

# Emerging Contaminants and Issues of Concern Program

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Division of the NTP

National Institute of Environmental Health Sciences

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# Emerging Contaminants and Issues of Concern (ECIC)

## Program Management Team



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# DNTP Strategic Areas of Focus

Health Effects  
Innovation Programs



Exposure-based  
Research Programs



Strengthening  
Capabilities Programs



Responsive Research  
Programs

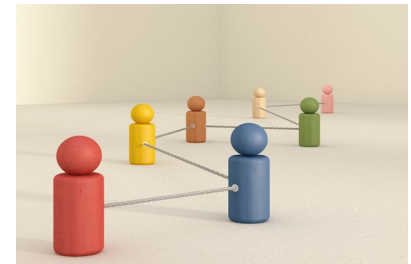


**Emerging Contaminants and  
Issues of Concern (ECIC)  
Program**



## Problem Statement

- Emerging issues and emergencies arise unexpectedly, yet regularly that require high-quality, actionable data to protect public health.
- Rapid mobilization of scientific resources in response to such situations can be challenging.
- Responsive programs would need to communicate translationally relevant data in timely manner for public health decision making.





## ECIC Program Definitions

***Emerging contaminants or issues of concern (ECIC)*** for which there is insufficient toxicological information available for understanding key aspects of risk to human health for contemporary environmental concerns requiring a *prioritized* response.

***Emergencies*** that require a *rapid* response when the public has been exposed to a toxicological hazard for which there are insufficient data to adequately characterize potential harm.

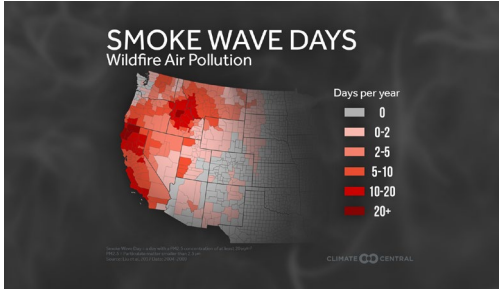


- **Accidental Exposures**
- **Industrial Contamination**
- **Natural Disasters**
- **Public Health Protection**
- **Limited Resources**
- **Increased Substance Exposures**
- **Limited Toxicological Data**



