City of Kingman

Infrastructure Improvement Plan

Water
Wastewater

October 2008

Report Prepared By:

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

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CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
DEBT - WIFA: Hilltop WWTP Expansion
30-Year Plan

FILE: Kingman2008
SCHEDULE: DEBT
DATE: 10/22/2008
RANGE: DEBT1

DEBT SERVICE PAYMENT		Projected							
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Growth P&I	$12,320,000 Issue	0	$699,692	$699,692	$939,302	$939,302	$939,302	$939,302	$939,302
			0	0	0	0	0	0	0
				0	0	0	0	0	0
					0	0	0	0	0
						0	0	0	0
							0	0	0
								0	0
									0
Total Growth P&I		$0	$699,692	$699,692	$939,302	$939,302	$939,302	$939,302	$939,302

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CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
DEBT - WIFA: Hilltop WWTP Expansion
30-Year Plan

FILE: Kingman2008
SCHEDULE: DEBT
DATE: 10/22/2008
RANGE: DEBT1B

DEBT SERVICE PAYMENT		Projected							
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Growth P&I	$12,320,000 Issue	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
				0	0	0	0	0	0
Total Growth P&I		$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302

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CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
DEBT - WIFA: Hilltop WWTP Expansion
30-Year Plan

FILE: Kingman2008
SCHEDULE: DEBT
DATE: 10/22/2008
RANGE: DEBT1C

DEBT SERVICE PAYMENT		Projected							
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	FY 2031-32
Growth P&I	$12,320,000 Issue	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
Total Growth P&I		$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302

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CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
DEBT - WIFA: Hilltop WWTP Expansion
30-Year Plan

FILE: Kingman2008
SCHEDULE: DEBT
DATE: 10/22/2008
RANGE: DEBT1D

DEBT SERVICE PAYMENT		Projected						
		FY 2032-33	FY 2033-34	FY 2034-35	FY 2035-36	FY 2036-37	FY 2037-38	FY 2038-39
Growth P&I	$12,320,000 Issue	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
Total Growth P&I		$939,302	$939,302	$939,302	$939,302	$939,302	$939,302	$939,302

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CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1

	Projected					
	FY 2008-09	**FY 2009-10**	**FY 2010-11**	**FY 2011-12**	**FY 2012-13**	**FY 2013-14**
Repayment of loans are assumed to be made at the end of the year						
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund						
Beginning of Year Balance	$0	$0	$0	$0	$0	$350,000
Current Year Loans	0	0	0	0	350,000	200,000
Interest	0	0	0	0	0	17,500
Current Year Payments	0	0	0	0	0	0
End of Year Balance	$0	$0	$0	$0	$350,000	$567,500

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1B

	Projected					
	FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Repayment of loans are assumed to be made at the end of the year						
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund						
Beginning of Year Balance	$567,500	$890,875	$1,010,419	$1,110,940	$1,166,487	$1,224,811
Current Year Loans	295,000	75,000	50,000	0	0	0
Interest	28,375	44,544	50,521	55,547	58,324	61,241
Current Year Payments	0	0	0	0	0	(25,000)
End of Year Balance	$890,875	$1,010,419	$1,110,940	$1,166,487	$1,224,811	$1,261,052

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1C

	Projected						
	FY 2020-21	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**
Repayment of loans are assumed to be made at the end of the year							
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund							
Beginning of Year Balance	$1,261,052	$1,299,104	$1,339,059	$1,381,012	$1,400,063	$1,420,066	$1,391,069
Current Year Loans	0	0	0	0	0	0	0
Interest	63,053	64,955	66,953	69,051	70,003	71,003	69,553
Current Year Payments	(25,000)	(25,000)	(25,000)	(50,000)	(50,000)	(100,000)	(50,000)
End of Year Balance	$1,299,104	$1,339,059	$1,381,012	$1,400,063	$1,420,066	$1,391,069	$1,410,623

