

Virginia Coastal Zone Management Program

Virginia Marine Debris Summit Summary



Virginia Coastal Zone
MANAGEMENT PROGRAM



The Virginia Marine Debris Summit was funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA11NOS4190122 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Summary of Event

The Virginia Aquarium & Marine Science Center provided the facilities to host the **Virginia Marine Debris Summit - Exploring Solutions: Educate, Motivate, Innovate** on February 27-28, 2013.

A planning committee comprised of Virginia Coastal Zone Management Program staff and representatives from the Virginia Aquarium, Clean Virginia Waterways/ Longwood University, Virginia Commonwealth University, Virginia Sea Grant, Virginia Institute of Marine Science, and the Department of Environmental Quality Office of Public Communication and Outreach and Office of Pollution Prevention Program worked together to develop the agenda, secure speakers and facilitators, and undertake all logistics.



The goal of the summit was to lay the groundwork for development of a Virginia Marine Debris Management Plan for the Commonwealth. Having a plan in place also will help Virginia meet one of its goals as a member of the Mid-Atlantic Regional Council on the Ocean (MARCO). Management options from the summit will be presented to the Virginia Coastal Policy Team and to MARCO for consideration.

The summit engaged 75 professionals from federal, state and local governments, nonprofits, community groups, industry, and academia who work to prevent and mitigate the litter and waste that degrades our coastal and ocean waters. (Photo above shows attendees gathered during one of the Summit's plenary sessions). A list of Summit attendees is provided below.



Together Summit attendees identified and reviewed the sources and impacts of marine debris of particular concern in Virginia - plastics (food and beverage containers and plastic bags), recreational and commercial fishing gear and cigarette butts and balloons - and then identified possible solutions for each type of marine debris. These proposed solutions included new ways to educate people and change their behavior, motivate them through new incentives, and to innovate products and technology that help the marine environment.

Virginia Secretary of Natural Resources, Doug Domenech, opened the Summit by reminding attendees of the importance of addressing the debris issue at its source as well as once trash enters the marine environment. Invited speakers included staff from NOAA and EPA, university scientists, NGOs, industry stakeholders, and state and local governments. There were more than 15 individual presentations, expert panel discussions, and breakout working sessions. Partner exhibits highlighting marine debris prevention and reduction efforts circled the main meeting space (photo above). The Summit agenda, including links to presentations, is provided below, and also available on the Virginia CZM Program Marine Debris web page at <http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/VirginiaMarineDebris.aspx>. A summary of the outcomes of the Summit is provided below.

Media coverage of the summit included a photo and caption in **Inside Business**. The Summit also was highlighted in the **Virginia Beach City Manager's Update**. See below.

The Virginia Marine Debris Summit was sponsored by the Virginia Coastal Zone Management Program and the Virginia Aquarium, as well as the Virginia Seafood Council and the Virginia Aquaculture Oyster Growers. Logistical support provided by the Aquarium and its catering subcontractor (Sodexo) included registration management and fee collection, host hotel arrangements, onsite coordination, food and break services, break-out space for workgroups, set-up and cleaning services, and audio-visual equipment use and support. Of particular note, the food service provided by the Aquarium and its caterer, and all activities during the event, generated zero landfill waste – the limited amount of waste from the event was entirely recycled or composted. As a result of the sustainability planning, the Marine Debris Summit received the highest rating from the state as a Virginia Green Certified Event.

Virginia Marine Debris Summit Attendees

Virginia Marine Debris Summit – February 27 & 28, 2013 - Attendees

Email Address	First Name	Last Name	Job Title	Company Name
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Total Attendees - 66

Virginia Marine Debris Summit Agenda

Welcome and Goals of the Workshop

Mark Swingle, Director of Research & Conservation, Virginia Aquarium & Marine Science Center (remarks only - no presentation)

[Exploring Solutions that Educate, Motivate and Innovate \(pdf\)](#)

Laura McKay, Program Manager, Virginia Coastal Zone Management Program

[Virginia Secretary of Natural Resources Remarks \(pdf\)](#)

Doug Domenech, Secretary of Natural Resources, Commonwealth of Virginia

Marine Debris – Global Perspectives (presentation to be posted soon)

Nicholas Mallos, Conservation Biologist & Marine Debris Specialist, The Ocean Conservancy

[Microplastics: Is smaller bigger? \(pdf\)](#)

Dr. Robert Hale, Professor of Marine Science, Virginia Institute of Marine Science, College of William and Mary

Fishing Gear: Commercial and Recreational

[Virginia Fishing Line Recycling Program \(pdf\)](#)

Alicia Nelson, Fisheries Management, Virginia Marine Resources Commission

[Marine Debris: Lost Commercial Fishing Gear in Virginia Waters \(pdf\)](#)

Dr. Donna Marie Bilkovic, Virginia Institute of Marine Science, College of William and Mary

Items of Special Concern: Cigarette Butts & Balloons

[Cigarette Butts as Litter \(pdf\)](#)

Katie Register, Executive Director, Clean Virginia Waterways of Longwood University

Bronwen Evans, Director of Litter Programs, Keep America Beautiful

[Balloons as Litter: A Rising Concern \(pdf\)](#)

Christina M. Trapani, Stranding Information Specialist, Virginia Aquarium Stranding Response