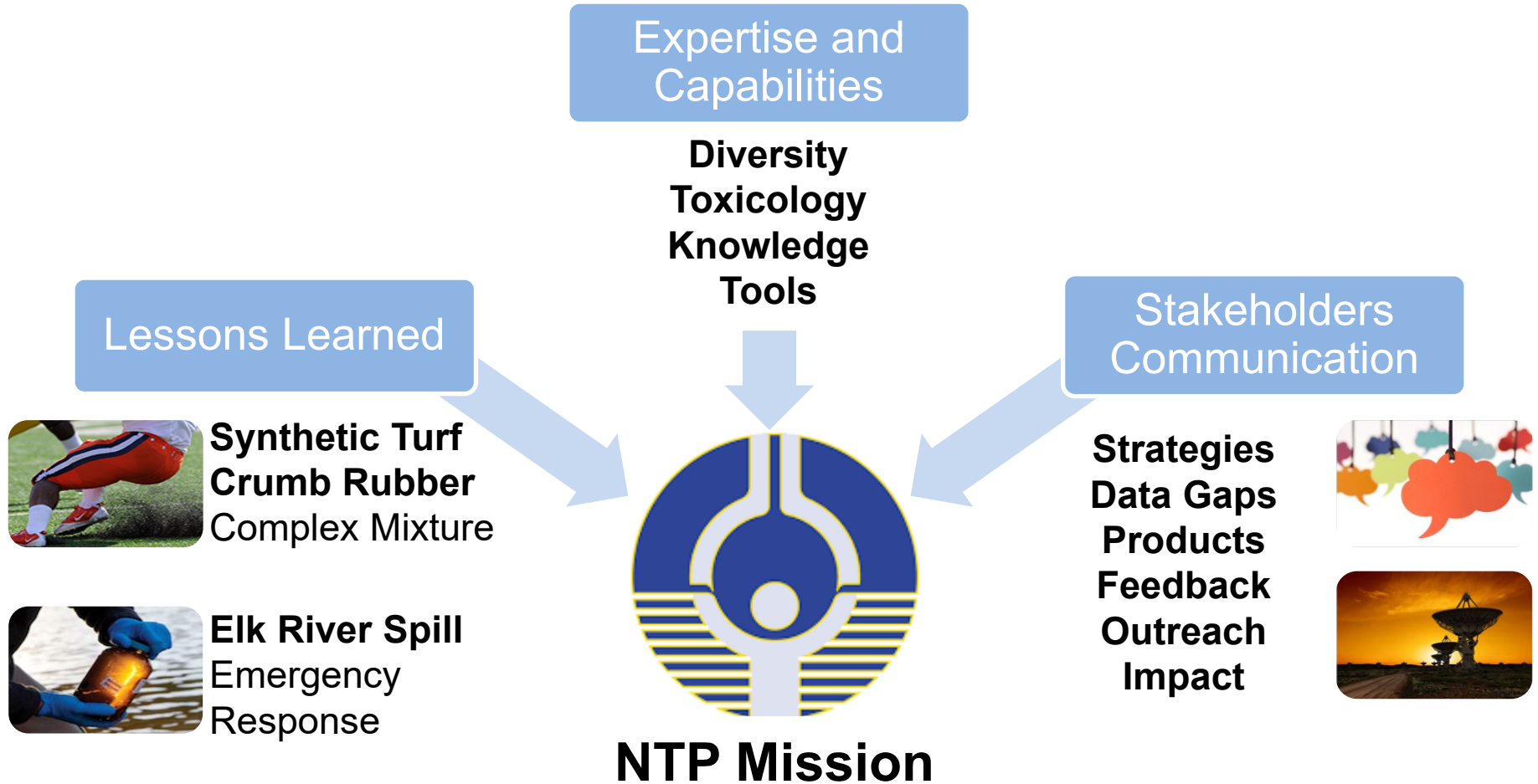


# Why Now?



Coordinated and Successful Response, Capabilities and Tools,  
Preparedness, Communication, Awareness, Breaking Silos...

