

## **4. Engineering and Operations (Public Works and Parks)**

### **(a) Purpose**

The largest part of the City's \$14.2 million operating budget falls under the Engineering and Operations Department. Such budget comprises approximately 58% of the total, and covers design, operational and maintenance activities required to provide appropriate services to the community, and to sustain related City infrastructure. The department's activities are fundamental to ensuring adequate basic services are consistently provided, including:

- Supply and distribution of safe, potable drinking water
- Conveyance of sanitary sewage to the regional treatment facility
- Storm-water drainage facilities
- Appropriate road and traffic facilities
- Parks
- Operation of Arrowsmith Dam
- Buildings

Critical issues include the planning and design of a new water intake and treatment facility on the Englishman River, which will be required to meet projected water demands within 7 to 10 years. This is a project which will be developed as part of the Arrowsmith Water Service Joint Venture with the Regional District of Nanaimo and the Town of Qualicum Beach. The City of Parksville owns a 63.9 % share of this venture.

Other issues requiring attention for reasons that include legislative changes, new technology and increased attention on climate change and sustainability include:

- Asset Management – PSAB requirements
- Cross Connection Control – Provincial Health Requirements
- Engineering Standards – Core Review
- Development Cost Charges – Review
- Information Technology
  - Document / Records Management Software
  - Asset Management Software
  - Web Page Update
  - Property Management

### **Engineering**

The Engineering Department accounts for approximately 7% of the city's operating budget. This covers technical, information technology and administrative functions. Recruitment and retention of qualified technical staff remains a significant issue, as it has in other jurisdictions and in the private sector. The department has operated short one technologist for most of 2007.

Development activity also continues at a record pace, with approximately 130 active development files being handled by the department. There have been approximately 20 new development applications received between January and November, 2007.

## **Operations**

The Operations Department, which includes Public Works and Parks, provide the 'hands-on' services to operate and maintain city infrastructure. This includes inspection of new construction, operation of buildings and pumping facilities, and operational and maintenance activities associated with the City's roads, drainage facilities, and water and sewer utilities.

The on-going growth within the community has resulted in corresponding increases in the amount of required infrastructure. Such growth includes approximate increases of over 25 % in the length of paved roads, a 40% increase in the length of sanitary sewers, and a 25 % increase in the area of parkland being maintained, over the past 5 years.

## **Public Works**

The public works budget, including roads, drainage, buildings and the sewer and water utilities represents approximately 39% of the total operating budget. This includes requirements related to the sewer and water utilities. Responsibilities for the water utility include the operation and maintenance of the Arrowsmith Dam. Buildings include the Parksville Civic and Technology Centre, which is a Joint Venture facility with School District 69 and Malaspina University College. Parksville owns approximately 70 % of this facility.

## **Parks**

The budget for maintaining the City's parks, open spaces and highway landscapes accounts for approximately 8.7 % of the total operating budget. Parksville has been recognized on a national level under the 'Communities in Bloom' program for its outstanding achievements in this regard.

### **(b) Service Level Goals**

- Maintain the City's infrastructure in a cost effective and efficient manner.
- Provide timely and appropriate programs, service and responses to customer needs.
- Manage the City's assets in a cost-effective manner.
- Provide all necessary technical engineering services including, study, design, drafting, surveying, and construction.
- Services to efficiently meet the City's water, sanitary sewer, storm drainage, traffic and transportation requirements, now and into the future.
- Facilitate the effective use of resources to achieve the greatest economic, environmental and social benefits in support of Council, Administration, City Departments and the City's growth and development objectives.
- Administer, supervise and/or construct all municipal infrastructure to ensure it meets the needs and standards of the community.
- Assist Downtown Parksville Business Improvement Area Initiatives.

