

**FIRCREST CITY COUNCIL
STUDY SESSION AGENDA**

**MONDAY, MAY 17, 2021
6:00 P.M.**

**COUNCIL CHAMBERS
FIRCREST CITY HALL, 115 RAMSDELL STREET**

- 1. Call to Order**
- 2. Pledge of Allegiance**
- 3. Roll Call**
- 4. Agenda Modifications**
- 5. [Proposed Amendments to Accessory Building Setbacks for Through-Lots](#)**
- 6. [Water System Plan Presentation – Financials](#)**
- 7. Pool Grand Opening Update**
- 8. Adjournment**

AGENDA ITEM: Proposed Amendments to Accessory Building Setbacks for Through-Lots

DATE: May 17, 2021

FROM: Angelie Stahlnecker, Planning and Building Administrator

PROPOSAL: The proposal would amend the exceptions section of FMC 22.58.003(b) Accessory Buildings Exceptions by allowing a reduction in through-lot rear setbacks with an administrative use permit.

BACKGROUND: Staff received a request from the property owners at 1046 Buena Vista for the City to consider amending the setback restrictions for accessory buildings in the rear yard of through-lots. Staff presented the request to the Planning Commission who agreed to place it on their work plan to study.

The current code (*highlighted on Recommended Amendments page*) mandates a 20- or 25-foot rear setback for through-lots versus the standard five-foot rear setback. Structures 200 sf and under are currently allowed to be within five feet of the rear property line.

These properties are not allowed to fully use their rear yards as other properties in Fircrest. Historically, this setback was to create a front yard appearance for properties that rear-face onto a street, but as the current code allows 7-foot fences, this argument is less applicable. Since the restriction is due to a code standard and not a uniqueness to the property, they would not qualify for a variance.

Approximately 142 lots are affected by the proposed amendment (*see Through-Lot Analysis Map*). Of that, five are “double lots” (and will likely be subdivided prior to development) and 35 are in planned neighborhoods such as The Commons or Fircrest Greens, which have additional covenant requirements. Of the 102 left, only six properties have a rear yard adjacent to a front yard. The remainder primarily function as rear yards for the entire block and often have solid fences along the rear property line (*see Street View Photos*). The majority of rear yards are along Alameda Avenue, Claremont Street, and 67th Avenue.

RECOMMENDATION: At the May 4, 2021 meeting, the Planning Commission recommended adding a rear setback reduction to the exceptions section. This would provide an option to property owners of through-lots to reduce the setback, but also requires higher design standards and outreach to the adjacent neighbors so any potential impacts can be addressed prior to approval.

The exception would allow a five-foot setback unless the property was adjacent to a front yard. In that situation, the setback could be reduced to 15 feet which is the same as a corner lot. There would be the potential for a greater visual impact as the code could allow up to 800 sf with a 12-foot high wall and a 21-foot ridge top.

Attachments: [Recommended Amendments](#)
[Through-Lot Analysis Map](#)

Recommended Amendments

22.58.003 Accessory buildings.

(a) One or more detached accessory buildings, including, but not limited to, garages, carports, garden sheds, greenhouses, and other similar structures, may be constructed on a parcel containing a principal residential structure, subject to the following standards:

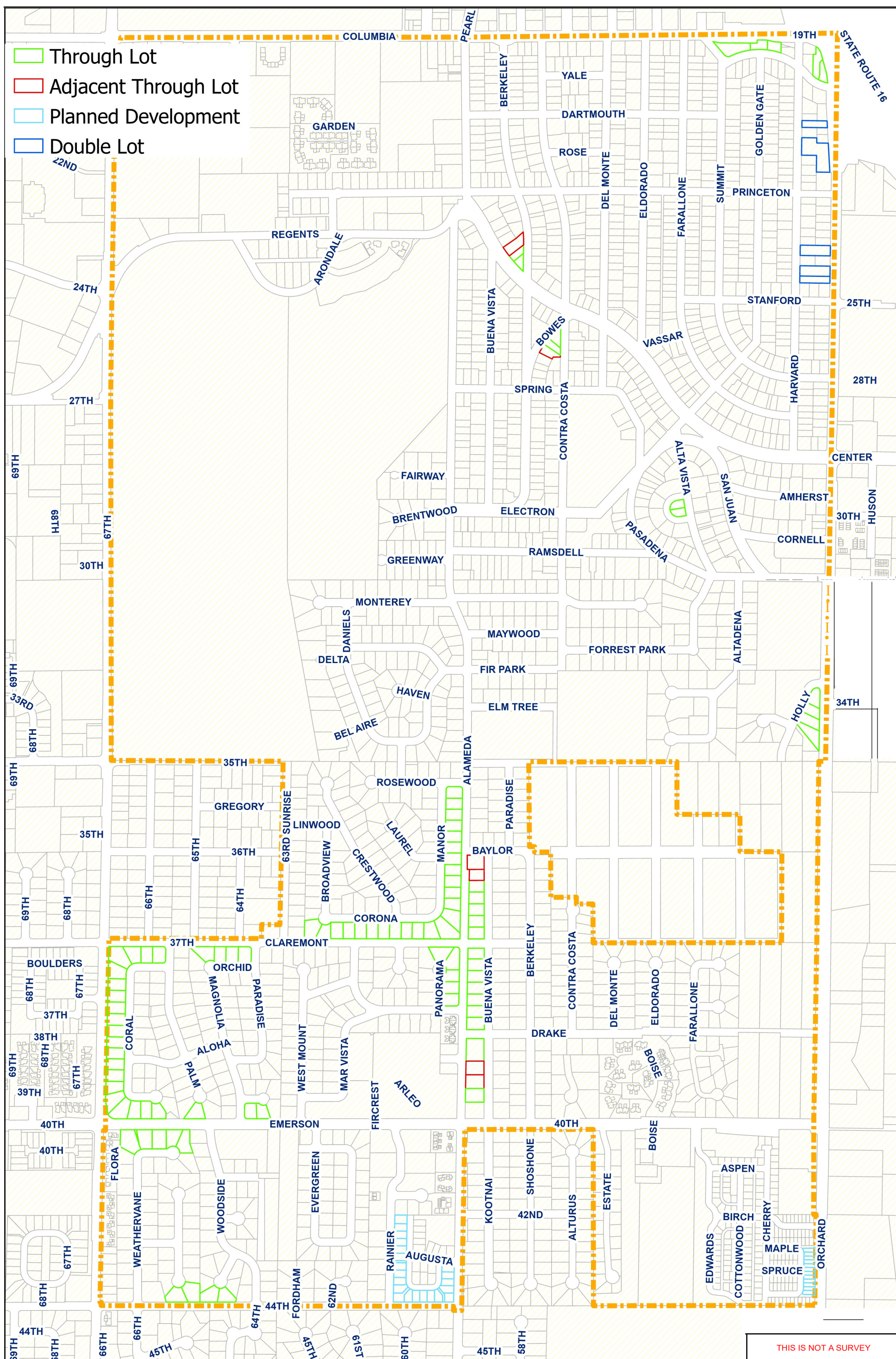
Maximum building footprint area	600 sf.
Maximum lot coverage	10% of the lot area or 1,000 sf, whichever is less, for all accessory buildings combined on a single lot.
Maximum building height	18 feet at top of the ridge and 10 feet at top of the wall
Minimum front yard setback	Same as specified for a principal residential structure.
Minimum interior side yard setback	5 feet.
Minimum side street side yard setback on a corner lot	Same as specified for principal residential structure if building permit required, otherwise 5 feet.
Minimum rear yard setback	5 feet.
Minimum setback from “rear” lot line of a “through lot”	Same as specified for required front yard for principal residential structure if building permit required, otherwise 5 feet.
Minimum setback from an alley	5 feet. Vehicle access points from garages, carports, or fenced parking areas shall be set back from the alley property line to provide a straight-line separation of at least 22 feet from the access point to the opposite property line of the alley. No portion of the garage or the door in motion may cross the property line abutting the alley.
Minimum separation from a principal residential structure	5 feet. Note: the building code may require additional separation based on construction design.
<i>Calculations resulting in a fraction shall be rounded to the nearest whole number with .50 being rounded up.</i>	

