Section 8

Recommended Capital Improvement Priorities & Implementation Plan

SECTION 8
RECOMMENDED CAPITAL IMPROVEMENT PRIORITIES AND IMPLEMENTATION PLAN

8.1. General Prioritization Issues

As summarized in the previous sections, there is a need for sanitary sewerage system improvements within the study area to correct existing and projected deficiencies. Some of these deficiencies are more critical than others. Some are deficient under existing conditions, while others will become deficient as time passes and the existing systems continue to age. In order to assist the City in the planning and scheduling the construction of needed improvements, the improvements recommended in previous sections are grouped as Priority 1, Priority 2 and Priority 3 as outlined below.

In order that the recommended improvements resolve existing problems and meet the requirements for future growth within the study area, this prioritization is necessary, since the City obviously cannot afford all of the long term improvements required for the study area at this time. Some improvements are not critical at the present time, but will be needed later as development occurs and flows increase. Additional pipelines may be needed to serve future developments. In such cases, if current City policies are maintained, a portion or all of the cost for installing such pipelines will be borne by the developers as required by the particular development conditions.

- **Priority 1** (Critical Near Term Improvements) - These are those projects representing existing deficiencies (currently needed to meet existing and near future projected flows) or public health problem areas needing immediate attention. Priority 1 improvements should be accomplished as soon as practical considering financing, construction time and timing associated with other related projects. This Facilities Plan is the first step in the implementation of a large-scale treatment plant project that is needed to address the existing MAO between the City and the DEQ. The City is in the early stages of assembling a financing package for the project. To determine which improvements to include in the project, the Priority 1 improvements are further broken into Class A and Class B Priorities. It is recommended that all Priority 1A improvements be included in the upcoming project.

- **Priority 2** (Vital Future Improvements) - These are improvements that are anticipated to be needed in the future as the existing on-site systems age and frequency of breakdowns and failures increase. Although not critical at this time, they should be considered improvement projects that if not constructed at this time, will be upgraded to Priority 1 at some time during the planning period.

- **Priority 3** (Long Term Improvements/Possible Future Need) - These improvements are needed to improve system reliability or to convey future design flows if land develops to future City zone intensities. While important, they are not considered to be critical at the present time. If possible, these improvements should be incorporated into other improvement projects that may allow for concurrent construction. They may be constructed by developers in conjunction with the utility construction associated with development.

8.2. Recommended Capital Improvement Program

To aid in the development of a Sanitary Sewer Capital Improvement Program (CIP), each of the projects was examined and assigned to one of the priority classes describe above according to the following criteria.

- Public Health Concerns. The driving force behind this Facilities Plan and the proposed improvements is the need to correct existing health hazards within the study area.

- Anticipated Time until Projected Flow Increases. The anticipated timeframe for the development of land within the basins and tributary to the proposed improvements was considered.

- Structural Damage/End of Useful Life. Projects to replace damaged components or components that have reached the end of their useful life and no longer function as designed were assigned a higher priority.

- Capital Costs. Capital costs of the projects were considered, including the costs of implementing a project, such as surveying, design, permitting, construction, legal fees and administration. Costs for acquisition of land and/or easements were included based on assumed property values. Projects that will need to be constructed by developers in conjunction with future developments were given a lower priority than projects that may be largely the responsibility of the City.

The recommended improvements identified in the previous sections are listed in **Table 8-1** with the total project costs and priority classification. The reader is referred to **Sections 6** and **Section 7** for more detailed descriptions of each of the projects. A breakdown of the construction costs, contingency, design and administration/financing costs are contained in **Appendix E**.

