Section 8

Financing

8.1 General

In general, cities have difficulty implementing storm drainage improvements. City services, such as, water, sanitary sewer, and streets usually have higher priority and use the available funds. Storm water issues become secondary and only immediate problems are corrected. Systematically programmed projects, which would be more effective in the long term, simply are not done.

As urbanization of the drainage area continues over time, storm drain issues present with more urgency. Reserve capacity in the existing system diminishes and postponed projects have increased in cost. With growth and without funding or commitment to make improvements, drainage problems increase.

The City could include the recommended projects in the annual budget, but, like most cities, budgets are limited and other important projects, such as, streets would be postponed.

Although grants are generally not offered to assist with storm drain projects, the city does have financing options available to them, some of which are listed below:

1. Issue a bond for storm water improvements as part of the city sewer system improvements.
2. Contact residents in each basin and form local improvement districts to fund the projects respective to each neighborhood.
3. Form a storm water utility and charge each user for storm water as a city service.
4. Construct improvements related to future development through system development charges.

8.2 General Obligation Bonds

General obligation bonds are often used to finance major utility improvements that benefit the entire community. Bonds are structured around the community's taxing authority and are retired through property taxes, or user fees, according to an equitable distribution of the bonded indebtedness across the community's assessed valuation.

8.3 Revenue Bonds

Revenue bonds are similar to general obligation bonds except that retirement of bonded indebtedness is from revenue generated from the sales of the utility. Unlike general obligation bonds, revenue bonds are more easily accessed because they do not always require a vote of the

utility's populous. However, the security of a revenue bond is lower than a general obligation bond and this generally results in higher interest rates. Currently, the city does not have a storm water utility; consequently revenue for loan repayment would have to be generated through sewer user and SDC fees.

8.4 Local Improvement District

A local improvement district (LID) may be formed by local residents who are responsible for securing and repaying the debt incurred through a project. LID formation requires public hearings and agreement of the local residents of the affected area. A successful LID area results in liens against the LID properties at the end of the project.

An LID could be formed for each basin identified in the study. Equitable distribution of costs would be based on a defined equivalent dwelling unit (EDU) and users in the basin contribute their share of the cost for the recommended improvement.

However, certain areas of the city would not contribute to projects, since not all sections of the city require improvements. Areas of the city with high improvement costs may not approve LID formation, consequently, improvements in these basins could not be constructed with LID funds.

A local improvement district is allowed to include affected properties that are not within the city limits. Addressing deficiencies in the dikes would involve improvements outside of the City that benefit both city and unincorporated areas and should be considered for an LID.

8.5 Rural Development Grant/Loans

The United States Department of Agriculture, Rural Development (RD) makes loans and grants tocities and towns with a population of less than 10,000 and to public bodies and non-profit corporations in rural areas to construct or improve essential community facilities, including storm water systems. While the City may not be eligible directly for funding, entities such as Coos County or special drainage districts would be eligible and could partner with the City on projects that affect both entities, such as the Blossom Gulch pump station. Grants may also be available to applicants who meet the median household income (MHI) requirements. However, RD grant funding for storm water improvements would probably have a low priority.

Rural Development is a reasonable and practical loan source for storm water improvements. Loan funds acquired through RD would be re-paid through monthly user fees (revenue bonds) which are either added to the City's current sewer user fees or though a storm water utility.

Access to the loan will require the city to secure bonding authority through the formation of the SWM utility (or sewer fees). As a borrower, the city must meet the following stipulations;

1. Be unable to obtain needed funds from other sources at reasonable rates and terms,
2. Have legal capacity to borrow and repay loans, to pledge security for loans and to operate and maintain the facilities or services,

3. Be financially sound and able to manage the facility effectively, and
4. Have a financially sound facility based on taxes, assessments, revenues, fees or other satisfactory sources of income to pay all facility costs, including operation and maintenance, and to retire the indebtedness and maintain a reserve.

