

21st Annual NJDEP/A&WMA Regulatory Update Conference



November 18, 2022

Welcome!

Dr. Ron Poustchi
NJDEP

Mike Schaffer
Terraphase Engineering

Joann Held
Air Toxics Analysis Services

Sunila Gupta
Haley & Aldrich, Inc

Annual Regulatory Update Conference

- ▶ Joint venture between NJDEP and the Northern and Central New Jersey Chapter of Air & Waste Management Association
- ▶ Opportunity for regulated community to hear directly from NJDEP staff on the latest Department initiatives in environmental regulations
- ▶ 21st Year! Virtual for the third year
- ▶ Honored to have Deputy Commissioner Sean Moriarty provide the opening remarks on the “State of the Department”
- ▶ Speakers include NJDEP leadership in major program areas (Air Quality, Site Remediation, Solid Waste, Land Use, and Water Resources)

AWMA- NCNJ Leadership Team

Chapter Chair

Michael Schaffer
Terraphase Engineering



Program Chair

Sunila Gupta
Haley & Aldrich, Inc.



Past Chair

Joann Held
Air Toxics Analysis Services



Program Committee

Ron Poustchi
NJDEP



Director

Mary Hewitt Daly
Surrey Environmental Consulting



Website Coordinator

Chris Whitehead
Enviro-Sciences
(of Delaware), Inc.



Secretary

Gabi Carrasco
Haley & Aldrich, Inc.



Paul Eisen

Proactive Environmental
Solutions, LLC.



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Fran Lindsley-Matthews
Buckeye Partners

Student Liaison Committee

Jyoti Agarwal, Covanta
Gabi Carrasco, Haley & Aldrich, Inc.

Conference Agenda (available as handout)

- 9:00 – 9:10 am – Welcoming Remarks; Morning Session Moderators: Mike Schaffer and Joann Held
- 9:10 – 9:45 am – Deputy Commissioner Sean Moriarty – Opening Remarks, “State of the Department”
- 9:45 – 10:20 am - Assistant Commissioner Paul Baldauf – Air Quality, Energy, Sustainability Program –Update on Air Quality, Energy, Sustainability Program
- 10:20 – 10:55 am – Acting Assistant Commissioner David Haymes – Contaminated Site Remediation and Redevelopment Program – Update on Contaminated Site Remediation and Redevelopment Program

10:55 – 11:05 am - Morning Break

- 11:05 – 11:40 am – Dr. Nick Procopio, Director, Division of Science & Research - Update on Current and Recently Completed Research Projects
- 11:40 – 12:15 pm – Director Richelle Wormley and Director Mike Hastry - Compliance and Enforcement Updates and Initiatives

12:15 – 1:00 pm – Lunch Break

- 1:00 – 1:05 pm - Afternoon Session Moderators: Sunila Gupta and Dr. Ron Poustchi
- 1:05 – 1:40 pm – Deputy Commissioner Sean Moriarty, Environmental Justice and Equity Program Updates and Initiatives
- 1:40 – 2:15 pm – Bureau Chief Kimberly Cenno – Water Monitoring, Standards and Pesticides Control Updates and Initiatives

2:15 – 2:25 pm - Afternoon Break

- 2:25 – 3:00 pm – Director Janine MacGregor – Sustainable Waste Management Updates and Initiatives
- 3:00 – 3:35 pm – Director Frank Steitz – Air Quality Program Updates and Initiatives
- 3:35 – 4:10 pm – Assistant Director Bob Kettig – Climate Change and Clean Energy Updates and Initiatives
- 4:10 – 4:15 pm - Closing Remarks

Q&A session to follow each presentation

Reminders

- ▶ Keep yourself on mute and video off
- ▶ Use question feature to type in your question
- ▶ Add your name and affiliation to the questions
- ▶ Moderators will try to get as many questions as we can within the allotted session





Deputy Commissioner Sean Moriarty

Opening Remarks
“State of the Department”

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Questions?



Assistant Commissioner Paul Baldauf

Air Quality, Energy, Sustainability Program

Update on Air Quality, Energy, Sustainability Program

New Jersey Department of Environmental Protection Air Quality, Energy & Sustainability

Assistant Commissioner
Paul Baldauf

Division of
Air Quality,
Director
Francis Steitz

Division of Air
Enforcement,
Director
Richelle Wormley

Division of Waste,
UST Compliance &
Enforcement,
Director
Mike Hastry

Division of
Climate, Clean
Energy &
Radiation, Director
Paul Orlando

Division of
Sustainable Waste
Management,
Director
Janine MacGregor

Regulatory Updates November 2022



NEW JERSEY PACT
Protecting Against Climate Threats

Climate Pollutant Reduction (CPR):

Reducing emissions of greenhouse gases and other climate pollutants by improving the State's GHG reporting and inventory system and strengthening air pollution control rules.

NEW JERSEY PACT

Protecting Against Climate Threats

Climate Pollutant Reduction:

ADOPTED RULES

Advanced Clean Trucks (ACT) Program and Fleet Reporting Rules

Adoption published
12/20/21

- Zero-emission truck sales requirement: Incorporates California's ACT regulations, which require manufacturers of vehicles over 8,500 pounds gross vehicle weight rating to participate in a credit/deficit program intended to increase the percentage of zero emission vehicles sold in NJ
- One-time fleet reporting requirements

Greenhouse Gas Monitoring/Reporting Rule

Adoption published
6/6/22

- Reporting requirements:
 - Natural gas utilities must submit annual Pipeline Modernization Report, providing general information about mains and service lines in the State, leak monitoring information, and blowdown event information.
 - Owner/operator of facility with a refrigeration system and/or chillers requiring 50 pounds or more of a high-GWP refrigerant are required to register their facility, keep records of their refrigerant usage, and report that information to the Department. Informational webinar on 11/17/22.
 - The Department amended its emission statement rules to add a reporting threshold for methane, so that all sources that emit, or have the potential to emit, methane equal to, or more than, 100 tons per year, will have to report those emissions annually.
- Information will enable Department to better quantify emissions of climate pollutants to support future reduction reforms.

NEW JERSEY PACT

Protecting Against Climate Threats

Climate Pollutant Reduction:

PROPOSED RULES

Control and Prohibition of CO₂ Emissions Rule: EGUs, boilers, fuel oils

- **Proposed 12/6/21**
- **Adoption pending**

- CO₂ emission limits phased in through 2035 in 3 tiers applicable to existing fossil fuel-powered electric generating units
- CO₂ emission limit for new EGUs
- Phase-out of certain fossil fuel-fired boilers
- Prohibition of combustion of No. 4 and 6 fuel oils

Mobile cargo handling equipment at ports and intermodal rail yards

- **Proposed 1/3/22**
- **Adoption pending**

- New and existing diesel-fueled mobile cargo handling equipment at ports and intermodal rail yards must meet performance standards that reflect best available control technology
- Tier 4 final engines required for new equipment, 2-year lead-time
- Phased compliance schedule for existing equipment to meet Tier 4

Model Year 2027 or Later Heavy-Duty New Engine and Vehicle Standards and Requirements and Diesel Vehicle Inspection Tests and Procedures

- Proposed 11/7/22
- Virtual public hearing on 12/8/22, at 9:30
- Public comment period ends 1/6/23

- Incorporate by reference California's emission standards and supporting requirements for new model year 2027 and later gasoline and diesel engines and vehicles with a GVWR greater than 8,500 pounds
- Repeal N.J.A.C. 7:27-14 Appendix A and N.J.A.C. 7:27-28, to avoid any confusion regarding which emission standards apply to heavy-duty vehicles
- Ensure that all heavy-duty vehicles are subject to the same emission inspection procedures and standards
- Amend the definition of gross vehicle weight rating in N.J.A.C. 7:27-14 and 15 for consistency
- Clarify that certain violations of N.J.A.C. 7:27-14 and 15 may be penalized pursuant to proposed new provisions at N.J.A.C. 7:27A-3
- Amend N.J.A.C. 7:27-15 so that the text more closely conforms to the text of N.J.A.C. 7:27-14
- Penalty provisions

FUTURE RULEMAKING EFFORTS

Air Quality

Appliance efficiency standards

- Potential rules to implement P.L. 2021, c. 464, which establishes minimum efficiency standards for certain products
 - sold, offered for sale, or leased in the State, or
 - installed for compensation in the State
 - Effective Jan. 18, 2023.
- Stakeholder sessions being planned

Consumer Products and Architectural and Industrial Maintenance Coatings

- OTC model rules: VOC limits for certain products
- Rulemaking underway. Stakeholder sessions completed.

Sustainable Waste Management

Stakeholder sessions held; rulemaking pending

- Food waste (stakeholder sessions held 12/9/21 and 2/24/22)
- Single-use plastic bag ban, polystyrene foam food service product ban, and single-use plastic straws by request (stakeholder sessions held 12/9/21 and 2/23/22)
- E-waste (stakeholder session held 2/14/22)
- A-901, dirty dirt (stakeholder sessions held 12/14/21 and 3/1/22)
- Recycling rules (stakeholder session held 12/2/21)

Stakeholder session planned

- Recycled content (tentatively scheduled 11/17/22)

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Questions?



Acting Assistant Commissioner David Haymes

- ▶ Contaminated Site Remediation and Redevelopment Program
- ▶ Update on Contaminated Site Remediation and Redevelopment Program

Contaminated Site Remediation & Redevelopment Program (CSRRP) Update

A&WMA

November 18, 2022



David Haymes,
Acting Assistant Commissioner

Topics



- Program priorities
- Site remediation stats
- Per- and polyfluoroalkyl substances (PFAS)
- Regulatory update

Mission



To reduce the number of contaminated sites in New Jersey to ensure the protection of public health and the environment and ready sites for redevelopment.

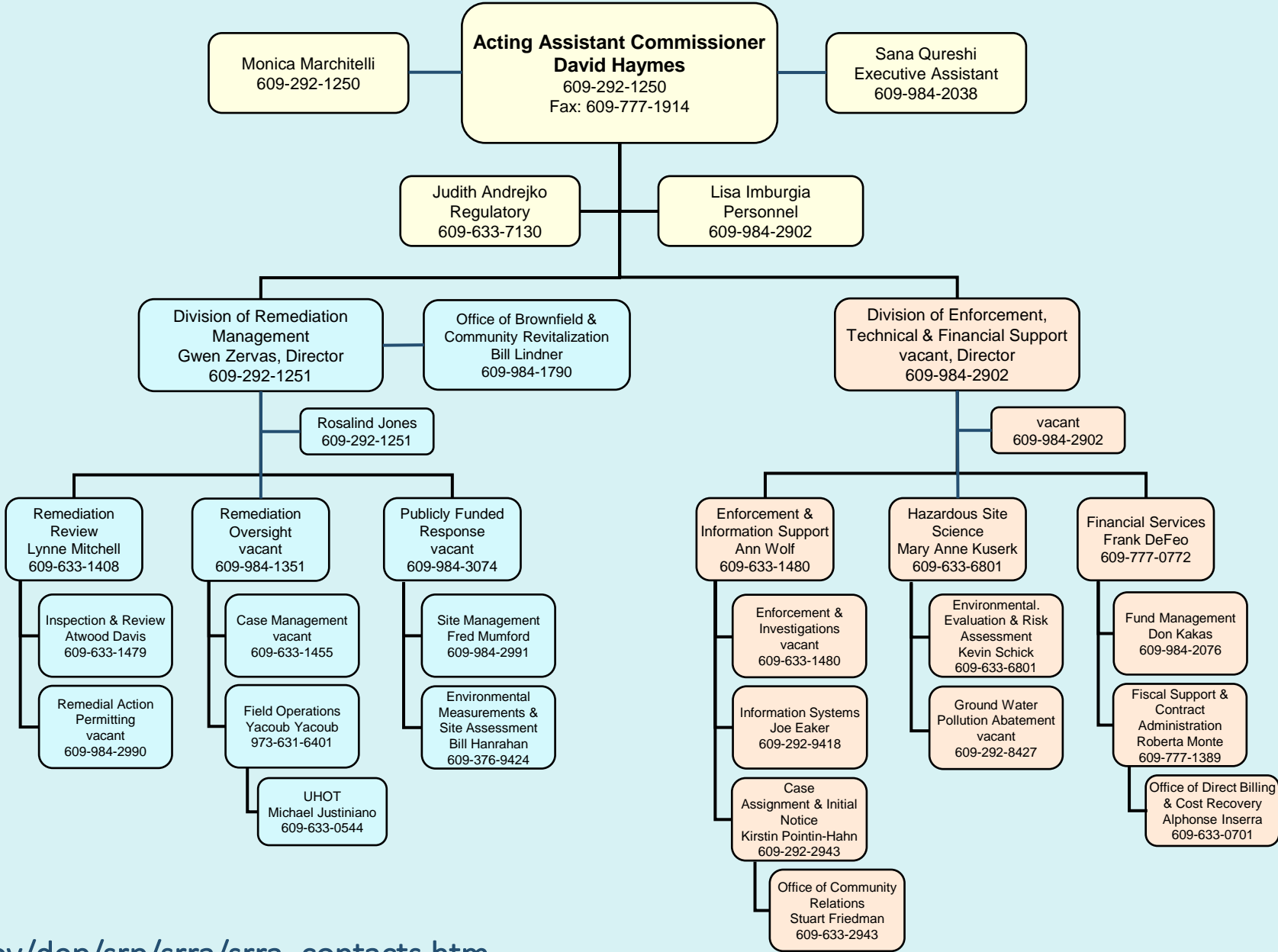
The Contaminated Site Remediation & Redevelopment Program (CSRRP) oversees all necessary actions performed by responsible parties to investigate and clean up any known or suspected discharge of contaminants and ensures remediations are completed in accordance with applicable laws, regulations, and standards. In addition, using public funds, the program implements remediations at contaminated sites where the responsible party is unable or unwilling to perform the necessary actions.

CSRRP Priorities



- Protect receptors
- Continue to increase the efficiency of the LSRP program
- Complete additional publicly funded remediations
- Investigate and remediate sites with emerging contaminants
- Prepare sites for redevelopment
- Ensure the program's continued financial health
- Overall program evaluation

CONTAMINATED SITE REMEDIATION & REDEVELOPMENT PROGRAM

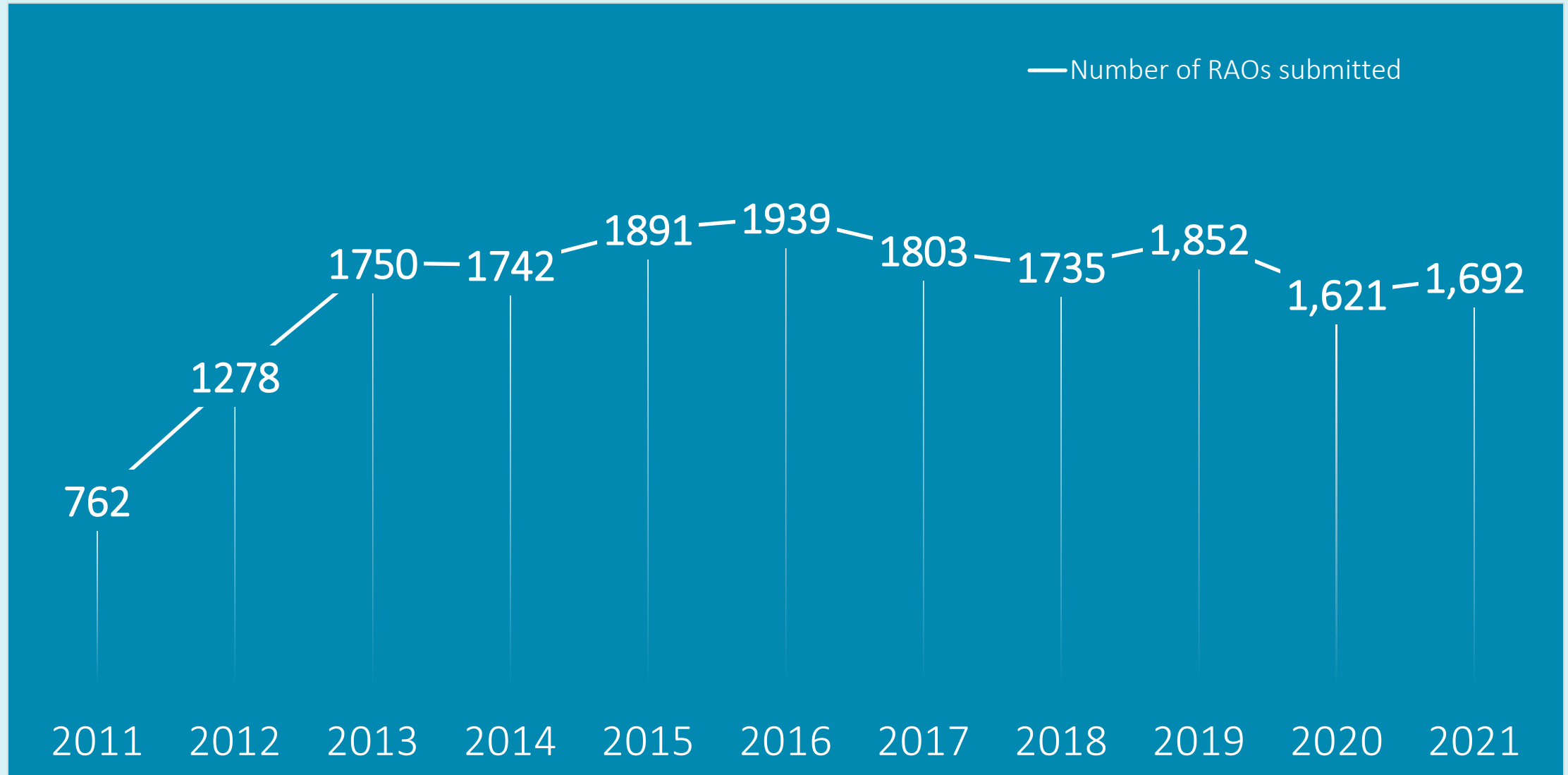


Active, New, and Closed Cases (2012-2021)



Year	Total Active	Total New	Total Closed
CY 2012	14,369	9,612	4,735
CY 2013	14,577	5,287	4,236
CY 2014	13,795	4,928	5,036
CY 2015	14,245	5,390	4,638
CY 2016	14,357	5,129	4,540
CY 2017	14,223	4,975	5,003
CY 2018	13,707	4,862	5,061
CY 2019	13,531	4,918	4,791
CY 2020	13,841	4,228	3,645
CY 2021	14,461	4,474	3,706

Response Action Outcomes (2011-2021)



Remedial Action Permits



Ground Water Remedial Action Permits	Jan. 2022- Oct. 2022
Average Number of Days for Application to be <i>Administratively</i> Complete	17
Average Number of Days for Application to be <i>Technically</i> Complete	259
Average Number of Days for DEP Total Process Time	239
Average Number of Days for Permits to be Issued	268
Soil Remedial Action Permits	Jan. 2022- Oct. 2022
Average Number of Days for Application to be <i>Administratively</i> Complete	27
Average Number of Days for Application to be <i>Technically</i> Complete	196
Average Number of Days for DEP Total Process Time	169
Average Number of Days for Permits to be Issued	209

Per- and polyfluoroalkyl substances (PFAS)



- PFAS have been used in a wide variety of industrial and commercial processes.
- Remediations must include an evaluation of potential spills and releases through air, water, and waste discharges, if PFAS were manufactured, stored, handled, or used.

Interim Soil and Soil Leachate Remediation Standards for PFAS



Contaminant	CAS No.	Soil Remediation Standard: Ingestion-Dermal Residential (mg/kg)	Soil Remediation Standard: Ingestion-Dermal Nonresidential (mg/kg)	Soil Remediation Standard: Migration to Ground Water (mg/kg)	Soil Leachate Remediation Standard: Migration to Ground Water (ppt)
PFNA	375-95-1	0.047	0.67	AOC/Site-specific	260
PFOA	335-67-1	0.13	1.8	AOC/Site-specific	280
PFOS	1763-23-1	0.11	1.6	AOC/Site-specific	260
GenX	13252-13-6 & 6203780-3	0.23	3.9	NA	NA

SRRA 2.0 Rulemaking (N.J.A.C. 7:26C and 7:26E)

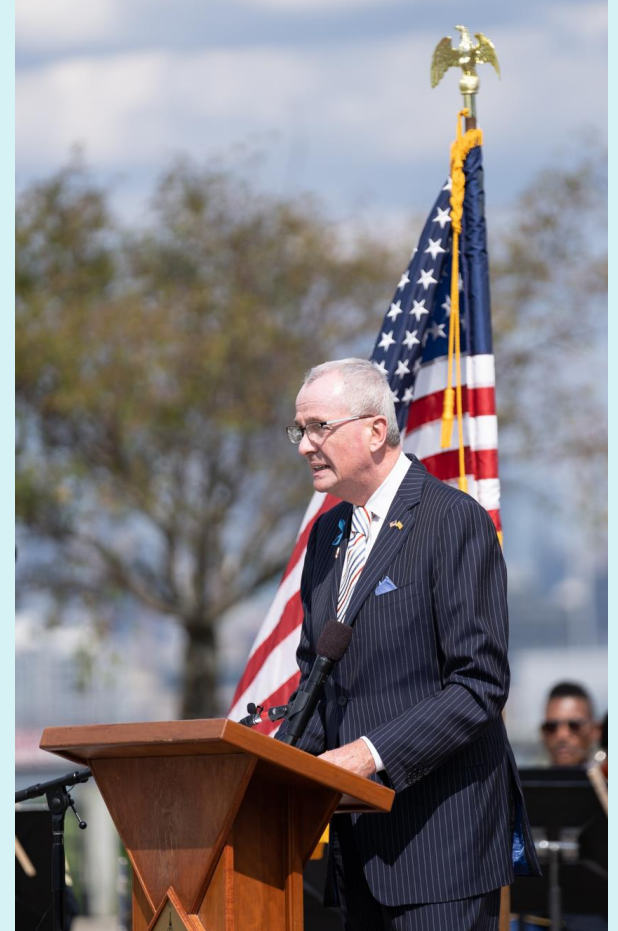
- Rule amendments to:
 - Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C
 - Technical Requirements for Site Remediation, N.J.A.C. 7:26E
- Stakeholdering continuing
- Anticipate 2023 publication of rule proposal in NJ Register

Contaminated Site Remediation & Redevelopment Program (CSRRP) Update

November 18, 2022



Questions?



Thank you!



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Questions?

Morning Break



2020 and 2021
conferences were
virtual with 350+
attendees each
year!

Photos from 2019 Annual NJDEP Regulatory Conference

Dr. Nick Procopio

Director, Division of Science and Research

Update on Current and Recently
Completed Research Projects



Division of Science and Research

2022 Update on Current and Recent Research

Nicholas A. Procopio, Ph.D.