Plastics in the Marine Environment: Food and Beverage Containers and Plastic Bags

Convenient Trash: On the go, on the beach, in the ocean (presentation to be posted soon)

Nicholas Mallos, Conservation Biologist & Marine Debris Specialist, The Ocean Conservancy

[Marine Debris Solutions: Creating Effective, Collaborative Partnerships to Reduce Litter \(pdf\)](#)

Ashley Carlson, Consultant, American Chemistry Council

[Keep Virginia Beautiful Plastic Bag Campaign \(pdf\)](#)

Mike Baum, Executive Director, Keep Virginia Beautiful

[Recycling Polyethylene Film: Trex Plastic Recycled Lumber \(pdf\)](#)

Samara Norman, Trex

The Power of a Nickel: The Story of the DC Plastic Bag Fee (presentation to be posted soon)

Matt Robinson, Environmental Protection Specialist, Stormwater Management Division, District of Columbia Dept of Environment

Stemming the Tide of Trash: Highlights of Innovative Programs, Solutions and Actions

[Solutions: A Toolbox of Options \(pdf\)](#)

Katie Register, Executive Director, Clean Virginia Waterways of Longwood University

Do You Sea What I See? (presentation not available)

Cris Ausink, HRStorm, Hampton Clean City Commission (presentation not available)

[Stream to Sea \(pdf\)](#)

Wade Blackwood, Director, American Canoeist Association

[Pilot Project to Assess Behavior and Attitudes Regarding Discarded Trash and Ocean Health \(pdf\)](#)

Mark Swingle, Director of Research & Conservation, Virginia Aquarium & Marine Science Center

[Implementing the Anacostia River Trash TMDL \(pdf\)](#)

Matt Robinson, Environmental Protection Specialist, Stormwater Management Division, District of Columbia Dept of Environment

[NOAA Action to Reduce the Impacts of Marine Debris: Responses to Pervasive Problems and Natural Disaster Events \(pdf\)](#)

Jason Rolfe, Southeast and Caribbean Regional Coordinator, Marine Debris Program, National Oceanic and Atmospheric Administration

[EPA National Trash Free Waters Program: A Strategic Approach to Reduce Trash and Debris in Aquatic Ecosystems \(pdf\)](#)

Robert Benson, Senior Advisor for Aquatic Ecosystem Strategies, Office of Wetlands, Oceans and Watersheds, United States Environmental Protection Agency

Virginia Marine Debris Summit Media Coverage



City of Virginia Beach

March 8, 2013

Virginia Marine Debris Summit Nets Plan During Virginia Green Certified Event



The Virginia Aquarium & Marine Science Center hosted a two-day Virginia Marine Debris Summit, February 27 and 28. Sponsored by the **Virginia Coastal Zone Management Program and the Aquarium**, the summit welcomed seventy attendees to Virginia Beach and brought together marine debris experts and target audiences.

Virginia Secretary of Natural Resources **Doug Domenech** opened the summit reminding attendees of the importance of addressing the debris issue at its source as well as once trash enters the marine environment. Invited speakers included staff from **National Oceanic and Atmospheric Association** and the **Environmental Protection Agency**, university scientists, non-governmental organizations, and state and local governments. The goal of the summit was to begin development of a Marine Debris Management Plan for the state as part of an overall water quality strategy of the **Mid-Atlantic Regional Council on the Ocean (MARCO)**. Management options from the summit will be presented to the **Virginia Coastal Policy Team** and to MARCO for consideration. Of particular note, the Aquarium food service provided by Sodexo, and all activities during the event generated zero landfill waste. This means the limited amount of waste from the event was entirely recycled or composted. As a result, the event received the highest rating from the state as a Virginia Green Certified Event.



Jr. Memorial Commission of the Virginia General Assembly and the Richmond Symphony will present a public concert on Saturday, April 13, at 8 p.m. at Richmond CenterStage's Carpenter Theater, 600 E. Grace St in Richmond.

The choral and orchestral production will tell the story of the emancipation in historical context and feature national and state performers and music written during and after the Civil War by Virginia composers and artists. A highlight will be a choir of 200 voices from university and college groups across Virginia, together with Richmond's One Voice Chorus and the Richmond Symphony Chorus. Included in that performance will be choral groups from the College of William and Mary, Hampton University, Norfolk State University, Old Dominion University and Regent University.

The concert is free to all but tickets are required. Tickets are limited to two per person and are available on a first come, first served basis from the symphony at www.richmondsymphony.com, (804) 788-1212 and patronservices@richmondsymphony.com through April 5.

Regional event organizers and askHRgreen.org have designated March through May for the task of cleaning up and greening up Hampton Roads as part of the **Great American Cleanup**.

Cleanup events from Williamsburg to Virginia Beach will be posted during those months at askhrgreen.org/the-great-american-cleanup-2013/.

The Great American Cleanup is a **Keep America Beautiful Initiative** and the largest grassroots community involvement program in the country, according to a press release.



PROS PONDER A PLAN The Virginia Aquarium in Virginia Beach hosted a two-day summit last month with the goal of beginning development of a marine debris management plan for the state as part of an overall water-quality strategy of the Mid-Atlantic Regional Council on the Ocean. Virginia Secretary of Natural Resources Doug Domenech, third from left, opened the summit, reminding attendees of the importance of addressing the debris issue at its source as well as once trash enters the marine environment. He is shown here with, left to right, Laura McKay, program manager, Virginia Coastal Zone Management Program; Virginia Aquarium Director of Research & Conservation Mark Swingle; Virginia Witmer, outreach coordinator of the zone management program; and Christiana Trapani, stranding information specialist.