### **(c) Accomplishment Objectives - Departmental**

- Information Systems Strategic Plan
- Community Park Shoreline Protection Works
- Transportation Plan Update
- Core area parking study
- Springwood Water Complex Upgrades

- Sewer Lift Station Upgrades
- Implement Cross Connection Control Program (Phase I)
- Englishman River Intake/Treatment Facility (Planning and Design)
- Renew Nanoose Water Supply Agreement (with RDN)
- Sections of Allwood/Rushton/Young Infrastructure Upgrades
- Hwy 19a Storm Sewer Crossing
- Martindale Hwy 19a Crosswalk
- Well Redevelopment Program
- Scada and Data Communications Upgrade

**(d) Accomplishment Objectives – Interdepartmental**

- DCC Bylaw Update
- Traffic Bylaw Update
- Develop fixed asset accounting program
- Water Rates/Charges review

## ENGINEERING AND OPERATIONS DEPARTMENT

### ACCOMPLISHMENT OBJECTIVES

DESCRIPTION	2008											
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec

#### Accomplishment Objectives

Community Park Shoreline Protection		
Transportation/Parking Plan Update		Ongoing into 2009
Springwood Water Complex Upgrades		
Sewer Lift Station Upgrades		Ongoing into 2009
Cross-Connection Control Program		Ongoing into 2009
Englishman River Intake/Treatment		Ongoing into 2009
Nanoose Agreement (RDN)		
Alwood/Ruston/Young Upgrades		
Hwy. 19A Storm Crossing		
Hwy. 19A Crosswalk - Martindale		
Well Redevelopment Program		Ongoing into 2009
Scada/ Data communications Upgrade		Ongoing into 2009
McMillan Upgrade		Ongoing into 2009
Stanford/McCarter Upgrade		

#### Interdepartmental Accomplishment Objectives

DCC update		
Traffic Bylaw		
Fixed Asset Accounting	Ongoing into 2009	
Water Rate Changes/Increases		

High Priority ■  
 Mid Priority ■  
 Low Priority ■



**Engineering & Operations (Public Works and Parks)  
2008 - 2012 Financial Plan**

**Expenditures**

	<b>2008 Budget</b>	<b>2009 Budget</b>	<b>2010 Budget</b>	<b>2011 Budget</b>	<b>2012 Budget</b>
Engineering	744,530	695,159	723,789	753,602	784,696
Information Technology	244,960	238,711	246,725	255,011	291,733
Parks	1,218,651	1,255,210	1,300,824	1,339,814	1,380,033
Public Works Administration	109,816	113,110	116,504	119,996	123,598
Building and Yard Maintenance	492,209	472,986	487,175	501,778	531,471
Transportation	1,035,101	945,953	974,332	1,003,537	1,033,660
Drainage	141,349	145,590	149,957	154,452	159,088
Solid Waste	502,800	525,213	539,651	554,550	569,692
	<b>4,489,416</b>	<b>4,391,932</b>	<b>4,538,957</b>	<b>4,682,740</b>	<b>4,873,971</b>