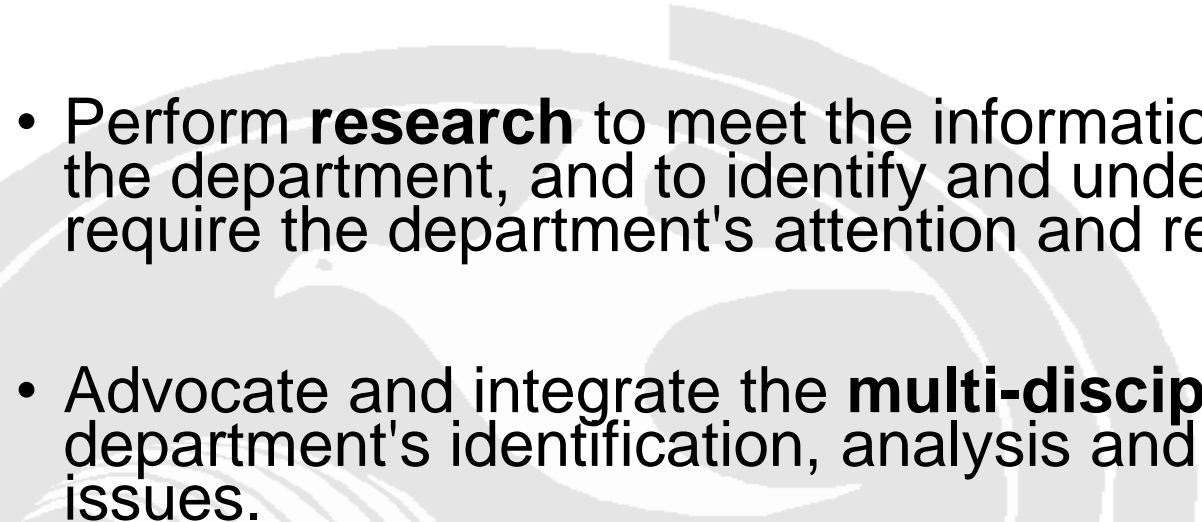
Director, Division of Science and Research
NJDEP

November 18, 2022

DEP/A&WMA Conference



DSR Goals:

- Provide the department with, and access to, **expertise and information** that supports its technical, program and policy needs.
 - Act as liaisons to the **Science Advisory Board** and Standing Committees that will help provide the DEP with outside expertise on scientific issues.
 - Perform **research** to meet the information and problem-solving needs of the department, and to identify and understand **emerging issues** that require the department's attention and response.
 - Advocate and integrate the **multi-disciplinary perspective** into the department's identification, analysis and resolution of environmental issues.
- 

Staff Expertise

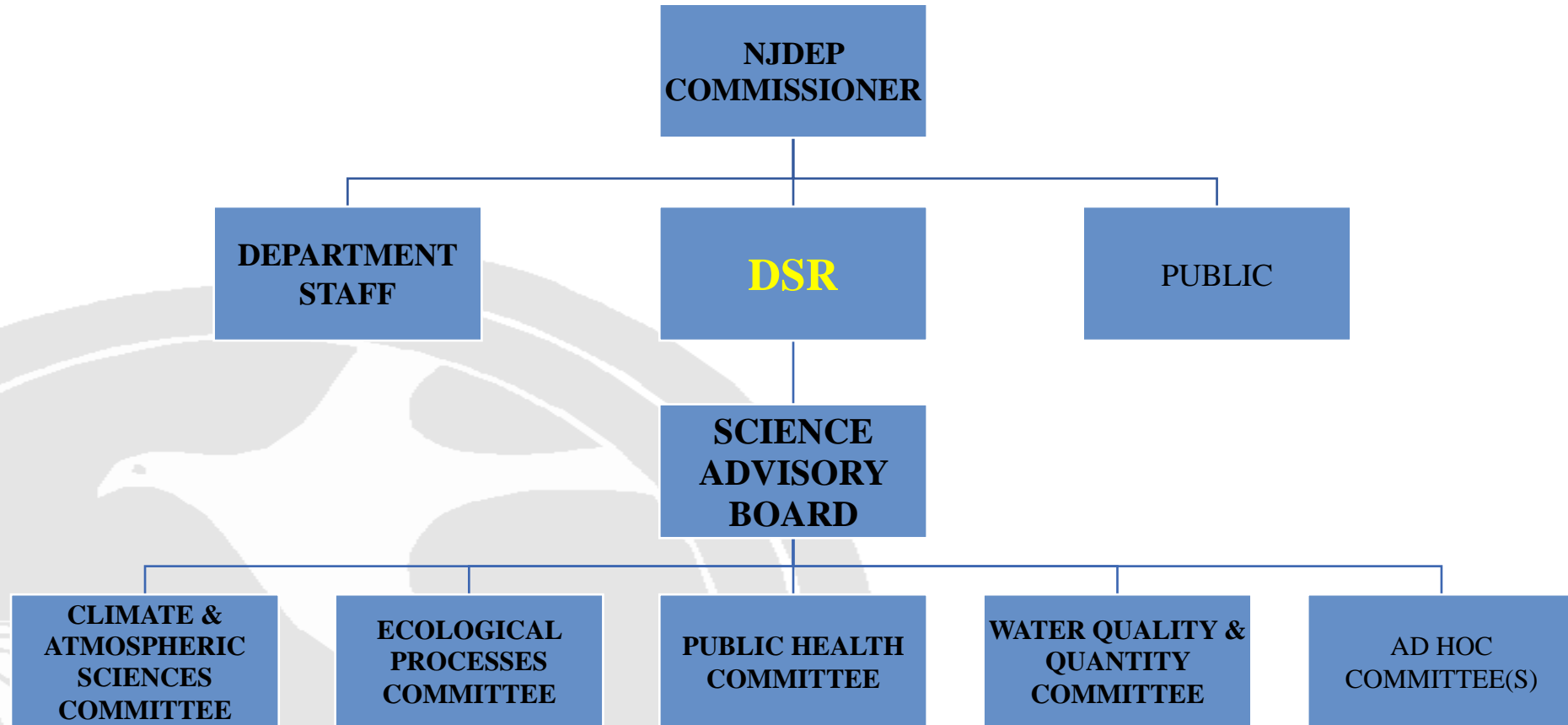
- Climate Change
- Toxicologists/Risk Assessment
- Biologists/Ecologists – wetlands, fisheries
- Air Quality/Modeling Specialist
- Water Quality Specialists
- GIS
- Chemists
- Statistician
- Microbiologist
- Environmental Scientists

Science Based Support

- Air Monitoring/Modeling
 - Fish Monitoring & Consumption Advisories
 - Human Health Risk Assessment
 - Standards Development
 - Data Analysis & Interpretation
 - Analytical Chemistry
 - Field Investigations and Sample Collection
 - Literature Reviews
 - Quality Assurance
- 
- A decorative background graphic consisting of several concentric, overlapping circles and arcs in shades of gray, creating a swirling, wave-like pattern that originates from the bottom left and extends towards the center of the slide.

Science Advisory Board

<http://www.state.nj.us/dep/sab/>



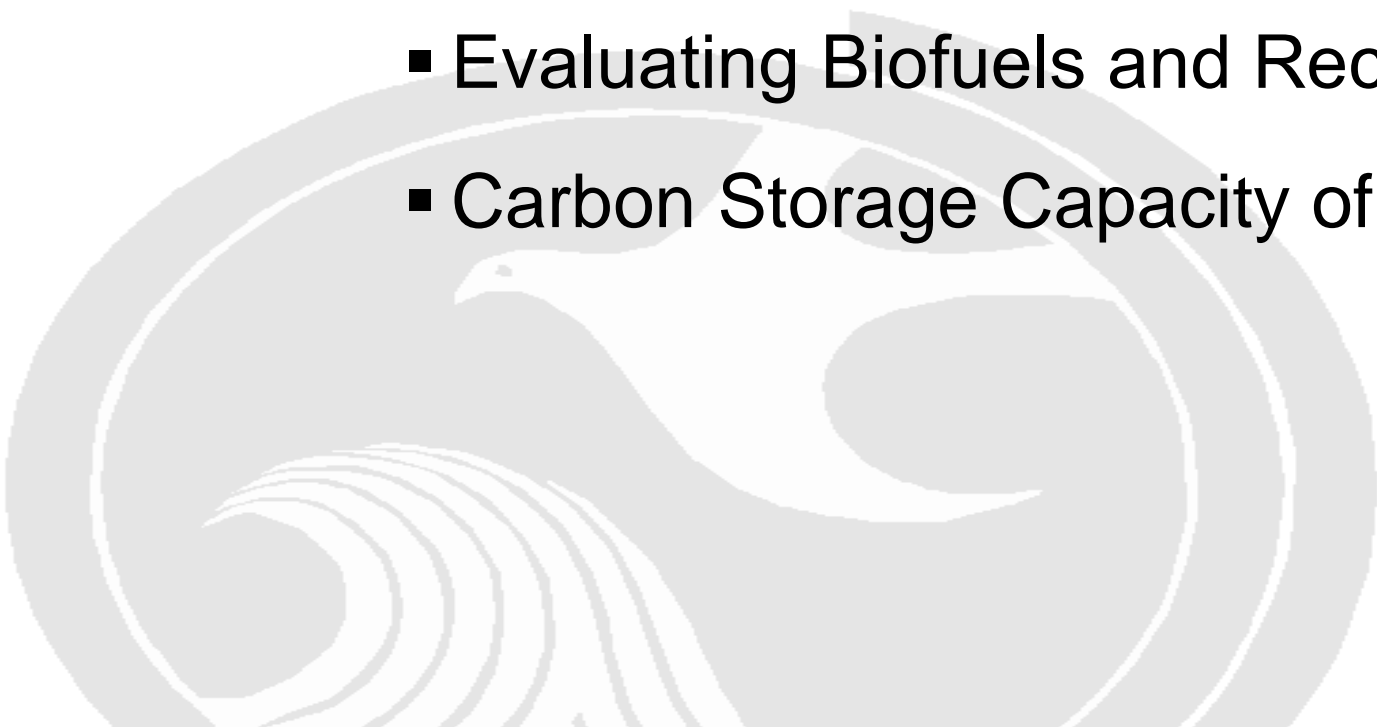
Science Advisory Board

Recently Completed Reports:

- ❖ Peer Review - “Addendum to the 2020 NJ Scientific Report on Climate Change: Climate Change Impacts on Human Health and Communities”
- ❖ Peer review: “Changes in Hourly and Daily Extreme Rainfall Amounts in NJ since the Publication of NOAA Atlas 14 Volume” and “Projected Changes in Extreme Rainfall in New Jersey based on an Ensemble of Downscaled Climate Model Projections”
- ❖ Horizontal Directional Drilling
- ❖ Vernal Pool: Review of Mitigation Approaches
- ❖ Submerged Aquatic Vegetation and Habitat: Survey and Mapping Methodologies Review

Science advisory board – ongoing Work

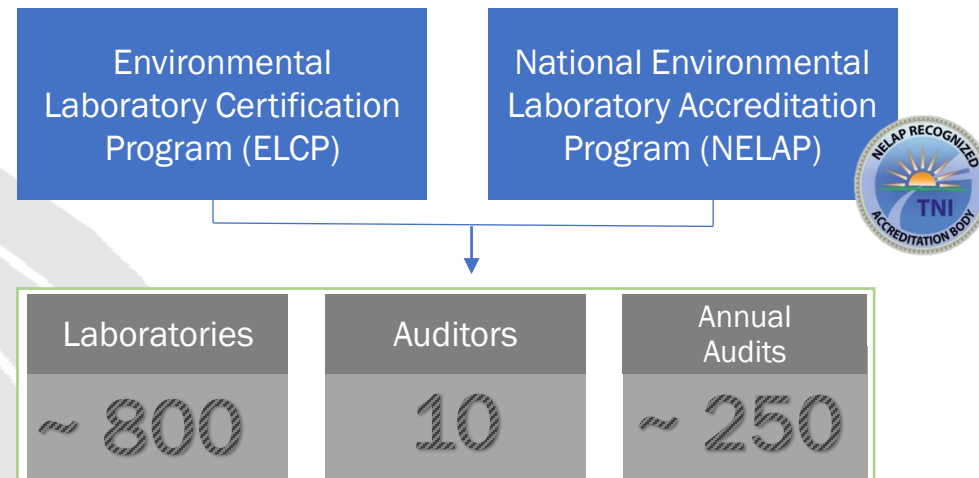
- Microplastics Impacts on NJ Ecosystems
- Human Health Impacts of Estrogens and Pharmaceutical in NJ Waters
- Evaluating Biofuels and Recommendations for NJ
- Carbon Storage Capacity of Forest Soils



DSR – Office of Quality Assurance

The NJ Laboratory Certification Program

- A two-tier program administered by the OQA in accordance with N.J.A.C. 7:18 *et. seq.*, the Regulations Governing the Certification of Laboratories and Environmental Measurements

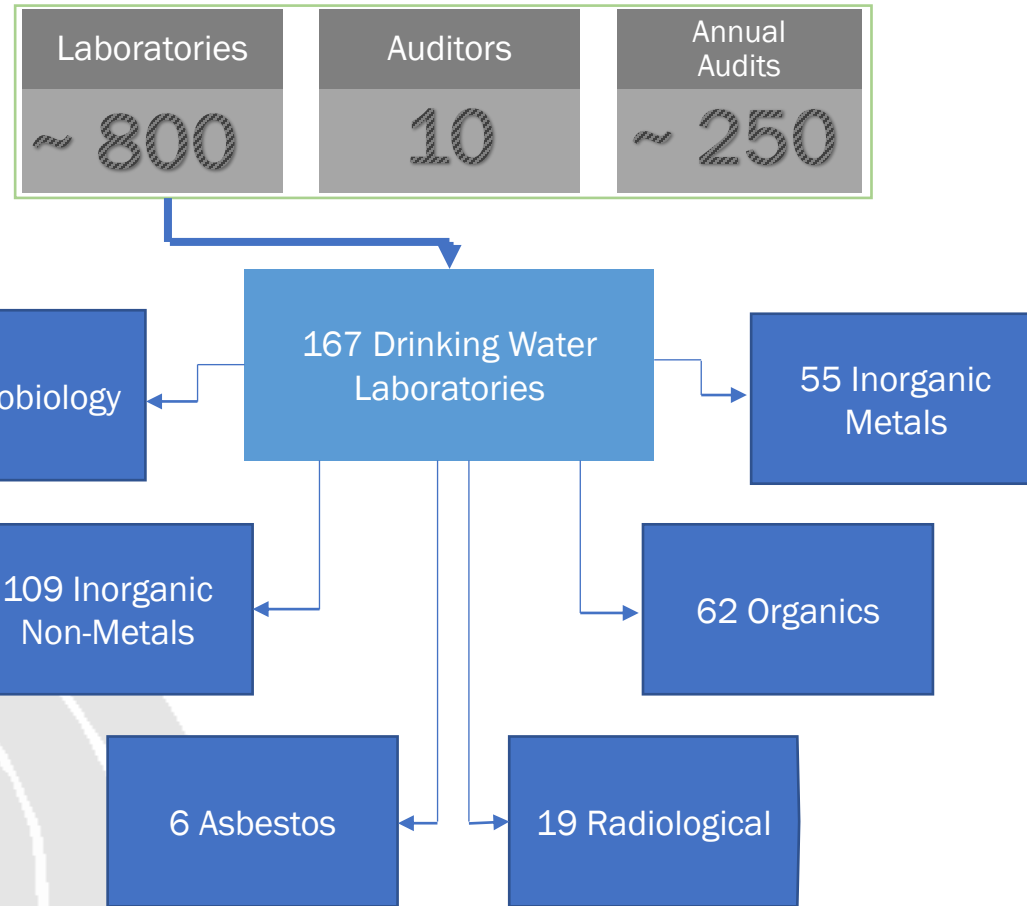


- Labs are certified by:

MATRIX – ANALYTE – METHOD - TECHNOLOGY

DSR – Office of Quality Assurance

The NJ Laboratory Certification Program – Drinking Water

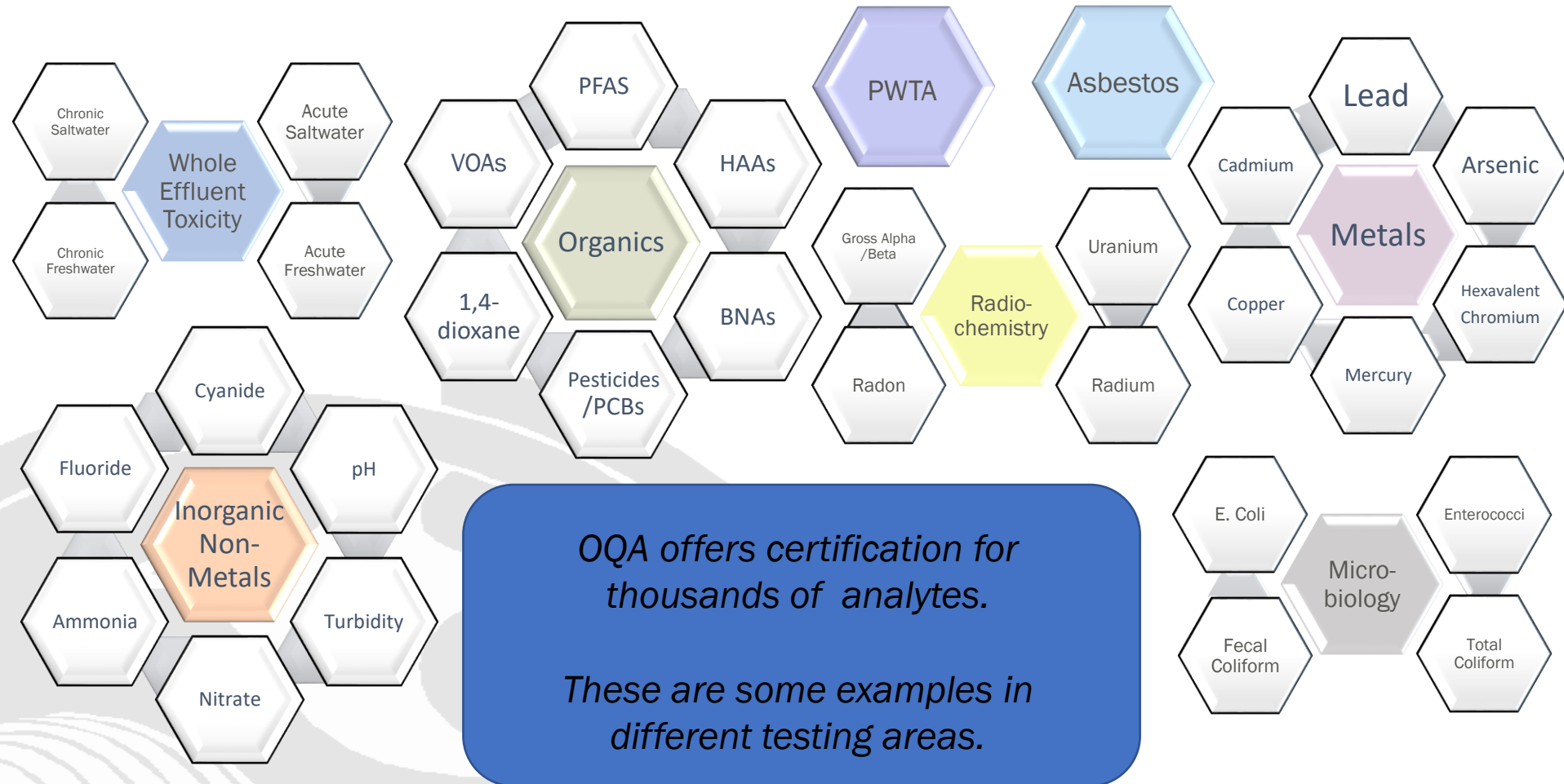


Certification provided for samples of multiple matrices:

- Drinking water
- Non-potable water
- Air
- Solid-chemical materials
- Biological tissue



Analytes





DSR - Active Research

Environmental Trends

- ✓ 39 chapters on the status of key environmental parameters
- ✓ Updated as new data become available
- ✓ Provides a summary of a major environmental issue
- ✓ Each chapter includes references, DEP contacts, and sources of additional information

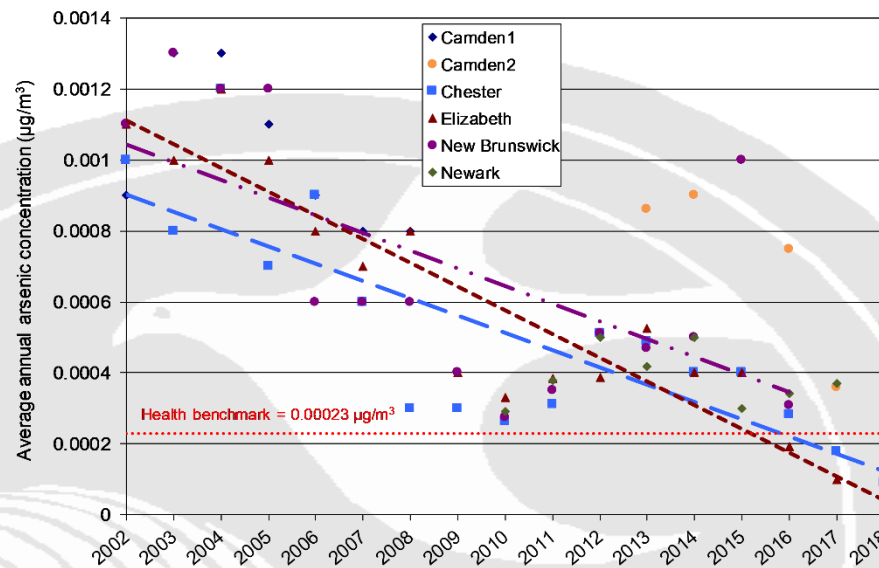


Figure 1: Average annual concentrations of arsenic in particulate matter at five air monitoring stations between 2002–2018 with health benchmark shown in red. Significant trend lines (Kendall Tau P-value ≤ 0.05) are shown.

Governor Chris Christie • Lt. Governor Kim Guadagno
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STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Science, Research and

<https://www.nj.gov/dep/dsr/trends>

[Return to Division of Science, Research and Environmental Health Home](#)

ENVIRONMENTAL TRENDS

The New Jersey Department of Environmental Protection (DEP) is charged with protecting the natural environment and those aspects of human health directly related to environmental factors. Historically this has meant controlling discharges to air, water and land, and working to both minimize and remedy the pollution of these media. Regulation of releases to the environment from point sources like waste discharge pipes and smokestacks, and the management of wastes themselves, have been particular focus areas. It has become increasingly clear that protection of the environment and human health requires a more comprehensive approach. Today, the DEP strives to protect and manage uses of land and other resources to ensure that not only future generations of people can thrive so can wild plants, animals and their critical habitats. The DEP continues its efforts to preserve environmental resources including air, water, land, and healthy ecosystems.

Periodic assessments of environmental conditions can provide insight into the effectiveness of the DEP's current efforts and offer guidance for future efforts. In monitoring and reporting on environmental conditions, it is useful to focus on measures, or indicators, of environmental health.