Virginia Marine Debris Summit Outcomes

A facilitator's guide and note taker's guide was developed to guide the collection of conversations from participants. Additionally, a template was developed for the note takers to guide their collection of Actions. The intent was for the note takers to record the Action, Responsible Party and the Timeframe. A simplified pull down menu was developed to facilitate the collection of these data and minimize the altering of comments from the participants. The summit engaged 66 professionals from federal, state and local governments, nonprofits, community groups, industry, and academia who work to prevent and mitigate the litter and waste that degrades our coastal and ocean waters. The attendance list is provided in the Appendices.

The Summit provided detailed sessions covering the topics of Fishing Gear (Commercial and Recreational), Items of Special Concern: Cigarette Butts and Balloons, Plastics in the Marine Environment: Food and Beverage Containers and Plastic Bags, Innovative Programs, Solutions and Actions. Speakers for the sessions included the Nicholas Mallos of the Ocean Conservancy, Ashley Carlson of the American Chemistry Council, Samara Norman of TREX, Matt Robinson of the DC Department of the Environment, Jason Rolfe of NOAA and Robert Benson of the USEPA. Additionally, local speakers included: Matt Swingle of the VA Aquarium and Marine Science Center, Cris Ausink of the City of Hampton, Katie Register of Clean VA Waterways and research faculty from VIMS. A full agenda is provided in the Appendices. The keynote speaker for the Summit was the Virginia Secretary of Natural Resources Doug Domenech. Presentations, where available, have been posted to the VA CZM Web:

<http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/VirginiaMarineDebris.aspx>

Breakout groups were self selected by the participants based upon their interest in providing meaningful participation in the development of draft Actions to inform a Management Plan. The topics were broken down into Fishing Gear (Recreational and Commercial), Single Use Plastics, and Butts, Balloons, and Special Concern Items. Participants were also requested to provide additional unaddressed recommendations in the form of hand written notes on provided 3x5 cards. All group facilitators were requested to identify the "responsible party" and "timeframe" for the suggested action. Based upon the notes, not all facilitators nor note-takers were able to record this valuable component. Where this was recorded, it is noted below.

Additionally, as part of the introduction into each breakout session, the groups were to respond to trigger questions such as:

- What specific information or images stood out to you?
- How did you feel at the end of the day?
- Who else should be involved and why?

Responses to these questions included:

- Negative imagery of impacted wildlife
- Recycling is confusing
- There is no silver bullet
- Balloons are an area that should be addressed considering there is a current law for releases
- Trash is a watershed issue and should be considered "aquatic debris" as opposed to "marine debris"
- Organizations need interconnected communication and coordination
- Waste management is a local and economic issue
- Include: Fishermen, recreational boat owners, County Government, Retail establishments, etc
- Engage outside states that have implemented programs for guidance in the VA efforts

The notes from this session are provided below.

As the discussions moved into the actual development of Actions, the following suggested actions were provided for each of the topic areas:

Fishing Gear:

- Educate and dispel urban myths about abandoned fishing gear – kids learn from parents (Short Term <12 mos)
- Incorporate marine debris education in boater education classes and other professional association meetings - perhaps when watermen or recreational fishermen apply for a license – develop on-line or written quiz for an incentive (locations for education and incentives – retailers, marinas – e.g., Bass Pro, West Marine, Walmart) and Boat US Foundation (Short Term <12 mos)
- Encourage, explore and consider requiring the expanded use of biodegradable hatches on crab pots; work with industry or target manufacturer; and develop a “how to” for own constructed pots (Medium Term 12mos to 3 yrs)
- Encourage watermen to report loses of crab pots and other derelict fishing gear (Short Term <12 mos)
- Fund more clean-up efforts (legal issues) (Medium Term 12mos to 3 yrs)
- Continued collection of derelict crab pots through both financial incentives and enforcement (Short Term <12 mos)
- Explore enforcement and legal issues of abandoned pots with identification still on them (current barrier is low number of marine patrol officers available) (Short Term <12 mos)
- Continue and expand the fishing line recycling program (Short Term <12 mos)
- Educate/Explore/Research/Encourage/Develop use of biodegradable fishing line (Medium Term 12mos to 3 yrs)
- Educate about fishing net use and net avoidance (Short Term <12 mos)
- Place identification tags on clam nets on the Eastern Shore (Short Term <12 mos)
- Follow progress (encourage implementation) of shellfish BMPs to address TMDLs
- Notify boaters about the location of aquaculture leases and cages; not only on the Internet but also for unidentified or unreadable PVC markers in riverine sites (Short Term <12 mos)
- Prioritize the impact of recreational and commercial fishing gear debris: where do we put our emphasis? (Short Term <12 mos)
- Invite additional partners to the table, such as: commercial watermen, recreational fishermen, agriculture, marine police, CBF and other water groups, boaters, marinas, VDOT, Coast Guard, boat manufacturing industry and retail businesses, waste management and disposal companies, Ducks Unlimited and duck hunters, AG or attorneys, JAG, environmental planners (Short Term <12 mos)
- Develop and publicize the economic (and environment) impact loss data – HR Green, VIMS, PDCs (Short Term <12 mos)
- Explore methods to obtain permission and gain access for clean ups in areas un-accessible (ex. shallow) or difficult to reach sites (ex. military)
- Create new methods to clean up less accessible areas
- Determine property ownership of clean-up areas
- Identify ownership of and responsibility for trash
- Develop methods for gaining access to private or government properties
- Take advantage of resources from Boat USA and Keep America Beautiful
- Encourage paddlers, fishers and other users to carry pocket knives or scissors to clip line
- Additional Topics:
 - Storms and tornado debris
 - Drinking and marine debris
 - Ammunition and fireworks
 - Incentives for crab pot debris
 - Cigarette butts in and around boats and marinas

