

Drinking Water Revolving Fund Eligibility Guidance

Michigan Department of Environmental Quality

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Table of Contents

Introduction	1
<i>Definitions</i>	1
<i>General Eligibility Criteria</i>	2
Qualifying Water Suppliers	2
Excluded Water Suppliers	2
Qualifying Projects	2
Refinancing Project Debt through the DWRP	3
<i>Specific Eligibility Criteria</i>	3
Accommodation of Future Growth or Development	3
Bid Allowances	3
Bonding Costs and Treasury Fee	4
Communication Equipment	4
Computer Hardware and Software	5
Construction Contract Awards	5
Construction Site Restoration	6
Contamination Discovered at the Project Site	6
Dams and Reservoirs	7
Delay Costs	7
Demolition or Decommissioning of Public Water Supply Systems	7
Energy and Water Conservation	8
Fire Hydrants	8
Force Account Project Administration/Technical	8
Force Account Project Construction	10
Furnishings	10
Inspector Days	10
Legal Services and Litigation Costs	11
Minor Repair vs. Major Renovation of Water Distribution Systems	11
Mitigation of Adverse Environmental Impacts	12
Multi-Purpose Projects	12
Operation, Maintenance, and Replacement Costs	12
Painting of Water Storage Tanks	13
Procurement of Well Drilling Services	13
Professional Services	13
Project Cost Overruns	14
Project Plan Amendments	14
Project Planning Costs	14
Project Planning Loans	15
Property Acquisitions	16
Purchase of Public Water Supply Capacity	18
Purchasing vs. Rental	18
Residuals Handling Equipment	19
Schools	19
Service Lines, Water Meters, and Water Main Diameters	19
Single Audit Compliance	20
Supplies	20
Test Wells	20
Waterworks System Expansion	20
Waterworks System Security Measures	21
Well Rehabilitation	21
Vehicles	22

Introduction

The purpose of this guidance is to convey the Department of Environmental Quality's (DEQ) intent concerning project cost eligibility. It presents both general and specific eligibility criteria to be considered by a water supplier when requesting financial assistance from the Drinking Water Revolving Fund (DWRF). Details of such criteria are necessary to ensure consistency of program decisions. It is intended to fully explain the requirements included in the following statutes and rules:

- The federal Safe Drinking Water Act (SDWA) Amendments of 1996, 42. U.S.C. §300f et seq.
- Part 54 (Safe Drinking Water Assistance) of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, MCL §§324.5401-324.5418
- The Michigan Safe Drinking Water Act, 1976 PA 399, MCL §§325.1001-325.1023
- The Act 399 Administrative Rules, Michigan Admin. Code R325.10101-325.12820

While this document is intended to clarify the types of projects (or their components) eligible for inclusion in a DWRF loan, it is recognized that this list cannot be comprehensive and there will be other questions of eligibility raised in the future. The DEQ will modify this document as necessary to include responses to any new issues.

Definitions

To enhance understanding of this document, please note the following definitions:

- A. "Project" means a project related to the planning, design, and construction or alteration of a waterworks system.
- B. "Water supplier" means a municipality, legal business entity, or other person who owns a public water supply, as defined in MCL§324.5403(d).
- C. "Waterworks system" means a system of pipes and structures through which water is obtained or distributed and includes any of the following that are actually used, or intended to be used, for the purposes of furnishing water for drinking or household purposes:
 - Intakes and cribs
 - Pipelines and appurtenances
 - Pumping stations
 - Storage tanks
 - Treatment plants
 - Wells and well structures
 - A combination of any of these items

General Eligibility Criteria

Qualifying Water Suppliers

Water suppliers who meet all applicable DWRP program requirements, and who own the following types of public water supplies at the time they submit project plans, may qualify to receive assistance from the DWRP:

- A. A community water supply, as defined in MCL §324.5401(f) [e.g., municipal water supply, subdivision, manufactured housing community, or apartment building].
- B. A non-community water supply, as defined in MCL §324.5402(h), that operates as a non-profit entity [e.g., a church camp, hospital, nursing home, or school].

The U.S. Environmental Protection Agency (EPA) has issued a policy decision for the DWRP program that will allow states to make loans that result in the creation of new community water systems. The DEQ has authority to administer the DWRP according to MCL §324.5417(i). The May 1, 1999, New System Eligibility procedure allows for the creation of a community water system (publicly or privately owned) to address an existing public health problem caused by unsafe drinking water provided by individual wells or surface water sources. This policy also extends to a situation where a new regional water system is created by consolidating several existing water systems that have technical, financial, or managerial difficulties.

Excluded Water Suppliers

Federal and state entities, as well as those water suppliers not regulated by the DEQ (e.g., tribal systems), are excluded from applying for assistance from the DWRP.

Qualifying Projects

To qualify for DWRP assistance, a water supplier must comply with all program requirements and demonstrate the following:

- A. The project for which DWRP assistance is sought is needed to assure maintenance of, or progress towards, compliance with the provisions of the federal SDWA [MCL§324.5405(3)].
- B. Feasible alternatives to the project were evaluated during the course of planning [MCL§324.5405(4)].
- C. The selected alternative proposed for construction meets the requirements set forth in Part 54 [MCL§324.5405(5)].
- D. The water supplier has the legal, institutional, technical, financial, and managerial capacity to build, operate, and maintain the project [MCL§324.5409(1)(d)].
- E. The water supplier has no outstanding prior-year fees under MCL§325.1011a or §325.1011b.

Refinancing Project Debt through the DWRF

Beginning with **fiscal year 2009**, no new project plan submittals for projects that proceeded to construction with non-DWRF financing will be accepted for refinancing.

Specific Eligibility Criteria

Accommodation of Future Growth or Development

Expansion or extension of public water supply systems that occur **primarily** in anticipation of development are not eligible for DWRF assistance (e.g., extension of water mains into areas not presently developed or served by a water supply, or expansion of capacity within existing facilities that accommodates growth or development). Identified needs within a 20-year planning period that are substantiated by valid population projections may be included in the scope of the project. However, the DEQ will examine each potential project to determine whether or not a primary purpose is the accommodation of growth or development.