(b) Exceptions ~~to Building Footprint Area, Height and Lot Coverage Limits~~. The director may grant an administrative use permit for a building that exceeds the building footprint, height, or lot coverage standards, or reduces the rear setback of a through lot listed in subsection (a) of this section if it finds that:

- (1) The building and its use will not significantly impact adjoining properties;
- (2) The architecture will incorporate exterior finish materials and design elements consistent with, or superior to, that of the principal residential structure on the property;
- (3) The building will fit the character of the neighborhood;
- (4) The architecture complies with the city's design guidelines;
- (5) The building footprint will not exceed 800 square feet, and the building height will not exceed 21 feet at the top of the ridge or 12 feet at the top of the wall; and
- (6) The combined building footprints of existing and proposed accessory buildings on the same lot will not exceed 1,000 square feet.

(7) The building will maintain a minimum setback of 5 feet and not encroach into a clear vision triangle. If the building is in a rear yard of a through lot that is adjacent to a front yard, it shall maintain a minimum of a 15-foot setback.

(c) Determination of Attached Versus Detached Status for Garages. A garage that is connected to a principal residential structure by an architecturally integrated, covered breezeway is classified as an attached garage if the separation between the parallel walls of the garage and principal structure does not exceed eight feet. For purposes of determining allowable setbacks, height, and lot coverage, an attached garage is treated as if it were part of the principal structure. If the separation between the parallel walls of a garage and principal structure exceeds eight feet, the garage is classified as a detached building subject to the accessory building standards listed in this section.



Through-lot Analysis

AGENDA ITEM: Water System Plan Update Financials

FROM: Scott Pingel, City Manager

BACKGROUND: The last Water System Plan update was done in 2014. At that time, plans had to be updated every 6 years. That timeframe has now changed to 10 years. So this new plan will be a 10-year plan. The 2014 plan included about \$1 Million in planned improvements and provided plan options for a \$2 per month increase each year and a \$3 per month increase per year. Much of the planned improvements changed with some of the mainline failures that occurred since 2014.

The draft updated plan calls for about \$2.8 Million in improvements over a 10-year period, with a planning level annual rate increase of 2% per year in order to meet that cost demand. A major reason these improvements can be done planning for a 2% per year increase is that the numbers assume 2 major things that have not yet been formalized by the City or the Council. The first is the \$171,000 we are slated to receive for the water meter upgrades in the 2021 State capital budget. The other is that I requested they include \$500,000 of Rescue Plan funds to be used towards water capital projects. Both of those funding sources are assumed in the numbers in the current version of the financial chapter of the Water System Plan.

Attachments: [Water System Plan Financial Presentation](#)
[Water System Plan Draft Financial Program](#)



City of Fircrest Water System Plan Financial Update

Presented by: Katy Isaksen
Katy Isaksen & Associates - Utility Financial Planning
Tabatha Dye, Murraysmith
Council Work Study Session
May 17, 2021



1

Water System Financial Plan

- Financial Progress since 2016 Rate Study
- 3-Year History, Current Rates & Charges
- 10-Year CIP & Funding Sources
- 10-Year Financial & Rate Outlook
 - Can afford recommended 10-Year CIP with 2% annual rate increases
- Water Fund & Capital Fund Reserves
- Financial Conclusion



2

Financial Planning: Long-term View

BALANCE BETWEEN CUSTOMERS & UTILITY

- Avoid drastic rate increases
- Plan for future replacement
- Predictable:
 - bills for customers
 - revenue & expenditures for utility
 - charges for new connections



3

Commitment to Financial Viability

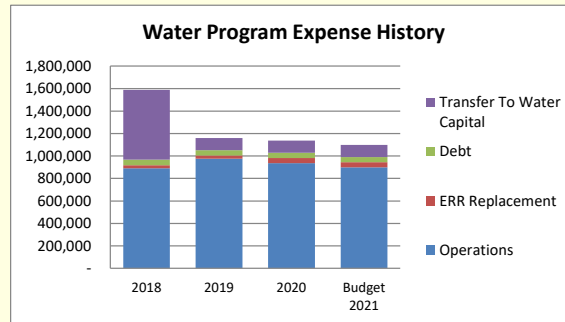
Progress since 2016 rate study

- Established a capital fund to save for planned improvements & system replacement
- Adjusted rate structure
 - All customers pay a Ready to Serve Charge + water
 - Water charged in 3 inclining tiers – use more/pay more
 - Continued senior/low-income discount of 25%
 - Adopted multi-year rate increases
- Reduced distribution system leakage



4

Water Financial History



Water Fund 425	2018	2019	2020	Budget 2021
Total Water Revenue	1,119,066	1,144,662	1,158,856	1,154,400
Total Water Expenditures	1,588,060	1,160,135	1,137,320	1,098,346
Annual Increase/(Use) of Reserves	(468,994)	(15,473)	21,537	56,054

- Revenue minus expenses = annual change in ending fund balance



5

Current Water Rates & GFC

Table 10-5 Current Water Rates		
Water Rates, Bi-Monthly	Base + Water	2021
Ready to Serve Charge		
Residential (Single & Multiple)	per dwelling unit	\$37.00
Single-family with ADU	1 dwelling unit	\$37.00
Commercial/Industrial Meter	per unit	\$37.00
Irrigation Meter		no base
Commodity Charge, 2-Month Usage		
Residential (Single & Multiple)		
Tier 1 (0 - 1,000 cubic feet)	per cubic foot	\$0.0109
Tier 2 (1,001 - 4,000 cubic feet)	per cubic foot	\$0.0163
Tier 3 (4,001+ cubic feet)	per cubic foot	\$0.0272
Commercial/Industrial		
Tier 1 (0 - 2,000 cubic feet)	per cubic foot	\$0.0129
Tier 2 (2,001 - 4,200 cubic feet)	per cubic foot	\$0.0183
Tier 3 (4,201+ cubic feet)	per cubic foot	\$0.0292
Irrigation (Separate Meter)		
Residential (at Tier 2)	per cubic foot	\$0.0163
Commercial (at Tier 2)	per cubic foot	\$0.0183

Table 10-6 Current Water General Facilities Charge	
Water General Facilities Charge	2021
Water Meter Size	
3/4"	\$4,400
1"	\$11,000
1-1/2"	\$22,000
2"	\$35,200
3"	\$70,400
4"	\$110,000

- Water bills are for 2-months – base + water
- Senior/Low Income Discount of 25%
- New connections pay GFC for right to connect



6

Affordability & Comparison

Table 10-7 Residential Water Rate Comparison 2021		
Residential Water Service	2-Month Bill @ 1,700 cf	Per Month @ 850 cf
University Place - summer	\$113	\$55
University Place - winter	\$105	\$53
Steilacoom	\$101	\$51
Tacoma - summer	\$94	\$46
Tacoma - winter	\$87	\$44
Fircrest	\$59	\$46
Lakewood	\$52	\$39
1 cubic foot equals 7.48 gallons.		

