

IUP 2022
Attachment V
System Criteria and Ranking Methodology Summary
Revised October 2013, August 2017-Hardship Disadvantage,
Revised May 2019, Americas Water Infrastructure Act of 2018 (AWIA)
Revised January 2023, Disadvantaged Communities
and Asset Management

System Criteria and Ranking Methodology

The Priority System sets priorities for the proposed projects according to their capacity to achieve and or to maintain compliance with the SDWA requirements and protection of the public health. Priority will be given to water systems in non-compliance with the surface water treatment requirements, and those incurring acute, primary or action level violations as defined in the SDWA. Addressing these problems will protect the public health of the water users and will bring water systems into compliance with the SDWA.

The next priority has been given to System that address the most serious risks to public health therefore the highest priority will be given to acute public health risks, particularly those related to microbiological organism. Situations that pose chronic and longer-term risks to consumers, such as organic chemical contamination, is also considered. The scoring criteria also consider issues that are related to infrastructure upgrading or replacement correction of a problem or improvements if included on the projects scope.

DOH will rank all eligible projects according to the total number of points each project receives and will subsequently place the projects on the Project Priority List according to their ranking. The project with the higher number of points ranks above those with lesser points. For project which include multiple elements as listed in priority category A below, projects will be separately listed by the elements involved, and priority points will be assigned for each element.

Points are assigned for each of the seven priority categories discussed below, as applicable:

A. Compliance with Safe Drinking Water Act (SDWA) DWSRF funds are to be utilized to address contamination problems through compliance requirements. Projects related to systems and or systems which utilize surface water or ground water under the direct influence of surface water, that are not in compliance with the surface water treatment requirements or have had any acute violations (e.g., fecal coliform or nitrates) and have been issued an administrative order, directive or recommendation by DOH requiring the correction of any noncompliance of its treatment facilities to address an immediate public health threat will be scored according the following:

* Maximum Contaminant Level (MCL)/Treatment Technique Violations (more than one item may apply):

1. Microbiological

a) Surface Water Treatment Rule

- i Filtration and/or groundwater wells, interconnection and or consolidation of water systems to comply with the SDWA

100 pts

- ii Filtration Performance (NTU compliance)

50 pts

- iii CT Disinfection 30 pts
 - b) E. Coli 80 pts
 - c) Total Coliform 40 pts
 - d) Cryptosporidium 100 pts
 - 2. Organics
 - a. Organics chemical (SOC/VOC) and disinfection by-products 40 pts
 - 3. Maximum Contaminant Level (MCL) violations (except acute violations) or exceedance of action levels Lead and Copper/Corrosion (mandated) 30 pts
 - 4. Radiological 20 pts
 - 5. Inorganic/Physical
 - a) Nitrates 50 pts
 - b) Other health-related inorganic 25 pts

B. Public Health Risk - For projects which eliminate critical or chronic health hazard or potential health hazard or provide protection against significant health hazard, documentation must be provided by the applicant to determine if the public health problem exists. More than one of the following may apply for rehabilitation, replaced or repaired appurtenances such as:

- 1. Inadequate Source Capacity 50 pts
- 2. Existing transmission or distribution mains to prevent contamination caused by leaks or breaks in the pipe or improve water measures to maintain safe levels 25 pts
- 3. Existing pump stations or finished water storage (uncovered if applicable) 25 pts
- 4. New finished water storage facilities that are needed to maintain pressure in the system and/or prevent contamination 25 pts

C. System in needs (Reliability Dependability) - Projects related to replacement or major rehabilitation of the existing treatment facilities or systems components to meet the design standards sanitary code. One of the following will apply for:

- 1. Complete replacement or major rehabilitation of the existing surface water filtration facility that has exceeded design life and/or does not meet the design standards in the current edition of PRASA's Design Standards. In lieu of filtration, installation of groundwater wells, and/or interconnection with, or purchase from adjacent water system 25 pts
- 2. Upgrade, replace and/or install major vulnerable system components to meet the design standards in the current edition PRASA's Design Standards. Any of the following apply.
 - a. A principal component integral to an existing filtration process such a sedimentation, flocculation, filtration, chemical feed, of backwashing (can only receive points for Criteria C.2a or C.1.) 10 pts
 - b. Pump stations 10 pts
 - c. Existing wells 10 pts

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| d. Existing disinfection system for a groundwater/
surface water supply | 25 pts |
| e. Transmission main | 10 pts |
| f. Finished water or distribution storage | 10 pts |
| g. Other water treatment systems (or replacement of
source instead of treatment) | 10 pts |
| 3. Aged mains and appurtenances | 5 pts |
| 4. Redundancy of critical components (pumps, valves
chemical feed-systems, etc. | 5 pts |
| 5. Asbestos main replacement | 5 pts |
| 6. Control/automation for operational efficiency
(computerization, control valves, metering Laboratory
upgrading) | 5 pts |
| 7. Inadequate source capacity, which is not a public health
hazard can only receive points for Criteria B1 or C7 | 5 pts |

D. Governmental Needs (more than one may apply)

Additional points will be assigned to a project on the basis of state or local governmental needs, policies, and/or requirements.