Bid Allowances

In many cases, unit price bid proposal forms contain line items designated as "allowances" for which a price has been specified by the owner. Lump sum contracts may also contain allowances, but details will often be found in the specifications rather than in the bid proposal form itself. An allowance is used to identify construction goods or services that are integral to the project, but for which it may not be feasible to establish a cost through the competitive bidding process. For example, an allowance for electric utility relocation is commonly used because the work is performed by the electric power company serving the area and the cost should be the same for each bidder. In effect, the work (and cost) would be a "constant" in each bidder's proposal and as such would not be a factor in the outcome of the bidding competition.

A second type of allowance involves circumstances for which bidders cannot reasonably be expected to know and evaluate factors pertinent to preparation of a bid. An example of this situation is construction at a contaminated site where the extent of the contamination or the details of on-site operations and overall waste handling requirements cannot be fully determined during the bidding phase of a project.

A third type of allowance falls under the general description of "owner's preference" or "owner's convenience." Examples of allowances in this category may range from a relatively small allowance for several pieces of office furniture, to a substantial amount covering a complete system of computer hardware and software. In the example concerning office furniture, it is possible that the owner would not yet have developed a biddable specification because the furniture was considered to be incidental to the primary objective of the contract and would not be needed until late in the project schedule. In the case of computer equipment, the owner may choose to rely on an allowance in an attempt to provide flexibility to adapt to the rapidly changing technology and pricing structure associated with the computer market.

To a certain extent, allowances circumvent the bidding process because the value of the allowance is specified by the owner (usually the DWRF loan applicant). Consequently, applicants are encouraged to avoid the use of allowances wherever possible and, instead, fully develop specifications to enable bidders to competitively establish the cost of goods and services. Nevertheless, all three types of allowances described above can be included in the DWRF loan computation **if adequate documentation is provided to support both the need for the allowance and its estimated cost.**

In a variation on the "owner's convenience" type of allowance, an applicant may use an allowance that basically serves as a non-specific contingency line item. Such allowances are not linked to goods or services and are typically identified as "allowance for differing site conditions" or "project overrun allowance" in the bidding documents. The DWRF loan will already include a standard 6-percent contingency based on the subtotal of eligible project costs. Therefore, since this type of allowance serves only to augment project contingency funds beyond the 6-percent already calculated, such an allowance will be excluded from the DWRF loan computation.

Bonding Costs and Treasury Fee

The financial costs directly associated with obtaining a DWRF loan are eligible for DWRF assistance. For example, the expenses incurred in hiring a bond counsel to issue a qualified opinion or a financial advisor to assist the water supplier in preparing the rate methodology may be included in the DWRF loan computation.

A municipality seeking a DWRF loan may be unable to obtain an investment grade rating for its bonds, as required by the Michigan Finance Authority (MFA). In such cases, the purchase of bond insurance by the municipality to guarantee its debt service payments will be eligible for DWRF assistance, as will the similar administrative charges for conduit financing from an umbrella unit of government (i.e., county or regional authority) who may help a smaller municipality obtain a loan from the DWRF.

It should be noted that any municipality who opts to use a debt service reserve to satisfy the requirement for an investment grade rating cannot include the money deposited in the reserve as an eligible expense of the DWRF. Such deposits will be returned in time and, therefore, are not true expenses.

The fee charged by the Local Audit and Finance Division of Treasury for a "Long Form" application filed by the applicant seeking authorization to issue DWRF debt is eligible for DWRF reimbursement. This authorization is necessary in cases where Treasury has denied a Qualifying Statement.

Communication Equipment

Equipment, fittings, accessories, and modifications are often incorporated into the design and construction of elevated water storage tanks to accommodate the installation and operation of non-water-system communications antennas, with beneficial use anticipated either immediately upon completion of construction or at some unspecified future time (e.g., police/fire radio systems, commercial wireless phone networks, etc.).

Since these communications facilities and appurtenances are for non-DWRF purposes, all such items are ineligible for DWRF funding. The contract documents must clearly identify such costs, and project accounting methods must ensure that the costs are excluded from the loan and from any disbursement requests.

Because such materials and labor are classified as ineligible construction costs, the construction eligibility ratio will be affected; and associated line items for engineering, etc. must be prorated in accordance with established DWRF eligibility proration procedures.

Computer Hardware and Software

Computer hardware and software are not eligible for DWRF assistance **unless** needed and used as a direct interface, process control component of the waterworks system. For example, a computer that automatically monitors and controls process operating cycles, chemical feed rates, or start-up and shut-down of pumps and motors is an eligible item.

Computers and software to be used **solely** for administrative tasks such as billing, timekeeping, or general office work are not eligible for DWRF assistance.

Construction Contract Awards

Except in the case of an approved sole source procurement, all construction contracts **worth \$50,000 or more** must be awarded through an open, competitive bidding process where a solicitation to bid is made by means of a formally advertised public notice and a public opening of the sealed bids is held.

The water supplier is not required to accept the lowest bid tendered, provided the construction contract language and local ordinances do not prohibit awarding the contract to a bidder other than the lowest bidder. However, unless the water supplier can demonstrate that the low bidder is nonresponsive or nonresponsible, the DWRF loan computation will be limited to the amount of the low bid.

The term "nonresponsive" means the bidder has not complied with the requirements set forth in the bidding documents (e.g., the bidder did not provide a bid bond in the proper amount; the bidder did not include required documentation in the bid, and so on). The term "nonresponsible" means the bidder has not proven that it has the capability to fulfill the terms of the contract (e.g., the contract requires experience that the bidder does not have).

If the water supplier can demonstrate that the low bidder is either nonresponsive or nonresponsible, the contract can be awarded to the next lowest bidder who is both responsive and responsible and the DWRF loan computation will include that bidder's amount.

All of the bids received may be rejected by the water supplier if it has sound, documented business reasons for doing so. The construction contract may then be rebid, which might push the DWRF loan closing date back by one quarter. If this situation occurs for a 4th quarter loan, the water supplier will need to fall within the established fundable range for the next fiscal year in order to receive a 1st quarter loan.