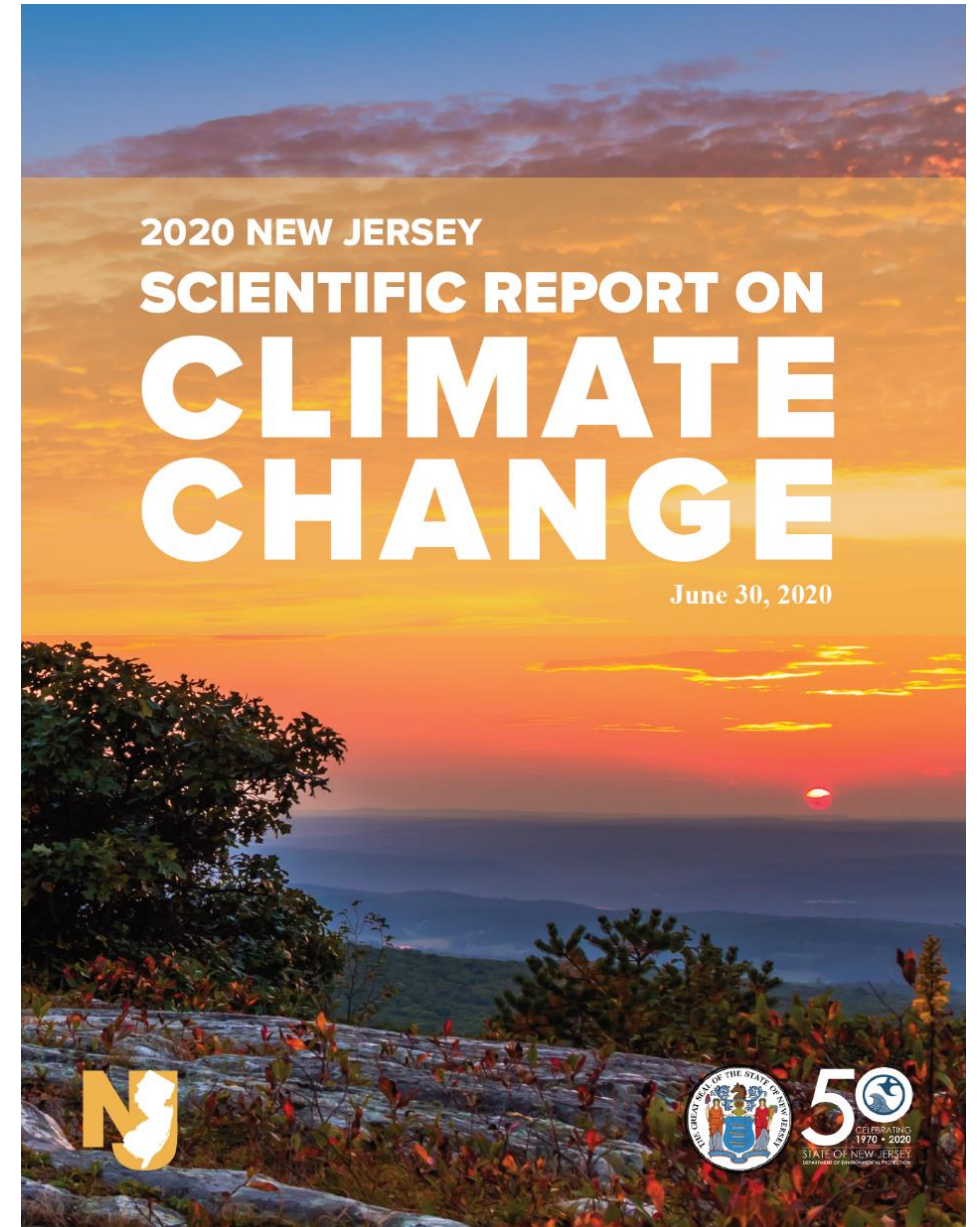
Report Chapters (all in PDF)	Updated
Air	
▶ Air Toxics	April 2013
▶ Atmospheric Deposition: Acidity and Nutrients	November 2015
▶ Greenhouse Gas Emissions	October 2017
▶ Mercury Emissions	August 2017
▶ NOx and VOCs	March 2018
▶ Ozone	March 2018
▶ PM2.5	March 2018
▶ Vehicle Miles Traveled	March 2018
Climate/Energy	
▶ Climate Change in NJ: Trends in Temperature & Sea Level	August 2017

Scientific Report on Climate Change

www.nj.gov/dep/climatechange

- Greenhouse Gases & Climate Pollutants
- Temperature
- Precipitation
- Sea-Level Rise
- Ocean Acidification
- Resources and Ecosystem Impacts
- Research and Data Gaps

- An addendum to the report entitled "Climate Change Impacts on Human Health & Communities" has been released.



NJ Offshore Wind (OSW) Research & Monitoring Initiative (RMI)



Governor Murphy established the goal of setting New Jersey on the path to 100% clean energy by 2050. Building upon that goal, in 2019 New Jersey's offshore wind goal was set at 7,500 megawatts by 2035.

- Addresses the need for regional research & monitoring of marine/coastal resources during offshore wind development
- Process: ID most vulnerable resources → coordinate regionally → form rigorous scientific questions → develop project concepts to address those questions
- Current focus is on pre-construction data collection
- www.nj.gov/dep/offshorewind/rmi.html



New Jersey's Natural and Working Lands Strategy

NATURAL AND WORKING LANDS STRATEGY **SCOPING DOCUMENT**

The Natural and Working Lands Strategy aims to:

- mitigate the effects of climate change through the protection, restoration, and strategic management of natural and working lands.

These lands include those that contribute the most to carbon storage and carbon sequestration:

- forests
- agricultural lands and aquaculture
- grasslands
- wetlands
- developed lands
- and aquatic resources and habitats



Estimation of Fish BAF for Select PFAS in Marine and Freshwater Systems



Addresses the need for water quality standards for key PFAS (PFOS, PFOA, PFNA)

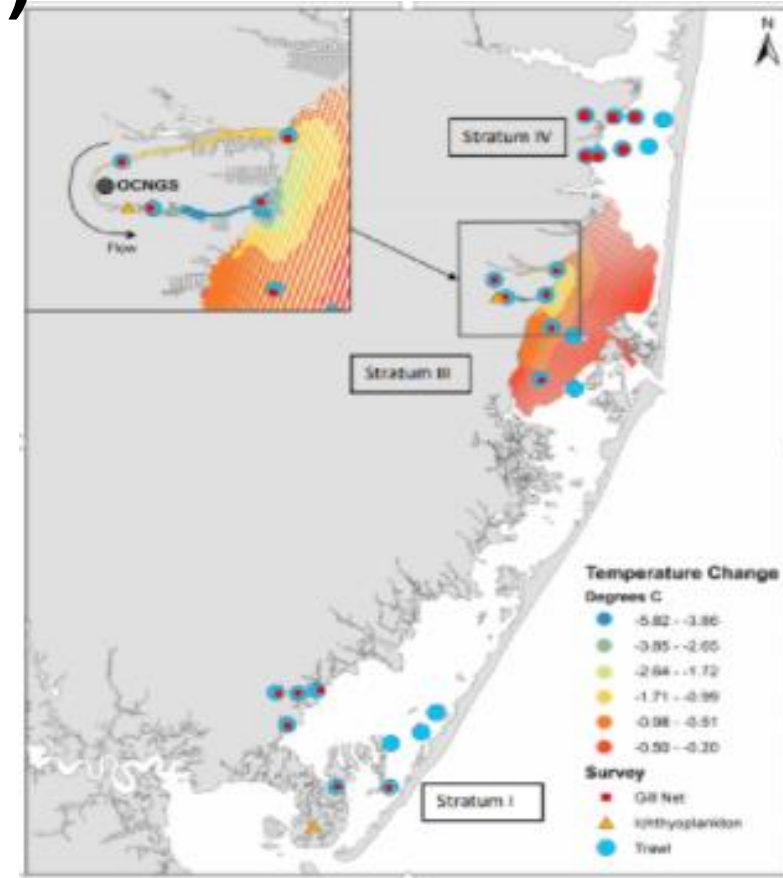
- **Project will develop state specific bioaccumulation factors that will be used to calculate protective surface water quality criteria in freshwater and saline waters.**
- 2022: Fish tissue and surface water samples collected at 16 saline sites
- 2023: Fish tissue and surface water

Joint project with the Academy of Natural Sciences of Drexel University



Ecosystem monitoring of pre- and post-closure of Oyster Creek Nuclear Generating Station (Year 3)

- Assessment of the impacts of the OCNGS on gelatinous zooplankton and planktonic community structure (*Montclair State Univ.*)
- Assessment of the effect of cooling water effluent on fish, crab, and benthic invertebrates (*Rutgers and Rider Univ.*)
- Study of zooplankton for monitoring and assessment of the closure Oyster Creek Nuclear Plant (*Monmouth Univ.*)
- Characterization of phytoplankton community changes in Barnegat Bay related to the closure of Oyster Creek Nuclear Generating Station, combining next generation sequencing and microscopy analyses (*George Mason Univ.*)



Monitoring and Targeted Research of Selected Chemical Contaminants in New Jersey Fish

<http://FishSmartEatSmartNJ.org/>

Routine Monitoring of Toxics in Fish

- Includes the monitoring of fish tissue statewide, evaluating multiple target contaminants, fish species and water bodies;
- Informs the appropriateness of current fish consumption advisories and need for modifications;
- Examine new species, contaminants, and waterbodies; and
- Supports education and outreach efforts in protecting the public.



Bruce Ruppel, retired, DSR

Monitoring and Targeted Research of Selected Chemical Contaminants in New Jersey Fish

Investigate Levels of Perfluoroalkyl Substances (PFAS) in NJ Fish Species, sediment and water

- As an emerging compound, PFAS, particularly PFOS, have been found to accumulate in fish tissue if a source is present.
- Contamination has been identified in public and private drinking water wells, and potential sources have been identified, NJ fish and consumers may be impacted.
- Concentrations in fish tissue will continue to be quantified and evaluated along with health criteria.



Invasive Species Management Strategy



- **Revisit/Revise the 2009 NJ Strategic Management Plan for Invasive Species**

- Inventory DEP projects and partnerships
- Identify new priorities and emerging issues
- Identify what can be implemented with available resources



- **Actionable Items:**

- New DEP Invasive Species website
- Pilot projects using eDNA detection
 - Inhouse: Clinging jellyfish, New Zealand mudsnails
 - Contracts: Chinese pond mussels, other
- Develop a NJ Aquatic Invasive Species Management Plan
 - Grant received from Mid-Atlantic Panel for Aquatic Invasive Species

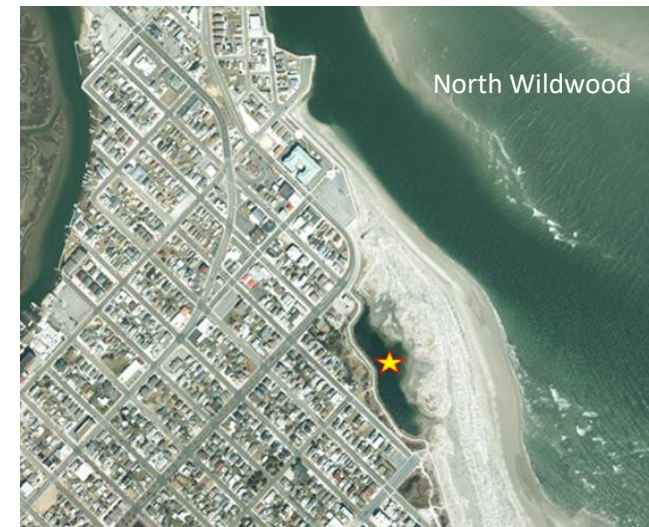
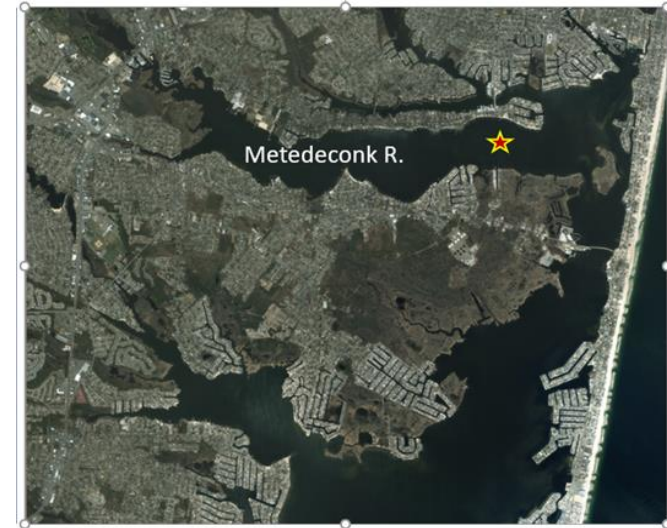
Clinging Jellyfish - Ongoing Monitoring

Objectives:

Characterization of presence, habitat preferences and full seasonal life cycle.

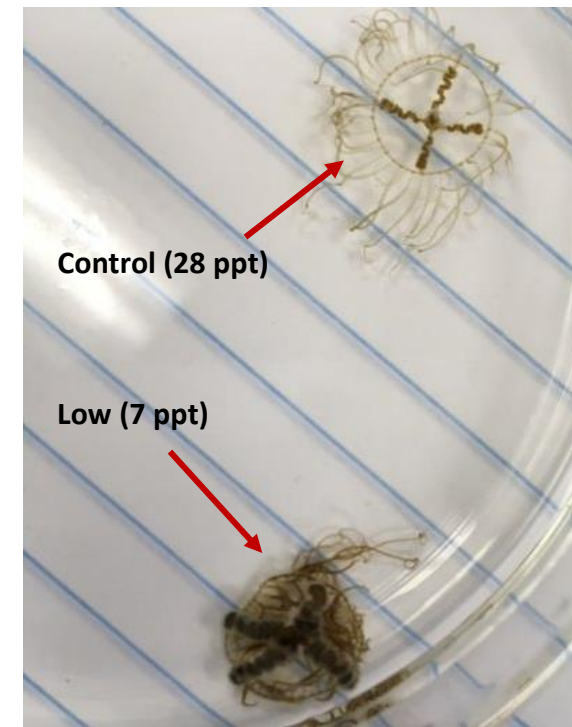
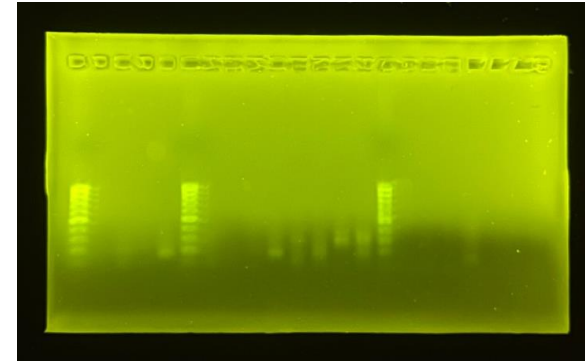
Focused Sampling:

- Metedeconk River
- North Wildwood
- Barnegat Bay off IBSP
- Shrewsbury River



Clinging Jellyfish Research Objectives 2021-2022

- Development and optimization of a **Molecular monitoring protocol** for detecting CJ's and other non-native, marine/aquatic invasives in New Jersey
- **Collaboration w/Rutgers U.** - Build **bioinformatics library** of associated cnidarian and ctenophore spp.
- **Salinity Tolerance:** Compare different populations (physiological & behavioral response) to salinity extremes



Harmful Algal Blooms

Harmful cyanobacteria blooms are increasing in both frequency and duration on inland waters. Some blooms are producing toxins not typically monitored while other blooms with similar species composition produce common toxins. Factors determining which toxins are produced remain unknown.

Research Objectives:

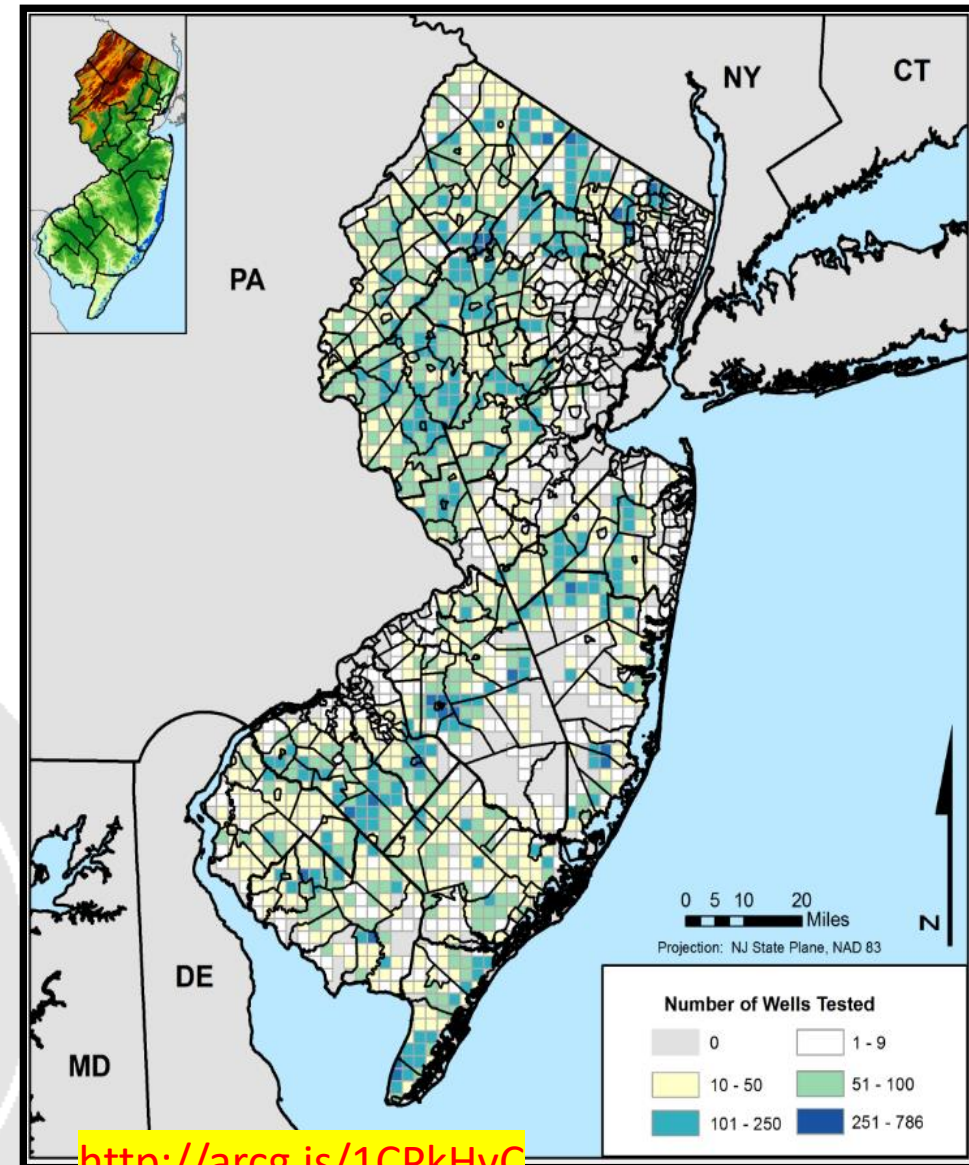
- + Increase understanding of drivers behind both non-toxic and toxigenic blooms.
- + Build out a rapid and accurate field assessment kit to determine bloom composition and toxin capacity.
- + Build a risk assessment model for NJ waterbodies to help assess their ability to support either a toxigenic bloom or non-toxigenic bloom.



New Jersey Private Well Testing

PFOA, PFOS, and PFNA on December 1, 2021

- ✓ Approximately 400,000 private wells (13 % of residents) in NJ.
- ✓ Wells are required to be tested for bacteria, nitrates, 29 volatile organic compounds, lead, pH, arsenic, gross alpha (radionuclides), iron, and manganese. Mercury and uranium are only required in certain counties.
- ✓ Analysis of data show the variability in the concentration of each parameter to state standards.
- ✓ Data from the PWTA can be used to identify vulnerable communities and direct outreach efforts.
- ✓ Data is also used by SDW, SRP, and NJGS.



<http://arcg.is/1CPkHyC>

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Division of Science and Research

Acknowledgements: DSR Scientists, DEP Programs,
Principal Investigators and their Universities

Contact me:

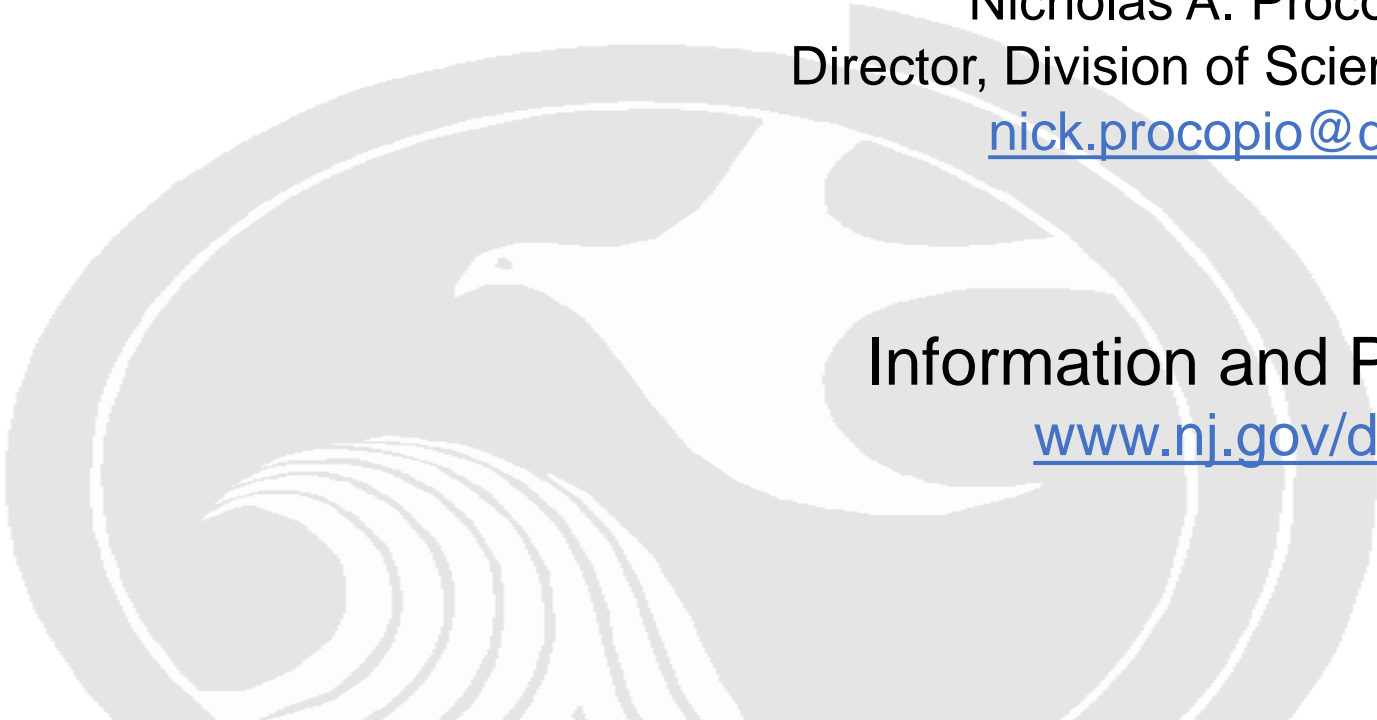
Nicholas A. Procopio, Ph.D.

Director, Division of Science and Research

nick.procopio@dep.nj.gov

Information and Publications:

www.nj.gov/dep/dsr/



The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the slide, creating a modern, layered effect. The rest of the slide has a plain white background.

Questions?

Director Richelle Wormley and Director Mike Hastry

Compliance and Enforcement Updates and Initiatives

Division of Air Enforcement Update

Richelle Wormley, November 18, 2022



NEW STAFF since November 2021



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Tampering

The disconnection, detachment, deactivation, or any other alteration or modification from the design of the original vehicle manufacturer or an element of design installed on any motor vehicle with a certified configuration or motor vehicle engine with a certified configuration, except temporarily for the purpose of diagnosis, maintenance, repair, or replacement;

BLACK SMOKE
Don't Mean It's Broke

Why Do It?

The most common reasons provided for tampering is increased performance and , but the more likely reason is to avoid maintenance upkeep costs. Like almost every other part of a vehicle, the emission system requires maintenance in order to work properly.



How Big of a Problem is Tampering?

- EPA estimates that more than 550,000 Medium Duty Diesel Trucks have removed their emission controls in the last decade.
- The emissions increases from these vehicles is equivalent to having over nine million additional stock trucks on the roads – That's Nine Million!