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| 1. Development of a water system or extending existing system
to service contaminated or insufficient yielding private wells
at existing residential housing (new systems are not eligible
for points under Criteria A, B or C2) | 25 pts |
| 2. Consolidation of water systems (can include improving
technical, managerial and financial capacity development) | 25 pts |
| 3. System depend on a Sole Source Aquifer for its source.
(These points can only be obtained if system scores points
from Criterion A, B or C) | 10 pts |
| 4. A project that has received written commitment of
funding from another source (eg co-funded with
Clean Water SRF, Rural Development, HUD, etc.) | 10 pts |
| 5. Proposes operational changes that improve and insure
adequate technical, managerial and financial capacity
of the system in order to insure compliance (guidelines
to be developed) | 5 pts |

E. Other Factors

As a tie breaker, projects will be assigned points based in the population of the water system service area. Priority points will be calculated as the population served by the water system divided by 100,000, expressed as a decimal and added to the total accumulated.

F. Special Priorities – Within this criterion, the following is taken in consideration where:

1. Any project identified as a result of the Strategy identified above and or CPE will receive additional priority points that will be added to the total accumulated by the Project, as indicated below. Projects identified under the

Consent Decree between DOH and PRASA will automatically receive the highest priority awarded to the ranked projects for the corresponding fiscal year list, plus one (1) point, with the exception of emergency projects as determined by DOH.

- a. Strategy 35 points
- b. CPE 20 points
- c. Consent Decree (X+1 where X=highest priority) ___ points

2. Emergencies - An emergency is a catastrophic situation that results in an imminent threat to public health. The determination of when an emergency exists will be made by the DOH. Projects designed to address emergencies will receive the highest priority ranking. Imminent threats to public health include:

- o situations that result in the unavailability of potable drinking water for an extended period of time or
- o evidence of a high incidence of water transmissible diseases
- o evidence of presence of Regulated Contaminants in Drinking Water

G. Affordability

This Criterion is to assist systems most in need on a household basis. The points awarded for this Category are documented by the latest census information attached. For those systems described or identified as disadvantaged systems the following priority points will be awarded based on the Median Household Income Levels (MHIL). Median household Income Levels (MHIL) will be used to assign points for affordability:

<u>Median Household Income (MHI)</u>	<u>Points</u>
less than \$9,813	30
between \$9,813 and \$14,719	15
between \$14,720 and \$19,626	5
above \$19,626	0

The information required for hardship determination includes:

- Existing population of the project service area.
- Number of Dwelling to be served, institutional users, and the basis on which they were calculated.
- Existing annual debt service for the system.
- Existing annual operation and maintenance (O&M) costs.
- Estimated project costs.
- Estimated O&M costs based upon completion of this project.
- Any other sources of funding anticipated for this project, including the amount, type of funding (loan or grant), and if a loan, its interest rate, term and annual debt payment.

Projects must meet the definition of hardship under this criteria. The determination will be made as follows:

- Projects may not be segmented in order to qualify for hardship assistance.
- Refinancing is eligible through the regular subsidized DWSRF Program if

qualified or eligible as required and stated in the DWSRF. However, hardship financial assistance is only available for new drinking water projects for which the notice for construction to proceed was given on or after July 1, 1993.

- The applicant for a DWSRF hardship loan must demonstrate that it can repay its debt obligation, has a satisfactory O&M procedure and can comply with DOH/DWSRF Capacity Development Program.
- Projects that are determined eligible for hardship assistance, will receive a written confirmation of eligibility.
- Confirmation of funding availability will be valid for two consecutive annual federal funding cycles, provided that the projected service charge does not change significantly.
- Confirmation of funding availability may be withdrawn if: the applicant fails to demonstrate satisfactory progress towards project Implementation; the information on which the determination was made changes prior to loan closing; or the applicant fails to demonstrate that it can repay the loan.

For the application of this criterion, DOH will proceed as follows:

- The initial range will be established with a minimum of 12 per cent and a maximum of 35 per cent. For the corresponding fiscal year the minimum and the maximum dollar amounts will be established.
- The funds will be distributed among the projects that satisfies the hardship criteria. Funds will be distributed starting with the project with the highest priority and until funds or the corresponding per cent is totally assigned.
- The priority points under this criterion will be those awarded based on the Median Household Income (MHI) (i.e.: 30, 15, 5, 0 points awarded) to the qualifying projects.
- Additional points will be awarded the project based on population: to the points obtained based on the MHI,
 - ❖ **one (1) point will be add** to the priority obtained by project with the lowest population; and
 - ❖ subsequently the number **will increase by one (1) point and added** to the project as they increase in population.

To the extent that there are sufficient applications for loans to disadvantage communities this per cent will be no less than 12 but not greater than 35. If there are no loan applications for disadvantage communities, the minimum 6 per cent will not be established.

