



OFFICE OF THE CITY CLERK
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January 31, 2005

City Clerk File Nos.:
PRO 2005-0001
PRO 2005-0002

COUNCIL ACTION MEMORANDUM

RE: SIX-YEAR COMPREHENSIVE SEWER PROGRAM, 2005-2010 (deferred from
January 18, 2005 Agenda)
SIX-YEAR COMPREHENSIVE WATER PROGRAM, 2005-2010 (deferred from
January 18, 2005 Agenda)

During its 6:00 p.m. Legislative Session held Monday, January 24, 2005, the Spokane City Council considered the above-described matters. Subsequent to staff presentations on the Six-Year Comprehensive Sewer Program, 2005-2010, and the Six-Year Comprehensive Water Program, 2005-2010, and Council inquiry and discussion, the following action was taken:

Motion by Council Member French, seconded by Council Member Stark, to approve (and thereby accept and authorize staff to apply for grants and loans) the Six-Year Comprehensive Sewer Program, 2005-2010, and the Six-Year Comprehensive Water Program, 2005-2010, **carried unanimously.**

During Council's discussion on the six-year sewer and water programs, Council Member Verner suggested that the Public Works Division organize a study session or an administrative report for the Council on sewer and water issues and the City's role. Council President Hession referenced the comments made last week during the Council's Town Hall Meeting at which an individual commented on alternatives to discharge and reducing the amount of water put into the sewage system by implementing low flow toilets. Mr. Hession encouraged staff to look into this suggestion if they haven't already done so.

Also, prior to the vote being taken on the six-year sewer and water programs, Council Member French divulged that he is the design architect for Eagle Ridge and has been since 1994 and that he has no financial interest in the project other than providing consulting services. No objections were voiced by fellow council members and Mr. French did participate in the vote.


Terri L. Pfister, CM/C
Spokane City Clerk

c: Capital Programs/GIS (Dick Raymond)
Wastewater Management (Dale Arnold)
Engineering Services (Tom Arnold)
Public Works & Utilities

CITY PLAN COMMISSION RECOMMENDATION

A Recommendation of the City Plan Commission certifying that the 2005-2010 Six Year Comprehensive Water Program is in conformance with the City of Spokane's Comprehensive Plan.

WHEREAS the Washington State Growth Management Act requires that the City's annual Six Year Capital Facilities Finance Programs be in conformance with the City's Comprehensive Plan, AND

WHEREAS the 2005-2010 Six Year Water Program has been prepared in full consideration of the City's "Comprehensive Water Plan", AND

WHEREAS the Six Year Water Program is presented to identify capital project activity which has implications on the growth of the community, AND

WHEREAS the Six Year Water Program has been reviewed by the City Plan Commission and found to be in conformance with the goals and policies of the City's 2001 Comprehensive Plan, as well as the Comprehensive Water Plan, AND

WHEREAS the City Plan Commission held a workshop on October 13, 2004, and a public hearing on November 10, 2004, to obtain public comments on the Six Year Water Program, AND

WHEREAS the City Council must receive a recommendation from the City Plan Commission to certify that the 2005-2010 Comprehensive Six Year Water Program is in conformance with the City's Comprehensive Plan.

NOW THEREFORE BE IT RESOLVED by the Spokane City Plan Commission that the 2005-2010 Six Year Water Program is in full compliance with the Spokane Comprehensive Plan as required by RCW 36.70A.070.

PASSED THIS 16th DAY OF NOVEMBER, 2004.


CANDACE MUMM, PRESIDENT

SPOKANE CITY PLAN COMMISSION

City of Spokane
Six—Year Comprehensive Water
Program
2005-2010

Contents

Introduction.....	1
Project Changes & Descriptions.....	2-3
Comprehensive Plan.....	4-5
Six-Year Program Financial Summary.....	6-8
Water Rehabilitation and Replacement Program.....	9-14
Water Capital Improvement Program.....	15-18

Introduction

The Water Department is an enterprise fund which operates like a business with an annual budget of about \$33 million. A population of approximately 200,000 people or about 68,000 customers is served by the Department's 162 employees. The Water Department has a Class 1 fire rating, the highest possible, and also the highest possible operating rating.

The mission of the Water Department is to give quality service and provide to each customer reliable water of excellent quality at the quantity needed for the most affordable price possible. Water needs to be available at all times for domestic, commercial, industrial, irrigation and fire control purposes.

The Water Department's Infrastructure consists of :

- 7 well stations with a total of 30 well pumps.
- 22 booster stations with a total of 62 pumps.
- 32 storage facilities with 103 million gallon capacity.
- 923 miles of water mains ranging in size from 4 inch to 48 inch.
- Over 6,600 fire hydrants and 15,000 valves.
- The Upriver Hydroelectric Facility which supplies the power needed for all of the system's water pumps.

Critical issues requiring continuous attention for the Water Department to fulfill its mission are:

- Funding for necessary capital projects in a manner to minimize rate impacts to citizens for both replacement of worn out infrastructure as well as new infrastructure needed to accommodate growth.
- Participating in the important and related tasks of dealing with aquifer capacity and conservation.
- Providing for wellhead protection and monitoring the water in the system to assure that high quality water is always being delivered to each customer.
- Dealing with growth management and water right issues.
- Ongoing operation and maintenance programs of the entire system including meter reading, meter maintenance, leak control, yearly hydrant and valve checks, cross connection and backflow prevention, new service connections, warehousing, engineering, accounting and customer service.

The Six-Year Comprehensive Water Program provides a blueprint for improving the Water Department's infrastructure in a rational, coordinated, cost-effective manner. The Six-Year Comprehensive Programs are prepared in support of the City's overall planning efforts.

