

THE GREATER HOUSTON-GALVESTON TRASH-BASED AQUATIC ACTION PLAN









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If we do the math, each Houstonian produces 0.81 Ibs of plastic waste per day Plastic waste compromises about 13% of municipal solid waste in the U.S. In 2015, there
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> In 2015, there were 6,656,947 people in the Houston Metro area

Each day Houston could produce

5,365,299 lbs

of plastic, or

1,958,407,200 lbs

per year

(~ 979,200 tons)



BAYOU CITY AND OUR DIRECT LINE TO THE GULF

- •Between 4.8 and 12.7 million metric tons of plastic entered the ocean in 2010 from people living within 50 kilometers of the coastline worldwide
- •The oceans take in roughly 8 million metric tons of plastic in a typical year
- •This is the equivalent of finding five grocery bags full of plastic on every foot of coastline in the 192 countries examined in the study

PROJECT BEGINNINGS: THE ACTION PLAN

- The goals of this project are to discuss the need for:
 - Research & Assessment
 - Coordination
 - Prevention
 - Removal Emergency Response & Preparedness





EXAMPLE ACTION PLANS

- Completed literature reviews of Houston/ Galveston area research
- Reviewed existing marine debris plans
 - Hawai'i
 - Great Lakes
 - Florida
 - Oregon
- Contacted previous plan writers/ follow up on progress





TRASH SUMMIT WORKSHOP ONE: MAY 2017

- Stakeholders representing 18+ local nonprofit organizations and
 12 local government entities
- Discussed methods to prevent/reduce marine debris and better coordinate regional efforts
- Began brainstorming development of a regional Trash-Based Aquatic Plan
- Drafts of goals for the Plan were developed

















WHY AN ACTION PLAN?

A non-regulatory guidance document

- •The document is not intended to be regulatory or specifically binding on actions or timeframes.
- Not just a communications plan for a marketing or awareness campaign.
- Plan addresses many aspects of marine debris and aquatic trash.



Components of an action plan framework



Modified from Integration and Application Network at University of Maryland Center for Environmental Science.



BUILD PARTNERSHIPS

- Identify key stakeholders
- Identify issues of concern
- Set primary goals



Still seeking industry, commercial, government and nonprofit partners

Components of an action plan framework



GOALS IDENTIFIED AT MAY 2017 TRASH SUMMIT

Goal 1: Conduct High Quality Research and Evaluation

Strategy 1.1 Identify Resources and Current Efforts

Strategy 1.2 Monitoring

Goal 2: Reduce Sources of Land-Based Debris through Prevention

Strategy 2.1 Increase Awareness and Change Behavior through Education and Outreach

Strategy 2.2 Promote and Encourage Extended Producer Responsibility

Strategy 2.3 Enhance Efforts to Support Waste Reduction

Strategy 2.4 Enhance Efforts to Utilize Physical Mechanisms to Prevent Debris

Goal 3: Reduce Sources of Water-Based Debris through Prevention

Strategy 3.1 Increase Awareness and Change Behavior through Education and Outreach

Strategy 3.2 Promote and Encourage Extended Producer Responsibility

Strategy 3.3 Enhance Efforts to Support Waste Reduction

Strategy 3.4 Enhance Efforts to Utilize Physical Mechanisms to Prevent Debris

Goal 4: Support and Sustain Removal of Traditional Litter and Trash

Strategy 4.1 Removal

Strategy 4.2 Disaster Debris

Goal 5: Increase Capacity for Large Debris Removal

Strategy 5.1 Disaster Debris

Strategy 5.2 Vessels

Strategy 5.3 Vehicles

TRASH SUMMIT WORKSHOP TWO: OCTOBER 2017

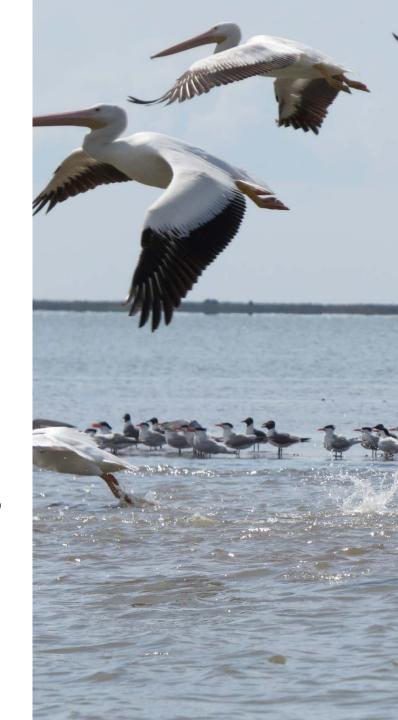
- 20 partner organizations
- Discussed and refined goals and strategies
- Refined language and determined best fit strategies
- Project website was introduced
- Post-meeting, partners used website's member only forum to comment further on strategies and to begin suggesting actions

www.donttrashagoodthing.org



TRASH SUMMIT WORKSHOP THREE: MAY 2018

- Finalized goals and strategies (now reduced to 3 goals)
- Discussed next steps
- Work Group Discussions and Updates
 - Communication Strategy Working Group
 - Research Strategy Working Group
 - Removal Strategy Working Group



2018 GOAL FINALIZATION

- Goal 1: Conduct High Quality Research and Needs Assessment
 - Strategy 1.1 Identify resources and current efforts
 - Strategy 1.2 Data gap assessment to prioritize needs
 - Strategy 1.3 Develop understanding of life cycle, transport, quantity and accumulation rate of marine debris
 - Strategy 1.4 Monitoring and standardization



2018 GOAL FINALIZATION

- Goal 2: Reduce Sources of Land-based and Water-based Debris Through Prevention
 - Strategy 2.1 Increase awareness and change behavior
 - Strategy 2.2 Promote and encourage producer and merchant responsibility
 - Strategy 2.3 Enhance efforts to support waste reduction



2018 GOAL FINALIZATION

- Goal 3: Support and Sustain Removal of Litter, Trash and Debris
 - Strategy 3.1 Removal of traditional litter
 - Strategy 3.2 Removal of disaster debris
 - Strategy 3.3. Increase capacity for large debris removal (including abandoned vessels and vehicles)



Components of an action plan framework



NEXT STEPS FOR THE GREATER HOUSTON-GALVESTON REGIONAL STAKEHOLDERS....

- Continue to build partnerships and bring in additional stakeholders who can contribute to preparing the plan and implementing actins.
- Establish timeline for releasing the plan
- Establish timeline for implementing actions
- Locate funding to speed up process



HOUSTON WE HAVE A PROBLEM... AND SOLUTIONS!

- black cat

 GIS and Biological Services
- We need you! Seeking partners in all industries and sectors
- www.donttrashagoodthing.org
- Amanda Hackney: Black Cat GIS & Biological Services
 - a.hackney@blackcatgis.com
- Dr. Stephanie Glenn, Dr. Erin Kinney: Houston Advanced Research Center
- Cynthia Clevenger, Lisa Marshall: Galveston Bay Estuary Program
- Rebecca Begley: Houston- Galveston Area Council