- DOH defines water “affordable” at 2% of median household income
- For Fircrest, DOH considers water “affordable” up to \$135 per month



7

Recommended 10-Year Water CIP

\$2.8 Million, Pay-As-You-Go

Table 10-8 Water 10-Year Capital Improvement Program (CIP), 2021-2030											
		The 2020 Cost Estimates shown by project have been Escalated to the Scheduled Year at 4% per year in the bottom line									
CIP No.	Project	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
R1	8" Main Replacement Old & Undersized Mains			200,000	200,000	160,000	160,000	160,000	0	160,000	160,000
L1	12" Main on Summit Ave							122,000	286,000		
F1	Golf Course 0.6 MG Tank recoating			60,000	90,000						
F2	Water Meter Upgrades & Software	250,000	200,000								
CW1	Comprehensive Plan										70,000
Total Ten-Year CIP - W (\$2020)		250,000	200,000	260,000	290,000	160,000	160,000	282,000	286,000	160,000	230,000
Total Ten-Year CIP W (Escalated)		250,000	216,300	292,500	339,300	194,700	202,500	371,100	391,400	227,700	340,500
Total 10-Year CIP (Escalated)		2,826,000									
Average Annual 2022-2030 (Escalated)		287,000									

- WSP plans for 20-years, financial chapter addresses first 10-years
- 10-year total \$2.8 million after escalating to scheduled year at 4% per year
- Main Replacement Program for old & undersized mains – budget annual amount, staff to manage for highest priorities



8

10-Year CIP Funding Sources

No Borrowing Required

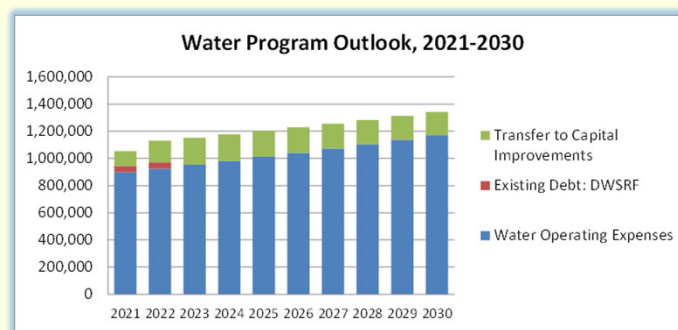
Table 10-9 Water 10-Year CIP Funding Sources, 2021-2030										
CIP Funding Sources	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
New ERU's	16.2	1	1	1	1	1	1	1	1	1
W GFC Connection Charges	64,800	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Grants - Legislative Appropriation	171,000									
Grants - American Rescue Plan		200,000	200,000	100,000						
Funded by Rates	14,200	12,300	88,500	235,300	190,700	198,500	367,100	387,400	223,700	336,500
Total 10-Year CIP Funding Sources	\$250,000	\$216,300	\$292,500	\$339,300	\$194,700	\$202,500	\$371,100	\$391,400	\$227,700	\$340,500

- GFC from new connections – conservative 1 ERU per year
- Legislative appropriation \$171,000 for water meter replacement
- American Rescue Plan - \$500,000 for meter and main replacement
- Remainder funded by rates
- If grants do not come in as planned, will need to reschedule CIP, seek additional grants or have additional rate increases



9

10-Year Water Outlook



- General Cost Escalation = 3% per year
- Construction Cost Escalation = 4% per year
- Growth = 1 new ERU per year
- Existing DWSRF Loan paid off in 2022



10

10-Year Financial Outlook

Table 10-12 Water 10-Year Financial Outlook										
WATER UTILITY 10-YEAR OUTLOOK	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operating Revenue										
Water Sales	1,050,000	1,050,200	1,050,400	1,050,600	1,050,800	1,051,000	1,051,200	1,051,400	1,051,600	1,051,800
Service Connections	5,000	2,065	2,065	2,065	2,065	2,065	2,065	2,065	2,065	2,065
Rent Property/Tanks	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000
Miscellaneous Revenue	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400
Subtotal Water Revenues	1,154,400	1,151,665	1,151,865	1,152,065	1,152,265	1,152,465	1,152,665	1,152,865	1,153,065	1,153,265
Expenses										
Water Operating Expenses	898,685	925,600	953,400	982,000	1,011,500	1,041,800	1,073,100	1,105,300	1,138,500	1,172,700
ERR Replacement	45,072	46,400	47,800	49,200	50,700	52,200	53,800	55,400	57,100	58,800
Existing Debt: DWSRF	46,429	45,323	-	-	-	-	-	-	-	-
Transfer to Capital Improvements	108,160	160,000	200,123	196,127	192,011	187,771	183,404	178,906	174,274	169,502
Subtotal Expenditures	1,098,346	1,177,323	1,201,323	1,227,327	1,254,211	1,281,771	1,310,304	1,339,606	1,369,874	1,401,002
Increase(Use) of EFB	56,054	(25,658)	(49,458)	(75,262)	(101,946)	(129,306)	(157,639)	(186,741)	(216,809)	(247,737)
Estimated Percentage Change to Balance	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Estimated Monthly Residential Rate	\$18.50	\$18.95	\$19.37	\$19.83	\$20.29	\$20.78	\$21.27	\$21.79	\$22.31	\$22.86
Estimated 2-Month Residential Base	\$37.00	\$37.90	\$38.74	\$39.65	\$40.59	\$41.55	\$42.55	\$43.57	\$44.63	\$45.71
Typical SF 2-Mo Bill @ 1,700 cfbill	\$59.31	\$60.76	\$62.10	\$63.56	\$65.06	\$66.61	\$68.20	\$69.84	\$71.54	\$73.28

- Annual rate increase of 2%, with planned grants, continues to fund operations & maintenance, existing debt, and recommended 10-year CIP
- 2-Month bill for typical residence = \$59 in 2021, estimated \$73 in 2030



11

Water Utility Reserves

- Water Fund 425
 - Cash flow reserve = 3 months operations, \$225,000 in 2021, grows to \$293,000 in 2030
- Water Capital Fund 426
 - Estimated ending balance = \$431,000 in 2021, reduces to \$37,000 in 2030
- Emergency Reserve
 - \$110,000 in 2030 = \$73,000 in 425 + \$37,000 in 426



12

Water Financial Conclusion

- Recommended 10-year CIP can be completed with a 2% annual rate increase
 - includes legislative appropriation and American Rescue Plan grants toward water meter and main replacement
 - Pay-as-you-go, no borrowing is required
- Water GFC continues for new connections
- Financial viability – water system will continue to afford safe, reliable drinking water for the future
- Manage financial plan through annual budget process



13

Sustainable Utilities

**It is up to us to protect the ratepayers
investment for future generations**



14

Next Steps

- **WSP Update Process:**
 - Fold financial chapter into WSP
 - Submit draft WSP to DOH and neighbors
 - Receive comments
 - Hold public hearing
 - Adopt WSP
- **Rate Update Process:**
 - Develop draft ordinance
 - Hold public hearing
 - Consider adopting a multi-year rate increase



15

Questions and Discussion



16

Chapter 1 Financial Program

1.1 Introduction

This chapter summarizes the City of Fircrest's water utility financial history, identifies funding sources and a plan for funding the recommended capital improvements and provides a ten-year financial plan, with the impact on rates. This chapter was prepared by Katy Isaksen & Associates.