Date Investigated	Facility Name	Inspected	Tampered	% Tampered	
7/11/2018	Dealer #1	35	10	29%	
8/9/2018	Dealer #2	15	4	27%	
9/27/2018	Dealer #3	16	5	31%	
10/30/2018	Dealer #4	8	1	13%	
2/5/2019	Dealer #5	33	1	3%	
2/6/2019	Dealer #6	3	1	33%	
2/25/2019	Dealer #7	50	14	28%	
4/4/2019	Dealer #8	5	2	40%	
5/7/2019	Dealer #9	3	2	67%	
6/20/2019	Dealer #10	5	1	20%	
10/10/2019	Dealer #11	2	1	50%	
11/15/2019	Dealer #12	3	1	33%	
9/17/2020	Dealer #13	4	2	50%	
9/17/2020	Dealer #14	1	1	100%	
11/18/2020	Dealer #15	9	3	33%	
4/21/2021	Dealer #16	7	2	29%	
7/6/2021	Dealer #17	19	5	26%	
8/19/2021	Dealer #18	17	4	24%	
10/7/2021	Dealer #19	12	1	8%	
10/14/2021	Dealer #20	1	1	100%	
10/21/2021	Dealer #21	1	1	100%	
10/28/2021	Dealer #22	2	1	50%	
11/24/2021	Dealer #23	1	1	100%	
12/2/2021	Dealer #24	2	2	100%	
12/8/2021	Dealer #16 - 2nd Offense	4	2	50%	
Totals	25	258	69	27%	

In New Jersey, Where Does Tampering Occur?



County	Private Sale Totals
Atlantic	18
Bergen	15
Burlington	32
Camden	13
Cape May	5
Cumberland	10
Essex	9
Gloucester	20
Hudson	2
Hunterdon	26
Mercer	2
Middlesex	13
Monmouth	25
Morris	14
Ocean	29
Passaic	8
Salem	8
Somerset	13
Sussex	18
Union	7
Warren	12
Total	299

Illegal 'Deleted' Ram Diesel Owner Wants It Crushed Rather Than Comply

by Thom Taylor  | [More Articles: Trucks](#)

Published on September 20, 2022

<https://www.motorbiscuit.com/illegal-deleted-ram-diesel-owner-wants-crushed-comply>

ADVERTISEMENT

When we last visited this diesel drama, a New Jersey man was flagged by the DMV for driving a "deleted" [Ram](#) 2500 diesel truck. It discovered the illegal removal of emissions components from the owner's Facebook Marketplace ad selling the truck. In it, he used "deleted" as a way to say the diesel particulate filter and EGR valve had been removed, [which is illegal](#). At that time, he said he would capitulate by finding a Cummins diesel engine with everything intact. Now, that thinking has changed

2007 Ford F-250 king ranch 4x4
226k miles

6.0 powerstroke bulletproofed but has emissions intact because this state is a joke
Rust free truck from West Virginia

2.5" level with 17+ lariat wheels and 35"s
5% tint on windows and 20% on windshield
08+ king ranch interior

Great running truck and has no mechanical issues



The ABS light is on and the water in fuel light randomly comes on . I changed all the fuel filters so it's probably the sensor . I just haven't replaced it

\$18,000 obo
Open to trades

Located in Nj

New Jersey Won't Let You Sell Your Dirty Diesel Truck on Facebook—And Yes, They Know (Updated)

The state is actively issuing notices to sellers of trucks with modified emissions equipment.

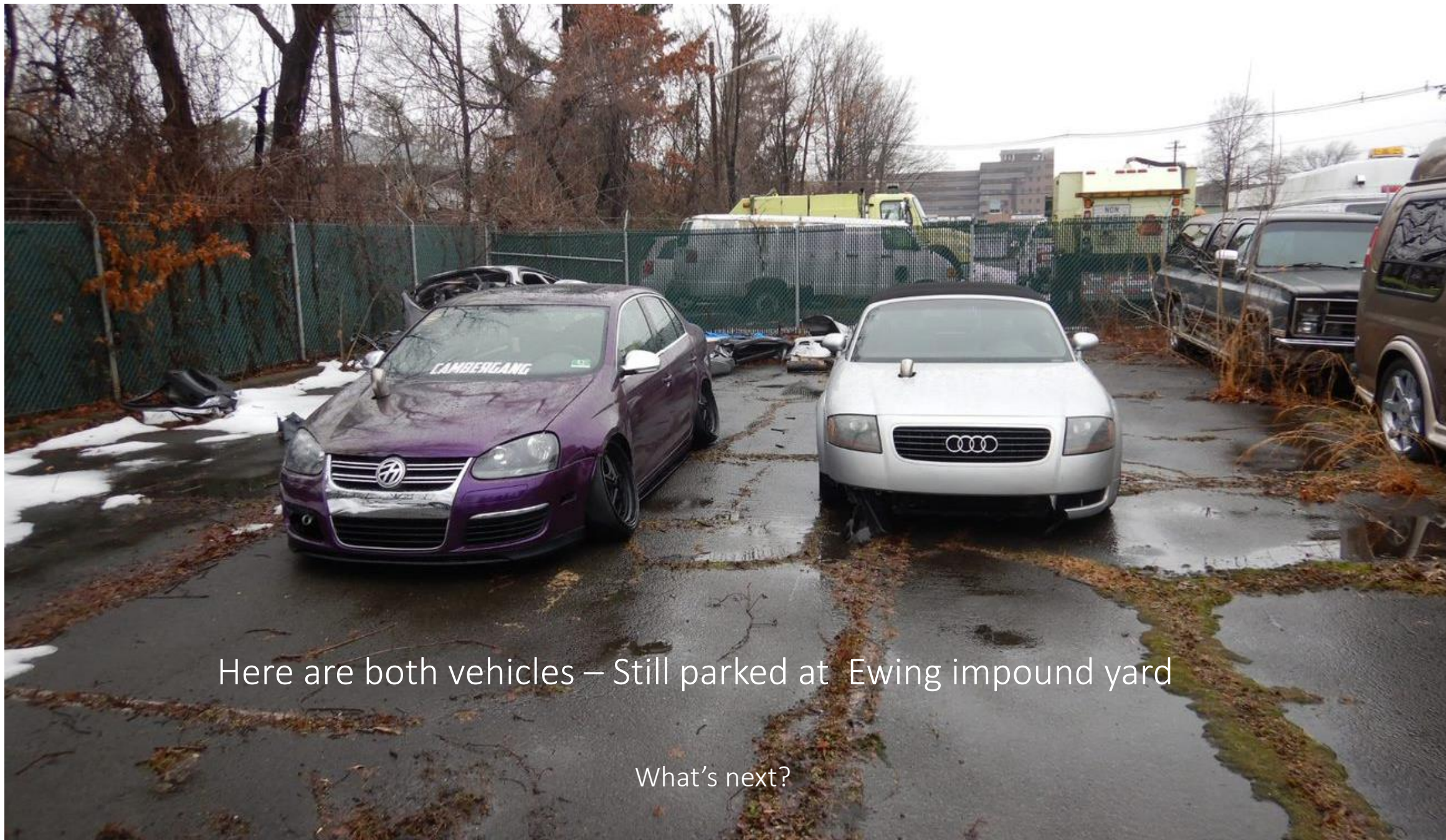
BY CALEB JACOBS | PUBLISHED JUL 28, 2022 4:21 PM

NEWS

TRUCKS

<https://www.thedrive.com/news/diesel-ram-owner-forced-to-scrap-truck-over-deleted-emissions-equipment>

<https://www.thedrive.com/diesel-ram-owner-forced-to-scrap-truck-over-deleted-emissions-equipment> [news/](#)



Here are both vehicles – Still parked at Ewing impound yard

What's next?



Compliance Advisory

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Air Enforcement #2022-10 Issued 9/21/2022

Permit Applicability Update for Fumigation Operations

WHO IS AFFECTED BY THIS ADVISORY?

Any industrial structure as defined at N.J.A.C. 7:27-8.1 in New Jersey that engages in a fumigation operation by either the owner or operator and has the potential to emit fumigant or combination of fumigants at a rate greater than 0.1 pounds per hour (45.4 grams per hour) is required to obtain an air pollution control permit per N.J.A.C. 7:27-8.2(c)22. Referenced regulations are available at <https://www.state.nj.us/dep/agm/rules27.html>.

ARE THERE ANY EXEMPTIONS?

"Emergency Fumigation Operations" as defined in N.J.A.C. 7:27-8.1 can be conducted without having to obtain an air permit and operating certificate. Emergency fumigation operations can only be conducted if there have been no other fumigation operations by the source owner or operator within the preceding 5 years. Owners or operators conducting emergency fumigation operations must adhere to the criteria defined under N.J.A.C. 7:27-8.2(g). Further guidance for emergency fumigation operations can be found in the Fumigation Permitting Frequently Asked Questions located under "General Guidance" at <https://www.state.nj.us/dep/agpp/permitguide.html>.

WHY IS DEP ISSUING THIS ADVISORY?

DEP is providing guidance on recently adopted fumigation regulations. Facilities that exceed the permit applicability of 0.1 pounds per hour (45.4 grams per hour) as of June 3, 2022, have until February 3, 2023, to submit a permit application for a preconstruction and operating certificate, as per N.J.A.C. 7:27-8.4(r) but are advised to submit as soon as possible. Facilities that have not fumigated or do not have documentation of fumigation prior to June 3, 2022, must obtain a permit prior to fumigating.

FUMIGATION



Main_New
http://www.burarra.questacon.edu.au

← BACK
NEXT →

Burarra Gathering
Sharing Indigenous Knowledge

Permit Application

Aboriginal land is private land. Aboriginal people have the legal right to grant or refuse permission to people wishing to enter their land. The permit system is designed to help protect the privacy of Aboriginal communities, preserve Aboriginal culture and safeguard the environment.

Your name:

Purpose of visit:

Areas to be entered:

Date of visit:

Method of transport: ☐ Road ☒ Aircraft

- APPLICATIONS DUE February 3, 2023
- - what happens then?



Requirements for Emergency Fumigation



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Advanced Notification

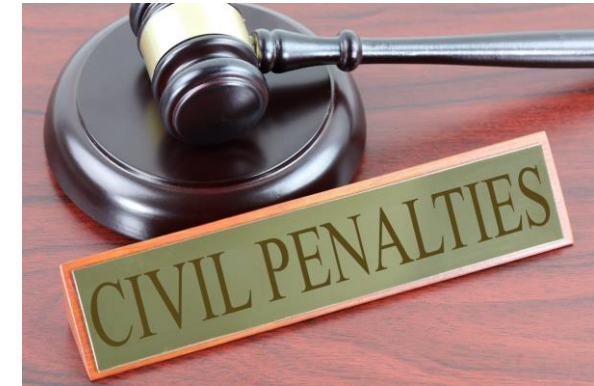
Posting of Fumigation Signs- visible, at access points

Stack Requirements – extend above the highest point of roofline and exhausts vertically

Concentration Level LIMIT must not exceed fumigant label at the fence or property line

Submit Emergency Fumigation Report 30 days following operation

FAILURE TO COMPLY WILL RESULT IN A PENALTY ASSESSMENT



<u>Citation</u>	<u>Rule Summary</u>	Type of Violation	First Offense	Second Offense	Third Offense	Fourth and Each Subsequent Offense
N.J.A.C. 7:27-8.2(g)1	Submit Pre-fumigation Notification	NM	\$500	\$1,000	\$2,500	\$7,500
N.J.A.C. 7:27-8.2(g)3	Posting of Fumigation Signs	NM	\$500	\$1,000	\$2,500	\$7,500
N.J.A.C. 7:27-8.2(g)4	Stack Requirements	NM	\$1,000	\$2,000	\$5,000	\$15,000
N.J.A.C. 7:27-8.2(g)5	Concentration Exceedance	NM	\$1,000	\$2,000	\$5,000	\$15,000
N.J.A.C. 7:27-8.2(g)6	Submit Emergency Fumigation Report	NM	\$500	\$1,000	\$2,500	\$7,500

May 3, 2023
State Police
Auditorium



Contact

Richelle Wormley

Director

Division of Air Enforcement



Richelle.Wormley@dep.nj.gov



www.nj.gov/dep/programname



609-609-633-7288

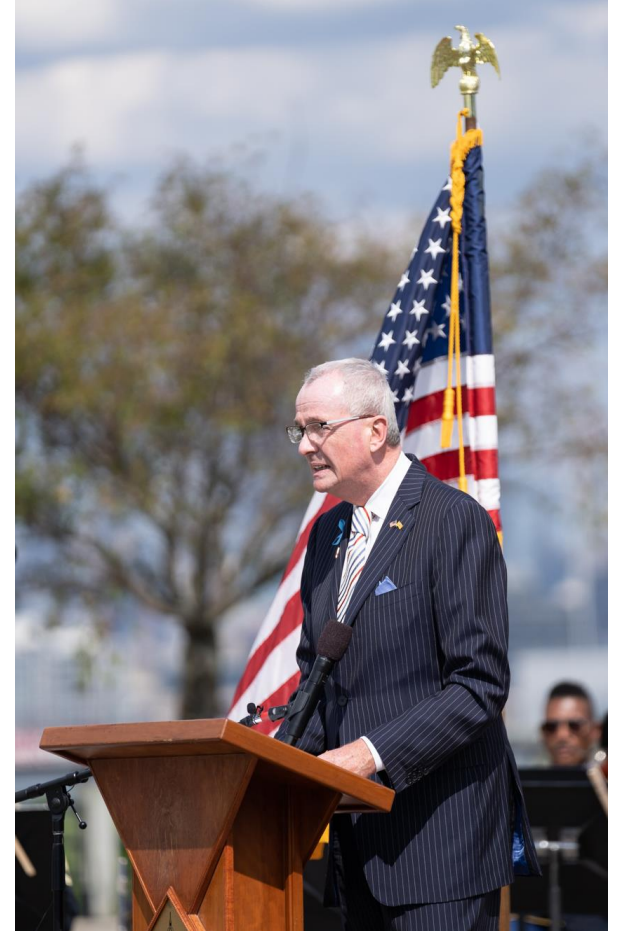
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Thank you!



Michael Hastry, Director

**Waste and UST Compliance and
Enforcement**

**Air Quality, Energy and
Sustainability Program**



UPDATES

Waste

- Soil/Fill
- Scrap Yards
- Sustainability

Underground Storage Tanks (UST)

- Emergency Generator Fuel Tanks
- Enhanced Vapor Recovery for Fuel Dispensing Tanks



SOIL/FILL

- Ongoing rulemaking to fully implement 2020 A-901 expansion to include soil and fill recycling industries in addition to the solid and hazardous waste industries.
 - Developing exemption via certification for persons who exclusively handle non-contaminated soils/fills and have a QA/QC program in place to ensure compliance.
- Ancillary rulemaking to classify soils as a Class B recyclable material and develop QA/QC for products generated at Class B facilities and sold into market.
- Developing a comprehensive soil and fill guidance document which encompasses all DEP programs (SRP, Waste, Dredge).



SCRAP YARDS

- Primarily regulated at the local level. Locals offer they have difficulty with oversight resources.
- Incidents (fires, smoke, dust problems) appear to be trending upward.
- Many yards are in overburdened communities. DEP is required to consider impacts of these facilities on the communities.
- Working to enhance state-level regulatory oversight/operational controls for these facilities (enhanced acceptance protocols, pile heights/volumes, turnover/processing rates, etc.). Potential rule and/or legislation changes contemplated.



SUSTAINABILITY

- A number of sustainability laws recently passed (bag/polystyrene bans, recycled content, food waste recycling). Others passed previously including banned containers, motor oil, toxics in packaging, batteries, mercury and asbestos products and covered electronic devices.
- Most of these laws have retailing requirements meaning that retailers (stores) are either prohibited from selling/providing certain products or require the retailer to provide recycling services or consumer information for these products.
- Working on enhancing DEP presence in the retail sector to ensure requirements are followed, provide compliance assistance and gather direct information to assist in reporting and efficacy analysis working towards improvement strategies. Go Shopping!



Enhanced Vapor Recovery for Fuel Dispensing Tanks

- **Deadline for required upgrading of fuel dispensing tank systems (>2,000g) to California Air Resources Board (CARB) Phase 1 Enhanced Vapor Recovery (EVR) Standards**
 - **12/23/24** Phase 1 EVR deadline for fuel dispensing tank systems (>2,000g) existing prior to 2018.
 - Requires use of system components having a vapor recovery collection efficiency of 98%.
 - All new constructed facilities (post 2018) required to include Phase 1 EVR equipment at installation.
 - Current Executive Orders/information can be found at:
<https://ww2.arb.ca.gov/resources/documents/vapor-recovery-phase-i-evr-executive-orders>



Emergency Generator Fuel Tanks

- **Emergency Generator USTs** – now required to have Release Detection Monitoring (RDM) either continuous or periodic monitoring, depending on the type of system and date of installation.
 - EPA has 3 new guidance documents on this issue:
 - <https://www.epa.gov/ust/emergency-power-generator-ust-systems-2015-requirement-release-detection>
 - <https://www.epa.gov/ust/federal-ust-requirements-emergency-power-generator-ust-systems>
 - <https://www.epa.gov/ust/depth-discussion-automated-interstitial-monitoring-systems-underground-pressurized-piping>



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Questions?

Announcements

- ▶ We will start promptly at 1 p.m. following the lunch break.
- ▶ Please continue to stay on mute while taking the lunch break.
- ▶ Please download handouts, including conference agenda, speaker bios, and survey form.
- ▶ Please complete the form and e-mail your responses to sgupta@haleyaldrich.com. You can also just send an e-mail with the following input:
 - ▶ Feedback on the conference
 - ▶ Topic(s) of interest for future programs
 - ▶ Please indicate your preference for future NJDEP Regulatory Conference: in-person or virtual.
 - ▶ Thank you for your input and feedback!
- ▶ Or you may complete the survey form online. Please see the link in the online chat or scan the QR Code with your mobile device.



Lunch Break

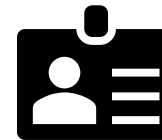
Afternoon Session

Sunila Gupta, Haley Aldrich
Program Chair, A&WMA - NCNJ

Dr. Ron Poustchi,
New Jersey Department of Environmental Protection

Reminders

- ▶ Keep yourself on mute and video off
- ▶ Use question feature to type in your question
- ▶ Add your name and affiliation to the questions
- ▶ Moderators will try to get as many questions as we can within the allotted session





Deputy Commissioner Sean Moriarty

Environmental Justice and Equity Program
Updates and Initiatives



Environmental Justice Rulemaking Briefing



The Environmental Justice Law (1/2)

The Legislature finds and declares...

- All New Jersey residents, regardless of income, race, ethnicity, color, or national origin, have a right to live, work, and recreate in a clean and healthy environment.
- Historically, New Jersey's low-income communities and communities of color have been subject to a disproportionately high number of environmental and public health stressors, including pollution from numerous industrial, commercial, and governmental facilities located in those communities.
- The legacy of siting sources of pollution in overburdened communities continues to pose a threat to the health, well-being, and economic success of the State's most vulnerable residents and that it is past time for the State to correct this historical injustice.

The Environmental Justice Law (2/2)

The Legislature finds and declares...

- No community should bear a disproportionate share of the adverse environmental and public health consequences that accompany the State's economic growth.
- The State's overburdened communities must have a meaningful opportunity to participate in any decision to allow facilities which, by the nature of their activity, have the potential to increase environmental and public health stressors.
- It is in the public interest for the State, where appropriate, to limit the future placement and expansion of such facilities in overburdened communities.

Stakeholder Process Recap

- **10/22/20** – Initial EJ Rulemaking Public Information Session
- **01/20/21** – Geographic Points of Comparison / Facility & Permit Definitions
- **03/11/21** – Environmental & Public Health Stressors
- **04/07/21** – Compelling Public Interest / Renewal Conditions
- **05/20/21** – Environmental Justice Impact Statement
- **06/24/21** – Review Meeting

Step 1: Applicability Determination – 3 Criteria

(1) Located in Overburdened Community: census block group in which: (1) at least 35 percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency

(2) Facility:

- major sources of air pollution (e.g., power plants, cogeneration facilities);
- incinerators or resource recovery facilities;
- large sewage treatment plants (more than 50 million gallons per day);
- transfer stations or solid waste facilities;
- recycling facilities that receive at least 100 tons of recyclable material per day;
- scrap metal facilities;
- landfills; or
- medical waste incinerators, except those attendant to hospital and universities.

(3) Permit: solid waste and recycling, development, water supply and pollution, air pollution and pesticides.

- Applies to individual permits (those permits for more substantial activities requiring deeper review) and excludes authorizations or approvals necessary to perform remediation and minor modification to major source air permits that do not increase emissions

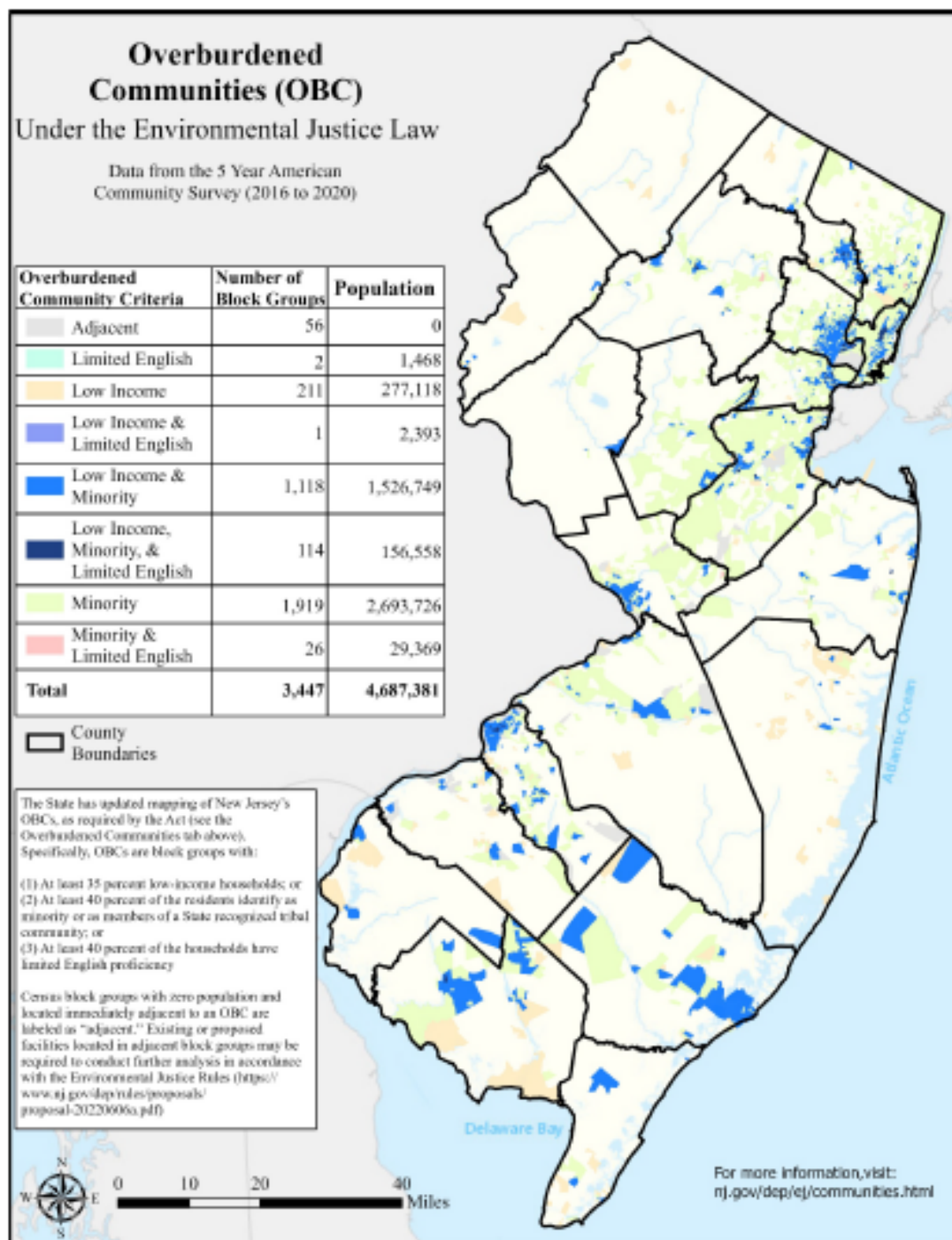
Note: Necessary information will be provided by the Department and publicly available as part of the Environmental Justice Mapping, Assessment & Protection Tool ([EJMAP](#)).

