



Coordinated Responses to Contaminants of Emerging Concern: National Emerging Contaminants Research Initiative

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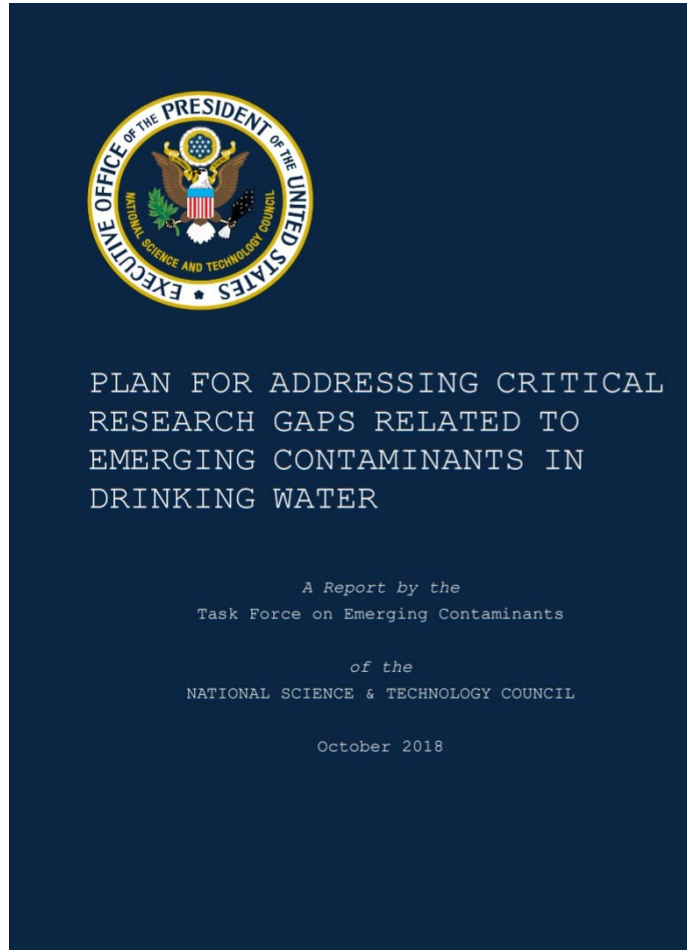
Contaminants of Emerging Concern

- In 2018, the US Congress identified Contaminants of emerging concern (CECs) as a key issue
- Requested US Environmental Protection Agency (EPA) and Department of Health and Human Services (NIEHS) to lead an effort to identify research gaps.
- Further improvements to existing coordination of Federal and State activities would enhance the research, tool development, and data translation needed to inform CEC-related efforts that protect public health

What are Contaminants of Emerging Concern (CECs)?

- Physical, chemical, biological, radiological, or nuclear materials for which there is no regulatory standard
- May have toxicity at lower levels of exposure than previously known or characterized
- May involve exposures not previously known or characterized
- Difficult to coordinate across different agencies, groups, and countries
- Difficult to provide timely and meaningful information to public stakeholders

CONGRESSIONALLY-MANDATED 2018 CROSS AGENCY PLAN* ON CONTAMINANTS OF EMERGING CONCERN IN DRINKING WATER



- Task Force on Emerging Contaminants (TF) was established May 2018 under the White House National Science and Technology Council (NSTC) Committee on Environment.
- Focuses on **critical research gaps**:
 - Contaminant Identification
 - Exposure Characterization
 - Human Health Impacts
- Acknowledges the need to address other areas
 - Risk Assessment
 - Risk Characterization
 - Risk Mitigation
- Identifies potential **areas for collaboration**

*Senate Report 115-139 related to Division B of Public Law 115-141
Called the Federal Research Strategy in the 2020 National Defense Authorization Act

Joint Subcommittee on Environment, Innovation, and Public Health (the “JEEP”)

Established by the Office of Science and Technology Policy (OSTP) in 2020 for Inter-Agency Coordination

Promotion of Federal R&D activities in Environmental Public Health

- Conduct landscape and gap analysis
- Carry out strategic planning
- Coordinate Federal research and development efforts; and
- Recommend policy options



CECs

PFAS

Sustainable
Chemistry

Veterans Toxic
Exposures



Contaminants of Emerging Concern (CECs) Strategy Team

CEC Strategy Team Charge: *Coordinate Federal programs and activities in support of CECs*

Co-Chairs:



Ben Place, PhD
Assistant Director for Environmental Health



David Balshaw, PhD
Director, DERT

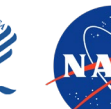


Annette Guiseppi-Elie, PhD
National Program Director Chemical Safety for Sustainability



Jennifer Collins, MR
Executive Secretary NIEHS ERTB

Agency Involvement:



National Defense Authorization Act (NDAA) for Fiscal Year 2020

National Emerging Contaminants Research Initiative (NECRI)

Authorization

(c) NATIONAL EMERGING CONTAMINANT RESEARCH INITIATIVE.—

(1) FEDERAL RESEARCH STRATEGY.—

(A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Director of the Office of Science and Technology Policy (referred to in this subsection as the “Director”) shall coordinate with the heads of the agencies described in subparagraph (C) to establish a research initiative, to be known as the “National Emerging Contaminant Research Initiative”, that shall—

Deadline.
 Coordination.

(i) use the Federal research strategy to improve the identification, analysis, monitoring, and treatment methods of contaminants of emerging concern; and

(ii) develop any necessary program, policy, or budget to support the implementation of the Federal research strategy, including mechanisms for joint agency review of research proposals, for interagency cofunding of research activities, and for information sharing across agencies.

NATIONAL EMERGING CONTAMINANT RESEARCH INITIATIVE (NECRI) TECHNICAL AREAS SPAN THE CONTAMINANT RESEARCH CONTINUUM

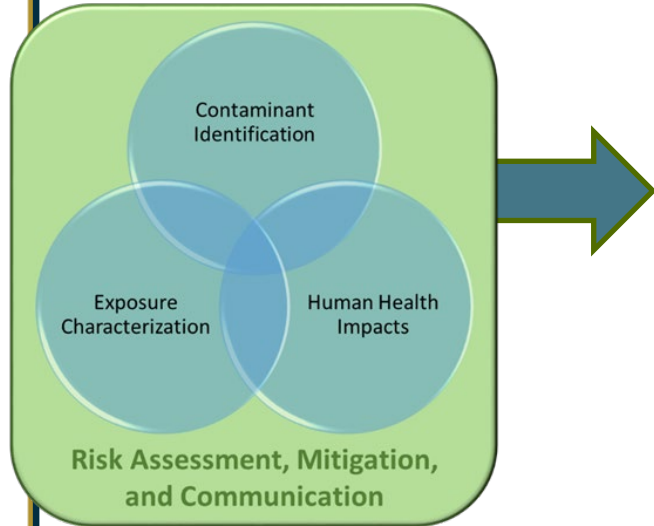
PLAN FOR ADDRESSING
RESEARCH GAPS RELATED TO
EMERGING CONTAMINANTS IN
DRINKING WATER

Task Force
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

UPDATE TO THE PLAN FOR ADDRESSING
CRITICAL RESEARCH GAPS RELATED TO
EMERGING CONTAMINANTS IN DRINKING
WATER

A Report by the
Interagency Working Group on Emerging Contaminants
of the
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

January 2022



NECRI Topic Areas:

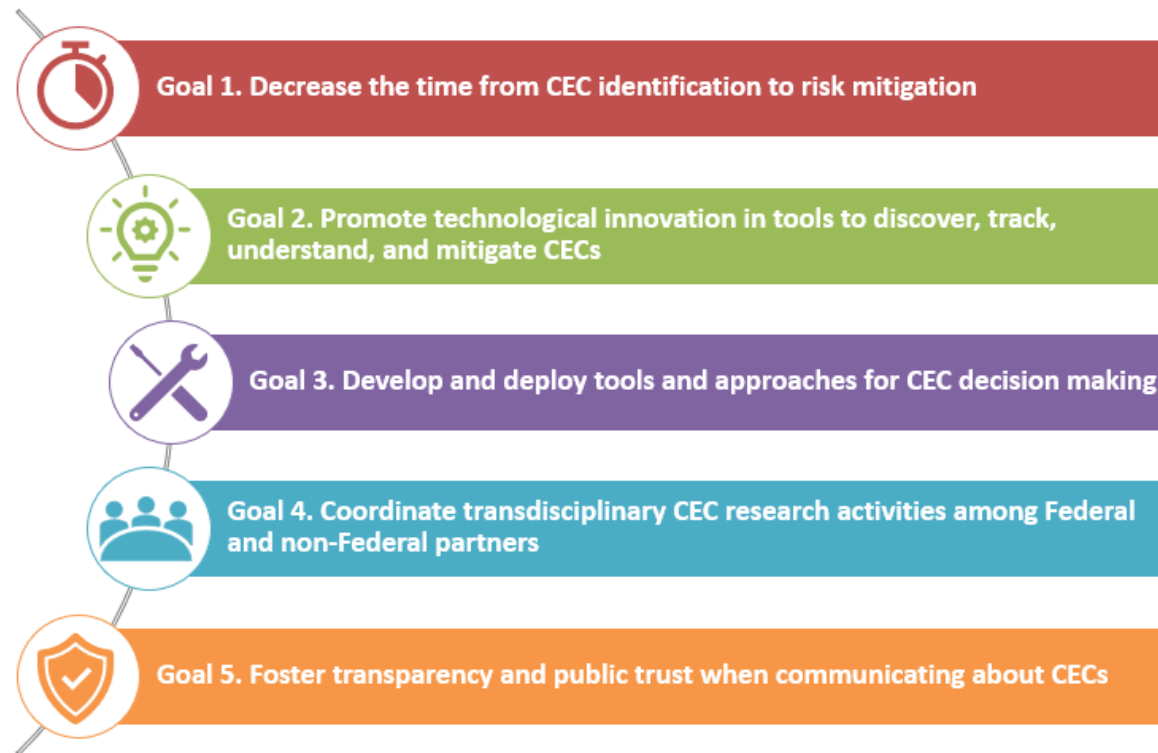
- Exposure
 - Source, contaminant identification, exposure characterization
- Effects
 - Human health, environment
- Risk characterization
- Risk mitigation
- Risk communication

CEC Critical Gaps Update 2022

Contaminants of Emerging Concern (CECs)

National Emerging Contaminants Research Initiative (NECRI)

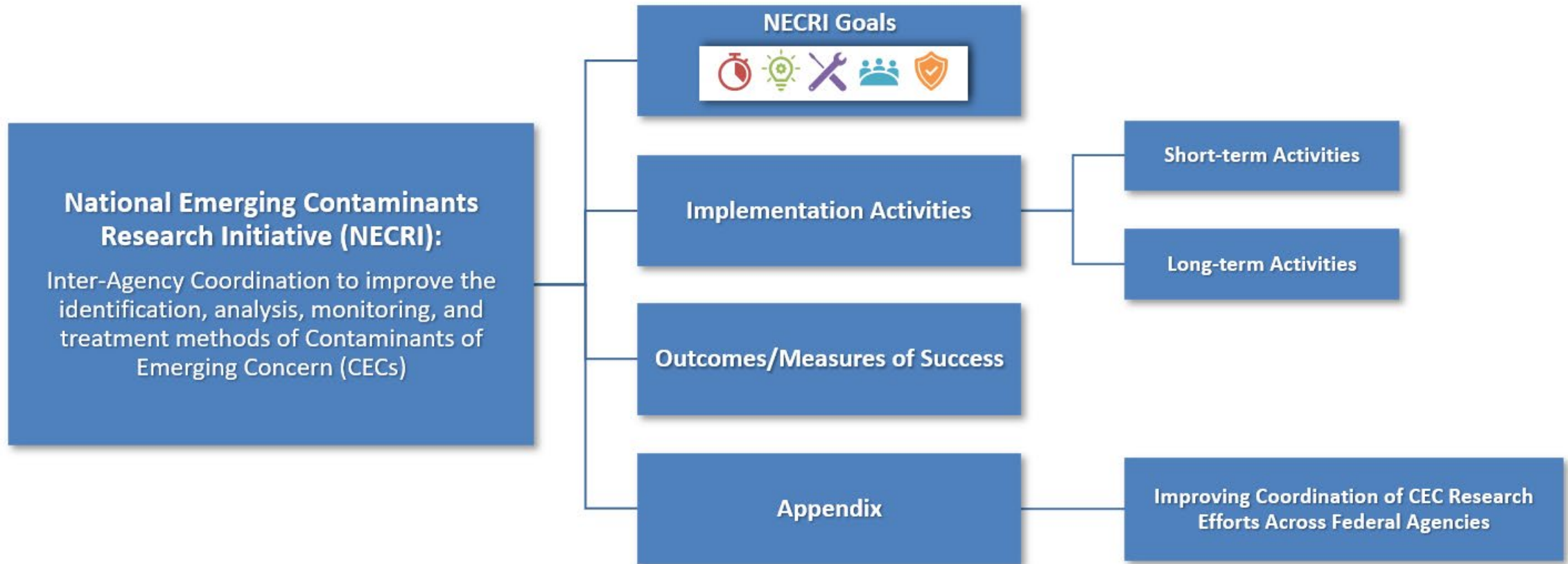
Vision: Access to clean and plentiful drinking water for every person in our Nation



