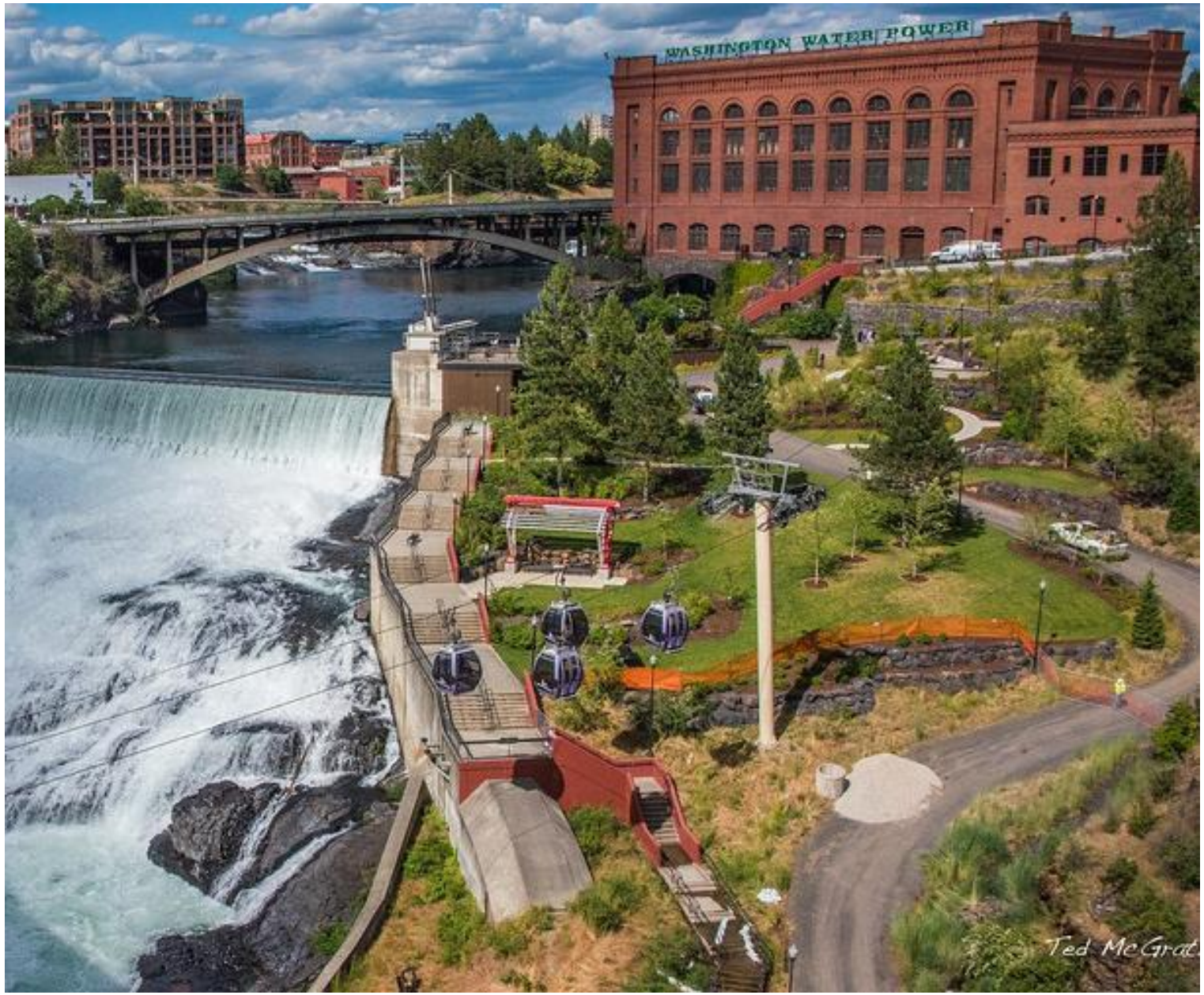


SRRTTF – TSCA

Effectiveness of PCB Procurement Policies & Certifications

Final Report

October 2022

Research Questions

What are the similarities, differences, and impacts of PCB and iPCB procurement policies and certifications?

