Chapter 12. SCHEDULING THE PROJECT

This chapter summarizes the stages in developing or improving a wastewater utility. The completion of your project might not proceed in the exact sequence outlined in this guide. Some stages may be completed before others are, and the completion of several steps may be occurring concurrently. This approach can be called Milestone Management. The following guide clearly shows the six stages or milestones that an improvement project will go through before it is completed.

Stage/Milestone	Major task to be completed
(1) Education and Preparation	Community commits to develop an improvement project.
(2) Analysis and Evaluation	Completion of preliminary plans.
(3) Application	Commitment of funds for financing the project.
(4) Final Design	Completion of final design plan and legal work.
(5) Construction	Project construction.
(6) Initial year of operation	Completed facility operational for one year.

Stages 1 and 2 prepare and enable a community to efficiently complete stages 3 and 4. Stages 3 and 4 are also often considered together as the "application" part of the process. Stages 5 and 6 are the fruit harvested from the hard work done in the first four stages.

Realize that it may take a long time to get to the beginning of construction. Set a date when you would like to begin construction. At a minimum, begin the application process eight months prior to the target date for construction. When using bonds or just the SRF, the process may be shorter. However, there are key deadlines that must be met in order for the project to move ahead smoothly and missing any of them may set the project back in time.

CONSTRUCT A TIME LINE FOR YOUR PROJECT!!!

In partnership with your engineer, attorney, the representative(s) of the funding agency(s) you are using, and technical advisors, develop a time line. Set a date that you are shooting for to start a key part of the project. Usually the target date is the date construction begins, the date for soliciting bids, or bid opening. Whatever event is used for the target, you will have to begin building your time line backwards from that point. The number of days suggested on the Milestone Management System table can help you establish certain dates that items must be completed, especially a project that is being funded by CDBG and/or RD. No project develops in a truly sequential manner; several steps may be happening at the same time. Your consultants, especially your engineer and agency representative, can help you develop the most realistic time line specific to your project.

For example, if you want to solicit for bids in early March in hopes of taking advantage of more favorable bidding from contractors, you should be ready to begin the application process in late July of the previous year or before. This is a good time to start, especially if you are seeking CDBG funding.

(Use pencil to fill in dates on the table as dates will change)

Key Activities for Funding	Date Activity Must Be Completed (Deadlines)
If SRF is to be used, request to be put on the Intended Use Plan.	
SRF Intended Use Plan determined.	
CDBG community improvement grant applications due.	
Notify RD if agency is to be part of your funding package.	
[Example: RD projects wanting to be certain to start spring construction should be obligated by late July. There are no guarantees it will happen, but enough time will exist to complete the final design phase (Stage 5) by the following spring.]	
CDBG awards announced.	
RD projects should be ready for obligation consideration.	

THE MILESTONE MANAGEMENT SYSTEM

Stage/Milestone	Example of # of Days Required	Major Task To Be Completed
(1) Education and Preparation	90	Community commits to develop an improvement project.
(2) Exploration	60	Completion of preliminary plans.
(3) Application	90	Commitment of funds for financing the project.
(4) Final Design	120	Completion of final design plan and legal work.
(5) Construction	180	Project construction.
(6) Initial Year Of Operation	365	Completed facility operational for one year.

MILESTONE 1

Project Selection and Identification	✔	**Questions**
Acquire legal and/or expert advice		
Vote on incorporation (if applicable) Or set up a Sewer Benefit District		
Election of public officials (if applicable)		
Establish a citizen planning committee *(Most likely the governing body. Public participation is increased when a citizen committee is used)*		
Education of leaders		
Set goals for utility		
Establish the need for the project		
Complete a capacity assessment of the governing body's ability to operate and manage a utility system. *Ask funders to direct your community or district to technical assistant providers like Midwest Assistance Program, Rural Water Associations, planning commissions or economic development districts that can help analyze if you have the ability to maintain, operate, and manage a utility system.* ***Many funders are now requiring a capacity analysis before they will fund a project***		

MILESTONE 2

Completion of preliminary plans	✓	Questions
Public meeting to discuss the problem* **Discuss sanitary surveys, environmental violations, major repair problems, water shortages, water quality, or etc...*		
Hire an engineer -- *to help the community analyze possible solutions to problems. All reasonable alternatives must be evaluated and given serious consideration.*		
Planning committee explains problem to engineer		
Engineer presents options, including O & M costs projections, for planning committee to consider • *It is important to know how much it will cost to run your system and how long it will last and availability of service and replacement parts.*		
Public meeting with engineer and citizens • *Consider having a special meeting* • *This meeting can be your required public meeting*		
Regular meetings with engineer and team members		
Examine engineer's cost estimates (mock budget)		
Planning committee and the public review draft plan • *Consider this as an agenda item at a regular meeting of the governing body* *Example: Public review and consideration of preliminary engineering plans*		
Amend draft plan *(if necessary)*		
Complete environmental report -- *engineer or other*		
Submit amended (preliminary engineering) plan to the governing body for approval		
Submit preliminary engineering plan to reviewing authority and to funding agency. Submit the environmental report at the same time to the funder(s)		