If the water supplier receives only one bid in response to its advertised solicitation to bid, the construction contract must either be awarded to that bidder or be rebid through an open,

competitive bidding process. If no bids are received, the water supplier must rebid the contract through an open, competitive bidding process.

Construction Site Restoration

Restoration of work sites disrupted by project construction is eligible for DWRF assistance, provided the restoration is strictly limited to those areas directly affected by construction and is necessary to restore the disrupted areas to pre-construction conditions. Utilities, roadways, sidewalks, driveways, and landscaping disrupted by the project may be restored with DWRF assistance to a quality equal to, but not exceeding, that of the original facilities. For example, replacing a gravel road with a gravel road is an eligible item, but upgrading to a paved road is only partially eligible for DWRF assistance. The intent is to preclude the use of DWRF loan funds for the general upgrade of roads or other infrastructure components that are more appropriately financed through other means.

Full bituminous overlays that are proposed as a result of water main installation in streets are eligible to maintain structural integrity and to protect the pavement surface from premature deterioration, which can result from partial width replacements over the trench/lateral cuts where joints between the old and new pavement can be a source for water to enter. These overlays are eligible only when the pre-existing road is in good condition based on supporting documentation from knowledgeable local public works/road commissions that provides information such as road age, thickness, design life, and other indexes of road quality. Overlays will not be eligible where the existing roads are not in good condition and the full width overlay would constitute an improvement.

Contamination Discovered at the Project Site

Typically, three types of contamination can be encountered during project construction: soils contaminated by petroleum or other chemicals, discarded materials such as abandoned chemical drums, and groundwater or surface waters contaminated by chemical leachate or runoff. All cleanup activities (i.e., excavation, testing, removal, handling, transportation, and disposal of contaminated materials) may be eligible for DWRF assistance; however, eligibility is limited to those areas **directly** affected by DWRF project construction.

For example, if contamination exists on ten acres of a project site, but construction activities directly affect only three acres, only those costs associated with the cleanup of the affected three acres are eligible for DWRF assistance. Cleanup activities outside the three-acre area are ineligible items. As another example, in a project undertaken to replace water distribution mains, only costs associated with the proper handling and disposal of contaminated materials encountered in the trench would be eligible for DWRF assistance.

The cleanup of contamination at a DWRF project site must be factored into the assessment of project alternatives, especially in regard to cost-effectiveness. This requirement applies not only to sites of known contamination, but also in cases where contamination is discovered only *after* DWRF-funded project construction has begun. If analysis reveals significant new financial or environmental impacts, it may be necessary to re-evaluate part or all of the selected alternative in favor of a more cost-effective or environmentally-acceptable alternative.

Activities related to the identification or investigation of contamination at a DWRF project site, such as an environmental audit, the installation of monitoring wells to document groundwater

conditions, or a waste characterization analysis associated with the disposal of contaminated materials, are eligible for DWRf assistance.

For cleanup activities to be eligible for DWRf assistance *after* an Order of Approval (OOA) has been issued, the loan recipient must provide written confirmation to the project manager that the appropriate DEQ staff has been notified that contamination was encountered during project construction. The loan recipient must then provide the project manager with a description of the contamination problem, the proposed cleanup activities, and the analysis of the discovery's impact on the selected alternative in terms of its cost-effectiveness.

Dams and Reservoirs

The construction or rehabilitation of a dam is not eligible for DWRf assistance [40 C.F.R. §35.3520(e)(1)]. The construction or rehabilitation of a reservoir is not eligible for DWRf assistance **unless** the reservoir is for finished water storage or is part of the treatment process and located on the same property as the treatment facility [40 C.F.R. §35.3520(e)(3)].

Delay Costs

To the extent they satisfy other eligibility criteria, costs associated with delays in project completion, regardless of cause, are eligible for DWRf assistance within the limits of the loan's remaining project contingency funds.

Demolition or Decommissioning of Public Water Supply Systems

Demolition necessary to accomplish project construction is eligible for DWRf assistance. For example, DWRf funds can be used for the removal of an underground tank located within the area to be occupied by a new treatment building (that is itself an eligible part of the project).

When the demolition and/or decommissioning of existing operational or abandoned components of a waterworks system are not necessary to accomplish project construction, the associated costs will be eligible for DWRf assistance only when all of the following conditions are met:

- A. The demolition/decommissioning is done in conjunction with new construction at the actual site of the system component to be demolished/decommissioned.*
- B. The demolition/decommissioning is part of the cost-effective alternative in an approved DWRf project plan.
- C. The demolition/decommissioning is necessary as a direct result of the project proposed for DWRf funding, even if actual demolition is not directly necessary to accomplish new project construction.

Site enhancements such as paving, additional landscaping, and playground equipment, would not be eligible.

*The exception to this is where abandonment of currently operating facilities (i.e., wells, storage tanks, pump stations, etc.) is occurring in conjunction with the construction of new facilities to replace the facilities being abandoned. In this case, the construction of the new facilities do not have to occur at the same site where the existing facilities to be abandoned are located.

Energy and Water Conservation

Energy and water assessments and audits are eligible activities when conducted in conjunction with an eligible DWRP construction project.

Fire Hydrants

The installation of fire hydrants will not be eligible for DWRP assistance unless those hydrants will be connected to a new water main being installed for an eligible purpose. If a new water main is being installed for an eligible purpose (e.g., replacement to restore the structural integrity of the distribution system, replacement of a pipe of less-than-standard diameter, DEQ District Engineer-approved looping), then new fire hydrants along that main will be eligible for DWRP assistance provided (a) the spacing of the hydrants is consistent with the provisions of the most current edition of the ***Recommended Standards for Water Works*** and (b) the proposed spacing conforms with the typical spacing used throughout the remainder of the existing water distribution system. The rehabilitation of existing fire hydrants will not be eligible for DWRP assistance unless those hydrants will be connected to a new water main being installed for an eligible purpose.

Force Account Project Administration/Technical

Force account administration consists of accounting, bookkeeping, and legal project work performed by municipal employees where such work is not otherwise required in the normal conduct of their jobs. Force account technical work consists of engineering services in connection with planning, design, inspection, and construction.