Overburdened Communities (OBCs)

5-year American Community Survey Data, 2016-2020

- This is revised analysis, based on data made available 3/17/2022.
- Updated from that used in the in original EJ mapping too (which was 2019 ACS data for 2015 to 2019).
- Information can be found on [EJMAP](#)
 - Excel Spreadsheet listing Overburdened Communities (OBCs) block groups with town names
 - PDF maps

Overburdened Community Criteria	# Block Groups	Population
Minority	1,919	2,693,726
Low Income and Minority	1,118	1,526,749
Low Income	211	277,118
Limited English	2	1,468
Low Income, Minority, and Limited English	114	156,558
Minority and Limited English	26	29,369
Low Income and Limited English	1	2,393
Adjacent	56	0
Total	3,447	4,687,381



Environmental & Public Health Stressors

- “Environmental or public health stressors” means sources of environmental pollution, including, but not limited to,
 1. concentrated areas of air pollution,
 2. mobile sources of air pollution,
 3. contaminated sites,
 4. transfer stations or other solid waste facilities, recycling facilities, scrap yards, and
 5. point-sources of water pollution including, but not limited to, water pollution from facilities or combined sewer overflows;
- or conditions that may cause potential public health impacts, including, but not limited to,
 1. asthma,
 2. cancer,
 3. elevated blood lead levels,
 4. cardiovascular disease, and
 5. developmental problems in the overburdened community.

Note: Baseline stressor information will be provided by the Department and publicly available on [EJMAP](#).

Environmental & Public Health Stressors

- After considering data availability, data quality, appropriate geographic scale, quantifiability, and marginal value, we are now considering 26 stressors.



Concentrated Areas of Air Pollution

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
1	Ground-Level Ozone	Days above National Ambient Air Quality Standard (NAAQS)	<ul style="list-style-type: none"> NJ monitoring data Points (monitors) 	✓	✓
2	Fine Particulate Matter (PM 2.5)	Days above National Ambient Air Quality Standard (NAAQS)	<ul style="list-style-type: none"> NJ monitoring data Points (monitors) 	✓	✓
3	Cancer Risk from Diesel PM	Estimated cancer risk	<ul style="list-style-type: none"> NATA data Census Tract 	✓	✓
4	Cancer Risk from Air Toxics Excluding Diesel PM	Estimated cancer risk	<ul style="list-style-type: none"> NATA data Census Tract 	✓	✓
5	Non-Cancer Risk from Air Toxics	Estimated noncancer risk	<ul style="list-style-type: none"> NATA Census Tract 	✓	
6	Permitted Air Sites	Number of sites per square mile	<ul style="list-style-type: none"> NJ Air Permitting data Points (facility locations) 		

Mobile Sources of Air Pollution

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
7	Traffic - Cars, Light- and Medium-Duty Trucks	Vehicle density per square mile	<ul style="list-style-type: none"> • USDOT FHA • Highway Performance Monitoring System (HPMS) 	✓	✓
8	Traffic – Heavy-Duty Trucks	Vehicle density per square mile	<ul style="list-style-type: none"> • USDOT FHA • Highway Performance Monitoring System (HPMS) 		
9	Railways	Rail miles per square mile	<ul style="list-style-type: none"> • ArcGIS Railroad Layer • Line segments 		

Point Sources of Water Pollution

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
10	Surface Water	Non-attainment of designated uses for the Integrated Report	<ul style="list-style-type: none"> Integrated Report Block Group 		✓
11	Combined Sewer Overflows	Number of CSOs in block group	<ul style="list-style-type: none"> NJPDES Permitting Database Points (CSO locations) 		
12	NJPDES Sites	Number of sites per square mile	<ul style="list-style-type: none"> NJPDES Permitting Database Points (facility locations) 		

Solid Waste & Scrap Yards

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
13	Solid Waste Facilities	Number of transfer stations, solid waste and recycling facilities, and incinerators per square mile	<ul style="list-style-type: none"> NJDEP Division of Solid and Hazardous Waste Database Points (facility locations) 		✓
14	Scrap Metal Facilities	Number of sites per square mile	<ul style="list-style-type: none"> NJ Environmental Management System Points (facility locations) 		✓

Contaminated Sites

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
15	Known Contaminated Sites	Density of Weighted Known Contaminated Sites (KCSL)	<ul style="list-style-type: none"> NJDEP Site Remediation Database Points (facility locations) 	✓	✓
16	Soil Contamination Deed Restrictions	Percent acres of the block group with Deed Notice restrictions	<ul style="list-style-type: none"> NJDEP Site Remediation Database Polygons 		
17	Groundwater Classification Exception Areas/Current Known Extent Restrictions	Percent acres of block group with Classification Exception Area (CEA) or Currently Known Extent (CKE) notice restrictions	<ul style="list-style-type: none"> NJDEP Site Remediation Database Polygons 		

May Cause Public Health Issues (Environmental, 1/2)

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
18	Drinking Water	Number of Maximum Concentration Level (MCL), Treatment Technique (TT), and Action Level Exceedance (ALE) violations	<ul style="list-style-type: none"> Public Violations Reports for MCL, TT, and ALE Purveyor Areas 		✓
19	Emergency Planning Sites	Density of TCPA, DPCC and CRTK facilities	<ul style="list-style-type: none"> FACITS, NJEMS, NJDEP databases Points (facility locations) 	✓	
20	Potential Lead Exposure	Percent of pre-1950 housing	<ul style="list-style-type: none"> US Census Data Block Group 	✓	✓

May Cause Public Health Issues (Environmental, 2/2)

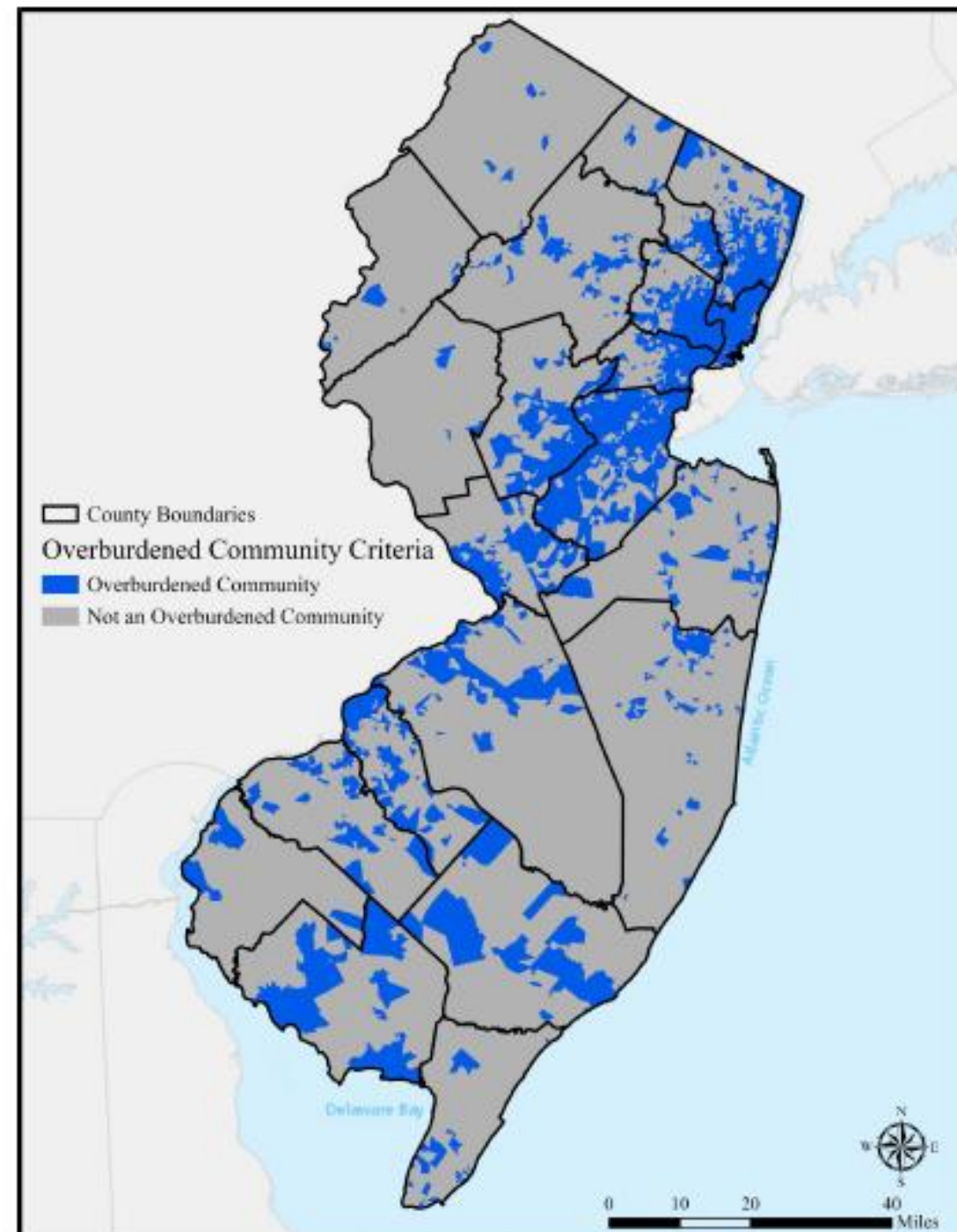
	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
21	Lack of Recreational Open Space	Population living greater than a ten-minute walk (¼ mile) from Public Recreational Open Space	<ul style="list-style-type: none"> ArcGIS Dataset Polygons of open space 		
22	Lack of Tree Canopy	Spatially weighted mean tree canopy cover	<ul style="list-style-type: none"> USDA Tree Cover Data Raster, 100 ft. grids 		
23	Impervious Cover	Percent impervious surface in a block group	<ul style="list-style-type: none"> ArcGIS Data Layer Polygons 		
24	Flooding (Urban Land Cover)	Percent of urban land use area flooded	<ul style="list-style-type: none"> FEMA Maps/NJDEP Flood Hazard Standards Polygons 		

May Cause Public Health Issues (Social)

	Stressor	Description	Data Source & Scale	EJScreen	CalEnviroScreen
25	Unemployment	Percent of an adult population that is unemployed	<ul style="list-style-type: none">• US Census Data• Block Group		✓
26	Education	Percent of an older population that has less than a high school diploma	<ul style="list-style-type: none">• US Census Data• Block Group	✓	✓

Geographic Point of Comparison

- **Statutory Context**
 - The Department must determine whether environmental or public health stressors are “higher than” those borne by other communities within the State, county, or other geographic unit of analysis as determined by the department.
- **Point of Comparison**
 - Lower of State or relevant County, excluding overburdened communities (most like USEPA, who uses multiple geographic areas).
- **Comparison Percentile**
 - 50th (higher than).



Comparative Analysis: Key Terms

Adverse Stressor

- Stressor that is higher than the geographic point of comparison (State or County Non-OBC, 50th percentile)

Combined Stressor Total (CST)

- Total count of adverse stressors in an OBC
 - E.g.: If 18 of the 26 stressors in an OBC are higher than the geographic comparison result, the total for that OBC is 18. The Combined Stressor Total for that OBC is 18.

Adverse Cumulative Stressors

- Exist where the OBC's sum of adverse stressors (CST) is higher than the geographic point of comparison (State or County Non-OBC, 50th percentile)
 - E.g.: If an OBC's CST is 18 and its geographic point of comparison is 13, that OBC is subject to adverse cumulative stressors.

Baseline Information

Upon receipt of a permit application subject to the requirements of this chapter, the Department would provide the applicant with the initial screening information for the overburdened community:

- Identification of the environmental and public health stressors
- Appropriate geographic point of comparison
- Any adverse environmental or public health stressors (higher than 50th percentile);
- The combined stressor total (CST) of the overburdened community; and
- Whether the overburdened community is subject to adverse cumulative stressors.

Alternatively, the applicant who wishes to submit the EJIS with its permit application could obtain the information directly from the Department's Environmental Justice Mapping, Assessment and Protection Tool ([EJMAP](https://experience.arcgis.com/experience/548632a2351b41b8a0443cfc3a9f4ef6)):

<https://experience.arcgis.com/experience/548632a2351b41b8a0443cfc3a9f4ef6>

Step 2: Environmental Justice Impact Statement & Meaningful Public Participation

- Environmental Justice Impact Statement (EJIS) assesses
 - The potential environmental and public health stressors associated with the facility;
 - The environmental or public health stressors already borne by the overburdened community;
 - Any adverse environmental or public health stressors that cannot be avoided if the permit is granted; and
 - Measures to avoid facility or minimize contributions to stressors in the OBC.
- Meaningful Public Participation
 - Public hearing in the overburdened community to present EJIS and minimum 60 day public comment period.
 - Notice: 60 days prior to hearing, newspaper, property owners w/in 200 feet, sign at facility, additional community specific methods.
 - Response to public comment.
 - Upon completion of public process, the applicant would provide the EJIS and any supplemental information, testimony, written comments, the applicant's response to comments, and any other relevant information to the Department for review and decision.

Disproportionate Impact

- “Disproportionate impact” occurs under two scenarios:
 1. Facility creates adverse cumulative stressors in an overburdened community as a result of its contribution; or
 2. Facility contributes to an adverse environmental and public health stressor in an overburdened community that is already subject to adverse cumulative stressors.
- Goal: Avoid disproportionate impact.
 - Where cannot avoid – analyze and propose feasible measures to, as applicable, avoid or minimize contributions to environmental and public health stressors, provide a net environmental benefit and, where appropriate, demonstrate how a new facility serves a compelling public interest in the overburdened community.

Step 3: Department Decision

- The Department would consider the EIS and any supplemental information, testimony, written comments, the applicant's response to comments, and any other information deemed relevant by the Department and determines whether the facility can avoid a disproportionate impact.
- Where the facility can avoid a disproportionate impact, the Department would authorize the applicant to proceed with the imposition of conditions set by the Department necessary to ensure a disproportionate impact is and remains avoided.
- Where the facility cannot avoid a disproportionate impact, the Department would
 - New: deny an application for a new facility unless it demonstrates it will serve a compelling public interest in the overburdened community.
 - Expanded facilities/Major source renewals: authorize the applicant to proceed with Department permitting subject to appropriate conditions to address facility impacts to environmental and public health stressors.

Compelling Public Interest

- Exception to requirement that new facility be denied where cannot avoid disproportionate impact.
- “Compelling public interest” means
 - Primarily serves an essential environmental, health or safety need of the individuals in an overburdened community;
 - Necessary to serve the essential environmental, health or safety need; and
 - No other means reasonably available to meet the established health or safety need.
- Focus on public works-type projects that are necessary to serve essential environmental, health or safety need of the individuals in an overburdened community such as those which directly reduce stressors (i.e., CSO projects).
- Economic benefits of the proposed new facility – employment, tax revenue - shall not be considered in determining whether it serves a compelling public interest in an overburdened community.
- Considers the position of members of the overburdened community, supportive or otherwise, in determining whether a facility satisfies the compelling public interest standard.

Permit Conditions

- For renewals – avoid impacts and where avoidance is not feasible, minimize facility contributions to individual stressors in the OBC.
- For new and expanded facilities, beyond avoidance and minimization, we would consider additional feasible conditions that would reduce offsite stressors or provide a net environmental benefit that improves baseline environmental and public health stressors in the overburdened community.
- Objective standards for major source components based off existing standards – will help address legacy sites that have lagged in technology upgrades.

Rulemaking Timeline

- **06/06/22** – Publication in the New Jersey Register with 90-day comment period
- **07/11/22** – Public Hearing – Trenton (2 sessions – 3 p.m. & 6 p.m.)
- **07/13/22** – Public Hearing – Camden (6:30 p.m.)
- **07/27/22** – Public Hearing – Newark (6 p.m.)
- **07/28/22** – Public Hearing – Virtual (6 p.m.)
- **09/04/22** – Public Comment Period ends
- **By 12/31/22** – Rule adoption (goal)

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Questions?

Bureau Chief Kimberly Cenno

Water Monitoring, Standards and Pesticides Control Updates and Initiatives



Division of Water Monitoring, Standards and Pesticide Control Updates and Initiatives

21st Annual Regulatory Update Conference

November 18, 2022

Kimberly Cenno, Bureau Chief

Bureau of Environmental Analysis, Restoration and Standards
(BEARS)

Division of Water Monitoring, Standards and Pesticide Control

New Jersey Department of Environmental Protection

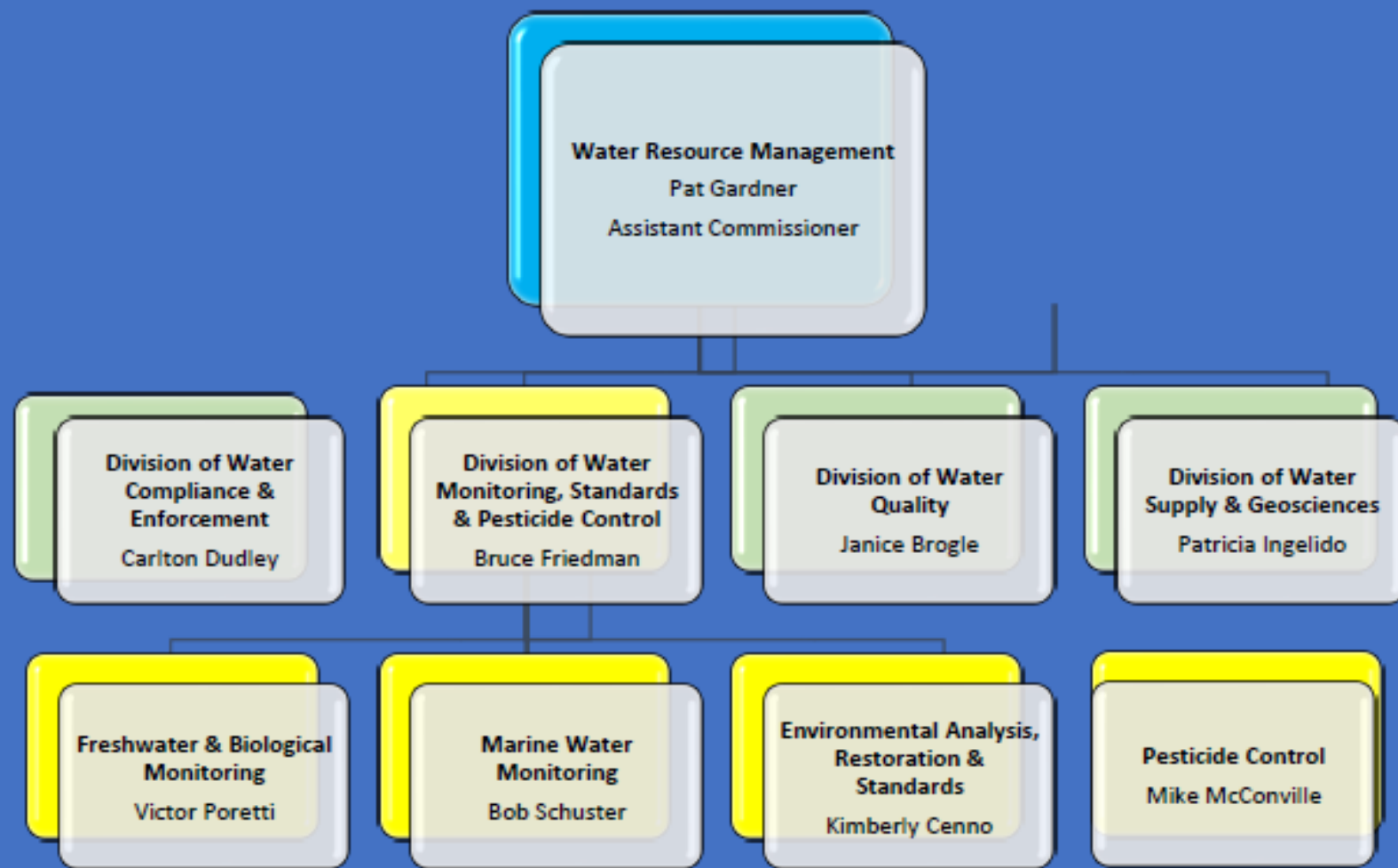
Division of Water Monitoring Standards & Pesticide Control What We Do

The Division of Water Monitoring, Standards and Pesticide Control (DWMSPC) regulates pesticides and assesses New Jersey's waters in order to protect and manage public drinking water supplies, recreational uses, shellfish harvesting, and the health of aquatic organisms, in accordance with State and Federal regulations.

To accomplish its mission of protecting public and ecological health, DWMSPC collects and analyzes water quality data, coordinates the development of water quality standards and the restoration of impaired waters, ensures compliance with pesticide regulations, and provides public education and outreach.



WATER RESOURCE MANAGEMENT





The Bureau of Pesticide Control

Mike McConville, Manager

Two Major Initiatives:

- Certification and Training Plan
- PL 1016 Neonicotinoid Legislative Mandate

Certification and Training Plan

- NJDEP, Pesticide Control Code
- NJAC 7:30-1(a) et seq.
- Target filling deadline has been extended until November 2024 for the adoption of the Federal Requirements.
- New Jersey is presently well ahead of the scheduled deadline for approval.

PESTICIDE TREATED AREA

Date of last application _____

AREAS TREATED

☐ Greens ☐ Tees ☐ Fairways

☐ Practice Areas ☐ Other

Chemical used _____

Proposed date of next application _____

ADDITIONAL INFORMATION AVAILABLE

Tele # _____ By _____

New Jersey PL 1016: Neonicotinoid Pesticide Restriction

Beginning the Rulemaking Process required to amend the Pesticide Control Act to restrict and curb the use of Neonicotinoids in New Jersey

- Mid-December 2022 proposing a Stakeholder Meeting
- October 31, 2023 deadline by Law for restriction to take effect.
- Only Agricultural Uses of Neonicotinoids are permitted and only by valid pesticide applicator licensed individuals.
- Banning use of Neonicotinoids by Golf Courses, Landscapers and homeowners after October 2023.
- Exemptions exist for environmental emergencies.



BUREAU OF FRESHWATER & BIOLOGICAL MONITORING (BFBM) VIC PORETTI, MANAGER

Rivers/Streams, Lakes & Ground Water

- Chemical/Physical - water & sediment
- Biological – macroinvertebrates & fish assemblage, fish tissue
- Microbiological – pathogens, Harmful Algal Blooms (HABs)
- Laboratory – Certified for HAB toxin analysis, Chlorophyll analysis, and field parameters.



- Data to assess Clean Water Act uses – aquatic life, recreation, drinking water & fish consumption
- Enhanced regional monitoring to support the Integrated Water Monitoring and Assessment Report
- Environmental Trend/Performance Metric indicators
- Contaminants of Emerging Concern (CEC)

BFBM 2022 New and Enhanced Initiatives

Contaminants of Emerging Concern (CEC)
Source Trackdown and Status Monitoring

Millstone River:
Trackdown of nutrient source of HAB effecting water supply.

PFAS:
Cedar Brook/ Bound Brook status monitoring
due to PFAS in groundwater discharge.

1,4 Dioxane:
Delaware River. Assisted BMW and C&E.





BFBM 2022 New and Enhanced Initiatives

Harmful Algal Blooms

Certified for Microcystin analysis for both surface water and low level finished drinking water.