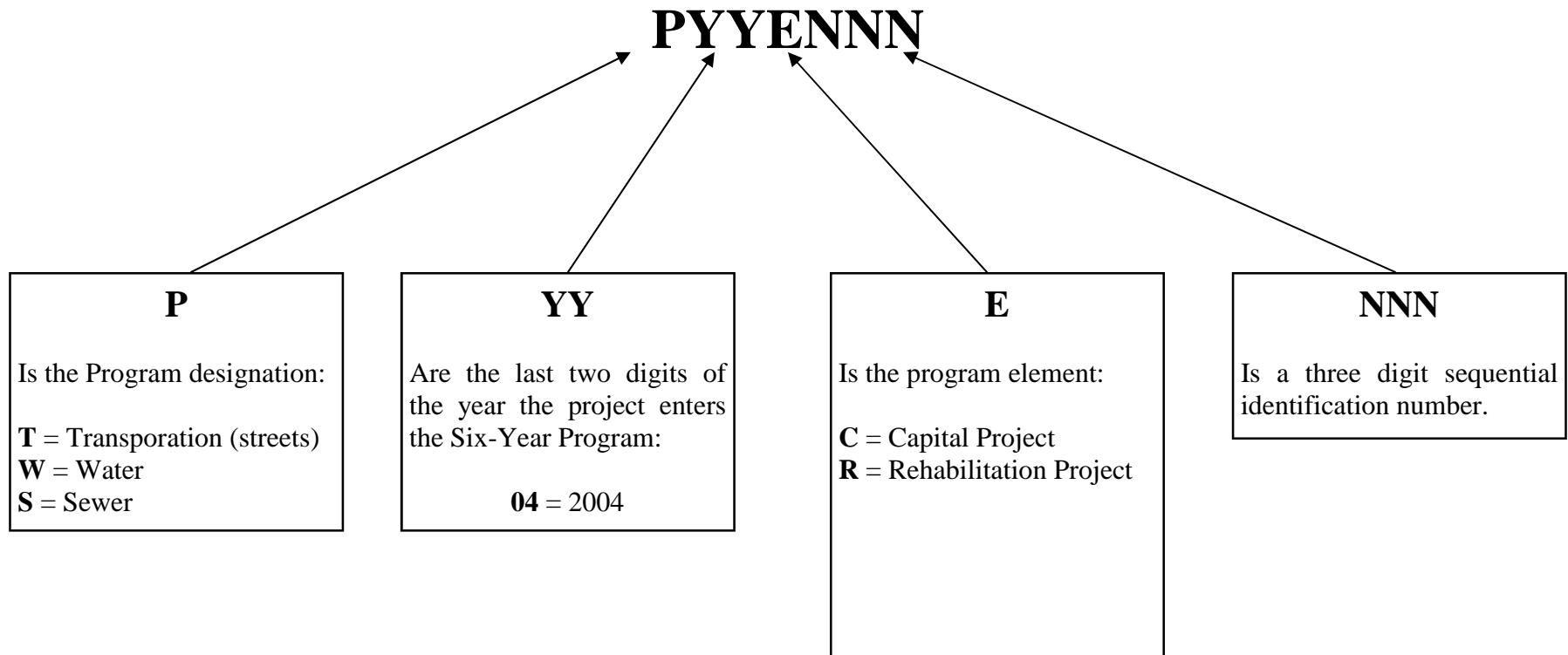
Projects

Projects shown below are provided as a comparison between last year's 6-year program (2004-2009) and this years program. Items below may include projects that have been completed, cancelled, added or changed from last years program.

Completed Projects	
W02 R004	Monroe Bridge Water Main Replacement
W00 R004	14th & Grand Tank
W00 C003	Completion of the Inland Empire to West Drive Booster Station portion of the Westside Main project.
New Projects	
W05 R001	Hoffman Well Rehabilitation
W05 C001	Eagle Ridge Transmission Main
W05 C002	Transmission Main Extension to Fairchild AFB

How to Use this Document

When a new project is added to the six-year program, it is assigned a unique tracking number. Once assigned, this tracking number stays with the project for its life, even if other project numbers are subsequently assigned for billing and internal tracking purposes. The tracking numbers are of the form:



For example, a project with the tracking number **W05C002** indicates that:

This project is the second (002) capital (C) project added to the Six-Year Water (W) program in 2005 (05).

The Comprehensive Plan

The City's first planning activities in the early 1900s were centered on parks and transportation. From these beginnings, planning in Spokane has continued to grow in significance and usefulness. In 1968, the City adopted the first land use plan as one element of the Comprehensive Plan. The 1968 Land Use Plan was updated in 1983. Over the years, topics in the Comprehensive Plan have expanded to include parks and open spaces, bike-ways, water and wastewater facilities, shorelines, and individual neighborhoods.

In 1990, the State of Washington enacted the Growth Management Act (GMA) that established rules for communities (such as the City of Spokane) to accomplish community planning. The City's most recent planning effort, the 2000 Comprehensive Plan, (adopted in 2001) complies with the GMA rules and consists of goals, policies, maps, illustrations, and implementation strategies that state how the City should grow physically, socially, and economically. The City's planning effort is termed "comprehensive" because it identifies the community's long-range plans for growth. The 2000 Comprehensive Plan consists of over thirty official documents that encompass all aspects of city activities.

Importantly, the GMA includes two provisions to ensure that the City follows Comprehensive Plan directives:

- 1) The City must regulate land use and development consistent with the plan; the zoning code, subdivision code, environmental ordinances, and the building code must follow the plan's intent.

- 2) The City must make capital budget decisions and capital project investments in conformance with the plan.