MILESTONE 3

Commitment of funds for financing the project	✓	**Questions**
Determine possible public funding sources *Done concurrently with steps 2,3,4 of Milestone 2*		
Determine what self-funding options are available *Done concurrently with steps 2,3,4 of Milestone 2*		
Determine household and family income levels for benefitting households/families *Done concurrently with steps 2,3,4 of Milestone 2*		
Secure financial counsel and technical assistance *Midwest Assistance Program, Rural Water Association K-State Research & Extension, area planning or economic development. districts, or RC&D*		
Vote on whether to seek funding -- *check with your attorney to determine if approval can be given by the governing body or if an election must be held.*		
Submit initial application materials including PER and environmental report to funder(s)		
Environmental assessment completed by applicant/engineer and submitted to funding agency		
Hold regular meetings with engineer		
Develop budgets		
Complete the public funding application process *(This will include holding a public information meeting to inform public on the proposal, project costs, location of key components, project cost to users, environmental issues, etc.; and completing an environmental review process)*		
Utility agreements (water purchase or sewer service) *preferably completed, at least tentatively approved*		
Obligation of funds		

MILESTONE 4

Completion of final design plans and specifications	✓	Questions
Bond Counselor: (RD Projects: choose an approved one)		
Bond Ordinance (*RD projects: draft submitted to RD, resolution adopted*)		
Discuss timetable with engineer & attorney -- *have them commit to a tentative schedule of when items will be done* ***This is very important -- Helps avoid delays***		
Regular meetings with the engineer		
Committee reviews approved preliminary engineering plan with engineer to offer suggestions about final design plan		
Conduct public meeting for input on final plan and specs *(can be held in conjunction with your regular meeting)*		
Engineer completes a draft of the final design plan		
Committee reviews draft final design plan with engineer		
Complete final design plans		
Governing body approves final design plans		
Acquire land, rights and/or services needed for the project		
Complete legal work: easement agreements, right-of-way crossing agreements (railroads, highways, utilities), title opinions, bond ordinances, or other required documents		
Submit final engineering plans and completed legal work to approving authority and funding agency(s).		
Public meeting to inform patrons about the final engineering design plans		
Review and up-date ordinances and/or operational procedures. Adopt rate ordinances (resolutions for counties).		
Establish appropriate rate structure for the improved utility		
Secure temporary funding for the project (consult RD) Engineer should help establish budget for the project		

MILESTONE 5

Project Construction	✔	Questions
Discuss construction timetable with engineer		
Review the bidding process with the engineer		
Select, train, and license operators		
Establish procedures for considering change orders, payment of the contractor, and financial tracking.		
Advertise for construction bids		
Select a contractor		
Hold an informational meeting for the public		
Hold pre-construction conference		
Hold regular meetings with engineer and contractor		
Near completion of construction, hold public meeting		
Hold pre-final construction conference – *develop punch list*		
Construction is complete		

MILESTONE 6

Completed facility operational	✔	Questions
Meet with the engineer to discuss start-up		
Have an outside review of your management system, bookkeeping, ordinances, and record-keeping.		
Engineer instructs operator on plant operation and maintenance		
Engineer provides three sets of *as-built working plans* to the governing body *(one for the maintenance shop, one for the office, one for a safe deposit box or other safe, fireproof location)*		
Engineer will provide a complete set of pertinent operation manuals and equipment warranties		
Post construction conference -- *Walk through and make sure items on the punch list have been taken care of*		
Operation responsibility turned over to governing body		
Plant is operational and meeting all requirements (*Make sure regulating agencies concur with this)*		
Meet with engineer eleven months after project completion -- ***System Walk Through*** *Hold everyone and equipment to warranties and guarantees*		

PROJECT TEAM

Governing Body	
Project Name or Title	
Brief description of the project	

Funding Sources	Agency contact	Address	Telephone

Governing Head (name)	
Title	
Address	
Telephone #	
Fax	

Your ***project coordinator***	
Title	
Address	
Telephone #	
Fax	

Technical Advice

Engineer	
Company	
Address	
Telephone #	
Fax	

Legal Counsel

Project Attorney	
Firm	
Address	
Telephone #	
Fax	

Project (grant) Administration

Grant Administrator	
Company	
Address	
Telephone #	
Fax	

Financial Advisor and Support

Bond Counselor	
Company	
Address	
Telephone #	
Fax	

THE PROJECT TEAM (cont.)

General Contractor

Contractor		Notes
Company		
Address		
Telephone #		
Fax		

List of subcontractors		
List of suppliers		

Project inspection

Inspector	
Company	
Address	
Telephone #	
Fax	

Other:	
Company	
Address	
Telephone #	
Fax	

Technical Assistance Providers

Provider	
Firm	
Address	
Telephone #	
Fax	

Other:	
Firm	
Address	
Telephone #	
Fax	