Improving a Program That Works

Recommendations to the New Jersey Water Bank for Advancing Equity
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ACRONYMS

ARPA American Rescue Plan Act
ASDWA Association of State Drinking Water Administrators
BIL Bipartisan Infrastructure Law*
CWA Clean Water Act (federal)
CWSRF Clean Water State Revolving Fund
CSO Combined Sewer Overflow
DAC Disadvantaged Community
DWSRF Drinking Water State Revolving Fund
EPA U.S. Environmental Protection Agency
EPIC Environmental Policy Innovation Center
FFY Federal Fiscal Year (October - September)
I-Bank New Jersey Infrastructure Bank
IIJA Infrastructure Investment Jobs Act*
IUP Intended Use Plan
LQI Lowest Quintile Income
LSLR Lead Service Line Replacement
MCL Maximum Contaminant Level
MHI Median Household Income
MRI Municipal Revitalization Index
NJDCA NJ Department of Community Affairs
NJDEP NJ Department of Environmental Protection
NJWB New Jersey Water Bank
PCWS Public Community Water System
PF Principal Forgiveness
PPL Project Priority List
SDWA Safe Drinking Water Act (federal)
SFY State Fiscal Year (July - June)
SRF State Revolving Fund
TA Technical Assistance

*The BIL and IIJA are the same federal legislation.
Executive Summary
By almost any measure, New Jersey’s water infrastructure financing program is a success, having provided over $9 billion in low-cost financing for water and wastewater projects since its inception in 1987. The New Jersey Water Bank (NJWB), which administers New Jersey’s State Revolving Funds (SRF), is a partnership between the New Jersey Department of Environmental Protection (NJDEP) and the New Jersey Infrastructure Bank (I-Bank). The NJWB comprises two programs, the Drinking Water SRF (DWSRF) and the Clean Water SRF (CWSRF, focused on public wastewater and stormwater systems). These programs have broadened water utilities’ access to capital funding while saving participating communities an estimated $3 billion compared to financing in the municipal bond market.

But there is an important issue buried within this success story: to what degree has the NJWB addressed the water infrastructure needs of New Jersey’s disadvantaged communities (DACs), many of which face multiple environmental threats but lack the financial capacity to respond? This study, jointly prepared by New Jersey Future and the Environmental Policy Innovation Center (EPIC), examines that question.

No community can thrive, much less reach its full potential, without access to safe, clean water, yet without state assistance many fiscally-distressed DACs are locked in place. States have broad flexibility to create a SRF program that addresses their priorities, and many have innovated aggressively. Several of those measures could benefit DACs if implemented in New Jersey.

Based on EPIC’s review of NJWB awards and associated data from SFY2018 to SFY2022, a very strong correlation exists between the number and amount of CWSRF and DWSRF awards and the size of a community, with larger water utilities receiving a disproportionate share while small communities have lagged considerably. On a per capita basis, however, the value of awards per person served is much more favorable to larger water utilities. The distribution of state assistance should take both factors into account.

NJWB awards and water-related violations also correlate fairly closely, however that assistance does not consider the fiscal condition of the utility involved. These findings reflect New Jersey’s approach to project scoring, which emphasizes water quality issues and providing assistance to as many people as possible. Both of these correlations, community size and violations, are also present on the national level.

It is difficult to isolate the extent of NJWB assistance to disadvantaged communities given the large number of regional water utilities in New Jersey, however DACs serving larger populations appear to have a significant advantage. While there is much to be said for NJDEP’s approach, the recommendations in this report identify how water infrastructure financing could be improved for all of New Jersey’s DACs, including progress toward the federal Justice 40 initiative, a related but not identical program that targets 40% of certain federal aid to communities that are marginalized, underserved and overburdened.

It is important to recognize, however, that the success of any water financing program depends not only on the state, but also the communities that participate. To more equitably distribute funding, both NJWB and local water systems have a vital role to play. While practical obstacles may discourage water systems serving DACs from applying, improvement in project readiness, adherence to basic SRF requirements, and ongoing compliance with water quality regulations are also critical.

Most of the report’s ten policy recommendations could be implemented administratively, without the need for authorizing legislation. Specifically, a more robust method of identifying DACs and maximization of set-aside activities (e.g., to address pre-construction needs, such as planning and design) are highly recommended. The NJWB’s most precious resource, principal forgiveness (PF) funds that do not need to be repaid, should be separately ranked and distributed on a tiered basis to more efficiently recognize the relative needs of different DACs. Existing state funding and a small portion of loan repayments should be redirected to expand the pool of PF and increased provision of 0% interest loans and alternatives to flat caps on PF would help advance DAC projects with high environmental benefits. Finally, state legislation could improve the credit worthiness of severely-distressed DACs, and the state’s congressional delegation should strive to end the recent practice of earmarking federal funds for specific projects, which threatens to undermine the entire SRF program.

These recommendations, which are tempered to account for key tradeoffs and to preserve the program’s essential strengths, provide a baseline for ongoing consideration.
Recommended Actions in Brief

1. **REDEFINE “DISADVANTAGED COMMUNITY”**
   To more accurately gauge local fiscal distress, NJDEP should change its definition of a “disadvantaged community” (DAC) from a primary reliance on median household income to a multi-dimensional tool, such as the NJ Department of Community Affairs’ Municipal Revitalization Index.

2. **OTHER STATES: WATER AFFORDABILITY INDEX AND SMALL COMMUNITIES**
   New Jersey should adopt DAC-related innovations from other states, including a water affordability index and lowest quintile household income and by expanding funding for small DACs to help strike a better balance versus large water utilities.

3. **“GAINSHARING” INITIATIVES**
   To incentivize DACs to pursue New Jersey Water Bank (NJWB) assistance, provide additional principal forgiveness and increase ranking points for initiatives that benefit all parties, such as water affordability programs, asset management plans, regionalization of water/sewer service, and prior adherence to NJWB policies.

4. **EXPAND ADDITIONAL SUBSIDIZATION**
   Increase principal forgiveness (PF) subsidies and provide state-funded grants to DACs by repurposing a portion of existing state appropriations and NJWB loan repayments.
To preserve the integrity of the NJWB and ensure its continued success, the Governor’s Office should work with New Jersey’s congressional delegation to prompt Congress to eliminate or sharply restrict the use of federal earmarks that circumvent the normal priority-setting process by directing aid to specific utilities.

To maximize aid to the most fiscally-distressed DACs, additional subsidization should be distributed to projects on a sliding scale based on financial need.

To increase equity, the New Jersey Department of Environmental Protection (NJDEP) should implement alternatives to the existing “flat caps” on additional subsidization per DAC applicant.

To recognize DACs’ fiscal challenges and spur new project requests, the loan portion issued at 0% interest should be raised markedly.

Maximize federal set-aside activities in the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund to assist DACs, with particular emphasis on funding for pre-construction work (e.g., planning/design) and regionalization studies/implementation.

New Jersey should adopt legislation authorizing measures to improve the credit worthiness of severely-disadvantaged communities.

To preserve the integrity of the NJWB and ensure its continued success, the Governor’s Office should work with New Jersey’s congressional delegation to prompt Congress to eliminate or sharply restrict the use of federal earmarks that circumvent the normal priority-setting process by directing aid to specific utilities.
Background
FEDERAL STATE REVOLVING FUND PROGRAM

As authorized by Congress, the Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF) are powerful federal/state partnerships, constituting the nation’s primary source of funding for water infrastructure. Their primary goal is to protect public health by maximizing compliance with national drinking water standards and enhancing the integrity of the country’s waterways, however there are also important ancillary impacts. By modernizing water systems, the State Revolving Fund (SRF) programs encourage local economic development, promote sustainability and resilience, and enhance cost efficiency.

The CWSRF, established in 1987 through amendments to the federal Clean Water Act (CWA) to advance wastewater and stormwater projects, is in and of itself one of the largest existing federal funding programs. Its counterpart, the DWSRF, was authorized in 1996 via amendments to the federal Safe Drinking Water Act (SDWA) to support projects in six broad categories.

HISTORY

The CWSRF loan program was created as part of a strategy to devolve responsibility for water infrastructure, fundamentally changing how such projects are funded. From enactment of the Clean Water Act in 1972 until the CWSRF’s authorization in 1987, the federal government provided wastewater grants directly to municipalities. The federal share of wastewater project costs, originally 75% in 1972, declined to 55% in 1981, and federal construction grants were eliminated altogether in 1987. The federal share of water infrastructure investment gradually declined from 31% in 1977 to a mere 4% in 2017.2

Under the new CWSRF program, federal grants provided seed money for state-administered loans that cities would repay. As federal involvement phased out, states gained a source of capital and flexibility to set priorities.

As communities grew over time, and commercial, agricultural, and residential land-uses became more concentrated, a growing list of contaminants began to degrade drinking water sources. Pressure increased to expand the SRF program beyond wastewater needs. Amid widespread concern that small water systems were particularly unlikely to have sufficient financial resources, the DWSRF was authorized in 1996.

The shift from federal grants to state-administered loans increased pressure on local water rates, since many localities assumed responsibility for 100% of project costs. However, this change did not affect all communities equally. Water systems serving DACs often do not have an adequate rate base to afford needed improvements.3 This situation can be compounded by deferred maintenance and regulatory requirements that trigger additional spending.4

KEY ROLES: FEDERAL GOVERNMENT, STATE AGENCIES, AND WATER UTILITIES

US Environmental Protection Agency (EPA)

The EPA has largely devolved “primacy” for SRF oversight to the states, which have ample flexibility to create programs that fit their circumstances. EPA monitors key parameters, sets high-level goals (e.g., Justice 40), and allocates annual SRF capitalization grants. As noted below, the DWSRF allocation is based on periodic needs surveys while the 1987 Clean Water Act amendments have set the CWSRF distribution since the start of that program.

Drinking Water Infrastructure Needs Survey and Assessment (DWINSA)

- 7th DWINSA FAQs (April 2023)
- EPA DWINSA Website

Clean Water

- CWSRF Allotment Formula: Background and Options
- Clean Watersheds Needs Survey = 2012 Rept to Congress

EPA requires each state to publish several key documents, most prominently:

- Intended Use Plan (IUP) – Proposed uses of SRF funds in the next fiscal year.
- Project Priority List (PPL) – Ranking of all SRF project requests (including the related methodology). Projects must be listed on the PPL to be eligible for SRF funds. (See WIIP IUP and Project Lists).
Current federal policy has increased program requirements, imposed cross-cutting restrictions (e.g., American Iron and Steel), and diverted significant funding by “earmarking” projects within certain congressional districts. (See “Principal Forgiveness – Impact of Federal Earmarks” and Recommendation 10.) This has diluted the program’s effectiveness and decreased discretion for states, including meeting the needs of DACs.

**New Jersey Water Bank (NJWB)**

As a partnership between NJDEP and the I-Bank, the NJWB provides low-cost financing for drinking water and wastewater projects, including stormwater improvements that impact water quality. NJDEP administers the primary funding sources: federal capitalization grants, State matching funds (20%), and related State appropriations.

**New Jersey Department of Environmental Protection (NJDEP)**

The primary role of NJDEP is to set state policy, rank and prioritize projects, and review technical aspects to certify eligibility for funding. The Department annually revisits the program, primarily to:

- establish the project funding mix between principal forgiveness (PF) and debt financing (i.e., PF can range from 20% to 100%, but is typically capped per recipient/project) and determine the rate on long-term loans (usually equivalent to 25%, 50% or 75% of the I-Bank’s AAA market rate loans);
- define the term “disadvantaged communities”; and
- customize funding packages for different types of water utilities/projects.

**New Jersey Infrastructure Bank (I-Bank)**

As an independent financing authority, the I-Bank provides financial administration and oversight of the NJWB loan program, including legal review. It assesses credit worthiness, monitors compliance with program requirements, identifies innovative finance opportunities, and administers loans to recipients (including repayments).

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### SOURCES OF FUNDS

- **USEPA**
  - USEPA Annual CAP Grant (CW/DW)
- **State of NJ**
  - 20% Match to CAP Grant
- **New Jersey Water Bank (SRF)**
  - Below Market Rate Financing
- **I-BANK**
  - AAA Market Rate Bond Funding
- **Projects**
  - Repayments
Water Utilities

The primary recipients of assistance from the NJWB are New Jersey’s water and wastewater systems which submit applications, implement projects, and repay loans.

BASIC PROGRAM FINANCING

The NJWB financing process starts with the annual “federal capitalization grant” from EPA, to which states provide a 20% match. Though some states limit their SRF program to those two sources, New Jersey and 15 other states regularly sell bonds, either in the public market or through private placements (e.g., federal Water Infrastructure Finance and Innovation Act, or WIFIA), to increase the reach of the program. New Jersey’s approach typically has two components: a State loan issued by NJDEP at 0% interest and a market rate loan from the I-Bank. These two funding sources combine to provide a “blended rate” that is far below what most water utilities could realize on their own. (See the national chart below published by the EPA).

Some borrowers may also receive principal forgiveness (PF), a loan portion that does not have to be repaid if the project is successfully completed; this portion may be viewed as a “conditional grant”.

The chart below compares the estimated blended interest rate and debt service (including program fees) for borrowing to support a $1 million project through the NJWB versus independent borrowing across various credit ratings. The debt service savings are quite significant, particularly for DACs which tend to have lower credit ratings (i.e., often “BBB”, though some may be rated “A” or higher.)

<table>
<thead>
<tr>
<th>Borrower's Credit Rating</th>
<th>Cost</th>
<th>Interest Rate</th>
<th>Program Savings</th>
<th>% Program Savings Per Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJWB</td>
<td>$1,364,000</td>
<td>2.22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAA</td>
<td>$1,560,000</td>
<td>3.36%</td>
<td>$196,000</td>
<td>19.60%</td>
</tr>
<tr>
<td>AA</td>
<td>$1,634,000</td>
<td>3.77%</td>
<td>$270,000</td>
<td>27.00%</td>
</tr>
<tr>
<td>A</td>
<td>$1,690,000</td>
<td>4.04%</td>
<td>$326,000</td>
<td>32.60%</td>
</tr>
<tr>
<td>BBB</td>
<td>$1,857,000</td>
<td>4.90%</td>
<td>$493,000</td>
<td>49.30%</td>
</tr>
</tbody>
</table>

The chart below compares the estimated blended interest rate and debt service (including program fees) for borrowing to support a $1 million project through the NJWB versus independent borrowing across various credit ratings. The debt service savings are quite significant, particularly for DACs which tend to have lower credit ratings (i.e., often “BBB”, though some may be rated “A” or higher.)

CWSRF AND DWSRF WEIGHTED AVERAGE INTEREST RATES ARE APPROX. HALF OF MARKET RATE

<table>
<thead>
<tr>
<th>INTEREST RATE (%)</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
<th>2015</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARKET</td>
<td>6.5</td>
<td>5.8</td>
<td>5.2</td>
<td>4.7</td>
<td>4.3</td>
<td>4.0</td>
<td>3.7</td>
<td>3.5</td>
<td>3.3</td>
<td>3.1</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>DWSRF</td>
<td>5.5</td>
<td>4.8</td>
<td>4.2</td>
<td>3.7</td>
<td>3.3</td>
<td>3.0</td>
<td>2.7</td>
<td>2.5</td>
<td>2.3</td>
<td>2.1</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>CWSRF</td>
<td>4.5</td>
<td>3.8</td>
<td>3.2</td>
<td>2.8</td>
<td>2.4</td>
<td>2.1</td>
<td>1.8</td>
<td>1.6</td>
<td>1.4</td>
<td>1.2</td>
<td>1.0</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Improving a Program That Works
The I-Bank also takes advantage of other federal funding opportunities. For example, the competitive federal WIFIA program, whose loan rates are often lower than many state SRFs, newly supports lending by state infrastructure financing authorities (i.e., “SWIFIA”). The I-Bank is one of only two programs nationally that have successfully applied for and closed a SWIFIA loan, receiving $500 million in 2023. Combined with a separate WIFIA loan of $221 million that closed in 2022, the I-Bank secured a total of $721 million in WIFIA funding. When fully implemented, these initiatives are expected to save $117 million of NJDEP’s SRF funds while still providing the same blended interest rate to borrowers. The SRF funds so relinquished will be leveraged with other I-Bank bonds to support approximately $234 million in additional projects.

Since leveraged SRF programs have more funding to distribute, they can be more innovative. For example, Ohio offers:

- lower loan rates to small communities (e.g., 0.5%) than larger localities (1%);
- 0% loans for projects that address high priority issues; and
- a higher rate (40%) of additional subsidization (e.g., principal forgiveness).

Loan repayments on I-Bank bonds are equivalent to the total debt service that is due to bondholders. Through a master program trust agreement, the bonds are further secured by loan repayments made on the portion of each project that supported by federal SRF funds. Nearly 89% of the loans are secured by a general obligation pledge from the underlying borrowers. The NJWB also earns interest on the funds held in reserve by the trust. Repayments of the federal and state match portions of the loan (i.e., issued by NJDEP) are “recycled” to make new loans to other eligible recipients.

MAJOR WATER BANK BENEFITS

The major benefits of the NJWB program are summarized below:

- Lowest cost financing (usually far less than municipal bonds)
- Loan repayments finance additional projects
- Very low cost of issuance (0.1%) vs. municipal bonds (1.0%)
- No debt service reserve or bond insurance requirement
- Loan repayments begin at construction completion
- Long repayment term (30 years or the useful life of the project)
- Credit pooling (same rate for all governmental utilities regardless of credit rating)
- Post-issuance filings for IRS and SEC (large cost/time savings)
- Bond refunding (savings accrue to borrowers)
- Additional subsidization to DACs
- Multiplier effect – every $1 in federal funds generates $3 in community benefits

The NJWB provides one other benefit that is often overlooked: the ability to advance projects that increase efficiency, providing ongoing operational savings to a water utility’s bottom line and easing the cost burden for ratepayers. Listed below are two examples:

- The Camden County Municipal Utilities Authority used NJWB funding to implement a Net Zero - Energy Self Sufficiency program, the annual savings of which will exceed the debt cost. (See, CCMUA Net Zero Energy Fact Sheet (EPA) and Planning for Sustainability: Handbook for Water and Wastewater Utilities.)
- A 2018 report issued by the Joint Legislative Task Force on Drinking Water Infrastructure highlighted the benefits of reducing water loss (see page 11.)
SRF’S BASIC PROCESS FLOW

As outlined below, the SRF process involves 13 major steps, with EPA, NJDEP, I-Bank, and participating water utilities all playing prominent roles.

Based on priority ranking and “readiness”, NJDEP selects projects that can be accommodated within the available “fundable range” of resources.

As noted in the chart below entitled “NJWB WIIP Loan Process”, there are several key milestones in the NJWB application process. After NJDEP certifies that a project may proceed, the I-Bank issues a short-term loan covering all phases of planning and construction. The interest rate on short-term loans is set monthly (e.g., 0.369% in July 2023.) Since the rate is not charged on the full loan but rather on funds that are actually requisitioned for use, the short-term loan program provides a very cheap and efficient funding source for...
borrowers while the project is being constructed. Upon completion of the project, when the final cost is known, short-term loans are converted to long-term financing. This provides far greater certainty, minimizing adjustments for overruns or the recapture of unspent funds. Importantly, loan payments do not begin until the long-term loan is arranged.

As part of the research for this report, New Jersey Future convened individuals familiar with the NJWB process and other water equity concerns in New Jersey communities. (See acknowledgements). They identified several pros/cons on the Water Bank process:

Pros:
- Online submissions (H2LOans; electronic document sharing)
- Online requisitions (average reimbursement time under 14 days)
- Rolling applications (borrowers submit when ready)

Cons:  
(Note: the challenges below are also common in other states)
- Lack of certainty on the loan/PF mix (until contract certification)
- Permit requirements (per project)
- More oversight requirements than with municipal bonds
- Fees render SRF less attractive for small projects (i.e., less than $1m)
- Lengthy review periods (e.g., Socially and Economically Disadvantaged business review can take up to 8 months)

ADDITIONAL SUBSIDIZATION - PRINCIPAL FORGIVENESS (PF) AND SET ASIDE ACTIVITIES

Beyond lower interest rates, the NJWB provides PF as “additional subsidization” to reduce the cost of water-related projects, primarily in DACs. PF does not have to be repaid if SRF requirements are satisfied.

Two types of additional subsidization are authorized from the federal capitalization grant. The “congressional” authorization is available to any DWSRF or CWSRF-eligible recipient. The “programmatic” authorizations from the SDWA and the CWA have different eligibility but are largely reserved for DACs. (See details in the CWSRF and DWSRF Base SRF Program sections below.) The line “Cumulative Minimum/Maximum” in the following table summarizes total potential subsidization across the CWSRF and DWSRF ranging from $8.4 million to $16.5 million in FFY2023.

NJDEP typically provides the maximum amount of additional subsidization, focusing on CSO projects for the CWSRF (40%) and small water systems and lead in drinking water projects for the DWSRF (49%). Each is detailed below.

<table>
<thead>
<tr>
<th>FFY23 Potential Additional Subsidization</th>
<th>CWSRF</th>
<th>DWSRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congressional</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>Programmatic (CWA or SDWA)</td>
<td>10% - 30%</td>
<td>12% - 35%</td>
</tr>
<tr>
<td>Cumulative Minimum/Maximum</td>
<td>20% - 40%</td>
<td>26% - 49%</td>
</tr>
<tr>
<td>FFY23 Total</td>
<td>$6.1m - $12.2m</td>
<td>$2.3m - $4.3m</td>
</tr>
</tbody>
</table>
CWSRF Base Program: Additional Subsidy Provisions

1) **Congressional Additional Subsidy Authority**
   States must issue 10% of their base CWSRF capitalization grant as additional subsidization (typically PF) to any CWSRF-eligible recipient.

2) **Clean Water Act Additional Subsidy Authority (Programmatic)**
   The BIL mandates that an additional subsidy between 10% and 30% of their CWSRF grant be provided to DACs, or to residential ratepayers in non-DACs, or for energy efficiency, stormwater, or sustainability projects.

Here is a CWSRF example of how a federal capitalization grant (valued at $100) might be divided between additional subsidy (i.e., PF) and loans:

**EXAMPLE $100 FY 2022 BASE CAPITALIZATION GRANT**

<table>
<thead>
<tr>
<th>Mandatory 10% Congressional Additional Subsidy</th>
<th>Mandatory 10-30% CWA Additional Subsidy</th>
<th>Revolving Infrastructure Loan Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10</td>
<td>$10 to $30</td>
<td>$60 to $80</td>
</tr>
</tbody>
</table>

Total FY22 Capitalization Grant = $100

The DWSRF approach is a bit more detailed. States must issue between 26% and 49% of their federal grant as additional subsidy and may use another 31% across four optional “set aside activities”:

DWSRF Base SRF Program: 
Additional Subsidy Provisions

1) **Congressional Additional Subsidy Authority**
   States must issue 14% of their base DWSRF capitalization grant as additional subsidization (typically via PF) to any DWSRF-eligible recipient.

2) **Safe Drinking Water Act Additional Subsidy Authority (Programmatic)**
   States must provide between 12% and 35% of their DWSRF grant to DACs.

As outlined in the four programs below, set aside activities represent a different type of subsidy, one that recognizes that capital investments alone do not solve all water-related problems. Set asides are particularly helpful for DACs, including assistance for planning and design, service line inventories, and asset management plans. Since these activities are funded from the federal capitalization grant, their use reduces loan funding for projects.

### DWSRF – Set Aside Activities (31%)

<table>
<thead>
<tr>
<th>15% Local Assistance and Other State Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Local capacity development and source water protection</td>
</tr>
<tr>
<td>• Asset management plans</td>
</tr>
<tr>
<td>• Voluntary, incentive-based water quality protection measures</td>
</tr>
<tr>
<td>• Regionalization/consolidation grants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10% State Program Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Public water system supervision and operator certification</td>
</tr>
<tr>
<td>• Capacity development studies (water system SDWA compliance)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4% State Administrative Costs and Technical Assistance (all systems)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Public water system supervision and operator certification</td>
</tr>
<tr>
<td>• Capacity development studies (water system SDWA compliance)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2% Technical Assistance (small systems)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Public water system supervision and operator certification</td>
</tr>
<tr>
<td>• Capacity development studies (water system SDWA compliance)</td>
</tr>
</tbody>
</table>

31% TOTAL

Though states have discretion over DWSRF set aside activities, not all of them are truly optional. Under the State Program Management set aside, states that fail to adequately certify water utility operators and perform studies to ensure the adequate water capacity risk EPA withholding up to 20% of their annual capitalization grant. As reported by NJDEP, the table below summarizes the recent DWSRF set aside amounts:

<table>
<thead>
<tr>
<th>Federal FY</th>
<th>Federal Grant</th>
<th>Percentage</th>
<th>Set Aside Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFY2021</td>
<td>$18.8m</td>
<td>18%</td>
<td>$3.4m</td>
</tr>
<tr>
<td>FFY2022</td>
<td>$11.9m</td>
<td>22%</td>
<td>$2.6m</td>
</tr>
<tr>
<td>FFY2023</td>
<td>$ 8.9m</td>
<td>25%</td>
<td>$2.2m</td>
</tr>
</tbody>
</table>

**BACKGROUND**

Improving a Program That Works
If the DWSRF federal capitalization grant is restored to the $18.8 million level that pre-dated congressional earmarks, the full 31% set aside would be worth $5.8 million annually, which is $3.6 million more than the FFY2023 amount.

The diagram below presents a consolidated view of the DWSRF’s additional subsidization and set aside activities. If each subsidy is maximized, the total would account for 80% of the federal capitalization grant for the DWSRF base program.

Beyond set aside activities, a total of $474 million of PF was provided as additional subsidization in SFY2023 from three federal sources: the SRF base program, the Bipartisan Infrastructure Law (BIL), and the American Rescue Plan Act (ARPA, a one-time, pandemic-related program.)

Of the $474 million total, 54% ($254 million) was targeted to DACs. This included $165 million from the CSWRF (most prominently, $129 million or 78% for combined sewer projects) and $89 million from the DWSRF (half of which targeted resiliency projects and major water quality violations). (For a detailed list of programmatic uses for PF in FY2023, see Appendix).

The $181 million in recurring PF seems like a large amount yet it pales in comparison to New Jersey’s needs. Based on periodic EPA surveys, New Jersey requires an amount approaching $30 billion to keep water infrastructure in a state of good repair over the next 20 years, including $12.2 billion for drinking water and $16.8 billion for clean water needs. Much of this need, including an estimated $10.8 billion for lead service line replacement (LSLR, $2.8 billion) and combined sewer overflow systems ($8 billion) alone, is in overburdened, fiscally-stressed communities that
desperately need state assistance. The fact that federal BIL funding is only authorized for five years, after which only base SRF funding will be available, compounds the problem.

As outlined below, the $89 million in PF provided by the federal BIL program in SFY2023 is distributed based on a minimum percentage for different project types.

EPA provides states with significant flexibility in determining additional subsidization per project. In New Jersey, the amount awarded per applicant is typically capped. For example, LSLR projects can receive up to 50% PF capped at $5 million per applicant.

<table>
<thead>
<tr>
<th>BIL Fund Category²⁶</th>
<th>PF%</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWSRF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gen. Supplemental</td>
<td>49%</td>
<td>DACs; low income ratepayers; treatment strategies</td>
</tr>
<tr>
<td>Emerging Contaminants</td>
<td>100%</td>
<td>Any eligible CWSRF recipients (CWA section 603c)</td>
</tr>
<tr>
<td>DWSRF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gen. Supplemental</td>
<td>49%</td>
<td>DACs</td>
</tr>
<tr>
<td>Emerging Contaminants</td>
<td>100%</td>
<td>Min. 25% to DACs or systems serving &lt; 25k pop.</td>
</tr>
<tr>
<td>Lead Service Lines</td>
<td>49%</td>
<td>DACs</td>
</tr>
</tbody>
</table>
Equity
Findings
STUDY ANALYSIS

To assess equity, the Environmental Policy Innovation Center (EPIC) examined the allocation of New Jersey’s NJWB awards from SFY2018 - SFY2022 using a probit model which identifies the characteristics of communities that benefit. Using water and sewer utility service areas as the unit of analysis, the model considers the likelihood of those entities receiving NJWB assistance based on factors such as water quality violations, median household income, population served, race, poverty rate, etc. Nearly 1,000 observations (NJWB awards: 542 DW, 441 CW) were considered.

It is important to note that most NJWB awards to regional water and sewer utilities, which serve roughly 3.6 million state residents across localities with different characteristics (i.e., over 40% of those not using private wells or septic), may mask underlying patterns.
FACTORS INFLUENCING NJWB AWARDS: SFY2018 - SFY2022 (EPIC)

Percent of Eligible Utilities Receiving NJWB Awards

Of New Jersey’s 542 water and wastewater utilities (i.e., including very small entities serving less than 500 people), about one-third (34%) received a SRF award during the five year period. Though a similar portion of project requests attracted an award from the CWSRF or DWSRF (40%), a much higher percentage of systems received awards from the CWSRF (76%) than the DWSRF (18%). In short, a sewer system stood a much higher chance of receiving a CWSRF award while drinking water awards were concentrated in fewer systems. (This comparison is heavily influenced by the fact that the CWSRF program was created 12 years prior to the DWSRF and therefore received a much higher level of funding over time.)

<table>
<thead>
<tr>
<th>NJWB Awards</th>
<th>Utilities</th>
<th>Awards</th>
<th>% Utilities with Awards</th>
<th>Project Requests</th>
<th>% of Requests with Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Water</td>
<td>154</td>
<td>117</td>
<td>76%</td>
<td>305</td>
<td>38%</td>
</tr>
<tr>
<td>Drinking Water</td>
<td>388</td>
<td>68</td>
<td>18%</td>
<td>158</td>
<td>43%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>542</td>
<td>185</td>
<td>34%</td>
<td>463</td>
<td>40%</td>
</tr>
</tbody>
</table>

Population

Population served (i.e., logged population) is the only variable that showed a distinctly statistically significant correlation (i.e., 99% confidence level). The higher the population served, the more likely a water utility is to receive a NJWB award. Statistical significance is apparent in both the output curve and the narrow confidence intervals (shaded area).
As noted in the chart below (which excludes water utilities serving less than 500 customers), large systems (100,000+ customers) comprising only 6% of New Jersey’s 447 water or sewer utilities received approximately half of all NJWB awards from SFY2012 to SFY2021 and submitted 52% of the “top 100 ranked projects” in the SFY2024 project priority list (PPL) (See Affordability Criteria). Small systems (less than 10,000 customers) comprise roughly half of all water utilities yet received only 16% of the historical awards and had few highly-ranked projects (6%). (Note: judging by SFY2022 awards, a similar pattern exists for NJWB assistance agreements: 56% were arranged with medium, 31% with large, and only 7% with small utilities.)

Of the $108 million in top-ranked NJWB requests from small utilities in the SFY24 PPL, 50% ($52 million) were from localities with a MHI ranging from $104,000 to $261,000, far above the statewide average of $85,751. Since NJDEP selects projects based on their water quality benefits, this observation may be due to the fact that wealthier localities have the staff or consultants required to aggressively pursue NJWB financing.

However, the average per capita cost for large utility projects is far superior:

<table>
<thead>
<tr>
<th>Utility Size</th>
<th>NJWB Aid Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>$284</td>
</tr>
<tr>
<td>Medium</td>
<td>$481</td>
</tr>
<tr>
<td>Small</td>
<td>$1,363</td>
</tr>
</tbody>
</table>

Policy decisions aimed at striking a balance between utilities of different sizes should consider each of these metrics. Specifically, NJDEP should examine the degree to which the NJWB is reaching small utility DACs, particularly those with high value projects.
Maximum Contaminant Level (MCL) Violations

The model suggests that as drinking water MCL violations\textsuperscript{31} increase, so does the likelihood of receiving NJWB funding. However, this correlation does not appear to be causal or statistically significant, falling just outside a 90% confidence level. When only considering small utilities (excluding those serving less than 500 people), there is a stronger relationship between drinking water violations and DWSRF awards. However, none of these relationships are statistically significant when considering CWSRF projects.

Given the imprecise geographic relationship between water utility service areas and localities, it is difficult to generate a comparable set of observations about DACs. Nonetheless, an additional model was created that considers only DACs. When considering only drinking water utilities that overlap with a DAC, population is still the only statistically significant variable (99% confidence). The community’s change in population is also significant, but only at a 90% level, which suggests that DW systems serving at least one DAC that is experiencing population loss may be more likely to receive NJWB funding. When considering only wastewater utilities that overlap with a DAC (i.e., combined sewer overflows), violations are the only noteworthy variable (99% confidence).

The remaining variables did not have statistical significance. That includes MHI, the primary factor in identifying DACs in New Jersey. If DAC status were a more decisive factor for NJWB awards, MHI would have a more significant role in the model. The fact that it doesn't draws into question the effectiveness of MHI as a single determining factor and the current system for ranking projects.

Nonetheless, EPIC’s analysis provides an important baseline for any future assessment of NJWB’s awards, including compliance with EPA guidance and the federal Justice 40 Initiative, both of which call for increasing water infrastructure investment in DACs.
Affordability Criteria

Federal law provides states with wide discretion in defining the “affordability criteria” that determine which localities qualify as DACs. Though the criteria may be established via statute or administrative rule, New Jersey’s policy resides in NJDEP’s IUP.

The affordability criteria affects NJWB funding assistance in two ways:

*Project Priority List (PPL)*
A project must be on the PPL to be considered for SRF assistance. Those that satisfy the affordability criteria receive an additional 80 ranking points, increasing the likelihood of being funded over a similar project that does not trigger one of the affordability criteria.

*Financial Assistance Packages*
DAC-sponsored projects receive the most beneficial aid terms, typically including PF and a loan mix that may provide a blended rate of 75% at 0% interest and 25% at the I-Bank’s AAA rate.

Affordability can be measured in many ways. In New Jersey, NJWB applicants that meet either of the following two criteria satisfy the affordability criteria.

1. **Median Household Income (MHI)**
   As NJDEP’s primary DAC criteria, the MHI in the affected municipality cannot exceed 80% of the statewide MHI. (Note: local unemployment and population growth are also considered, however they basically represent “tie breakers” in the affordability formula.) As of 2019, a total of 119 municipalities qualified as DACs based on this threshold:

<table>
<thead>
<tr>
<th>Statewide MHI</th>
<th>80% MHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>$85,751</td>
<td>$68,600</td>
</tr>
</tbody>
</table>

2. **Environmental Justice Economic Overburdened Community Criteria**
   Alternatively, a locality may qualify as a DAC in New Jersey if a particular census block group or the entire municipality is considered an overburdened community, wherein at least 35% of the households qualify as low-income households (i.e., at or below twice the poverty level set by the United States Census Bureau). However, all but three of the communities on this list already qualify under NJDEP’s MHI criteria. To date, very few NJWB awards have been issued through this criterion alone.
Defining DACs – Trends in Other States

Based on a survey developed by the Association of State Drinking Water Administrators, the chart below summarizes DAC indicators employed by states across six broad areas: socioeconomic, demographic, financial, public health, environmental justice, and “other”.

Nearly all states (49) use socioeconomic indicators to define DACs, as they approximate a community’s ability to pay for water service. MHI is the most prominent factor, but only eight states use it (or a similar income measure) as the only indicator. Other common indicators are water rates (27 states) and water system size (i.e., small, 16 states). Nearly half of the states (24) use multiple factors to determine DAC status, and at least twelve jointly consider MHI and a water affordability index. At least six states employ a sliding scale of conferring PF benefits based on the existing degree of fiscal distress.

## INDICATORS STATES USE TO DEFINE DACs

<table>
<thead>
<tr>
<th>Type of Indicator</th>
<th>Indicators</th>
<th>Number of States Using Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic</td>
<td>Median Household Income(^a)</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Unemployment Rate</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Poverty Rate</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Percentage of Population Receiving Government Assistance(^b)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Labor Force Participation Rate</td>
<td>1</td>
</tr>
<tr>
<td>Demographic</td>
<td>Population Trends</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Age Composition</td>
<td>2</td>
</tr>
<tr>
<td>Financial</td>
<td>Water Rates</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Water System Size (Population Served or Number 16 Connections)</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Water System Debt</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Municipal Bond Rating</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Proposed Loan Amount</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Property Value</td>
<td>3</td>
</tr>
<tr>
<td>Public Health</td>
<td>Human Health-related Factors</td>
<td>2</td>
</tr>
<tr>
<td>Environmental Justice</td>
<td>EJ Community or Similar Designation</td>
<td>2</td>
</tr>
<tr>
<td>Defined Categories</td>
<td>Specifically defined and identified category or group</td>
<td>3</td>
</tr>
</tbody>
</table>

\(^a\) Includes two states that do not use median household income but do use adjusted gross income or per capita income as indicators.

\(^b\) Government assistance includes Social Security, Supplemental Security Income, cash assistance, or Supplemental Nutrition Assistance Program (SNAP).
There are two key points to note about how DAC definitions affect NJWB subsidies:

1. Merely qualifying does not mean the project will be fully funded by PF or even receive the full amount of PF for which it is eligible. In fact, most DAC projects are financed by a combination of PF and low-interest loans.

2. There are other factors beyond the DAC definition that determine the size of the project subsidy, including the project prioritization and ranking criteria.

Project Priority List (PPL)

As published in the annual IUP, NJDEP’s PPL ranks all project requests. Inclusion on the PPL is a prerequisite for short term financing from the I-Bank. To receive long term funding, projects must receive all program approvals, reside on a sub-list that forms the basis for a state appropriation, and be near completion of construction.

The PPL assigns points to each project request, placing greatest emphasis on environmental emergencies and protection of public health, particularly compliance with acute violations of the Safe Drinking Water Act (e.g., E. coli, 500 points) or the Federal Water Pollution Control Act (e.g., CSO, 600 points). Projects that satisfy the DAC “affordability criteria” receive an additional 80 points which merely differentiates them from equivalent projects requested by non-DACs. Projects involving violations, the cause of which may run the gamut from unavoidable circumstances to longstanding negligence, receive the highest priority regardless of the fiscal condition of the water utility. See the DWSRF chart below (from the SFY2024 IUP).

**DWSRF PROJECT SCORING**

<table>
<thead>
<tr>
<th>Priority Projects</th>
<th>Project Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergencies</td>
<td>Priority Hazard</td>
</tr>
<tr>
<td>Violations</td>
<td></td>
</tr>
<tr>
<td>- Acute/Administrative Consent Orders</td>
<td>500</td>
</tr>
<tr>
<td>- Groundwater</td>
<td>300</td>
</tr>
<tr>
<td>- MCLs</td>
<td>250</td>
</tr>
<tr>
<td>Lead Service Line Replacement</td>
<td>175</td>
</tr>
<tr>
<td>Disadvantaged Communities (Addtl Pts)</td>
<td>80</td>
</tr>
</tbody>
</table>

**NJWB Awards as Percent of Funds Available**

Judging by program performance from SFY2018 through SFY2022, NJDEP awards nearly two thirds of the NJWB’s total available funds in a given year. This reinforces the importance of the state’s plan to expand technical assistance services to water utilities and confirms there is ample room for consideration of the recommendations in this report.
State Appropriation to NJWB Program

After many years in which the State match was satisfied from loan repayments on State bonds issued in prior years, a State appropriation of $60 million was provided beginning in SFY2021. As of SFY2024, approximately one-third ($22 million) of that appropriation satisfies the state match requirement for both the base federal SRF ($11 million) and the federal BIL ($11 million).39 Another $3 million supports direct grants to very small water systems, leaving an annual balance of $35 million. (See Recommendation 4.)

Demand for NJWB Assistance

Regarding demand for NJWB assistance, “project readiness” is a primary factor. Technical assistance services, which help water utilities prepare projects, are particularly helpful for DACs, which typically lack in-house expertise to navigate the application process. Historically, NJDEP has run a modest TA program ($377,000) for small systems, but BIL funds now support new efforts at NJDEP, EPA, and the I-Bank.40

Based on feedback from key stakeholders, however, other concerns exist. NJWB loans are not attractive to water utilities that have reached their debt limit or have critical needs that far exceed the additional debt they could issue. New Jersey’s lack of a water affordability program, which offsets the cost of water bills for low income residents, may prevent the restructuring of water rates to increase debt capacity at certain water utilities.

The WISE Act (P.L. 2017, c.71) requires local governments and regional authorities seeking to independently finance environmental infrastructure projects valued at $1 million or more to secure approval from New Jersey Department of Community Affairs’ (NJDCA) Local Finance Board. The estimate, obtained via the I-Bank’s online Wise Calculator, compares the cost of an independent bond issuance versus the NJWB and generates a report on the estimated debt savings. If independent financing is less advantageous, the Board may require NJWB financing.

Principal Forgiveness – Impact of Federal Earmarks

PF from the base SRF program is derived from the annual federal capitalization grants to the CWSRF and DWSRF after subtracting federal “earmarks”, which are grant appropriations that Congress specifically directs to individual localities. For the first time in the program’s history, Congress circumvented the normal process to earmark federal SRF funds in FFY2022 and then sharply expanded that practice in FFY2023, reducing the base SRF program by $2.3 billion nationally. Available PF was reduced dramatically.

<table>
<thead>
<tr>
<th></th>
<th>CWSRF</th>
<th>DWSRF</th>
<th>Total SRF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding ($billions)</td>
<td>FFY22</td>
<td>FFY23</td>
<td>Change</td>
</tr>
<tr>
<td>National Approp</td>
<td>$1.6</td>
<td>$1.6</td>
<td>$0.0</td>
</tr>
<tr>
<td>Federal Earmarks</td>
<td>($0.4)</td>
<td>($0.9)</td>
<td>($0.5)</td>
</tr>
<tr>
<td>SRF Net Approp</td>
<td>$1.2</td>
<td>$0.7</td>
<td>($0.5)</td>
</tr>
</tbody>
</table>
The chart below summarizes the national impact in FFY2022 and FFY2023.

<table>
<thead>
<tr>
<th>Fiscal Year (whole)</th>
<th>SRF Base Prog.</th>
<th>Earmarks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal FY21</td>
<td>$2,770,000,000</td>
<td>$0</td>
<td>$2,770,000,000</td>
</tr>
<tr>
<td>Federal FY24 (US House)</td>
<td>115,000,000</td>
<td>880,000,000</td>
<td>995,000,000</td>
</tr>
<tr>
<td>Difference</td>
<td>($2,655,000,000)</td>
<td>$880,000,000</td>
<td>($1,775,000,000)</td>
</tr>
</tbody>
</table>

From FFY2022 through FFY2023, Congress appropriated $2.3 billion in earmarks for clean water ($1.3 billion) and drinking water ($1 billion) projects, reducing SRF appropriations by 43%. The federal capitalization grant to New Jersey dropped 53% ($44.4m).

The FFY2024 budget proposed by the U.S. House of Representatives would make even deeper cuts, earmarking 88% of all projects and reducing SRF funding by 96% ($2.6 billion) from 2021 pre-earmark levels. New Jersey’s federal capitalization grants would be reduced to $2.6 million for the CWSRF and $.7 million for the DWSRF.

Since PF would be practically eliminated, the impact on DACs would be devastating. And there are two other worrisome implications.

**Loan Repayments**
Since the federal capitalization grant is also a source of NJDEP’s 0% loans, the growth in earmarks will reduce the issuance of such loans to DACs.

**Funding Shift:**
From Disadvantaged to Wealthy Communities
Earmarks tend to shift funding that is needed in DACs to wealthier localities that have the resources to pursue water projects on their own. For example, of the $31.1 million in FFY2023 earmarks for DWSRF projects in New Jersey, 43% ($13.3m) were issued to wealthy localities, including allotments averaging $2.8 million to Moorestown, Park Ridge, Montclair, and Fair Lawn whose average MHI of $134,000 is nearly two-thirds higher than the statewide MHI.

As noted in a letter dated July 25, 2023 from the Council on Infrastructure Financing Agencies to the U.S. Senate Appropriations Committee:

"Congress is essentially replacing the fiscally responsible, federally subsidized SRF loan programs with a massive new federal grant program for water infrastructure projects that are selected behind closed doors without any transparency or accountability to the taxpayers. Instead of incentivizing responsible, sustained investment in this critical public health infrastructure, Congress is creating a lottery-like atmosphere that disrupts and delays decisions on financing capital improvement projects in the hopes of “winning” a congressional earmark."
Policy Recommendations
The ten policy recommendations below would expand the impact of the NJWB on DACs in New Jersey, increasing equity and effectiveness. Increasing the equitable distribution of funds ensures that communities with the greatest needs and the least fiscal capacity are first in line to receive assistance.

Formal EPA guidance to states issued in March 2022 aligns with most of these initiatives, including revisiting how DACs are defined and projects are ranked, maximizing set aside activities, proactively identifying vital DAC projects, and pursuing regionalization where appropriate. Nearly all of these recommendations could be implemented without new authorizing legislation.
RECOMMENDATION 1

Redefine “Disadvantaged Communities”

To more accurately gauge local fiscal distress, NJDEP should change its definition of a “disadvantaged community” (DAC) from a primary reliance on median household income to a multi-dimensional tool, such as the NJ Department of Community Affairs’ Municipal Revitalization Index.

Nearly half (24) of all states presently use more than one indicator to define DACs. NJDCA’s Municipal Revitalization Index (MRI) index, which serves as the State’s official measure and ranking of municipal distress, is used to distribute certain “need based” funds to municipalities in the State Budget. As summarized below, it consists of ten factors in five broad categories but yields one composite score. While more robust than using only MHI, it is administratively simple.

While the MHI and MRI systems flag the same municipalities with severe fiscal distress, they produce significantly different results for many other localities. Approximately 20% of existing DACs would not qualify under the MRI, while a similar portion of non-DACs (i.e., MHI exceeds NJDEP’s criteria) exhibit serious distress under the MRI. See examples below. (Note: the lower the rank, the higher the fiscal distress).

<table>
<thead>
<tr>
<th>Economic</th>
<th>MHI</th>
<th>Poverty</th>
<th>Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Children/TANF Rate</td>
<td>SNAP Benefits (%)</td>
<td></td>
</tr>
<tr>
<td>Fiscal</td>
<td>Average Property Tax Rate</td>
<td>Equalized Valuation</td>
<td>Per Capita</td>
</tr>
<tr>
<td>Educational</td>
<td>HS Diploma+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res. Desirability</td>
<td>Population Change</td>
<td>Non-Seasonal Housing</td>
<td>Vacancy Rate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Municipality</th>
<th>County</th>
<th>MHI Score</th>
<th>MRI Score</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Twp</td>
<td>Warren</td>
<td>54</td>
<td>239</td>
<td>185</td>
</tr>
<tr>
<td>Andover Boro</td>
<td>Sussex</td>
<td>96</td>
<td>263</td>
<td>167</td>
</tr>
<tr>
<td>Tuckerton</td>
<td>Ocean</td>
<td>68</td>
<td>200</td>
<td>132</td>
</tr>
<tr>
<td>Swedesboro</td>
<td>Gloucester</td>
<td>218</td>
<td>71</td>
<td>(147)</td>
</tr>
<tr>
<td>Maurice Twp</td>
<td>Cumberland</td>
<td>163</td>
<td>46</td>
<td>(117)</td>
</tr>
<tr>
<td>Glassboro</td>
<td>Gloucester</td>
<td>166</td>
<td>67</td>
<td>(99)</td>
</tr>
</tbody>
</table>

(Note: the lower the rank, the higher the fiscal distress).
The table below compares statistical averages for existing DACs (as classified in New Jersey, based on MHI), alternative DACs (based on MRI), and all municipalities. Since existing DACs are chosen solely on MHI, their average MHI is lower. However, all of the other factors indicate that the alternative DACs are in greater distress. For example, equalized valuation per capita in alternative DACs is 31% less than existing DACs (i.e., residents hold substantially less wealth in property).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Existing DACs (MHI)</th>
<th>Alternative DACs (MRI)</th>
<th>All NJ Municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with SNAP benefits (2019)</td>
<td>6.4%</td>
<td>10.7%</td>
<td>6.1%</td>
</tr>
<tr>
<td>% children on TANF (2020)</td>
<td>0.6%</td>
<td>6.2%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Poverty Rate (2019)</td>
<td>9.5%</td>
<td>10.7%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Median Household Income (2019)</td>
<td>$63,590</td>
<td>$75,159</td>
<td>$85,751</td>
</tr>
<tr>
<td>Unemployment Rate (2019)</td>
<td>3.8%</td>
<td>4.3%</td>
<td>3.5%</td>
</tr>
<tr>
<td>% High School Diploma + (2019)</td>
<td>91.8%</td>
<td>87.3%</td>
<td>92.3%</td>
</tr>
<tr>
<td>Average Property Tax Rate (2017 - 2019)</td>
<td>2.4</td>
<td>3.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Equalized Valuation Per Capita (2019)</td>
<td>$359,640</td>
<td>$249,560</td>
<td>$279,345</td>
</tr>
</tbody>
</table>

Why the MRI Tool is Probably Not Sufficient: The Case of Cape May City

This prominent seashore community, which presently qualifies as a DAC because its MHI of $55,700 (circa 2019) is well below the DAC threshold of $68,600, highlights why even a more multi-dimensional tool such as MRI may require a few additional adjustments to maximize its effectiveness. While Cape May City would qualify for DAC status under both the MHI (49th most needy) and MRI (87th), it has the 24th highest property valuation in New Jersey (i.e., equalized valuation per capita of $901,865), placing it among the state’s most wealthy communities in that respect. MHI does not measure property wealth, including expensive second homes owned by wealthy individuals or the local commercial tax base buoyed by tourism activity (e.g., bed and breakfast properties.) Rather, MHI simply measures income of year-round residents, and a sizable portion of the Cape May City residents may be employed in low-paying, tourism-related service jobs. As a single measure, MHI fails to capture property wealth as a potential funding source.

The two potential solutions below would more fully account for property wealth:

1. **ALTER THE DAC AFFORDABILITY CRITERIA TO EXCLUDE COMMUNITIES WHOSE EQUALIZED PROPERTY VALUE PER CAPITA RANKS IN THE TOP 10% OF THE STATE.**

2. **PRESENTLY, THE MRI INDICATORS THAT GAUGE PROPERTY WEALTH, NAMELY EQUALIZED VALUATION PER CAPITA AND AVERAGE PROPERTY TAX RATE, ARE WEIGHTED AT 0.25, WHILE OTHER MRI INDICATORS, SUCH AS MHI, ARE WEIGHTED AT 1.0. THE WEIGHT OF THE PROPERTY WEALTH INDICATORS SHOULD BE INCREASED TO 1.0.**
Current DAC
Andover Borough

Andover Borough (Sussex County) may also be misclassified as a DAC. An MHI of $65,000 earns it a ranking of 96 based on MHI, while it ranks 252 by MRI. The Borough generally does not have high-earning residents, is losing population (i.e., 8% decrease from 2009 to 2019), and has a high housing vacancy rate (13%). However, the Borough scores low on all poverty indicator metrics, with only 1.6% of residents receiving SNAP benefits, 0% of children on TANF, a 3.6% poverty rate, and a 3.5% unemployment rate. Far from New Jersey’s economic centers, Andover’s economy may function on a different scale, offering more value per dollar and fewer high-paying jobs than much of the state.

Alternative DACs
South Toms River

South Toms River (Ocean County) is not presently considered a DAC due to its MHI of $83,000, ranked 229 in the state, but its MRI ranking is 80. In South Toms River, a large number of people live substantially below the town’s MHI, with 12% of its residents using SNAP benefits, 13% living in poverty, and only 85% holding a high school diploma. The sole use of MHI does not accurately gauge the income distribution across the lower half of the spectrum. In addition, most residents are year-round, meaning there are few families paying property taxes without schooling their children, and the municipality’s low tax valuation per capita ($64,000) does not suggest substantial property wealth that could help fund infrastructure needs. Despite a higher than average MHI, South Toms River may be considered disadvantaged and in need of additional aid.

Glassboro

The Borough of Glassboro (Gloucester County) is not presently considered a DAC due to its MHI of $74,000, ranking 166. However, its MRI ranking (67) indicates a much higher degree of local distress, including a 10% housing vacancy rate, an exceptionally high 24% poverty rate, 12% of residents receiving SNAP benefits, and a low tax valuation per capita of $64,000. Its base population of 23,600 (2022) expands significantly due to Rowan University, whose student enrollment is just shy of 20,000. Though many students commute, they likely comprise a large demographic force. With this large temporary population and a high percentage of lower-value rental units, Glassboro faces several water infrastructure challenges and seems to merit state support.
Other States: Water Affordability Index and Small Communities

New Jersey should adopt DAC-related innovations from other states, including a water affordability index and lowest quintile household income and by expanding funding for small DACs to help strike a better balance versus large water utilities.

**Water Affordability Index**

The affordability criteria in at least 12 other states includes a water affordability index which measures the average per household water/wastewater bill. That result may be combined with a financial capability indicator, such as the MRI tool, to produce a more complete composite score for any community.

Considerable work has already been done on how a water affordability index could work in New Jersey. The 2021 study for Jersey Water Works, “A New Jersey Affordability Methodology and Assessment for Drinking Water and Sewer Utility Costs” (Van Abs, et al.), addresses the question, “What geographic distribution and approximate number of households potentially face affordability issues from water and sewer costs if they receive no financial assistance?” Based on utility rate schedules, household incomes and essential expenses, the study provides a method for assessing how rate decisions and financial support to utilities could change the level of household affordability (i.e., number and percentage of households whose combined water and sewer costs exceed affordability thresholds). Utility costs are based on a “nominal household demand” of 45,000 gallons per year and household disposable income is calculated as the Lowest Quintile Income (LQI, the 20th percentile income level) minus non-discretionary expenses for households at each income level. Three thresholds are identified at which household water bills cause affordability stress. See the example below for Burlington County:

The study includes a spreadsheet model which can be used to apply the methodology to households in areas that have public drinking water and/or public sewer services.

**Large and Small Water Utilities – Striking a Balance**

As noted below from the Drinking Water section of the River Network’s SRF Toolkit, other states have tried to balance the allocation of SRF awards to water utilities but it is tricky:

“About a third of states use the number of people served by a water system within their DAC definition, primarily focusing on small systems that serve 10,000 people or fewer. While small and rural communities often face affordability challenges, not all small systems struggle financially, and many poor urban areas may be excluded using these criteria.”

<table>
<thead>
<tr>
<th>MAX.COMBINED WATER/SEWER COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Quintile Income</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Burlington</td>
</tr>
</tbody>
</table>
Nonetheless, many racially-diverse communities have been adversely affected by historic underinvestment (i.e., following the historical flight of upper-income residents to affluent suburbs), the shift of federal water infrastructure funding from grants to loans in the late 1980s, and the impact of racial housing policies (e.g., redlining). The remaining residents typically could not afford higher water rates, thus critical needs often were not addressed.

The initiatives below could be targeted to small, fiscally-distressed water utilities:

- As implemented in California, Tennessee, and Illinois, create a separate tier for severely disadvantaged small utilities and provide a higher level of assistance.
- PF additive for small water utilities that implement water affordability programs that buffer low-income ratepayers and encourage rate restructuring to increase revenue.
- To encourage requests for smaller-scale projects, Pennsylvania allocated $15 million to expedite staff review, reducing the time between application and award.
- Grants for projects that improve operational or financial capacity through agreements between two or more small systems.

Broadly defined, “gainsharing” is a process that realizes important benefits for each of the major parties involved. In this case, both the NJWB and participating water utilities would benefit from increased efficiency. Water affordability programs support appropriate rate setting while protecting low income customers. Asset management plans rationalize capital investment and avoid crisis management. Administrative regionalization of very small or struggling water systems, or consolidation of neighboring systems, could address affordability concerns while reducing the cost to maintain a state of good repair. (Note: this is not a reference to the water utility privatization, but rather community-driven, locally-determined initiatives.) At least 11 states prioritize such projects when distributing PF including Ohio, which provides discretionary PF and 0% interest loans.
Since the water investment required in New Jersey dwarfs existing resources, and in light of DACs’ inability to pay, an increase in additional subsidization is highly desirable. New Jersey should use state resources to expand the funding pool by $50 million per year.

- **State Appropriation** – Of the NJWB’s existing $60 million state appropriation, $25 million is used to match federal funds ($22 million) and to assist very small communities ($3 million). The remaining $35 million should be distributed as additional PF and state grants to DACs.

- In future IUPs, NJDEP plans to designate $20 million for planning and design PF loans and $15 million for DAC projects flagged by the Technical Assistance program. This recommendation generally embraces that strategy, but assumes that funding for planning and design would be issued as grants to DACs, including those with credit worthiness issues. (See the [State of Michigan’s FY2022 DWSRF IUP](#) for precedent on this approach.)

- **Loan Repayments** – Presently, the amount of annual PF is based on the annual federal capitalization grant, which represents a relatively small portion of the total fund sources supporting the NJWB, and the BIL program, which expires in 2026. While SRF regulations require that states manage cash needs to ensure that the program remains viable in perpetuity, it appears that a modest redirection of loan repayments to increase PF would be permissible. Over time, repayments from new BIL loans issued through FY2026, estimated to exceed $500 million, will offset the impact of this initiative and help sustain an expanded level of project loans. Based on the $152 million in loan repayments in New Jersey’s SFY24 IUP, redirection of 10% would increase PF by $15 million annually.

Combined, the $50 million provided by this proposal would increase PF by 28% over the $181 million currently provided on a recurring basis (i.e., excluding one time ARPA). All planned uses of the SRF’s state appropriation should be clearly detailed in future IUPs.
To ensure equity in NJWB assistance, it is not sufficient to simply refine how DACs are defined. Other policies governing the distribution of PF must also be considered. Based on New Jersey’s “in or out” DAC definition, all DACs have the same status and receive a similar level of subsidy. That is, DACs are not ranked to prioritize the most disadvantaged. Whereas individual projects are ranked on the PPL based on water quality indicators, the relative need for PF should be determined separately. At least eight states (MA, MI, MS, NE, RI, WA, WI, WY) employ a tiered system, weighting several factors to set the PF distributed to different DACs based on relative need. See Wisconsin’s approach below.

State of Wisconsin: Affordability Criteria and Principal Forgiveness Eligibility

An applicant pursuing general PF in Wisconsin must meet the affordability criteria described below, receiving at least 60 points in Tables 1–6:

<table>
<thead>
<tr>
<th>Table 1 Population</th>
<th>Highest points (up to 100) to localities with smallest population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2 MHI %</td>
<td>Municipal MHI as % of statewide MHI (up to 100 points)</td>
</tr>
<tr>
<td>Table 3 Family Poverty</td>
<td>% households at/below 200% of fed poverty level (up to 100 pts)</td>
</tr>
<tr>
<td>Table 4 Population Trend</td>
<td>Localities that project to lose 5%+ population (5 to 15 points)</td>
</tr>
<tr>
<td>Table 5 County Jobless Rate</td>
<td>County rate vs state rate (10 to 25 points)</td>
</tr>
<tr>
<td>Table 6 Lowest Quintile HH</td>
<td>Municipal vs statewide (10 to 20 pts to localities with lowest LQI)</td>
</tr>
</tbody>
</table>

An applicant’s scores from tables 1 through 6 are summed to calculate a value in the table below, which determines the percentage of PF for which the applicant is eligible.

<table>
<thead>
<tr>
<th>Points Points: Tables 1 - 6</th>
<th>Qualified PF Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 59</td>
<td>No principal forgiveness</td>
</tr>
<tr>
<td>60 - 69</td>
<td>10%</td>
</tr>
<tr>
<td>70 - 79</td>
<td>15%</td>
</tr>
<tr>
<td>80 - 94</td>
<td>20%</td>
</tr>
<tr>
<td>95 - 109</td>
<td>25% ...</td>
</tr>
<tr>
<td>250 - 360</td>
<td>65%</td>
</tr>
</tbody>
</table>

For details, see Principal forgiveness | Wisconsin DNR.
RECOMMENDATION 6

“Flat Cap” Alternatives

To increase equity, NJDEP should implement alternatives to the existing “flat caps” on additional subsidization per DAC applicant.

Though the amount of PF available through the NJWB has increased markedly, it pales in comparison to the need within DACs. Most states employ some version of a “flat cap” (regardless of the relative size of the community) primarily to ensure that PF is not concentrated in a few large projects. However, flat caps can work at cross purposes with affordability assessments, particularly for larger systems with expensive water needs.

While there is no “one size fits all” solution, there are alternatives to flat caps that could improve equity. Assuming that Recommendation 5 (Distribute Subsidies More Equitably) is implemented to separately rank PF:

- Gradually distribute PF to DACs over several funding rounds until it is exhausted. For example, if the tiered system determines that a DAC should receive a total of 30% PF, it would receive 10% of project costs in each round until funds are depleted. The chart below assumes a $20 million project, $25 million in available PF, and that PF is exhausted after two rounds. The gradual distribution provides considerably more PF (i.e., $3.5 million, 18%) than a flat cap ($1 million, 5%).

- Waive flat caps in two specific instances:
  1. If the water affordability index noted in Recommendation 2 (Other States: Water Affordability Index and Small Communities) indicates that existing DAC water rates are presently unaffordable based on the household LQI. (As in Recommendation 5, this could be scaled.)
  2. If the PF/loan package requires a water utility to exceed its debt limit, with consideration given to when existing debt will be paid off.

<table>
<thead>
<tr>
<th>Flat Cap of $1M</th>
<th>No Cap - $25M PF, Multiple Rounds (10% per)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Cost</td>
<td>PF</td>
</tr>
<tr>
<td>$20M</td>
<td>$1M (5%)</td>
</tr>
</tbody>
</table>
Generally, the NJ Water Bank supports DAC projects with a mix of PF, 0% interest NJDEP loans, and I-Bank AAA loans. Under NJDEP’s affordability criteria, 0% loans typically fluctuate between 50% and 75% of the overall project cost, with I-Bank market rate loans often providing the difference. For DACs, any increase in the 0% loan portion (and reduction in I-Bank financing) would make the program much more attractive. The proposed increase could be limited (e.g., $15 million per project) during initial implementation. The table below compares current and proposed approaches for a $25 million project.

This proposal would reduce the financing portion derived from I-Bank loans from approximately 40% to 8%, a level that should spark significant additional demand from DACs. Doing so would also reduce the number of projects the Water Bank can fund, as it reduces the I-Bank contribution, but the equity gains could be significant.

<table>
<thead>
<tr>
<th>Example: Increase 0% Loans for DACs (Maximum $15 million/Project)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT</strong></td>
</tr>
<tr>
<td>First $2m</td>
</tr>
<tr>
<td>Next $2m</td>
</tr>
<tr>
<td>Next $6m</td>
</tr>
<tr>
<td>Next $15m</td>
</tr>
<tr>
<td><strong>Total $25m</strong></td>
</tr>
</tbody>
</table>

| **PROPOSED** | **PF** | **NJDEP 0% Loan** | **I-Bank Loan (AAA)** |
| First $2m | $2.0m | NA | NA |
| Next $15m | 0 | $15.0m (100%) | $0 |
| Next $8m | 0 | $6.0m (75%) | $2.0m (25%) |
| **Total $25m** | **$2.0m** | **$21.0m** | **$2.0m** |
Since funding from set aside activities does not need to be repaid, it is another way to address affordability. For eligible projects, set-asides shift the funding mix, increasing the proportion awarded as PF and reducing the loan portion. (Set asides are subtracted from funds that would otherwise be awarded as loans, not the amount for PF.) Two examples:

- **Planning and Design/Engineering Grants** – To assist DACs, Colorado’s DWSRF provides planning grants (e.g., project need and environmental assessments) of up to $10,000 and design and engineering grants up to $300,000 for projects that rank high on the PPL. A 20% match is required, reimbursable upon execution of the loan, and the grants have a duration of one year for planning and 18 months for design.

- **Regionalization Grants** – Presently, New Jersey is served by 542 public community water systems (PCWS, including those serving 500 or fewer customers). In certain instances, either administrative or physical consolidation of systems in a region (depending on whether the PCWS are contiguous) could provide better service at less cost. With lower expenses spread across more customers, the economy of scale could increase capital investment. NJDEP grants would offset upfront costs under three models, none of which involve a sale to a private, investor-owned system:
  - new regional utility (e.g., a multi-jurisdiction or county utility authority);
  - service agreements, mergers or redirection of water/sewer flow; or
  - nonprofit cooperative with a board of local officials.

A 12-county cooperative has been implemented in Illinois (see NonprofitWater.org and EJ Water Trust) and there is active interest in California, Baltimore, and Texas, the latter of which has drafted legislation. Such partnerships are supported by EPA. In each model, state legislation could help maintain local control. Importantly, the SFY2024 State Budget appropriated $2 million to the I-Bank for a Water/Sewer Asset Study that could inform this recommendation.
Many of the state’s most serious environmental challenges exist in its poorest communities, a small number of which are not “credit worthy” (i.e., they are unable to satisfy the criteria for a NJWB loan.) Credit enhancement is presently available through New Jersey’s Municipal Qualified Bond Act program in which State Aid to a municipality is committed to satisfy outstanding debt service payments. This reassures bondholders of repayment. Also, the I-Bank and the State may intercept State Aid after 30 days for any municipality that fails to pay their NJWB loan.

Other states have employed proactive enhancements that New Jersey should consider. Most, if not all, would require authorizing legislation.52

- Commit to the State making the debt service payment regardless of the State Aid balances attributable to the municipality at the time of intercept.
- Provide a statutorily-dedicated, standing State appropriation or a State pledge to pay local debt service if it exceeds the intercept amount.
- Create a bond reserve with part of the NJWB’s existing state appropriation.
- Alter the I-Bank’s credit policy to make limited exceptions for DACs.
- Though less ideal than a permanent State policy solution, forge an impact investing partnership between the State and a nonprofit foundation, with each entity funding loan guarantees to severely-distressed DACs. The I-Bank would administer the agreement, select the borrowers, and divide loan repayments with the foundation.
The success of the SRF program is rooted in the states’ prioritized ranking of project requests. Federal earmarks supersede that process by distributing funds to specific communities based on political concerns. Equity is not a prime consideration. In fact, national studies document over 200 recent cases in which earmarks were issued to affluent communities.\(^5\) In New Jersey, only 35% (i.e., $20.6 million) of the $59.5 million in SRF earmarks appropriated in FFY2023 by Congress benefitted DACs.\(^4\)

And because they are distributed as grants, earmarks reduce SRF funds available for other communities since, unlike loans, there is no repayment back to the program. Finally, since earmarks reduce the federal SRF grants that support set aside activities, they directly reduce assistance that benefits DACs.

On September 14, 2023, the National Governors Association issued a letter of concern on this issue to the U.S. Senate and House Appropriations Committees. It is recommended that the Governor and New Jersey’s congressional delegation:

- urge Congress to restore the SRF’s traditional allocation process next fiscal year;
- publish the relative wealth (e.g., median household income) of each community that receives a future SRF earmark to promote transparency; and
- to help DACs recover lost ground and provide states with greater flexibility:
  - waive the existing maximum limit on additional subsidization for two years;
  - base additional subsidy on total funds available instead of the federal capitalization grant, which furnishes a relatively small portion of SRF funds.
The following issues should be considered for future study and implementation.

- **NJWB Process Improvements**
  Stakeholders suggested the following measures:
  - Finalize the mix of loans and PF as quickly as possible, as this affects net utility costs and therefore decisions on whether a project is possible.
  - Pay for project managers to expedite and monitor progress of DAC projects.
  - Waive NJWB fees on small projects (e.g., less than $1 million) in DACs.55
  - Publish a best practices template for applications, including key steps prior to starting the process and a listing of typical errors.

- **Water Utility Debt Burden**
  Does this prevent DACs from pursuing NJWB aid?

- **Regional Utilities**
  To what extent have awards to regional utilities benefitted DACs in their service area?

- **Transparency**
  NJDEP should report on PF awards (e.g., allocation per utility).

- **DAC Project Scoring**
  Is 80 points sufficient to differentiate DACs in the PPL and should those points be inversely proportional to MHI, as in the state of Florida?

- **SRF Advisory Council**
  To supplement the annual IUP process and secure ongoing input on policy issues relating to DACs, NJDEP should convene and meet regularly with a group of key community advocates and water utility officials.

- **Unused Prior Year Funds**
  To avoid misinterpretation as to the amount of funds available, each IUP should clarify the extent to which “Unused Prior Year Funds” are actually committed to outstanding segments of active projects.
Acknowledgements

New Jersey Future and the Environmental Policy Innovation Center are grateful to the Robert Wood Johnson Foundation for its generous financial support for this project. The views in this report do not reflect those of the Robert Wood Johnson Foundation.

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Special thanks to the following individuals for their critical review of the report:
- Daniel J. Van Abs, Professor of Professional Practice for Water, Science, and the Environment, Department of Human Ecology, SEBS, Rutgers University
- Upmanu Lall, Director, Columbia University Water Center Authority
- Larry Levine, Senior Attorney and Director, Urban Water Infrastructure, Natural Resources Defense Council

A special thank you is also extended to the following individuals who provided key insights into the NJWB program from either a water utility or advocacy perspective:

Jersey Water Works Steering Committee
- Andy Kricun, Managing Director, Moonshot Missions
- Kristin Epstein, Northeast US Lead and Copper Rule Compliance Coordinator, CDM Smith
- Rocco Russomanno, Town Engineer, Harrison
- Patricia Lindsay-Harvay, Commissioner, Willingboro MUA
- Jim Nelson, Jersey City Together
- Mike Furrey, Owner, Agra Environmental and Lab Services
- Rich Calbi, Executive Director, Ridgewood Water
- Nicole Miller, Co-Chair, Newark DIG

- Stephen Marks, Township Administrator, City of Kearny
- Kathy Corcoran, Executive Director, Hackettstown MUA
- Tenisha Malcolm-Witt, Director of Urban Mayors Policy Center, John S. Watson Institute for Urban Policy and Research, Kean University
- Missy Frankel, Project Manager, Camden County Collaborative
- Ryan Krause, Executive Director, South Monmouth Regional Sewerage Authority
- Joel Rosa, Administrative Analyst, City of Perth Amboy
- Yvette Jordan, Co-Chair, Lead Free NJ Advocacy Committee

Additional thanks to the NJDEP and I-Bank for providing suggestions for the technical accuracy of the report. Their involvement does not constitute an endorsement of the report, nor the recommendations presented therein.
ENDNOTES

1. 20th percentile
3. H2Equity Rebuilding A Fair System of Water Services for America, Environmental Policy Innovation Center, 2020 (page 10)
6. Council of Infrastructure Financing Authorities, Status of Leveraging for SRFs
9. Credit rating of BBB approximates that for many DACs.
11. Issuance costs typically include financial underwriters, bond counsel, and rating agency fees, which are shared proportionately among the borrowers on each I-Bank bond sale.
12. Longer repayment terms available for CSO projects and those funded through WIFIA.
13. Credit pooling is particularly helpful for DACs.
16. “Treatment-eligible” recipients implement a process, material, technique, or technology that addresses water or energy efficiency goals; mitigate stormwater runoff; or encourage sustainable projects.
18. No more than 10% of the capitalization grant may be used for any eligible activity.
19. Administrative set aside is the greater of 4%, $400,000, or one-fifth percent of current SRF valuation.
20. The percentages listed for FY21 and FY22 were calculated by NJ Future from data provided by NJDEP.
22. New Jersey’s SFY2024 Intended Use Plan.
23. In SFY23, $300m in ARPA was appropriated for water projects, including $7m for administrative costs.
24. Final Amendments to the Final Drinking Water Intended Use Plan for Federal Fiscal Year 2022 (page 42).
27. In statistics, a probit model is a type of regression where the dependent variable can take only two values (e.g., married or not married). In this study, the two values are “received” or “did not receive” an award.
28. For the methodology, see Appendix A of the report, Assessing the Affordability of Water and Sewer Utility Costs in New Jersey, September, 2018, Dan Van Abs, PhD, Rutgers University and Tim Evans, NJ Future. The model creates utility-level estimates of any variable for which census tract or municipal level estimates are available, computing a weighted average of the values for the municipalities or tracts within the utility’s service area while also accounting for those that are partly inside the service area and partly outside.
29. EPIC’s analysis of New Jersey’s NJWB awards SFY2018 to SFY2022.
31. For more on MCLs, see EPA: national drinking water primary regulations; NJDEP: water quality standards
32. The federal Clean Water Act requires states to develop an “affordability criteria” while the DWSRF refers to the “Disadvantaged Community Criteria” based on the federal Safe Drinking Water Act.
33. For water utilities that serve multiple municipalities, a weighted MHI is calculated. For those that serve more than 10 municipalities, the 10 with the highest populations are considered for the affordability factor.
37. Project Eligibility List (PEL). For an explanation, see SFY2024 NJ Water Bank May Report, pg 5.
New Jersey Future analysis.

39 Of the annual state match. $17 million supports the CWSRF and $5 million supports the DWSRF.

40 To provide permanent funding for TA, a modest new fee of two basis points will be charged on SRF loans.

New Jersey Future’s analysis.

New Jersey Intended Use Plans.

New Jersey Future analysis.

TANF: Temporary Assistance for Needy Families; SNAP: Supplemental Assistance Nutrition Program. Both are federally-funded programs.

New Jersey Future’s analysis.

New Jersey Future’s analysis.

Cape May’s MHI increased dramatically in recent years, from $55,700 in 2019, to $64,330 in 2020 and $71,875 as of 2021, possibly due to Covid-related relocations to second homes which became permanent.

20th percentile

New Jersey Future’s analysis.

49 See also the State of PA’s approach, noting that there are pros and cons to basing water affordability on the relationship of water rates to a single measure (i.e., MHI).

50 Research into this proposal is ongoing. See also DWSRF 40 CFR Section 35.3500 and CWSRF 40 CFR section 35.3115.

51 Currently, 100% NJDEP loans may be issued to localities under State financial supervision and oversight pursuant to the “Local Government Supervision Act (1947),” P.L.1947, c.151 (C.52:27BB-1 et seq.)

52 Research into this proposal is ongoing. See also DWSRF 40 CFR Section 35.3500 and CWSRF 40 CFR section 35.3115.

53 EPIC Letter to US Office of Management and Budget March 6, 2023; EPIC Blog: "Adequate and Stable Base Funding is Critical for the Longevity of SRF Programs".

54 Based on median household income for 2019. See also “States Lose Federal Water Funds as Lawmakers Redirect Money to Pet Projects”, Washington Post, July 24, 2023.

55 Presently, NJDEP fees are waived for PF and Nano (very small sized) projects.
NEW JERSEY FUTURE 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. New Jersey Future does this through original research, innovative policy development, coalition building, advocacy, and hands-on strategic assistance. Embracing differences and advancing fairness is central to New Jersey Future’s mission and operations. New Jersey Future is firmly committed to furthering justice, equity, diversity, and inclusion in its programs, internal operations, and external communications.

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