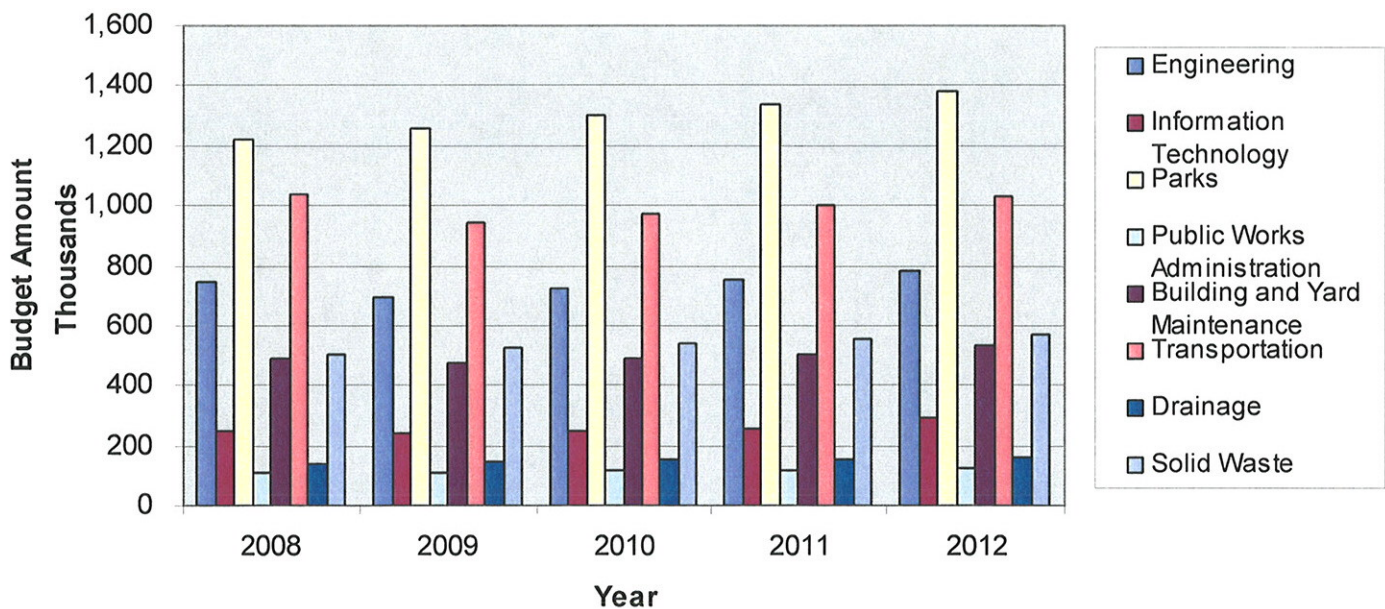
**Revenues**

Engineering Fees	(52,000)	(18,113)	(18,419)	(18,854)	(19,297)
Information Technology	-	-	-	-	-
Parks	(98,000)	(101,488)	(105,104)	(108,855)	(112,753)
Building Rentals	(23,400)	(23,696)	(23,995)	(24,299)	(24,608)
Transportation	-	-	-	-	-
Drainage	(3,000)	(3,070)	(3,140)	(3,213)	(3,287)
Solid Waste	(537,125)	(551,986)	(567,090)	(582,676)	(598,516)
	<b>(713,525)</b>	<b>(698,353)</b>	<b>(717,748)</b>	<b>(737,897)</b>	<b>(758,461)</b>

