

## APPENDIX A

### OPERATIONS PROGRAM

#### A.1 GENERAL

This Appendix to the Plan presents an overview of the routine and emergency procedures that the City of Sedro-Woolley employs for the operation and maintenance of its system. Specific recommendations for continued operation of the sewer utility are in accordance with State regulations and City policies.

#### A.2 SYSTEM RESPONSIBILITY AND AUTHORITY

A prerequisite to the delivery of efficient and reliable service to all customers of the City is a competent staff organized such that the responsibility for day-to-day and emergency operations is clearly defined and executed. The following is a summary of Sedro-Woolley's sewer utility organization.

##### *A.2.1 Mayor and City Council*

Overall responsibility for the City's utility operations lies with the elected officials. The City of Sedro-Woolley has a mayor and 7 City Council members who are responsible for operation, management, regulatory compliance and financial aspects of city services.

The City Council holds regular meetings which are open to the public. Meetings are held twice monthly on the second and fourth Wednesdays of the month at the Sedro-Woolley Community Center.

##### *A.2.2 City Engineer and Public Works Director*

The City of Sedro-Woolley also employs a Public Works Director/City Engineer. This person has overall authority of all public works in the City.

##### *A.2.3 Sewer Personnel*

The Sewer Foreman has the overall responsibility for the management of the sanitary sewer system and wastewater treatment plant. There are currently five other employees in the sewer department who share the responsibility to maintaining and operating the system.

##### *A.2.4 Outside Consultants*

The City of Sedro-Woolley retains the services of outside consultants for some of its engineering needs for its sewer system, surveying and legal counsel. In accordance with State law, engineering consultants are selected based on statements of qualifications periodically requested from specialists in sanitary sewer system engineering.

#### A.2.5 Other Assistance

Other assistance is required from time to time for specific City projects, maintenance and construction. The City maintains a roster of qualified contractors for small works projects and contracts with other service providers as required by City needs and in accordance with State law.

### A.3 RECORD MAINTENANCE

Operation of a sewer utility requires consideration of long term records management in a format which is useful to the variety of staff members and outside consultants which use them. The City maintains the following records on an ongoing basis:

- Customer Account Information: Detailed records of each sewer account are maintained through the City's computerized billing system.
- Agreements: Copies of the City's agreements with other agencies, as well as monthly reports required for documentation of wastewater treatment and disposal charges are kept on file at the City.
- Comprehensive Plan Map: The Sewer Comprehensive Map and other maps included in this document are maintained in a computerized (AutoCAD and GIS) format. These maps detail the general location of existing and proposed facilities, as well as physical features, land use, and boundary information for the City.
- Maintenance Reports: Detailed records of periodic maintenance schedules and system attributes are kept on file.

### A.4 PREVENTATIVE MAINTENANCE

Generally, preventive maintenance on the City's sewer system includes the following elements:

- All possible hazards are thoroughly and systematically identified.
- Potential failures are detected while still in their developing stages.
- Maintenance activities are prioritized and scheduled.
- Scheduled maintenance of pump stations is completed quarterly. Problems are addressed on an as needed basis. The pump stations with telemetry are inspected weekly while the stations without telemetry are inspected three times a week.

- System cleaning and field and video inspection of the system, including lines and manholes, is scheduled and accomplished.
- City staff attend workshops and seminars in order to learn up-to-date techniques and materials.

The staff records maintenance information manually or with Excel spreadsheets.

## A.5 EMERGENCY PROCEDURES

### *A.5.1 City Personnel*

The City's sewer department maintains a sanitary sewer emergency response crew on 24-hour call. The sewer department duty telephone number (360-661-1834) is monitored 24 hours a day to allow the public to notify emergency crews at any time.

The City's on-call crew is available to answer any emergency that may occur within the system and has immediate response responsibility. This includes but is not limited to power failures, equipment failure at the treatment plant, response to lift station alarms, sewer back-ups and forcemain blockages, minor repair work and emergency response procedures required to sustain service. In the event of a major emergency, on-call staff are responsible for notifying other staff members as appropriate to conditions. Table A-1 outlines emergency contacts.