Eligibility of force account services is governed by limitations that are intended to insure that the applicant consider the impacts of borrowing funds to subsidize salaries that may already be included under existing municipal budgets and will have to be paid back concurrent with funding future salaries. Eligible activities include DWRP project implementation tasks that are typically contracted out, but may be more economically performed by qualified municipal staff. Eligible force account costs are reserved for staff that actually performs tangible, hands-on services that have substantial and specific linkage to implementation of the project. The documentation must show that the costs are justified and appropriate based on the number of staff hours required relative to the construction implementation schedule and the complexity of the project. Additionally, the documentation must demonstrate that there is no overlap with work proposed to be contracted to other parties.

Force account costs (direct labor costs, indirect costs, and other project allocable expenses, such as travel, printing or postage) incurred by an applicant for administration and technical services are eligible for reimbursement if such costs are adequately documented, as described in the "instructions for Completing the Project Cost Worksheet" (which requires detailed project time accounting) that accompanies the *Part II DWRP Application*. In addition to specific hours worked, this documentation would include the specific staff titles/classifications and their specific roles with respect to the proposed project. **A summary of estimated hours will not be accepted for those tasks that have been completed or partially completed. Actual hours must be accounted for by providing a ledger of dates, hours worked, employee names, rates (including indirect costs) where the source of information is timesheets, daily logs, or other records to document costs incurred by each municipal employee for which**

funding is being sought. The following is a breakdown of eligible/ineligible tasks associated with force account administration and technical:

- Administration (Eligible)
 - Preparation of loan application materials
 - Preparation of disbursement requests
 - Project cost accounting (up to 2 hours/week)
 - Preparation of project closeout documentation
 - Easement/land acquisition services (appraisals, agreement preparation, relocation assistance)
 - Legal services associated with preparation and review of contracts related to project implementation, the resolution of bid protests, the resolution of contract claims, and services associated with contract enforcement
 - Financial/legal services associated with preparation of a revenue system

- Administration (Ineligible)
 - Services provided by clerical support staff such as typing and filing
 - Services provided by elected officials
 - Employee supervision
 - Drinking water program administration that is not sufficiently linked to a specific DWRP project

- Technical (Eligible)
 - Procurement of engineering services required to implement the project
 - Planning, design, inspection, and construction engineering where there are no consulting engineers providing these services for project contract(s)
 - Management (limited to two positions) of technical/construction contracts which may include duties/activities in the following areas:
 - Bidding process, including addendum preparation/approval, and contract award
 - Review/approval of engineering invoices and amendments
 - Review/approval of construction contractor pay estimates and change orders
 - Attendance at progress meetings
 - Review/approval of design documents, shop drawings, as-built drawings
 - Overtime/holiday pay for eligible technical staff for project-related work
 - Vehicle charges and mileage for eligible staff for project-related work

- Technical (Ineligible)
 - Services that are a duplication of services provided by the project consulting engineer, any other service provider or other force account staff.
 - Costs incurred by operational staff of the drinking water distribution/source/treatment system
 - Cell phone usage charges for project-related work

- Other
 - Force account costs incurred by staff of a “conduit borrower” (for example where a county applies for and receives a loan on behalf of a smaller unit of government) are eligible provided a contractual basis exists for incurring/billing those expenses based on hours/tasks.
 - Costs associated with a single-purpose millage election held to increase local property taxes in order to service the DWRF debt, or a referendum on the DWRF bond issue, where necessary, are eligible for reimbursement.

Force Account Project Construction

The use of the water supplier’s employees to construct a DWRF project (force account labor) may be approved for DWRF assistance only when the following conditions are met:

- A. The construction work can be effectively performed by permanent staff on the water supplier’s current payroll within the course of their regular duties.
- B. The total labor cost (salaries, fringe benefits, travel expenses) and associated equipment/materials purchase costs are less than \$50,000.
- C. The supplier can demonstrate to the DEQ that force account labor will be cost-effective when compared with contracted labor.

Furnishings

Desks, tables, chairs, storage cabinets, refrigerators, microwaves, stoves, floor treatments (e.g., carpets, epoxy coatings), window treatments (e.g., curtains, venetian blinds), and other furnishings for a waterworks facility are eligible for DWRF assistance, provided they are necessary to furnish new construction or areas where remodeling or expansion of existing facilities has occurred. In all other cases, the purchase of new desks, appliances, window treatments, or other furnishings are considered to be routine replacement costs, which are not eligible for DWRF assistance.

Inspector Days

Inspector (crew) days can be used in construction contracts to motivate a contractor to finish on time or ahead of schedule. When called for in a bid proposal, each bidder will enter an estimated quantity of inspection (usually given as a number of days) that will be required for completion of the project. This number is then multiplied by the unit price (\$/day) supplied by the owner/engineer in the bid proposal. This unit price reflects the costs that are incurred by the owner for each day of on-site engineer representation during construction to arrive at a total inspection budget.

On construction pay requests, the actual number of inspector days used will be entered. The resulting amount will be deducted from the request. A running total of inspector days used and inspector days available is tracked on each pay request. The contractor is not actually paying anything unless the inspection days are exhausted. The owner is paying the engineer directly from the inspection bills submitted each month.

If the contractor completes the work using fewer inspector days than the number stated in his proposal, final payment will include an amount equal to the unused inspector days. This is essentially a bonus to the contractor for finishing ahead of schedule. Bonuses are not eligible in the DWRP program.

If the work under the contract is incomplete when the contractor has expended the number of inspector days stated in his proposal, subsequent payments to the contractor will be “net” payments after deducting an amount for the excess inspector days used during the period covered by the payment. This is essentially a penalty to the contractor for not finishing on time.

While DWRP applicants may choose to use the inspector day methodology, the costs of inspection (resident) engineering to be included in the loan will be established based upon the budget reflected within the engineering agreement. Applicants need to insure that an appropriate amount for on-site inspection has been included in the engineering agreement, as the amount bid for inspector days will not be included in the loan. Applicants will be reimbursed from only the bills due and payable from their engineers for resident inspection.

