



PROJECT PLANNING DOCUMENT PREPARATION GUIDANCE CLEAN WATER STATE REVOLVING FUND (CWSRF)

IN THIS GUIDANCE

- Introduction3
- Project Planning Document 3
- Background..... 4
 - Study and Service Areas 4
 - Population 4
 - Existing Environment Evaluation 4
 - Existing System 5
 - Need for the Project..... 6
 - Projected Future Needs 7
- Analysis of Alternatives..... 8
 - No Action..... 8
 - Optimum Performance of Existing System 8
 - Regionalization 9
 - Monetary Evaluation 9
 - Environmental Evaluation..... 12
- Selected Alternative..... 12
 - Design Parameters 12
 - Useful Life 12
 - Project Maps 13
 - Water and Energy Efficiency 13
 - Schedule for Design and Construction 13
 - Cost Summary..... 14
 - Implementability 14
- Environmental and Public Health Impacts 15
 - Direct Impacts..... 15
 - Indirect Impacts 17
 - Cumulative Impacts 18

Mitigation 18

 Mitigation of Short-Term Impacts 19

 Mitigation of Long-Term Impacts 19

 Mitigation of Indirect Impacts 20

Public Participation 21

 Public Meeting 21

 Public Meeting Advertisement 22

 Public Meeting Summary 22

 Adoption of the Project Planning Document 23

Technical Considerations 23

 Infiltration and Inflow Removal 23

 Sewer System Evaluation Survey 24

 Structural Integrity 25

 Fiscal Sustainability Plan 26

 Special Assessment District Projects 26

Appendix 1: Planning Document Required Components 28

Appendix 2: Notice of Project Planning Public Meeting 30

Appendix 3: Sample Resolution 31

INTRODUCTION

This document is to assist applicants and their consultants fulfill project planning requirements of the CWSRF as identified in Part 53 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. This guidance addresses a wide variety of potential projects; therefore, not every issue is relevant to every project. However, when items are pertinent to the project, they must be addressed at a level of detail appropriate to the complexity of the issue and the scope of the proposed project. Refer to the flowchart in the appendix to assist in identifying which items apply to specific projects. If you are unsure whether an item applies to your project, consult with your EGLE project manager.

Applicants should begin compiling a project planning document as early as possible, after the submission of an Intent-to-Apply (ITA) form and attending an ITA meeting. Water Infrastructure Funding and Financing Section (WIFFS) staff are available to discuss program requirements and project planning document contents. Applicants should submit a draft project planning document for review at least 90 days before the document is finalized. This will allow staff to identify problematic issues or potential obstacles to prioritizing the project. The applicant can then incorporate the necessary changes before the public meeting and submittal of the final project planning document.

Potential applicants should note that if identified as an equivalency project, all contracts for architectural and engineering services (including planning, design, and construction engineering) for work being funded by the CWSRF must publicly announce all requirements for these services and negotiate contracts using a Qualifications-Based Selection (QBS) process. Guidance documents for the QBS process, along with the QBS Procurement of Architectural and Engineering Services Certification Form, can be found on the [EGLE WIFFS Forms and Guidance website](#).

PROJECT PLANNING DOCUMENT

A project planning document must be submitted to EGLE to evaluate, score, and rank projects on the upcoming fiscal year (October 1 – September 30) Project Priority List (PPL). Planning documents shall clearly specify which projects CWSRF assistance is being sought in the upcoming fiscal year separate from any future year projects. Municipalities have the option to draft a new project planning document or compile a project planning document using elements from a previously completed planning document, such as an Asset Management Plan (AMP), Capital Improvement Plan (CIP), Preliminary Engineering Report, etc. This could include preexisting documents or plans that were prepared for other projects, purposes, or developed under another local, state, or federal program, as applicable.

Please note that full copies of an AMP or CIP should not be submitted and will not be accepted by EGLE as a project planning document. If previously created documents are used in a CWSRF planning document, include a reference to the appendix in the section(s) which are covered by the excerpt of that document. Avoid submitting full copies of previous planning documents; instead, only reference and include necessary pages and sections. Regardless of which type of document

is used for drafting a plan, the applicable elements listed in the following sections must be included.

The final project planning document must be submitted to your EGLE project manager by the annual submittal deadline, as identified on the [EGLE CWSRF website](#). The Project Planning Document Submittal Form, PPL Scoring Form, Project Useful Life and Cost Analysis Certification, and QBS Certification Form are required to be submitted alongside your project planning document. These forms are available on the [EGLE WIFFS Forms and Guidance website](#).

BACKGROUND

Your document should begin with basic background information. The initial section should be detailed enough to serve as the foundation for assessing needs, evaluating alternatives, and identifying environmental issues. Items to be included in the project background include the following.

STUDY AND SERVICE AREAS

The study area includes the area that contributes to the wastewater and water quality problems to be addressed by the project. The study area covers the geographic area served by any existing system(s) and include potential treatment sites or facilities outside of the current service area. Any development trends which may be detrimental to the air and water quality, agricultural areas, or develop sensitive areas must be addressed.

Once the study area is delineated, the area to be served by the proposed project must be identified, including the current service area and any new service areas anticipated during the planning period. Maps of the study and service areas should be included.

POPULATION

The current population along with the projected population in 20 years for the study area must be included. Factors such as expected significant growth or decline, or seasonal populations must be discussed. Projections used must correlate with those prepared by the appropriate regional planning agency, State of Michigan, or United States Census Bureau. Sources of population projections must be listed.

EXISTING ENVIRONMENT EVALUATION

The existing environment in the study area must be discussed, including a brief evaluation of the following items if they are present and impacted by the proposed project. Resources which are not present can simply be listed and identified as not applicable or present. Maps are not required but are recommended for any impacted resources.

- A. **Cultural and Historic Resources** – known historical and archaeological sites must be described, based on documentation provided through the National or State Historical Register, the State Historical Preservation Office (SHPO), Tribal Historic Preservation

Officers (THPO), local historical societies, and local or regional planning agencies.

B. **Air Quality** – current and anticipated.

C. **Wetlands**

D. **Great Lakes Shorelands, Coastal Zones, and Coastal Management Areas**

E. **Floodplains** – including a Federal Emergency Management Agency (FEMA) floodplain map.

F. **Natural or Wild and Scenic Rivers**

G. **Major Surface Waters** – characteristics, uses, and water supply sources.

H. **Topography**

I. **Geology**

J. **Soil Types**

K. **Agricultural Resources**

L. **Fauna and Flora** – Environmentally sensitive habitats and any species currently listed as threatened, endangered, or state special concern.

EXISTING SYSTEM

A brief overview of the existing system must be included. A brief discussion of the overall system can be included along with further analysis of items impacted by the project or identified as 20-year needs. This information can be included as a table highlighting main assets and their age, material, problems, etc. The following items are examples of possible assets to be included, but not all are required for every project:

- A. The method of wastewater treatment and condition of the facilities.
- B. The method of sludge handling/disposal and the status of the Residuals Management Program.
- C. The type of collection system, including the physical condition, age, adequacy, and location of existing sewers, interceptors, outfalls, treatment facilities, and pump stations.
- D. The design capacity, existing flows, average and peak dry-weather and wet-weather flows, and characteristics of wastes.
- E. The location, description, and quantity of major industrial discharges and industrial pretreatment programs in place.
- F. Infiltration and inflow (I/I) problems in the collection system.

- G. The location of all system bypasses, including sanitary sewer overflows (SSO) and combined sewer overflows (CSO), with their frequency, duration, and cause.
- H. The existing stormwater system including collection, treatment, and discharges.
- I. The existence of any operation or maintenance problems.
- J. An evaluation of the system's climate resiliency. This is the system's ability to withstand and respond to changes resulting from climatic factors, such as increased flooding risks and increased intensity or frequency of storm events, should be evaluated. The availability of back-up power to continue facility operations should be discussed. Information and resources can be found on EPA's [Website for Creating Resilient Water Utilities](#).