1.2 Financial Viability

Financial viability is the ability for the water system to meet its financial needs to operate, meet debt obligations, repair/replace/improve the system components, and maintain reserves as necessary. Financial viability is very important to make sure the water utility remains in a position to provide safe and reliable drinking water for years into the future. The City has shown its commitment to financial viability with a recent rate study, establishing a capital fund to save for planned improvements, making adjustments to the rate structure to charge all customers for water used in an inclining 3-tier rate system (each tier gets more expensive as customers use more water), adopting multi-year rate increases, and reducing the distribution system leakage. Following submittal of this draft WSP, the City will be evaluating rates and charges to be sure they are in line with the planned operations and improvements.

1.3 Financial History

The City owns and operates a water system along with sewer and stormwater systems. The self-supporting water utility is accounted for separately in water fund 425 that includes water operating expenses and transfers to the water capital fund to carry out the capital improvement projects. The ending fund balance remains to provide for future use of the water utility. Table 10--1 provides a three-year financial history of the water operating fund based on the City's financial reports.

Table 10-1 Three Year Financial History			
WATER OPERATING FUND 425	2018	2019	2020
Operating Revenue			
Sale Of Water	1,019,251	1,030,557	1,046,111
Service Connections	360	11,665	16,111
Setup Fees - Water	1,658	1,385	1,287
Penalties - Water	10,351	11,421	3,470
Backflow	270	450	225
Investment Interest - Water	3,994	4,927	1,917
Rent City Property/High Tank	51,103	53,088	54,591
Rent City Prop/Golf Crse Tank	30,460	29,996	34,768
Court Ordered Judgments - Water	340	-	-
Other Misc Revenue - Water	1,279	1,174	375
Subtotal W Revenue	1,119,066	1,144,662	1,158,856
Expenses			
Sal & Wages - Water Admin	159,412	159,681	168,322
Overtime - Water - Admin	321	170	-
Casual Labor - Water Admin	-	130	-

Sal & Wages - Water Maint	112,740	137,937	112,595
Overtime - Water Maint	1,686	2,626	2,933
Casual Labor - Wtr Maint	-	520	1,150
Sal & Wages - Water Gen Op	19,781	21,767	28,925
Overtime - Water Gen Op	539	430	452
Personnel Benefits - Wtr Admin	75,236	71,732	71,487
Contract Benefits - Wtr Admin	391	843	568
Personnel Benefits-Wtr Maint	59,306	70,085	56,094
Personnel Benefits - Gen Op	8,685	9,203	13,352
Office Supplies - Water	215	139	321
Small Tools & Equip - Water	68	107	198
Oper Supplies - Water Maint	11,091	18,028	17,684
Fluoride	8,049	2,927	3,035
Oper Supplies - Water	1,601	1,781	330
Oper Supplies - Chlorine	4,246	4,309	4,909
Small Tools & Equip - Water Gen	2113.41	3331.97	594
Prof Svcs - Water	2,100	3,250	36,194
Advertising - Water	28	28	107
Communication - Water	2,522	2,737	2,741
Postage - Water	1,354	1,664	1,601
Travel - Water	75	340	520
Land Rental/Water Tank	15,150	15,377	15,608
Oper Rentals - Copier - Water	658	644	543
Interfd Land Rental	18,220	18,875	19,200
Utility Services/Building - Water	2,993	3,124	2,787
Rep & Maint - Water Admin	53	3,010	1,611
Interfd ERR Replace - Water	19,340	18,860	27,027
Miscellaneous - Water	347	395	546
State Operating Permit	3,578	3,578	3,578
Reg & Tuition - Water	699	18	-
Dues,Member,Sub - Water	1,019	993	1,374
Printing & Binding - Water	1,478	1,364	1,533
Mailing Service - Water	2,287	3,319	2,811
Rep & Maint - Water Maint	11,485	13,256	19,776
Interfd ERR R & M - Water	8,199	7,896	18,961
Water Testing	4,769	8,698	5,536
Utility Services/Pumping	70,799	68,087	67,560
Dumping Fees - Water	386	-	526
Public Utility Services/Meter	44	161	88
Excise Tax - Water	49,454	49,913	20,644
City Utility Tax	78,506	80,074	82,209
Interfd Service Charges	155,973	190,221	165,596
Overtime - Water Conservation	191	-	-
Personnel Benefits-Wtr Conserv	130	-	-

Office/Operating Supplies - Wtr Conserv	-	1,706	-
Principal Loan Payment - Water	44,218	44,218	44,218
Interest - Water	5,527	4,422	3,316
Transfer Out To Water Capital Fund	621,000	108,160	108,160
Subtotal W Expenses	1,588,060	1,160,135	1,137,320
Annual Increase/(Use) of Reserves	(468,994)	(15,473)	21,537

At the bottom of Table 10-1, the Annual Increase/ (Use) of Reserves line provides a quick view of whether the water revenue was sufficient to meet the expenditures in each year. If revenue is greater than expenses, the reserve levels are increased. If revenues are less than expenditures, the reserves are used to balance the budget for the year. This may work for a couple of years as long as capital improvement funding is higher than typical but is not sustainable in the long run.

In 2018, the City established the water capital fund 426 to set aside funds for capital improvements instead of having one combined ending fund balance for both operations and improvements. A transfer from the water operating fund was made for the initial funding, and annual transfers continue to fund system replacement. A multi-year rate schedule was adopted by the City Council for 2017-2019.

Table 10-2 summarizes the annual operating expenses for the water utility that are supported by water rates, including operations, equipment repair and replacement, debt repayment, and the transfer to water capital fund 426 for water system improvements.

Table 10-2 Three Year Expense Summary			
WATER OPERATING FUND 425	2018	2019	2020
Operations	889,777	976,579	935,638
ERR Replacement	27,539	26,756	45,988
Debt	49,745	48,640	47,534
Transfer To Water Capital	621,000	108,160	108,160
Subtotal W Expenses	1,588,060	1,160,135	1,137,320

Monthly water service charges are the primary source of ongoing revenue for the water utility, including the sale of water. Other revenue includes service connections which reimburse for staff and equipment, setup fees for new water accounts, penalties, backflow charges, investment interest, rent for use of the water tank properties, and other miscellaneous revenue. The general facilities charges collected from new or upsized water connections are deposited directly into capital fund 426.