Legal Services and Litigation Costs

Standard legal services that are necessary to implement the project are eligible. Examples include services associated with the acquisition of property for project construction, the preparation and review of contracts related to project construction, the resolution of bid protests, the resolution of contract claims, the establishment of special assessment districts, and services associated with contract enforcement.

Costs associated with the litigation of project-related personal injury or property damage claims, whether defending against or bringing a suit, are not eligible for DWRP reimbursement because such actions are not directly necessary to implement the project.

Costs associated with litigation related to land acquisition are not eligible since the law specifically precludes the cost of land obtained from an unwilling seller.

Costs associated with the establishment of authorities or other units of government that are necessary to implement the project are **not** eligible for DWRP reimbursement because these costs are not considered standard legal services and are incurred prior to the existence of a legal applicant. However, costs associated with the establishment of a special assessment district (SAD) as a financial mechanism to implement the project are eligible.

Minor Repair vs. Major Renovation of Water Distribution Systems

Costs for the periodic replacement of distribution system water mains may be eligible for DWRP assistance. Infrequent breaks or blockage may necessitate minor repair or flushing, and these expenses are considered to be routine maintenance costs, which are not eligible for DWRP assistance. However, a substantial increase in breaks may be an indication that a section of the distribution system has reached the limit of its useful life and major renovation may be necessary to restore its structural integrity. If so, the water supplier must demonstrate in the project plan that the existing condition of the distribution system has deteriorated to a point where major rehabilitation and/or replacement is necessary to maintain structural integrity. Alternatives should be examined to assess the condition of the transmission and distribution

system and determine the most cost-effective method of accomplishing any major renovations that are needed.

Mitigation of Adverse Environmental Impacts

Costs associated with the significant, long-term mitigation of adverse environmental impacts due to project construction may be approved for DWRF reimbursement only when the following conditions are met:

- A. The specific mitigation measures to be utilized have been described in the project plan and included in the costs listed for the selected alternative.
- B. The specific mitigation measures to be utilized have been demonstrated to be the cost-effective means of mitigation.
- C. The specific mitigation measures to be utilized are not otherwise ineligible for the receipt of DWRF assistance. For example, to mitigate a loss of wetlands, the applicant may be required to purchase a suitable land parcel (an ineligible item) and modify the project site to enhance wetland value by excavating pothole ponds or building a dike (an eligible item).

Short-term mitigative measures, such as siltation barriers and dust control, are also eligible for DWRF reimbursement, but are normally included in the construction bid costs.

Multi-Purpose Projects

Some projects proposed for DWRF funding include work, such as the full-width repaving of streets, which is over and above what is necessary to complete the needed water system improvements. Such multi-purpose projects can be funded through the DWRF, but not all of the project costs will be eligible to receive DWRF reimbursement. Where there is a **physical overlap** between eligible and ineligible project components, the DEQ will require the submittal of an analysis utilizing the Alternative Justifiable Expenditure (AJE) accounting methodology. This analysis will identify the portion of the project costs that are directly related to the needed water system improvements so that they may be appropriately included in the DWRF loan amount. Guidance on the preparation of an AJE analysis is available from your project manager or on the RLS Web site. Multi-purpose projects that do not have overlap between the eligible and ineligible items will calculate an eligibility ratio based on the eligible and ineligible bid costs. This ratio will be used to adjust the engineering costs.

Operation, Maintenance, and Replacement Costs

Goods or services that can be classified as routine operation and maintenance (O&M) or replacement items are not eligible for DWRF assistance. This also includes expenses for deferred maintenance that may accrue to a larger amount if annual O&M is not performed consistently over multiple years. The purpose of the DWRF is to assist with capital construction for improvements, upgrades, or other projects necessary to maintain safe drinking water supplies, not to fund current O&M costs.

Maintenance contracts, service contracts, and extended warranties beyond the scope of standard one-year product warranties are classified as O&M services, which are not eligible for DWRF assistance.

The replacement of waterworks system equipment will not be eligible for DWRF assistance **unless** the component being replaced is past or near the end of its useful life and the need for its replacement was established in the project plan. An example would be the replacement and/or rotation of valves in the system. In addition, loan applicants who have previously received DWRF funding are required to establish a replacement account and finance equipment replacement with monies set aside in that account.

Costs associated with the flushing of water mains, service lines, or fire hydrants are not eligible for DWRF reimbursement because these costs are considered to be routine O&M costs, which are not eligible for DWRF assistance.

Painting of Water Storage Tanks

The painting of a water storage tank will not be eligible for DWRF assistance **unless either** (a) the painting is done in conjunction with a major rehabilitation that is necessary to restore the integrity of the water tank *or* (b) the painting is a stand-alone improvement that is necessary to restore the integrity of the tank's interior or exterior coating, involving extensive surface preparation such as sand blasting and priming. The project plan must document why the painting is necessary, rather than routine maintenance, and a technical report from a tank inspection firm must be part of this justification. The project plan must also include a comparison of tank refurbishment or stand-alone painting versus tank replacement as part of the cost-effectiveness analysis. Routine maintenance painting is not eligible for DWRF assistance. Reasonable enhancements painted in conjunction with an eligible repainting project, such as the painting of letters or logos, can be reimbursed in the DWRF loan.

Procurement of Well Drilling Services

A water supplier may hire any well driller it wishes to drill a test well during the planning or design phase of a project – without following DWRF program requirements for formal advertising and competitive bidding – and still be reimbursed for those well drilling services in the DWRF construction loan.

The procurement of a driller's services to convert a test well to production status may be included as part of a competitively-bid construction contract or, if the cost of the service is less than \$50,000, may be handled as a minimal cost procurement for which the water supplier obtains a waiver from bidding requirements from the project manager prior to the acquisition of the driller's services.

Professional Services

The costs of engineering, legal, and financial services related to planning, designing, or building the project are eligible for DWRF assistance. Examples of eligible engineering services include facility start-up assistance and the preparation or revision of a facility's O&M Manual.

All costs associated with municipal borrowing that were necessary to pay for DWRF project planning and design work are eligible for DWRF reimbursement, provided the debt instrument

can be retired at the time of DWRF loan closing. Interest paid on moneys transferred from one municipal account to another is not eligible for DWRF reimbursement. Reasonable carrying charges (i.e., at the prevailing interest rate) assessed by an engineering firm or other provider that accepts deferred payment for its planning or design work are also eligible for DWRF reimbursement.