NEED FOR THE PROJECT

The plan must demonstrate the need for the project to maintain compliance or progress toward compliance with the Federal Water Pollution Control Act and meet the requirements of the National Environmental Policy Act of 1969. Compliance with existing National Pollutant Discharge Elimination System (NPDES) or groundwater discharge permit should be described. A comparison of the existing treatment facility performance to the permit discharge limits should be included. If the NPDES permit contains an enforceable construction schedule, those requirements should be discussed in relation to the proposed project. A copy of the latest discharge permit must be included as an appendix to the project planning document.

All court orders, federal or state enforcement orders, administrative consent orders, violation notices for MS4 involving the municipality should be described and must be included in an appendix to the project planning document. Anticipated impacts to water quality and public health if the proposed project is not implemented should be included. Concerns with aging infrastructure and the need to replace components to maintain system integrity should be demonstrated.

Water Quality Problems

Point and nonpoint sources of pollution from on-site systems, stormwater runoff, municipalities, industries, and agriculture must be identified. The characteristics of these discharges should be described to evaluate the magnitude of water quality impacts of the separate and/or cumulative discharges. The sources expected to be addressed by the proposed project must be identified.

Where a municipality is considering providing service to areas currently without sewers, it must be demonstrated that the disposal of wastewater from the existing population is causing a public health problem, groundwater contamination, or a violation of the point source discharge requirements of the Federal Clean Water Act.

Since a direct link between improperly functioning septic systems and water quality sampling results is often not clear, the documentation process involves the compilation of information to establish the site conditions and its impact on septic systems. The local health department should be able to provide septic system installation and drinking water well records, which will establish the condition of the systems, the replacement frequency, and the depth to the water table. The applicable public health code, county soil survey, soil maps, sanitary surveys, site inspections, and

soil borings can supply information on the impact of the site conditions on septic system function. A questionnaire can be used to obtain additional information such as the age of the building and sewage disposal system, lot size, location of the sewage disposal system and distances from the house/drinking water well/property lines, system maintenance, occupancy of the building, water-using appliances, depth of drinking water well, and identification and characterization of any problems.

For projects undertaking sewer rehabilitation or replacement projects to address Infiltration and Inflow or structural integrity, justification must be included with the planning document. For more information on these reports, refer to the technical considerations section at the end of this document.

Stormwater Projects

For projects proposed in separate storm sewer, justification of project need includes items such as runoff volume or pollutant loads. Applicants must clearly identify the need for the proposed stormwater project and what environmental and/or public health issues are being addressed. Compliance or enforcement items from an NPDES MS4 permit must be discussed. Issues currently experienced within the system along with projected future issues related to flooding that causes water quality problems should be identified. Areas experiencing high volumes of stormwater runoff must be identified. The volume of runoff and any pollutant concerns must be discussed. Any exceedances of total maximum daily load levels and their impact must be discussed. Impervious surfaces currently connected to the system must be identified.

PROJECTED FUTURE NEEDS

The document must examine and prioritize needs in the study area over the planning period. For a CWSRF plan, a minimum 20-year planning period must be used. A copy of planned work from an AMP or CIP is sufficient for demonstration of future needs. Only CWSRF funded projects require in-depth analysis. Improvements or modifications to improve a system's ability to adapt and respond to changes resulting from climatic factors should also be examined.

Residential wastewater needs must be based on data included in the population section. 70 gallons per capita per day must be used in computing the future per capita residential wastewater flow unless another figure can be justified. Another figure might be calculated by subtracting the estimated I/I and industrial flows from an average daily base flow derived from reliable water supply records showing residential consumption or wastewater flow records over extended dry periods. This figure is then divided by the existing sewered residential population to obtain the per capita contribution.

Industrial, commercial, and institutional flows should be supported by documentation, either in terms of letters of intent or flow records, particularly where flows from individual water users are a significant contribution to the total wastewater flow. Projection of these flows should be based on realistic economic expectations.

ANALYSIS OF ALTERNATIVES

The alternative analysis must consider the objectives of the project, technical constraints, and discharge permit requirements. The widest variety of potential alternatives for the system must be identified. The potential alternatives must be evaluated based on the project objectives. Rationale for rejecting an alternative must be provided. An in-depth analysis, including the monetary and environmental evaluations, is only performed for the principal alternatives.

Equivalent alternatives must be compared. Each alternative must serve the same customers and provide the same capacity. Each alternative must address all the needs detailed in the Need for the Project section. Any deviations from this comparison must be noted.

The following alternatives must be evaluated, in addition to conventional transportation and treatment technologies or processes. Rehabilitation of components compared with replacement must be compared. Varying construction methods and materials must be considered. In the event of structural sewer issues, spot repairs/lining compared to full replacement must be evaluated.

No ACTION

The no-action alternative is evaluated to assess the impact of continuing with the existing system. This alternative may be feasible when transportation, treatment, and disposal facilities comply with discharge permits or where no facilities currently exist.

OPTIMUM PERFORMANCE OF EXISTING SYSTEM

The existing system should be evaluated to determine if it can function more efficiently with operational changes, additional new equipment, or addition and training of operating personnel. This alternative is different from construction or replacement alternatives. The investigation will determine what additions or process modifications can be made to improve system operation.

The following items should be considered:

- A. The optimum performance level possible with the existing process design.
- B. The age and reliability of the existing treatment equipment and its remaining useful life.
- C. Any additional operating controls and laboratory facilities needed to monitor and improve operations.
- D. Process modifications (e.g., conversion of conventional activated sludge to contact stabilization, the addition of mechanical aeration to waste stabilization ponds).
- E. The impact on performance of implementing an industrial pretreatment program if one does not already exist.
- F. The impact on performance of flow reduction programs to remove or eliminate excess I/I.
- G. The performance of the existing on-site disposal systems and modifications to improve performance through public education and management.

REGIONALIZATION

Regionalization is evaluated to assess the feasibility of connection to an existing regional system and/or the creation of a regional system with neighboring municipalities. The complete cost of each alternative and its comparability with other alternatives must be evaluated carefully. For instance, a regional alternative may serve areas with no water pollution problems along with areas that have existing needs, while other alternatives serve only those areas with existing pollution problems (e.g., a regional interceptor extension compared to a treatment plant upgrade in a small town).

For regional alternatives, the capacity and adequacy of the proposed treatment facility must be examined. The costs of upgrade or expansion to treat increased flows and the basis for these costs must be included. These costs are in addition to any interceptor/pump station costs. Where a new regional treatment facility is proposed, the basis for allocating costs to the participating municipalities and the need to negotiate and execute intermunicipal service agreements must be discussed.

In analyzing regional alternatives, alternative interceptor routings must be evaluated, with consideration given to cost and the magnitude of facilitated growth caused by access to wastewater systems. The resulting socioeconomic and environmental impacts of the growth must be examined. Where the construction of a regional interceptor will facilitate or accelerate development of a currently less developed area, the impacts of this development must be addressed. Also, the population to be ultimately accommodated by the system must be discussed and must correspond to acceptable assumptions and projection methodologies.

MONETARY EVALUATION

The monetary evaluation includes a present worth analysis which compares all costs (design, construction, mitigation) for each alternative over the 20-year planning period. All costs except for sunk costs must be included, both eligible and ineligible. Comparison in a tabular format is recommended for the monetary evaluation.