Single Use Plastics:

- Put pressure on brand owners to use proper recycling labels (NGO) (Medium Term 12mos to 3 yrs)
- Develop and implement a monitoring program with intent and purpose. [Partner depends on what is being monitored; most likely Gov't and NGO; Alice Ferguson Foundation] (OTHER) (Long >3yrs)
- Appropriate education to take action for defined audiences [look at Alice Ferguson Foundation; Keep America Beautiful models] (NGO) (Medium Term 12mos to 3 yrs)
- Marketing to elicit action: ex. Washed Ashore's Every Action Counts; The Ocean Project (NGO) ((Medium Term 12mos to 3 yrs)
- Implement the Keep America Beautiful "Littering is Wrong Too" campaign [Alice Ferguson Foundation has a host of resources available] (NGO) (Short Term <12 mos)
- Conduct a systematic strategic planning process at the State and Regional Level. Identify: What are the big issues? What are the priority opportunities? Goals? Available Resources? Key Players? Deliverables? Barriers to success. Do assessment homework first. (STATE) (Short Term <12 mos)
- Host consortia of expertise on Trash Free Waters to develop strategic plan. [Clean Virginia Waterways] (ACADEMIC) ((Short Term <12 mos)
- Encourage Virginia Junior Academy of Science and Virginia Academy of Science to focus research on Marine Debris. [Virginia Office of Environmental Education and Dept of Education] (STATE) (Medium Term 12mos to 3 yrs)
- Radically expand Environmental Education activities by state agencies. (STATE) (Short Term <12 mos)
- Develop a strategy for removal of existing debris/trash. (PLANNING DISTRICTS) (Short Term <12 mos)
- Explore/document existing regulatory actions that impact marine debris. [nests within assessment process as part of strategic plan development] (STATE) (Short Term <12 mos)

Butts, Balloons, and Special Concern Items:

- Address storm debris management, especially from flooding) – Engaging local governments; disposal of organic/inorganic material policy; research of salt concentrated (contaminated) materials
- Education to include the connections between land and water via storm drain; motivate to change behavior; involve schools and MWEE (OTHER)
- Develop a balloon campaign – multilevel comprehensive education program; offer alternatives and legacy; collaborating with the balloon industry
- Change statutes regarding balloon releases and increase enforcement; have JLARC do regulator review
- Increased penalties for litter; review penalty levels and connect to enforcement via committee
- Promote central repository marine debris clearing house; NOAA marine debris (FEDERAL)
- Engage local governments for cleaning –up derelict vessels and structures; identify funding streams; public/private rights/policy; VMRC has derelict vessel program for boats in water (STATE)
- Establish marine debris monitoring sites for the purpose of ongoing data collection and use as public awareness tool/educator tool
- Establish water quality standards for nicotine and other plastic chemical additives
- Promote balloon litter study and engaging more citizens as citizen scientists
- Investigate impacts of used fireworks as litter source (NGO) (Short Term <12 mos)
- Increased adoption of storm drains by neighborhoods (Adopt-A-Drain)
- Education on refusing/reducing/responsible use of plastic bags; promote BYOB (bring your own bag)
- Research and promote health/economic effects of plastics and other litter off-gassing/leaching
- Review the planning document on a yearly basis for revision
- Create a survey via social media to identify alternatives to balloon releases
- Define packages of ads thrown onto private properties as litter (review ordinances)
- Consider statewide bag ban or fees for use; talk with legislators

- Identify hotspots for cigarette butt littering; identify incentives for providing receptacles; review ordinances and conversations with hotspot owners

Additionally, 3x5 index cards were collected from participants indicating their top three priorities as outcomes and to inform the development of the Management Plan. Overall categories includes marine debris monitoring, storm drain management and the connection from upland sources, management of derelict vessels, balloon release laws or campaigns, adoption of policies and outreach/education.

Specifically, these included:

- Establish marine debris monitoring sites (x3)
- Storm drain/debris management (x3)
- Develop a balloon release campaign (x3)
- Education to include the connection between land and water via storm drains (x2)
- Policies established on derelict boat; determine the authorities and jurisdictions (x2)
- Develop a NOAA Marine Debris Clearing House (x2)
- Research and promote the health and economic effect of plastic and other litter in the environment
- Establish water quality standards for nicotine and other plastics
- Education of refusal and the reduction of plastic bags
- Education on the responsible use of plastic bags
- General adoption of storm drains by neighborhoods (Adopt-a-Drain)
- NOAA promotion of their data on web
- Outreach and education to youth
- Change or enforce the balloon release laws
- Monitoring sites involving kids and using as a tool to bring your own bag (BYOB) campaign
- Establish improved water quality standards
- Establish a balloon study and implement citizen science
- Research the health and economic benefits of plastics and other litter leaching impacts

EPA Lead Discussion: EPA's Trash Free Waters Program

At the end of the VA Marine Debris Summit, Bob Benson of the US EPA provided an overview of the USEPA Trash Free Water's Program and led a discussion of to identify needs and next steps to implementing such an effort.