Project Cost Overruns

The maximum amount of the DWRF loan is set at the time the OOA is issued and includes a 6-percent contingency, which is based on the subtotal of all eligible line item costs. If the project experiences cost overruns, the contingency amount may be spent up to the amount of the loan. There will be no increases in the loan amount, nor will the water supplier be permitted to apply for another loan covering any cost overruns.

Project Plan Amendments

When the selected alternative contained in a project plan has been significantly changed, a project plan amendment will need to be submitted. Significant changes are those that:

- Substantially alter the design, scope (the problem or issues to be resolved), or the cost of the project
- Alter the type of treatment to be provided
- Substantially alter the location, size, capacity, or quality of any major equipment item
- May be controversial

These types of changes will require the preparation of a formal project plan amendment, subject to all the public participation requirements. Significant increases in project costs and user rates as a result of the change must be addressed as part of this process. Any significant inflationary cost increases that may occur during a prolonged period between project plan submittal and Environmental Assessment publication should at least be public-noticed or handled through a public meeting process.

The optimal time to submit a project plan amendment is May 1 so that the revised project can be appropriately ranked on the Project Priority List; however, amendments can be submitted at any time. Contact your RLS project manager for guidance on your specific situation.

Project Planning Costs

Planning costs directly related to the project for which DWRF assistance is being sought can be reimbursed in a DWRF loan. Since the DWRF did not exist prior to June 17, 1997, only the planning costs incurred after that date may be included in an application for assistance. Eligible planning costs include costs associated with:

- Archaeological surveys
- Environmental audits of project sites (Phase I)
- Hydrogeological studies
- Project plan preparation and submission
- Public participation activities
- Public hearing transcripts

- Reliability studies
- Vulnerability assessments in conjunction with full project planning efforts
- All water storage tank inspections

Costs associated with the preparation of a wellhead protection plan are not eligible for DWRP assistance, but may be funded under the DEQ's Wellhead Protection Grant Program.

For a municipality serving 10,000 or more people, eligible planning costs can be included in a DWRP construction loan. For a municipality serving less than 10,000 people, eligible planning costs can be included in a DWRP planning loan, as set forth in the Project Planning Loans section of this guidance.

Planning costs that involve the construction of tangible assets (e.g., test wells that may or may not become production wells) are not eligible for reimbursement as part of a DWRP planning loan, but can be included in a DWRP construction loan. It is also important to differentiate between professional services provided during the planning stages of a project and those that may occur in the design phase. While both planning and design are identified as eligible activities, there are significant distinctions embodied in MCL§324.5404 that require a careful delineation of costs. For example, engineering services for the development of the project plan would be considered a planning cost. However, services related to costs of soil borings or other design services necessary to compile plans and specifications are considered to be design costs.

If planning/design services involve pilot studies to demonstrate the effectiveness of a technology, the DWRP loan can cover these costs. However, this excludes costs of any permanent construction that is part of the pilot study and that would become a tangible asset of the project.

Project Planning Loans

Public Act 147 of 2000 provided authorization allowing the MFA to establish a Small Issuer Planning Loan Program to implement the planning loan provisions of Public Act 26 of 1997. This program allows municipalities serving less than 10,000 people to borrow up to \$100,000 on a short-term basis to pay for eligible planning costs that were incurred for a DWRP project.

Only a municipality that is listed on the annual DWRP PPL will be eligible to receive a planning loan. A qualifying municipality should check the appropriate box on its *DWRP Project Plan Submittal Form* to indicate its interest in receiving a planning loan. The project manager will then provide the municipality with a *Small Community Planning Loan Application* to complete. The MFA intends to close on such loans during the 1st Quarter of the fiscal year.

Small Community Planning Loans will have a maturity not to exceed five years. The planning loan interest rate will be the same as the interest rate established by the DEQ Director for the DWRP program for the year in which the planning loan is originated. Principal and interest payments will be due on October 1st in each subsequent year for the life of the loan.

If a qualifying municipality is confirmed by the DEQ to be a "disadvantaged community" [as defined in MCL§324.5402(c)], its short-term planning loan can be forgiven at the time of loan award for DWRP construction. A grant will be provided from the Act 399 technical assistance set-aside fund. The outstanding principal and accrued interest on the municipality's Small

Community Planning Loan will then be due and payable 30 days after receipt of the grant. Guidance on disadvantaged community criteria is available from your project manager or on the RLS Web site.

Property Acquisitions

The acquisition or long-term lease of land or structures, or both, is eligible for DWRF assistance, provided the acquisition is integral to an eligible waterworks system project and the purchase is from a willing seller at fair market value. Federal regulations implementing the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (49 C.F.R. §24.1 et seq.) are applicable to the acquisition of property necessary for a DWRF project, and the cost of complying with these regulations will be eligible for DWRF assistance. Common examples of acquisition-related costs include:

- The cost of an appraisal of any property to be acquired for project construction, including any studies necessary to properly value improvements, minerals, timber, or other resources on the property.
- The cost of surveys and legal boundary descriptions of any property to be acquired for project construction.
- The costs associated with relocation and moving expenses for displaced persons, businesses, and farms, including the cost of a relocation specialist to facilitate compliance with the Act.
- The cost of necessary services associated with the acquisition of property for project construction, including title searches, lease or easement agreement preparation, legal descriptions of the property, legal notices, and closing costs.

Land for a waterworks system project may be acquired through the purchase of the fee simple title or a permanent easement or through donation by its owner to the water supplier.

Save for the three exceptions discussed in the next paragraph, a land parcel or structure to be purchased must first be appraised so that its fair market value can be established. An appraisal is a written statement independently and impartially prepared by a qualified appraiser that sets forth an opinion of the defined value of the property as of a specific date, supported by the presentation and analysis of relevant market information. Criteria that govern property appraisals appear in 49 C.F.R. §24.103.