TABLE 8-1
Recommended Capital Improvement Priorities

Project	Priority	Total Estimated Project Cost[1]	Oversize Cost Required for Future Growth[1]
Collection System			
I/I Reduction Plan (Original 1948 Collection System)	1A	$275,000/yr [2]	$0
14th & Elm Pump Station	1A	$1,663,000	$0
9th & Ivy Pump Station and Trunk Sewer	1A	$1,101,000	$0
17th & Ivy Pump Station	1B	$756,000	$196,000
3rd & Maple Pump Station Phase I	1B	$726,000	$405,000
14th Avenue Trunk Sewer (14th & Elm P.S. to East Front Street)	1B	$51,000	$0
East Front Street Trunk Sewer Phase 1 (14th to 12th Streets)	1B	$163,000	$0
East Front Street Trunk Sewer Phase 2 (12th to 10th Street)	1B	$170,000	$0
9th to 10th Alley Trunk Sewer (Between East Front and Elm Streets)	1B	$137,000	$0
10th & Rose Pump Station and Trunk Sewer (Rose to Tamarack)	2	$926,000	$377,000
1st & Monaco Pump Station Phase I	2	$237,000	$0
Rosewood Pump Station	2	$227,000	$138,000
3rd & Maple Pump Station Phase II	3	$1,512,000	$1,512,000
3rd Street and Maple Street Trunk Sewer (3rd & Maple P.S. to 1st Ave.)	3	$184,000	$184,000
Prairie Road Trunk Sewer (1st Ave to Bryant Street)	3	$293,000	$293,000
Prairie Road Trunk Sewer (Bryant Street to Basin Boundary)	3	$546,000	$546,000
1st Ave. Trunk Sewer (Maple St. west to existing MH)	3	$47,000	$0
10th Avenue Trunk Sewer (New 10th & Rose Pump Station to Vine St.)	3	$177,000	$177,000
Vine Street Trunk Sewer (10th to 6th Avenues)	3	$339,000	$339,000
1st & Monaco Pump Station and Trunk Sewer Phase II	3	$979,000	$890,000
1st Ave. Trunk Sewer (New 1st & Monaco P.S. East)	3	$119,000	$119,000
1st Ave. Trunk Sewer (Old 1st & Monaco Site West)	3	$152,000	$152,000
Chapel Creek Pump Station Upgrades	3	$151,000	$151,000
West 10th Pump Station	3	$1,134,000	$1,134,000
Prairie Road Trunk Sewer (Northern Basin Boundary to Hwy 99)	3	$898,000	$898,000
Highway 99 Crossing	3	$227,000	$227,000
Prairie Road Trunk Sewer (Hwy 99 to Hwy 36)	3	$499,000	$499,000
Highway 99 Trunk Sewer (Hwy 36 to South Industrial Lift Station)	3	$1,111,000	$1,111,000
South Industrial Lift Station	3	$1,134,000	$1,134,000
South Industrial Trunk Sewer (Lift Station to Milliron Rd.)	3	$748,000	$748,000
South Industrial Trunk Sewer (Milliron Rd. to South UGB)	3	$475,000	$475,000
Forcemains			
New 9th & Ivy Pump Station Forcemain	1A	$212,000	$0
Existing Primary Forcemain Replacement (Chapel Ck to South Primary F.M.)	1A	$1,292,000	$1,292,000
New 30-Inch Primary Forcemain (Primary F.M Connection Point to WWTP)	1A	$204,000	$204,000
New 17th & Ivy Pump Station Forcemain	1B	$179,000	$0
New Rosewood Pump Station Forcemain	2	$197,000	$126,000
New 1st & Monaco Pump Station Forcemain	3	$470,000	$470,000
New 3rd & Maple Pump Station Forcemain	3	$137,000	$137,000
New 16-Inch South Primary Forcemain (3rd & Maple to Existing Primary F.M.)	3	$1,670,000	$1,670,000
Wastewater Treatment Plant Improvements (Alternative 1)	1A	$17,191,000	$12,929,000

(1) Costs are in 2006 dollars and assume dry weather construction, publicly bid project, ENR 20 cities index = 7883. See Section 3.7 for basis of project cost estimates (i.e., 10% construction contingency, 20% engineering, 10% legal, permits, easement, and administration)
(2) Funds generated as part of the I/I reduction plan may be used to complete the trunk sewer replacement projects listed in this table. Costs will increase over time due to inflation.

At a minimum, all of the Priority 1A, 1B, and Priority 2 improvements should be included in the CIP. The Priority 3 improvements are largely growth driven. In general, it is envisioned that the Priority 3 improvements will be constructed as part of future development and that the developer will pay for the improvements. Should the City desire to promote development in certain areas, selected Priority 3 improvements may also be included in the CIP. It is recommended that the City implement the Priority 1A improvements under a single funding package. Work on the Priority 1A improvements should begin immediately after agency approval and City adoption of this Facilities Plan. The Priority 1B and Priority 2 projects should be implemented after the Priority 1A improvements as finances become available and the need arises. The total preliminary project cost estimates for each priority classification are listed below. The figures listed below are rounded to the nearest $10,000 increment.

