| | Madison Water Utility | | | | | | | | | | | |
|--|---|---------------------|---|---------------|----------------|---------------|---------------|---------------|---|---------------|---------------|---------------|
| 1 | - | and Dood | | | | | | | | | | |
| Madison | 2011-2030 Capital Improvem | ent Bua | get | | | | | | | | | |
| Water IIII | Upd | ated: June 18, | 2011 | | | | | | | | | |
| Utility mwu | DRAFT | | Annual Totals | \$ 18,118,300 | \$ 1,860,000 | \$ 21,263,300 | \$ 28,648,200 | \$ 26,097,460 | \$ 28,786,920 | \$ 30,438,980 | \$ 28,969,760 | \$ 26,974,400 |
| | | Primary | | | 2011 Carryover | | | | | | | |
| Line Project | Date/Description/Purpose | Year | Tasks | 2011 | to 2012 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Arbor Hillo Sumplemental Fi | vo Flaur Crimalir - BDC 440 | 2011 | | | | | | | | | | |
| 1 Arbor Hills Supplemental Fit | vas selected and procured in 2010. The design was completed and the pr | | Public Participation Plan | | | | | | | | | |
| | vas selected and procured in 2010. The design was completed and the pi 111 and be finished and in service by 2012. The Arbor Hills Supplement | | Property Purchase | | | | | | | | | |
| Supply project will correct a significa | int system deficiency identified by the Water Master Plan. Due to the fact | hat the area was | Consultant Design contract for | | | | | | | | | |
| | n on the Beltline Highway frontage road, the area was vulnerable to water | | Pump Station | | | | | | | | | |
| | ire flow capacity. When fully completed, this project will provide the ability ncludes a pipeline on the Cannonball Bike Trail that will link the area to th | | Construction Administration Services | 66,500 | | | | | | | | |
| | ed in 4 phases. Phase 1 & 2 are complete. Phase 3 will be constructed in | | Pipeline Construction | | | 1,000,000 | 750,000 | | | | | |
| 7 4 in 2013. | · | | Pump Station Construction | | | 1,000,000 | . 00,000 | | | | | |
| 8 | | | Project Total | 1,016,500 | - | 1,000,000 | 750,000 | - | - | - | - | - |
| 9 | | | | | | | | | | | | |
| 20ne 4 Fire Flow Supply Aug | | 2013 | | | | | | | | | | |
| | ave been identified as potential well sites and will be investigated during 2 production well is scheduled to be drilled in 2012. Once adequate well car | | Public Participation Plan Additional Water Quality Analysis | | | | | | | | | |
| | production well is scheduled to be drilled in 2012. Once adequate well cap Instruction of Unit Well 31 is scheduled to start in 2013 and be finished an | | Additional Water Quality Analysis | | | | | | | | | |
| 13 2014. The Zone 4 Fire Flow Supply | y Augmentation project will correct a significant system deficiency identifi | ed by the Water | Property Purchase | | | | | | | | | |
| | of the system within Pressure Zone 4. Due to significant expansion over the | | Drill Test Well & Analysis | 130,000 | | | | | | | | |
| | system will not adequately serve this area for fire flow supply or system rit development pressure in the southeast and the proposed new well will si | | Production Well and | | | | | | | | | |
| | econd source of supply to the area will improve fire flow capacity and brin | | Development | | 620,000 | | | | | | | |
| system level of service for the area u | up to Utility standards. In the future, a pump station may be considered to | | Consultant Design contract for design of Unit Well, Reservoir, | | | | | | | | | |
| be pumped from Zone 4 to Zone 6 at | nd provide additional redundancy to Zone 6. | | Pump Station, and Pipelines | | 416,000 | | | | | | | |
| | | | Construct Unit Well & Fe and Mn | | | | | | | | | |
| 17 | | | Filter | | | | 5,201,000 | | | | | |
| | | | Consultant Construction | | | | 242,000 | | | | | |
| 18 | | | Administration Pipelines | | | | 312,000 | | 1,217,000 | | | |
| 20 | | | Project Total | | 1,036,000 | - | 5,513,000 | - | 1,217,000 | _ | - | - |
| 21 | | | • | | ,, | | -,, | | , | | | |
| 22 E. Side Phase 1 - Unit Well N | No. 15 - VOC Mitigation | 2012 | | | | | | | | | | |