Transfers to (from) Reserves & Other Funds	(465,400)	(243,664)	(248,002)	(252,428)	(256,944)
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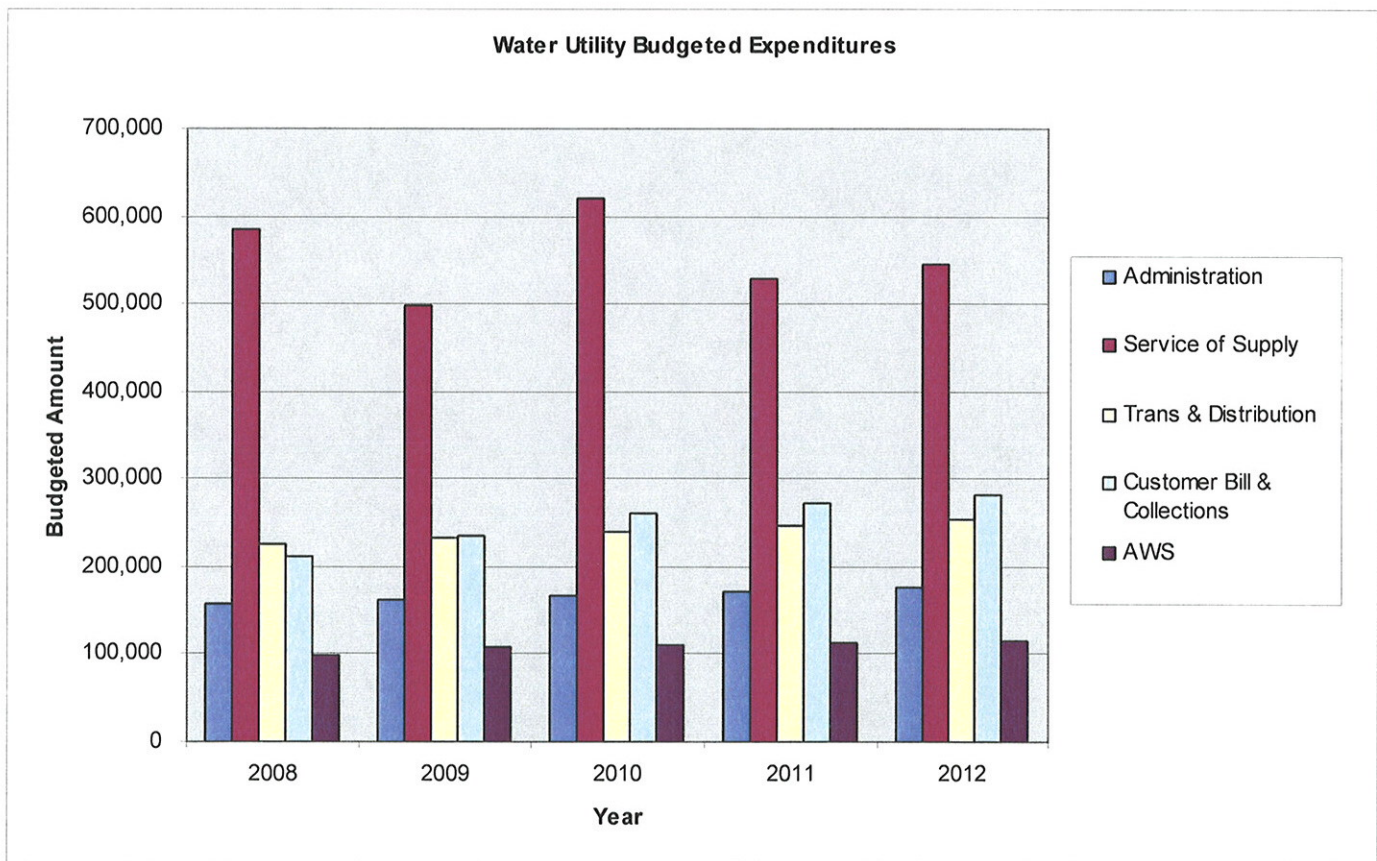
Funded by Property Taxes	\$ 3,310,491	\$ 3,449,915	\$ 3,573,207	\$ 3,692,415	\$ 3,858,566
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**Engineering & Operations (Public Works and Parks)**



**Water Services  
2008 - 2012 Financial Plan**

	<b>2008 Budget</b>	<b>2009 Budget</b>	<b>2010 Budget</b>	<b>2011 Budget</b>	<b>2012 Budget</b>
<b>Expenditures</b>					
Administration	157,330	162,050	166,911	171,914	177,075
Service of Supply	583,992	498,512	619,557	528,858	544,733
AWS	99,812	107,468	109,617	111,810	114,047
Trans & Distribution	225,848	232,623	239,602	246,784	254,192
Customer Bill & Collections	210,967	234,942	261,634	271,595	281,947
	<b>1,277,949</b>	<b>1,235,595</b>	<b>1,397,321</b>	<b>1,330,961</b>	<b>1,371,994</b>
<b>Revenues</b>					
Water Fees	(2,325,030)	(2,573,094)	(2,876,959)	(3,000,957)	(3,130,349)
Other	(50,000)	(36,385)	(41,986)	(55,468)	(43,064)
	<b>(2,375,030)</b>	<b>(2,609,479)</b>	<b>(2,918,945)</b>	<b>(3,056,425)</b>	<b>(3,173,413)</b>
Transfers to (from) Reserves & Other Funds	300,850	309,475	318,345	327,451	336,832
Surplus Funds for Water Capital Projects	<b>\$ (796,231)</b>	<b>\$ (1,064,409)</b>	<b>\$ (1,203,279)</b>	<b>\$ (1,398,013)</b>	<b>\$ (1,464,587)</b>