Priority 1A
- Collection System $2,760,000
- I/I Reduction $275,000/year
- Forcemains $1,710,000
- WWTP Improvements $17,190,000

Priority 1B
- Collection System $2,000,000
- Forcemains $180,000

Priority 2
- Collection System $1,390,000
- Forcemains $200,000

Priority 3
- Collection System $10,730,000
- Forcemains $2,280,000

Priority 1A Total (excluding annual I/I Budget) $21,660,000
Priority 1B Total $2,180,000
Priority 2 Total $1,590,000
Priority 3 Total $13,010,000

Grand Total (excluding annual I/I Budget) $38,440,000

Note: Costs are 2006 dollars and assume dry weather construction, publicly bid project, ENR 20 Cities Index = 7883.

8.3. Funding Issues

As a general rule, small communities are not able to finance major sewerage system improvements without some form of government funding such as low interest loans or grants. It is anticipated that the funding for the recommended capital improvement plan outlined herein will be from multiple sources, including systems development charges

(SDC's), monthly user fees, as well as state and federal grant and loan programs. The following section outlines the major local and State/Federal funding programs that may be available for these projects.

8.3.1 Local Funding Sources

To a large degree, the type and amount of local funding used for the sewerage system improvements will depend on the amount of grant funding obtained and the requirements of any loan funding. Local revenue sources for capital improvements include ad valorem taxes (property taxes), various types of bonds, sewer user fees, connection fees, and system development charges (SDC). Local revenue sources for operating costs include ad valorem taxes and sewer user fees. The following sections discuss the local funding sources and financing mechanisms that are most commonly used for the type of capital improvements presented in this study.

8.3.1.1 Existing Debt Service

The City currently has no outstanding debt associated with the sanitary sewer utility.

8.3.1.2 User Fees

Although user fees are not sufficient to finance major capital construction projects, they can be used to repay long term financing. User fees are typically the sole source of revenue to finance sewer system operation and maintenance. User fees are monthly charges to all residences, businesses, and other users that are connected to the sewer collection system. These fees are established by the City Council and may be modified as needed to account for changes in O&M costs, need for new improvements, etc. The monthly charges are typically based on a user classification (i.e., single family dwelling, multiple family dwelling, school, commercial, etc.), as well as the amount of wastewater discharged to the system. The most common method of estimating the wastewater discharge rate is to base it on water usage. This is how the City currently establishes rates for each user. The existing SDC and user fees are discussed in **Section 4**. The existing fee structure alone is not sufficient to fund the recommended improvements. It is recommended that upon adoption of this Facilities Plan, the City update the SDC and user fees to values that will support the projected construction costs for the Priority 1A, 1B, and priority 2 improvements.

8.3.1.3 System Development Charge (SDC) Revenues

A system development charge (SDC) is a fee collected by the City as each piece of property is developed. SDCs are used to finance necessary capital improvements and municipal services required by the development. SDCs can be used to recover the capital costs of infrastructure required as a result of the development. As established in ORS 223, an SDC can have two principal

elements, the reimbursement fee and the improvement fee. Fees are collected at issuance of building permits. It is important to note that operation, maintenance, and replacement costs cannot be financed or repaid by SDC revenues.

The reimbursement portion of the SDC is the fee for buying into existing or under construction capital facilities. The reimbursement fee represents a charge for utilizing excess capacity in an existing facility that was paid for by someone else. The revenue from this fee is typically used to pay back existing loans for improvements.

The improvement portion of the SDC is the fee designed to cover the costs of capital improvements that must be constructed to provide an increase in capacity.

Based on the information contained in this Facilities Plan, the existing SDC fees are not in line with the cost projections included herein. Therefore, it is strongly recommended that the City update the SDC fee schedule based on the projected capital improvement costs for the recommended sewerage system improvements.

8.3.1.4 Connection Fees

Many cities charge connection fees to cover the cost of connecting new development to wastewater systems. There are two types of connection fees typically assessed. The first is for brand new connections, and is designed to cover the cost of City inspections at the time of physical connection to the sewer system.