These two GMA rules give the new Comprehensive Plan a much higher level of importance in managing and guiding the city's growth and development than previous editions of the plan.

As defined in the Comprehensive Plan, Capital facilities and utilities are services and facilities that support physical development and growth of the city. Section 1.1 of the Comprehensive Plan states that the "...city must make capital budget decisions and capital project investments in conformance with the plan." Further, it states, "In addition to ongoing needs for repair and maintenance, these lists of capital facilities include the immediate improvements necessary to support growth, in conformance with the Comprehensive Plan." The Comprehensive Plan, then strives to contain and manage sprawl, and it encourages investment of infrastructure in support of the managed growth areas including focusing high intensity growth in Centers and Corridors and in infill development in other areas of the City.

Section 5.4 of the Comprehensive Plan addresses certain goals and policies for indicating desired directions, accomplishments, or aims in relation to the growth and development of Spokane. An important but subtle provision is included in CFU 1.2, Operational Efficiency. This powerful provision requires "...the development of capital improvement projects that either improve the city's operational efficiency or reduce costs by increasing the capacity, use, and/or life expectancy of existing facilities."

The concept of increasing the use of existing facilities implies – requires – a more dense development pattern, and not the physical extension of services to more consumers. Simply stated, maximizing the utilization of existing facilities reduces future capital costs by eliminating or delaying the need to expand the system in response to internal perimeter growth or external sprawl, and lowers the unit cost of service delivery by distributing capital and certain operational costs over a larger customer base.

Full realization of the CFU 1.2 goal, however, is akin to considering the "chicken or the egg" paradox. Obviously, the cost "savings" cannot be realized unless a more dense development pattern occurs. However, the mere existence of the infrastructure cannot of itself assure denser development without additional incentives. For just this reason, the sewer and water utilities have included a provision in their budgets to eliminate the general facilities charge (GFC) for all areas within the state-designated Community Empowerment Zone. This GFC infill incentive program provides a financial stimulus for developing/redeveloping within currently underutilized areas of the city.

In order to fully comply with the Comprehensive Plan, capital sewer, water, and street facilities planning must acknowledge and address two apparently conflicting goals: facilities must be constructed within the Urban Growth Area (UGA), and facilities must be consistent with strategic system planning (50 to 100 years). Resolution of this apparent conflict is found in CFU 3.6, which allows transmission facilities outside the UGA and prohibits service outside the UGA from those facilities.

Six-Year Programs and the Comprehensive Plan

The City of Spokane prepares and publishes the Six-Year Capital Improvement Programs (CIPs) annually for street, water and sewer projects. These programs are termed the Six-Year Comprehensive Sewer Program; Six-Year Comprehensive Water Program; and the Six-Year Comprehensive Street Program. These programs provide a blueprint for improving the City's sewer, water and transportation infrastructure in a rational, coordinated, cost-effective manner. The Six-Year Comprehensive Programs are prepared in support of the City's overall planning efforts.

The Six-Year Comprehensive Utility Programs are used for five distinct purposes:

1. The City Utilities are "enterprise" activities that are managed similarly to many successful businesses. The Six-Year CIPs provide the planning structure that supports efficient system improvements.
2. The 20-year utility financial planning periods and the Six-Year CIPs are directly related and promote a predictable and even cash flow for the Utilities.
3. Federal and state agencies that offer grants and low interest loans require that projects proposed for funding are part of an approved capital improvement program, and the City's Six-Year CIPs satisfy that requirement.
4. All Six-Year CIPs are closely coordinated with each other. This coordination allows efficient installation of utility improvements in conjunction with street projects and prevents costly multiple construction projects in the same area.
5. The Six-Year CIPs are used by the public.

These programs contain information that supports redevelopment, private construction projects, and other City economic activities.

New projects are added annually to the Six-Year Comprehensive Sewer, Water and Street Programs, and completed (or cancelled) projects are removed from the programs. Proposed new projects must be "needs-driven" to be considered for inclusion in the programs, and new projects can originate from one or more of the following sources:

- Utility maintenance and operations staff identify infrastructure needing immediate replacement or upgrade based on observed conditions.
- Adopted facility and management plans list projects needed for continued system operation.
- Other City projects (such as street or bridge work) create an opportunity for cost-effective upgrades or facility replacements.
- Planning documents, such as the City Comprehensive Plan, provide guidance on expansion and growth related projects.
- Regulatory agencies (such as the Washington Department of Ecology and the Department of Health) have ordered improvements to the infrastructure system for public health and safety.

Updating the Six-Year Comprehensive Water Program is an annual activity that begins immediately after the most recent plan is adopted. A summary of the processes is provided below:

January-May: Capital Programs solicits input from various City and agency sources.

June-July: A rough draft of the Program is prepared and then reviewed with City staff.

August: A working draft is prepared; the environmental process is started (SEPA checklist); and the draft is coordinated with the proposed utility budget.

September-November: The working draft is presented to the Public Works Committee. The draft is then presented to the Plan Commission where the new program elements are critically reviewed for consistency with the city's overall Comprehensive Plan. Lastly, the final draft is then prepared and presented at a Plan Commission public hearing.