A property appraisal is **not** required in the following cases:

- A. The owner is donating the property to the water supplier *and* releases the water supplier from its obligation to obtain an appraisal.
- B. The water supplier determines that the valuation of the property is uncomplicated *and* its fair market value is estimated to be \$2,500 or less.
- C. The fair market value of the property to be acquired is estimated to be over \$2,500, but under \$10,000 *and* any remainder property is either not affected or only affected to a limited degree *and* the owner releases the water supplier from its obligation to obtain an appraisal. In this case, a market study by the water supplier can be used in lieu of an appraisal. The market study will be an examination of the record of recent sales of

comparable properties obtained from the local assessor to verify that the property to be acquired should indeed be valued under \$10,000. No review appraisal is required.

A railroad “crossing permit” is considered to be a right-of-way easement and is, therefore, eligible for DWRP assistance. An appraisal to determine the value of the easement is not necessary, provided the permit fee is \$2,500 or less.

To be eligible for DWRP assistance, a land parcel cannot be larger than what is needed to construct the project (e.g., the cost of purchasing a ten-acre parcel is not eligible when a five-acre parcel is adequate). Every effort should be made by the water supplier to evaluate the size of the parcel to be purchased against the needs identified in the project plan. If a parcel to be purchased is larger than can be justified, the cost of the parcel and expenses related to its acquisition must be prorated by the project manager.

To be eligible for DWRP assistance, the land parcel or structure must be purchased *after* the water supplier adopted the project plan demonstrating the need for the acquisition. The water supplier may acquire an option on the land in anticipation of adopting a project plan, but to preserve the opportunity to receive DWRP reimbursement for the actual purchase, cannot exercise the option until the project plan is adopted. This ensures that a full hearing is given to the selected alternative without undue pressure to direct the outcome.

To meet the “willing seller” test, the water supplier and the owner of the desired land parcel or structure must reach amicable agreement on the purchase price. As soon as feasible, the water supplier must notify the owner of the supplier’s interest in acquiring the property and the obligation the supplier has to secure an appraisal. The owner must be given an opportunity to accompany the appraiser during the appraiser’s inspection of the property.

Before the initiation of negotiations with the property owner, the water supplier must establish an amount that it believes is just compensation for the property. The amount shall not be less than the approved appraisal of the fair market value of the property, taking into account the value of allowable damages or benefits to any remaining property upon the appraisal of the fair market value of the property.

In order to establish the just compensation amount, the water supplier must have a qualified reviewing appraiser examine all appraisals to assure that they meet the requirements of 49 C.F.R. §24.103 and must then seek any necessary corrections or revisions before accepting the appraisals. The reviewing appraiser may either be a contracted appraiser or a qualified employee of the water supplier or other public agency such as the Michigan Department of Transportation (MDOT). Listings of approved appraisers and reviewing appraisers are maintained by MDOT.

Upon reviewing the appraiser’s certification of the just compensation for the property, the water supplier will send a written purchase offer to the property owner. The purchase offer must contain:

- A. A statement of the amount being offered as just compensation.
- B. An identification of the real property and the particular interest being acquired, including buildings, structures, and other improvements that are considered to be part of the real property for which the offer of just compensation is made.

- C. In the case of a partial acquisition, the compensation for the real property to be acquired and the compensation for damages (if any) to the remaining real property shall be separately stated.

When property appraisals are required, the initial offer to the property owner may not be less than the amount that is certified through the appraisal review process outlined above. The final offer to the owner may exceed the appraised amount when reasonable efforts to negotiate an agreement at that amount have failed and the water supplier can justify the final purchase price as being reasonable, prudent, and in the public interest. However, since the DWRF loan computation must be based on fair market value, the amount approved for inclusion in your loan may be less than the final purchase price.

Documentation of fair market value must be provided with the *Part II DWRF Application*, including a copy of the appraisal(s) or market study, the initial purchase offer, and the final purchase agreement. If an amount greater than the initial purchase offer is requested for DWRF loan participation, the information that resulted in a revised appraisal and a reestablishment of the just compensation amount must also be provided.

Property acquired through condemnation or the exercise of the power of eminent domain is not eligible for DWRF assistance.

Purchase of Public Water Supply Capacity

Purchase of public water supply capacity from another supplier is eligible for DWRF assistance if it is determined to be the most cost-effective alternative for meeting the needs identified in the project plan. The contractual basis for a capacity buy-in from an existing waterworks system must be carefully documented to ensure that capacity is available and ownership of the stated capacity share is demonstrated to the DEQ's satisfaction. The DWRF will not assist with purchase of capacity in excess of need identified over the 20-year planning period.

If the DWRF has previously committed assistance to one water supplier for the purchase of capacity from another existing water supplier, the DEQ will subtract the amount of the previously funded capacity buy-in from any assistance requested from the providing supplier that directly enables capacity delivery. For example, the DEQ receives and commits to a request to fund capacity purchase through a transmission main to be built and operated by another water supplier. If the providing water supplier also seeks funding assistance from the DWRF for construction of the main, that loan would be reduced by the amount of the earlier loan to the supplier that benefits from the purchased capacity. A similar reduction would occur from any other buy-in, either within or apart from the DWRF.

In addition, the purchase of distribution main, storage or treatment capacity in facilities where the DWRF previously funded the construction of the capacity will not be eligible for DWRF assistance.

Purchasing vs. Rental

The purchase of equipment that is necessary for the completion of DWRF projects is eligible in any instance when purchasing is more cost-effective than renting.

Residuals Handling Equipment

Facilities or equipment designed to handle residuals are eligible for DWRF assistance.

Schools

DWRF assistance can be provided to schools that own and operate a water system, thereby making it a public water supplier.

Service Lines, Water Meters, and Water Main Diameters

Service Lines

The replacement of service lines on public and private property is DWRF eligible provided there is a public health threat (i.e., lead, other contaminants) that is being addressed. Regulatory provisions governing the use of DWRF funds do not require the public water system to have ownership over the private portion of a service line. The service line from the public water main up to and including the meter is DWRF eligible regardless of pipe material as long as the replacement reduces the health risk. The applicant's project plan must include a description of the public health threat (such as the location and/or pipe material) and the basis of prioritizing work (explain why replacement in one area/neighborhood will be completed prior to other areas).