The following cost factors are associated with the monetary evaluation:

A. Sunk Costs

Sunk costs are the investments or financial commitments made before or during project planning. These costs are not included in the cost-effectiveness analysis since they have already been committed regardless of the alternative selected. Sunk costs typically include the cost of existing facilities and land, outstanding bond indebtedness, and the cost of preparing the project planning document.

B. Present Worth

Total present worth is used to compare alternatives including OM&R, capital costs, and salvage value. Where the components used as the basis for calculating OM&R costs (e.g., the number of operators, energy costs, training needs) differ between alternatives, a

breakdown of those differences must be provided.

The real discount rate used to calculate the present worth cost is established each year by the Federal Office of Management and Budget (OMB). The real discount rate can be obtained from Appendix C of OMB circular A-94, available on the OMB website. The discount rate used must be noted and must be the same used for all alternatives.

The following equations are useful in completing the present worth analysis.

Present Worth of One-Time Expenditures (Capital Costs and Salvage Value)

$$PW = F \times \frac{1}{(1 + i)^n}$$

Uniform Series Present Worth of Recurring Equal Expenditures (OM&R Costs)

$$USPW_{OM\&R} = A \times \left[\frac{((1 + i)^n - 1)}{i(1 + i)^n} \right]$$

Present Worth of Recurring Escalating Expenditures (Energy Costs, if applicable)

$$PW = G \times \left[(1 + i)^{n+1} - \frac{(1 + ni + i)}{i^2(1 + i)^n} \right]$$

F = future value = estimated project cost	A = annual expenditure
n = number of years	G = uniform increasing amount
i = discount rate	PW = Present worth

- 1) Determine the present worth of construction and OM&R components.
- 2) Determine the salvage value and present worth of the salvage value.
- 3) Determine the present value of capitalized interest and revenue generated, if applicable.
- 4) Calculate total present worth by adding capital costs, plus OM&R components, and capitalized interest minus the present worth of the salvage value and revenue generated.

C. Salvage Value

At the end of the 20-year planning period, portions of the proposed structures or equipment may have a salvage value. When calculating present worth, the salvage value of structures or equipment is determined by using straight line depreciation. The useful life to be used in the monetary evaluation should fall within the following ranges:

- 1) Land — permanent.

- 2) Water supply conveyance (e.g., distribution and transmission mains, intakes, and wells) — 50 years.
- 3) Other structures (e.g., waterworks buildings, storage tanks, and pump station structures) — 30 to 50 years.
- 4) Process equipment (e.g., chemical feed systems, pumps, and motors) — 15 to 20 years.
- 5) Auxiliary equipment — 15 to 20 years.

If a useful life of less than the planning period is assigned to any project component, the cost-effectiveness analysis must show the present worth of the replacement cost at the end of the useful life, as well as the present worth of the salvage value of the replacement at the end of the planning period.

D. Escalation

Only energy costs and land value may be escalated in the monetary evaluation. The cost of labor, equipment, and materials is not escalated since it is assumed that any increase will apply equally to all alternatives. The escalation of energy costs is to be based on data periodically published by the EPA or on historical data for the area, if justified. Land prices should be escalated at a uniform rate of 3 percent per year, except for rights-of-way and easements.

E. Interest During Construction

If interest during construction is significant and may influence the choice of alternatives, it may be included in the monetary evaluation using one of two methods. If expenditures are uniform and the construction period is less than four years, interest is one half of the product of the construction period (in years), the total capital expenditures (in dollars), and the real discount rate. Otherwise, interest should be calculated on a yearly basis.

F. User Costs

Total cost of the project to users, including capital and financing costs, OM&R costs, and hook-up/tap-in fees etc., must be presented. The project planning document must show estimated costs (annual, quarterly, or monthly) to residential and industrial users for each alternative.

G. Project Delivery Method

If an alternative delivery method is to be utilized, the monetary evaluation (which includes an estimate of costs for the firm) must consider the costs of the selected method versus the traditional Design-Bid-Build delivery method. The benefits and disadvantages of these methods must be discussed in detail as part of the alternative evaluation, with an explanation of why the chosen delivery method is the best fit for the project.

ENVIRONMENTAL EVALUATION

The major environmental impacts expected to result from each alternative must be compared. Similar impacts between alternatives should be compared in terms of scope and intensity. Where vastly different types of impacts are expected, the whole range of impacts must be addressed, including any significant environmental benefits precluded by rejection of an alternative. In general, the comparison of impacts resulting from each alternative should address each relevant environmental, social, or other factor identified in the project background section.

It may be possible to summarize the comparison of impacts in a matrix or other tabular format. Complex and major impacts should be fully described to clarify the differences in scope and intensity of impacts expected to result from the various alternatives. Anticipated mitigation requirements and costs must be included in this discussion.

SELECTED ALTERNATIVE

The description of the selected alternative must be comprehensive, providing sufficient detail on the project and its beneficial and adverse impacts. An explanation of how the proposed project fits into comprehensive plans to address wastewater needs for the future should be included.

DESIGN PARAMETERS

A summary of the basis of design should be presented, including:

- A. The unit processes and sizes as related to service area needs (population, industrial users).
- B. A schematic flow diagram of the treatment processes and major features.
- C. The design criteria (e.g., detention times, overflow rates, process loadings, initial and design flows).
- D. Discharge permit/effluent limit requirements.
- E. Residuals management (e.g., grit, sludge, ash).
- F. Collection system details. Provide pipe lengths and sizes, street names, and proposed routes to be impacted by construction.
- G. Factors that dictate the type and sizing of the collection and transportation system (e.g., state standards, anticipated service area flows, minimum slopes) and provisions for standby power and odor control.
- H. Stipulations in court orders, federal or state enforcement orders, administrative consent orders, or local health department findings and directives.
- I. Mitigation of environmental impacts of the proposed project construction and operation.
- J. Any other pertinent factors (e.g., budget restraints or debt loads).

USEFUL LIFE

Projects must submit documentation to reasonably support the projected useful life of the assets financed by the CWSRF loan. Useful life estimates should be supported by manufacturer's recommendations and other relevant information in the project planning document. Loan terms (20 or 30 years) must not exceed the useful life of the project.

For projects involving a variety of components or equipment with varying useful life estimates, a weighted average should be used to determine the overall project useful life.

$$\text{weighted useful life} = \frac{(\text{sum of each asset's dollar value times its estimated useful life})}{\text{total estimated dollars spent on assets}}$$

PROJECT MAPS

Legible maps, with distance scales and other appropriate graphics, must be provided to show the locations of the following items if part of the proposed project:

- A. Locations of treatment and disposal facilities for wastewater and residuals. If residuals must be transported, proposed haul routes and schedules (hours and frequency) should be discussed.
- B. Routes, lengths, and sizes of sewers and force mains.
- C. Locations of pump stations.
- D. Locations of CSO, SSO, and stormwater control/treatment facilities.

WATER AND ENERGY EFFICIENCY

Provide an explanation of the selected alternative's potential for water and energy efficiency and associated cost savings. Water efficiency efforts to consider include water reuse, water efficient devices, water meters, water audits and conservation plans. Energy efficiency efforts to consider include energy audit and assessment results, energy use of proposed alternatives, emissions of various alternatives and greenhouse gas reductions, and use of renewable energy.

Applicants are required, to the maximum extent practicable, to select an alternative that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation. This must consider the cost to construct the project, the cost to operate and maintain the project over the life of the project, and the cost to replace the project.