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1D

	Projected						
	FY 2027-28	**FY 2028-29**	**FY 2029-30**	**FY 2030-31**	**FY 2031-32**	**FY 2032-33**	**FY 2033-34**
Repayment of loans are assumed to be made at the end of the year							
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund							
Beginning of Year Balance	$1,410,623	$1,381,154	$1,250,212	$1,112,722	$968,358	$866,776	$760,115
Current Year Loans	0	0	0	0	0	0	0
Interest	70,531	69,058	62,511	55,636	48,418	43,339	38,006
Current Year Payments	(100,000)	(200,000)	(200,000)	(200,000)	(150,000)	(150,000)	(150,000)
End of Year Balance	$1,381,154	$1,250,212	$1,112,722	$968,358	$866,776	$760,115	$648,121

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE:	**Kingman2008**
SCHEDULE:	**CASHFLOW**
DATE:	**10/22/08**
RANGE:	**Loan1E**

	Projected		
	FY 2034-35	**FY 2035-36**	**FY 2036-37**
Repayment of loans are assumed to be made at the end of the year			
Interest Rate	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund			
Beginning of Year Balance	$648,121	$530,527	$407,053
Current Year Loans	0	0	0
Interest	32,406	26,526	20,353
Current Year Payments	(150,000)	(150,000)	(427,406)
End of Year Balance	$530,527	$407,053	$0

CITY OF KINGMAN
WATER RATE STUDY
INVESTMENT FEES - WATER

FILE:	**Kingman2008**
SCHEDULE:	**ASSETS**
DATE:	**10/22/2008**
RANGE:	**WATER**

DESCRIPTION	INSTALLED COST	YEAR	ENR 20-Cities Index Denver	Replacement Cost New
Land				
LAND-FUTURE WELL SITE-BADGER	$86,745			$86,745
LAND-CASTLE ROCK BOOSTER STAT	110,663			110,663
LAND-CASTLE ROCK BOOSTER ROW	66,465			66,465
LAND PARCEL .1757 ACRES	3,827			3,827
LAND PARCEL .007 ACRES	152			152
LAND PARCEL .0896 ACRES	1,951			1,951
LAND PARCEL .0206 ACRES	449			449
LAND PARCEL .1219 ACRES	2,655			2,655
LAND PARCEL .3036 ACRES	6,612			6,612
LAND PARCEL .2295 ACRES	4,999			4,999
LAND PARCEL .5694 ACRES	12,402			12,402
LAND PARCEL 1.35 ACRES	29,403	1966		29,403
LAND PARCEL .2471 ACRES	5,382			5,382
LAND PARCEL .5165 ACRES	11,249	1969		11,249
LAND PARCEL 1.832 ACRES	39,901	1970		39,901
LAND PARCEL .1423 ACRES	3,099	1975	2212	3,099
LAND PARCEL 3.6 ACRES	78,408	1980	2947	78,408
LAND PARCEL .4743 ACRES	10,330	1985	3316	10,330
LAND PARCEL .0087 ACRES	189			189
LAND PARCEL .4106 ACRES	8,943	1989	3642	8,943
LAND PARCEL .3515 ACRES	7,656	1992	3834	7,656
LAND PARCEL .0111 ACRES	242			242
LAND PARCEL .1061 ACRES	2,311			2,311
LAND PARCEL 1.0366 ACRES	22,577	1999	4498	22,577
LAND PARCEL .1061 ACRES	2,311	1999	4498	2,311
LAND PARCEL 1.492 ACRES	32,496			32,496
Subtotal Land	551,417			551,417
Land Improvements				
FENCE CHAIN LINK 8' BARB WIRE	6,060	1995	4088	8,538
FENCE CHAIN LINK 8' BARB WIRE	6,550	1992	3834	9,840
FENCE CHAIN LINK 8' BARB WIRE	7,340	1990	3668	11,524
FENCE CHAIN LINK 8' BARB WIRE	7,340	1990	3668	11,524
FENCE CHAIN LINK 8' BARB WIRE	13,820	1990	3668	21,698
FENCE CHAIN LINK 8' BARB WIRE	7,030	1990	3668	11,037
FENCE CHAIN LINK 8' BARB WIRE	10,400	1999	4498	13,315
FENCE CHAIN LINK 8' BARB WIRE	12,470	2002	4744	15,138
FENCE CHAIN LINK 6' BARB WIRE	9,260	1990	3668	14,539
RETAINING WALL CMU	15,640	1990	3668	24,556
FENCE CHAIN LINK 6' BARB COIL	14,420	1982	3446	24,102
PAVING ASPHALT	15,270	1982	3446	25,523
CONCRET SLAB 20' X 40'	6,373	2003	5015	7,319