Full service line replacement is desired and recommended. However, if an applicant is unable to replace service lines on private property, partial service line replacement is DWRF eligible. A discussion must be included in the project plan as to why the applicant is unable to implement full service line replacement. If the public water system wishes to purchase and retain an easement so that it maintains control of the infrastructure, that purchase is DWRF eligible if the easement is determined to be integral to the project and the seller is willing.

Expenses related to collecting field information, coordinating and educating homeowners, and the creation of maps may also be eligible planning costs. However, to avoid ineligible costs, it is imperative to contact DWRF program staff in the pre-planning stages to confirm eligibilities.

Water Meters

The installation of water meters for a new waterworks system or an existing unmetered system is eligible for DWRF assistance, provided the meters are owned by the water supplier. The replacement or upgrading of existing water meters is also allowable if adequate need has been demonstrated in the project plan. An example would be upgrading meters to have remote read capabilities. While ancillary costs such as providing the meter reading equipment is eligible, billing software to process the information obtained from the meters is not eligible.

Water Mains

The installation and replacement of undersized water mains is eligible for DWRF assistance provided the project plan documents the need. The ten-state standards require water main that provides fire protection to be 6 inches in diameter and larger sizes to meet minimum residual pressures and flow requirements during fire flow. Where local code requirements mandate a minimum size of 8 inches in diameter and it is documented in the project plan as part of the selected alternative, replacements with 8-inch-diameter water main are allowable. However, please note that a local ordinance requirement alone is not a sufficient demonstration of need

for water main replacement. There must be documentation of existing problems, such as low pressures/flows, frequent breaks, or capacity issues, resulting in the need for new water main.

Construction activities, such as interior plumbing work, performed within the confines of individual private structures are not eligible for DWRF assistance.

Single Audit Compliance

The Single Audit Act of 1984 (with amendment in 1996) and OMB Circular A-133 ("Audits of State, Local Governments, and Non-Profit Organizations") provide audit requirements for ensuring that federal funds provided to non-federal agencies such as cities, townships, and tribal governments are expended properly. The costs associated with the single audit are eligible for DWRF assistance provided that the DWRF is the only source of federal funding related to the project. Only costs directly associated with single audit compliance for the DWRF project are eligible for loan reimbursement.

Supplies

Costs associated with expendable supplies, such as chemicals or replacement parts, are not eligible for DWRF reimbursement because these costs are considered to be routine O&M costs, which are not eligible for DWRF assistance.

Test Wells

In cases where a test well must be drilled, the water supplier may acquire a temporary easement to allow drilling to proceed and then receive reimbursement for that easement under a DWRF construction loan. Land purchase or easement cannot be finalized until after the applicant's resolution to adopt the final project plan takes place in order for the land acquisition costs to remain eligible. Also, environmental clearances must be obtained prior to test drilling at any well site in order for the drilling and land acquisition costs to remain eligible. The DEQ District Engineer should be contacted for an on-site inspection of proposed well sites prior to the commencement of exploratory drilling.

If a test well comes up dry and an additional test well(s) needs to be drilled, the costs associated will be eligible for DWRF reimbursement. Also, if land is purchased and is discovered to not produce a suitable well(s), the additional costs (legal, etc.) will be eligible for DWRF reimbursement. However, only the purchase cost of the final property (i.e., the property that is ultimately used for the well(s) or treatment plant) will be eligible for DWRF reimbursement. See the Property Acquisition Section of this guidance for additional information.

Waterworks System Expansion

The extension of a water main into an area not presently served by a public water supply will not be eligible for DWRF assistance unless (a) the extension is necessary to address a drinking water problem in that area that was documented in the project plan, (b) the extension is the cost-effective solution to that problem, *and* (c) the extension is necessary to meet clearly identified needs for the 20-year project planning period that are substantiated by valid population projections (e.g., projections prepared by the state of Michigan or the appropriate regional planning agency, using a nationally recognized model such as the one produced by the

U.S. Census Bureau). A waterworks system component sized to accommodate development or growth beyond the 20-year project planning period will not be eligible for DWRF assistance.

Waterworks System Security Measures

Waterworks system security measures are eligible for DWRF assistance, provided the need for each measure was established by the time draft plans and specifications are submitted for DEQ review. Eligible security measures include:

- Facility lighting
- Perimeter fencing
- Security cameras and motion detectors
- Secured storage for chemicals or fuel
- Backflow prevention devices in the distribution system
- Covers for finished water reservoirs
- Security hatches on reservoir or tank access panels and vents

The hiring of security personnel and the purchase of chemicals for enhanced disinfection are **not** eligible for DWRF assistance.

Security measures that are extensive in scope or cost may be eligible for DWRF assistance, provided the need for each measure was documented in a vulnerability assessment and discussed at the public hearing held for the proposed project. Examples of such security measures include:

- Enhanced filtration or disinfection for biological agents
- Enhanced treatment for chemical agents
- Other measures the need for which is demonstrated to the DEQ's satisfaction

Well Rehabilitation

Well rehabilitation will not be eligible for DWRF assistance unless the following two conditions are met:

- A. The applicant can demonstrate that the proposed work is not part of an operation and preventative maintenance program. A distinction is made between preventative maintenance and well rehabilitation. Preventative maintenance is a scheduled, budgeted process of monitoring, testing, inspection, repair, and treatment to maintain well performance and water quality. Preventative treatments are applied "pro-actively," usually on a schedule, and, frequently at low doses to control well and pipeline fouling in its early "light" stages. Well rehabilitation occurs after deterioration is evident, treatments/repairs are more intense, use more chemicals, and take more time.
- B. The applicant can demonstrate that well rehabilitation is more cost-effective than replacing the well. Considerations that need to be part of this evaluation include capital costs, design life of the new well versus the rehabilitated well, and operation and maintenance costs (i.e., if the water supplier is likely to have to repeat the rehabilitation process every several years, this cost needs to be included).

Vehicles

Cars, trucks, or other vehicles that are used for waterworks system O&M activities are not eligible for DWRF assistance.

All DEQ eligibility determinations will be based on the central criteria of necessity and reasonableness. For further information, please contact your DEQ project manager.