The USEPA Trash Free Waters Program has five essential program elements:

1. Make the case that the impacts of trash in aquatic ecosystems justify priority action
2. Determine whether plastic trash has major human health effects in the food chain.
3. Define the next generation of public engagement in trash prevention.
4. Create a Sustainable Materials Management program for plastics packaging.
5. Establish regional watershed partnership programs for zero trash in coastal waters.

Through the discussion lead by Mr. Benson, the topic began with a, "*Need to understand the needs to support trash prevention*" in Virginia. For example, Mr Benson, suggested the process work with other fed groups such as NOAA and indicated a need for more flexibility in state pass-through grants from the Federal Government so states can redirect \$ as needed. Topically, the process was to identify:

- What is working
- What is not working
- What tools do you need

- What is the number one thing the fed govt can do for us (funding)

The focus of the conversation was primarily on: “What can the fed govt do to help. This discussion resulted in the following list of suggestions:

1. Provide funding to support research, capacity building (preventing, reducing & cleaning up)
2. Work closely with other fed partners to break down silos of fed agencies
3. More flexibility in grants
4. Facilitate partnerships
5. National guidelines for MD reduction
6. Tech assistance for understanding problem, monitoring
7. EPA to encourage states to be more proactive stewards (citizen engagement)
8. Help private & public partnerships (govt, NGO, industry)
9. Be the keystone in aquatic debris cleanup. National guidelines for aquatic debris reduction and states implement.

Mr Benson sought to answer, “Do we set inspirational goals or regulatory standards?” Asking, “Are these volunteer-based and individual-based actions.”

Consensus from the discussion indicated, that monitoring is needed. To facilitate the monitoring, the following suggestions were provided:

- Money to support monitoring, gather data, assessment of known data.
- Local & State objectives
- More data for baseline & to compare to older data sets

Finally, Mr Benson, asked to identify the relevant partners that may be willing to participate in the implementation of the National Trash Free Waters Program, in Virginia. The following list of suggestions was provided by the participants:

- VA Recycling Assn
- VA Waste Management Companies
- VA Municipal League
- VA Association of Counties
- VA Planning District Commissions
- VA Recycling Association
- Clean Virginia Waterways
- Regional and watershed groups

Final Recommendations

As demonstrated through the work sessions and from thoughtful participation by the attendees, significant areas have been identified to address the overall marine debris issue. An overarching theme which became apparent through this process was marine debris is not solely a coastal issue but a larger watershed-based issue. This issue is similar to the nonpoint source pollution as it emanates from many diffuse sources and is collected in the estuaries and coastal areas. To sufficiently address marine debris, the overall plan must include a statewide and watershed-wide component.

Resources from the NOAA Marine Debris Program and the USEPA have been offered to assist in the development of a monitoring program to quantify the impacts of marine debris and collection efforts. As well as assisting in the development of a regional approach to address a “Trash Free” initiative by the USEPA. Additionally, the VA CZM Program is supporting the development of a Marine Debris Management Plan, with funds to support the Clean Virginia Waterways, VA Aquarium and the VCU for this effort. A draft plan will be based upon a strategic planning effort that

includes the participation from participants and attendees at the Summit and will be advanced to the MARCO VA Coastal Policy Team for adoption.

Faciliator's Guide

Facilitator and Note-taker Guide for Break-out Sessions: the Focused Conversation to identify Strategies and Actions

Intro (5 minutes: Please use your own words, paraphrase, and make it yours...don't just read!)

Thank you for joining this session on (*Fishing Gear, Single Use Plastics, Items of Special Concern, put title of break out group in here.*) The Virginia Coastal Zone Management Program (VCZM) truly appreciates your participation in this discussion. My name is (*give a bit of info on yourself...*) and I will be leading us through a focused conversation for the next hour and a half. Your input today will help us toward our ultimate goal to develop a Marine Debris Management Plan for Virginia. Virginia is first in the region to initiate this process and much will be built upon what we begin today. You have selected this session because you have an interest in this topic and wanted to help craft the plan to manage marine debris.

We will follow a process that might be new to some of you, so please hang in there and have fun. The questions are organized in a way that will get us to our ultimate work-session goal of identifying strategies and actions, but we will first ask you to think about and reflect on what we heard yesterday from experts in the field of marine debris. Yesterday, we heard several experts address some of the most critical issues in Marine Debris including Fishing Gear, Butts and Balloons, Single Use Food and Beverage Containers, Plastic Bags and Innovative Solutions. We hope those presentations as well as your own experiences will inform our discussion.

As your process facilitator, I will now pose a series of open ended questions intended to stimulate and focus our discussion. You have heard some similarities in yesterday's presentations, such as need for regulatory changes or enforcement, education and communication, and incentives for positive action. We'd like you to think about what needs to happen in terms of short term, mid- term and long term goals.