The second type of fee is typically designed to defray the administrative cost to the City of setting up a new account, and is charged on both brand new services and when a sewer service is transferred to a new owner.

8.3.1.5 Capital Construction (Sinking) Fund

Sinking funds are often established as a budget line item to set aside money for a particular construction purpose. A set amount from each annual budget is deposited in a sinking fund until sufficient revenues are available to complete the project. Such funds can also be developed from user fee revenues or from SDCs. The City Council should consider setting aside reserves immediately for the expansion and upgrades recommended herein as well as improvements that will be required at the end of the 20 year design life of the new facilities. This will allow the City to make future improvements without having to obtain outside financing.

8.3.1.6 General Obligation Bonds

One traditional way to fund municipal sewer projects is through the sale of municipal general obligation (GO) bonds. This is the most often used form of local financing for large scale utility improvements benefiting a major portion of the City. GO bonds utilize the City's basic taxing authority and are retired with property taxes based on an equitable distribution of the bonded obligation across the City's assessed valuation. General obligation bonds are normally associated with the financing of facilities that benefit an entire community and must be approved by a majority vote of the City's voters.

General obligation bonds are backed by the City's full faith and credit, as the City must pledge to assess property taxes sufficient to pay the annual debt service. This portion of the property tax is outside the State constitutional limits that limit property taxes to a fixed percentage of the assessed value. The City may use other sources of revenue including water user fee revenues to repay the bonds. If it uses other funding sources to repay the bonds, the amount collected as taxes is reduced commensurately.

The general procedure followed when financing water system improvements with GO bonds is typically as follows.

- Determination of the capital costs required for the improvement.
- An election by the voters to authorize the sale of bonds.
- The bonds are offered for sale.
- The revenue from the bond sale is used to pay the capital costs associated with the project(s).

GO bonds can be "revenue supported," wherein a portion of the user fee is pledged toward repayment of the bond debt. The advantage of this method is that the need to collect additional property taxes to retire the bonds is reduced or eliminated. Such revenue supported GO bonds have most of the advantages of revenue bonds, plus lower interest rate and ready marketability.

The primary disadvantage of GO bond debt is that it is often added to the debt ratios of the City, thereby restricting the flexibility of the municipality to issue debt for other purposes.

8.3.1.7 Revenue Bonds

These are similar to GO bonds, except they rely on revenue from the sales of the utility (i.e. user fees) to retire the bonded indebtedness. The primary security for the bonds is the City's pledge to charge user fees sufficient to pay all operating costs and debt service. Because the reliability of the source of revenue is relatively more speculative than for GO bonds, revenue bonds typically have slightly higher interest rates.

The general shift away from ad valorem property taxes makes revenue bonds a frequently used option for payment of long term debt. Many communities prefer revenue bonding, because it insures that no additional taxes are levied. In addition, repayment of the debt obligation is limited to system users since repayment is based on user fees.

One advantage with revenue bonds is that they do not count against a City's direct debt. This feature can be a crucial advantage for a municipality near its debt limit. Rating agencies evaluate closely the amount of direct debt when assigning credit ratings. There are normally no legal limitations on the amount of revenue bonds that can be issued. However, excessive issue amounts are generally unattractive to bond buyers because they represent high investment risks.

Under ORS 288.805-288.945, Cities may elect to issue revenue bonds for revenue producing facilities without a vote of the electorate. Certain notice and posting requirements must be met and a sixty (60) day waiting period is mandatory.

The bond lender typically requires the City to provide two additional securities for revenue bonds that are not required for GO bonds. First, the City must set user fees such that the net projected cash flow from user fees plus interest will be at least 125% of the annual debt service (a 1.25 debt coverage ratio). Secondly, the City must establish a bond reserve fund equal to maximum annual debt service or 10% of the bond amount, whichever is less.

8.3.1.8 Improvement Bonds

Improvement (Bancroft) bonds are an intermediate form of financing that are less than full-fledged GO or revenue bonds. This form of bonding is typically used for so-called Local Improvement Districts, or LIDs.