December: The pre-publication draft along with the Plan Commission's recommendation is presented to the City Council for acceptance

Six-Year Program Financial Summary

(Costs in \$1,000s)

	2005	2006	2007	2008	2009	2010
<u>OPERATING REVENUES & EXPENSES</u>						
Water & Electrical Sales	25,479	25,943	26,817	27,722	28,659	29,629
Rate Stabilization Fee	3,264	3,264	3,264	3,264	3,264	3,264
General Facilities Charges (capital recovery)	687	687	687	687	687	687
Other Operational Revenue	2,449	6,637	2,141	2,198	2,252	2,222
Operating Expenses	(27,827)	(28,692)	(29,456)	(30,703)	(31,690)	(32,873)
GFC Infill Incentive Program	<u>(40)</u>	<u>(40)</u>	<u>(40)</u>	<u>(40)</u>	<u>(40)</u>	<u>(40)</u>
NET OPERATING REVENUE	\$4,012	\$7,800	\$3,413	\$3,129	\$3,132	\$2,888
 <u>AVAILABLE FOR CAPITAL</u>						
Cash Balance as of Jan 1	20,205	15,687	6,056	6,682	7,477	4,410
Net Operating Revenue	4,012	7,800	3,413	3,129	3,132	2,888
Grant and Loan Proceeds	1,068	5,162	1,916	2,730	978	3,760
Revenue Bond Proceeds	0	0	0	0	0	0
Transfer from (to) Capital Reserve	0	0	0	0	0	0
Transfer from (to) Emergency Reserve	(70)	(71)	(73)	(74)	(76)	(77)
Transfer from (to) Replacement Fund	<u>(1,112)</u>	<u>(1,347)</u>	<u>(1,583)</u>	<u>(1,717)</u>	<u>(1,917)</u>	<u>(2,117)</u>
AVAILABLE FOR 6-YR PROGRAM	\$24,103	\$27,230	\$9,729	\$10,749	\$9,593	\$8,864
 <u>SIX-YEAR CAPITAL PROGRAM</u>						
(note: incidental Water Labor is included in Operating Expenses above)						
Rehabilitation & Replacement Program	2,157	5,134	2,625	2,206	5,108	4,555
Capital Improvement Program	<u>6,258</u>	<u>16,040</u>	<u>421</u>	<u>1,066</u>	<u>75</u>	<u>75</u>
6-YEAR CAPITAL PROGRAM	\$8,415	\$21,174	\$3,047	\$3,272	\$5,183	\$4,630
 CASH BALANCE: Dec 31	 \$15,687	 \$6,056	 \$6,682	 \$7,477	 \$4,410	 \$4,233

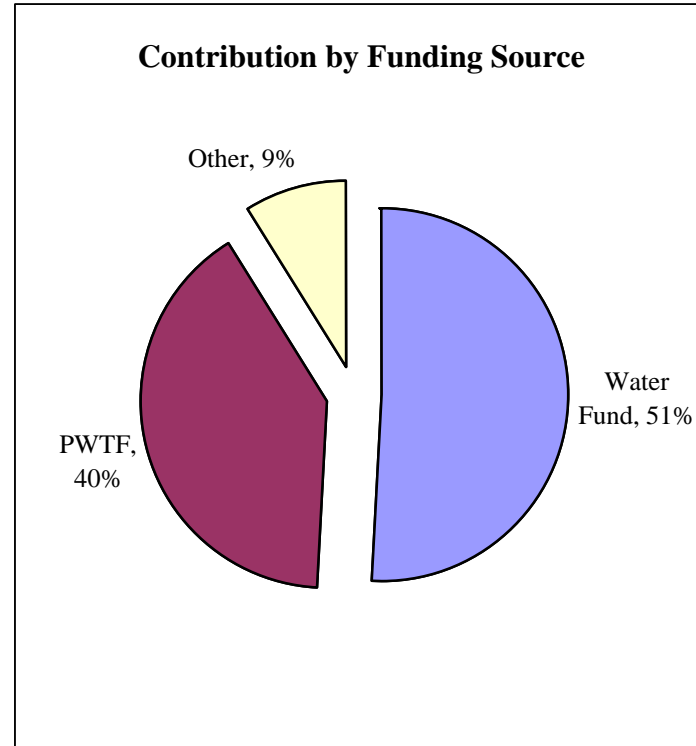
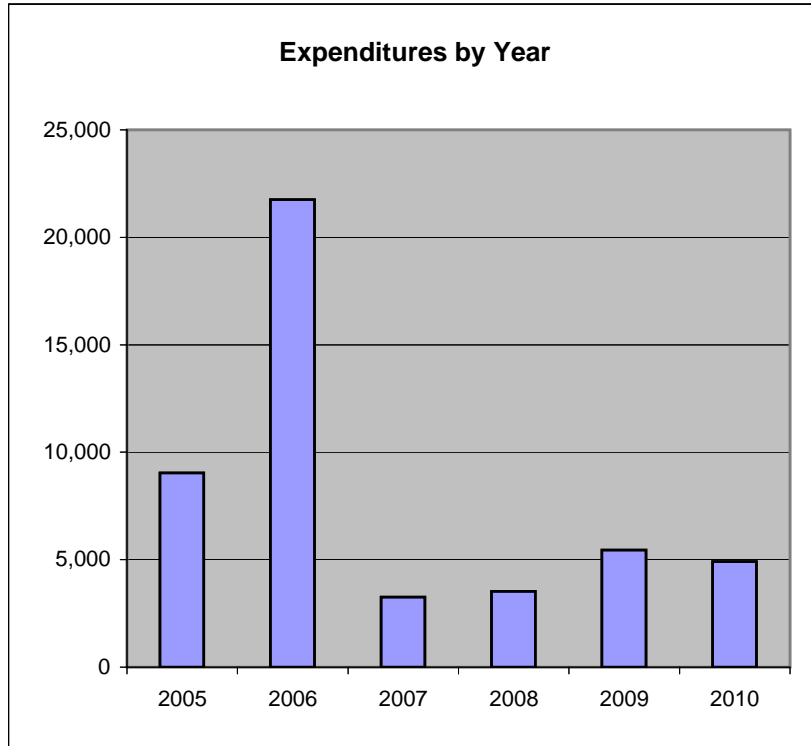
Six-Year Program Financial Summary by Category
(Cost in \$1,000s)

