

DWSRF Guidance Document Number 13
Annual Operation and Maintenance Costs, Equivalent Units, and Existing Debt

Three primary elements in determining a loan term and interest rate are annual operation and maintenance costs, equivalent units, and existing debt.

A. Operation and Maintenance Costs Estimate

- (1) The DWSRF Project Specialist will use the following standard O&M Allowance Table to establish O&M costs.

System Size (EUs)	O&M Allowance (Cost/EU)
15 - 200	\$200
200 - 1,000	\$190
1,000 - 5,000	\$200 - (.01*EUs)
> 5,000	\$150

- (2) If actual O&M costs exceed the standard allowance, the water system can provide documentation that clearly details higher costs and, if approved, the higher costs will be used.
- (a) The Water System must provide actual O&M costs for the previous two years and projected expenditures for the current year in the construction loan application.
- (b) The difference between projected annual expenditures after project completion and past and current expenditures should be explained.
- (3) Allowable Costs
- (a) Salaries, wages, taxes, accounting and auditing fees, legal fees, interest, utilities, gasoline, oil and fuel, insurance, repairs and maintenance, supplies, chemicals, office supplies and printing are examples of allowable costs.
- (b) Miscellaneous expenses should be less than 2% of the total annual O&M cost.
- (c) Prorated cost estimates for replacement of equipment and short term maintenance that will be required in fewer than 10 years (e.g., pump replacement, tank painting, etc.) may be included in operation and maintenance costs. These costs should be justified by projected life and maintenance schedules recommended by manufacturers and suppliers.
- (d) Funds for capital improvements (e.g., water main replacement, storage tank

- (e) replacement, etc.) will not be included in O&M cost estimates for determining interest rates.

(4) Review and Approval

- (a) DWSRF Program Specialist is responsible for initial review and recommendation.
- (b) DWSRF Program Specialist is responsible for coordinating negotiations/consultation with applicant and WSD staff as required.
- (c) DWSRF Program Manager makes final determination on allowable O&M costs with approval of reduced loan interest rates.

(5) O&M Cost Determination Date

- (a) Final determination of O&M costs will occur at the time the construction loan application is approved by the WSD.
- (b) There will be no adjustment of this estimate following project completion and actual operation of the facilities.

B. Equivalent Unit (EU) Determinations

- (1) The number of residential service connections shall be determined. Each independent living unit served by the water system must be counted as one unit. This number may be different than the number of customers, water meters, or service lines. Examples are: 1.) a duplex is two units, 2.) a house with an apartment would be two units, and 3.) an apartment building with ten apartments would be 10 units.
- (2) The number of commercial, industrial, institutional and other connections shall be determined.
- (3) The annual water use of the commercial, industrial, institutional, and other non-residential users shall be determined from existing data or estimated (refer to the WSR, Appendix A, Table A2-1, Unitized Average Day Flows). Water use information will be used when available for customers with meters and estimates made for non-metered customers. The estimate is to be made for projected future use following project completion and it may not be appropriate to use data from any one specific year. The engineer is expected to justify the estimate of non-residential water use.
- (4) The annual water use determined under item 3 above shall be divided by 76,650 gallons per year to determine the number of commercial, industrial, institutional and other equivalent units. The 76,650 gallons per year is based on 70 gallons per day per person and an average 3 person household unit.
- (5) The number of equivalent units is the sum of numbers 1 and 4 above (residential service connections plus non-residential water use equivalent units).
- (6) In no instance shall the number of equivalent units be less than the total number of service connections (residential plus all other connections).
- (7) It is expected that the procedures outlined above will not be appropriate for all loan applications. The intent is to determine the number of independent living units served by

the water system and add the number of equivalent units for other water uses. The Water Supply Division will determine if the above procedures require modifications to provide an equitable result. The Water Supply Division makes the final determination on the number of equivalent units to use in making loan interest rate and term determinations.

C. Prior Drinking Water Project Debt

- (1) Existing water system debt is limited to annual debt payments for prior water system improvement projects (documentation will be required) and will not include debt accumulated for the current project.
- (2) Debt incurred by the purchase of the water system by a new owner will be evaluated on a case by case basis. The purchase must be part of the most cost effective solution to correcting a public health or compliance problem and the purchase price must be fair and reasonable. Impact on long term financial, managerial and technical capability will also be a determination.
- (3) The impact of existing debt on user costs over the term of the DWSRF loan will be evaluated to determine the appropriate dollar amount to include in projected household user costs. The proposed amount will be discussed with the applicant prior to making a final determination. The final determination will be made by the DWSRF Program Manager based on recommendations from FED.

Honorable Jim Douglas, Governor George Crombie, ANR Secretary Jeffrey Wennberg, DEC Commissioner

This guidance and related environmental information are available electronically via the internet. For information visit us through the Vermont Homepage at <http://www.vermont.gov> or visit VT WSD directly at <http://www.vermontdrinkingwater.org>

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