

**DWSRF Guidance Document Number 9
Engineering Allowance for DWSRF Projects**

- I) All professional services contracts require DEC review and approval prior to reimbursement as eligible loan costs. Applicants are strongly encouraged to consider proposals from more than one consultant prior to consultant selection, which should not be based primarily on cost. The WSD offers water systems assistance with developing RFPs for engineering services. The following practice is followed in evaluating and approving consultant fees for DWSRF projects. Unless otherwise noted, this guidance document focuses specifically on engineering services since they are the predominant type of professional services provided and paid for through the DWSRF (other typical professional services covered by the DWSRF include archeological and hydrogeological services).
- A. Consultants/applicants are requested to include a detailed level-of-effort summary with each engineering services agreement submitted for review.
- B. Planning and Final Design Engineering Services Agreements are reviewed by the WSD. The engineering fees are compared to the curve allowance (see the revised fee allowance tables below). In cases where the fees are less than the allowance, the level-of-effort review will be minimal unless a more detailed review is requested by the loan applicant. When the curve is exceeded, a more detailed review will be conducted. If the WSD is satisfied with the necessity of all tasks and the amount of effort involved, the fee will be approved. If, however, the WSD is not satisfied with the services to be provided and/or the effort involved, the applicant will be so advised. The WSD will consult with the applicant on the services and effort to be provided. In cases where an impasse is reached, the WSD will make a determination and an engineering allowance will be established. The WSD will consult with FED staff as appropriate during review and negotiations.
- 1) The DWSRF Program Specialist or Project Development Specialist manages the review of professional service agreements for the WSD.
 - 2) Applicants are advised to submit *draft* professional service agreements to the DWSRF Program Specialist or Project Development Specialist. Applicants are also (at the time of the submittal) advised of the following:
 - a) Consultants must have a minimum of \$250,000 of professional liability insurance.
 - b) Agreements with consultant liability limits will not be approved.
 - c) Agreements must include a governing laws provision noting that the laws of the State of Vermont govern the agreement.
 - d) Agreements should include a time schedule for providing consultant services.
 - e) Mediation clauses cannot limit the parties to one particular method of dispute resolution.
 - 3) FED and WSD staff receiving such agreements send the agreements to the DWSRF Program Specialist or Project Development Specialist.
 - 4) The DWSRF Program Specialist or Project Development Specialist provides a copy of the draft agreement to the appropriate WSD Engineer for review of scope and level of effort.
 - 5) The WSD Engineer provides comments and recommendations on the draft agreement to the DWSRF Program Specialist or Project Development Specialist in an appropriate format (i.e. e-mail, notes on the agreement, memo etc.). The WSD Engineer is expected to contact the applicant or consultant to clarify questions concerning scope or level of effort prior to submitting comments and recommendations to the DWSRF Program Specialist or Project Development Specialist.

- 6) The DWSRF Program Specialist or Project Development Specialist consults as necessary with WSD and FED staff and completes the review.
- 7) The DWSRF Project Development Specialist completes and signs agreement approval letters. Copies of letters are sent to FED. Tracking information is entered in the appropriate planning or construction loan spreadsheet. The letters advise the applicant to send a copy of the executed agreement to the DWSRF Program Specialist or Project Development Specialist and generally include the following statement:

"The scope of services, level of effort and estimated costs of the proposed engineering agreement has been reviewed and are acceptable for reimbursement from DWSRF (name of project) funds. Allowable expenses and payment procedures will be in accordance with the Department of Environmental Conservation policies and procedures; payments will not be made until the loan agreement is approved and signed by all parties.

We do not conduct a detailed review of the terms and conditions of engineering agreements, however, based on our review, we have the following comments:

(Include comments on terms, conditions, and eligible costs)

A copy of the executed agreement must be submitted to _____ at this office prior to requests for reimbursements."

- 8) Once the executed engineering services agreement is submitted to the WSD, the DWSRF Program Specialist or Project Development Specialist sends the loan approval packet (potentially including, but not limited to, a loan approval memo, loan approval letter, loan application review and approval form, executed engineering services agreement, loan application, project cost summary, and bond authorization documents) to FED for final loan approval and processing.
- C) FED provides comments and sends out approval letters for construction engineering service agreements and will coordinate as necessary with WSD staff. Please note that all redesign work during the construction phase (e.g., archeological services) is routed back to the WSD for review and approval.