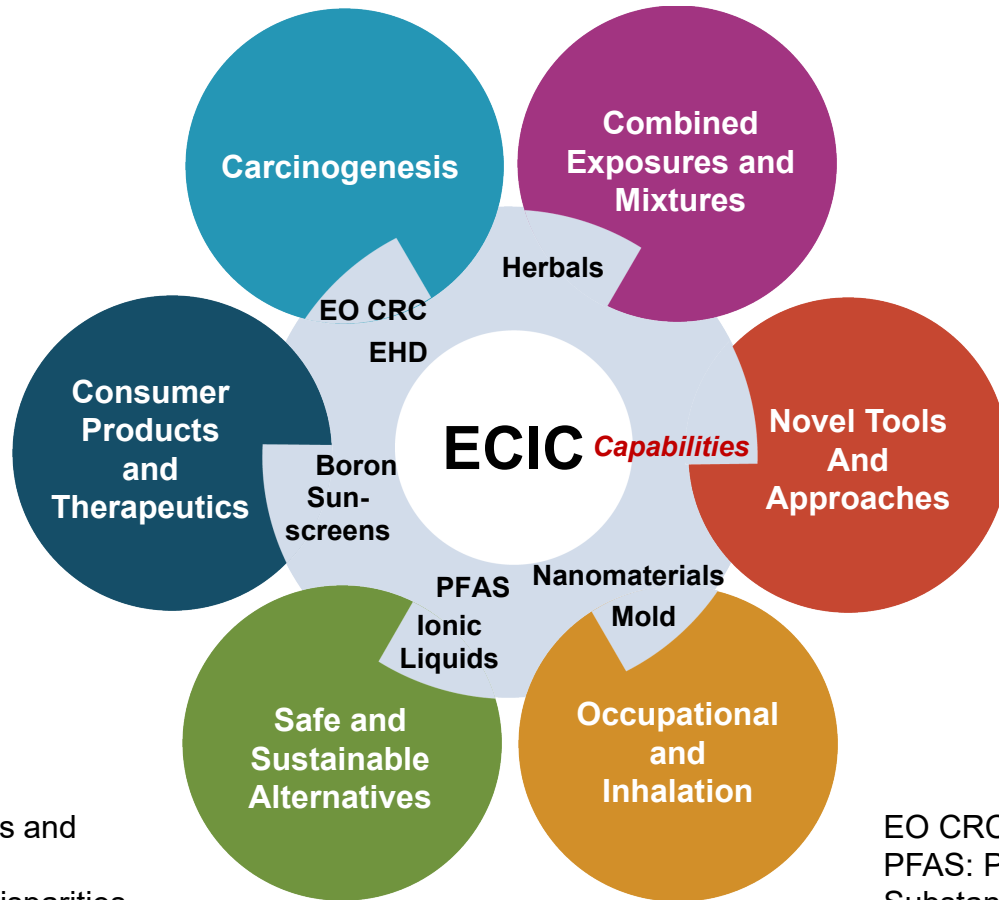








# Conceptual Connectivity



ECIC: Emerging Contaminants and  
Issues of Concern;  