Analyzed and Investigated Finished Drinking Water HABs

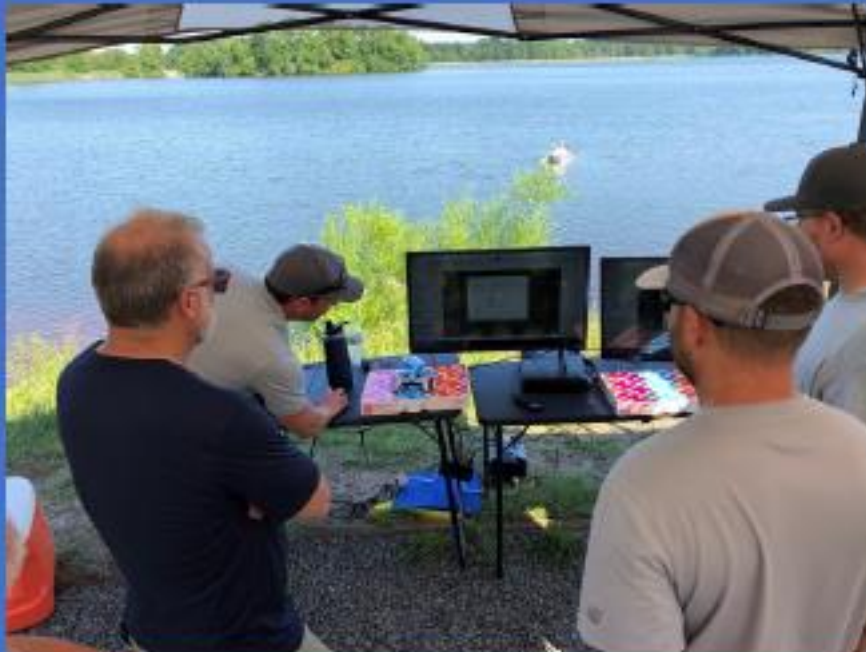


Photo Credit:

BFBM 2022 NEW AND ENHANCED INITIATIVES

Harmful Algal Blooms

Acquired YSI HYCAT Autonomous Surface Vehicle (ASV) to characterize HAB and surface water quality conditions for an entire lake.





BFBM 2022 New and Enhanced Initiatives

Fish eDNA

- Using a variety of laboratory techniques including qPCR and metabarcoding, trace amounts of DNA can be detected
- Detect invasive species, track species of concern, and an ability to monitor entire biological communities

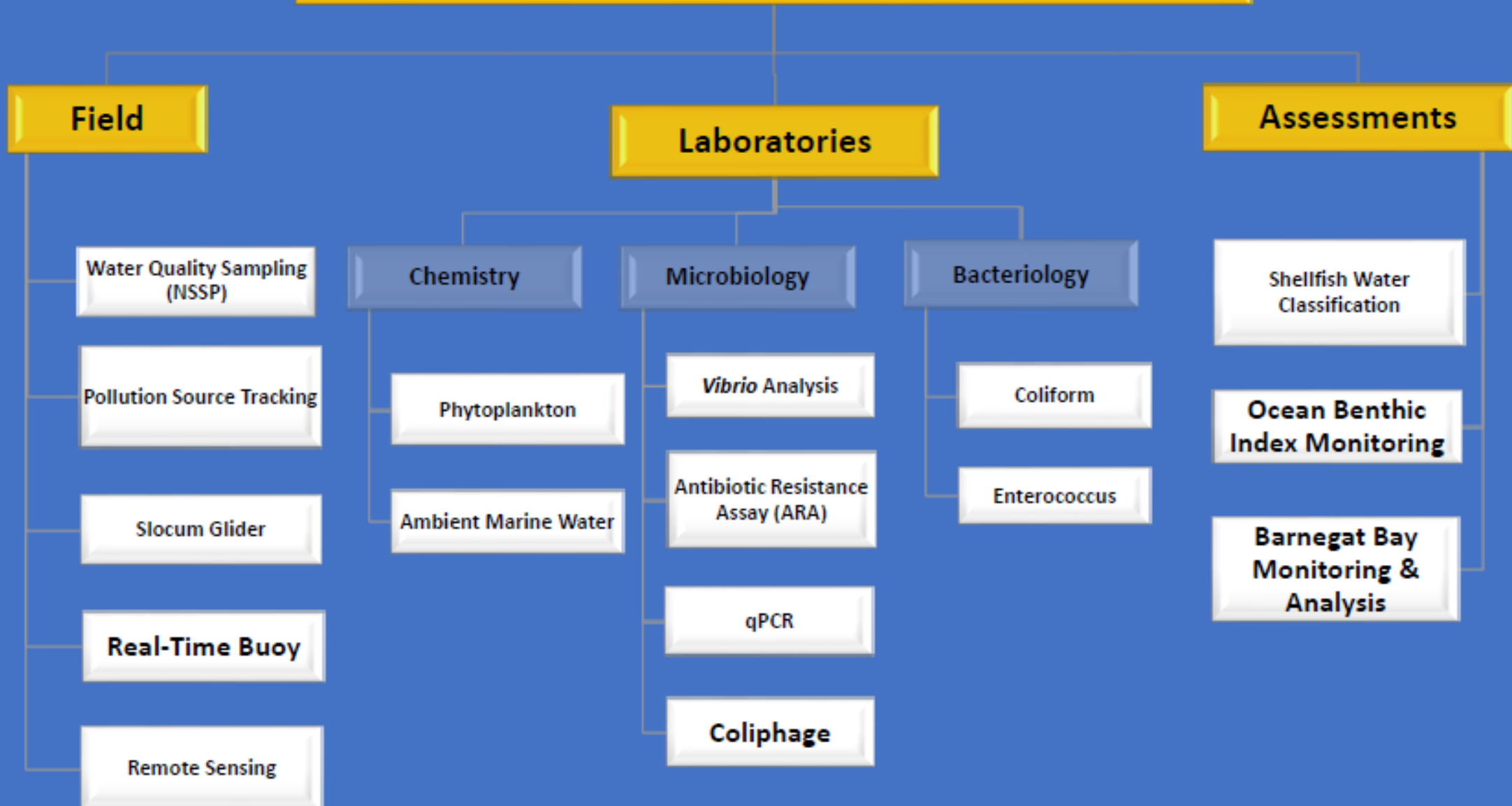
Collected samples from both Paulins Kill and Musconetcong River to determine the presence and upstream migration of adult American shad now that several dams have been removed

Early results show American shad DNA was detected and indicates the presence of young-of-the-year American shad and successful spawning upriver.



Bureau of Marine Water Monitoring

Robert Schuster, Manager

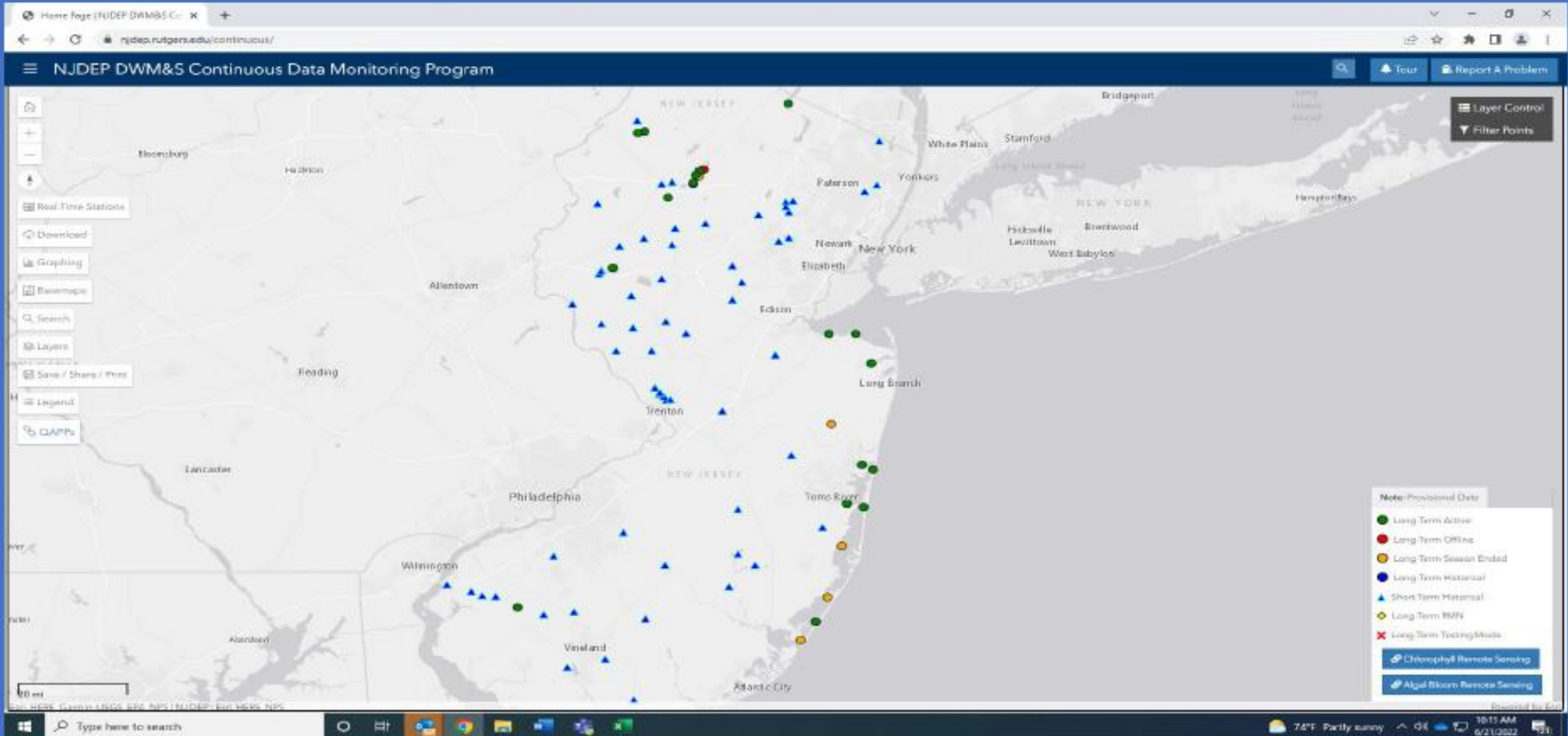


Major Programs

- Shellfish water classification through administration and conformance with the National Shellfish Sanitation Program (NSSP)
- Issuance of Permits for Shellfish related Activities
- Ambient Water Quality Monitoring
- Real-time Continuous Water Quality Monitoring and Aircraft Remote Sensing
- Microbial and Pollution source Tracking
- Shellfish Vibrio Monitoring
- Marine Phytoplankton Monitoring

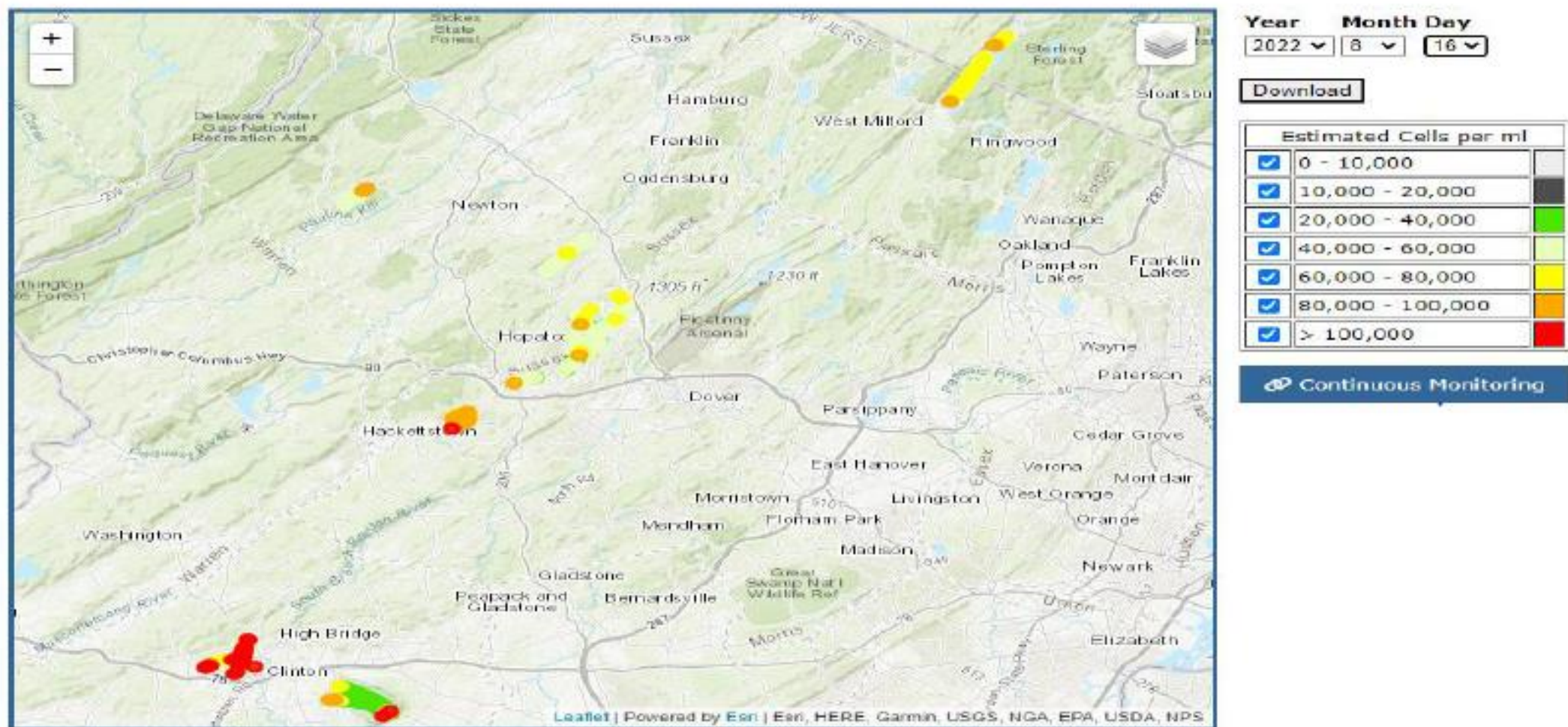


Continuous Water Quality Network (added Fresh Water buoys)



Aircraft Remote Sensing (Added Lake HAB flights)

conduct aircraft remote sensing using phycocyanin measurements for estimating the presence of cyanobacteria harmful Algal Blooms (HABs) in select NJ lakes. Phycocyanin measurements are used to estimate the cell density and the spatial extent of cyanobacteria. This information is used by WMSPC to strategically deploy staff to collect HAB samples for laboratory analysis. Laboratory analysis of cell density, species and cyanotoxins are used to confirm the presence of HABs and to determine if a recreational [Alert level](#) is triggered. To detect potential blooms and assess the status of previously confirmed HABs, the plane flies one day a week (generally on Tuesday) or as needed over lakes with a known history of HABs. Other lakes may be considered and added, however the flight path and phycocyanin sensor resolution is limited to larger lakes. Other screening and status monitoring is performed on smaller lakes via on-site surveys. The overall goal is to inform response actions for public health and safety of NJ residents. To learn more about cyanobacteria and the potential threat to health they may cause, visit DEP's [HAB Page](#). Alert Postings and laboratory analysis results can be found on the [HAB Interactive Map](#).



Bureau of Environmental Analysis, Restoration and Standards

Kim Cenno, Manager

The Mission of BEARS is:

to provide the scientific foundation for the restoration and protection of New Jersey's water resources so that all of our rivers, lakes and coastal waters are



fishable, swimmable and support healthy ecosystems, and so all of our freshwater resources are clean sources of drinking water.

Photo credit: DEP

Surface Water Quality Standards

(<https://www.nj.gov/dep/wms/bears/swqs.htm>)



Designated Uses

- Aquatic life, drinking water after conventional treatment
- Agricultural and industrial supplies
- Navigation, recreation



Stream Classifications

- Freshwaters: FW1, FW2 (TP, TM, NT)
- Saline Waters (SE1, SE2, SE3, SC)
- PL



Water quality criteria necessary to protect the designated uses

- Aquatic life (based on toxicity studies in aquatic life)
- Human health (based on drinking water and fish consumption)
- Does not consider economic or technological feasibility or detectability to implement.



Policies affecting implementation

- General and Technical
- Antidegradation
- Mixing Zone
- Variances

SWQS Requirements

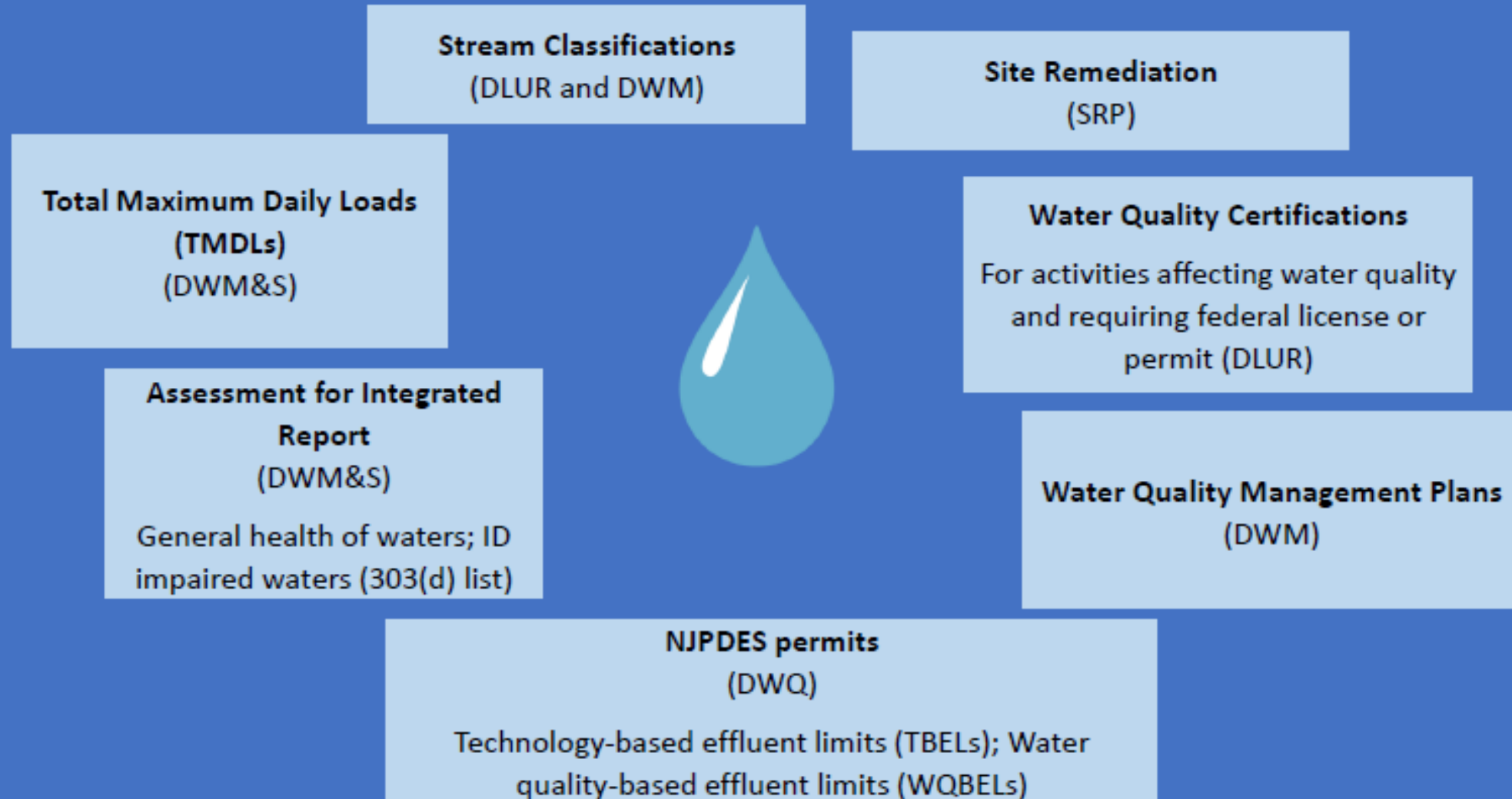
- Must be reviewed every three years (Triennial Review)
- Must be renewed every seven years – expires in 2023 (New Jersey Administrative Procedure Act (NJAPA) at N.J.S.A. 52:14B-1 et seq.)

Statutory Authority

- Federal:
 - Clean Water Act (§101(a), §303(a-c))
 - Federal Regulations (40 C.F.R. 131.11)
- State:
 - NJ Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.)
 - Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.)



SWQS Implementation



SWQS Antidegradation Policy

Outstanding National Resource Waters (ONRW)

- Waters within state and federal parks
- No manmade wastewater dischargers are allowed
- No activities which would cause a measurable change in water quality, except toward natural conditions

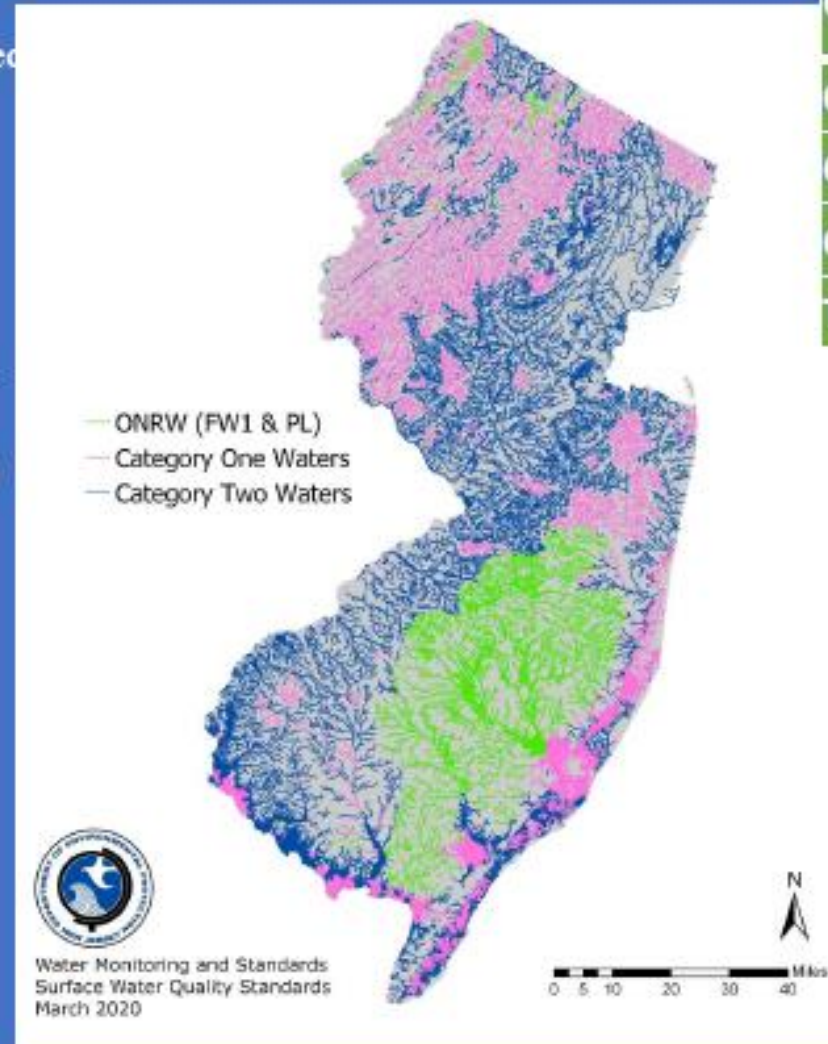
Category One Waters

- Wastewater dischargers are required to maintain the current level of water quality
- C1 designation provides additional protection to waterbodies to discourage development (300-ft riparian zone)
- Waters shall be protected from measurable changes in water quality

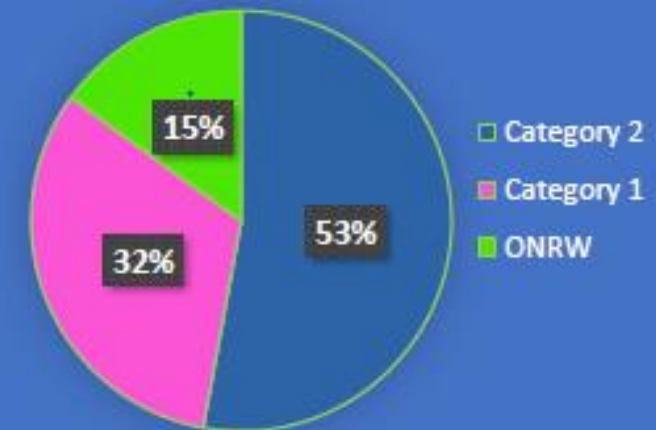
Category Two Waters

- All streams that are not ONRW or C1
- Existing water quality is maintained
- Some degradation may be allowed to accommodate important economic and social development
- Must continue to meet SWQS criteria
- Review done on a pollutant-by-pollutant basis

Categories	River miles	Percent (%)
ONRW	3,527	15
C1	7413	32
C2	12581	53
Total	23,521	100



NJ Surface Water Antidegradation Designations



Surface Water Standards Development

DRIVERS:

New (or revised) federal guidance

Data sufficient to develop state-specific criteria without federal guidance

Petition for rulemaking

CRITERIA DEVELOPMENT:

Aquatic life-based criteria (acute and chronic exposure)

Fresh Saline

Human health-based criteria

Fresh Saline

Carcinogens

Non-carcinogens

Conventional Pollutants

Fresh Saline

FINAL STANDARD:

Criteria automatically becomes the implemented **Surface Water Quality Standard.**

Ongoing rule amendments to the SWQS

- Rule proposal published on July 5th, 2022
- Anticipated adoption Summer 2023
- Rule proposal included amendments to:
 - Primary contact recreation bacterial quality criteria (2012 USEPA recommendations)
 - Freshwater aquatic life ammonia criteria (2013 USEPA recommendations)
 - Water Quality Standards Variance provisions (2015 USEPA recommendations)
- Affects implementation programs of the SWQS:
 - Bacteria – DEP does not anticipate changes required in disinfection practices and no issues with compliance are anticipated. The statistical threshold value (STV) recommended by USEPA will be applied as an action level; if exceeded, NJDEP will be required to submit additional data for analysis of an exceedance.
 - Ammonia – May result in more stringent permit limits for some NJPDES permittees.
 - WQS Variances – Provides a pathway to establish a “temporary standards” for NJPDES permitting only, which will accomplish incremental improvements in achieving the underlying designated use and SWQS criterion.

Ongoing rulemaking - Toxics

Stakeholder Meetings

- Stakeholder meetings held on June 20, 22, and 28, 2022.
 - Rule Proposal anticipated to be published early 2023
 - Discussed potential updates to human health surface water quality criteria at [N.J.A.C. 7:9B-1.14](#):

Revisions and additions to fresh and saline numeric criteria **for 94 toxic substances** (based on NJDEP's review of [USEPA's 2015 recommendations](#))

Adding new fresh water numeric criteria for **additional toxic substances** based on drinking water exposure:

Perfluorononanoic acid (PFNA)
Perfluorooctanoic acid (PFOA)
Perfluorooctanesulfonic acid (PFOS)
1,4-dioxane

Stakeholder Meetings - SWQS

Revisions and additions to fresh and saline numeric criteria for 94 toxic substances (based on NJDEP's review of [USEPA's 2015 recommendations](#))



Fresh Water <i>Recommended Criteria Versus Existing NJ SWQS Criteria</i>	
Number of constituents more stringent	73
Number of constituents less stringent	13
No difference	2
Number of new constituents	6

Impacts:

- 7 new toxic substances will be added to the SWQS
 - NJDEP will review data resulting from sampling and monitoring as part of the permit process.
- No impacts anticipated for 87 (fresh) /88 (saline) toxic substances with existing criteria in the SWQS.
 - Already reviewed as part of the application review process;
 - Not typically present in wastewater effluent.



Saline Water <i>Recommended Criteria Versus Existing NJ SWQS Criteria</i>	
Number of constituents more stringent	67
Number of constituents less stringent	19
No difference	1
Number of new constituents	7

Stakeholder Meetings - SWQS

Adding new fresh water numeric criteria for additional toxic substances **based on drinking water exposure** (basis: [NJ Drinking Water Quality Institute recommendations](#))

Perfluorononanoic acid (PFNA)
Perfluorooctanoic acid (PFOA)
Perfluorooctanesulfonic acid (PFOS)
1,4-dioxane

Impacts:

- PFNA, PFOA, PFOS, and 1,4-dioxane are new substances that will be added to the SWQS
- NJDEP will review data resulting from sampling and monitoring as part of the permit process.
 - Industrial facilities (B, L, and DLAs) will be targeted for monitoring.
 - No additional/new violations are anticipated based on the anticipated rule amendments at this time.

Name	Recommended Fresh Water Criterion (Drinking Water Only)
PFNA	0.013 µg/L
PFOA	0.014 µg/L
PFOS	0.013 µg/L
1,4-dioxane	0.33 µg/L

Ground Water Quality Standards

N.J.A.C. 7:9C



Designated Uses

- Maintenance of special ecological resources
- Potable water after conventional treatment
- Agricultural water and industrial water



Ground Water Classifications

- Class I Ground Water of Special Ecological Significance (Class I-A, PL)
- Class II Ground Water for Potable Water Supply (Class II-A, II-B)
- Class III Ground Water With Uses Other Than Potable Water Supply (Class III-A, III-B)



Water quality criteria necessary to protect the designated uses

- Human health (based on drinking water consumption)
- Considers detectability (PQL); the higher of the specific criterion and the PQL becomes the Constituent Standard.



Policies affecting implementation

- Antidegradation

GWQS Requirements

- Must be renewed every seven years – expires in 2028 (New Jersey Administrative Procedure Act (NJAPA) at N.J.S.A. 52:14B-1 et seq.)

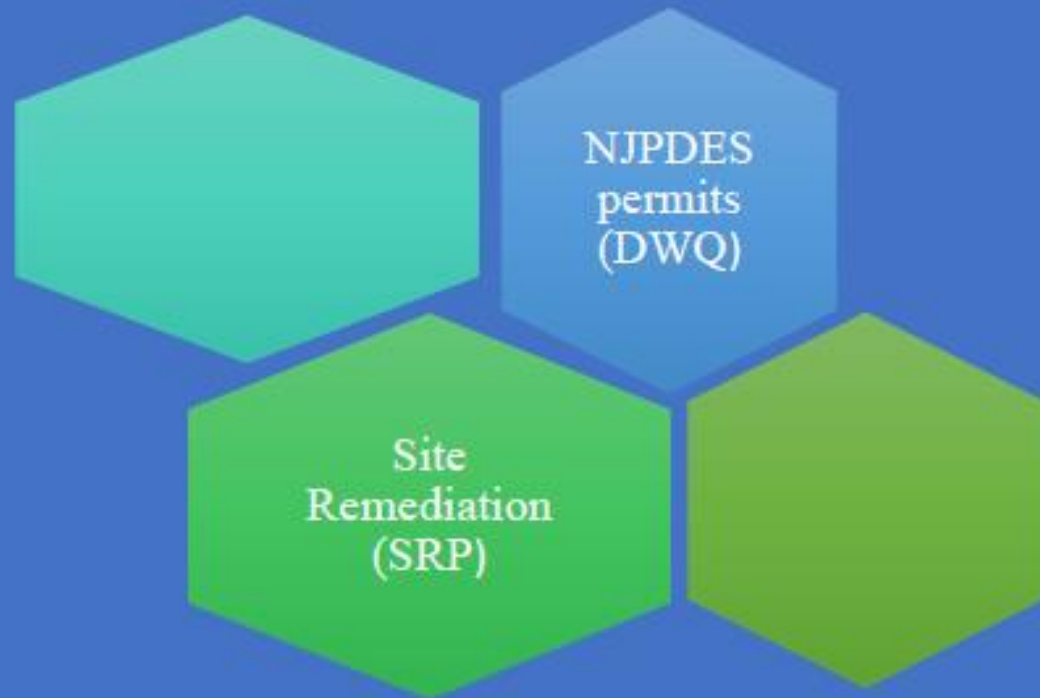
GWQS Statutory Authority

- The Clean Water Act does not have authority over ground waters, so the NJDEP's authority for the GWQS is derived from state statutes:
 - NJ Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.)
 - Water Quality Planning Act (N.J.S.A. 58:11A-1 et seq.)





GWQS Implementation



Ground Water Standards Development

DRIVERS:

New data or scientific information (e.g. emerging contaminant, new toxicity factors, analytic methods)

Need for remediation standard (SRP)

New (or revised) federal guidance

Readoption/petition for rulemaking

CRITERIA DEVELOPMENT:

Derives human health-based MCLs and PQLs for:

Carcinogens

Non-carcinogens

FINAL STANDARD:

Whichever is **higher** between the derived **Specific Ground Water Quality Criterion** and **PQL** becomes the implemented **Constituent Ground Water Quality Standard**.

Practical Factors Considered in Standards Development

Standard	Practical Quantitation Level (PQL)	Treatment (Removal of Substance)
Drinking Water (MCLs)	X	X
Ground Water Quality	X	
Surface Water Quality	Not considered	

Potential rule amendments to the GWQS

- Updates to existing specific ground water quality criteria, PQLs and standards for constituents in Class II (potable use) ground water; Appendix Table 1.
- Amendments to the default values for body weight and drinking water consumption rate at N.J.A.C. 7:9C-1.7(c)4i and ii to be consistent with USEPA.
 - Average adult weight: 80.0 kg
 - Daily water consumption: 2.4 L/day
- Amendments to the rounding provisions at N.J.A.C. 7:9C-1.7(c)4iii and -1.9(c)3i to round new or revised criteria and PQLs to two significant figures, rather than one, when scientifically supportable.

Possible updates to specific ground water quality criteria and PQLs

Updates	# of Constituents
Updates to criteria or PQLs identified	73
• Change in standard	65
• More stringent	50
• Less stringent	13
• Order of magnitude change (more stringent)	7

For questions, please contact:

Pesticides	Bureau Chief, Mike McConville mike.mcconville@dep.nj.gov	609 984-6513
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BMWM	Bureau Chief, Bob Schuster robert.schuster@dep.nj.gov	609 748-2000
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BFBM	Bureau Chief, Vic Poretti victor.poretti@dep.nj.gov	609 292-0427
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BEARS	Bureau Chief, Kim Cenno kimberly.cenno@dep.nj.gov	609 633-1441
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Director Bruce Friedman
<https://www.state.nj.us/dep/wms/>



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Questions?

Afternoon Break

Announcements

- ▶ The link to the slides will be e-mailed through NJDEP listserv to registered attendees. Slides will also be posted on AWMA-NCNJ website. [NJ Events \(mass-awma.net\)](https://mass-awma.net)
- ▶ Please complete the survey form and e-mail your responses to sgupta@haleyaldrich.com. You can also just send an e-mail with the following input:
 - ▶ Feedback on the conference
 - ▶ Topic(s) of interest for future programs
 - ▶ Please indicate your preference for future NJDEP Regulatory Conference: in-person or virtual.
 - ▶ Thank you for your input and feedback!
- ▶ Or you may complete the survey form online. Please see the link in the online chat or scan the QR Code with your mobile device.
- ▶ If you are not an AWMA member, please consider becoming one.
 - ▶ [Join A&WMA \(awma.org\)](https://awma.org)
- ▶ We are looking for members to become more involved and be part of the leadership team!



Director Janine MacGregor

Sustainable Waste Management Updates
and Initiatives



21st Annual NJDEP/A&WMA Regulatory Update

November 18, 2022



Janine MacGregor, Director
NJDEP Division of Sustainable Waste Management

Sustainable Waste Management – Next Generation

- Evaluation of innovative solid waste and recycling developments
- Development of new reduce/reuse/recycle concepts, including zero waste initiatives
- Work with Stakeholders to inform our Recommendations

Division of Sustainable Waste Management

- **Bureau of Solid Waste Permitting**
 - Anthony Fontana
- **Bureau of Recycling and Hazardous Waste Management**
 - Dana Lawson
- **Bureau of Solid Waste Planning and Licensing**
 - Seth Hackman

Current Focus

- **Office of Policy, Planning and Outreach**
- **Extended Producer Responsibility for Packaging**
- **Advanced Recycling – Collaboration with other Agency and Resource Groups**
- **Reducing our Waste Footprint at 401**

P.L. 2020, c. 117 - Plastics law

- Prohibits provision or sale of single-use plastic carryout bags, single-use paper carryout bags
- Limits provision of single-use plastic straws
- Limits polystyrene foam food service products
- <https://www.nj.gov/dep/get-past-plastic/>

Dirty Dirt Law

P.L. 2019, c.397, N.J.S.A. 13:1E-127 expands A901 licensing requirements to businesses engaged in soil and fill recycling services

Collection, transportation, processing, brokering, storage, purchase, sale or disposition, or any combination thereof, of soil and fill recyclable materials

<https://www.nj.gov/dep/dshw/a901/a901frms.htm>

Food Waste Reduction

- P.L. 2017, c. 136 (S3027) established a goal of reducing food waste by 50%, based on 2017 food waste estimates, by the year 2030.
- Tips for reducing food waste:
<https://www.nj.gov/dep/dshw/food-waste/>

Food Waste Recycling

- **P.L. 2020, c. 24 was signed into law April 2020**
 - Compliance required by October 14, 2021
- **Requires large food waste generators, who produce 52 or more tons of food waste per year, and are located within 25 road miles of an authorized food waste recycling facility, to source separate and recycle their food waste**

Recycled Content Legislation

- **P.L. 2021, c. 391 signed into Law on Jan. 18, 2022**
- **Stimulates recycling markets by requiring manufacturers to meet minimum recycled content standards for covered products sold in the State.**
- **Markets for recycled materials are enhanced as demand shifts from virgin to recycled sources.**

Regulatory Update

- **NEW Rules Related to Recycling:**
 - Food Waste (P.L.2020, c.24)
 - Plastic Bag Ban (P.L. 2020, c.117)
- **NEW Rules Related to Recycled Content:**
 - New rules to implement the January 2022 law (P.L.2021, c. 391), including companion rule amendments to the Recycling Rules, N.J.A.C. 7:26A
- **Environmental Justice – EJ Law P.L.2020, c. 92**

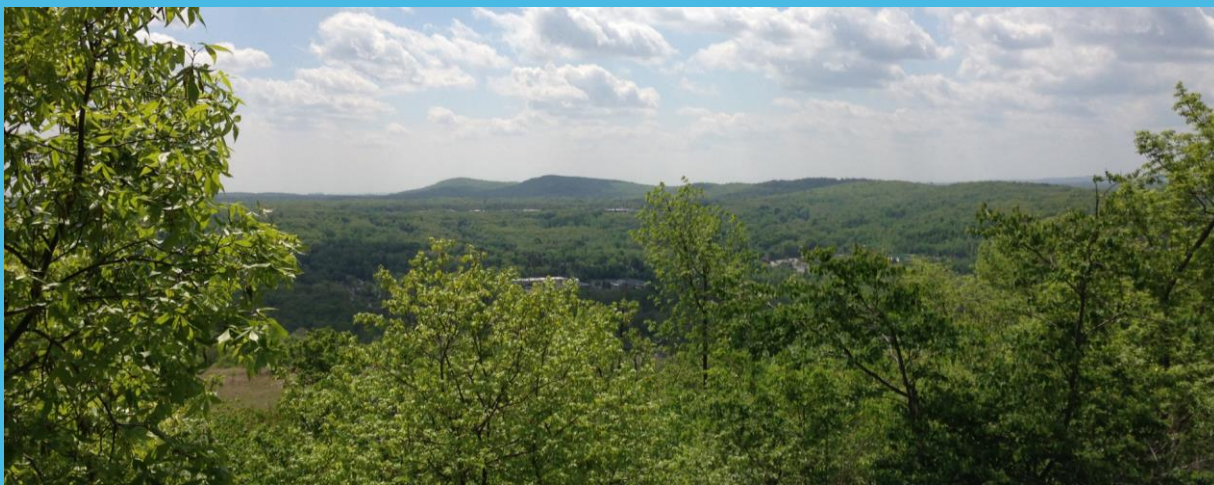
Regulatory Update

- **Electronic Waste (E-Waste) Management – N.J.A.C. 7:26A-13, anticipate moving these rules to new N.J.A.C. 7:26J.**
- **Recycling Rule Exemptions – N.J.A.C. 7:26A-1.4**
- **Dirty Dirt and A-901 – N.J.A.C. 7:26 & 26A**



Thank
you!

QUESTIONS?



Director Frank Steitz

Air Quality Program Updates and Initiatives

Air Quality Regulatory Update

November 18, 2022

Frank Steitz
NJDEP Division of Air Quality
Director



Recent Air Quality Rules

- New Jersey Stationary and Area Sources Rulemakings
- Federal Transport Rulemaking
- New Jersey Mobile Sources Rulemakings





Stationary Source PACT

Primary CO₂

**Secondary Considerations:
NO_x, SO₂, PM**

- **Timing**
 - Proposed December 6, 2021
 - Final Decision on adoption this year
- **What is in proposal?**
 - EGU Performance Standards
 - Bans combustion of #4 and #6 fuel oils
 - Non-Fossil Fuel Boiler Replacement

Existing Unit EGU Standards [N.J.A.C 7:27F-2.5(d)]



Date	Performance Standard
1/1/2024	1,700 pounds of CO2 per MWh gross energy output
1/1/2027	1,300 pounds of CO2 per MWh gross energy output
1/1/2035	1,000 pounds of CO2 per MWh gross energy output

Comments received during the public comment will be addressed in the rule adoption package.

Bans combustion of #4 and #6 fuel oils (7:27F-3.2)

Ban effective as per operative date of rule

Exceptions include:

- Two year allowance for already in storage (7:27F-3.2(d))
- Ocean going Vessels (7:27F-3.3)

Comments received during the public comment will be addressed in the rule adoption package.



Non-Fossil Fuel Boiler Replacements (7:27F-4.4)

Required to evaluate feasibility for non fossil fuel replacement at end of useful life (7:27F-4.4)

- Between 1 and 5 MMBTU/hr
- Based on Technical feasibility
- Allowance for Public Health and Safety concerns

Boiler Fleet Requirements (7:27F-4.5)

- More aggressive replacement requirements
- Annual Reporting of Replacements

Comments received during the public comment will be addressed in the rule adoption package.





Consumer Products (CP) and Architectural Coatings (AIMS)

- **Timing**
 - Stakeholdered September 2019
 - Updated Stakeholders in June 2022
 - Proposal in Spring 2023?
- **The Ozone Transport Commission developed model rules to reduce VOC emissions (an ozone precursor) from consumer products and coatings.**
- **Link to all OTC Model Rules**
 - <https://otcair.org/document.asp?fview=modelrules>
- **Coatings and consumer products represent the largest source of VOC emissions in the State's emission inventory.**



Consumer Products and Architectural Coatings

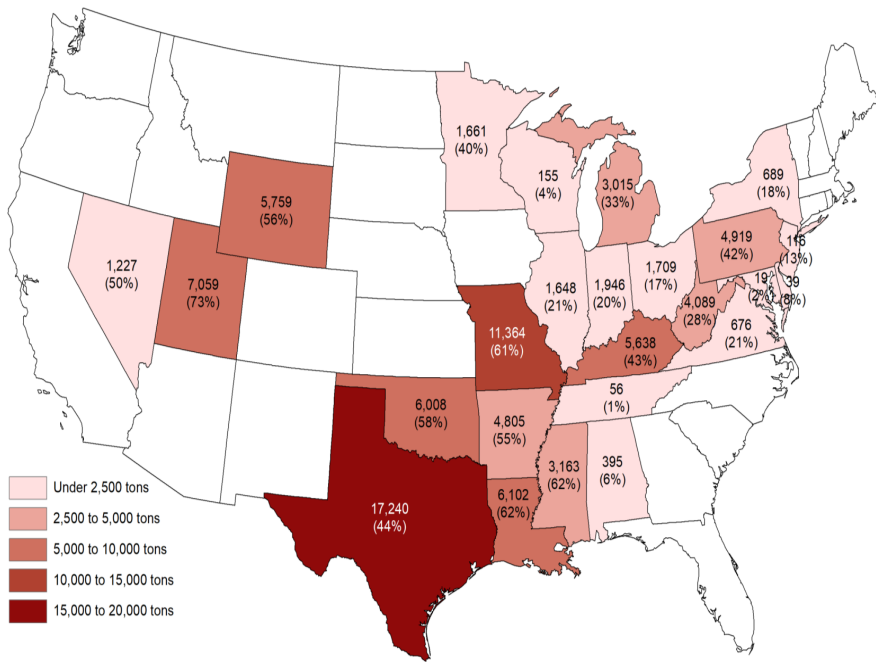
- **CP Model Rules 1 & 2 already in rules**
 - **CP Model Rules 3 & 4 will be included in this rulemaking**
 - **CP5 Model Rule not to be included**
 - **Other States that have already adopted CP 3 &4**
 - DEL, MD, NH, NY, RI
-
- **AIMs Model Rule 1 already in rules**
 - **AIMs Model Rule 2 already in rules**
 - **Other States that have already adopted AIMs 2**
 - DEL, MD, NY, RI

Federal CSAPR Update Rulemaking

Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone

- Published on April 6, 2022. Comment period closes June 21, 2022
- Addresses 26 states' obligations to eliminate contribution to nonattainment of the 2015 ozone standard
- The proposed FIP is for states with disapproved 2015 Ozone Transport SIPs
 - EPA proposed disapproval of 19 SIP submissions including New Jersey (*87 FR 9484, February 22, 2022*)
- Proposed reductions are based on:
 - EPA modeling projecting rule impact on ozone concentrations at air monitoring sites in 2023 & 2026
 - CT Highest Monitor 2023: 76.1 to 76.0 (Average DV)(*)
 - CT Highest Monitor 2026: 74.6 to 74.1 (Average DV)
 - PA (Bucks) Monitor 2023: 70.7 to 70.6 (Average DV)
 - 4-Step Interstate Transport framework
- States would have an option to replace FIP requirements by submitting SIP revision

* Average Design Value is for Attainment and Maximum Design Value is for Maintenance



Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone (cont'd)

- Proposed NOx reductions from Electric Generating Units (EGUs) and Non-EGUs
- EGUs:
 - Expand Group 3 CSAPR Trading program to include 25 states
 - Declining NOx budgets and allowance-based ozone season trading for EGUs >25 MW
 - Unit specific optimization by 2024 ozone season and
 - Control Retrofits by 2026 ozone season (639 EGU Retrofits)
- Non-EGUs:
 - Unit specific NOx limits by 2026 ozone season (235 Retrofits)
- Does not address:
 - VOC emissions
 - Mobile sources
 - MWCs