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CITY OF KINGMAN
WATER RATE STUDY
INVESTMENT FEES - WATER

FILE: Kingman2008
SCHEDULE: ASSETS
DATE: 10/22/2008
RANGE: WATER

DESCRIPTION	INSTALLED COST	YEAR	ENR 20-Cities Index Denver	Replacement Cost New
GROUP OF PIPE/VALVES	19,018	1974	2020	54,222
Subtotal Land Improvements	150,991			252,875
Buildings				
CASTLEROCK PUMP BUILDING	47,000	1990	3668	73,793
CASTLEROCK BOOSTER OFFICE	72,500	1990	3668	113,829
VAUGH RANCH HOUSE	64,000	1998	4470	82,453
WELLS CASTLE ROCK CW#8	502,574	2002	4744	610,092
WELL - CASING & CONSTRUCTION	16,150	1955		16,150
GROUP OF BOOSTER CONSTRUCTION	9,428	1967		9,428
WELL - CASING & CONSTRUCTION	63,956	1968		63,956
WELL - CASING & CONSTRUCTION	75,469	1968		75,469
WATER TANK BEALE SPRINGS RES	126,810	1969		126,810
WATER TANK MAIN TANK B 1.4MG	181,587	1970		181,587
WELL - CASING & CONSTRUCTION	86,237	1971		86,237
WELL - CASING & CONSTRUCTION	93,006	1982	3446	155,454
WELL - CASING & CONSTRUCTION	112,304	1974	2020	320,193
FOREBAY TANK CASTLEROCK STAT	92,521	1982	3446	154,643
FOREBAY TANK CASTLEROCK STAT	92,521	1982	3446	154,643
WELL - CASING & CONSTRUCTION	153,591	1978	2565	344,893
WELL - CASING & CONSTRUCTION	316,291	1983	3690	493,630
WATER TANK MAIN TANK A 1.0MG	379,871	1985	3316	659,717
WATER TANK CAMELBACK 1.0 MG	379,871	1985	3316	659,717
WATER TANK HUALAPAI MTN 1.5MG	582,386	1989	3642	921,011
WATER TANK HUALAPAI FTHLS .5MG	271,584	1992	3834	408,001
WELL - CASING & CONSTRUCTION	405,810	1994	4009	583,018
WELL - CASING & CONSTRUCTION	67,007	1996	4334	89,041
WATER TANK COLLEGE TANK 1.5MG	733,999	1999	4498	939,724
WATER TANK RANCHO SANTE FE 1.5	733,999	1999	4498	939,724
WELL - CASING & CONSTRUCTION	590,657	2002	4744	717,019
WELL - CASING & CONSTRUCTION	515,864	2002	4744	626,225
WATER TANK MAIN TANK C 1.5MG	731,624	2002	4744	888,144
CASTLEROCK BOOSTER BUILDING	94,492	1980	2947	184,655
Subtotal Buildings	7,593,113			10,679,257
EQUIPMENT				
GTS TOTAL STATION	12,611	2002	4744	15,309
METER READ DEVICE-HANDHELD	6,660	2003	5015	7,648
WATERGEMS SOFTWARE	20,513	1968		20,513
METER READ DEVICE AUTOREAD	12,432	2003	5015	14,275
WATER DISTRIBUTION SYSTEM	8,239	2002	4744	10,001
COPIER	5,813	2003	5015	6,675
ENGINE - HYDRAULIC POWER UNIT	5,206	2003	5015	5,978