Water Rehabilitation and Replacement Program							
Funding	2005	2006	2007	2008	2009	2010	6-Yr Costs
Water Fund	2,268	1,563	834	772	1,215	1,133	7,785
Public Works Trust Fund Loan (PWTF)	227	3,934	2,007	1,653	4,164	3,701	15,686
Total	2,495	5,497	2,842	2,424	5,378	4,835	23,471

Water Capital Improvement Program							
Funding	2005	2006	2007	2008	2009	2010	6-Yr Costs
Water Fund	5,833	10,002	339	230	75	75	16,554
Public Works Trust Fund Loan (PWTF)	346	2,326	82	878	0	0	3,631
Other (Fairchild AFB Anticipated Contribution)	367	3,925					
Total	6,545	16,253	421	1,108	75	75	24,477

Six-Year Program Financial Summary by Category

(Cost in \$1,000s)



Six-Year Program Summary

Funding	2005	2006	2007	2008	2009	2010	6-Yr Totals
Water Fund	8,101	11,565	1,174	1,002	1,290	1,208	24,338
Public Works Trust Fund Loan (PWTF)	573	6,259	2,089	2,530	4,164	3,701	19,317
Other (Fairchild AFB Anticipated Contribution)	367	3,925					4,292
Total	9,041	21,749	3,263	3,532	5,453	4,910	47,948

Water Rehabilitation and Replacement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs
W00 R001 SCADA System										
Replace 1980's vintage computerized data acquisition and control system for monitoring and controlling pumps and reservoirs (carry-over).	PW:	◇								
	Func:	S,T	Eng/AD \$0	Wtr Fund	100					100
	Envr:	CE	ROW \$0	PWTF						
	Dsgn:	W	Cons/C \$100							
	Length:	n/a	Total \$100	Total	100					100
System:	All									
W00 R005 Northeast Transmission Mains										
Replace 24" & 30" riveted steel main with ductile iron in Freya, LaCrosse, Napa, and Wellesley from Frederick Avenue to Division Street.	PW:	2003154								
	Func:	T	Eng/AD \$308	Wtr Fund	40	669				709
	Envr:	CE	ROW \$0	PWTF	227	3791				4019
	Dsgn:	ESV	Cons/C \$4,460							
	Length:	3.5	Total \$4,768	Total	268	4460				4,728
System:	North Hill									
W00 R007 Division Transmission Main (N)										
Replace 24" riveted steel main with ductile iron from Cleveland to Euclid Avenue.	PW:	◇								
	Func:	T	Eng/AD \$18	Wtr Fund	138					138
	Envr:	CE	ROW \$0	PWTF						
	Dsgn:	W	Cons/C \$120							
	Length:	0.1	Total \$138	Total	138					138
System:	Low									
W00 R008 Euclid/Mayfair Transmission Mains										
Replace 28" riveted steel main with 30" ductile iron from Upriver Drive to Mayfair Street.	PW:	◇								
	Func:	T	Eng/AD \$342	Wtr Fund			(51)	(686)		737
	Envr:	CE	ROW \$0	PWTF			(291)	(3887)		4177
	Dsgn:	ESV	Cons/C \$4,573							
	Length:	3.6	Total \$4,915	Total			(342)	(4573)		4,915
System:	North Hill		This project is subject to funding							

Abbreviation Key:

CE – categorically exempt
 Cons/C- construction management and construction costs
 CP – Capital Programs

D-Distribution line
 Dsgn – design responsibility
 EA – environ. assessment
 Eng/AD – eng./admin. costs
 ES – environ. significant

ESV – engineering services
 Envr – environmental class
 Func – function class
 Length – length of pipe (miles)
 P – pump station

PW-public works number
 ROW – right-of-way costs
 S- source i.e. wells and tanks
 System- water pressure system

T- transmission main or booster station
 W-water department
 Funding Sources on Summary Page

Water Rehabilitation and Replacement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs
W00 R009 Mission Transmission Main, Ph. 2										
Replace 30" riveted steel main with ductile iron from Greene to Hamilton Street.	PW:	◇								
	Func:	T	Eng/AD	\$168	Wtr Fund	(25)	(336)			361
	Envr:	CE	ROW	\$0	PWTF	(142)	(1906)			2048
	Dsgn:	ESV	Cons/C	\$2,242						
	Length:	1.5	Total	\$2,409	Total	(168)	(2242)			2,409
System:	Low			This project is subject to funding						
W00 R010 Transmission Mains (S) Relining										
Replace 18", 24" & 36" riveted steel mains with ductile iron along Division from Eighth to Ninth Avenue. 14th Avenue.	PW:	◇								
	Func:	T	Eng/AD	\$10	Wtr Fund	(10)	(104)			113
	Envr:	CE	ROW	\$0	PWTF					
	Dsgn:	W	Cons/C	\$104						
	Length:	0.1	Total	\$113	Total	(10)	(104)			113
System:	Low/Inter			This project is subject to funding						
W00 R011 Glenaire Booster Station										
Replace existing booster station.	PW:	◇								
	Func:	T	Eng/AD	\$26	Wtr Fund	240				240
	Envr:	CE	ROW	\$0	PWTF					
	Dsgn:	ESV	Cons/C	\$214						
	Length:	n/a	Total	\$240	Total	240				240
System:	Glenaire									
W00 R012 Milton Booster Station										
Relocation of an existing booster station.	PW:	◇								
	Func:	T	Eng/AD	\$20	Wtr Fund		100			100
	Envr:	CE	ROW	\$0	PWTF					
	Dsgn:	ESV	Cons/C	\$80						
	Length:	n/a	Total	\$100	Total		100			100
System:	High/SIA									