H. Green Portion (only for Green Projects)

The fiscal year (FY) 2010 Appropriation Law (P.L. 111-88) includes specific goals and eligibilities for green infrastructure, water and energy efficient improvements, and environmentally innovative activities. Green projects could enable utilities to take savings derived from reducing water losses and energy consumption and use them for public health and environmental enhancement projects. Additionally, green projects will help the water sector improve the quality of water services without putting additional strain on the energy grid, and by reducing the volume of water loss every year.

The following process was established for the selection for funding of those eligible GPR projects based on the technical aspects of the DWSRF green projects:

1. Water efficiency
 - a. Replacement or rehabilitation of distribution lines to reduce water loss and prevent water main breaks (Business Case (BC) required) 10 pts.
 - b. Retrofit, replace, purchase and/or install water efficient fixtures, fittings, equipment 5 pts.
 - c. Purchase or install water meters, automatic meter reading equipment and systems, and pipe 5 pts.
 - d. Storage tank replacement/rehabilitation to reduce water loss (Business Case (BC) required) (Per 1MG) 5 pts.
 - e. Installing Pressure Reduced Valves (PRV) 5 pts.

2. Energy efficiency
 - a. Replacement or rehabilitation of distribution lines (Business Case (BC) required) 15 pts.
 - b. Energy efficient retrofits, upgrades or new pumping systems and treatment processes (including variable frequency drives (Business Case (BC) required) 5 pts.
 - c. Works that cost effectively eliminate: pumps, pump stations, filtrations plants, well. (Business Case (Business Case (BC) required) 10pts.
 - d. Producing clean power for treatment systems on site (wind, solar, hydroelectric, geothermal, biogas power) 5 pts.
 - e. Automated and remote control systems (SCADA) that achieve substantial energy savings (Business Case (BC) required) 5 pts.

3. Environmental Innovative Activities
 - a. Enables utility to adapt to impacts of global climate change 5 pts.
 - b. Total Water Management project where life cycle costs are minimized 10 pts.

4. Green Infrastructure- to manage water resources in a sustainable way
 - a. Implementation of wet weather management systems for utilities building and parking areas (porous pavement, bio-retention, trees, green roofs, other practices that mimic natural hydrology) 5 pts.

For the application of this criterion, DOH will request qualified projects. If there is not sufficient qualified projects or components already in the IUP that total the per cent of the fiscal year funds available, DOH agrees to conduct additional solicitation, in order to satisfy the per cent requirement. Amendment to the project list will be undertaken to include any such qualified projects identified, and thus provide not less than the per cent of such funds available to such projects on its amended project list. In accordance with

the Procedures, DOH will proceed, if necessary, to submit a waiver request to EPA if there are not sufficient qualified projects or components on the amended project list after such additional solicitation is undertaken. Notwithstanding GPR projects are identified as GPR, and are ranked along with all eligible projects on the priority list, these will be selected for funding until the per cent requirement is met but in a separate process for the GPR projects only which was established by DOH taking into consideration the green technical nature of the project .

I. Eligibility Criteria for “Mandatory Congressional” Additional Subsidy

There are two additional subsidies that DOH will be considering/establishing: “Mandatory Congressional” and “Limited 35% Subsidy/Disadvantaged Community”. Under this criterion only the projects that comply with the requirements of the Mandatory Congressional Subsidy will receive points.

The recipient of the grant must identify projects within at least one of the following qualifying categories in order to receive points under the additional **mandatory congressional subsidy criterion**:

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| a) projects that will eliminate or consolidate small system | 3 points |
| b) projects that support sustainable systems and help build or maintain the technical, financial and managerial capacity of the recipient | 2 points |
| c) systems related to communities or serving directly a community that could not otherwise afford the DWSRF loan including disadvantaged communities as defined by the Commonwealth | 1 point |

When applicable, if the Act provides for a range in the per cent to be established, and if there are more projects that could be identified under one or more of the above mentioned categories, for each additional remaining category the percent will increase by 5%.

The subsidy will be distributed until the subsidized amount is completely used and among the eligible projects, as follows:

- to project(s) by priority order and the qualifying category and until the subsidized amount is completely used.

Please note that, notwithstanding the distributed amount by the above priorities the subsidized amount could be re-awarded due to unforeseen circumstances (i.e. projects delayed, among others). The re-award may be in any of the following manners and until the subsidized amount is used:

- to project(s) by priority order and the qualifying category,
- directly to the project(s) identified within the qualifying categories,
- the project(s) first received and ready to go,
- the most expensive project(s).

J. Asset management considerations to improve the systems general performance

1. What is the current state of the system assets?
 - b. (less than ten years) New 1 point
 - c. (more than 10) old 2 points
 - d. (More than 20) very old 3 points
 - e. More than 40 obsolete 4 points

2. Does the system have an inventory of assets?
 - a. Yes 10 points
 - b. No 0 points

3. Does the system have an asset management plan?
 - a. Yes 50 points
 - b. No 0 points

What and where are your assets (infrastructure particularly) define				
How many they are?	Name them	Which are critical for the operation	Rank them (a,b,c,d,e)	Value them