Improvement bonds are payable from the proceeds of special benefit assessments, not from general tax revenues or user fees. Such bonds are issued only where certain properties are recipients of special benefits not occurring to other properties. For a specific improvement, all property within the designated improvement district is assessed on the same basis, regardless of whether the property is developed or undeveloped. The assessment is designed to divide the cost of the improvements among the benefited property owners. The manner in which it is divided is in proportion to the direct or indirect benefits to each property. The assessment becomes a direct lien against the property, and owners have the option of either paying the assessment in cash or applying for improvement bonds. If the improvement bond option is taken, the City sells Bancroft Improvement Bonds to finance

the construction, and the assessment is paid over 20 years in 40 semiannual installments plus interest.

The assessments against the properties are usually not levied until the actual cost of the project is determined. Since the determination of actual costs cannot normally be determined until the project is completed, funds are not available from assessments for the purpose of paying costs at the time of construction. Therefore, some method of interim financing must be arranged.

The primary disadvantage to this source of revenue is that the development of an assessment district is very cumbersome and expensive when facilities for an entire City are contemplated. Therefore, this method of financing should only be considered for discrete improvements to the collection system where the benefits are localized and easily quantified.

8.3.1.9 Certificates of Participation

Certificates of Participation are a form of bond financing that is distinct from revenue bonds. While it is more complex and typically has a higher interest rate than revenue bonds, it is a process controlled by the City Council, and it does not have to be referred to the voters, which can result in a significant time savings. Current rates for Certifications of Participation range from 4.5 to 5.5%.

8.3.1.10 Ad Valorem Taxes

Ad valorem property taxes were often used in the past as a revenue source for public utility improvements. Historically, ad valorem taxes were the traditional means of obtaining revenue to support all local governmental functions. Ad valorem taxation provided a means of financing that reached all property owners that benefit or can potentially benefit from the water system, whether the property was developed or not. The construction costs for the project were shared proportionally among all property owners based on the assessed value of each property. Ad valorem taxation, however, is less likely to result in individual users paying their proportionate share of the costs as compared to their benefits.

8.3.2 State & Federal Grant & Loan Programs

Several state and federal grant and loan programs are available to provide financial assistance for municipal wastewater system improvements. Based on data from the 2005 Community Development Block Grant Guidelines, 41.5% of families in Junction City are classified as low or moderate income. This calculation is performed using data from the 2000 Census. Many communities (e.g., Brownsville, Corburg, etc.) have performed income surveys and have found the percentage families classified as low or moderate is actually much higher than revealed by the 2000 Census data. Communities with high portions of low and moderate income families

qualify for a number of grant and low interest loan programs. Should the City suspect that actual percentage of low and moderate income families is higher than 41.5%, an income survey may be performed. In Oregon, income surveys are typically performed by the Portland State University Center for Population Researce for a minimal cost.

The primary sources of funding available for wastewater system financing are Rural Utilities Service (RUS), Special Public Works Fund (SPWF), the Water/Wastewater (W/W) Financing Program, the Community Development Block Grant (CDBG) program, and the Clean Water State Revolving Fund (CWSRF).

8.3.2.1 Rural Utility Services

Rural Utility Service (RUS) provides federal loans and grants to rural municipalities, counties, special districts, Indian tribes, and not-for-profit organizations to construct, enlarge, or modify water treatment and distribution systems and wastewater collection and treatment systems. Preference is given to projects in low-income communities with populations below 10,000.

Borrowers of RDA loans must be able to demonstrate the following:

- Monthly user rates must be at or above the "state wide average".
- They have the legal authority to borrow and repay loans, to pledge security for loans, and to operate and maintain the facilities and services.
- They are financially sound and able to manage the facility effectively.
- They have a financially sound facility based on taxes, assessments, revenues, fees, or other satisfactory sources of income to pay for all facility costs including O&M and to retire indebtedness and maintain a reserve.

The maximum loan term is 40 years but the finance term may not exceed statutory limitations on the agency borrowing the money or the expected useful life of the improvements. The reserve can typically be funded at 10 percent per year over a ten-year period. Interest rates for RUS loans vary based on median household income (MHI), but tend to be lower than those obtained in the open market.

