PPAT April Quarterly Meeting
Chesapeake Bay Plastic Pollution Source Reduction Strategy Overview

April 9, 2026

Presented by: Verone Bernard and Keith Weitz

RTI INTERNATIONAL

Presentation Overview

01 RTI Overview and Team Introduction

02 Past Experiences to Inform Our Work

03 Approach to Plastic Source Reduction Strategy for Chesapeake Bay

04 How the PPAT Can Expect to be Involved

05 Q&A

delivering **the promise of science**
for global good

RTI INTERNATIONAL

RTI International is an independent, scientific research institute dedicated to improving the human condition. We combine scientific rigor and technical expertise in social, statistical, data, and laboratory sciences, engineering, and other technical disciplines to deliver solutions to the critical needs of clients worldwide.

RTI at a Glance

Worldwide Presence and Financial Strength

$1.21B
FY2025 Revenue

1,130
FY2025 Clients

3,359
FY2025 Projects

FY2025 Scientific Stature

52
RTI Fellows

1,109
Journal Articles

5
Patents

33
Editorials

79
Nationalities

20
RTI Press Publications

73
Languages

10
Book Chapters

What We Do

Focus Areas

Multidisciplinary expertise and research insights our clients need to inform policy, practice, and programs

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Analytical Laboratory Sciences

Biopharmaceutical Research

Data Modernization

Drug Discovery and Development

Energy Research

Engineering and Technology R&D

Environmental Science

Food Security and Agriculture

Health

Innovation Ecosystems

Military Support

The RTI team brings a combined ## years of designing and implementing waste management solutions

Laura Morrison
Project Director

Keith Weitz
Plastics Technical Lead

Jamie Pero Parker
Strategy & Facilitation Lead

Emily Thompson
Research Analyst

Verone Bernard
Senior Researcher

Our work is designed to account for the core challenges facing the Chesapeake Bay and its surrounding watershed.

Persistent Threat

Plastic pollution poses a growing ecological threat to the Bay and the communities that depend on it.

Reactive vs. Preventive

Traditional control approaches manage pollution after generation — **a source reduction strategy prevents it upstream.**

Complex Jurisdiction

The watershed spans 6 states, D.C., and nearly 1,800 local governments — **coordination is essential.**

Clear Roadmap Needed

An **evidence-based strategy is needed** to reduce plastic generation and leakage before it enters the watershed.

Our experience will inform our work in the Chesapeake.

	Project	Client
1	Reducing Plastic Litter Along the Mississippi River	EPA ORCR
2	Jamaica Plastic Waste Removal Technical Assistance	World Bank
3	Sri Lanka & Maldives Ocean Plastics Reduction Activity	USAID
4	Optimization Approach for Evaluating Chesapeake Bay Restoration Strategies	EPA ORD
5	Benefit Transfer Analysis of the Chesapeake Bay TMDL	EPA NCEE

Three Core Pillars of RTI's Approach

01

Execute Efficiently at Scale

Leverage AI-assisted document screening, existing Bay Program structures, and PPAT engagement to accelerate delivery without sacrificing scientific rigor across 1,800+ local governments.

02

Convert Technical Rigor into Action

Mobilize multidisciplinary experts early to evaluate feasibility alongside evidence — assessing cost, scale, authority, and implementation challenges as strategies are developed.

03

Human-Centered Design

Move beyond information gathering to reconciliation of trade-offs, co-creating strategy elements through structured iteration — producing decision-ready recommendations with shared ownership.

TASK 3

Research & Inventory Current Management Actions

Subtask 3.1 — Literature Review

3.1.1 Establish Analytical Framework

Align with EPA & PPAT on definitions of source reduction (macro + micro). Confirm watershed characteristics relevant to strategy transferability (governance, land use, leakage pathways).

3.1.2 Accelerated Strategy Identification

RTI Library + AI/ML-enabled screening of peer-reviewed and gray literature. Prioritize strategies with documented implementation and effectiveness. All AI outputs validated by subject matter experts.

3.1.3 Evidence Synthesis & Finalization

Searchable MS Excel evidence table filterable by pathway, intervention type, and evidence tier. Draft synthesis memo presented to PPAT ≥14 days before EPA submittal.

Subtask 3.2 — Watershed Inventory

3.2.1 Initial Inventory Development

Extract Chesapeake Bay–relevant policies and programs from Subtask 3.1 findings. Use consistent typology to classify voluntary and regulatory actions.

3.2.2 Targeted Desk-Based Review

Review state statutes, county ordinances, utility/stormwater programs, and Bay Program documentation. Capture location, scale, timeline, implementing partners, and evidence of effectiveness.

3.2.3 Stakeholder Mapping

Map key actors: state agencies, municipal governments, stormwater/wastewater utilities, watershed orgs, NGOs. Builds on existing Bay Program partner structures — no duplication.

3.2.4 Validation & Finalization

Targeted outreach via PPAT to confirm completeness. Searchable MS Excel inventory (SharePoint) with source citations. Presented to PPAT ≥14 days before EPA submittal.

TASK 4

Develop Source Reduction Strategy

Subtask 4.1 — Priority Action List

4.1.1 Evidence-Based Preparation

RTI experts distill candidate actions from Tasks 3.1 & 3.2 applying a screening lens: effectiveness, cost, scale, and implementation barriers. Packaged as a decision-oriented pre-read + pre-work survey sent to PPAT members.

4.1.2 PPAT Virtual Workshop

One structured virtual session. Survey insights pre-loaded to focus discussion. HCD tools (Mural, Mentimeter) used to surface perspectives, reduce dominance effects, and converge on priorities in real time.

4.1.3 Post-Workshop Synthesis

RTI synthesizes PPAT input and produces a Priority Action List table of near-term, achievable, jurisdiction-ready actions. Presented to PPAT ≥14 days before EPA submittal.

Subtask 4.2 — Full Strategy Document

4.2.1

Single cohesive document drawing on all prior subtask outputs. Clearly distinguishes current actions (inventory) from new opportunities. Includes education/outreach, single-use plastic prevention, and producer responsibility.

4.2.2 PPAT Review Workshop

One virtual review session presented ≥21 days before EPA submittal. Focused on clarity, jurisdiction alignment, and practicality. Feedback incorporated before final submission.

How the PPAT Can Expect to be Involved

Task 3. Research & Inventory Current Management Actions

REVIEW

Definition alignment

RTI aligns with EPA & PPAT on plastic pollution scope — macro- and microplastics, in vs. out-of-scope.

REVIEW

AI screening review

RTI will share how AI-supported screening will be used during literature review

OUTREACH

Targeted validation

RTI conducts outreach through PPAT to validate inventory completeness and clarify implementation details.

FACILITATION

PPAT as connector

RTI works through PPAT's convening role to efficiently engage stakeholders and guide targeted outreach.

Task 4. Develop Source Reduction Strategy

SURVEY / PRE-WORK

Pre-work survey

PPAT members complete a short survey built on the pre-read so all participants share a common baseline.

WORKSHOP

Prioritization workshop

Single virtual workshop to build shared agreement on a shortlist of top source-reduction actions.

REVIEW

Priority Action List review

PPAT reviews the Priority Action List developed at the workshop

WORKSHOP

Strategy review workshop

Virtual workshop to confirm clarity, alignment with watershed realities, and cross-jurisdiction practicality.

REVIEW

Final draft strategy review

PPAT receives the draft strategy . Feedback is incorporated before the final version is submitted.

Active Engagement Review

Thank you

We look forward to partnering with you.