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CITY OF KINGMAN
WATER RATE STUDY
INVESTMENT FEES - WATER

FILE: Kingman2008
SCHEDULE: ASSETS
DATE: 10/22/2008
RANGE: WATER

DESCRIPTION	INSTALLED COST	YEAR	ENR 20-Cities Index Denver	Replacement Cost New
GROUP OF PUMPS/MOTORS & EQUIP	10,464	1995	4088	14,743
GROUP OF PUMPS/MOTORS & EQUIP	12,654	1987	3507	20,780
GROUP OF PUMPS/MOTORS & EQUIP	9,926	1970		9,926
GROUP OF PUMPS/MOTORS & EQUIP	15,490	1955		15,490
GROUP OF PUMPS/MOTORS & EQUIP	60,682	1967		60,682
GROUP OF PUMPS/MOTORS & EQUIP	42,125	1968		42,125
GROUP OF PUMPS/MOTORS & EQUIP	46,051	1968		46,051
GROUP OF PUMPS/MOTORS & EQUIP	61,485	1971		61,485
GROUP OF PUMPS/MOTORS & EQUIP	52,996	1982	3446	88,579
GROUP OF PUMPS/MOTORS & EQUIP	75,141	1974	2020	214,235
GROUP OF PUMPS/MOTORS & EQUIP	91,505	1970		91,505
GROUP OF PUMPS/MOTORS & EQUIP	357,708	1980	2947	699,029
GROUP OF PUMPS/MOTORS & EQUIP	213,821	1983	3690	333,708
GROUP OF PUMPS/MOTORS & EQUIP	198,154	1994	4009	284,684
GROUP OF PUMPS/MOTORS & EQUIP	110,205	1996	4334	146,444
GROUP OF PUMPS/MOTORS & EQUIP	243,972	2002	4744	296,166
GROUP OF PUMPS/MOTORS & EQUIP	305,896	2001	4663	377,806
BACKHOE	78,000	1999	4498	99,862
BACKHOE	9,800	1980	2947	19,151
BACKHOE	17,400	1984	3106	32,259
JACK HAMMER	63,000	1997	4329	83,810
WELDER SHOP	21,500	1998	4470	27,699
FUEL STATION/GENERATOR	89,023	2000	4767	107,559
AIR COMPRESSOR	11,345	2002	4744	13,772
WELDER	7,037	2000	4767	8,502
COMPACTOR	22,000	1999	4498	28,166
BACKHOE	13,800	1986	3503	22,686
AIR COMPRESSOR	71,000	1987	3507	116,599
TAMPER	14,000	1988	3538	22,788
TAMPER	17,100	1988	3538	27,834
CRACK VACUUM	26,988	2001	4663	33,332
TRACTOR W/LOADER & BACKHOE	50,677	2003	5015	58,192
PICKUP	14,933	2000	4767	18,042
PICKUP	24,983	2001	4663	30,856
PICKUP	21,800	2000	4767	26,339
VAN	15,459	2001	4663	19,093
PICKUP	15,173	2001	4663	18,740
PICKUP	22,714	2001	4663	28,054
SPORT UTILITY LIBERTY	19,791	2001	4663	24,443
PICKUP	20,842	2002	4744	25,301
PICKUP	16,551	2002	4744	20,092
PICKUP	24,899	2002	4744	30,226
PICKUP	24,789	2003	5015	28,465