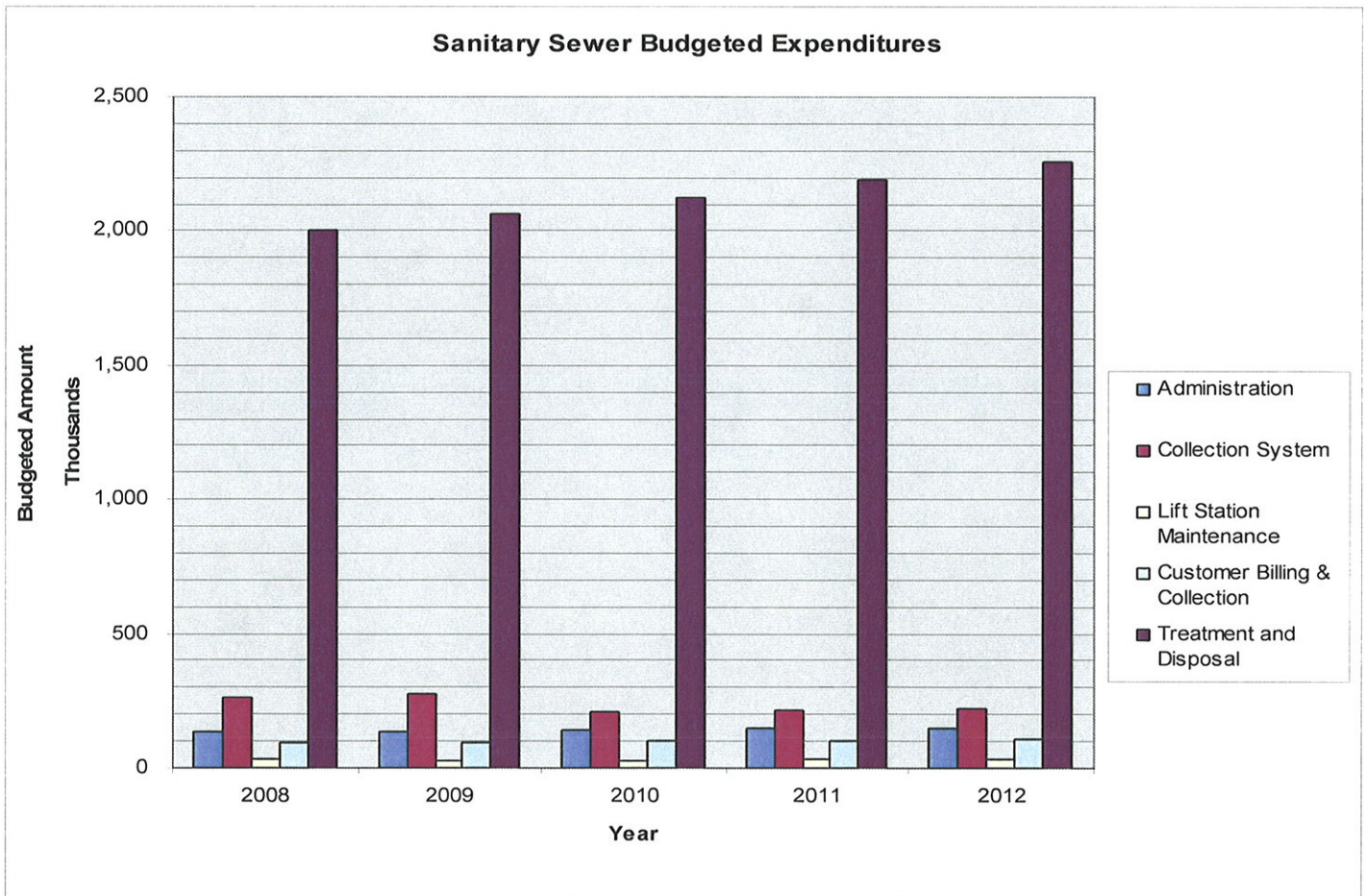
**Sewer Services  
2008 - 2012 Financial Plan**

	2008 Budget	2009 Budget	2010 Budget	2011 Budget	2012 Budget
<b>Expenditures</b>					
Administration	131,320	135,700	140,229	144,909	149,757
Collection System	262,478	273,463	205,304	214,837	224,766
Lift Station Maintenance	36,892	28,165	29,386	30,659	31,989
Treatment and Disposal	2,003,700	2,063,811	2,125,725	2,189,443	2,255,164
Customer Bill & Collect	90,900	94,237	97,697	101,287	105,017
	<u>2,525,290</u>	<u>2,595,376</u>	<u>2,598,341</u>	<u>2,681,135</u>	<u>2,766,693</u>