What strategy, based on what similar consortia have done, could SRRTTF set to advocate for effective public and company policies regarding PCBs?

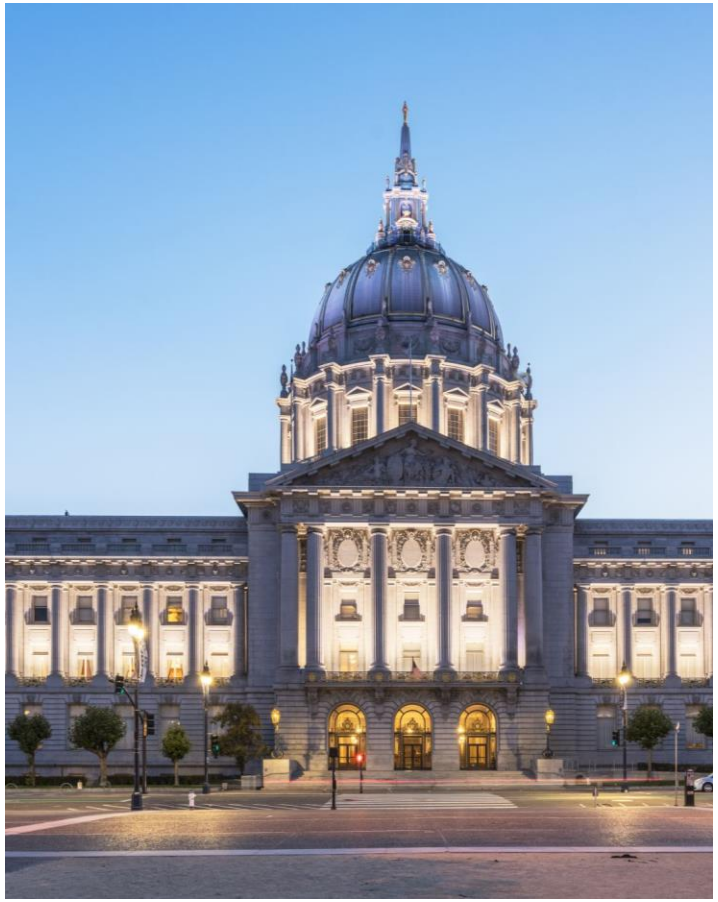
What are the evidence-based practices for stakeholder engagement and intersectoral collaboration that SRRTTF could use to further its mission?

Project Scope

Braided River Consulting

Type of Influence	Assumed Influence	Influence Assessment	Evidence-Based Practices
Knowledge	SRRTTF needs knowledge of the procurement policies, certifications, and other interventions that are currently used to control PCBs.	Environmental scan involving IC2, industry association, and other sources to identify where this knowledge resides.	Benchmark each intervention on testing method, conformance compliance, enforcement, monitoring, successes, and challenges in implementation. Information will be gathered from surveys, interviews, and publicly available data.
	SRRTTF needs to know what makes an intervention to reduce chemicals of concern successful within an intersectoral collaboration.	Review of public policy, environmental law, implementation strategies, and intersectoral collaboration.	Literature review to reveal best and evidence-based practices with surveys and interviews from consortium members and similar groups.
Motivation	Are manufacturers and others in the supply chain motivated to reduce PCBs in products, packaging, and other materials used?	Determine if pressure and/or incentives from consumers, brands, government agencies, or others will change processes and products.	Evaluate what is working to reduce PCBs and other chemicals of concern.
	SRRTTF needs to find a way to dovetail or advocate its values into those held by members and the organizations and/or public they seek to influence.	Determine ways to communicate, educate, and influence the intersectoral stakeholders that can make changes.	Literature review on evidence-based practices for intersectoral stakeholder engagement.
Inter-organizational	SRRTTF needs to advocate for the creation/implementation of public policy, market incentives, industry or public awareness to achieve its goal.	Determine strategy and implementation plan based on benchmarks and other evidence-based practices revealed by this research project.	Recommendations from the research team to SRRTTF based on outcomes of this research project.