The following resources are available to assist with the analysis:

- EPA's [WaterSense Program Website](#)
- EPA's [Water Conservation Plan Guidelines Website](#)
- AWWA [Water and Audit Software Website](#)
- AWE [Water Conservation Tracking Tool](#)
- EPA's [Energy Use Assessment Tool](#)

SCHEDULE FOR DESIGN AND CONSTRUCTION

The time required for design, financing, bidding, permit procurement, seasonal restrictions on construction, and the mitigation of environmental impacts of construction and operation should all be identified. A table or write-up of the project schedule should be included. Planning documents shall clearly specify which projects CWSRF assistance is being sought in the upcoming fiscal year separate from future year projects.

If the project is part of a regional system, the time required for review and approval from the regional system should be identified and factored into the schedule. Time needed to amend intermunicipal agreements should be identified and factored into the project schedule. Projects that involve the creation or modification of a SAD must identify the dates for the confirmation hearing on the special assessment tax roll and the close of the special assessment appeal period. If the SAD includes a significant number of seasonal residents, it is strongly suggested that the confirmation hearing be held during the season of highest occupancy.

COST SUMMARY

A summary of all costs associated with planning, design, and construction of the selected alternative must be presented, including costs associated with administration, financial and legal services, land acquisition, mitigation, and other project-related activities. If applicable, costs of green project reserve components should be specifically identified. The total estimated project costs should be translated into an estimated total annual, quarterly, or monthly residential user charge over the useful life of the project. The amount of flow generated by the typical residential customer, based on actual metering or water usage, must be presented to allow the public to calculate their actual costs. Whatever method will be used to repay the debt for the project, those sources must be clearly identified.

The discussion of user costs must identify the number of users or user equivalents. When user equivalents are used, an explanation of how a user equivalent is defined must be included. It must be clear how the cost of the project is distributed across the users. The method for debt repayment including use of other funding sources to defray costs must be described. The use of hook-up fees, special assessments, or other financing tools that will be used to defray the debt must be discussed. The impact of principal loan forgiveness or grants from EGLE should be discussed as it relates to the user cost impact.

Estimated costs must be generated without factoring in new users projected to connect after project completion, even though such users could serve to lower long-term costs.

The project costs and associated user charges must include and differentiate the following items:

- A. Capital expenditures (e.g., debt retirement, hook-up/tap-in fees, special assessments).
- B. Operation and maintenance.
- C. Replacement of service-limited facilities and components.
- D. Other costs likely to be incurred by customers.

Since customers will have varying means to pay hook-up or tap-in fees and recurring user charges, it may be useful to briefly discuss various methods of payment and any financial aid programs that may be available to assist customers.

IMPLEMENTABILITY

Certain alternatives or sites may not be acceptable to the public or to neighboring communities affected by the project. These issues must be resolved in the choice of alternatives.

The applicant must have the legal authority, managerial capability, and financial means to build, operate, and maintain the system. Identify the entity that will own, operate, and finance the facilities to be built as part of the proposed project and if any cash contributions are necessary. If the system is a regional system or authority with multiple municipalities, a discussion of the institutional arrangements for financing the project and any intermunicipal service agreements or amendments to existing agreements must be included. Resolutions must be obtained from all participating entities adopting the planning document and agreeing to implement the selected alternative. These resolutions will suffice as an initial demonstration of project implementation capability. However, executed intermunicipal agreements will be needed to solidify the arrangements to finance the project.

For projects that involve the disconnection of footing drains to remove clear water from sanitary or combined sewer house leads, an ordinance or similar legal instrument will be an indication that the municipality has the legal authority to complete the proposed project. The project planning document must identify this legal document.

All service agreements and necessary ordinances must be submitted for EGLE review as part of the CWSRF loan application process.

ENVIRONMENTAL AND PUBLIC HEALTH IMPACTS

The potential beneficial and adverse effects of the project to the environment and/or public health must be evaluated. The analysis of project impacts should be organized to consider the impacts of the proposed project on the existing environment. Responses from reviewing agencies can be compiled in an appendix. Responses received after submittal should be forwarded to your EGLE project manager. Responses received after planning document submittal should be forwarded to your EGLE project manager.

For projects that are identified as equivalency projects, formal contacts with federal crosscutting authorities must be made. These include the State Historic Preservation Office (SHPO), Tribal Historic Preservation Officers (THPO), U.S. Fish and Wildlife Service, Michigan Natural Features Inventory (MNFI), and EGLE Water Resources Division.

During early discussions with your EGLE project manager, an outlook on likelihood of being selected as an equivalency project will be given. Projects with higher cost totals and those receiving federal funds are strongly encouraged to make formal contacts with federal crosscutters during project planning. It is also acceptable for these contacts to be made after a planning document is submitted and ranked on the PPL. Your project manager will follow-up prior to the publication of the Finding of No Significant Impact regarding these contacts. More information on these requirements can be found in the *Applicant Actions During Project Planning Guidance*.

DIRECT IMPACTS

Direct impacts are the social and environmental impacts that are directly attributable to the construction and operation of the project. Projects such as minor sewer rehabilitation (grouting or slip lining) will normally have minimal impacts on environmental features, but will have noise, dust,

and traffic disruption impacts. New treatment plants, retention basins, and collector or interceptor sewers normally have greater primary impacts that must be evaluated, particularly where construction will occur in undeveloped areas.

Direct impacts can be divided into those attributable to project construction and operation. While construction normally creates short-term impacts that can be mitigated or reversed through adequate restoration, the destruction of structures or sensitive habitats during construction can result in long-term, irreversible impacts.

A. Construction Impacts

The document must describe the areas to be impacted during construction. All natural and man-made features existing in these areas must be identified. Construction in rights-of-way should describe the existing features in the zone of construction. Areas of potential tree removal must be identified, and any removal of large trees or extensive areas of vegetation removal must be noted. Drainage features, sidewalks, and other features that will be disturbed should be identified.

Impacts upon sensitive features such as floodplains, wetlands, stream crossings, shorelands, and prime or unique agricultural lands must be identified. Disturbance of any of these features must be described and typically will require review by and permits from state or federal agencies. Applicants should have sensitive features such as floodplains and wetlands delineated by qualified consultants and include these delineations and maps.

Construction methods (e.g., open cut, directional drill, etc.) and areas of disturbance (including expected width of trench and associated disturbed areas) should be thoroughly described.

Rare, threatened, endangered, and special concern species must be identified. A biological survey may be required to identify if they exist in the areas of construction or would be affected by proximity to construction.

Impacts upon archaeological, historical, or cultural resources (e.g., historic neighborhoods, buildings, or streetscapes) must be identified. Refer to SHPO for instructions and documents needed for a review. If there is likelihood of impacts to tribal resources, contacts must be made with the THPO in each region. Tribal contact lists and sample letters are available on the [EGLE WIFFS Forms and Guidance website](#).

Traffic impacts should be identified, especially areas where construction will impact access or areas that will be affected by increased construction traffic. The potential location of construction haul routes and other traffic disturbances should be addressed.

Impacts to surface water and groundwater, including impacts from construction dewatering, must be identified. If there is a potential for adverse impacts to groundwater or surface water activities related to the project, the selected mitigation measures should be explained in the Mitigation Section of the document. The evaluation can be based on the groundwater depth and the anticipated depth of construction. The evaluation should include:

1. Whether dewatering activities will occur with this project and a short description on the type of dewatering activity (localized, minimal, extensive).
2. Estimation on the depth of the dewatering activity.
3. If there are any special circumstances, such as if the project area's residential population relies heavily on residential wells or if there are wetlands located within the anticipated cone of influence for the dewatering activity, the potential impact needs to be evaluated. Details should be provided as to how many residential wells are located within the project area and the anticipated depth, ground, or surface water flow direction, etc.

Other potential environmental impacts not identified above must also be addressed.

B. Operational impacts

Impacts of facility discharges to groundwater and surface water should be identified, including any interim discharges for segmented projects. Project operation can impact the surrounding area if the facility is in operation. Operational impacts include odors, noise, traffic, and accidents such as chemical spills. Discuss impacts to residential areas while the facility is in operation.