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CITY OF KINGMAN
WATER RATE STUDY
INVESTMENT FEES - WATER

FILE:	**Kingman2008**
SCHEDULE:	**ASSETS**
DATE:	**10/22/2008**
RANGE:	**WATER**

DESCRIPTION	INSTALLED COST	YEAR	ENR 20-Cities Index Denver	Replacement Cost New
PICKUP	24,789	2003	5015	28,465
PICKUP	17,915	2003	5015	20,572
PICKUP	15,115	2003	5015	17,357
VAN	19,722	2003	5015	22,647
PICKUP	21,435	2003	5015	24,614
PICKUP	21,435	2003	5015	24,614
PICKUP	11,500	1988	3538	18,719
PICKUP	18,000	1989	3642	28,466
PICKUP	14,500	1998	4470	18,681
PICKUP	15,115	2003	5015	17,357
PICKUP	9,487	1998	4470	12,222
PICKUP	18,004	1994	4009	25,866
VAN	18,232	1998	4470	23,489
PICKUP	12,305	1995	4088	17,336
SPORT UTILITY CHEROKEE	17,002	1998	4470	21,904
PICKUP	15,999	1998	4470	20,612
PICKUP	20,861	1996	4334	27,721
PICKUP	20,861	1996	4334	27,721
PICKUP	22,376	2003	5015	25,695
PICKUP	19,582	1997	4329	26,050
PICKUP	23,066	1998	4470	29,717
PICKUP	14,701	1998	4470	18,940
Subtotal Equipment	3,106,353			4,354,463
Infrastructure				
GROUP OF PIPE/VALVES	6,198	1955		6,198
GROUP OF PIPE/VALVES	14,191	1967		14,191
GROUP OF PIPE/VALVES	11,205	1968		11,205
GROUP OF PIPE/VALVES	11,841	1968		11,841
GROUP OF PIPE/VALVES	15,858	1971		15,858
GROUP OF PIPE/VALVES	14,771	1982	3446	24,688
GROUP OF PIPE/VALVES	22,848	1980	2947	44,648
GROUP OF PIPE/VALVES	93,349	1980	2947	182,421
GROUP OF PIPE/VALVES	45,008	1983	3690	70,243
GROUP OF PIPE/VALVES	44,899	1994	4009	64,506
GROUP OF PIPE/VALVES	23,428	1996	4334	31,131
GROUP OF PIPE/VALVES	54,437	2002	4744	66,083
GROUP OF PIPE/VALVES	63,011	2002	4744	76,491
PIPE 18"-DEVLIN WASH BOX	7,130	2003	5015	8,187
WATER PIPE - 2" PVC	122,016	1978	2565	273,991
WATER PIPE - 3" PVC	107,779	1978	2565	242,021
WATER PIPE - 3.5" PVC	137,855	1978	2565	309,558
WATER PIPE - 6" PVC	1,732,213	1978	2565	3,889,738