8.3.2.2 Oregon Economic and Community Development Department (OECDD)

The OECDD manages a number of grant and low interest loan programs as describe in the following sections.

a) Special Public Works Fund

The Oregon Economic and Community Development Department (OECDD) administers the SPWF program. The SPWF is a lottery-funded loan and grant program that provides funding to municipalities, counties, special districts, and public ports for infrastructure improvements to support industrial/manufacturing and eligible commercial economic development. Eligible commercial means commercial activity that is marketed nationally or internationally and attracts business from outside Oregon. Funded projects are usually linked to a specific private sector development and the resulting direct job creation (i.e., firm business commitment), of which 30% of the created jobs must be "family wage" jobs. The program also funds projects that build infrastructure capacity to support industrial/manufacturing development where recent interest by eligible business(s) can be documented.

The SPWF is primarily a loan program, although grant funds are available based on economic need of the community. Although the maximum loan term is 25 years, loans are generally made for 20-year terms. The maximum loan amount for projects funded with direct SPWF money is $1 million, while the maximum for projects financed with bond funds is $10 million.

b) Bond Bank Program

The Bond Bank program, administered by OECDD, attempts to lower the cost of issuing debt by pooling small revenue bond issues from many communities into one large revenue bond issue. It uses lottery proceeds to write down financing costs, and to improve the debt/equity ratio on projects. The interest rate for repayment of funds is typically around 6 percent, with up to a 25 year term.

c) Water/Wastewater Financing Program

OECDD also administers the W/W Financing Program, which gives priority to projects that provide system-wide benefits and help communities meet the Clean Water Act or the Safe Drinking Water Act standards. It is intended to assist local governments that have been hard hit with state and federal mandates for public drinking water

systems and wastewater systems. In order to be eligible for this program, the system must be out of compliance with federal or state rules, regulations or permits, as evidenced by issuance of Notice of Non-Compliance by the appropriate regulatory agency. The funded project must be needed to meet state or federal regulations. Priority is given to communities under economic distress.

Similar to the SPWF, the W/W Financing Program is primarily a loan program, although grant funds are available in certain cases based on economic need of the community. Although the maximum loan term is 25 years, loans are generally made for 20-year terms. The maximum loan amount for projects funded with direct W/W money is $500,000, while the maximum for projects financed with bond funds is $10 million.

d) Economic and Community Development Block Grant

The OECDD administers the CDBG, but the funds are from the U.S. Department of Housing and Urban Development (HUD), so all federal grant management rules apply to the program. The federal eligibility standards are strict. There are two subcategories of Public Works projects eligible for funding, "Public Water and Wastewater," and "Public Works for New Housing." Only the former is considered in this discussion.

Grants are available for critically needed construction, improvement, or expansion of publicly owned water and wastewater systems for the benefit of current residents. Generally, projects must be necessary to resolve regulatory compliance problems identified by state and/or federal agencies and the project must serve a community that is comprised of more than 51% of low and moderate income persons.

The program separates projects into three parts. Grants are available for:

- Preliminary Engineering and Planning Projects

Generally, these grants fund preparation or update of Water System Master Plans and Wastewater Facility Plans, as required by the Oregon Department of Environmental Quality or Oregon Health Division. In addition, funds for grant administration and preparation of a final design funding application can be included in the project budget. All plans produced with grant funds must be approved by the appropriate regulatory agency. Grants of up to $10,000 can also be made for problem identification studies to delineate problems and corrective measures, as required by a regulatory agency.

- Final Design and Engineering Projects

Final design and engineering, bid specifications, environmental review, financial feasibility, rate analysis, grant administration, and preparing a construction funding application are all eligible project activities. The final design, plans and specifications must be approved by the appropriate regulatory agency before a grant will be awarded.

- Construction Projects

These grants fund construction and related activities, grant administration and land/permanent easement acquisition.

OECDD has established an evaluation system that gives priority to projects that provide system-wide benefits. The overall maximum grant amount per water or wastewater project is $1,000,000 (including all planning, final engineering, and construction). The project cannot be divided locally into phases with the expectation of receiving more than one $1,000,000 grant. In order to qualify for grant funding under this program, the water user rates must be at or above statewide averages.

8.3.2.3 Clean Water State Revolving Fund

The Clean Water State Revolving Fund (CWSRF) program is administered by the DEQ and provides low interest loans to cities, counties, special districts, and Indian tribes to plan, design and construct water pollution control facilities, estuary management projects, and non-point source control plants. Applicants to the program must be a public agency.

