

**Elements of a General Plan  
for Water Treatment Plant Design and/or Construction Projects  
Funded Through the Water Supply Revolving Loan Account (WSRLA)**

All applications for water treatment plant design and/or construction funding through the WSRLA must include a general plan. The general plan must contain the following information, where applicable.

**Introduction and Purpose**

- Discuss why the project is needed and provided documentation of need. Be sure to include any compliance issues or standards violations. The types of projects eligible for funding through the WSRLA are discussed in *Appendix D of the Drinking Water Assistance Fund Draft Management and Intended Use Plan*. Types of specific projects ineligible for funding are discussed in *Appendix C of the Drinking Water Assistance Fund Draft Management and Intended Use Plan*.

**Existing Situation**

- Describe the raw water sources, capacities, and water quality data.
- Discuss all existing drinking water problems in the study and/or service area (this includes treatment, distribution and issues associated with the plant).
- Describe the existing service area and current population to be served.
- Provide the existing water demand. Water demands should be broken down into residential, commercial and industrial categories.
- Provide an engineering description of the existing facilities.

**Future Conditions**

- Describe other projects anticipated over the next twenty years.
- Provide the projected average and peak water demands based on population trends. Water demands should be broken down by residential, commercial and industrial. Projections should be for at least 20 years in five year increments.
- Describe the projected service area and the projected population to be served.

**Alternatives**

Describe the project alternatives considered and the rationale for the selected alternative; this description should include the technical, managerial, financial, operational and local decision making rationale for the selected approach. Where environmental resources (e.g., stream, wetlands, woodlots, etc.) may be present, it will be important to demonstrate how avoidance of impacts to such resources was included in the alternative evaluation and selection process. **A regionalization alternative must be included for projects that are for new water treatment plants or major plant rehabilitations, or plant expansions.** A cost analysis must include any required construction, operation, maintenance, and ongoing disposal costs.

**Selected Alternative**

The basis for choosing the selected alternative needs to be clearly identified – i.e., lowest capital cost, greater ease of operation, most reliable, fewest environmental impacts, etc. – thereby helping demonstrate that it is, in fact, the cost-effective alternative. In addition, the selected alternative needs to be described in sufficient detail, including the following:

- Provide an engineering description of the facilities to be constructed, including a basic layout (schematic and site plan) sizing of treatment units and a desired approved capacity of the treatment facilities. The methodology for determining approved capacities for treatment facilities can be found in the document titled *Approved Capacity Planning and Design Criteria for Establishing Approved Capacity for: 1) Surface Water And Ground Water Supply Sources, 2) Drinking Water Treatment Plants (WTPs), and 3) Source/WTP Systems* (Approved Capacity).
- Provided a description of all existing and proposed raw water sources and their desired approved capacity. The methodology for determining approved capacities for raw water sources can be found in the Approved Capacity document.
- The engineering description must include proposed use of existing facilities (if applicable), treatment and disposal to be installed, including the construction phases (if overall project is to be completed in steps).
- Describe how this project will address current compliance issues, if applicable.
- All proposed facilities must be sized for current needs with a moderate allowance for future growth. Describe how any water treatment residuals will be properly disposed of, whether on-site, via a publicly-owned wastewater treatment facility, or to a receiving stream, following proper treatment and in compliance with the appropriate discharge permit.

An estimated schedule for designing, bidding, constructing and initiating operation of the proposed facilities should also be included.

### **Preliminary Estimate**

Provide a preliminary estimate of the proposed project's cost and the associated impact on local user rates. If rates will have to be increased to support the project, an estimate of the necessary increase should be included.

### **Public Participation**

Provide information regarding public participation for the project, to date, such as minutes from council meetings, public meetings or newspaper articles. If future public participation activities are planned, or needed, they should also be described, keeping in mind that the more controversial a project could be (e.g., major rate increases needed, it's proposed to abandon a local facility in favor of regionalizing with a more distant utility, etc.), the more critical it is to have public involvement and support.

### **Environmental Issues**

Describe the project area's major resources (e.g., streams, wetlands, woodlots, historic structures, etc.), the likely impacts, if any, of project implementation on these resources, how impacts to these resources can be avoided or minimized, and other agencies that may already have been contacted to help address these resource issues. In addition, construction-related impacts specific to the type of work proposed should be identified (e.g., noise, dust, traffic disruption, erosion and sediment runoff, etc.), along with applicable best management practices to address them. (Please contact Ohio EPA – DEFA for further assistance with these topics).

### **Funding**

Describe all anticipated sources of funding for the project, if known. Otherwise, identify likely funding sources to be pursued.

### **Compliance schedule**

For systems presently out of compliance for drinking water requirements, submit a detailed compliance schedule with applicable milestone dates for the significant events that are necessary to attain compliance.