Our note taker (recognize the person) will record our conversation and project the notes on a flip chart and the screen to help all of us stay on track and to capture the group's discussion.

Ground Rules:

- Openly share your opinions
- Listen to the thoughts of your peers
- There is no wrong answer, we are not here to debate
- Please take care of your personal needs
- Phones to stun and take calls away from discussion
- Bathrooms are...

Now, let's begin!

(10 minutes) Objective Questions:

Thinking about what you heard in yesterday's presentations.....

- What specific information stood out for you ?
- What are your take aways?
- Any images that hit you and why?

(15-20 minutes) Reflective Questions:

Your reaction to the information you heard yesterday....

- What surprises or concerns you?
- What resonated with you?
- What did you like or not like hearing?
- What still leaves you with questions?
- As you reflect on the attendees, who else do you think might need to be part of this process?
- Are your personal experiences consistent or inconsistent with what you heard?
- How did you FEEL at the end of the day.....?

(20 minutes) Interpretive Questions:

How you will use the meaningful information you heard yesterday....

- What previously held ideas were changed for you if any?
- What do you know now that you did not know before this planning summit? (ACTION: Ask participants to give two numbers on scale of 0-5. First number represents how much they knew before the presentations and second number represents how much they know now, after the presentations)

Let's take a look at implementation of a Marine Debris Management Plan.

- What role do you see yourself playing in the solution to the marine debris problem?
- What do we need to do or change to be on the right track in VA?
- What are the main steps in moving forward?
- What resources are needed?
- Who else should be involved and why?

(approx 35 minutes) Decisional Questions:

Make a decision about actions needed to form the plan!

Based on our discussion so far, let's now focus on specific strategies for Virginia...remember to suggest if short, mid or long term action.

- As Virginia moves forward, what are some of the specific things we can address?
- What are the specific regulatory changes needed?
- How might educational programs include and address marine debris?
- What incentives might be involved?
- How can we measure progress?
- What are funding priorities for projects?

Note Taker will create/populate while projecting on screen the action planning spread sheet with:

- WHO
- WHAT (action verb), Action to be taken
- WHEN (Timeframe: short, mid, long)

Final Prioritizing:

Before we leave, I would like you to take a 3x5 card and write the top three action items from the spread sheet. Please put your 3x5 card in this pile on your way to the final session.

Closing Remarks:

We, the VCZM and our partners, want to thank you so much for your active listening and for your contributions to the focused conversation. Your input is critical to developing a plan that will be achievable. If you are interested in continuing to participate in the discussion of (say the name of this break out session), please list your name and contact information on the flip chart in the back. We will distill the comments into a draft plan that will be available for additional input.

Roles of the Note Takers

Teams:

Angela Neilan and Virginia Witmer

Ann Regn and Hillary Adams

Todd Janeski and Dave Ruble

The note takers are to support the facilitators by recording and displaying the comments of the participants. They are to remain neutral (as will the facilitators), not influence the statements, nor interrupt the speaker. Responses recorded are to be the exact language the participant has provided. Please do not abbreviate, interpret their statement or change their language. Note takers may ask for clarification and a confirmation the participant's comment was accurately recorded. It is the responsibility of the facilitators to obtain the involvement from the participants.

The note takers will record on flip charts the responses to the Objective, Reflective and Interpretive questions. These will be posted on the walls (need tape or adhesive flip pads) for all participants to see and reference.

All flip chart sheets will be numbered in the top right hand corner.

Print in large text so the language is visible by the furthest person in the room. Approximately 2" letters.

With the guidance from the facilitator, the title at top of sheet may include:

"What we heard"

"Your reaction"

"Who is missing"

"What are some key questions?"

The note takers will transition to the laptop to record the responses to the Decisional questions. They are to capture the active language for Strategies and Actions. Responsible parties will be identified as will the time scale.

Efficiency is the key to conducting this facilitated process and teamwork is essential for accurately capturing the participant's viewpoint and comments.

Note Taking Template

Responsible Party	Action	Timeframe
Choose WHO.		Specify timeframe
Choose WHO.		Specify timeframe
Choose WHO.		Specify timeframe
Choose WHO.		Specify timeframe
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Choose WHO.		Specify timeframe
Choose WHO.		
Choose WHO.		
Choose WHO.		
Choose WHO.		
Choose WHO.		

Trigger Question Responses, prior to Action Item development

Single Use Food and Beverage

(10 minutes) Objective Questions:

Thinking about what you heard in yesterday's presentations.....

Trigger Questions:

- What specific information stood out for you?
- What are your take-aways?
- Any images that hit you and why?
 - Bottle caps in the stomach of animals
 - Trash TMDL in DC is awesome
 - Comparison of Virginia data with the world data
 - Recycling is confusing
 - How to change behavior and culture of single use
 - No one is excluded
 - Everyone is involved

- No silver bullet – solutions will need to be combination of methods
- No exclusions
- Bridging the watershed with coastal communities
- Ocean is always downstream
- Trash as a watershed issue
- Marine debris is “aquatic” debris
- Trash blindness
- Fundamental disconnect with U.S. society (developed world) between what happens to trash after it gets tossed ‘near’ trash cans (I’ve done my part...)
- Understanding the economic impact of trash and litter

(15-20 minutes) Reflective Questions:

Your reaction to the information you heard yesterday....