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PW-public works number
 ROW – right-of-way costs
 S- source i.e. wells and tanks
 System- water pressure system

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 Funding Sources on Summary Page

Water Rehabilitation and Replacement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs
W00 R013 Kalamein Pipe Replacement										
Replace aging thin-wall Kalamein pipe with ductile iron as opportunities arise, such as in conjunction with street projects.	PW:	◇								
	Func:	T	Eng/AD \$20	Wtr Fund	180	180	180	180	180	1080
	Envr:	CE	ROW \$0	PWTF						
	Dsgn:	W	Cons/C \$1,060							
	Length:	n/a	Total \$1,080	Total	180	180	180	180	180	180
System:	various									
W00 R014 Water Operations Facility Upkeep										
Scheduled and unscheduled repair at existing Operations Facility	PW:	◇								
	Func:	n/a	Eng/AD \$0	Wtr Fund	100	100	100	100	100	600
	Envr:	CE	ROW \$0	PWTF						
	Dsgn:	?	Cons/C \$600							
	Length:	n/a	Total \$600	Total	100	100	100	100	100	100
System:	n/a									
W00 R015 Miscellaneous Rehabilitation										
Unscheduled work relating to pipes, reservoirs, and pump stations.	PW:	◇								
	Func:	T	Eng/AD \$0	Wtr Fund	185	185	185	185	185	1110
	Envr:	CE	ROW \$0	PWTF						
	Dsgn:	W	Cons/C \$1,110							
	Length:	n/a	Total \$1,110	Total	185	185	185	185	185	185
System:	Various									
W02 R002 Upriver Dam Generators										
Rebuild and overhaul existing hydroelectric generators at Upriver Dam which provide power for pumping City water (carry-over).	PW:	◇								
	Func:	S,T	Eng/AD \$0	Wtr Fund	185	185				370
	Envr:	CE	ROW \$0	PWTF						
	Dsgn:	W	Cons/C \$370							
	Length:	n/a	Total \$370	Total	185	185				
System:	All									

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Water Rehabilitation and Replacement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs
W02 R003 Belt Street Booster Station										
Upgrade Belt Street Booster Station to improve pumping capacity.	PW:	◇								
	Func:	T	Eng/AD	\$5	Wtr Fund	75				75
	Envr:	CE	ROW	\$0	PWTF					
	Dsgn:	W	Cons/C	\$70						
	Length:	n/a	Total	\$75	Total	75				75
	System:	Five Mile								
W05 R001 Hoffman Well Rehabilitation										
Stabilize existing well shaft to preserve for future use.	PW:	◇								
	Func:	T	Eng/AD	\$200	Wtr Fund	1000				1000
	Envr:	CE	ROW		PWTF					
	Dsgn:	W	Cons/C	\$800						
	Length:	0	Total	\$1,000	Total	1000				1,000
	System:	NorthHill								
W02 R005 Jackson/Division Trans. Mains										
Replace 24" riveted steel main with ductile iron from Division Street to Upriver Drive.	PW:	◇								
	Func:	T	Eng/AD	\$326	Wtr Fund			(49)	(653)	702
	Envr:	CE	ROW	\$0	PWTF			(277)	(3701)	3978
	Dsgn:	ESV	Cons/C	\$4,355						
	Length:	~4	Total	\$4,680	Total				(326)	(4355)
	System:	Low		This project is subject to funding						
W02 R006 29th Avenue Transmission Mains										
Replace steel mains with 18" ductile iron from Ray to Mt. Vernon; Stone to Perry; Arthur to Grand Blvd.	PW:	◇								
	Func:	T	Eng/AD	\$120	Wtr Fund		(18)	(240)		258
	Envr:	CE	ROW	\$0	PWTF		(102)	(1362)		1464
	Dsgn:	ESV	Cons/C	\$1,602						
	Length:	1.3	Total	\$1,722	Total			(120)	(1602)	1,722
	System:	High		This project is subject to funding						

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 Length – length of pipe (miles)
 P – pump station

PW-public works number
 ROW – right-of-way costs
 S- source i.e. wells and tanks
 System- water pressure system

T- transmission main or booster station
 W-water department
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Water Rehabilitation and Replacement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs
W04 R001 Quadrant Planning "Water"										
Long range planning in each quadrant for future; water transmission lines, distribution lines, storage, booster stations...etc, in support of infill and growth, consistent with the Comprehensive Plan.	PW: ◇									
	Func: D,S,T	Eng/AD	\$90	Wtr Fund	15	15	15	15	15	90
	Envr: n/a	ROW	\$0	PWTF						
	Dsgn: W	Cons/C	\$0							
	Length: n/a	Total	\$90	Total	15	15	15	15	15	90