**Revenues**

Sewer Fees	(929,925)	(933,752)	(945,487)	(986,101)	(1,028,465)
Sewage Treatment Plant Tax	(2,003,700)	(2,063,811)	(2,125,725)	(2,189,443)	(2,255,164)
Other	(118,500)	(93,340)	(87,309)	(88,875)	(84,880)
	<u>(3,052,125)</u>	<u>(3,090,903)</u>	<u>(3,158,521)</u>	<u>(3,264,419)</u>	<u>(3,368,509)</u>

Transfers to (from) Reserves & Other Funds	360,850	371,676	382,826	394,301	406,137
Surplus Funds for Sewer Capital Projects	<u>\$ (165,985)</u>	<u>\$ (123,851)</u>	<u>\$ (177,354)</u>	<u>\$ (188,983)</u>	<u>\$ (195,679)</u>



## **PART VI – Five Year Capital Plan Overview**

### **1. Funding Sources**

Funding for capital expenditures comes from a variety of sources including general tax revenues, reserves, statutory funds, grants, contributions from developers, businesses or partners and borrowed funds.

### **2. Capital Process**

Capital assets provide a benefit to the City beyond one year. Such items typically require operating and maintenance expenditures, and may need to be replaced in the future. Examples include infrastructure such as buildings, roads, bridges, water and sewer facilities, as well as vehicles, computer equipment and furniture.

Legislation requires local governments to prepare a five year financial plan including operating and capital budget.

The City's policy however is to plan for major capital expenditures on a fifteen-year cycle with annual reviews and updates. The fifteen-year capital plan presented to Council includes projects that are consistent with corporate objectives and long-range plans. In accordance with the legislation the city prepares and adopts a five year financial plan however in reality we actually prepare a 15 year plan.

### **3. Operating Cost Impact**

Each capital project in the plan is reviewed to assess the impact it will have on the operating budget. Projects providing new infrastructure will typically require additional expenditures each year for operation and maintenance. Projects which replace or rehabilitate existing infrastructure will typically reduce operating costs, however this does not generally result in an overall reduction of operating costs as other aging city infrastructure not replaced is progressively more expensive to operate and maintain.

### **4. Water Supply Strategic Plan**

As a result of changes to water regulations and the issues arising from the boil water advisory, staff is in the process of an in depth review of the City's water supply system to addressing the long-term questions of:

- How is the City going to address drinking water quality?
- How is the City going to ensure sufficient capacity in the water supply for future growth?
- How and when should we be replacing our major water supply infrastructure?

The installation of the new Top Bridge Reservoir in 2007, the \$2.6 million Springwood Water Facility upgrade included in the 2007 and 2008 budget as part of our 2007 Federal/Provincial MRIF grant application and the identified new Englishman River Water Intake Upgrade through AWS are all projects already identified through this review.



## 5. Departmental Highlights

The 2008 - 2012 capital expenditure program includes approximately \$34.2 million to be expended on a number of types of projects.

### (a) Administrative and other Services (\$158,000)

The majority of this amount is for PCTC office renovations to increase the usable floor space currently in the building (\$100,000 in 2008). The remaining 58,000 is for office equipment replacements in 2008 and 2012.

### (b) Protective Services (\$4.8 Million)

In addition to routine replacement of small equipment gear and small vehicles this budget includes:

- Major fire hall renovation and addition, \$3,200,000 funded through long term debt planned for 2008.
- Two fire trucks, \$900,000, replacement of an existing vehicle planned for 2011 and the addition of a new vehicle planned for 2009.
- Construction of components of the Industrial Park Fire Department Training Grounds, \$300,000, \$25,000 in each of 2008 and 2009 and \$250,000 in 2010 for construction of a hi rise training tower.