Similarities, differences, and impacts of PCB and iPCB procurement policies and certifications



- Limited scope of publicly available data
- Lack of interest in addressing external stakeholders concerns about accountability or evaluation
- Led research team to conclude that no definitive conclusions regarding efficacy can be made at this time
  - However, it is concluded that government policies would benefit from improved education for procurement specialists
  - Incentives can lessen the burden of testing for applicants
  - Extending solicitation times may also increase the number of applicants that will provide test results since the solicitation period is often shorter than the testing turn around period

Business	Intentional PCBs addressed	Inadvertent PCBs addressed	Pigments mentioned as a potential source	Product examples only focused on intentional PCB use	Source
Apple	Y	Y	N	Y	(B, J., 2021)
Bed Bath and Beyond	Y	100 ppm	N	None listed	(Bed Bath and Beyond, 2013)
Brother	Y	Legal limit	Y	None listed	(Brother Industries, LTD., 2021)
Canon	Y	N	N	n/a	(Canon, 2021)
Dell	Y	nd	N	None listed	(Stutz, M., 2021)
Epson	Y	Legal limit	N	None listed	(Epson, 2021)
Fuji Xerox*	Y	Y	N	None listed	(Fuji Xerox Co., LTD, 2020)
HP	Y	0.1 ppm	N	None listed	(HP, 2021)
Lexmark	Y	nd	N	Y	(Lexmark, P.S., 2021)
Namiki	N	N	N	n/a	(Yaguchi, Y., 2021)
Nitto Kohki	Y	50 ppm	N	Y	(Kohki, N., 2021)
Samsung	Y	N	N	Y	(Samsung Electronics Co., Ltd., 2020)

Eco-certification	Intentional PCBs addressed	Inadvertent PCBs addressed	Comments
Cradle to Cradle Certified (C2CC)	Y	Y, < 0.1 ppm	Testing required for products that are colorants, pigments, dyes, or inks containing diarylide yellow, orange, and red and phthalocyanine blue and greens pigment
EWG Verified	Y	Unknown	Focused on personal care products
Green Seal	N	Y, < 100 ppm	No specific prohibition of PCBs, but PCBs are prohibited as contaminants above 100 ppm in formulated product
GreenScreen Certified	Y	Y, < 100 ppm	These assessment methods do consider contaminants, but the standard threshold is 100 ppm
ToxFMD	Y	Y, < 100 ppm	
Made Safe	Y	Yes, limit unknown	Made Safe intentionally does not address intentional use of substances that are already illegal.

Pollution Prevention Consortia

Bay Area Municipal Stormwater Collaborative is an entity focused on uniting the efforts of various city, county, and regional water management entities