C. Social impacts

Increased user costs are a social impact. Large increase in rates can create a negative impact. A discussion of any existing or proposed methods to lessen this impact should be discussed.

Construction may increase jobs in the area either directly or indirectly. Major disturbance of traffic patterns such as extensive detours or lack of access to important facilities or businesses are negative impacts that should be discussed. Examples of long-term impacts include the relocation of businesses or residents and employment changes.

INDIRECT IMPACTS

Indirect impacts are those caused or facilitated by the proposed project, but which will be removed in time and/or distance. Indirect impacts often take the form of new residential or commercial development made possible by the project. A key point to remember is that interceptors or an expanded treatment facility can cause indirect impacts in addition to the direct impacts due to the construction activity. Facilitation of new areas of development, even if "consistent" with zoning, may be considered significant adverse impacts. In addition, the conversion of agricultural lands and open areas to other uses and destruction of sensitive environments such as wetlands, shorelands, areas of unbroken forest canopy, and other habitat areas may also be considered significant adverse impacts.

The impacts of undirected growth include additional traffic, overcrowded schools, overextended police and fire protection, and a heavy financial burden on existing and future residents not only for the cost of new wastewater facilities, but also for the cost of other capital improvements. Undirected growth not only affects residents and their quality of life but can also have serious adverse impacts on the natural environment, historical resources, and sensitive features.

The following indirect impacts must be discussed:

- A. Changes in the rate, density, or type of development (residential/commercial/ industrial).
- B. Changes in land use (i.e., open space, floodplains, prime agricultural land, shorelands, forested areas, or other natural habitats).
- C. Changes in air or water quality due to facilitated development, including traffic impacts.
- D. Changes to the natural setting or sensitive features resulting from secondary growth.
- E. Impacts on cultural, human, social, and economic resources.
- F. Impacts on area aesthetics.
- G. Resource consumption over the useful life of the project.

CUMULATIVE IMPACTS

Cumulative impacts to the environment are those that increase in magnitude over time or that result from individually minor but collectively significant actions taking place over time. Cumulative impacts may take the form of multiple impacts affecting one element of the environment. A comprehensive overview of these impacts should be presented, not an analysis of each impact separately. The overview should blend impacts from actions directly related to the project and/or related impacts with impacts from actions attributable to other agencies or persons. Cumulative impacts should encompass the entire treatment system, other public works projects, and projected community growth. Some examples are:

- A. Siltation or other impacts caused by successive discharges to the same waterbody over time.
- B. Water quality impacts from direct discharges and nonpoint sources.
- C. Indirect impacts from development facilitated by a new interceptor where a new interstate highway or other infrastructure additions will help induce development.
- D. The impacts from multiple public works projects occurring in the same vicinity upon business or residential access and traffic patterns. Segments occurring in successive years may also have a cumulative disruptive impact.
- E. Fiscal impacts on the municipality and its citizens resulting from multiple public works projects occurring in the same time frame.

MITIGATION

Where adverse impacts cannot be avoided, mitigation must be considered and described, regardless of if required by a particular permit or agency clearance. The magnitude and potential for environmental impacts, and any "extraordinary measures" necessary to mitigate them, form the basis for EGLE to determine whether an Environmental Impact Statement will be required.

The project planning document must include both structural and non-structural measures that will be taken to avoid, eliminate, or mitigate adverse impacts on the environment. Structural measures include mitigation related to the specific design and construction of the facility. Non-structural measures include mitigation related to governmental, institutional, or private plans, policies,

regulations, or phasing of facility construction over the planning period. The discussion must specifically address the proposed mitigation for each identified impact.

MITIGATION OF SHORT-TERM IMPACTS

Many mitigation techniques used to minimize short-term construction impacts are standard procedures included in construction contracts. Examples are traffic and safety hazard controls, dust control, noise control, soil erosion and sedimentation control, tree protection, disposal of construction spoils, and restoration of roads, vegetation, and utilities. These types of mitigation must be discussed. Siting and routing decisions should consider the relative costs of replacing or restoring the more expensive or valuable existing features such as roads and mature vegetation.

General Construction

If construction will occur in or near sensitive features, mitigation measures are usually specified in permits issued under the various acts that protect those features. Even if the required permits or clearances do not specify mitigation measures, mitigation must be evaluated if adverse impacts are possible. Typical mitigation-related permit specifications include:

- A. Prohibiting the disposal of spoils in wetlands, floodplains, or other sensitive areas.
- B. Specifying the use of construction mats or wide-track vehicles in wetlands or limiting construction to dry seasons.
- C. Specifying certain construction practices for stream crossings along sewer routes.
- D. Construction timing and other requirements to protect endangered/threatened species and their habitat.

Early contact should be made with permitting authorities to determine the existence and extent of the various sensitive features. This information must be incorporated into the project planning document. Be aware that these agencies often cannot provide a clearance on the proposed action without detailed plans or drawings. Because the applicant is ultimately responsible for complying with federal and state environmental laws and regulations, its representatives must be timely in providing sufficient information for agency evaluations.

MITIGATION OF LONG-TERM IMPACTS

Every effort must be made to avoid potential long-term or irreversible adverse impacts. Alternative routings of collector sewers, interceptors, or outfalls and alternative sites for major facilities that avoid affecting sensitive environmental features must be evaluated. Where it is demonstrated that there are no feasible and prudent alternatives that totally avoid impacts, mitigation must be considered to ensure that sensitive features do not suffer permanent or irreversible adverse environmental impacts.

Siting Decisions

The location of treatment facilities or major appurtenances is generally permanent and irreversible and should avoid damage to sensitive features. When there is no other feasible alternative,

replacement of damaged features may be an option upon approval by the agency with permitting or review authority.

Operational Impacts

Preventative and mitigative measures to address impacts occurring because of facility operation such as odors, aerosols, noise, and operational accidents, must be discussed. These potential impacts can generally be mitigated by use of buffer zones and structural or mechanical features of the facility. Potential releases of hazardous chemicals can be addressed in the facility's operation plan. Potential impacts of effluent discharge are typically addressed in discharge permits; however, if the quality or quantity of a discharge will adversely affect the hydrologic regime or vegetation of a wetland or stream, mitigation must be considered.

MITIGATION OF INDIRECT IMPACTS

The provision of infrastructure in an area frequently facilitates residential and commercial growth, especially where publicly financed infrastructure gives one location a competitive advantage in building costs over other locations in the same market area. The potential for facilitated development must be evaluated in conjunction with other capital improvements and infrastructure projects, particularly where a lack of adequate wastewater facilities currently prevents development.

Where new development is expected to be either facilitated or accommodated by the project, the project planning document must show that the negative impacts can be mitigated so as not to be detrimental to the cultural, historical, and natural features of the area. Mitigation of indirect adverse impacts is often accomplished by utilizing non-structural means (e.g., public policies, phasing the construction of the facility). The first step in addressing this issue is demonstrating that the capacity provided by the project corresponds with the current master plan and/or zoning. Where the current master plan or ordinances are not adequate to address facilitated development, the project planning document must discuss the necessary modifications and a projected schedule for the modifications.

CWSRF loan assistance cannot be provided to a project that will accommodate or facilitate growth in areas that are protected from development under federal or state law. Treatment capacity, interceptors, and sewers will not be eligible for funding if they serve or provide capacity to such areas.

The master plan and zoning should recognize and protect the cultural, historical, and natural attributes existing in the study area. Planning and zoning should specifically address development pressures on the following:

- A. Historical features or neighborhoods so that these areas are not directly destroyed by new building or indirectly impacted by other infrastructure.
- B. Prime or unique agricultural land to control direct development of this critical resource and prevent displacement of farmers by increased taxes and other assessments for sewers and road widening made necessary by development.