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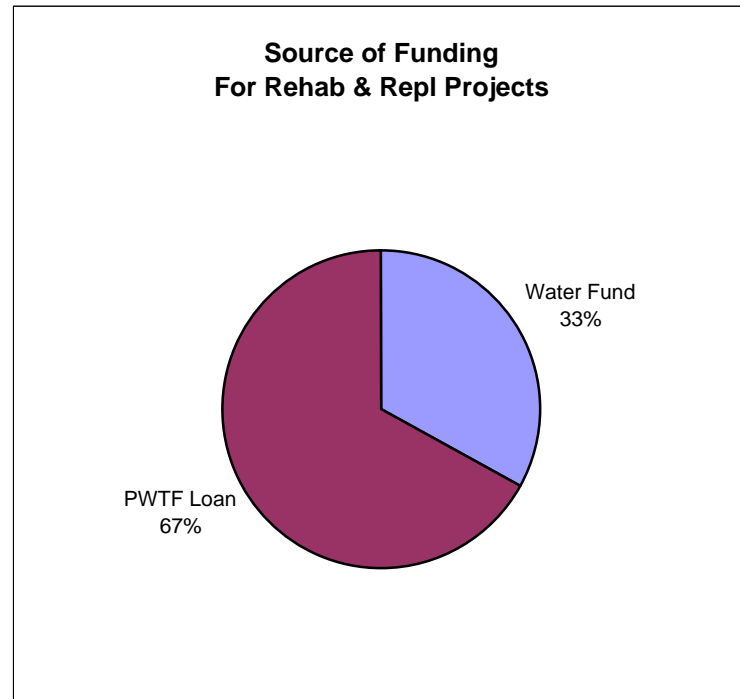
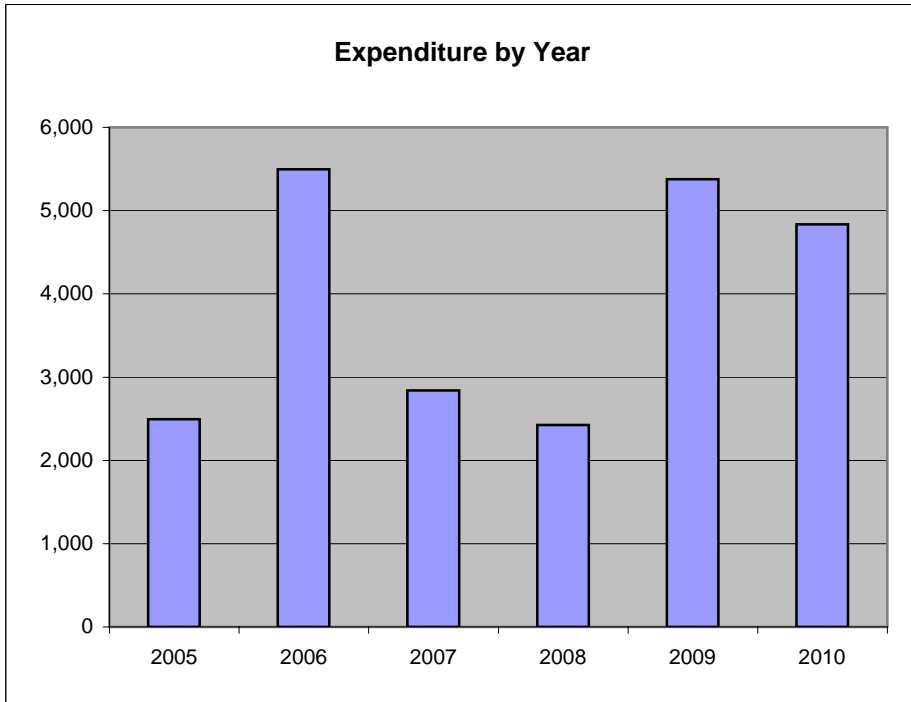
PW-public works number
 ROW – right-of-way costs
 S- source i.e. wells and tanks
 System- water pressure system
 T- transmission main or booster station
 W-water department
 Funding Sources on Summary Page

Water Rehabilitation and Replacement Program

(Cost in \$1,000s)

Summary

	2005	2006	2007	2008	2009	2010	6-Year Costs
Water Fund	2,268	1,563	834	772	1,215	1,133	7,785
PWTF Loan	227	3,934	2,007	1,653	4,164	3,701	15,686
Total	2,495	5,497	2,842	2,424	5,378	4,835	23,471



Water Capital Improvement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs
W00 C001 Infrastructure Management System										
Implement computerized system to improve maintenance management and inventorying (carry-over).	PW: <>									
	Func: All	Eng/AD \$100	Wtr Fund	300	300					600
	Envr: CE	ROW \$0	PWTF							
	Dsgn: W	Cons/C \$500								
	Length: n/a	Total \$600	Total	300	300					600
System: All										
W00 C003 Westside Transmission Main										
Construct 30" and 36" transmission main from Third & Division 2003162 & Spotted Road & Hwy 2 2001172 for system reliability (carry-over). Related projects: W00 C004 & W00 C006.	PW: 2001171									
	Func: T	Eng/AD \$346	Wtr Fund	2626	(3853)					6479
	Envr: CE	ROW \$0	PWTF							
	Dsgn: ESV	Cons/C \$8,176								
	Length: ~7.1	Total \$8,522	Total	2626	(3853)					6,479
System: Low, SIA		A portion of this project is subject to funding								
W00 C004 West Drive Booster Station										
Construct new booster station along West Drive near Rosamond. This station will allow Indian Canyon GC to connect to the City water system rather than relying on its existing well. Related project: W00 C003.	PW: 2001173									
	Func: T	Eng/AD \$111	Wtr Fund	1249						1249
	Envr: EA	ROW \$0	PWTF							
	Dsgn: ESV	Cons/C \$1,212								
	Length: n/a	Total \$1,323	Total	1249						1,249
System: SIA, Woo										
W00 C005 Melville Road Transmission Main										
Construct 18" transmission main from Thomas Mallen Road to Hayford Road for system reliability.	PW: 2000188									
	Func: T	Eng/AD \$93	Wtr Fund		1398					1398
	Envr: CE	ROW \$0	PWTF							
	Dsgn: ESV	Cons/C \$1,398								
	Length: 1.7	Total \$1,491	Total		1398					1,398
System: Plains		This project is subject to funding								