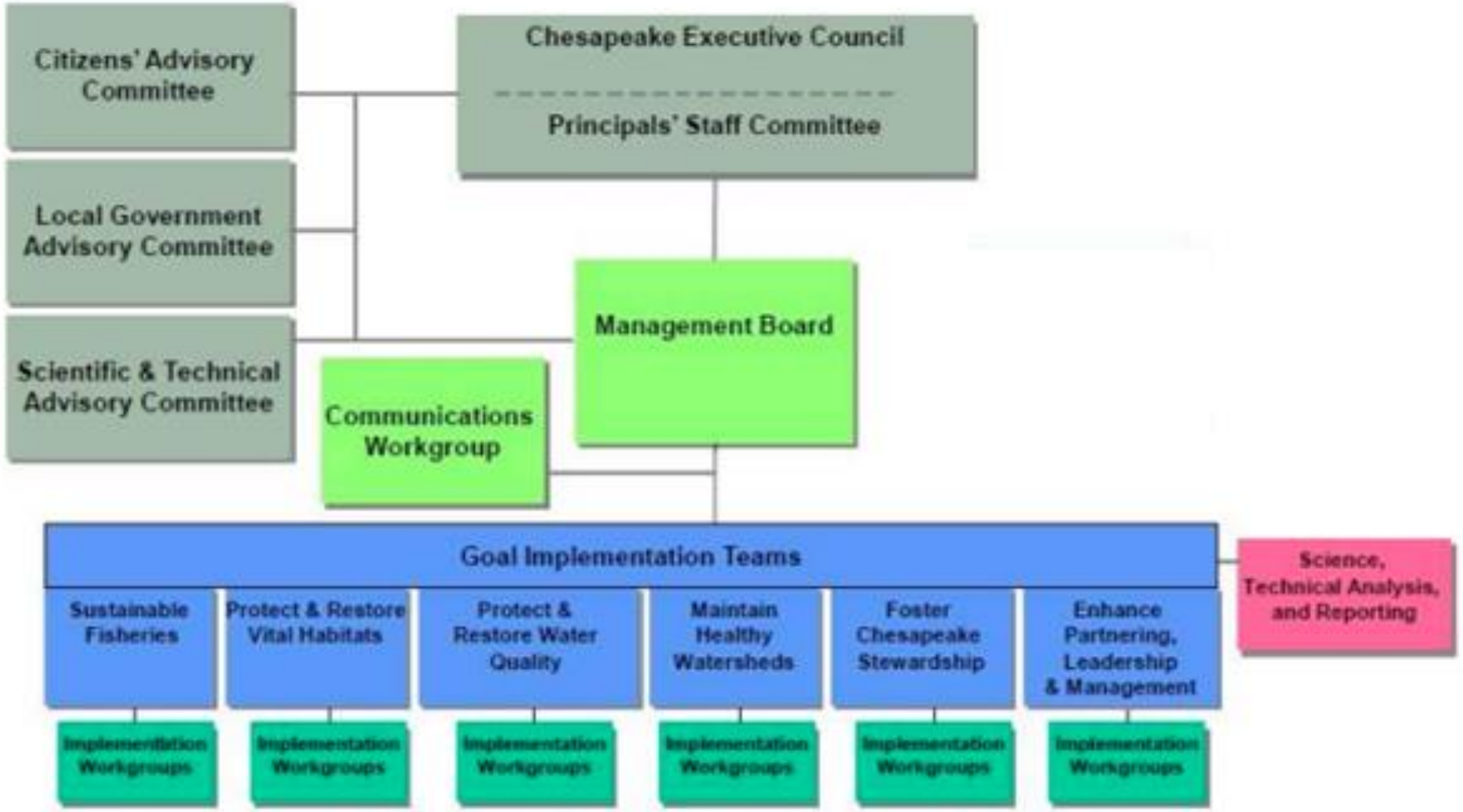
- Creating regional infrastructure for pollution prevention was 75%-95% more cost effective than addressing contamination issues jurisdiction by jurisdiction