CITY OF KINGMAN
WATER RATE STUDY
INVESTMENT FEES - WATER

FILE:	**Kingman2008**
SCHEDULE:	**ASSETS**
DATE:	**10/22/2008**
RANGE:	**WATER**

DESCRIPTION	INSTALLED COST	YEAR	ENR 20-Cities Index Denver	Replacement Cost New
WATER PIPE - 8" PVC	2,748,578	1978	2565	6,172,017
WATER PIPE - 12" PVC	530,479	1978	2565	1,191,207
WATER PIPE - 16" PVC	581,262	1978	2565	1,305,242
WATER PIPE - 2" AC	11,531	1978	2565	25,893
WATER PIPE - 3" AC	291,022	1978	2565	653,499
WATER PIPE - 3.5" AC	296,769	1978	2565	666,404
WATER PIPE - 6" AC	4,466,971	1978	2565	10,030,721
WATER PIPE - 8" AC	3,114,147	1978	2565	6,992,913
WATER PIPE - 10" AC	75,735	1978	2565	170,065
WATER PIPE - 12" AC	5,509,221	1978	2565	12,371,125
WATER PIPE - 14" AC	1,373,931	1978	2565	3,085,204
WATER PIPE - 16" AC	1,999,841	1978	2565	4,490,705
WATER PIPE - 3.5" DIP	13,088	1978	2565	29,390
WATER PIPE - 6" DIP	110,838	1978	2565	248,890
WATER PIPE - 8" DIP	104,238	1978	2565	234,070
WATER PIPE - 12" DIP	35,375	1978	2565	79,436
WATER PIPE - 16" DIP	390,730	1978	2565	877,396
WATER PIPE - 1" STEEL	42,720	1978	2565	95,929
WATER PIPE - 2" STEEL	621,255	1978	2565	1,395,047
WATER PIPE - 3" STEEL	558,753	1978	2565	1,254,697
WATER PIPE - 3.5" STEEL	395,747	1978	2565	888,662
WATER PIPE - 6" STEEL	569,132	1978	2565	1,278,003
WATER PIPE - 8" STEEL	335,960	1978	2565	754,409
WATER PIPE - 12" STEEL	520,875	1978	2565	1,169,641
WATER PIPE - 14" STEEL	11,884	1978	2565	26,686
WATER PIPE - 16" STEEL	248,523	1978	2565	558,066
WATER PIPE - 18" STEEL	223,797	1978	2565	502,543
WATER PIPE - 12" CAST IRON	6,395	1978	2565	14,360
WATER PIPE - 6" C900	716,713	1978	2565	1,609,401
WATER PIPE - 8" C900	1,693,055	1978	2565	3,801,807
WATER PIPE - 12" C900	483,434	1978	2565	1,085,566
WATER PIPE - 16" C900	484,378	1978	2565	1,087,686
WATER PIPE - 4" UNK MATERIAL	67,263	1978	2565	151,041
WATER PIPE - 6" UNK MATERIAL	129,960	1978	2565	291,829
WATER PIPE - 8" UNK MATERIAL	146,343	1978	2565	328,618
WATER PIPE - 12" UNK MATERIAL	52,966	1978	2565	118,937
WATER PIPE - 15" UNK MATERIAL	125,698	1978	2565	282,259
WATER PIPE - 16" UNK MATERIAL	159,925	1978	2565	359,117
WATER PIPE - UNK SIZE, UNK MAT	374,893	1978	2565	841,834
FIRE HYDRANTS, GROUP OF	821,750	1978	2565	1,845,265
WELL CABLE, GROUP OF	79,519	1978	2565	178,562
WATER EXTENSION-NORTH CENTRAL	6,283	2002	4744	7,627
WATER IMP - MAIN/DETROIT	70,373	2002	4744	85,428

REDDAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

CITY OF KINGMAN
WATER RATE STUDY
INVESTMENT FEES - WATER

FILE:	**Kingman2008**
SCHEDULE:	**ASSETS**
DATE:	**10/22/2008**
RANGE:	**WATER**

DESCRIPTION	INSTALLED COST	YEAR	ENR 20-Cities Index Denver	Replacement Cost New
WATER LINE - NORTH ADAMS ST	68,400	2003	5015	78,544
WATER LINE-VAN MARTER/RICCA DR	96,167	2003	5015	110,430
WATER LINE 6"-HAMMON/LYDIA	19,780	2003	5015	22,714
WATER LINE 6"&8" MOHAVE WASH	172,371	2003	5015	197,935
WATER SERVICE - RAINBOW DRIVE	7,788	2003	5015	8,943
WATER LINE - GORDON DRIVE	405,194	2003	5015	465,289
WATER LINE - EMERSON AVENUE	89,669	2003	5015	102,968
WATER LINE 16" BANKS/AIRWAY	42,276	2003	5015	48,546
WATER LINE - NORTH ROOSEVELT	133,510	2003	5015	153,311
WATER LINE - NORTH IRVING ST	32,586	2003	5015	37,418
WATER LINE - PICO ALLEY	23,260	2003	5015	26,710
WATER LINE - COURT STREET	35,084	2003	5015	40,288
WATER LINE - GOLF STREET	11,482	2003	5015	13,185
WATER LINE - NORTH HARVARD ST	60,718	2003	5015	69,723
WATER LINE - BERK AVENUE	26,906	2003	5015	30,896
FIRE HYDRANTS 12-ADAMS/HARVARD	33,659	2003	5015	38,651
WATER LINE-NORTH SIERRA ROAD	19,825	2003	5015	22,765
WATER LINE-EASTERN STREET	104,335	2003	5015	119,809
WATER LINE-WARBLER LANE	29,696	2003	5015	34,100
WATER LINE-WESTERN AVENEU	28,210	2003	5015	32,394
WATER LINE-HIGHWAY 66	10,000	2003	5015	11,483
Subtotal Infrastructure	34,580,301			75,646,298
Other				
EQUIPMENT AND VEHICLES	194,122	2004	5450	205,125
INFRASTRUCTURE	1,458,045	2004	5450	1,540,688
LAND	10,464	2005	5552	10,464
VEHICLES	67,419	2005	5552	69,942
INFRASTRUCTURE	565,441	2005	5552	586,598
MACHINERY AND EQUIPMENT	9,298	2006	5714	9,371
VEHICLES	78,988	2006	5714	79,610
INFRASTRUCTURE	2,483,005	2006	5714	2,502,546
LAND IMPROVEMENT	1,240,764	2007	5747	1,243,422
MACHINERY AND EQUIPMENT	173,727	2007	5747	174,099
VEHICLES	27,347	2007	5747	27,406
INFRASTRUCTURE	3,202,053	2007	5747	3,208,912
Subtotal Other	9,510,673			9,658,183
Grand Total	**$55,492,849**			**$101,142,493**
Total Water IIP Costs				**$101,142,493**

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
GROWTH WASTEWATER CIP - CURRENT $
20-Year Plan

FILE: Kingman2008
SCHEDULE: CIP
DATE: 10/22/2008
RANGE: IIP

				Budget	Projected										
Line No.		**Growth**	**Non-Growth**	**FY 2008-09**	**FY 2009-10**	**FY 2010-11**	**FY 2011-12**	**FY 2012-13**	**FY 2013-14**	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**Total**
1	Mohave Channel Trunk Sewer	75%	25%	$375,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$375,000
2	HTWWTP Upgrades & Expansion	40%	60%	2,200,000	7,000,000	5,120,000	0	0	0	0	0	0	0	0	14,320,000
3	**Total Growth CIP**			**$2,575,000**	**$7,000,000**	**$5,120,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$14,695,000**
4	Net Present Value of Borrowing Costs														$7,563,199
5	**Total IIP Costs**														**$22,258,199**

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
DEBT - WIFA: Hilltop WWTP Expansion
20-Year Plan

FILE: Kingman2008
SCHEDULE: DEBT
DATE: 10/22/2008
RANGE: DEBT1

DEBT SERVICE PAYMENT		Projected									
		FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Growth P&I	$12,320,000 Issue	0	$699,692	$699,692	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121
			0	0	0	0	0	0	0	0	0
				0	0	0	0	0	0	0	0
					0	0	0	0	0	0	0
						0	0	0	0	0	0
							0	0	0	0	0
								0	0	0	0
									0	0	0
										0	0
											0
Total Growth P&I		$0	$699,692	$699,692	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121

REDDAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
DEBT - WIFA: Hilltop WWTP Expansion
20-Year Plan

FILE:	**Kingman2008**
SCHEDULE:	**DEBT**
DATE:	**10/22/2008**
RANGE:	**DEBT1B**

		Projected										
DEBT SERVICE PAYMENT		**FY 2018-19**	**FY 2019-20**	**FY 2020-21**	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Growth P&I	$12,320,000 Issue	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
Total Growth P&I		$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121	$1,197,121

REDDAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1

	Projected					
	FY 2008-09	**FY 2009-10**	**FY 2010-11**	**FY 2011-12**	**FY 2012-13**	**FY 2013-14**
Repayment of loans are assumed to be made at the end of the year						
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund						
Beginning of Year Balance	$0	$0	$0	$0	$300,000	$965,000
Current Year Loans	0	0	0	300,000	650,000	700,000
Interest	0	0	0	0	15,000	48,250
Current Year Payments	0	0	0	0	0	0
End of Year Balance	$0	$0	$0	$300,000	$965,000	$1,713,250