- C. Wetlands, floodplains, stream banks, shorelands, or other sensitive features to direct growth away from these areas and to prevent deterioration of these areas by dumping, nonpoint source pollution, and other degradation (e.g., destroying vegetation, draining, ditching, utilization of pesticides and herbicides).

Ordinances

Ordinances should be developed and enforced to control increased stormwater and NPS pollution from impervious surfaces, fertilized and chemically treated residential lawns, and disturbed areas where new construction is occurring. Structural solutions (e.g., settling or retention basins, a stormwater control network) may be necessary to address the magnitude of stormwater, potential flooding, and NPS pollution problems that are created by growth.

Building codes, performance standards, specific ordinances, or limitations on certain uses can be used to address the increased noise, odors, and air pollution from dust, general combustion sources (open burning, wood stoves), and vehicle emissions caused by increased growth.

Staging of Construction

Construction of interceptor sewers, collection sewer extensions, and major treatment facility expansions should be staged when feasible. This method, especially when increases in capacity and extension of the system are dramatic, can assist in limiting the debt retirement burden for existing residents. It can also allow for other capital improvements, such as roads, to keep pace with the provision of wastewater systems. The routing and timing of interceptors and sewer extensions can help direct development and in accordance with the municipality's master plan and zoning.

PUBLIC PARTICIPATION

Opportunities for public participation must be documented in the project planning document. In addition to public meetings, other methods of informing and involving the public include newspaper articles, fliers in utility bills, mass mailings to citizens, and the establishment of citizen's groups for input on controversial projects. The purpose is to address any controversial aspects of the plan and to generate a better understanding of the project.

Although public meetings on the proposed alternatives are preferred, council meetings held in accordance with all the requirements are acceptable. In either case, a demonstration that there were adequate opportunities for public consultation, participation, and input in the decision-making process during alternative selection should be included in the project planning document. A list of significant issues raised by the public and any changes to the project resulting from public input should also be discussed.

PUBLIC MEETING

The applicant applying for a CWSRF loan must hold a formal public meeting prior to the adoption and submittal of a final project planning document. The date, place, and time of this meeting must

be conducive to maximizing public input. For complex or controversial projects, or projects that will serve more than one municipality, multiple meetings could be held, and several meeting locations could be selected.

The following items must be discussed during the public meeting:

1. A description of the water quality problems to be addressed by the project and the principal alternatives that were considered.
2. A description of the recommended alternative, including its capital costs and a cost breakdown by project components (e.g., treatment plant, sewer system).
3. A discussion of project financing and costs to users, including the proposed method of project financing and estimated monthly debt retirement; the proposed annual, quarterly, or monthly charge to the typical residential customer; and any special fees that will be assessed.
4. A description of the anticipated social and environmental impacts associated with the recommended alternative and the measures that will be taken to mitigate adverse impacts.

In the event no one from the public attends the meeting (a reporter would be considered a member of the public, as would members of the applicant's governing body), the public meeting may be opened and closed without a formal presentation of the project planning document. However, the public meeting summary must still be included documenting this action.

PUBLIC MEETING ADVERTISEMENT

A notice of the public meeting must be advertised at least 15 days prior to the meeting in the communities affected by the proposed project. To count the number of days, the day after the advertisement is published is considered the first day, and the public meeting could be held on or after the 15th day (for example, if the advertisement was published on the 1st of the month, the public meeting could be held on or after the 16th). Determine the best way to reach the most residents in the community through methods such as posting on the municipality's website, mailings, social media posting, and/or newspaper posting. Notice of the public meeting must also be sent to all affected local, state, and federal agencies along with public and private parties that expressed interest in the project.

The draft project planning document must be available for public review during the 15-day period. A copy of the advertisement, such as a screenshot, active posting link, or affidavit, must be included. The posting date must be able to be confirmed. Instructions on how to view the project planning document and how to submit written comments must be included in the advertisement. A Notice of Project Planning Public Meeting Template can be found in the appendix of this document.

PUBLIC MEETING SUMMARY

The following elements from the public meeting must be included in the final planning document.

- Summary of the meeting held and what was covered during the meeting. If a presentation was given, a copy of the slides is sufficient for a summary.
- List of all attendees. If possible, include contact information such as email addresses for those present to be sent a copy of the Environmental Assessment.
- Any specific concerns that were raised during the meeting and the responses.
- Any written comments that were received during the public notice period and the responses.
- Any changes that were made to the project because of public comment should be described in the plan.

ADOPTION OF THE PROJECT PLANNING DOCUMENT

After the close of the public comment period, an alternative must be selected for implementation by the municipalities participating in the project. The final project planning document submitted must include resolutions from all the participating local units of government to formally adopt the document and implement the selected alternative. A sample Joint Resolution is included at the end of this document to be used as a model. Note that the resolution to adopt the plan must occur after the public meeting and end of the public comment period.

TECHNICAL CONSIDERATIONS

The following items are technical considerations that are only applicable to certain projects. If any of these items apply to your project, discussion of these considerations must be included in the planning document. If none of these apply, no mention of these items is necessary.

INFILTRATION AND INFLOW REMOVAL

Infiltration and/or inflow (I/I) is clear water entering the system during wet weather or high groundwater conditions. If discharged into a treatment works, this flow may cause sewer surcharging, sanitary sewer overflows, and other operational or capacity problems.

I/I removal may be cost-effectively compared to the operational costs for transport and treatment of the clear water. However, projects proposing I/I removal solely to reduce operational costs are not eligible. To be eligible for CWSRF funding, a proposed project must demonstrate that the I/I is resulting in a capacity problem that can be addressed either through new construction to alleviate the capacity problem or through removal of I/I.

An evaluation of I/I should be completed for each existing collector system in the study area. Both private and public sources of I/I must be included in this evaluation. If any of the following conditions exist, then an I/I analysis must be performed during project planning:

- 1) Wastewater flow during high groundwater conditions is greater than 120 gallons per capita per day (gpcd). For a calculation of this threshold number, look at the metering data for the spring months of March/April/May and the fall months of September/October/November (non-precipitation days).
- 2) Wastewater flow during the design storm event or when any smaller storm event is greater than 275 gpcd. For a calculation of inflow from the WWTP records, use flow metering data

for the period April 1 through October 31. Select at least six of the largest storm events for analysis. Extrapolate the data to the recommended remedial design standard (25-year/24-hour storm event during growth conditions and normal soil moisture) using the longer duration storms; or

- 3) Storm events cause backup problems, overflows, or poor treatment performance due to hydraulic overloading.

In large communities and regional systems, the analysis should be performed on a district or subdistrict basis (based on areas tributary to a particular pump station or other readily monitored area) to avoid masking problems in older areas by averaging these flows with flows from newer areas, particularly where the older areas are exhibiting capacity problems. I/I analysis and flow monitoring results from various subdistricts cannot be extrapolated to other subdistricts of the system due to the large variability in the conditions and facilities between subdistricts. Flows in regional systems should not be averaged together if there are capacity problems anywhere in the system.

The gpcd is calculated for existing population and flows only; future growth is not included. Once the cost effectiveness of I/I removal is established, then reasonable population increases for the system can be evaluated.

In preparing an I/I analysis, the applicant should analyze the treatment plant flow records, compare the sewage flows against water consumption records, conduct flow monitoring at selected manholes or pumping stations, identify surcharges and overflows in the system, and conduct a field investigation to determine the quantity, location, and source of the I/I. Pump station run times are not an adequate basis for I/I determinations or for defining the scope of work, although excessive run times can identify areas where further analysis is needed. Subsystems that are tributary to facilities that are exhibiting surcharges, overflows, or other operational problems due to peak clear water flows (during wet weather or high groundwater conditions) must be investigated.