If acquired, loan and grant funds may be used for the following;

1. Construct, repair, improve, expand or otherwise modify storm drainage facilities,
2. Legal and engineering costs connected with the development of facilities, and
3. Other costs related to development of the facility including the acquisition of right-of-way and easements and the relocation of roads and other utilities.

The maximum term on Rural Development loans is 40 years. However, no repayment period will exceed any statutory limitation on the organization's borrowing authority nor the useful life of the improvement or facility to be financed. Interest rates are set periodically and are based on current market yields for municipal obligations. The following rates apply for the Rural Development program for the quarter ending June, 2003.

Market Rate
The market rate is paid by those applicants whose median household income (MHI) of the service area is more than the $34,608 (Oregon non-metropolitan MHI). The market rate is currently 4.625 percent.

Intermediate Rate
The intermediate rate is paid by those applicants whose MHI of the service area is less than $34,608. The intermediate rate is currently 4.50 percent (as of January 2004).

Poverty Line Rate
The lowest rate is paid by those applicants whose MHI of the service area is below $27,686 (80 percent of the non-metropolitan MHI). The poverty line rate is currently 4.50 percent.

The MHI for the City of Coos Bay, based on census data for the year 2000, is $31,212. The City would qualify for the intermediate rate for any project approved for financing by Rural Development.

8.6 Department of Environmental Quality Clean Water State Revolving Fund (SRF)

The SRF Program is administered by the DEQ and was developed to replace the EPA Construction Grants Program. The SRF is a loan program that provides low interest rate loans, instead of grants, for the planning, design, and construction of water pollution control facilities.

Interest rates on all design and/or construction loans are two-thirds of the current municipal bond rate during the quarter that the loan agreement is signed. Estimated loan rates are currently 3.1 percent. In addition, an annual servicing fee (0.5 percent of the outstanding balance) is also

assessed to cover program administration by DEQ. Loans can be in the form of general obligation bonds or other rated debt obligations, revenue secured loan, or a discretionary loan.

SRF funds are allocated based on a prioritization process. Based on the preliminary applications, projects are assigned points and ranked in priority order based on 1) severity of water quality/health hazard problem; 2) receiving water body sensitivity; and 3) population served by the project.

The Intended Use Plan is one part of Oregon's annual SRF capitalization grant application. This plan includes lists of eligible projects ranked in priority order. Projects allocated funds are placed on the Funded List. Unfunded projects are on the Planning List to receive funds if any of the Funded List projects do not complete the loan process. Projects identified on the Funded List from prior years, which have not been initiated, are placed on a Supplemental List.

Obtaining SRF funding requires the submission of an environmental assessment of the project, a land use compatibility statement from the county planning official, and a department approved user charge system.

For additional information on this and other DEQ programs, call 1-800-452-4011 or visit the DEQ website at http://waterquality.deq.state.or.us.

8.7 Special Assessment/Utility Charges

A special assessment or utility charge would allow the city to charge residents a fee for storm water services. The collected revenue would be dedicated to constructing and maintaining the recommended projects. The term for the special assessment could be set over a limited time period, e.g., ten to 20 years. As funds accumulate, the city allocates them to complete each element of the long-term plan. Through this process, the city does not assume additional long-term debt, or minimizes debt by implementing certain improvements in each year. Special assessments could be collected on a monthly basis using the same methods currently used for collection of existing sewer and water fees, or through the formation of a storm water utility.

8.8 Storm Water Management Charges

Storm water management (SWM) utilities are becoming more common as communities search for methods to fund public works projects that involve storm drainage systems. Similar to a sewer and water system, the SWM utility considers the storm drainage system as a public facility that provides a service. One of the first SWM utilities developed in Oregon was in Washington County by the Unified Sewerage Agency (USA). The program was developed to address water pollution concerns in the Tualatin River and assist local communities to fund needed projects.