1.3.1 Water Utility Funds

The water operating fund balance at the beginning of 2020 was \$311,000 as shown in Table 10-3. The model estimates \$367,000 will be available, primarily from rates, after meeting operating expenses and debt payments at the end of 2020. The City's enterprise funds goal is to maintain reserves equal to at least three months of adopted operating expenditures. After subtracting a three-month cash flow reserve of \$225,000, the remaining \$142,000 is available for future system investment or water fund use.

Table 10-3 Water Fund Balance – 425		
Water Operating Fund 425	2021	Comments
Beginning Fund Balance	\$311,000	2020 actual year end
Annual Increase/(Use) of EFB	56,000	
Undesignated Ending Fund Balance	367,000	
Target Minimum Balance		
Cash Flow Reserve	225,000	90 days operating expense
Available Balance	\$142,000	for future investment

The water capital fund balance at the beginning of 2020 was \$337,000 as shown in Table 10-4. Anticipated 2020 income includes capital contributions/general facilities charges of \$65,000, a grant from WA State Legislature for \$171,000 for water meter replacement, and an operating transfer from rates for capital improvements of \$108,000. The 2020 planned capital expenditures are \$250,000. The estimated ending balance of \$431,000 is available to meet emergencies and future water system improvements.

Table 10-4 Water Capital Fund Balance – 426		
Water Capital Fund 426	2021	Comments
Beginning Balance	337,000	2019 actual year end
Capital Contributions/GFC	65,000	one time
Grants (Amer. Rescue, WA St. Leg.)	171,000	
Transfer - Rate-Funded CIP	108,000	
Subtotal W Capital Sources	681,000	
CIP Improvement Projects (escalated)	250,000	
Estimated Ending Fund Balance	431,000	Available for Emergencies

1.4 Outstanding Debt

The water utility has one outstanding debt issue in the form of a Drinking Water State Revolving Fund (DWSRF) low-interest loan from Washington State Department of Health.

The 2001 DWSRF loan was for \$840,141 in water supply improvements and is scheduled to be paid off in October 2022. The loan has an interest rate of 2.5%. The remaining payments are \$46,429 in October 2021 and \$45,323 in October 2022, including principal and interest.

Debt reserves are held as appropriate and necessary to meet covenants on outstanding debt. The current loan does not require a separate reserve fund, and the City budgets for annual principal and interest payments to be sure it can meet its obligations.

The State of Washington designed the DWSRF program to be junior in lien to outstanding parity debt, typically revenue bonds. The City does not currently have any revenue bonds outstanding that pledge the revenue of the combined waterworks utility.

1.5 Current Rates and Charges

The City Council has authority to set rates and charges for the water utility to ensure it remains self-sufficient and meets all covenants on outstanding debt. The rates are reviewed annually during the budget process. Current water rates and fees are included in the COF Municipal Code, Chapter 21.04.

1.5.1 Monthly Water Rates

The City reads meters and bills customers every 2 months (bimonthly) for water service. All customers pay a ready to serve charge (base rate) per dwelling unit or water meter, plus a consumption charge based on metered water use in three inclining tiers (water rate). The water rate is charged per cubic foot and the customers that use more, pay more. Residential and commercial customer classes have different tier definitions and rates, with commercial being higher to meet additional fire flow requirements. Water from separate irrigation meters is charged at the second tier. This rate structure gives customers control over their bill, promotes conservation, and provides incentive to correct leaks as quickly as possible.

The current residential base rate is \$37.00 for 2 months. Residential water tiers range from \$0.0109 for up to 1,000 cubic feet to \$0.0272 for greater than 4,000 cubic feet, on a per cubic foot basis. The typical single family residence uses 843 cubic feet per month (see Table 4-1) or 1,700 cubic feet with rounding per 2-month bill. This typical residence pays \$59.31 per 2-month bill. Current water rates are shown in Table 10-5.

Table 10-5 Current Water Rates		
Water Rates, Bi-Monthly	Base + Water	2021
Ready to Serve Charge		
Residential (Single & Multiple)	per dwelling unit	\$37.00
Single-family with ADU	1 dwelling unit	\$37.00
Commercial/Industrial Meter	per unit	\$37.00
Irrigation Meter		no base
Commodity Charge, 2-Month Usage		
Residential (Single & Multiple)		
Tier 1 (0 - 1,000 cubic feet)	per cubic foot	\$0.0109
Tier 2 (1,001 - 4,000 cubic feet)	per cubic foot	\$0.0163
Tier 3 (4,001+ cubic feet)	per cubic foot	\$0.0272
Commercial/Industrial		
Tier 1 (0 - 2,000 cubic feet)	per cubic foot	\$0.0129
Tier 2 (2,001 - 4,200 cubic feet)	per cubic foot	\$0.0183
Tier 3 (4,201+ cubic feet)	per cubic foot	\$0.0292
Irrigation (Separate Meter)		
Residential (at Tier 2)	per cubic foot	\$0.0163
Commercial (at Tier 2)	per cubic foot	\$0.0183

1.5.2 Water General Facilities Charges

Water general facilities charges (also referred to as system development fees, capital facilities charges, connection charges or participation fees) are collected from each new or upgraded connection to the water system. These charges are for the right to connect into and make use

of the system. All connections must obtain a water permit, pay water meter and service connection fees for installation and inspection as appropriate and described in COF Municipal Code, Chapter 21.01 and 21.04. The 2021 Water General Facilities Charge for a new single family residence with a ¾" meter inside the city limits is currently \$4,400. Table 10-6 summarizes the current water general facilities charge.

Table 10-6 Current Water General Facilities Charge	
Water General Facilities Charge	2021
Water Meter Size	
¾"	\$4,400
1"	\$11,000
1-1/2"	\$22,000
2"	\$35,200
3"	\$70,400
4"	\$110,000

1.6 Capital Improvement Funding

1.6.1 Capital Funding Sources

The City has preferred to avoid taking on new utility debt when possible and has relied on low interest loan programs from Washington State when necessary, including Drinking Water State Revolving Fund (DWSRF) and Public Works Trust Fund (PWTF). In addition, local sources of capital funding include connection fees, developer extensions with latecomer agreements, monthly rates, and capital reserves. These are the primary sources of capital funding available for water. The following discussion outlines the City's major water funding source opportunities.

The Washington State legislature just adopted the 2021-23 Capital Budget with an appropriation for the City of Fircrest for \$171,000 grant for water meter replacement with the Infrastructure Projects to be funded from the federal coronavirus state fiscal recovery fund. The City is also seeking a grant from the federal American Rescue Plan to step up replacement of old and undersized water mains.

The Washington State Department of Health (DOH) typically has four DWSRF funding opportunities each year: grants for preconstruction or consolidation in April and May; loans for preconstruction are open year-round; construction loans in October and November; and emergency loans open year-round. The opportunities require funding from the State capital budget and federal capital budget. Specific information is available on the DOH website (www.doh.wa.gov, DWSRF page). A 1-percent loan fee is included in a successful construction application and the standard interest rate is currently 1.75 percent for a 20-year loan term. Disadvantaged systems and consolidation projects qualify for 1.25 percent interest rate, up to 50 percent principal forgiveness (subsidy), and up to 30-year loan term. The interest rates and terms can be adjusted for each new application window. This is partially a federally funded program under the U.S. Environmental Protection Agency (EPA) (partially State funded) and there are a number of federal requirements that must be met. EPA has a new focus on asset management. Bonus points are available for attending asset management training and for submitting a completed asset inventory. The DWSRF program scores all project applications based on the health risk being addressed. The goal is to provide loans for capital improvements that increase public health protection and compliance with drinking water regulations and protect the health of people throughout the State by ensuring safe and reliable drinking water.