The estimated costs to eliminate portions of the I/I are compared to the costs to transport and treat the I/I. Transport and treatment costs include the costs to enlarge the sewers, pump stations, or treatment works to eliminate surcharges, overflows, or other capacity problems, coupled with the costs to treat the extraneous flows. If the costs to construct necessary facilities to relieve capacity problems and the costs to treat the extraneous water exceed the costs to remove the water by rehabilitating the system, then the I/I is considered excessive. Where a portion of the I/I is determined to be excessive, the recommended alternative must include a sewer system rehabilitation component to eliminate the excessive I/I, which will require the completion of a Sewer System Evaluation Survey (SSES). The SSES needs to have been recently conducted to be acceptable.

SEWER SYSTEM EVALUATION SURVEY

A SSES starts with the information gathered in the I/I analysis and then identifies the specific sources of extraneous water input, whether a peaking source (such as a cross connection or

flooding manhole) or a steady source (such as infiltration into a deteriorated sewer or service lead). Each source, both public and private, is quantified as to the volume of flow it contributes to the system. In all cases, the disconnection of footing drains must be considered during the preparation of the SSES.

To confirm the estimated I/I source leakage rates, quantification of leakage rates attributable to each type of defect found in the system must be verified in the field through water simulation testing. Water simulation testing shall be taken at design storm conditions.

Once the sources of extraneous flow are identified, specific costs to address these sources are estimated. Typically, this information is presented in a tabular format showing the flow contributed and the cost for its removal. These costs are compared to the costs to transport and treat the extraneous water. This comparison will identify those sources that are less costly to remove versus those sources where it is less costly to transport and treat the extraneous water.

The costs to transport and treat the extraneous water must include all physical improvements to the collection system needed to convey the excess flows to the treatment plant and the plant improvements necessary to treat the flows. All the costs to handle this water (e.g., new sewers; equalization to prevent bypasses; upgrades to pumping stations; increases in the size of components at the treatment plant) must be identified and presented in a cost-per-gallon basis.

Where sewage treatment is provided by another municipality, contract capacity issues must be considered. This may result in project alternatives that include relief and storage if additional capacity cannot be purchased.

Performance of studies to complete an I/I analysis or an SSES are eligible for loan assistance in conjunction with a funded construction project.

STRUCTURAL INTEGRITY

If the analysis does not confirm that the I/I removal is cost-effective, but structural sewer problems are suspected, the planning document must document the age and condition of those sewers. The planning document should incorporate the findings from recent sewer inspections (e.g., televising, physical inspection) and sewer maintenance records to identify problems. The National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) can be used to grade and define the severity of pipe defects. The pipe defects must either have a structural rating of either Significant (Grade 4) or Most Significant (Grade 5) or submit other justification to be considered for CWSRF funding. The condition of the manholes must be assessed using the NASSCO Manhole Assessment Certification Program (MACP). The manholes must either have a structural rating of either a Significant (Grade 4) or Most Significant (Grade 5) Manhole Rating using a level two inspection or submit other justification to be considered for CWSRF funding. Note that any grade of O&M defects are not eligible for CWSRF funding. Refer to the Major Rehabilitation of Sewers Section in the CWSRF Eligibility Guidance for further information.

Other justification that will be reviewed by EGLE to determine eligibility of structural sewer projects that do not Grade 4 or 5 defects includes, but is not limited to, visual or zoom camera inspection

data, documented historical collapse/failure of equivalent nearby sewers, excessive age, adjacent or contiguous sections, prioritization for criticality from AMP, and instances where inspection data is unable to be obtained. All factors, such as pipe age, likelihood of failure, environmental impacts of failure, sewer depth, soil type, or difficulty of access that would impact the chance or consequence of failure should be discussed. Televising reports, PACP/MACP rating information, and any other justification for all proposed sewer sections must be included with the project planning document. Maps of the portions of proposed sewer projects with areas of Grade 4 or 5 defects should be included.

Please note that where sewers must be cleaned prior to televising or actual sewer rehabilitation, the sewer clean-out residue must be handled as a Liquid Industrial By-Products (Part 121). Contact should be made with EGLE's Materials Management Division for disposal.

FISCAL SUSTAINABILITY PLAN

Projects that involve the repair, replacement, or expansion of a treatment works must develop and implement a Fiscal Sustainability Plan (FSP) that contains the following items:

- A. An inventory of critical assets that are part of the treatment works.
- B. Evaluation of the condition and performance of inventoried assets or asset groupings.
- C. Certification that the applicant has evaluated and will be implementing water and energy conservation efforts as part of the plan.
- D. A plan for maintaining, repairing, funding, and as necessary, replacing the treatment works.

The FSP is not required for the entire wastewater system; it is only required for the assets that are a part of the CWSRF-financed project. The FSP is not required to be submitted to EGLE unless requested. Certification that the FSP has been completed and is available to review is submitted with the Part III CWSRF Application.

FSP development is an eligible activity, provided it has been identified in the project planning document and is a part of an eligible construction project. Energy and water conservation audits can also be a part of FSP development. A description of the FSP activities should be presented in the project planning document along with the estimated costs. Refer to the CWSRF Eligibility Guidance for further information.

SPECIAL ASSESSMENT DISTRICT PROJECTS

A special assessment is a charge that a municipal government may levy on parcels of property to recover the costs of a public improvement such as a new wastewater collection system. A special assessment district (SAD) is the limited geographical area where properties receive a direct, special, and unique benefit from the public improvement (e.g., a rise in property market values).

All properties that will receive a benefit from the proposed wastewater system must be included within the boundaries of the SAD (i.e., the SAD cannot be gerrymandered to exclude certain properties, such as project opponents). All properties within the SAD with a currently occupied dwelling, either seasonal or year-round, must be required by ordinance to connect to the proposed

wastewater collection system upon the completion of construction unless the county health department has provided a certification that the property has a properly functioning on-site sewage disposal system. The ordinance must be structured to ensure that (a) the municipality has the legal authority to demand connection at a later date and (b) on-site system failures are identified proactively through frequent monitoring, inspections, and evaluations.

The SAD needs to be delineated during the project planning period and presented in the draft project planning document for public review and comment. A map showing the SAD boundaries, the individual parcels within and around the SAD, and any vacant parcels must be included. Properties that will not be required to connect to the new collection system, as certified by the county health department, must also be identified on the map. Copies of the health department certifications must be included in an appendix.

The final project planning document must include information on the number of

- (a) parcels in the SAD,
- (b) parcels where a service connection will be made,
- (c) parcels occupied seasonally rather than year-round,
- (d) parcels that are vacant, and
- (e) parcels that will not be required to connect to the new system.

