!!***

***Questions?***

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[dsouza@serainc.com](mailto:dsouza@serainc.com)

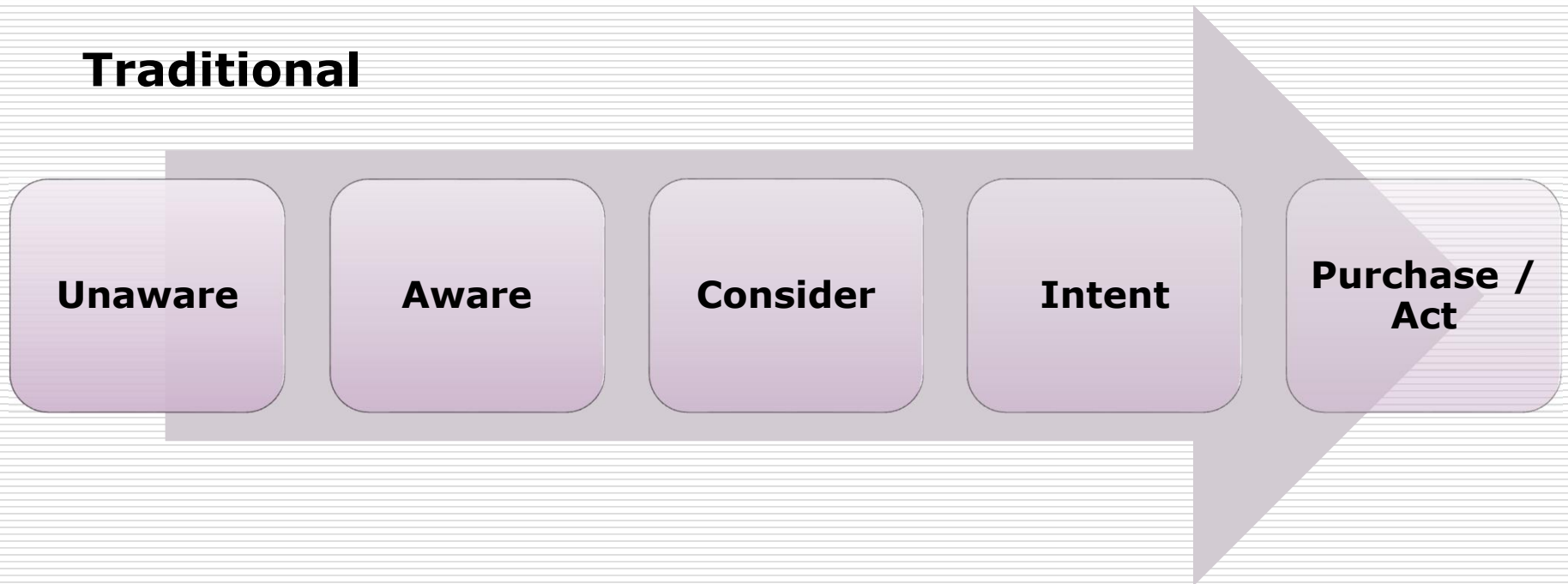
***Lisa Skumatz, Ph.D.***  
[skumatz@serainc.com](mailto:skumatz@serainc.com)

**Skumatz Economic Research Associates**  
[www.serainc.com](http://www.serainc.com) / 303-494-1178

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## **Traditional**



Focus on developing awareness and an action