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Water Capital Improvement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs	
W05 C001 Eagle Ridge Transmission Main											
Construct 24" transmission main from Qualchan/Lincoln to Meadow Lane for system reliability.	PW:										
	Func: T	Eng/AD \$99	Wtr Fund	1156						1156	
	Envr: CE	ROW \$0	PWTF								
	Dsgn: W	Cons/C \$1,057									
	Length: 1	Total \$1,156	Total	1156						1,156	
System: Low											
W00 C007 Shawnee Booster Station											
Construct new booster station for system reliability.	PW:	◇									
	Func: T	Eng/AD \$40	Wtr Fund		40	250				290	
	Envr: CE	ROW \$0	PWTF								
	Dsgn: W	Cons/C \$250									
	Length: n/a	Total \$290	Total		40	250				290	
System: Shawnee											
W00 C008 Water Main Upsizing Fund											
Fund to pay for up-sizing new distribution mains installed by developers to the sizes needed for future transmission capacity purposes as identified in the Water Comprehensive Plan.	PW:	◇									
	Func: T	Eng/AD \$23	Wtr Fund	75	75	75	75	75	75	450	
	Envr: CE	ROW \$0	PWTF								
	Dsgn: W	Cons/C \$427									
	Length: n/a	Total \$450	Total	75	75	75	75	75	75	75	450
System: various											
W02 C002 Northwest Terrace Reservoir											
Construct 0.8-million-gallon reservoir to improve Northwest Terrace system reliability.	PW:	◇									
	Func: S	Eng/AD \$96	Wtr Fund			(14)	(155)			169	
	Envr: EA	ROW \$0	PWTF			(82)	(878)			960	
	Dsgn: ESV	Cons/C \$1,033									
	Length: n/a	Total \$1,129	Total			(96)	(1033)			1,129	
System: NW Terr			This project is subject to funding								

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Water Capital Improvement Program

(Cost in \$1,000s)

Tracking Number, Name and Description	Information	Budget	Funding	2005	2006	2007	2008	2009	2010	6-Year Costs
W03 C002 Dorset Road Tank & Booster Station										
Construct 2-million-gallon tank and booster station on Five Mile Prairie to restore pressure and allow existing tank to be off-line for maintenance.	PW: 2002136									
	Func: S	Eng/AD \$407	Wtr Fund	61	410					471
	Envr: EA	ROW \$0	PWTF	346	2326					2672
	Dsgn: ESV	Cons/C \$2,736								
	Length: n/a	Total \$3,143	Total	407	2736					3,143
System: new name										
W05 C002 Fairchild AFB Transmission Extension										
Joint project with Fairchild AFB to extend the 30" transmission line from Thomas Mallon & 57th to Rambo Rd via Geiger Blvd, Hayford, Thorpe and McFarlane Roads for system reliability. Fairchild AFB is anticipated to fund half of the project cost.	PW:									
	Func: S	Eng/AD \$734	Wtr Fund	(367)	(3925)					4292
	Envr: EA	ROW \$0	PWTF							
	Dsgn: ENG	Cons/C \$7,851	OTHER	(367)	(3925)					4292
	Length: 7.2	Total \$8,584	Total	(734)	(7851)					8,584
System: W Plains			This project is subject to funding							
W00 C006 Government Way Transmission Main										
Construct 18" transmission main from Hartson Avenue to Fort George Wright Drive for system reliability. (carry-over project, funds encumbered in 2004). Construction scheduled for 2005	PW: 2002135									
	Func: T	Eng/AD \$140	Wtr Fund							
	Envr: CE	ROW \$0	PWTF							
	Dsgn: ESV	Cons/C \$1,850	OTHER							
	Length: 1.9	Total \$1,990	Total							
System: Low										

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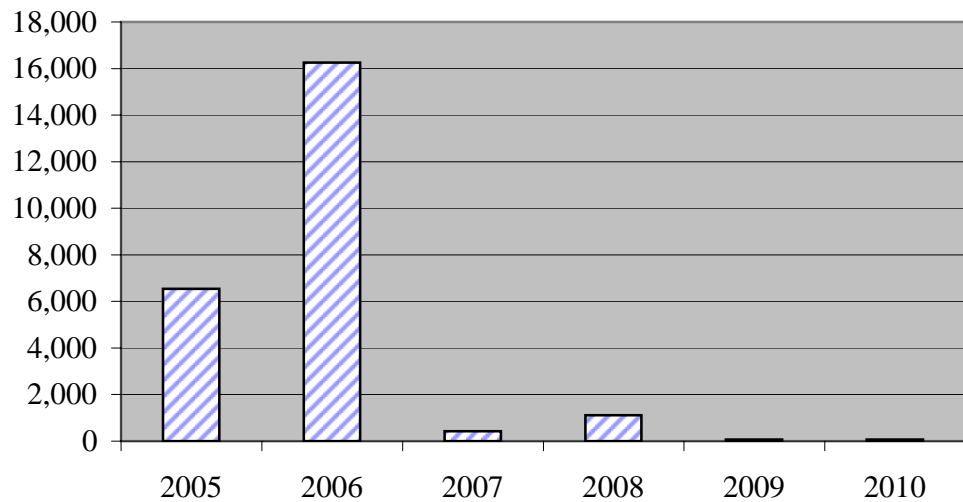
Water Capital Improvement Program

(Cost in \$1,000s)

Summary

	2005	2006	2007	2008	2009	2010	6-Year Costs
Water Fund	5,833	10,002	339	230	75	75	16,554
PWTF Loan	346	2,326	82	878	0	0	3,631
OTHER (Fairchild AFB Anticipated Contribution)	367	3,925					4,292
Total	6,545	16,253	421	1,108	75	75	24,477

Expenditure by Year



**Source of Funding
For Capital Improvement Projects**