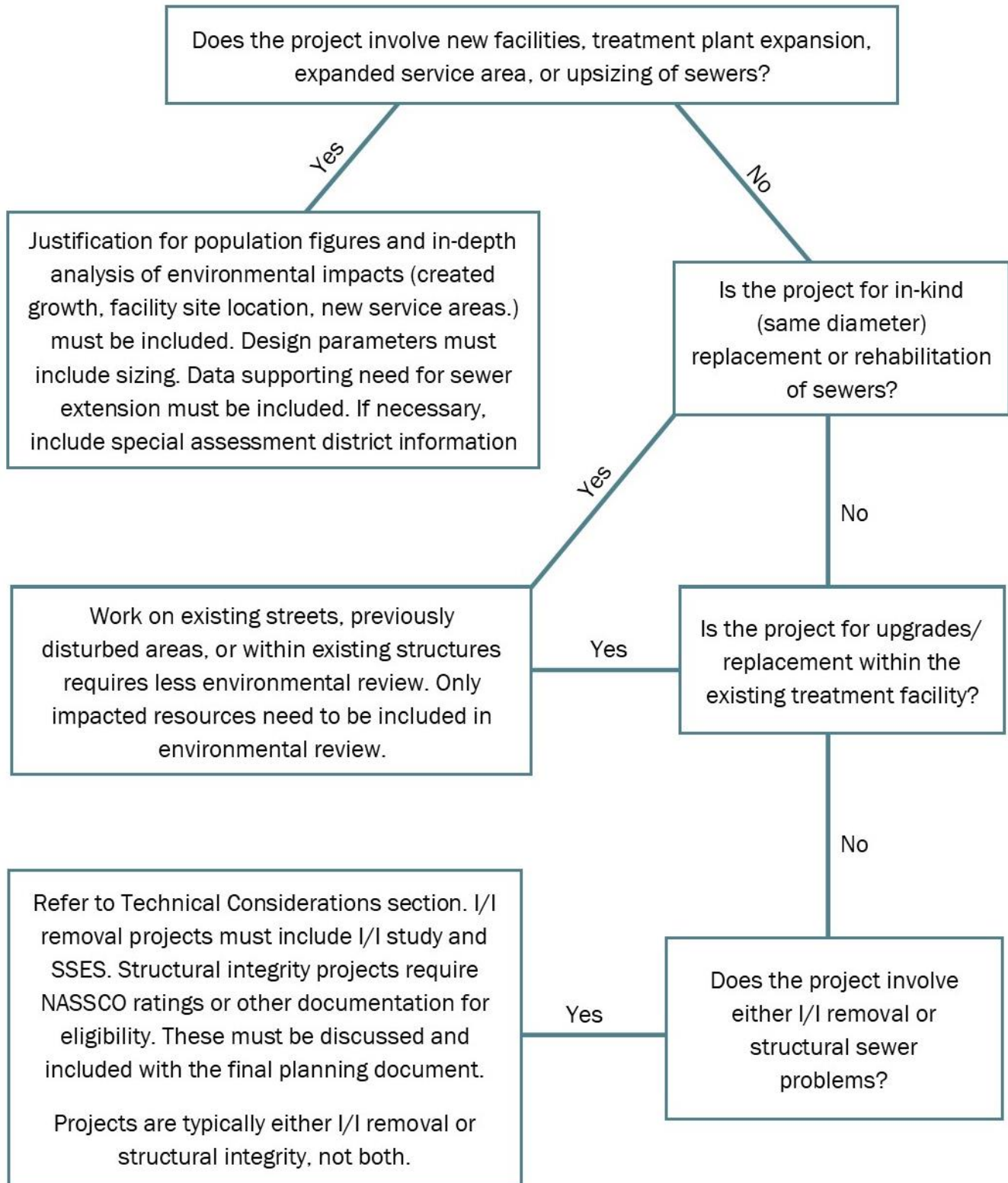
The final plan also needs to include the estimated annual amount to be levied on owners of parcels where a service connection will be made and the estimated annual amount to be levied on owners of vacant and excluded parcels.

This publication is intended for guidance only and may be impacted by changes in legislation, rules, policies, and procedures adopted after the date of publication. Although this publication makes every effort to teach users how to meet applicable compliance obligations, use of this publication does not constitute the rendering of legal advice.

EGLE does not discriminate on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height, weight, genetic information, or sexual orientation in the administration of any of its programs or activities, and prohibits intimidation and retaliation, as required by applicable laws and regulations.

To request this material in an alternate format, contact EGLE-Accessibility@Michigan.gov or 800-662-9278.

APPENDIX 1: PLANNING DOCUMENT REQUIRED COMPONENTS



SPECIFIC PROJECT REQUIREMENTS PROCESS DESCRIPTION

Does the project involve new facilities, treatment plant expansion, expanded service area, or upsizing of sewers?

1. If yes, population figures must be included as justification for upsizing. Data supporting extended service areas must be included. Sizing of pipes and equipment must be included in the design parameters for the selected alternative. Environmental and public health impacts must be analyzed for the entire service area, including new areas, treatment facility locations, and potential areas of induced growth. If necessary, include information from the special assessment district information section.
2. If no, proceed to the next question.

Is the project for in-kind (same diameter) replacement or rehabilitation of sewers?

1. If yes, work on existing streets, previously disturbed areas, or within existing structures typically involves a lessened environmental review. Only impacted resources need to be included in the existing environment evaluation and the environmental impact sections.
2. If no, proceed to the next question.

Is the project for upgrades/replacement within the existing treatment facility?

1. If yes, work on existing streets, previously disturbed areas, or within existing structures typically involves a lessened environmental review. Only impacted resources need to be included in the existing environment evaluation and the environmental impact sections.
2. If no, proceed to the next question.

Does the project involve either I/I removal or structural sewer problems?

1. If yes, refer to the technical considerations section for more information on items to be included. Note that projects are typically either for I/I removal or structural integrity, not both. I/I removal projects must include I/I study and SSES. Structural integrity projects require NASSCO ratings or other documentation for eligibility. These must be discussed and included with the final planning document. This discussion can be included in the need for the project section.
2. If no, the technical considerations section is not required for your project.

APPENDIX 2: NOTICE OF PROJECT PLANNING PUBLIC MEETING

(To be used as Template)

The _____ (Name of Applicant) _____ will hold a public meeting on the proposed _____ (description) _____ project for the purpose of receiving comments from interested persons.

The meeting will be held at _____ p.m. on _____ (Date) _____ at _____ (Location) _____.

The purpose of the proposed project is _____

Project construction will involve _____

Impacts of the proposed project include _____

The estimated cost to users for the proposed project will be _____

Copies of the plan detailing the proposed project are available for inspection at the following location(s): _____

Written comments received before the meeting record is closed on _____ (Date and Time) _____ will receive responses in the final project planning document. Written comments should be sent to: _____

APPENDIX 3: SAMPLE RESOLUTION

**A RESOLUTION ADOPTING A FINAL PROJECT PLANNING DOCUMENT
FOR WASTEWATER SYSTEM IMPROVEMENTS OR
NPS POLLUTION CONTROL/STORMWATER IMPROVEMENTS
AND DESIGNATING AN AUTHORIZED PROJECT REPRESENTATIVE**

WHEREAS, the _____ (legal name of applicant) _____ recognizes the need to make improvements to its existing wastewater treatment and collection system or its existing NPS pollution control/stormwater treatment system; and

WHEREAS, the _____ (legal name of applicant) _____ authorized _____ (name of consulting engineering firm) _____ to prepare a Project Planning Document, which recommends the construction of _____

WHEREAS, said Project Planning Document was presented at a Public Hearing held on _____ (Date and Time) _____ and all public comments have been considered and addressed.

NOW THEREFORE BE IT RESOLVED, that the _____ (legal name of applicant) _____ formally adopts said Project Planning Document and agrees to implement the selected alternative _____ (Selected Alternative Description) _____

BE IT FURTHER RESOLVED, that the _____ (title of the designee's position) _____, a position currently held by _____ (name of the designee) _____, is designated as the authorized representative for all activities associated with the project referenced above, including the submittal of said Project Planning Document as the first step in applying to the State of Michigan for a Clean Water State Revolving Fund Loan to assist in the implementation of the selected alternative.

Yeas (names of Members voting Yes):

Nays (names of Members voting No):

I certify that the above Resolution was adopted by _____ (the applicant's governing body)
on _____ (date of adoption) _____.

BY: _____

Name (please print or type)

Title

Signature

Date