EHD: Environmental Health Disparities

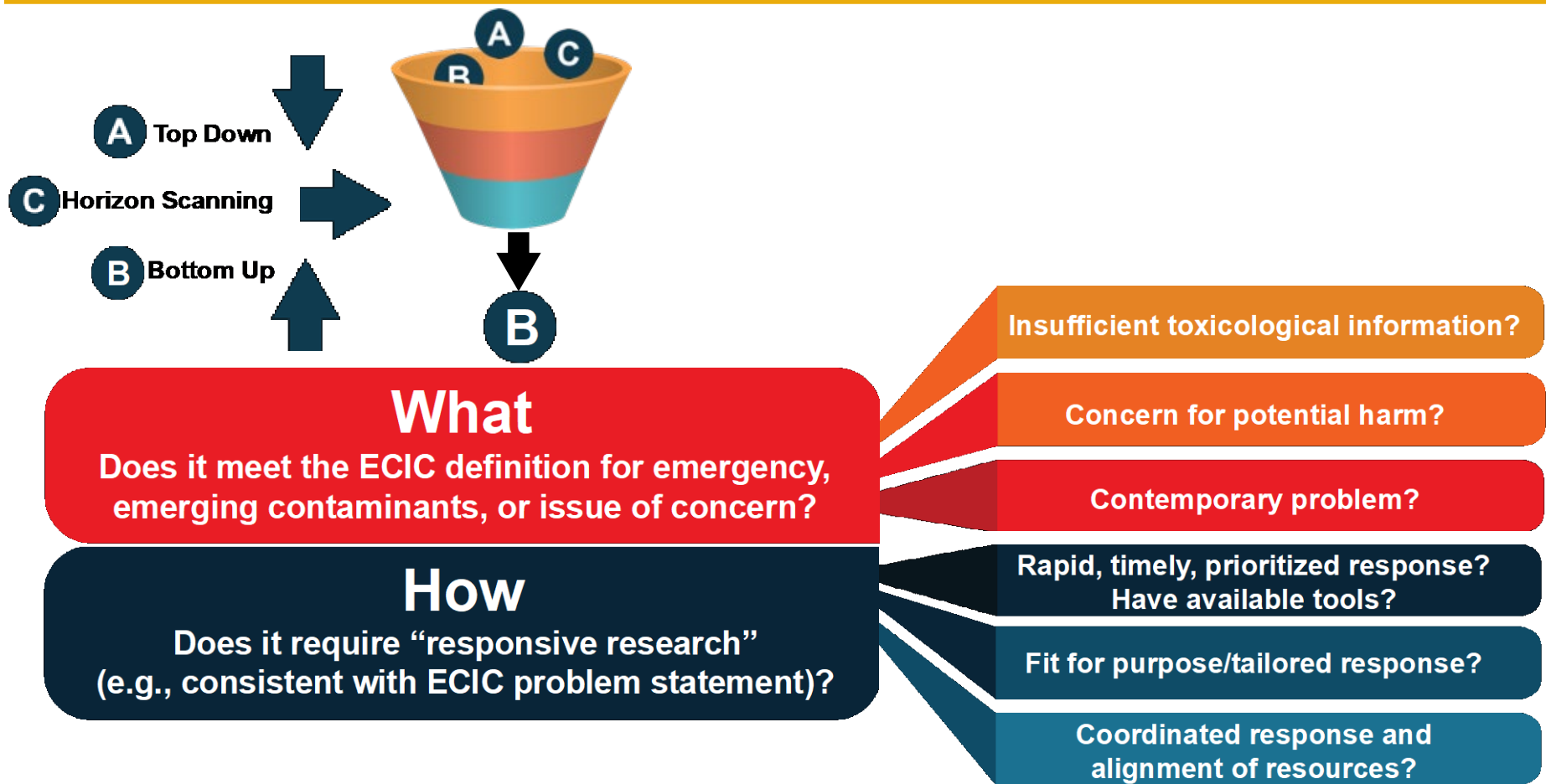
EO CRC: Early Onset Colorectal Cancer  
PFAS: Per- and Polyfluoroalkyl  
Substances