Trigger questions:

- How did you FEEL at the end of the day.....?
 - Each organization is doing their own thing to seek solutions and not collaborating for a combined strategy for marine debris
 - Disconnect between initiatives trying to solve the challenge of marine debris
 - The toxicity question – what are the priorities for handling toxic challenges? Where should we focus our energies when looking at toxicity and transfer?
 - There’s more plastic coming down the pipe
 - Tackling totality of M.D. is challenging
 - “Size Matters” concept in regards to plastic
 - Can only eat an elephant one bite at a time
 - We can collaboratively and collectively solve and prioritize
 - Relatively low-hanging fruit
 - A lot of solutions not being utilized
 - What defines “access” for being able to recycle?
 - Cities = curbside
 - Rural = depot
 - Perception/acceptance of recycling is valuable
 - Waste management is a local and economic issue
 - Coffee chains use recyclable foam cups, but public perception is that the foam cups are not recyclable

Let’s take a look at implementation of a Marine Debris Management Plan.

Trigger Questions:

- What role do you see yourself playing in the solution to the marine debris problem?
- What do we need to do or change to be on the right track in VA?
- What are the main steps in moving forward?
- What resources are needed?
- Who else should be involved and why?
 - How much infrastructure is already in place to prevent trash from entering the waterways
 - Logistics of capturing debris
 - Need for accurate definition of ‘waste’ and ‘trash’

- Waste is trash not properly disposed
- We can technically recycle anything, but it's the economics to make it viable that create challenges
- Need baseline assessments for trash in the waterways
- Assessment of existing programs involved with litter and trash removal
- Alice Ferguson Foundations makes assessment reports for Anacostia River clean-ups each year
- Make GIS map for where clean-up projects are already taking place
- Land-based prevention and reduction strategies
- Celebrate success
- If all things are "recyclable" then the costs for recycling should be factored into the entire life cycle of the product from manufacture to recycling
- Life cycle analysis does not consider end-of-life impacts in the environment and marine environment
- Need to quantify end of life impacts on marine environment
- We need standards for recycling
- Who else needs to be involved?
 - Fishermen
 - Recreational boat owners
 - County agencies
 - VACO (Virginia Association of Counties) and VML (Virginia Municipal League)
 - Schools
 - Retail and Restaurants
 - National Recycling Coalition
 - Waste Management, Inc.
 - Engage outside states that have implemented programs for guidance on how to develop a state plan

Balloons, Butts and Special Concern Items

Pre-action Item discussion

- **Images or concepts that Stood out**
 - Balloons-Warfare
- Albatross-Stomachs
- Leaching plastic containers
- Bags—recycling process
 - TREX- process/valid
- Issue of biodegradable plastics
- Green event RRR model participation
- Unintended consequences
 - Ban cigarettes to address the concentration of butts
- Balloon data tracking
- Midway Albatross Images how to promote
- Bags look like jelly fish
- Animals entangled
- Pushing recycling when we need to rethink & refuse
- Waster hierarchy and prevention—keep in mind
- Start thinking differently
- Balloons the "new" poster child?
- Lots of research but lots missing

- Surfers and paddlers on the ground
- Resources from Feds like the NOAA MD Program

What's Missing

- Where does litter come from?
 - Untarped—Don't go topless
- More enforcement
- More datasharing
 - KAB data, resources and protocols
 - OC-CC data state or items
- Litter.org—sharing
 - Central repository—NOAA MD
 - Spatially located
 - Share and post data—two way
 - State/local/fed/NGOs
- Common vocabulary—how to address
 - Both sides marine and land
 - Look at wiki
 - Articulate needs and expectations to web owners
- Identify pristine areas for benchmarks
- Green events use as a means to benchmark
- Adopt and spot model and NOAA protocol
- Connect land and aquatic and processes and impacts--SWM

Notes Collected in Template

	Fishing Gear	
Responsible Party	Action	Timeframe
Choose WHO.	Educate and dispel urban myths about abandoned fishing gear – kids learn from parents	Short (<12 months)
Choose WHO.	Incorporate marine debris education in boater education classes and other professional association meetings - perhaps when watermen or recreational fishermen apply for a license – develop on-line or written quiz for an incentive (locations for education and incentives – retailers, marinas – e.g., Bass Pro, West Marine, Walmart) and Boat US Foundation	Short (<12 months)
Choose WHO.	Encourage/explore (require?) the expanded use of biodegradable hatches on crab pots – work with industry or target manufacturer – how to when you make your own pots	med (12mos-3yrs)
Choose WHO.	Encourage watermen to report loses of crab pots and other derelict fishing gear	Short (<12 months)
Choose WHO.	Fund more clean-up efforts (legal issues)	med (12mos-3yrs)
	Continued collection of derelict crab pots (financial incentives and enforcement)	Short term
Choose WHO.	Explore enforcement and legal issues of abandoned pots with identification still on them (barrier is low number of marine patrol officers available)	Short (<12 months)
Choose WHO.	Continue and expand the fishing line recycling program	Short (<12 months)
Choose WHO.	Educate/Explore/Research/Encourage/Develop use of biodegradable fishing line	med (12mos-3yrs)
Choose WHO.	Educate about fishing net use and net avoidance	Short (<12 months)
Choose WHO.	Place identification tags on clam nets on the Eastern Shore	Short (<12 months)
Choose WHO.	Follow progress (encourage implementation) of shellfish BMPs	Short term
Choose WHO.	Notify boaters about the location of aquaculture leases and cages (not only on the Internet – unreadable PVC markers)	Short term
Choose WHO.	Prioritize the impact of recreational and commercial fishing gear debris (where do we put our emphasis?)	Short term
Choose WHO.	Invite additional partners to the table (commercial watermen, recreational fishermen, agriculture, marine police, CBF and other water groups, boaters, marinas, VDOT, Coast Guard, boat manufacturing industry and retail businesses, waste management and disposal companies, Ducks Unlimited and duck hunters, AG or attorneys, JAG, environmental planners)	Short term
Choose WHO.	Develop and publicize the economic (and environment) impact loss data – HR Green, VIMS, PDCs	Short term
	Explore methods to obtain permission and gain access for clean ups in areas un-accessible (shallow), difficult to reach (military)	
	Create new methods to clean up less accessible areas	
	Determine property ownership of clean-up areas	