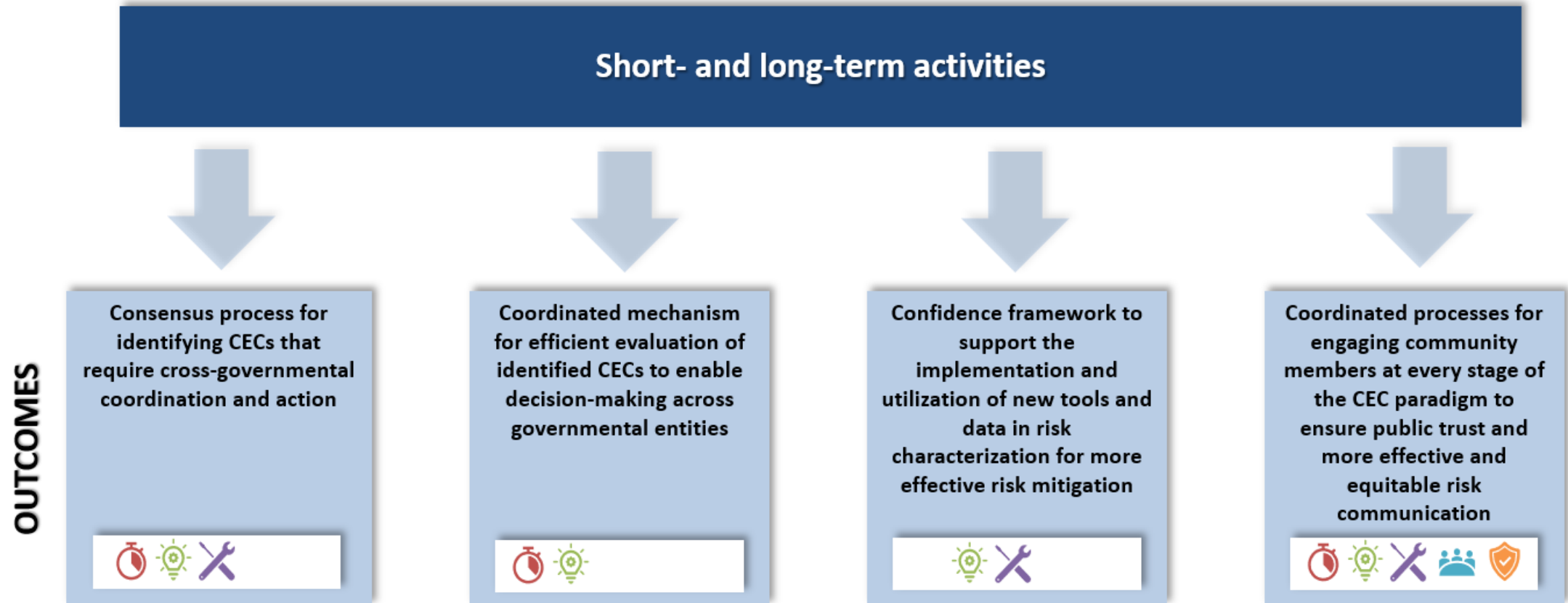
From NECRI to Inter-Agency Action

- Three Coordination Teams:
 - Non-targeted Analysis and Effects Based Monitoring
 - Discovery of CECs
 - Screening on Molecular Responses
 - Risk Characterization
 - Potential Hazard (NAMS)
 - “Expand, validate, and adopt rapid risk assessment methods and link data to critical biological endpoints and exposure scenarios”
 - Potential for exposure
 - Joint Solicitation
 - How to work across Agencies?

NECRI Implementation (expected release fall 2023)



Activities to Outcomes



In Closing

- Contaminants of Emerging Concern are an **Inter-Agency focus**
- The NECRI provides a platform for **coordination of Joint Solicitations**
- **NAMS** are seen as a critical tool for potential hazard characterization
- **MUCH more to come** in this space

ACKNOWLEDGEMENTS

2018 Federal Cross-Agency Team

Science Technology and Policy Institute (STPI) and Avanti Corporation

Inter-Agency Workgroup/CEC Strategy Team/Coordination Teams

THANK YOU



Thanks!