1. Address emerging issues where DNTP may apply capabilities and expertise to effectively respond to public health issues in a timely way using a '*Decision Framework*'.
2. Use '*horizon scanning*' or *scoping* activities to proactively identify emerging contaminants and issues of concern, especially pertaining to historically marginalized populations.
3. *Formulate and apply strategic approaches*, leveraging the breadth of DNTP capabilities, that allow for fit-for-purpose research responses to emerging contaminants, diseases, disasters, or other concerns.

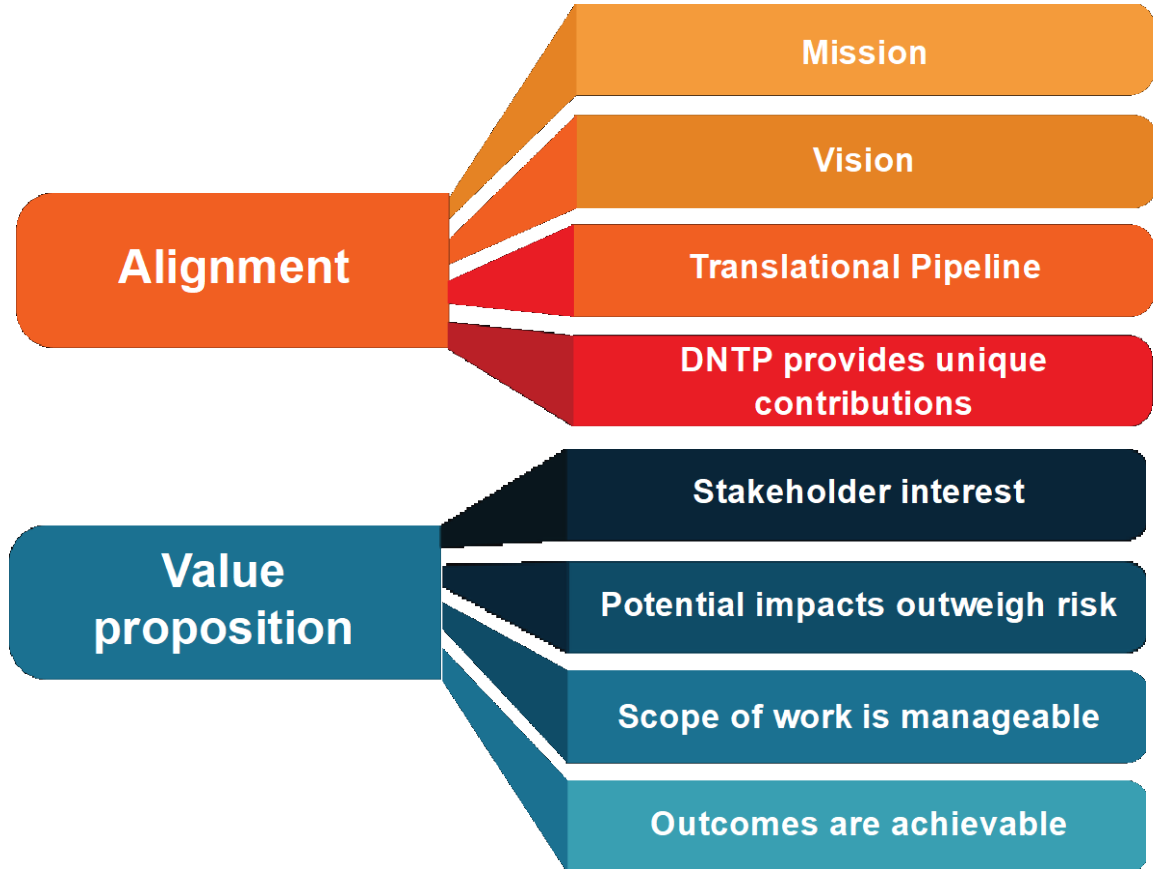
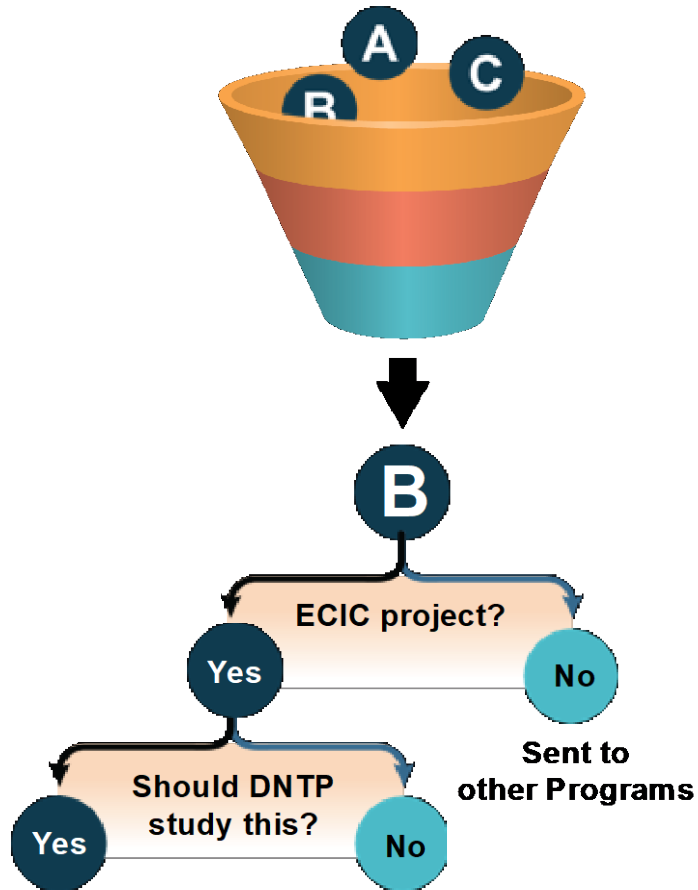


# Objective 1: Decision Framework





# Objective 1: Decision Framework





# Objective 2: Horizon Scanning and Scoping

## Proactive Identification of Future Issues



- What is constant?
- What changes?
- What constantly changes?





# Objective 3: Strategies for Prioritized Response

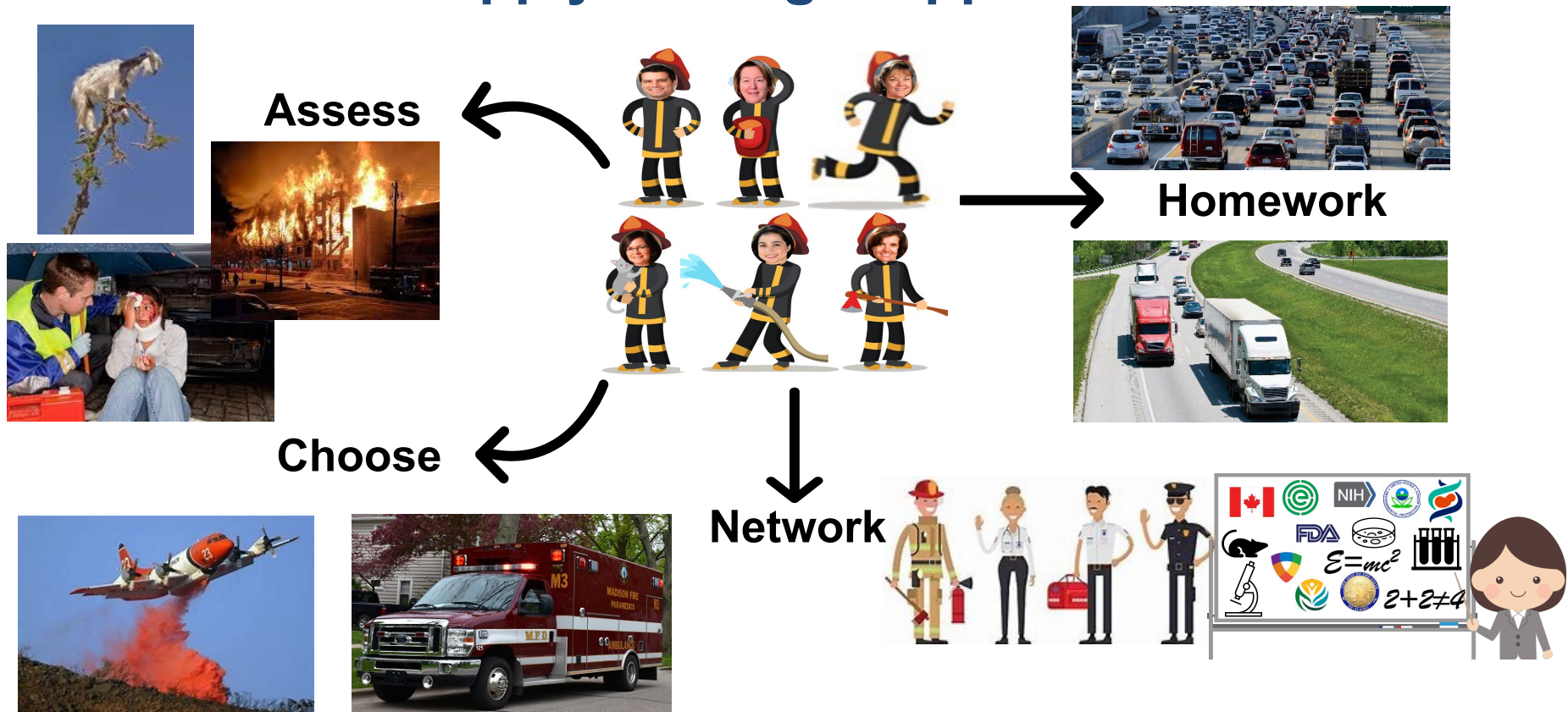
## Formulate and Apply Strategic Approaches