| 23 East Side Phase 1 - Unit Well No. 1 | 15 - VOC Mitigation will address the water quality issues that exist at We | ll 15 due to rising | UW 15 - VOC Stripper Design | | | | | | | | | |
| | at the VOC levels could exceed current regulatory standards. Unit Well 15 of the City. The project will benefit the Well 15 service area and improve | | Construction Admin Services Construction of Unit Well No. 15 | | • | 146,000 | | | | | | |
| 25 water bringing it up to minimum Utilit | | rie quality of the | VOC Stripper | | | 2,430,000 | | | | | | |
| 26 | | | Project Total | 219,000 | - | 2,576,000 | - | - | - | - | - | - |
| 27 | | | | | | | | | | | | |
| 28 E. Side Phase 2 - Unit Well N | - | 2013 | | | | | | | | | | |
| | <u>B - Fe and Mn Mitigation</u> will address current water quality issues at Well | | Public Participation | | | 40,000 | | | | | | |
| | eed the EPA secondary standard's. Due to the colored water as a result of tly limited to summer only and a total of approximately 100 million gallons | | UW 8 - Filter Design Documents | | | 421,000 | | | | | | |
| would allow the well to be operational | al all year long and produce significantly greater quantities of water. The p | | Property Acquisition | | | | 450,000 | | | | | |
| existing customers in the east Isthmu | us area and improve the quality of the water pumped from Well 8. | | Construction Admin Services | | | | 281,000 | | | | | |
| 33 | | | Well 8 Fe and Mn Filter Construction | | | | 4,680,000 | | | | | |
| 34 | | | Pipelines | | | | 1,222,000 | | 750,000 | 750,000 | | |
| 35 | | | Project Total | | - | 461,000 | 5,411,000 | - | 750,000 | 750,000 | - | - |
| 36 | | | | | | | | | · · · · · · · · · · · · · · · · · · · | | | |
| E. Side Phase 3 - Unit Well N | | 2014 | D | | | | | | | | | |
| | - Fe and Mn Mitigation will address the water quality issues that exist at W | | Public Participation | | | 30,000 | | 20,000 | | | | |
| | or approach the EPA secondary standard. Due to the colored water that or complaints are common in the Well 7 service area. This condition limits the | | UW 7 - Filter Design Property Purchase | | | 400,000 | 438,000 | | | | | |
| | ne well. A filter would significantly reduce the iron and manganese levels in | | Construction Admin Services | | | 400,000 | | 292,000 | | | | |
| The state of the s | <u> </u> | -1 | Jonatiaction Aumin Services | | | | | 232,000 | | 1 | | |

| 1 | Madison Water Utility | | | | | | | | | | | |
|--|--|--------------------------------|--|---------------|----------------|---------------|---------------|----------------------|-----------------------|---------------|----------------------|---------------|
| Quality and Reliability since 1882 | 2011-2030 Capital Improvement | ent Budo | get | | - | | | | | | | |
| Madison | • | | _ | | | | | | | | | |
| Water IIII | Upda | ated: June 18, | 2011 | | - | | | | | | | |
| Utility mwu | DDAFT | | | 4 40440000 | 4 400000 | * 04 040 000 | | * 0.00 = 4.00 | # 00 = 0 < 000 | * 00 100 000 | # 20.000 = 00 | * aca=a |
| | | | Annual Totals | \$ 18,118,300 | \$ 1,860,000 | \$ 21,263,300 | \$ 28,648,200 | \$ 26,097,460 | \$ 28,786,920 | \$ 30,438,980 | \$ 28,969,760 | \$ 26,974,400 |
| | | Duiman | | | 2011 Carryover | | | | | | | |
| Line Project | Date/Description/Purpose | Primary Year | Tasks | 2011 | to 2012 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| produced by the well. Filtering the wa | ater and removing the iron and manganese will reduce the likelihood of cus | stomers | Construction of Unit Well No. 7 | | 10 2012 | 2012 | 2010 | 2014 | 2010 | 20.0 | 2011 | 2010 |
| experiencing colored water due to wa | ater pumped from Well 7 and will allow the Utility to increase the use of the | well. | Fe and Mn Filter | | _ | | | 4,867,000 | | | | |
| 43 | | | Pipelines | | 1 | 400.000 | 400.000 | 5 470 000 | 1 | 500,000 | 500,000 | |
| 44 45 | | | Project Total | - | - | 430,000 | 438,000 | 5,179,000 | - | 500,000 | 500,000 | - |
| 46 E. Side Phase 4 - East Isthm | us Unit Well | 2017 | | | - | | | | | | | |
| | ly 2008 due to elevated levels of Carbon Tetrachloride. This project is inte | | