

Appendix D: Delaware River Basin State Revolving Fund Affordability Criteria

PENNVEST Clean Water and Drinking Water Disadvantaged Community and Affordability Criteria

PENNVEST utilizes a financial capability analysis that compares various community specific demographic data to similarly situated communities across the Commonwealth to determine a percent of the community's adjusted median household income (MHI) that should be available to pay for water service. The amount that should be available to pay for water service by residential customers will range from 0.5 to 1.5 percent of the community's adjusted MHI dependent upon the specific socio-economic factors that are provided by the Pennsylvania DCED.

Metrics used:

- Median Household Income – for this factor, the most recent Census data is updated by changes in the Consumer Price Index to get an estimate of the current income level
- the percentage of the population over age 64
- the percentage of the population below the poverty line
- the rate of population change in the community between census data collection
- Department of Community and Economic Development (DCED) Early Warning System Measure used in the Financially Distressed Municipalities Matching Assistance Program

All these measures are used together to construct a “target percentage” for an applicant community (defined by the utility service area served by the project). This is the percentage of annual income that the users of a project are reasonably expected to be able to pay for either drinking water, wastewater, or stormwater service. This percentage is constrained to be between one and two percent of the adjusted median household income. The relationships between each of the above factors and an applicant's target percentage are:

- Median household income – direct relationship (the lower is median household income, the lower is the target percentage)
- The percentage of the population over age 64 – inverse relationship (the higher is the percentage of the population over age 64, the lower is the target percentage)
- The percentage of the population below the poverty level – inverse relationship (the higher is the percentage of the population below the poverty line, the lower is the target percentage)
- The rate of population change between the most recent census – direct relationship (if population declined the target percentage is reduced)
- Early Warning System measure of economic distress – inverse relationship (the more distressed a community is, the lower is the target percentage)

Once calculated, the target percentage is then used to derive the target user rate for an applicant community. This target rate is simply the product derived from multiplying the target percentage by median household income. It is this target rate that PENNVEST tries to achieve by manipulating the terms of the financial assistance offered to applicants. In doing this the target user rate is compared with the actual rate that project customers will have to pay after the project being funded by PENNVEST is completed. This estimate considers all costs borne by these users, not just those associated with the project PENNVEST is funding.

Additionally, any community identified as disadvantaged using the Council on Environmental Quality (CEQ) Climate and Economic Justice Screening Tool or located in a Pennsylvania defined Environmental Justice Area will be considered a disadvantaged system for purposes of applications relating to design

and engineering projects with the financial capability analysis being performed on the service area impacted by the proposed project instead of system wide.

Notably, Pennvest's authorizing statute includes stipulations regarding the distribution of grants, which are related to affordability and distribution of principal forgiveness. According to § 963.14., Grants:

“(a) A grant will be considered only when the Board determines that the financial condition of the recipient indicates that repayment of a loan is unlikely and that the recipient will not be able to proceed with the project without a grant. If the Board decides to award a grant, the Board will attempt to mix the grant funds with loan funds.

(b) In determining whether a grant should be offered, and, if so, what proportion of the financial assistance offered should constitute a grant and what portion should constitute a loan, the Board will consider the ultimate effect that financing a project's costs will have on the rates that customers will have to pay. A rate increase will be compared with local incomes and ability to pay in assessing the need for a grant.”

NJ I-Bank Affordability Criteria

In New Jersey, those applicants that meet either of the following two criteria are considered to have satisfied the State's Affordability Criteria:

- Project affordability score of 80 or less, or
- The project is eligible to receive 80 Environmental Justice Economic Overburdened Community Criteria ranking points.

Project Affordability Score = Project Median Household Income (MHI) Factor – Project Unemployment (UE) Factor – Project Population Trend (PT) Factor

Project MHI Factor = $100 \times (\text{Project MHI} / \text{State MHI})$ (rounded down to the nearest integer)

Project UE Factor = 1 if Project Unemployment Rate > State Unemployment Rate

Project UE Factor = 0 if Project Unemployment Rate < State Unemployment Rate

Project PT Factor = 1 if Project Population Trend < State Population Trend

Project PT Factor = 0 if Project Population Trend > State Population Trend

Project Unemployment Rate is equal to weighted unemployment rate of the project service area using service area populations and county unemployment data. Calculation is similar to weighted MHI example below.

Project Population Trend is equal to the weighted Population Trend for the project service area using service area populations and municipal population trend data. Calculation is similar to weighted MHI example below.

Consideration will be given to for projects with a qualifying service area population within a municipality that does not meet the CWSRF Affordability Criteria.

Delaware Clean Water and Drinking Water SRF Affordability and Disadvantaged Community Criteria

Metrics used:

- Single wastewater or drinking water rate > 1.5% of MHI OR combined rate > 3.0% of MHI
- Communities with $\geq 3.4\%$ Unemployed Population ≥ 16 years in Civilian Labor Force
- Communities with $\geq 12.1\%$ household vacancy
- Communities $\geq 30.9\%$ of population living under 200% of the poverty line

Or, if the applicant is deemed disadvantaged by the Climate and Economic Justice Screening Tool

<https://screeningtool.geoplatform.gov/en/>

Income Data – 1.5 percent of MHI will be considered affordable for a single wastewater or drinking water residential user rates; 3.0 percent of MHI will be considered affordable for combined wastewater and drinking water residential user rates. Delaware’s affordability criteria accounts for existing system costs relative to Operations and Maintenance (O&M) and Capital, as well as proposed project O&M and Capital costs as a function of MHI (1.5 percent water or wastewater, 3.0 percent if both services are provided) for the project area. MHI is based on the most recent census data for the municipality or county. CWSRF loan applicants whose MHI is not representative of the census data may provide documentation in order to obtain principal forgiveness or additional subsidization. Documentation will be in the form of a representative income survey of the majority of the residents of the project area.

Unemployment Data – Nonpayment of residential wastewater and drinking water utility bills are normally directly associated with insufficient income and unemployment. Communities with greater than or equal to 3.4% unemployed population greater than or equal to 16 years in civilian labor force will be eligible for additional subsidy. Based on the percent above the threshold, additional subsidy may be provided to the extent available.

Population Trends – Wastewater utilities can be negatively impacted by decreasing population in relation to fixed assets and expenses that were designed/sized to service a larger customer base. Communities with greater than or equal to 12.1% vacant households would be eligible for additional subsidy. Based on the percent above the threshold, additional subsidy may be provided to the extent available.

If considered disadvantaged under this method, additional subsidy consideration may be given on a percentage basis in concert with any wastewater rate increase (to the extend available).

For projects that may seem unaffordable but are actually not cost effective, the CWSRF will review projects for the cost per EDU. Projects in which the cost per EDU is greater than \$25,000 will be subject to additional analysis. This may include: income surveys, value engineering, detailed budget review, and/or capital contribution from the borrower.

Comparison of Delaware River Basin State Revolving Fund Affordability Criteria to the March 2022 Environmental Protection Agency (EPA) Guidance Memo

In March 2022, the EPA issued a guidance memo regarding the increased water infrastructure funding in the Infrastructure Investment and Jobs Act (IIJA) that state revolving fund programs were receiving. In accordance with the goals of the IIJA and the Biden Administration's Justice 40 initiative, this funding was meant to provide significant resources to environmental justice, underserved and under-resourced communities that had not previously benefited from SRF support. The mechanism identified to facilitated this result was increased subsidies for specific kinds of projects and for communities experiencing water affordability challenges. Both the Safe Drinking Water Act and the Clean Water Act include provisions to address affordability. The Safe Drinking Water Act, requires states to define "disadvantaged communities." Given the focus of these case studies on Clean Water Act obligations, it provides that:

A State shall establish affordability criteria to assist in identifying municipalities that would experience a significant hardship raising the revenue necessary to finance a project or activity eligible for assistance under subsection (c)(1) if additional subsidization is not provided." Section 603(i)(2).

Key points from the memo pertaining to subsidy and affordability include:

For the CWSRF, the BIL mandates that 49% of funds provided through the CWSRF General Supplemental Funding must be provided as grants and forgivable loans to the following assistance recipients or project types:

- *Municipalities that meet the state's affordability criteria.*
- *Municipalities that do not meet the state's affordability criteria but seek additional subsidization to benefit individual ratepayers in the residential user rate class.*
- *Entities that implement a process, material, technique, or technology that addresses water or energy efficiency goals; mitigates stormwater runoff; or encourages sustainable project planning, design, and construction.*

Throughout the five years of BIL implementation, EPA expects states to:

- *Evaluate and revise, as needed, the DWSRF disadvantaged community definition and CWSRF affordability criteria. This definition and these criteria should capture both urban and rural disadvantaged communities and include criteria that are consistent with the appropriate statute.*

Examples of criteria within affordability and disadvantaged community definitions that can be barriers include:

- *Definitions solely based or contingent upon an "unaffordable" rate. Some state rate considerations serve to assist in affordability determinations, but others do so in a way that can be a barrier to systems with low capacity and a poor rate structure.*

- *Definitions that include a low cap on additional subsidy (e.g., 30%) are a barrier to communities that need a higher amount of additional subsidization to be able to take the loan.*
- *Definitions based solely on population or definitions that include population as a determining factor.*

The EPA guidance included some examples for SRF programs to consider when deciding on disadvantaged community definitions and affordability criteria. These examples included:

Income:

- *Community MHI is less than 80% of State MHI*
- *Communities with \$25,766 or less upper limit of Lowest Quintile Income*
- *Communities with $\geq 30.9\%$ Population Living Under 200% of Poverty Level*
- *Community with census tracts that have a poverty rate greater than or equal to 20%*

Unemployment Data:

- *Communities with $\geq 3.4\%$ Unemployed Population ≥ 16 years in Civilian Labor Force*

Population Trends:

- *Communities with $\geq 12.1\%$ Vacant Households*

Other Data Determined Relevant by the State:

- *Community in a county with a [Social Vulnerability Index](#) score higher than 0.8036*
- *Combined sewer and drinking water costs are greater than 2% of the 20th percentile household income (i.e., the Lowest Quintile of Income for the Service Area)*
- *Communities with 10% of failing decentralized systems*
- *Communities with $\geq 11.7\%$ Population Receiving Food Stamps/SNAP Benefits*
- *Communities with Lagoon systems not achieving water quality standards*

The New Jersey Infrastructure Bank (NJ I-Bank) has three metrics of affordability a community must meet that consider median household income in reference to the state median household income, county-wide unemployment, and population trend. These metrics are well-defined and can be compared to metrics included in the latest EPA guidance memo.

Delaware also has three metrics of affordability a community must meet that consider percentage of MHI relative to service rate, unemployment, and household vacancy. The unemployment and household vacancy (population) metrics are the exact metrics suggested by EPA. Delaware also includes two additional criteria, and if either of them is met, that community qualifies for subsidization including the Council on Environmental Quality's Climate and Economic Justice screening tool.

PENNVEST has a complicated affordability test that calculates a target user rate for each applicant that is between one and two percent of a community's median household income that they should be expected to pay for either drinking water, wastewater, and/or stormwater service. PENNVEST then estimates the actual user rate that the applicant will experience after the proposed project is done. If that rate exceeds the target rate they will reduce the interest rate on the loan, substitute some principal

forgiveness or grant funds for loan funds, or extend the repayment terms. This system differs from the EPA guidance. There is an additional metric that allowing that “any community identified as disadvantaged using the Council on Environmental Quality (CEQ) Climate and Economic Justice Screening Tool or located in a Pennsylvania defined Environmental Justice Area will be considered a disadvantaged system for purposes of applications relating to design and engineering projects with the financial capability analysis being performed on the service area impacted by the proposed project instead of system wide.” (PENNVEST CWSRF IUP at 16).