# Objective 3: Strategies for Prioritized Response

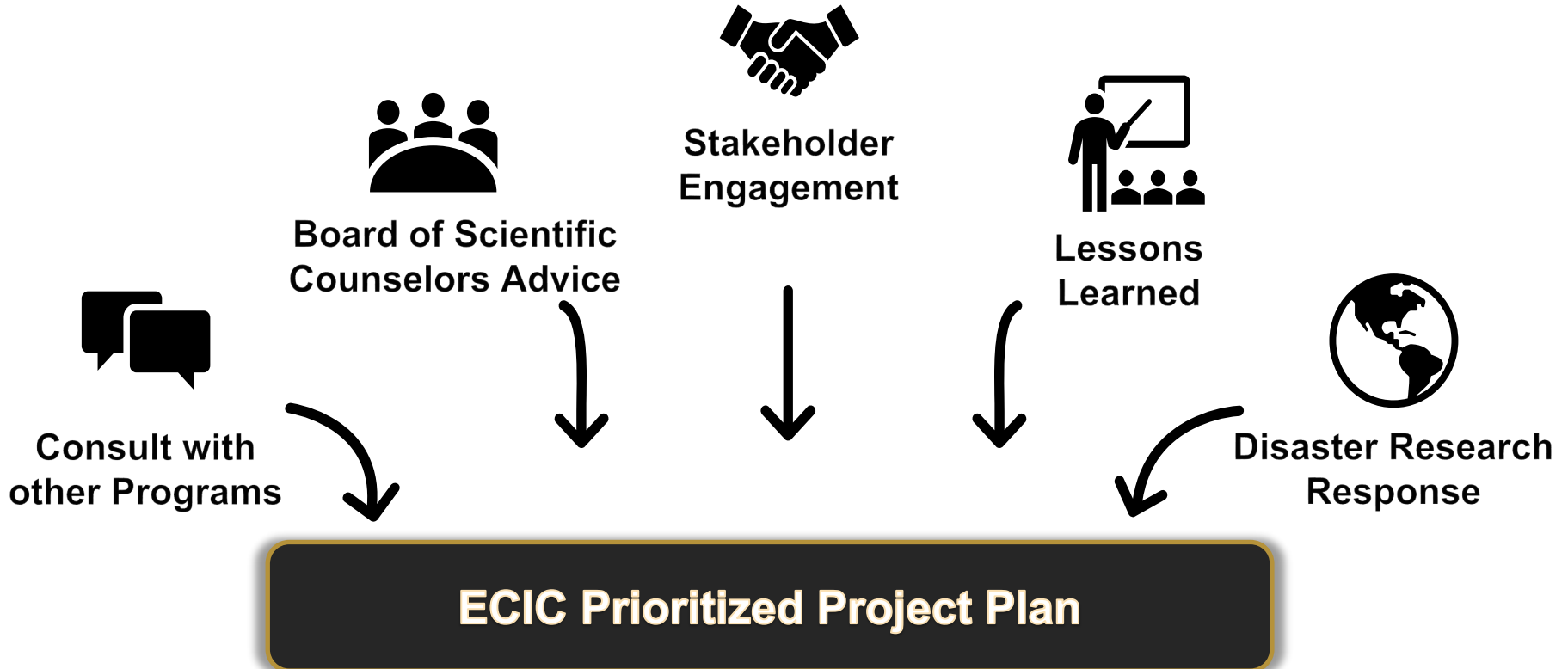
## Formulate and Apply Strategic Approaches