8.3.3 Funding Recommendations

As available grant funding on public works projects has decreased in the last several years, it will be incumbent upon the City to aggressively pursue grant funding. The first step in this process is to schedule a "one stop meeting" with Oregon Economic and Community Development Department (OECDD) and the preparation of applicable grant applications as soon as possible. The City may not qualify for a number of grant programs since the City does not have greater than 51% of residents in the low and moderate income brackets. As described previously, many communities have performed local income surveys and have determined that a greater percentage of households fall under the low or moderate income category than determined by the 2000 census data. If the City believes the actual percentage of low and moderate income families is higher than revealed by the 2000 census data, a local income survey may be performed.

Based on the 2000 census data, 41.5% of the households in the City fall into the low or moderate income category. In order to qualify for most grant programs, this number must be greater than 51%. To assist the City in determining weather or not an income survey would be beneficial, the information presented in **Table 8-2** was tabulated. This table shows the communities that have performed local income surveys after the 2000 census and how the results of the local survey differ from the 2000 census data. For comparison purposes, the percent of low/mod income from the 1990 census or a local survey performed before 2000 is also included. With the exception of Cottage Grove, all of the communities saw an increase in the percentage of low and moderate income families when a local survey was performed. Some communities saw dramatic increases. This fact suggests the possibility of an overall inaccuracy with regard to income levels in the 2000 census data. Based on this information, the City may wish to perform a local income survey to obtain a more accurate measurement of the percentage of low and moderate income families. The cost for such a survey is likely to be in the $8,000 to $10,000 range. Should this expenditure reveal the actual percentage of low and moderate income families is greater than 51%, the City would readily qualify for a $1,000,000 grant from the Community Development Block Grant Program administered by OECDD. The balance of the funding would have to be derived from local sources and/or state or federal loan programs. The most likely loan program is the Clean Water State Revolving Fund administered by the DEQ.

TABLE 8-2
Effects of Local Income Surveys for Communities in Oregon

Community	Low/Mod Income as Percent of Population (1990 Census or Local Survey)	Low/Mod Income as Percent of Population (2000 Census)	Low/Mod Income as Percent of Population (Local Survey performed after year 2000)
Junction City	42.8%	41.5%	NA
Cascade Locks	47.9%	37.5%	58.5%
Cottage Grove	59.5%	50.6%	48.0%
Brownsville	46.9%	46.0%	58.0%
Mill City	56.0%	50.5%	53.5%
Vale	61.9%	49.8%	57.4%
Aumsville	56.1%	44.6%	74.3%
Jefferson	62.0%	44.1%	57.3%
Mt. Angel	55.8%	43.2%	66.3%
Independence	55.9%	48.0%	79.5%
Monmouth	52.1%	48.6%	67.3%
Yamhill	57.3%	39.9%	64.8%

Data compiled from 2003 Oregon Community Development Block Grant Guidelines – Appendix A and 2005 Oregon Community Development Block Grant Guidelines – Appendix A

8.4. Recommended Implementation Plan

It is recommended that the City begin design work on the Priority 1A improvements as soon as possible after the final approval of the Facilities Plan. A key early step involves putting together a funding package and adjusting SDC and user fees accordingly. The SDC and user fee structure should be sufficient to fund all of the Priority 1A, 1B, and Priority 2 improvements over the duration of the planning period. It is recommended that the City's initial efforts be focused on the Priority 1A improvements and initiating the I/I correction program. After these improvements are completed, the Priority 1B and Priority 2 improvements can be implemented as finances become available. Clearly, the Priority 1A improvement project is substantial. Based on discussions with City Staff it will be the largest single project the City has ever undertaken.

A recommended implementation schedule for the Priority 1A improvements is shown on the following page for the City's consideration. Since the recommended improvements are substantial in nature, and since the tasks associated with these improvements are complex and interrelated, it is likely that the actual implementation schedule will vary from that as shown below. It should be noted that the City and its project team will need to complete many of the tasks concurrently in order to meet the schedule as outlined below.