EGUs - Emissions Reductions in 2026 Relative to 2021

Proposed Revisions to CSAPR NOx OS Group 3

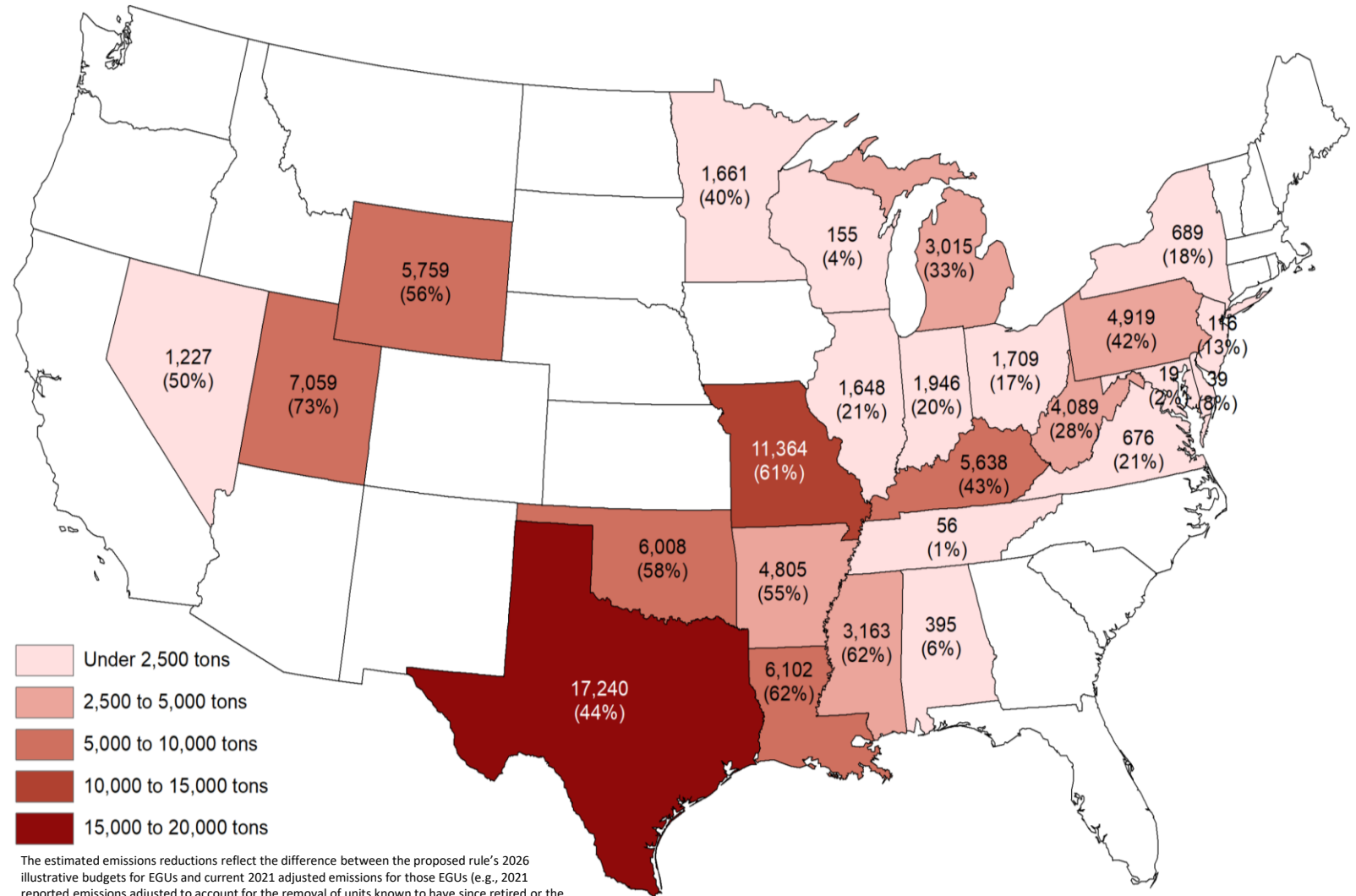
* Geographic Expansion (25 States)

* 12 States Currently in Group 3 from previous CSAPR rules
(IL, IN, KY, LA, MD, MI, NJ, NY, OH, PA, VA, WV)

* 8 States Moving from Group 2 to Group 3
(AL, AR, MO, MS, OK, TN, TX, WI)

* 5 States Not Previously Covered
(DE, MN, NV, UT, WY)

* New Jersey Reductions:
13% (116 Tons) (2023)



The estimated emissions reductions reflect the difference between the proposed rule's 2026 illustrative budgets for EGUs and current 2021 adjusted emissions for those EGUs (e.g., 2021 reported emissions adjusted to account for the removal of units known to have since retired or the addition of emissions from under-construction new fossil plants). In other words, the estimated reductions reflect changes known to have happened and be happening in the power sector, as well as the impact of the proposed rule. Because these estimated reductions reflect the overall change from current levels of operation, they are higher, on average, than the values reflected in the regulatory impact analysis (emissions reductions relative to projected future levels of operation) and other communications materials for the proposal.

Mobile Source Rulemakings



Mobile Cargo Handling Equipment

Primary NOx, PM

Secondary Considerations:
GHG

- **Timing**
 - Proposed January 3, 2022
 - Final Decision on adoption this year
 - Initial phase, if adopted, in 2025
- **What is in rule?**
 - Modernization of CHE at Ports and Intermodal Railyards
 - Applies to owners/operators and sellers of CHE at these facilities
 - Exemption for some low use applications
 - Requires move to Tier 4F or Tier 4 w/alternate PM
 - Credit for early ZEV adoption



Advanced Clean Trucks

Primary: GHG

**Secondary Considerations:
NOx, PM**

- **Timing**
 - Adopted December 2021
 - Initial sales requirements in 2025
 - ZEV credits for early adoption in 2022
- **What is in rule?**
 - Manufacturers of vehicles over 8,500# GVWR must meet sales requirements for sales to NJ fleets
 - Requirements depend on weight class and increase each year through 2036



One-Time Fleet Reporting

**Primary: Support of future
fleet electrification (GHG)**

Secondary: NOx, PM

- **Timing**

- Adopted December 2021
- Reporting deadline 4/1/2023

- **What is in rule?**

- Fleets over 50 vehicles must report
- Includes government fleets and brokers who handle over 50 vehicles
- Reporting template available at:
<https://dep.nj.gov/stopthesoot/advanced-clean-trucks-rule-fleet-reporting/>



Low NOx Omnibus

Primary: NOx

**Secondary Considerations:
PM, GHG**

- **Timing**

- Proposed November 7, 2022
- Effective for model year 2027

- **What is in rule proposal?**

- New heavy-duty vehicles and engines, of all fuel types, sold in NJ must be California-certified.
- Very limited exceptions, such as diesel transit buses which may have no California-certified engines available.



Medium-Duty Diesel Inspection

Primary: NOx, PM

**Secondary Considerations:
GHG**

- **Timing**

- Proposed November 7, 2022
- Effective upon adoption but implementation requires Motor Vehicle Commission rule amendments and changes to the motor vehicle inspection system.

- **What is in rule proposal?**

- Diesel vehicles between 8,500 and 18,000 lbs., which are currently exempt from periodic inspection, would be required to submit to visual checks (e.g., anti-tampering) and instrumented tests (e.g., smoke opacity and OBD).



Thank you!



The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the slide, creating a modern, layered effect. The central area of the slide is a plain, light grayish-white.

Questions?

Assistant Director Bob Kettig

Climate Change and Clean Energy Updates
and Initiatives





A&WMA - 21st Annual Regulatory Update Conference – Climate Change Clean Energy and Sustainability Updates



Bob Kettig – Assistant Director

Climate Change and Clean Energy Updates....

- Greenhouse Gas Monitoring and Reporting
New Rules
- RGGI Funding Plan Updates



Statutory Requirements

manufacturers and
distributors of fossil fuels

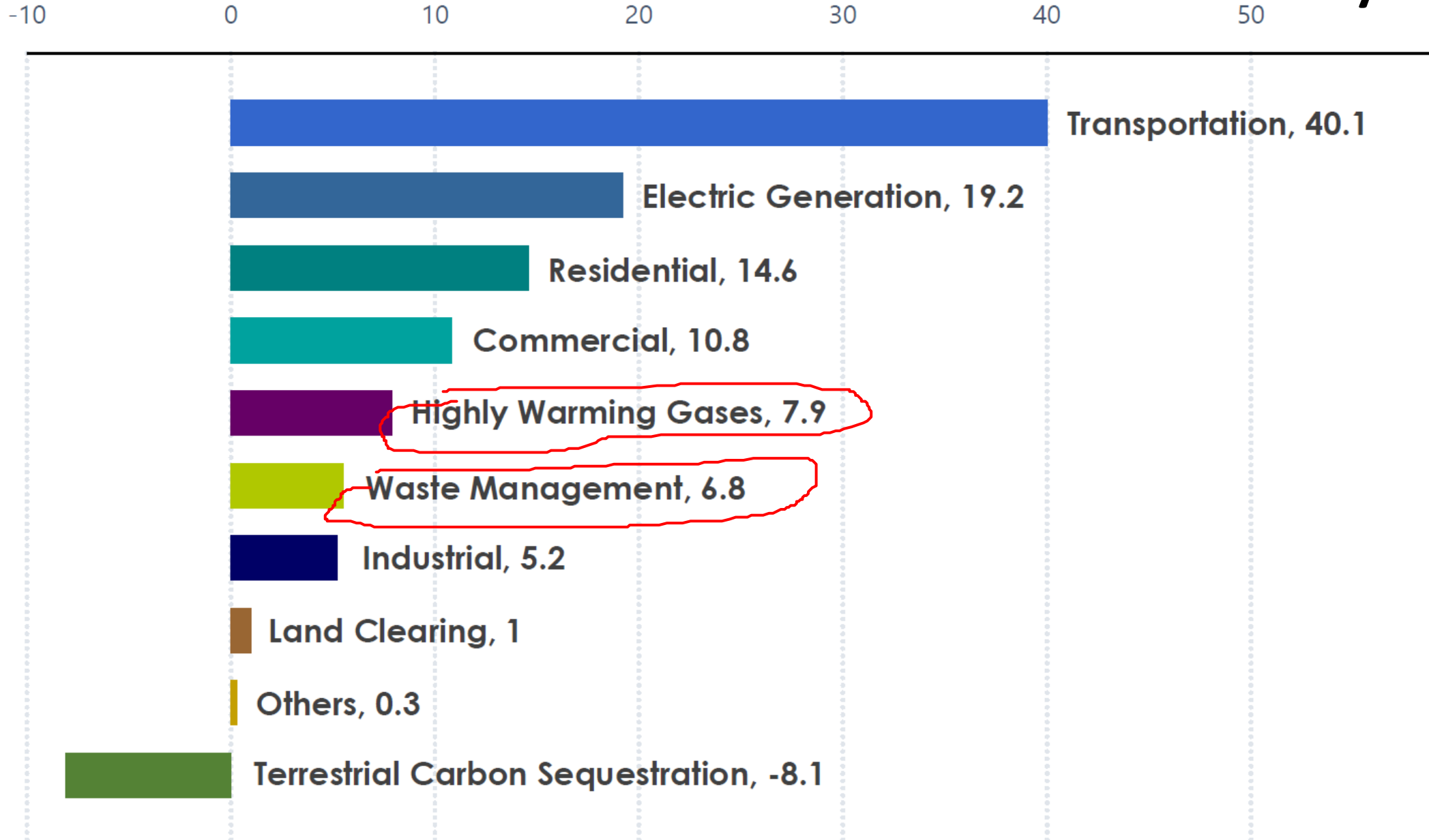
EGUs in State and out of State
for end use in the State

**Must Report
GHG Emissions**

any gas public utility

significant emitters of GHGs
including SLCP, as determined
by the Department

NJ 2019 GHG Emissions Inventory



Identified Sources

Highly warming gases and waste management emission sources



Methane: Landfills, Wastewater Treatment, Natural Gas System Losses



HFCs: Refrigerants



New Rules & Amendments



Greenhouse Gas Monitoring and Reporting

New Rules: N.J.A.C. 7:27E

Emission Statements Program

Amendments: N.J.A.C. 7:27-21.2, 21.3, and 21.5

Air Enforcement Regulations

Amendments: N.J.A.C. 7:27A-3.2, 3.5, and 3.10



Amendments to Sub 21



The Department requires reporting of greenhouse gas emissions associated with significant methane emissions

- Which include, but need not be limited to:
 - Landfills,
 - Wastewater treatment, and
 - Fugitive emissions from natural gas stationary sources.
- Reporting threshold
 - 100 TPY of Methane



Emission Statements



Methane Emission Reporting Requirements

- Begin monitoring on August 1, 2022
- Reporting year ends December 31, 2022
- Subsequent reporting based on calendar year (1/1 – 12/31)
- Create an Emission Statement on RADIUS
- Due on May 15th annually, submitted at NJDEPonline.com
- For more information visit:
<https://www.state.nj.us/dep/aqm/es/emstatpg.html>



Gas Public Utility

Require reporting of GHG emissions:
from any gas public utility



that operates mains and service lines within
the State providing natural gas.



Annual Submittal of a
Pipeline Modernization Report





Gas Public Utility



Pipeline Modernization Report includes the following:

1. The miles of mains and number of service lines
2. Mains and service lines replaced and refurbished
3. Identification of pipeline leaks by leak grade classification
4. Leak detection practices that exceed Federal Standards
5. Report of blowdown events in excess of 50 scf



Gas Public Utility



Record Keeping: 1st year – July 1 to December 31, 2022

Subsequent reporting is conducted on a calendar year basis

Reporting: Annually on June 15th

Reporting fee = \$8000 annually

Reports submitted electronically through NJDEPonline.com

Website: dep.nj.gov/ghg/ghgmr-rule/natural-gas-public-utilities/



HFC Emissions



HFC reporting is required for facilities with one or more refrigeration systems with a full charge greater than or equal to 50 pounds of a high-GWP refrigerant.

- Facility types include grocery stores, ice rinks, refrigerated warehousing, industrial refrigeration and the chemical industry. Chillers are included, but not air conditioners.
- The Department will collect HFC usage data annually and NJEMS will calculate GHG emissions.



HFC Emissions



Record Keeping: 1st year – October 1 to December 31, 2022

Subsequent reporting is conducted on a calendar year basis

Facility Registration: NJDEPonline.com

- Registration fee = \$400 every 5 years
- November 1st for existing refrigeration systems
- New facilities must register 90 days after installation
- Registration Change Form submitted within 120 days after the change dep.nj.gov/ghg/ghgmr-rule/refrigeration/



HFC Emissions



Reporting:

- April 1, annually at NJDEPonline.com
- Provide a facility contact
- Must identify refrigeration equipment
- System size, type, and classification
- Information on type of refrigerant and its usage



RGGI Strategic Funding Plan



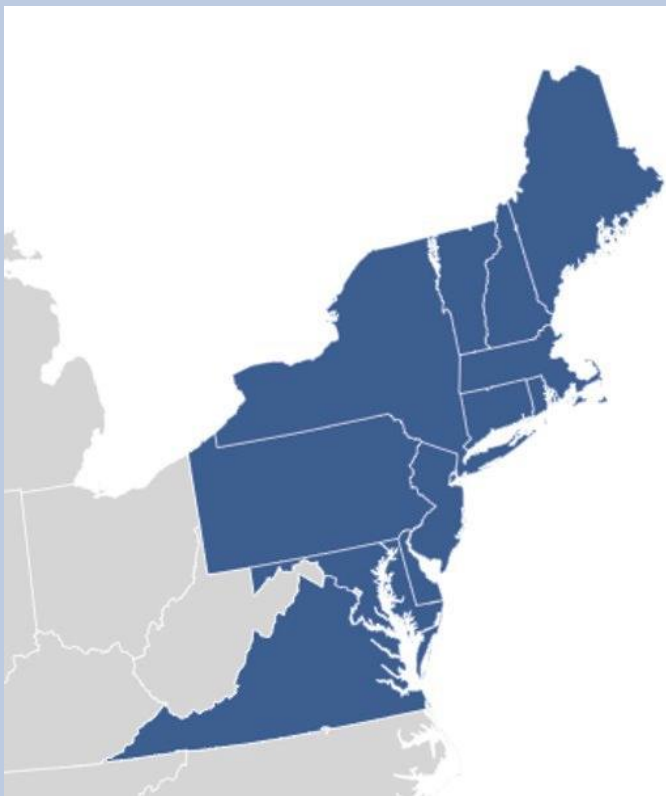
The Strategic Funding Plan identifies how New Jersey will invest its share of the RGGI auction proceeds. It defines key initiatives that each agency sponsors.



It is jointly developed at least once every three years by the NJ Department of Environmental Protection, NJ Economic Development Authority, and NJ Board of Public Utilities.



Identifies initiatives that will be funded by RGGI auction proceeds.



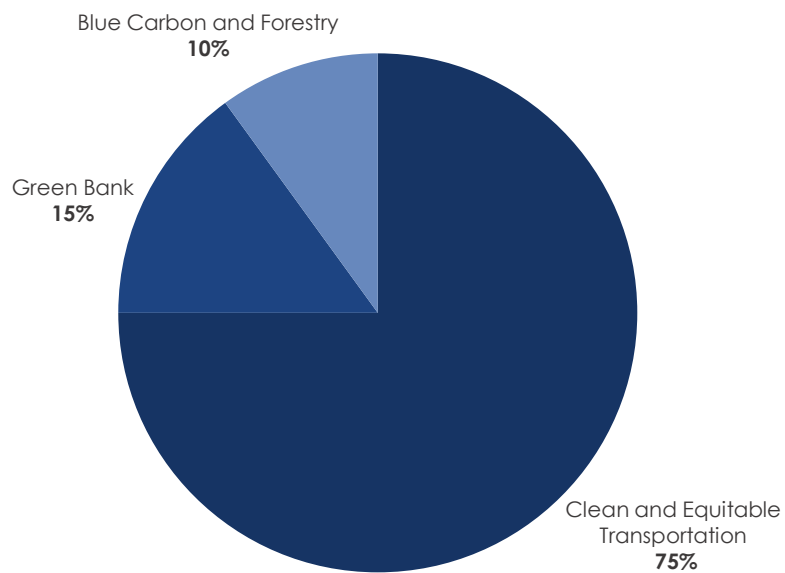


RGGI Strategic Funding Plan

Years 2020-2022

NJ'S RGGI STRATEGIC FUNDING PLAN: YEARS 2020- 2022

Percentage of Funding by Initiative



The first RGGI Strategic Funding Plan was launched in April of 2020

Four initiatives were identified:

Initiative 1 Catalyze Clean, Equitable Transportation

Initiative 2 Promote Blue Carbon in Coastal Habitats

Initiative 3 Enhance Forests and Urban Forests

Initiative 4 Create a New Jersey Green Bank



RGGI Strategic Funding Plan

New Incentive Programs



NCS GRANT PROGRAM

- \$15 Million dedicated to projects that will create, restore and enhance New Jersey's Natural Carbon Sinks
- 6 eligible project categories
 - Living Shorelines
 - Restoring Tidal Flows to Tidal Wetlands
 - Tidal Salt Marsh Vegetation Restoration
 - Submerged Aquatic Vegetation Restoration
 - Forest and Woodland Restoration
 - Urban Forest Canopy and Water Quality Enhancement



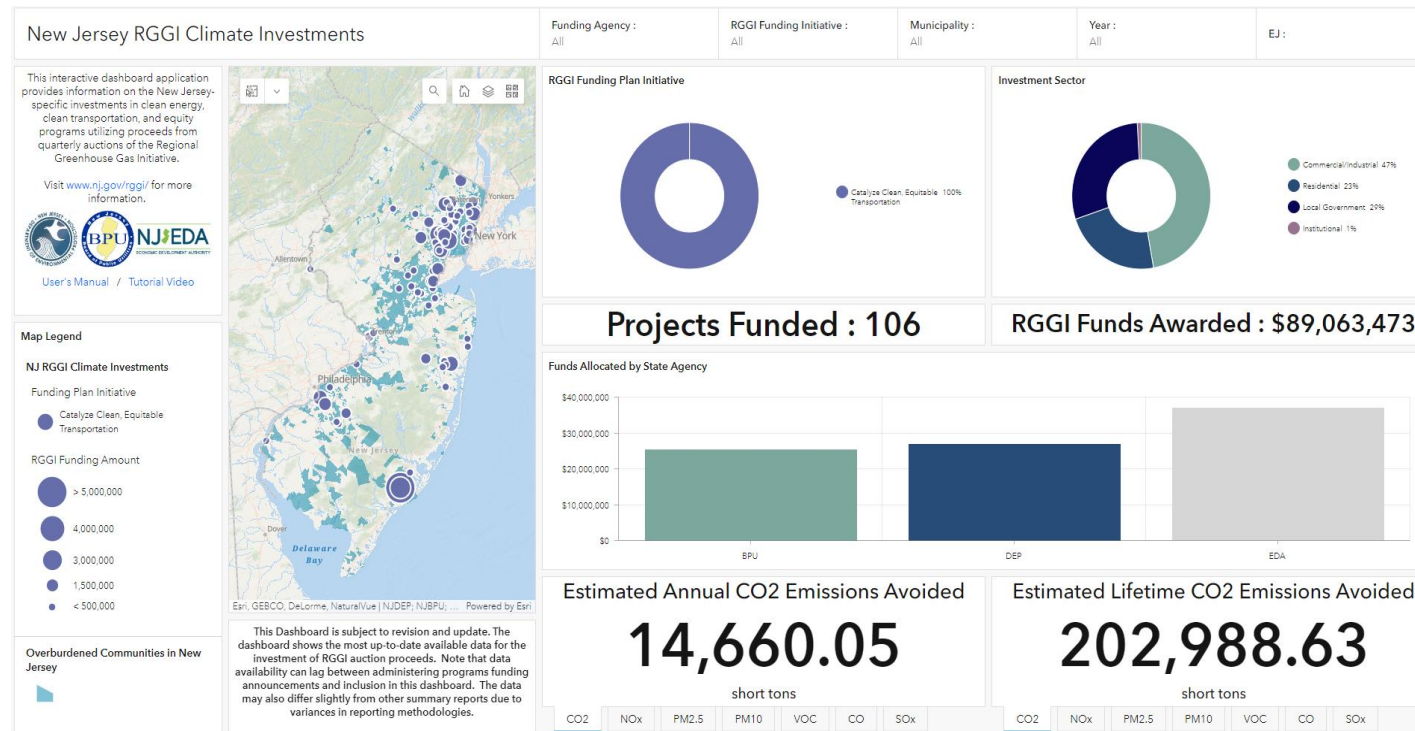
For More Information Visit

<https://www.nj.gov/dep/climatechange/mitigation/ncs-grant.html>



NJ'S RGGI CLIMATE INVESTMENTS DASHBOARD

RGGI Climate Investments Dashboard





RGGI Strategic Funding Plan

Years 2023-2025

THE NEXT RGGI STRATEGIC FUNDING PLAN

Strategic Funding Plan Development



Stay in the know on RGGI
Sign up for the ListServ!
www.nj.gov/rggi/engage

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Questions?

Closing Remarks

Announcements

- ▶ The link to the slides will be e-mailed through NJDEP listserv to registered attendees. Slides will also be posted on AWMA-NCNJ website. [NJ Events \(mass-awma.net\)](https://mass-awma.net)
- ▶ Please complete the survey form and e-mail your responses to sgupta@haleyaldrich.com. You can also just send an e-mail with the following input:
 - ▶ Feedback on the conference
 - ▶ Topic(s) of interest for future programs
 - ▶ Please indicate your preference for future NJDEP Regulatory Conference: in-person or virtual.
 - ▶ Thank you for your input and feedback!
- ▶ Or you may complete the survey form online. Please see the link in the online chat or scan the QR Code with your mobile device.
- ▶ If you are not an AWMA member, please consider becoming one.
 - ▶ [Join A&WMA \(awma.org\)](https://awma.org)
- ▶ We are looking for members to become more involved and be part of the leadership team!





Thank you for joining us!