### (c) Engineering and Operations (Public Works and Parks) (\$28.5 Million)

Highlights of the Parks, Engineering, Public Works, Water and Sanitary Sewer capital plan include:

- Completion of water front walkway, \$820,000
- Mitigation of the Beach erosion in the Community Park, \$400,000.
- Road replacement and upgrades:
  - Resurfacing sections of Highway 19A, \$ 1,060,000
  - Moilliet - Harnish to Morison, \$690,000
  - Temple - Philips to Doehle, \$1.7 million
  - Memorial - Hwy 4A to McMillan, \$400,000
  - Corfield - Stanford to Hwy 19A, \$840,000
  - Jensen Extension, \$1.3 million
- Storm Sewer replacement and upgrades:
  - Corfield - Stanford to Jensen, \$220,000
  - Finholm – Rowan to Hirst, \$420,000
  - Forsyth - Acacia to Finholm, \$110,000
  - Jensen - Hwy 4A to Moilliet, \$420,000
  - Moilliet - Bernard to Morison, \$710,000
  - Temple - Phillips to Sanderson, \$450,000
  - Temple - Sanderson to Bay, \$760,000
  - Rushton – Temple East, \$355,000
- Water Infrastructure replacement and upgrades:
  - Jensen - Hwy 4A to Moilliet, \$340,000
  - Moilliet - Bernard to Hwy 19A, \$450,000
  - Temple - Phillips to Bay, \$750,000

Springwood Water Facility Systems, \$2.8 million  
 Arrowsmith Water Service, \$304,000  
 Jensen Extension, \$215,000

**Capital Expenditures  
 2008 - 2012 Financial Plan**

	<b>2008 Budget</b>	<b>2009 Budget</b>	<b>2010 Budget</b>	<b>2011 Budget</b>	<b>2012 Budget</b>
<b><u>Expenditures</u></b>					
<b>Corporate Services</b>					
Legislative	110,000	0	0	0	23,000
<b>Protective Services</b>					
Fire Services	3,389,644	490,000	358,600	450,000	100,600
<b>Community Development</b>					
Planning	25,000	0	0	0	0
<b>Parks, Engineering &amp; Public Works</b>					
Parks	1,356,011	127,000	168,000	60,000	0
Information Technology	175,000	215,000	310,000	35,000	10,000
Transportation	4,165,378	1,143,216	750,552	1,971,200	2,901,808
Storm Drains	1,478,825	835,304	710,000	1,275,296	1,200,000
Buildings & Other	48,700	0	0	0	0
	<u>7,223,914</u>	<u>2,320,520</u>	<u>1,938,552</u>	<u>3,341,496</u>	<u>4,111,808</u>
<b>Water Services</b>	3,932,587	817,382	673,230	1,097,362	1,477,862
<b>Sewer Services</b>	904,754	480,728	125,000	250,368	558,120
<b>Total Capital Expenditures</b>	<u>\$15,585,899</u>	<u>\$ 4,108,630</u>	<u>\$ 3,095,382</u>	<u>\$ 5,139,226</u>	<u>\$ 6,271,390</u>
<b><u>Revenues</u></b>					
<b>Corporate Services</b>					
Grants	(5,000)	-	-	-	-
<b>Community Development</b>					
<b>Protective Services</b>					
Reserve Funds	(94,794)	-	-	-	-
Borrowing	(3,100,000)	-	-	-	-
<b>Parks, Engineering &amp; Public Works</b>					
Grants/Donations	(625,012)	-	-	-	-
Reserve Funds	(1,837,042)	(123,750)	(472,650)	(465,855)	(1,881,440)
Borrowing	-	-	-	-	-
<b>Water Services</b>					
Grants	(931,962)	-	-	-	-
Reserve funds	(1,403,761)	(150,000)	-	-	(212,850)
<b>Sewer Services</b>					
Reserve funds	(326,350)	(217,801)	-	-	(217,801)
	<u>(8,323,921)</u>	<u>(491,551)</u>	<u>(472,650)</u>	<u>(465,855)</u>	<u>(2,312,091)</u>
<b>Capital Funded from Operating Funds</b>	<u>\$ 7,261,978</u>	<u>\$ 3,617,079</u>	<u>\$ 2,622,732</u>	<u>\$ 4,673,371</u>	<u>\$ 3,959,299</u>

### 2008 Capital Expenditures

