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Comments on New Jersey Department of Environmental Protection's (NJDEP) Draft 2024 New Jersey Statewide Water Supply Plan Submitted via Water Supply Plan Website

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Introduction and Background

New Jersey Future (NJF) submits the following recommendations on the New Jersey Department of Environmental Protection's ("NJDEP" or "Department") Draft 2024 New Jersey Statewide Water Supply Plan ("Plan").

Founded in 1987, NJF is a nonprofit, nonpartisan organization that promotes sensible growth, redevelopment, and infrastructure investments to foster vibrant cities and towns; protect natural lands and waterways; enhance transportation choices; provide access to safe, affordable, and aging-friendly neighborhoods; and fuel a strong economy. NJF does this through original research, innovative policy development, coalition-building, advocacy, and hands-on strategic assistance. Embracing differences and advancing fairness is central to NJF's mission and operations. NJF is firmly committed to pursuing greater justice, equity, diversity, and inclusion through its programs, internal operations, and external communications.

New Jersey faces many water resource challenges, including a changing climate, aging infrastructure, and the discovery of emerging water contaminants such as PFAS. The 2024 New Jersey Statewide Water Supply Plan provides an opportunity to identify implementable solutions to address these issues promptly and collaboratively. The 2024 Plan is the first water supply plan issued by NJDEP that includes climate change and equity considerations. Climate change and other threats to New Jersey's water supplies can exacerbate social inequities experienced by underserved and overburdened communities. Therefore, it is imperative that the plan not only identify inequities but also prioritize solutions that address historic inequities.

NJF applauds the efforts of NJDEP to address water supply in New Jersey holistically and thanks the Department for the opportunity to comment on the draft of the 2024 Water Supply Plan.

Recommendations

NJF generally supports the recommendations in the draft plan and appreciates the detailed background provided. While the inclusion of climate change, equity, and other considerations

not included in the <u>2017 Water Supply Plan</u> is appreciated, we are concerned about the Plan's lack of an implementation strategy. There will only be progress if timelines are associated with recommendations and local governments and water infrastructure systems are provided additional funding and technical assistance to implement solutions. Below are specific recommendations:

1. Climate change implications for water supply in New Jersey

Sea level rise, changing precipitation patterns, alterations of groundwater supplies, and increased water use all contribute to the complexities of climate change and water resources in New Jersey. While the Plan outlines the need for further research and modeling, it does not consider other actions the Department and other agencies are taking and how they could inform the Water Supply Plan.

- Many of these issues can be addressed through robust contingency planning and assessment by water infrastructure system owners, and regulatory programs that acknowledge floods will worsen and occur more frequently. Funding should be provided for water infrastructure systems and municipalities to study their vulnerabilities to climate change adequately and to prioritize which assets to upgrade or change. Recommended vulnerability assessments on page 267 of the Plan should be integrated into required municipal climate change-related hazard vulnerability assessments to ensure owners of applicable systems are identified.
- The Plan should expand the climate change resilience recommendations to acknowledge that, while many water infrastructure systems can be well-served by enhanced protection and fortification, others will be located in places that face managed retreat. The Plan should call for the DEP to create a climate-resilient water investment framework that addresses where and when to "relocate vs. fortify."
- The Plan references New Jersey Tidal Climate Adjusted Flood Elevation (CAFE).
 CAFE and other applicable land use regulations are subject to change through
 the pending Resilient Environments and Landscapes (REAL) regulatory reform.
 Beginning on page 265, this section should be updated to reflect land use
 regulatory changes through the newly effective Inland Flood Protection (IFP) rule
 and pending REAL.
- Increased runoff due to extreme storm events may compromise the quality of drinking water sources. These impacts should be addressed with targeted watershed management plans, such as the newly required Watershed Improvement Plan through the Tier A Municipal Separate Storm Sewer System (MS4) Permit.

2. Contaminants of emerging concern, including the PFAS suite

Per- and polyfluoroalkyl substances (PFAS) contamination may lead to adverse health risks for New Jerseyans. There are water supply concerns as well; the discovery of PFAS has resulted in at least a temporary loss of water supply while installing new or updating existing treatment technology.

- NJDEP must continue to understand the extent of and regulate PFAS and other emerging contaminants. The Water Supply Plan notes that the state's water utilities are already implementing a significant amount of treatment; however, this should be tracked.
- The plan acknowledges the limited safe drinking water quality data to evaluate
 the distribution of PFAS throughout the state. NJDEP should prioritize additional
 vulnerability assessments to understand which regions are experiencing higher
 concentrations of contaminants to focus treatment efforts. The recommendations
 section should be updated to incorporate actions to address PFAS.
- NJDEP should continue to study PFAS.
 - NJDEP should include PFAS in future <u>Integrated Water Quality</u>
 <u>Assessment</u> reports to understand how to effectively treat water supplies for PFAS while mitigating other identified water quality issues.
 - Bill <u>S3176/A4760</u>, recently signed by the Governor, requires NJDEP and the Drinking Water Quality Institute to perform a study concerning regulating and treating perfluoroalkyl and polyfluoroalkyl substances. This requirement should be reflected in the Plan's recommendations.

3. Concerns for environmental justice and overburdened communities

Climate change and other threats to New Jersey's water supplies can exacerbate social inequities experienced by underserved and overburdened communities.

- NJF strongly supports the recommendation that the Department further refine its overburdened community water supply analysis. This could include detailed regional/community assessments and identifying additional opportunities to incorporate New Jersey's Environmental Justice Rule into water supply and drinking water permitting actions.
- NJF strongly supports the recommendation for a permanent Low-Income
 Household Water Assistance Program across New Jersey. In addition, NJDEP
 should support legislative efforts to allow publicly owned water, wastewater, and
 stormwater utilities to offer discounts to low-income customers. Water and sewer
 utilities and authorities need clear authority to offer discounts to low-income
 customers who may otherwise be unable to pay their utility bills while ensuring
 that the utility has sufficiently set aside earnings to offset these costs.

4. Lead and Copper Rule

NJF strongly supports the mandatory removal of all lead and galvanized service lines, as required by state statute, particularly given the potential impact of climate change on exposure to lead in drinking water.

- NJDEP should undertake more vigorous enforcement and transparency of lead service line removals through the Water Quality Accountability Act (WQAA) for the following reasons:
 - **Temperature:** Climate change will result in higher water temperatures. High water temps result in higher lead concentrations from lead pipes and solder.

- **Precipitation:** More extreme rainfall can result in more turbidity and organics in the water sources. More organics in the water results in higher lead concentrations.
- Water loss: Replacement of older lead pipes, especially galvanized service lines, will reduce water losses.
- Water Quality: Changes in water quality, changes in source water, and/or increased interconnection use (mingling of water with different chemistries) are all risk factors for higher lead concentrations or a lead crisis. Reducing the amount of lead in the infrastructure can avoid this.
- On page 171 of the Plan, it states, "[Lead contamination] is commonly found when <u>treated</u> drinking water chemically reacts with the lead pipes and plumbing fixtures when moving from a water treatment plant to the end user, most often in the service lines between the water mains and a customer meter."
 - NJDEP should consider removing the word "treated." This is accounted for as drinking water is treated water.
 - NJDEP should consider replacing the term "customer meter" with the customer's building. Many meters are outside, so this would not account for the piping between the meter and the house.

5. Water Demand

The Plan aims to understand water availability to allow for effective planning and management of water resources.

- Recently enacted legislation, that governs the provision of affordable housing subject to the Mount Laurel Fourth Round, requires municipal housing elements to include "An analysis of consistency with the State Development and Redevelopment Plan, including water, wastewater, stormwater, and multi-modal transportation based on guidance and technical assistance from the State Planning Commission." This requirement will impact approximately 350 municipalities, which must complete housing elements by June 2025. The final Water Supply Plan should highlight this requirement and describe how the DEP will work with the State Planning Commission to: 1) ensure the updated State Development and Redevelopment Plan defines how municipalities should address the water, wastewater, and stormwater impacts of development; and 2) provide the necessary guidance and technical assistance to municipalities.
- The final Water Supply Plan should call for updated state population projections that consider the impact of climate impacts, including flooding, on municipal population levels in 2050. The Plan should also call for a calculation of projected water demands in 2050, a comparison to the water supply, and the identification of locations where special measures, such as water conservation measures, will be necessary.
- The Plan states that alternative water supplies may or may not be feasible in specific regions. Alternative water supplies should be considered where and to the extent that reducing water losses and demands will not eliminate water deficits. The alternatives should focus on using the lowest quality water

- acceptable for the intended use. NJDEP should study where this solution is feasible in the state.
- Recent news articles, including <u>As Use of A.I. Soars</u>, <u>So Does the Energy and Water It Requires</u> from Yale Environment 360, have identified the concerning trend of increased water use by data centers, including those serving artificial intelligence. Did NJDEP and its partners consider this emerging trend as it developed this Plan?

6. Improving Water Quality Regulatory Programs

- Harmful algal blooms (HABs) are worsened as New Jersey experiences extremely warm temperatures and intense precipitation, threatening water supplies. NJDEP should continue to enforce its regulatory requirements to address non-point source pollution runoff.
- NJF supports recommendations to further modernize the Water Quality
 Accountability Act (WQAA), as outlined on page 270. We also strongly
 encourage adding a recommendation to create a schedule of civil administrative
 penalties pursuant to the WQAA, along with a timeline. These penalties are
 overdue and must be enforced to meet the current WQAA requirements and lead
 service line implementation.

7. Regional Solutions

- The NJDEP should provide additional guidance on a regional approach and assistance in facilitating the formation of regions to address water-related challenges. For example, the Department could outline parameters for selecting a region regarding municipal/county boundaries, shared infrastructure, and/or hydrology. Regional planning to address water-related issues, including flooding and degraded water quality, that span multiple communities enables localities to identify and prioritize the most efficient and cost-effective local or regional solutions that will achieve the highest pollutant reductions, mitigate flooding, and meet municipal separate storm sewer system (MS4) or combined sewer system (CSS) permit goals.
 - Existing Watershed Management Areas (WMAs) provide an existing framework for operationalizing regional planning and development of solutions. This plan references WMAs in several sections.
- The State Planning Act requires cross-acceptance procedures by state agencies and municipal, county, and regional governments to ensure their actions are consistent with the State Development and Redevelopment Plan (SDRP). The final Water Supply Plan could recommend that the updated SDRP articulate the specific considerations that land use plans should make regarding water supply. The updated SDRP could be leveraged to operationalize recommendations, especially those on a regional scale, in the Water Supply Plan.

8. Funding

- NJF strongly supports the recommendation to implement the New Jersey Water Bank's "Building Water Infrastructure Resilience," guidance that requires applicants for State Revolving Fund financing to evaluate the potential effects of climate change, such as sea level rise, storm surges and changes in precipitation patterns and intensity during the planning and design of water infrastructure projects; and to incorporate appropriate resilience measures into project designs.
 - NJDEP should work with the New Jersey Office of Emergency Management and the New Jersey Infrastructure Bank through the newly established New Jersey Resilience Bank Financing Program to fund projects that increase water systems' resilience to climate change.
- NJF supports NJDEP's funding for water quality restoration projects and initiatives through the 319 Grants program to identify and address nonpoint source pollutants upstream of drinking water sources. However, additional funding sources are needed to address source water protection.
- Funding should be provided for systems to adequately study their vulnerabilities to climate change.
- Stormwater utilities should continue to be promoted as a funding source to help water infrastructure systems address their water resource challenges related to stormwater runoff.
- Regarding funding Reclaimed Water for Beneficial Reuse (RWBR), Page 151 of the plan states, "To promote RWBR, DEP has instituted financial assistance programs to finance new infrastructure and additional treatment requirements for RWBR projects. More information regarding RWBR can be found on the DEP RWBR website"; however, funding information is <u>not available</u>.

9. General Comments

- In the recommendations section, the Department outlines recommended actions to address the water supply issues outlined in the plan. However, there is no timeline associated with each recommendation. We recommend that an implementation matrix be developed to ensure the prioritization of actions, identification of the departmental program charged with each action, and timing tied to each recommendation. Alternatively, NJDEP could create a separate Action Plan supplement outlining how the Water Supply Plan will be implemented within six months of publication of the final 2024 Water Supply Plan.
- NJF strongly supports the transition of this Plan into an online interactive document, such as a story map, to illustrate the findings and communicate updates following its publication.
- The Water Supply Plan should support legislative efforts establishing a New
 Jersey Water Infrastructure Center at an institute of higher education to assist the
 Department with data, applied research, and convening cross-disciplinary
 stakeholders to accelerate infrastructure solutions. A Water Infrastructure Center
 would deliver services that aid in implementing this Plan and leverage federal
 and philanthropic funding.