8.4.1 Wetland Issues

The recommended treatment plant alternative includes significant wetland impacts. As described in **Section 7**, and noted in the NEPA Environmental Report that accompanies this document, the recommended treatment plant alternative includes approximately 53 acres of wetland impacts. The recommended project budget for the treatment plant project includes approximately $2.5 million for wetland mitigation. This cost represents a significant portion of the overall project cost. Most projects comparable in size to the proposed lagoons are likely to have some wetland impacts. However, the magnitude of the wetland impacts for the proposed treatment plant project is well beyond what is typically encountered. In response to the significant wetland impacts, the City and the City's consultants met with DSL, OECDD, DEQ, and a representative from the Governor's office on multiple occasions to discuss alternatives for addressing the wetland issue. These discussions largely involved identifying other treatment plant alternatives that may reduce wetland impacts and reduce the cost of the project. A number of alternatives and variations of the recommended plan that are not formally listed above were discussed. Ultimately the two possible variations of the existing plan that are listed below were considered to merit additional study. These variations may simply be viewed as fine-tuning of the recommended alternative.

- Raise Existing Lagoon Dikes – Raise the existing lagoon dikes to increase storage capacity and eliminate the need to construct two new lagoons. Raising the lagoon dikes may enable the City to construction a single new lagoon and decrease the

wetland impacts by approximately 50%. The drawback of this variation is that it significantly reduces the treatment capacity of the lagoons. Significant consideration to the repercussions of the reduced treatment capacity is warranted prior to implementation of this variation. Any cost savings associated with this variation must be weighed against the loss in flexibility and redundancy that results from the decreased lagoon area.

- Relocate the two new lagoons south of High Pass Road – Presuming that the ground south of High Pass Road is upland ground, the two new lagoons could be constructed immediately south of High Pass Road on upland ground. A new pump station would be needed to convey wastewater from the two exiting lagoons to the two new lagoons. This variation has the potential to significantly reduce and may even eliminate the wetland impacts and associated mitigation costs. This variation is promising only if the area south of High Pass Road is predominately upland ground.

In an effort to keep the project moving forward, it was decided to finalize the Facilities Plan and evaluate these variations of the recommended alternative during the predesign phase. This decision was based, in part, on the fact that the proposed project budget included herein is likely to represent the worst case with respect to cost. Therefore, a financing package structured around the information presented herein will be sufficient for a less costly project that may result from either of the two variations listed above. DEQ agreed that this approach was feasible and requested that the City prepare a predesign report that included appropriate amendments to the facilities plan should the City choose to implement any alternative other than the recommended alternative described herein. If during the predesign phase of the project, it is determined that neither of the above options are better than the recommended alternative as described herein, the facilities plan amendment will not be necessary.

The bottom line is that wetland mitigation for the impacts is feasible despite the cost. As such, the wetland issues are not likely to prevent the City from implementing the recommended improvements described herein.

TABLE 8-3 Recommended Implementation Schedule (Priority 1A)	
Milestone	Date
Facilities Plan	
Submit final Facilities Plan and EA to DEQ and Agency for final review	11/17/2006
DEQ and Agency approval of final Facilities Plan	1/30/2007
City adopts Final Facilities Plan	2/28/2007
Funding Package	
Determine if local income survey should be performed	1/30/2007
Evaluate potential funding sources/schedule one-stop meeting	3/30/2007
Complete local income survey if applicable	4/30/2007
Decision on final funding sources to pursue	5/30/2007
Submit funding applications	6/30/2007
Update user rates analysis and SDC fees	10/30/2007
Finalize funding package	12/30/2007
Land and Easement Acquisition	
Identify land and easement needs	2/28/2008
Contact property owners and enter into negotiations	3/31/2008
Prepare legal documents and finalize purchases	6/1/2008
Design Engineering	
Select and retain engineering team	10/30/2007
Notice to proceed for preliminary engineering	11/15/2007
Submit Draft Predesign Report to DEQ & Funding Agency	2/28/2008
Receive Predesign Report comments from DEQ & Funding Agency	4/15/2008
Submit Final Predesign Report to DEQ & Funding Agency	5/15/2008
DEQ and Agency Approval of Predesign Report	6/1/2008
Notice to proceed for final engineering	6/1/2008
Complete final design	1/30/2009
DEQ and agency approval of plans & specifications	2/28/2009
Construction	
Advertise for Construction Bids	3/1/2009
Receive Construction Bids	4/1/2009
Award Contracts	5/1/2009
Start Construction	6/1/2009
Complete Construction of Priority 1A improvements	11/1/2010
Improvements fully Operational	12/31/2010