### *A.5.2 Communications*

All sewer staff members carry Nextel phones for communication with the City.

### *A.5.3 Supplies and Spare Parts*

The City maintains an inventory of spare parts that are required for routine maintenance and/or emergency repairs. A list of suppliers for after hours and emergency repairs is maintained for response to major emergency conditions.

### *A.5.4 Outside Assistance*

Sedro-Woolley maintains relationships with neighboring cities and the County for coordination during emergency events. In addition, the City has contacts at other agencies and jurisdictions which may be instrumental in emergency response. A summary of emergency contacts and agencies which the City may be required to notify is provided in Table A-1.

## A.6 SYSTEM VULNERABILITY

The City of Sedro-Woolley's sewer system consists of individual drainage basins which convey wastewater to the City's wastewater treatment plant for treatment and disposal.

The vulnerability of various components of the overall sewer system has been evaluated to identify areas which may be affected in the event of a natural or manmade disaster. System vulnerability includes loss of service, damage to property, and/or health risks which may be associated with failure of the individual components of the sanitary sewer system. A summary of the system vulnerability analysis is presented in the following paragraphs.

#### *A.6.1 Treatment and Disposal*

The City operates a wastewater treatment plant for the treatment and disposal of wastewater flows generated within the City. Any interruption in the treatment would likely result in discharge of untreated wastewater to the Skagit River or at the treatment plant site.

#### *A.6.2 Sewer Mains, Trunks and Regional Interceptors*

Any pipeline is subject to clogging and, under certain circumstances, can break. Clogging of sewer lines can create backups in manholes and in severe cases can progress back to customer properties. Pipe breaks due to settlement, deterioration of pipe material or other causes can pollute the groundwater and result in excessive infiltration and inflow.

#### *A.6.3 Pump Stations*

The City operates pump stations to serve low elevations within the system. Failure of a lift station could cause significant backups in the collection systems surrounding the pump stations, public health and safety concerns or environmental issues.

All but two pump stations in the City are equipped with alarm systems which relay information by an auto-dialer to the Duty Phone. The Mountain View Estates and John Liner Road Pump Stations do not have this feature but have beacon lights. When the beacon light is active, neighbors call the Duty Phone. The Mountain View Pump Station also has a built-in overflow to the gravity collection system.

#### *A.6.4 Electrical Power*

Power to the City of Sedro-Woolley is provided by Puget Sound Energy. Historically, loss of power has not been a significant issue because the City maintains emergency on-site generators at the treatment plant and at all but two pump stations (the Mountain View Estates and John Liner Road Pump Stations). The addition of another generator is recommended at the John Liner Road Pump Station. The Mountain View Estate Pump Station has an emergency overflow to the gravity collection system and does not need a generator at this time. If the overflow capacity becomes an issue at this station and if overflows cause customer or environmental issues, the addition of a generator may be required.

## A.7 OPERATIONAL RECOMMENDATIONS

The following operational recommendations are made for the City's sewer system.

- Capacity, Management, Operations and Maintenance (CMOM) Regulations are anticipated in the future as part of the Environmental Protection Agency's Sanitary Sewer Overflow (SSO) Rule under the National Pollution Discharge Elimination System (NPDES) policy. CMOM will require sanitary sewer system owners to develop a program to address sanitary sewer overflows. It is recommended that the City staff begin preparing for implementation of the CMOM Regulations.
- Maintenance software for recording and compiling operations and maintenance records and information.
- An on-site generator for the John Liner Road Pump Station.
- Auto-dialer alarm systems for the John Liner Road and Mountain View Estates Pump Stations.
- Based on discussions with City staff, an additional full-time staff dedicated to maintaining and operating the collection system portion of the sewer system is recommended.

**Table A-1**  
**Sedro-Woolley Wastewater Treatment Plant Emergency Call List**