The formation of the SWM utility allows a city to collect revenue from rate payers and assess new developments. Unlike sewer and water, the rate is not based on use. Instead of consumption, the SWM assesses rates on the basis of runoff generation through impervious areas.

Runoff generation is based on the equivalent dwelling unit (EDU) methodology. One EDU is the impervious area of a typical of residential property, that is, a house with driveway, yard, and storage sheds. Each residential EDU is charged at flat rate for monthly service, while industry, commercial establishments, and institutional facilities are charged in terms of equivalent dwelling units.

Typically, this calculation involves determination of impervious area by aerial photography. If, for example, a shopping center and its parking lot have five times more impervious area than a typical house, then the center would be charged five times the EDU rate.

Once established, a SWM rate system is easily updated since changes to a community's EDU count only occur when a new development is constructed or an old building is destroyed.

There are advantages of a storm water management utility are as follows:

1. The SWM can enforce development standards, set minimum storm drainage requirements for new developments, address litter or storm water pollution, and maintain storm water facilities.
2. Once formed, the SWM utility collects revenue from customers based on the impervious surface EDU methodology.
3. The steady revenue allows the city to acquire loans for large scale improvements using revenue bonds issued by the SWM or by raising rates in preparation of future projects without having to seek loans.
4. New developments impacting the existing drainage system are also addressed by the SWM through system development charges based on an equitable share of costs and services.

Disadvantages of the storm water management utility are:

1. The additional bookkeeping and fund transfers required to keep the SWM independent from other city services.
2. Since the storm drainage system is addressed as an independent service, funds cannot be used for other city services.
3. Rate payers might also view the SWM as another level of government bureaucracy and taxation.

8.9 Systems Development Charges

In accordance with Oregon Revised Statutes (ORS) 223.97 through 223.314, system development charges (SDC) can be assessed for improvements directly relating to a development. The new user is considered to be, in effect, "buying in" to the existing system. Oregon Administrative Rules require that the money collected for an SDC be spent on increasing capacity in the system.

8.10 Federal Emergency Management Agency (FEMA) Grants

Flood Mitigation Assistance (FMA) Program

FMA provides funding to assist States and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program (NFIP). There are three types of grants available under FMA: Planning, Project, and Technical Assistance Grants. FMA Planning Grants are available to States and communities to prepare Flood Mitigation Plans. NFIP-participating communities with approved Flood Mitigation Plans can apply for FMA Project Grants. FMA Project Grants are available to States and NFIP participating communities to implement measures to reduce flood losses. Ten percent of the Project Grant is made available to States as a Technical Assistance Grant. These funds may be used by the State to help administer the program. Communities receiving FMA Planning and Project Grants must be participating in the NFIP. A few examples of eligible FMA projects include: the elevation, acquisition, and relocation of NFIP-insured structures. Funding for the program is provided through the National Flood Insurance Fund, and FMA is funded at $20 million nationally.

States are encouraged to prioritize FMA project grant applications that include repetitive loss properties. The FY 2001 FMA emphasis encourages States and communities to address target repetitive loss properties identified in the Agency's Repetitive Loss Strategy. These include structures with four or more losses, and structures with 2 or more losses where cumulative payments have exceeded the property value. State and communities are also encouraged to develop Plans that address the mitigation of these target repetitive loss properties.

Pre-Disaster Mitigation Program

The Pre-Disaster Mitigation (PDM) program provides technical and financial assistance to States and local governments for cost-effective pre-disaster hazard mitigation activities that complement a comprehensive mitigation program, and reduce injuries, loss of life, and damage and destruction of property. FEMA provides grants to States and Federally recognized Indian tribal governments that, in turn, provide sub-grants to local governments (to include Indian Tribal governments) for mitigation activities such as planning and the implementation of projects identified through the evaluation of natural hazards.