The Public Works Board, operating with the Washington State Department of Commerce, offers the PWTF program. The program is focused on completing necessary infrastructure projects to recirculate the funds to the next round of projects. This requires that projects be ready to proceed and thus the loans must be drawn within 36 months of approval. The program has been on hold or had limited funds for several years with the State education budget crisis. The program relies on a State capital budget appropriation. The program will accept applications when funds are available. The legislative session in 2021 will be the next opportunity for funding into the Public Works Assistance Account. If successful, the first round submittal deadline may be in July 2021 for construction or preconstruction loans, with interest rates potentially around 1.5% for standard 6-20 year loans. Emergency loans are offered year-round as long as funds are available. More detailed information is available on the Public Works Board website (www.pwb.wa.gov).

Other funding sources include the Washington State Department of Commerce energy efficiency grants and the Community Economic Revitalization Board (CERB) program geared to infrastructure improvements for job creation.

On the federal assistance side, there is the US Department of Agriculture-Rural Development Program (USDA-RD) that provides low-interest loans with potential grant subsidy for water systems in communities up to 25,000. There is also a federal Economic Development Administration (USEDA) with a Public Works grant and loan program available. Community Development Block Grant (CDBG) is another federal program, managed at the State Department of Commerce, with limited grants for improvements that benefit low to moderate income customers.

To keep current with infrastructure funding programs, a database is provided by the Infrastructure Assistance Coordinating Council (IACC). The City can use this database to monitor available funding and contact information. The database can be accessed on the web directly on the IACC website (www.infracfunding.wa.gov).

1.6.2 Local Funding Sources

Monthly water rates can provide an on-going level of funds for planned capital repairs, system replacement, and improvements. These funds are appropriate for repair and replacement of the water system to serve existing customers. General facilities charges from new connections are also available to fund improvements to the water system. The water utility is able to borrow from the above-mentioned financial assistance programs and any loans will need to be repaid by monthly rates and connection charges. The water utility is able to sell revenue bonds and/or general obligation bonds to fund planned system improvements. Revenue bonds will be repaid by water rates and connection fees. General obligation bonds can be repaid by water rates and charges or general City tax revenue.

Some of the projects will be the responsibility of developers to connect their property to the system. When developers complete projects that are approved by the City, the infrastructure is deeded over to the City. The developer can negotiate a latecomer or recovery agreement with the City to be reimbursed by new development making use of the facilities constructed by the developer for a specified period of time allowed by state law. In certain instances, on a case by case basis, such as when additional capacity is provided by a developer-funded project, the City may opt to participate in a cost sharing mechanism.

The City has the option to complete area-specific projects and be reimbursed as new development occurs in that area through a special connection charge. The City also has the option to establish a local improvement district (LID), where the properties specially benefiting from an infrastructure investment would pay their share through an assessment.

1.6.3 Affordability

The EPA requires DOH to award subsidy, or principal forgiveness, of at least 20 percent of the EPA capitalization grant award. In order to determine how best to award the subsidy, communities are evaluated on affordability of water compared to the median household income (MHI). EPA defines affordable water rates as 2 percent of MHI for a community. This also reflects the test applied by DOH to determine the level of hardship in a community when applying for grants (subsidy) and loans for water improvement projects. The level of hardship can influence the financial assistance offer. If the cost of water service is higher, the community will be considered in hardship and could be eligible for some financial assistance in the offer, resulting in a grant (subsidy), a lower interest rate loan, or a combination of the two.

The Census Bureau operates a Quick Facts portal of data (census.gov) that provides information for a community, including MHI. For the City, the current MHI is \$80,839, in 2019 dollars based on 2015-2019 American Community Survey. The threshold for hardship at 2.0 percent of MHI would be residential water rates of \$134.73 per month, or \$269 per 2-month bill. A lower threshold of 1.5 percent of MHI, with residential bill of \$202 per month could result in a 0.5% reduction in the interest rate. A typical residence in Fircrest currently pays \$59.31 per 2-month bill for water service. This level is considered affordable and would not be eligible for subsidy.

Another measure of affordability is what residents in local jurisdictions are paying. Table 10-7 compares 2021 water rates for a typical single-family residence, 3/4-inch meter using 850 cubic feet of water per month, or 1,700 cubic of water per 2-month bill. Using this measure, Fircrest currently in the lower tier compared to other local communities. The average cost of water in the communities listed is \$88.00 per 2-month bill which is higher than current City rates. The comparison will vary depending on the amount of water used in a home, the season of the year, the rate structure (base fee and usage tiers), and timing of the next rate adjustment.

Table 10-7 Residential Water Rate Comparison 2021		
Residential Water Service	2-Month Bill @ 1,700 cf	Per Month @ 850 cf
University Place – summer	\$113	\$55
University Place – winter	\$105	\$53
Steilacoom	\$101	\$51
Tacoma – summer	\$94	\$46
Tacoma – winter	\$87	\$44
Fircrest	\$59	\$46
Lakewood	\$52	\$39
<i>1 cubic foot equals 7.48 gallons.</i>		

1.7 Water Capital Improvements

Chapter 9 of this WSP identifies \$4.2 million in recommended capital improvements for the water system during the 20-year planning horizon, \$2.3 million are recommended for the first 10 years (2021-2030) and \$1.9 million for the second 10 years (2031-2040). These cost estimates are in 2020 dollars. This financial chapter addresses the first 10-year period.

It is reasonable to assume that the costs will be higher in the future when projects are scheduled for completion. The estimated costs will be escalated in this financial chapter to make sure the funding is appropriate to match the anticipated cost. The financial projections include construction cost escalation of 4.0 percent per year.

1.7.1 Ten-Year Capital Improvements

The 10-year projects are displayed by year over the planning period as shown in Table 10-8. The main replacement program provides funding for the highest priority replacement of old and undersized mains. The estimated costs in this table have been escalated from 2020 dollars to the scheduled year at 4% per year. The total estimated planning level cost for the ten-year CIP is \$2.8 million after construction cost escalation. The average annual cost is \$287,000.

Table 10-8 Water 10-Year Capital Improvement Program (CIP), 2021-2030											
		The 2020 Cost Estimates shown by project have been Escalated to the Scheduled Year at 4% per year in the bottom line of the table.									
CIP No.	Project	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
R1	8" Main Replacement Old & Undersized Mains			200,000	200,000	160,000	160,000	160,000	0	160,000	160,000
L1	12" Main on Summit Ave							122,000	286,000		
F1	Golf Course 0.6 MG Tank recoating			60,000	90,000						
F2	Water Meter Upgrades & Software	250,000	200,000								
CW1	Comprehensive Plan										70,000
	Total Ten-Year CIP - W (\$2020)	250,000	200,000	260,000	290,000	160,000	160,000	282,000	286,000	160,000	230,000
	Total Ten-Year CIP W (Escalated)	250,000	216,300	292,500	339,300	194,700	202,500	371,100	391,400	227,700	340,500
	Total 10-Year CIP (Escalated)	2,826,000									
	Average Annual 2022-2030 (Escalated)	287,000									

1.7.2 Ten-Year Capital Improvement Funding

The 10-year CIP projects have been reviewed for potential funding sources, such as general facilities charges from new connections, grants and appropriations, developer funding, borrowing, reserves and rates. The City plans to schedule the projects as necessary to balance the engineering need, system capacity and the ability to fund the CIP without borrowing in the next 10 years. Grants will always be reviewed and pursued when appropriate.