# Objective 3: Strategies for Prioritized Response

## Coordination and Regular Communication







# Selected DNTP Responses to ECIC



**Chronic Kidney Disease of Unknown Origin (CKDu)**  
Multiple causes  
in rural agriculture  
populations



**Glyphosate**  
Issue of concern  
Widely used  
herbicide



**Boron**  
Drinking water  
contaminant  
lacking  
developmental  
exposure data



**Sulfolane**  
Emerging  
Drinking water  
contaminant



# Stakeholder Engagement



**OEHHA**  
California Office of Environmental  
Health Hazard Assessment





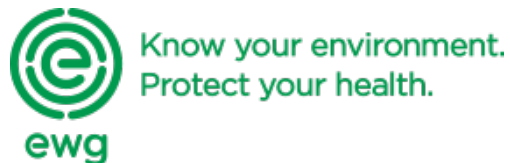
# Program Stakeholder Engagement



**OEHHA**  
California Office of Environmental  
Health Hazard Assessment



**ATSDR**  
AGENCY FOR TOXIC SUBSTANCES  
AND DISEASE REGISTRY



**USGS**  
*science for a changing world*





# Stakeholder Engagement

## Program Stakeholders Identified



NC DEPARTMENT OF  
HEALTH AND  
HUMAN SERVICES



North Carolina  
Environmental  
Justice Network

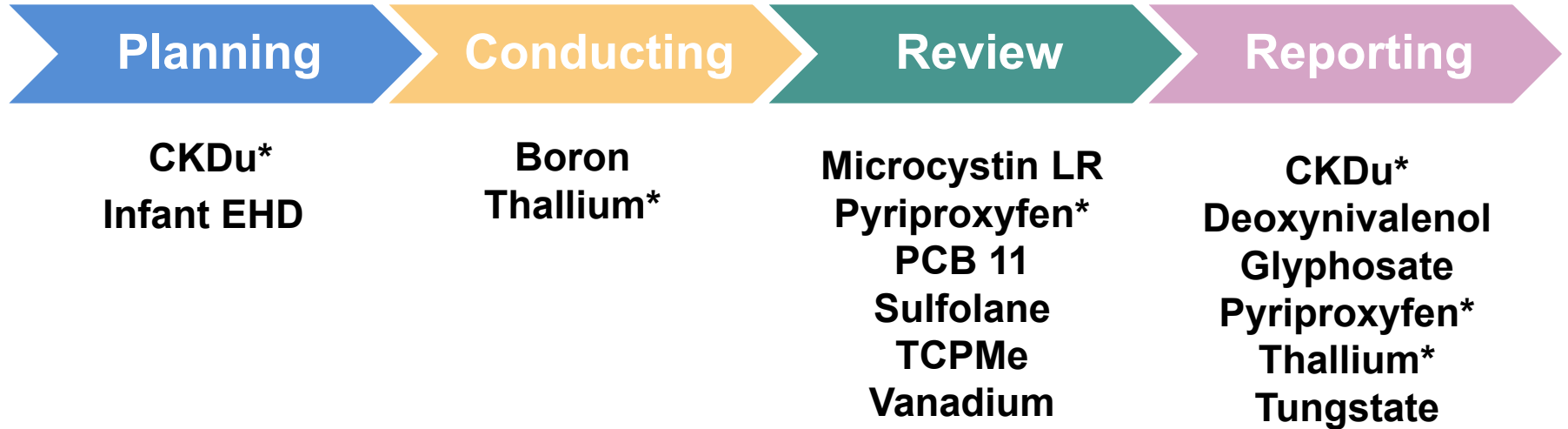


SILENT SPRING INSTITUTE  
Researching the Environment and Women's Health





# Milestones/Current Project Stages



CKDu: Chronic Kidney Disease of unknown origins

EHD: Environmental Health Disparities

TCPMe: Tris(4-chlorophenyl)methanol

PCB 11: 3,3'-dichlorobiphenyl

\*Multiple studies are associated with the same chemical/issue of concern



# ECIC Program Strategic Projects

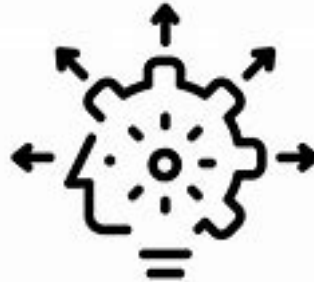


## Develop Guidance

- Prioritized Response
- Rapid Response
- Fit-for-Purpose Response
- Project Review Protocol

## Tools and Approaches

- Characterize
- Identify
- Integrate
- Utilize



## Capabilities



## Strategies

- Decision Framework
- Horizon Scanning and Scoping
- ECIC Identification
- Workshop
- Communication



# Strategic Objective Milestones

Short-Term (0-1 year)

Mid-Term (1-2 year)

Long-Term (2-4 year)

## Objective 1: Selection/Review of Projects in ECIC Program

Request Input for the Decision Framework  
Testing the Effectiveness

Revise and Finalize the Decision Framework

Standardized Application of the Decision Framework

## Objective 2: Horizon Scanning and Scoping Activities

Communication with the Stakeholders and Project Leads

Develop Methods to Conduct Horizon Scanning and Scoping Activities

Apply Methods to Identify ECIC Develop Systems for Communication w/ Stakeholders

## Objective 3: Strategies for Prioritized Response

Draft Rapid Response Plan Communication

Characterize Tools/Capabilities, Identify Gaps and Develop Guidance

Prepare Cross agency Publication on Strategies for Rapid Responses



## **Program Stakeholders**

### **Project Leads**

**Christopher Weis (NECRI)**

**Aubrey Miller (DR2 Team)**

**Alex Merrick (Fire Drill, Novel Tools and Approaches Program)**

**Steve Ferguson (Safe and Sustainable Alternatives Program)**

**Scott Auerbach (Lessons Learned, Elk River Spill)**



**Thank You!**





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