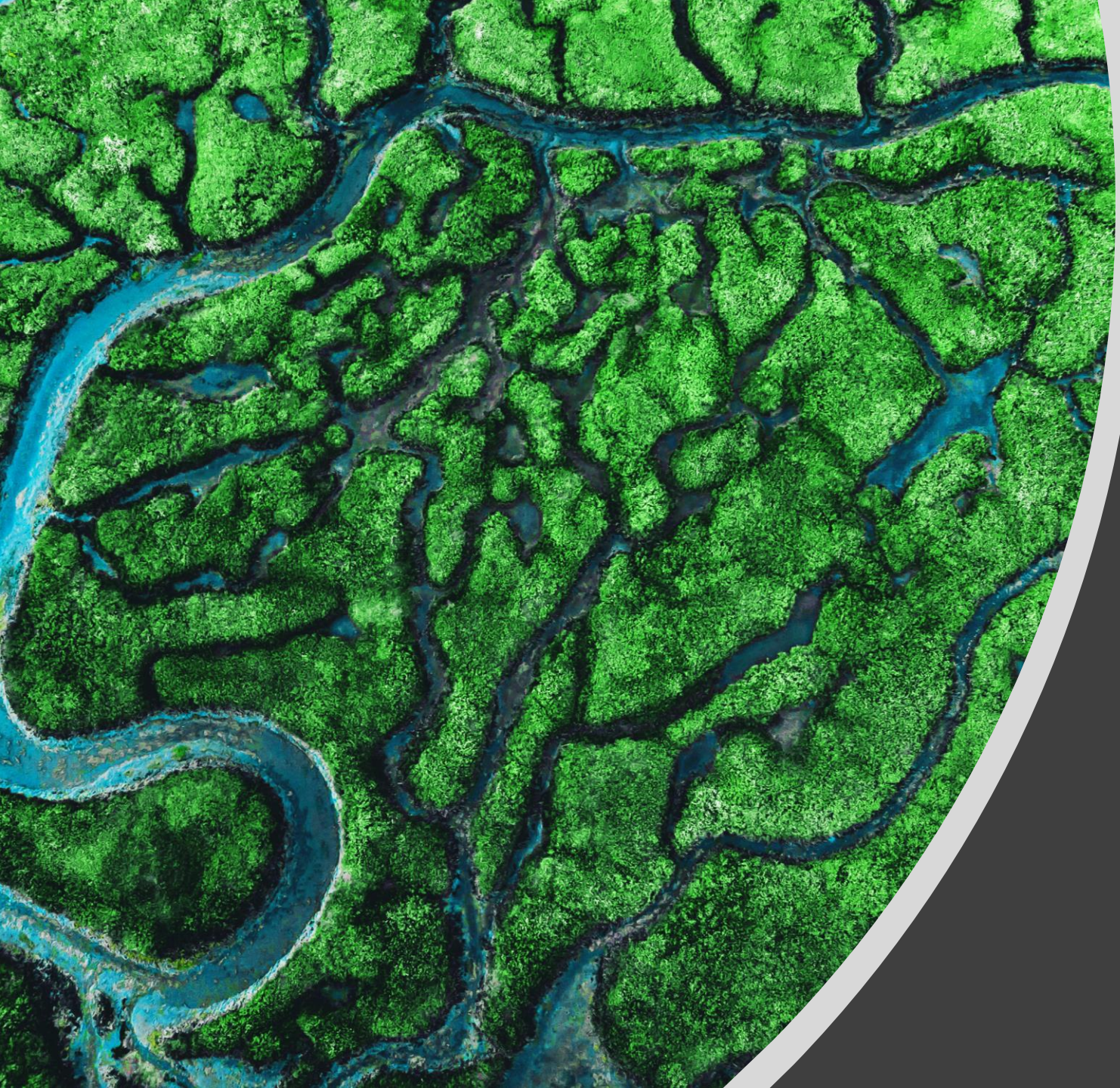
Hudson River Superfund site in New York State benefits from federal coordination due to its official designation as a Superfund site

Chesapeake Bay Program has a unique structure that formalizes input and influence from multiple advisory committees

- Members are elected or appointed and include scientific/technical, citizen, and local government representatives
- Have a strong performance improvement system due to a formalized annual review process where outcomes are measured against previously stated goals