Table 10-9 summarizes the funding sources to support the planned CIP projects. With the conservative growth scenario of 1 new ERU per year, general facilities charges are projected to bring in \$104,000. Anticipated grants include a legislative appropriation for \$171,000 and from the American Rescue Plan for \$500,000 toward meter and main replacement. The remaining \$2,050,000 will be funded with rates and reserves already set aside.

Table 10-9 Water 10-Year CIP Funding Sources, 2021-2030										
CIP Funding Sources	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
New ERU's	16.2	1	1	1	1	1	1	1	1	1
W GFC Connection Charges	64,800	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Grants - Legislative Appropriation	171,000									
Grants - American Rescue Plan		200,000	200,000	100,000						
Funded by Rates	14,200	12,300	88,500	235,300	190,700	198,500	367,100	387,400	223,700	336,500
Total 10-Year CIP Funding Sources	\$250,000	\$216,300	\$292,500	\$339,300	\$194,700	\$202,500	\$371,100	\$391,400	\$227,700	\$340,500

1.8 Ten-Year Financial Plan

The 10-year financial plan was developed and discussed with Public Works, Finance and City Management to support the recommended capital improvements. The adopted 2021 budget is the base year for projections in the model.

1.8.1 Key Assumptions

Several key assumptions were used in making the 10-year projections and are shown in Table 10-10. These include the number of new connection equivalent residential units (ERU's) per year, cost escalation factors, the residential water general facilities charge and the bimonthly single family base rate.

Table 10-10 Key Financial Assumptions	
Assumptions:	Amount
New Customer ERU's per year	1
General Cost Escalation	3.0%
Construction Cost Escalation	4.0%
Water General Facilities Charge	\$4,400
Single Family Base Rate (2-Months)	\$37.00

The financial outlook assumes the bimonthly water rate is held constant at \$37.00 for a single family residence to calculate the impact on existing water rates to carry out the plan.

1.8.2 Ten-Year Outlook

The 10-year rate outlook for Water Fund 425 was developed and is summarized in Table 10-11. In order to fund the CIP with a combination of rates, water capital reserves, general facilities charges, and grants, the current residential bimonthly base rate of \$37.00 (\$18.50 per month) would need to increase to \$46.00 (\$23.00 per month) by 2030. This represents an increase of \$9.00 per bimonthly bill (\$4.50 per month) for the 10-year period. With annual rate increases of 2 percent per year, the planned CIP would be funded along with the planned level of operations to continue to provide reliable, safe drinking water into the future.

The percentage rate impact is assumed to be applied to all customer classes and water rates. The impact on a typical single family residence using 1,700 cubic feet of water per 2-months would be an increase from the current bill of \$59.00 to \$73.00 by 2030, an increase of \$14.00 over ten years (\$7.00 per month).

Table 10-11 Summary 10-Year Residential Rate Outlook										
WATER UTILITY 10-YEAR OUTLOOK	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Increase/(Use) of Reserves	56,054	(25,658)	(49,458)	(75,262)	(101,946)	(129,306)	(157,639)	(186,741)	(216,809)	(247,737)
Percentage Impact on Rates - Annual		2%	2%	2%	2%	2%	2%	2%	2%	2%
Monthly Base Rate - if Balanced	\$18.50	\$18.95	\$19.37	\$19.83	\$20.29	\$20.78	\$21.27	\$21.79	\$22.31	\$22.86
2-Month Base Rate - if Balanced	\$37.00	\$37.90	\$38.74	\$39.65	\$40.59	\$41.55	\$42.55	\$43.57	\$44.63	\$45.71
Typical SF 2-Mo Bill @ 1,700 cfm/mo	\$59.31	\$60.76	\$62.10	\$63.56	\$65.06	\$66.61	\$68.20	\$69.84	\$71.54	\$73.28
This conservative growth scenario with 1 new ERU per year requires a rate adjustment of 2% per year over the 10-year period.										

The City will manage the budget and improvements to fit as necessary and will consider rate increases as needed to complete the recommended improvements to provide safe, reliable water service to ratepayers for years to come. The City plans to review rates following submittal of this plan and may consider another multi-year rate schedule to provide consistency to ratepayers as the current multi-year ordinance schedule runs out in 2020.

1.8.3 Water Fund 425 Revenue

The water revenue is based on the 2021 budget, including a conservative estimate for water sales and growth. The current water rates are held constant to allow the model to calculate the impact on existing rates to have a balanced program (yellow line equals zero). It is assumed that 1 new residential customer is added each year to the 2021 budgeted rate revenue. Other revenue is held flat throughout the 10-year outlook. Additional new customers will positively impact the water bottom line and will provide increased revenue available to fund CIP.

1.8.4 Water Fund 425 Expenditures

The operating expenses reflect 2021 budget and are generally projected to increase 3.0% per year for cost escalation. The expenditures include water operating expenses, ERR equipment repair and replacement, existing debt payments on the DWSRF loan (ends in 2022), and a transfer to capital fund 426 for rate-funded CIP. These expenditures are primarily supported by water rates, with contributions from water tank leases, service connections and other miscellaneous revenue.

1.8.5 Detailed 10-Year Outlook

After deducting the estimated water expenditures from the water revenue, the net income available for capital is shown as the increase or (use) of ending fund balance (EFB). The bottom yellow line shows an annual (use) of EFB in every year between 2021 and 2030. For one year, this could be addressed by applying reserves. However, with multiple on-going years, the model estimates the impact on rates to bring the yellow line to zero. The City has the choice to address annual deficits by reducing expenses, increasing rates and fees, and/or new customer growth exceeding expectations.

Table 10-12 provides the detailed 10-year outlook. Additional connections would provide additional funding for capital improvements, and additional ratepayers to share in the operating costs and contributions to fund CIP.