	Identify ownership of and responsibility for trash	
	Methods for gaining access (private or government properties)	
	Additional Topics: Storms and tornado debris Drinking and marine debris Ammunition and fireworks Incentives for crab pot debris Cigarette butts in and around boats and marinas	
	Take advantage of resources from Boat USA and KAB	
	Encourage paddlers/fishers to carry pocket knives or scissors to clip line	

	Single Use Plastics	
Responsible Party	Action	Timeframe
NGO	Put pressure on brand owners to use proper recycling labels	med (12mos-3yrs)
Other	Monitoring with intent and purpose. [Partner depends on what is being monitored; most likely Gov't and NGO; Alice Ferguson Foundation]	long (>3yrs)
NGO	Appropriate education to take action for defined audiences [look at Alice Ferguson Foundation; Keep America Beautiful models]	med (12mos-3yrs)
NGO	Marketing to elicit action [Washed Ashore's Every Action Counts; The Ocean Project]	med (12mos-3yrs)
NGO	Implement the Keep America Beautiful "Littering is Wrong Too" campaign [Alice Ferguson Foundation has a host of resources available]	Short (<12 months)
State	Systematic strategic planning process at the State (Virginia) and Regional Level. What are the big issues? What are the priority opportunities? Goals? Available Resources? Key Players? Deliverables? Barriers to success. Do assessment homework first.	Short (<12 months)
Academic	Host consortia of expertise on Trash Free Waters to develop strategic plan. [Clean Virginia Waterways]	Short (<12 months)
State	Encourage Virginia Junior Academy of Science and Virginia Academy of Science to focus research on Marine Debris. [Virginia Office of Environmental Education and Dept of Education]	med (12mos-3yrs)
State	Radically expand Environmental Education activities by state agencies.	Short (<12 months)
Planning Districts	Strategy for removal of existing debris/trash.	Short (<12 months)
State	Explore/document existing regulatory actions that impact marine debris. [nests within assessment process as part of strategic plan development]	Short (<12 months)
Choose WHO.		
Choose WHO.		

Choose WHO.		
Choose WHO.		

	Butts, Balloons and Special Concern Items	
Responsible Party	Action	Timeframe
Choose WHO.	Storm Debris Management (flooding) – Engaging local governments; disposal of organic/inorganic material policy; research of salt concentrated (contaminated) materials	Specify timeframe
Other	Education to include the connections between land and water via storm drain; motivate to change behavior; involve schools and MWEE	Specify timeframe
Choose WHO.	Balloon campaign – multilevel comprehensive education program; offer alternatives and legacy; collaborating with the balloon industry	Specify timeframe
Choose WHO.	Change statutes regarding balloon releases and increase enforcement; have JLARC do regulator review	Specify timeframe
Choose WHO.	Increased penalties for litter; review penalty levels and connect to enforcement via committee	Specify timeframe
Federal	Promote central repository marine debris clearing house; NOAA marine debris	Short (<12 months)
State	Engage local governments for cleaning –up derelict vessels and structures; identify funding streams; public/private rights/policy; VMRC has derelict vessel program for boats in water	Specify timeframe
Choose WHO.	Establish marine debris monitoring sites for the purpose of ongoing data collection and use as public awareness tool/educator tool	Specify timeframe
Choose WHO.	Establish water quality standard for nicotine and other plastic chemical additives	Specify timeframe
Choose WHO.	Promote balloon litter study and engaging more citizens as citizen scientists	Specify timeframe
NGO	Investigate impacts of used fireworks as litter source	Short term
Choose WHO.	Increased adoption of storm drains by neighborhoods (Adopt-A-Drain)	
Choose WHO.	Education on refusing/reducing/responsible use of plastic bags; promote BYOB (bring your own bag)	
Choose WHO.	Research and promote health/economic effects of plastics and other litter outgasing/leaching	
Choose WHO.	One year review session	
	Create a survey via social media to identify alternatives to balloon releases	
	Define packages of ads thrown onto private properties as litter (review ordinances)	
	Consider statewide bag ban or fees for use; talk with legislators	
	Identify hotspots for cigarette butt littering; identify incentives for providing receptacles; review ordinances and conversations with hotspot owners	