Organizational Structure of the Chesapeake Bay Program





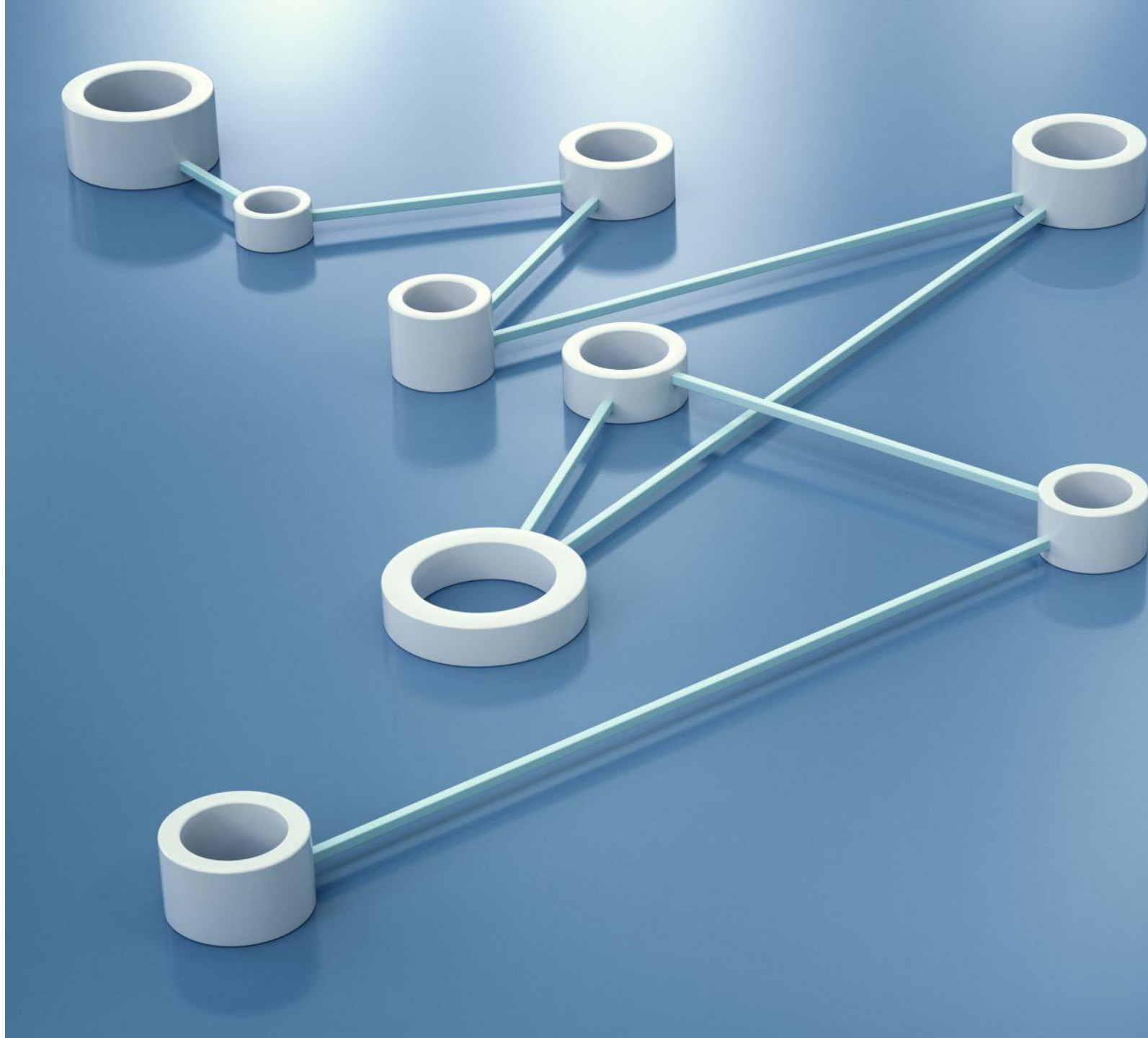
Lessons Learned from Pollution Prevention Consortia

- Set clear goals
- Be consistent with communications
- Transparency among, and buy-in from, affected stakeholders
- Simple, clear agreements recognized by regulators

Consortia

- Unique context
- Varying stakeholders
- Different levels of coordinated effort

All employ some of the smart and evidence-based practices for stakeholder engagement and intersectoral collaboration



Evidence-Based Practices for Intersectoral Collaboration

Practice	Hierarchy of Evidence
1. Engage inclusive and diverse group of stakeholders	EBP
2. Engage in dialogue	EBP
3. Identify purpose and goals of collaboration	EBP
4. Define roles and responsibilities of participants	EBP
5. Set ground rules	EBP
6. Address imbalances in power or resources	EBP
7. Identify shared motivation	EBP
8. Establish commitment	EBP
9. Develop trust	EBP
10. Determine actions the collaboration seeks to take	EBP
11. Address any innovation/ intellectual property considerations	SP
12. Determine definitions for success and collective impact	SP
13. Support accountability	SP
14. Develop legitimacy	SP
15. Exhibit and share leadership	EBP