II) Engineering Fee Allowance Background

- A) An engineering fee allowance applicable to water supply and wastewater projects funded by DEC grant and loan programs was originally established in 1987 and has been revised once since that time, in 1994 to adjust for inflation. Two alternative fee formulas are used and their applicability for a given project is a function of the project's construction cost. One formula is applied to *small* projects while the other is used for *large* projects. The designation of small or large, as noted above, is dependent upon the cost of construction. Until the last fee allowance change in 1994, the dividing point between small and large was \$500,000. In 1994, when the allowance was revised upward, the dividing point also increased, and was reestablished at \$605,000. The breakpoint between small and large projects represents the point of intersection of the two fee formulas; as the fixed fee portion of the allowance increases, so too must the small project threshold.
- B) Previous Fee Allowances (where C represents construction cost)

Year	Small Projects	Large Projects	Solving for C
1987	$\$15,000 + 0.20 * C$	$0.23 * C$	\$500,000
1994	$\$18,165 + 0.20 * C$	$0.23 * C$	\$605,500

III) Revised Fee Allowance

This guidance establishes an adjustment to the fee allowance to account for the rate of inflation since 1994. The 2001 adjustment is similar to that made in 1994 in that only the fixed portion of the small projects fee allowance is increased to match the rate of inflation. Also, as explained above, the dividing point between small and large projects needs to be adjusted upward to correspond to the changes to the fee allowance. The fixed amount of the fee allowance is being increased by 17.8%, which matches the increase between January 1994 (last adjustment) to April 2001 in the ENR-CCI (the Index), which is 5336 and 6286, respectively. The new upper limit for small projects (or lower limit for large projects) is now set at \$713,300. The tables below summarize the fee allowances for small and large projects. Following the two fee allowance tables are two lists: the first is a list of services referred to as *Special Tasks or Studies* or *Non-Standard Tasks* that are typically not limited by the fee allowance, and the second is a list of *Standard Tasks* that are typically subject to the fee allowance.

1) Fee Allowance for Small Projects: Projects \leq \$713,300

Engineering Step	Fixed Fee Allowance	Variable Fee Allowance	Total Fee Allowance
Preliminary	\$ 3,210	\$0.03*C	\$ 3,210+\$0.03*C
Final Design	\$ 6,420	\$0.06*C	\$ 6,420+\$0.06*C
Construction	\$11,770	\$0.11*C	\$11,770+\$0.11*C
Total	\$21,400	\$0.20*C	\$21,400+\$0.20*C

2) Fee Allowance for Large Projects: Projects \geq \$713,300

Engineering Step	Fee Allowance
Preliminary	\$0.0345*C
Final Design	\$0.0690*C
Construction	\$0.1265*C
Total	\$0.2300*C

Note: When warranted, the Department may combine fee allowances for individual engineering steps and apply the combined allowance to the aggregate engineering fee.

3) Special Tasks/Studies (Non-Standard Tasks) not Subject to the Fee Allowance

Technical services that fall within this designation are non-routine and of a highly specialized nature. The work is most frequently encountered as part of preliminary engineering and in particular is associated with problem identification and development of project alternatives. Examples of the most common of these services are listed below. It should be noted that the list is not all inclusive; there may be some relatively obscure services not identified below that should be included or new services could emerge that will be so designated. When a task not included below comes up for consideration and is deemed by the department to be a service that should be exempt from the fee allowance under most circumstances, it will be added to the list which will be updated from time-to-time.

- (1) Aerial Photographic services
- (2) Archaeological Studies
- (3) Source Exploration and Development Tasks
 - (a) Hydrogeologic Evaluations
 - (b) Pump Tests

- (c) Water Quality Tests
- (d) Source Protection Plans (when eligible)
- (4) Water System Contamination Investigations
- (5) Water Distribution System Leakage Surveys
- (6) Sewer I/I Studies
 - (a) Sewer TV Work
 - (b) I/I Flow Measurement
 - (c) Smoke Detection Surveys
- (7) Hydrogeologic Evaluations for Indirect Discharge Systems
- (8) Pilot Testing - water supply or wastewater projects
- (9) Evaluating New Technologies
- (10) Value Engineering
- (11) Extraordinary Materials Testing for Quality Control during Construction
- (12) Asbestos and Lead Surveys

Note: The department reserves the right to designate a service that might ordinarily be regarded as a special task to be a standard task under certain circumstances and vice versa for the purposes of this guidance.

(4) Standard Tasks subject to the Fee Allowance

The following is a list of technical services that typically are regarded as standard services and are subject to the fee allowance. As with the listing of non-standard services, the following is not necessarily an all inclusive listing of applicable services.

- Data Review and Collection
- Soil Borings
- Topographic Surveys
- Preliminary Engineering Report Preparation
- Basis for Final Design Development
- Project Meetings
- Construction Cost Estimates
- Plan and Specification Preparation
- Bid Assistance
- Construction Contract Management
- Resident Project Representation
- O&M Manual (but exempt from construction proration)
- Record Drawings (but exempt from construction proration)
- Materials Testing for Quality Control during Construction

Honorable Jim Douglas, Governor George Crombie, ANR Secretary Laura Pelosi, 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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