REDOAK CONSULTING
A DIVISION OF MALCOLM PIRNIE

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1B

	Projected					
	FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Repayment of loans are assumed to be made at the end of the year						
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund						
Beginning of Year Balance	$1,713,250	$2,298,913	$2,713,858	$3,124,551	$3,555,779	$4,008,568
Current Year Loans	500,000	300,000	275,000	275,000	275,000	250,000
Interest	85,663	114,946	135,693	156,228	177,789	200,428
Current Year Payments	0	0	0	0	0	0
End of Year Balance	$2,298,913	$2,713,858	$3,124,551	$3,555,779	$4,008,568	$4,458,996

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1C

	Projected						
	FY 2020-21	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**
Repayment of loans are assumed to be made at the end of the year							
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund							
Beginning of Year Balance	$4,458,996	$4,906,946	$5,372,293	$5,840,908	$6,307,953	$6,798,351	$7,288,268
Current Year Loans	225,000	220,000	200,000	175,000	175,000	150,000	135,000
Interest	222,950	245,347	268,615	292,045	315,398	339,918	364,413
Current Year Payments	0	0	0	0	0	0	0
End of Year Balance	$4,906,946	$5,372,293	$5,840,908	$6,307,953	$6,798,351	$7,288,268	$7,787,682

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1D

	Projected						
	FY 2027-28	**FY 2028-29**	**FY 2029-30**	**FY 2030-31**	**FY 2031-32**	**FY 2032-33**	**FY 2033-34**
Repayment of loans are assumed to be made at the end of the year							
Interest Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund							
Beginning of Year Balance	$7,787,682	$8,302,066	$8,217,169	$8,128,027	$8,034,429	$7,436,150	$6,307,958
Current Year Loans	125,000	0	0	0	0	0	0
Interest	389,384	415,103	410,858	406,401	401,721	371,808	315,398
Current Year Payments	0	(500,000)	(500,000)	(500,000)	(1,000,000)	(1,500,000)	(1,500,000)
End of Year Balance	$8,302,066	$8,217,169	$8,128,027	$8,034,429	$7,436,150	$6,307,958	$5,123,356

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
INTRA-FUND LOANS - WASTEWATER

FILE: Kingman2008
SCHEDULE: CASHFLOW
DATE: 10/22/08
RANGE: Loan1E

	Projected			
	FY 2034-35	**FY 2035-36**	**FY 2036-37**	**FY 2037-38**
Repayment of loans are assumed to be made at the end of the year				
Interest Rate	5.00%	5.00%	5.00%	5.00%
Loans To Investment Fee Subfund (From) Operation Subfund				
Beginning of Year Balance	$5,123,356	$3,879,523	$2,873,500	$1,517,175
Current Year Loans	0	0	0	0
Interest	256,168	193,976	143,675	75,859
Current Year Payments	(1,500,000)	(1,200,000)	(1,500,000)	(1,593,033)
End of Year Balance	$3,879,523	$2,873,500	$1,517,175	$0

CITY OF KINGMAN, ARIZONA
REVENUE STUDY - WASTEWATER
GROWTH WASTEWATER CIP - CURRENT $
30-Year Plan

FILE: Kingman2008
SCHEDULE: CIP
DATE: 10/22/2008
RANGE: IIP

Line No.		Growth	Non-Growth	Budget FY 2008-09	Projected FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	Total
1	Mohave Channel Trunk Sewer	75%	25%	$375,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$375,000
2	HTWWTP Upgrades & Expansion	40%	60%	2,200,000	7,000,000	5,120,000	0	0	0	0	0	0	0	0	14,320,000
3	**Total Growth CIP**			**$2,575,000**	**$7,000,000**	**$5,120,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$14,695,000**
4	Net Present Value of Borrowing Costs														$7,513,951
5	**Total IIP Costs**														**$22,208,951**

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