Sources: Allnock et al., 2006; Ansell & Gash, 2008; Bartlett, 2012; B. Becker, personal communication, February 29, 2016; Bryson, 2011; Bryson, Crosby, & Stone, 2006; Center for Collaborative Policy, n.d.a; Center for Collaborative Policy, n.d.b; D. Constable, personal communication, February 26, 2016; Crosby & Bryson, 2010; Emerson et al., 2011; Foster-Fishman et al., 2011; Iles & Mulvihill, 2012; Innes & Booher, 2004; Intersector Project, n.d.; Johnson et al., 2003; Khosla et al., 2013; W. Leach, personal communication, February 19, 2016; Leach & Sabatier, 2005; Linden, 2003; López & Montalvo, 2015; McDermott et al., 2011; Page, 2010; Provan & Milward, 1995; S. Rogers, personal communication, February 19, 2016; J. Tickner, personal communication, February 29, 2016; Walker & Senecah, 2011; Zahner, 2005

Smart Practices for Stakeholder Engagement

Practice	Hierarchy of Evidence
1. Engage stakeholders early	SP
2. Use messaging targeted to different audiences	SP
3. Establish a collaboration champion	SP
4. Utilize a trusted facilitator	SP
5. Establish trust	EBP
6. Utilize collaborative governance	SP
7. Use a collaboration and communication management software	SP
8. Ensure strong collaboration leadership is in place	SP
9. Determine stakeholder motivations	SP

Sources: Ansell & Gash, 2008; Bartlett, 2012; B. Becker, personal communication, February 29, 2016; Boyte, 2008; Bryson, 2004; Bryson, 2011; Emerson et al., 2011; Getha-Taylor, 2008; Hage, Leroy, & Peterson, 2010; Hargrove, 1998; Innes & Booher, 2004; Intersector Project, n.d.; Leach, 2011; W. Leach, personal communication, February 19, 2016; McDermott et al., 2011; Reed, 2008; S. Rogers, personal communication, February 19, 2016; Sayce et al., 2013; J. Tickner, personal communication, January 26, 2016; Walker & Senecah, 2011; Waugh & Streib, 2006

Recommendations for SRRTTF's stakeholder engagement and intersectoral collaboration

Revisit its list of stakeholders every 3-5 years and note important changes that inform its strategy of stakeholder engagement and its overall strategic plan

It is difficult to hold external stakeholders (like many of those that adopt and implement procurement policies or create certifications) accountable. By partnering with watchdog groups, encouraging government agencies to conduct evaluation of implemented procurement policies, and collaborating with groups that educate consumers on how to exert market pressure it can better achieve its goal of reducing iPCB pollution.

Identify change champions that are likely to create, implement, or evaluate procurement policies in a meaningful way and provide a model and leadership to other stakeholders. Cultivating good relationships with these champions and creating shared messaging could improve compliance and efficacy with procurement policies.

Create a clear and concise Case Statement to help external stakeholders understand the scope and limitation of the consortium while illuminating its important outcomes and why its work should be funded outside its state allocation

Author an evaluation plan with metrics that capture the creation of intellectual, social, political, and economic capital to help SRRTTF understand its impact and better communicate its value to external stakeholders

Follow the Soft Systems Model to help strengthen SRRTTF logic model and increase the efficacy of collective impact in the region

Audit SRRTTF's use of Smart and Evidence-Based Practices and determine where it is doing well and where additional resources may leverage greater impact

Seven Stages of the Soft Systems Methodology

1. Explore the issue (may evolve through study, becoming more or less bounded)
2. Express the problematic situation (in picture form including structures, processes, climate, people, issues expressed by people, and conflicts)
3. Identify key perspectives that are the value base for evaluation and determine what will affect the possibility for success
4. Create a conceptual model of the issue
5. Compare conceptual model with the real world through multiple means
6. List the desirable and feasible interventions according to context
7. Recommendations are made

(Checkland, 2000; Williams, 2005)