After November 1, 2003, local governments and Indian Tribal governments applying for PDM funds through the States will have to have an approved local mitigation plan prior to the approval of local mitigation project grants. States will also be required to have an approved Standard State mitigation plan in order to receive PDM funds for State or local mitigation projects after November 1, 2004. Therefore, the development of State and local multi-hazard mitigation plans is key to maintaining eligibility for future PDM funding. Coos County is currently completing a local mitigation plan in cooperation with Coos Bay that will make the City eligible for this program.

Dennis Sigrist of the Oregon Office of Emergency Management (503-378-2911 x247) is the local contact for applying for FEMA grants.

8.11 Equivalent Dwelling Unit Generation

The total number of EDU's can be used to estimate future demands based on the average household size and the future population. In the example provided above, if the average household consisted of three persons and in twenty years there are 100 households and one restaurant in the community, then the equivalent population of the community would be 315 (300 people for the 100 houses + 15 equivalent people for the restaurant).

Unlike the example above, storm drainage use is not measured by consumption. Rather, an indirect method is employed. Since runoff is a consequence of the surface material and surface area, storm drain usage may be derived from the amount of impervious surface on a tax lot. The impervious surface methodology is used.

Impervious Surface Methodology

The impervious surface methodology for calculating storm water system EDU'S is based on the impervious surface area for each property. This method is based on the assumption that each residential unit consists of a lot divided into impervious area (roof tops, driveways, sheds, etc.) and non-impervious area (lawns, gardens, etc.). The typical lot size and the amount of impervious surface area are based on the average for the entire community. Determination of the typical residential lot size and impervious surface area can be calculated from a random survey of aerial photography and does not necessarily have to be based on the entire community.

Once established, the base impervious area for residential units is used to rate each commercial and industrial unit according to the amount of impervious area relative to the typical residential unit. As new development occurs, it is assumed that each new residential, commercial, or industrial unit increases storm water runoff proportional to the amount of impervious surface area developed with the respective property. Future residential units are rated as 1 EDU while commercial, multi-family, and industrial developments are rated according to the amount of impervious surface as measured in the field or as shown in the engineering plans. Using this method, future demands for storm system services and future SDC's can be based on estimated population growth rates for residential development with proportional growth in the commercial and industrial sectors.

Since industrial and commercial establishments generally develop larger areas of impervious surface, for example, parking lots and buildings, than residential developments, these sectors place a larger burden on the storm system. Consequently, this method allows for an equitable distribution of costs when evaluating how to finance storm water improvements and system development charges relative to the amount of benefit provided by the service. An example of the impervious surface EDU methodology for storm water system is provided below in Table 8.11.1.

TABLE 8.11.1
TYPICAL EDU's BASED ON IMPERVIOUS SURFACE METHODOLOGY

TYPE OF DEVELOPMENT	TYPICAL LOT SIZE, (SQUARE FEET)	IMPERVIOUS AREA, (SQUARE FEET)	NUMBER OF EDU'S*
Residential	10,000	5,000	1
Commercial w/ parking	10,000	9,000	2
Industrial w/ parking lot	20,000	15,000	3

*Rounded to the nearest whole unit.

Several storm water utilities have been established in Oregon based on this methodology. The utility provides a service with benefits based on a fair and equitable accounting method. Since the service received by the customer is directly proportional to the amount of impervious surface area, customers can be charged for the service accordingly.

EDU and impervious surface methodologies are used as an accounting procedure for properties that contribute storm water runoff to a drainage system. The same procedure can be used for developing SDC costs and assessing storm water utility fees.

8.12 Recommended Financing

The recommended financing would consist of a combination of loans and FEMA grants, with the loans repaid through storm water utility fees and system development charges.

The following recommendations affect project funding:

- The City should enter the FEMA National Flood Insurance Program to become eligible for federal grants.
- The City and Coos County should form a Blossom Gulch Drainage District to jointly administer development requirements and projects for flood prevention along the Blossom Gulch Creek floodplain and drainage basin. This district would act as a vehicle for making decisions to most efficiently direct the combined efforts of the City and County to reduce flood damage.