Table 10-12 Water 10-Year Financial Outlook											
WATER UTILITY 10-YEAR OUTLOOK	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Comments
Operating Revenue											
Water Sales	1,050,000	1,050,200	1,050,400	1,050,600	1,050,800	1,051,000	1,051,200	1,051,400	1,051,600	1,051,800	adds # new homes x rate
Service Connections	5,000	2,065	2,065	2,065	2,065	2,065	2,065	2,065	2,065	2,065	new homes x conn fee
Rent Property/Tanks	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	flat - 2 sites
Miscellaneous Revenue	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400	19,400	flat
Subtotal Water Revenues	1,154,400	1,151,665	1,151,865	1,152,065	1,152,265	1,152,465	1,152,665	1,152,865	1,153,065	1,153,265	
Expenses											
Water Operating Expenses	898,685	925,600	953,400	982,000	1,011,500	1,041,800	1,073,100	1,105,300	1,138,500	1,172,700	by cost escalation
ERR Replacement	45,072	46,400	47,800	49,200	50,700	52,200	53,800	55,400	57,100	58,800	by cost escalation
Existing Debt: DWSRF	46,429	45,323	-	-	-	-	-	-	-	-	by debt schedule, ends 2022
Transfer to Capital Improvements	108,160	160,000	200,123	196,127	192,011	187,771	183,404	178,906	174,274	169,502	annual amount escal by constr
Subtotal Expenditures	1,098,346	1,177,323	1,201,323	1,227,327	1,254,211	1,281,771	1,310,304	1,339,606	1,369,874	1,401,002	
Increase/(Use) of EFB	56,054	(25,658)	(49,458)	(75,262)	(101,946)	(129,306)	(157,639)	(186,741)	(216,809)	(247,737)	with rate funding for CIP
Estimated Percentage Change to Balance		2%	2%	2%	2%	2%	2%	2%	2%	2%	
Estimated Monthly Residential Rate	\$18.50	\$18.95	\$19.37	\$19.83	\$20.29	\$20.78	\$21.27	\$21.79	\$22.31	\$22.86	
Estimated 2-Month Residential Base	\$37.00	\$37.90	\$38.74	\$39.65	\$40.59	\$41.55	\$42.55	\$43.57	\$44.63	\$45.71	
Typical SF 2-Mo Bill @ 1,700 cf/mo	\$59.31	\$60.76	\$62.10	\$63.56	\$65.06	\$66.61	\$68.20	\$69.84	\$71.54	\$73.28	

1.8.6 Water Fund 425 Balance and Cash Flow Reserve

The 2021 beginning balance is based on the utility's actual year end 2020 balance. The projected increase or (use) of EFB, or yellow line from above, is used in estimating the ending fund balance for each year. Table 10-13 assumes that the rate increases of 2% per year have been applied to result in balanced revenue and expenditures for each year, thus the ending fund balance remains at \$367,000 for the 10-years. If rates were not adjusted, this fund balance would be drawn down.

The ending fund balance includes an amount set aside for reserves. The target minimum cash flow reserve of 90 days (3 months) of operating expense is set aside within the fund balance. This matches the City's goal for enterprise fund reserves. The remainder of the funds are available to water.

Table 10-13 Water Fund 425 Balance and Cash Flow Reserve											
WATER OPERATING FUND 425	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Comments
Beginning Balance	310,885	366,939	366,939	366,939	366,939	366,939	366,939	366,939	366,939	366,939	actual 2020 end bal
Increase/(Use) of EFB	56,054	assumes estimated rates for balanced program									
Ending Fund Balance	366,939	366,939	366,939	366,939	366,939	366,939	366,939	366,939	366,939	366,939	
Target Minimum Balance											
Cash Flow Reserve	224,671	231,400	238,350	245,500	252,875	260,450	268,275	276,325	284,625	293,175	90 days operating expense
Available Balance	142,267	135,539	128,589	121,439	114,064	106,489	98,664	90,614	82,314	73,764	+ 3 Mos. Operating Expense

1.8.7 Water Capital Fund 426 Outlook

The water capital resources begin with the actual 2020 ending balance. The model assumes this fund collects revenue for future system improvements for several sources, including the water general facilities charges, grants and appropriations for meter and main replacement CIP, and an annual transfer from Water Fund 425 for the rate-funded portion to complete the CIP. The projects funded are then shown in the Water CIP Program line as the funds are expended.

In Table 10-14, after accounting for the revenue sources and spending on the CIP, the ending balance is estimated to decrease from \$431,000 to \$37,000 over the 10-years as the City completes the scheduled CIP projects. At the end of 2030, this financial plan estimates \$111,000 will be available for emergencies (in addition to the 90 days of operating expenses in the cash flow reserve) in water funds 425 and 426.

Table 10-14 Water Capital Fund 426 Balance											
WATER CAPITAL FUND 426	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Comments
Resources											
Beginning Balance	337,324	431,284	579,384	691,407	652,634	654,345	644,016	460,721	252,627	203,601	actual 2020 end bal
Capital Contributions/GFC	64,800	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	GFC x new homes/ERU
Grants (Amer. Rescue, WA St. Leg.)	171,000	200,000	200,000	100,000	0	0	0	0	0	0	see CIP Funding Sources
Transfer - Rate-Funded CIP	108,160	160,000	200,123	196,127	192,011	187,771	183,404	178,906	174,274	169,502	
Subtotal Capital Resources	681,284	795,684	983,907	991,934	849,045	846,516	831,821	644,027	431,301	377,503	
Expense											
CIP Improvement Projects (escalated)	250,000	216,300	292,500	339,300	194,700	202,500	371,100	391,400	227,700	340,500	
Subtotal Capital Expense	250,000	216,300	292,500	339,300	194,700	202,500	371,100	391,400	227,700	340,500	
Estimated Ending Capital Balance	431,284	579,384	691,407	652,634	654,345	644,016	460,721	252,627	203,601	37,003	Available for Emergencies
Estimated Total Emergency Reserve										110,766	Funds 425 & 426

1.9 Financial Conclusion

There are not sufficient funds available at the existing water rates to pay for the recommended 10-year capital improvements. The CIP list has been prioritized and planned for annual investment in system repair/replacement/improvement to continue to provide safe, reliable water service for future generations. The goal is to do so in an affordable manner with annual investment funded by water rates, and general facilities charges from new connections. Developer contributions will be considered where appropriate. Of course, the City will seek grants to assist where appropriate.

The financial model estimates the impact on residential monthly water rates (base and water usage) to complete the 10-year CIP. No borrowing is anticipated during this period. The impact on the base rate and typical single family residence are summarized below:

- **Impact on Ready to Serve Charge (Base Rate)** - In order to fund the CIP with a combination of rates, water capital reserves, general facilities charges, and grants, the current residential bimonthly base rate of \$37.00 would need to increase 2 percent per year to \$46.00 by 2030. On a monthly basis, the current base rate of \$18.50 would need to increase to \$23.00 by 2030. This represents an increase of \$9.00 per bimonthly bill (\$4.50 per month) for the 10-year period.
- **Impact on Commodity Charge (Water Usage)** – The same 2 percent per year increase would apply to the 3-tiers of water usage rates.
- **Impact on Typical Single Family Residence** - The model assumes that all water rates would be impacted on a similar percentage basis. A typical single family residence using 1,700 cubic feet of water per 2-months would need an increase from the current bill of \$59.00 to \$73.00 by 2030, an increase of \$14.00 over ten years (\$7.00 per month).
- **Impact on Reserves** – The reserves remain fully funded in the 10-year financial plan. The annual rate increase at 2% is near the assumed cost escalation of 3% after using \$394,000 in capital reserves. If the assumed grants are not realized, the utility will need to reschedule projects or rates will need to be further increased.

These water rates continue to be considered affordable when compared to the median household income of Fircrest, which is the measure specified by DOH and EPA.

The City will manage the budget and improvements to fit as necessary and will consider rate increases as needed to complete the recommended improvements to provide safe, reliable water service to ratepayers for many years to come. The City plans to review rates and charges following submittal of this draft plan to be sure they are recovering the necessary costs in a fair and equitable manner.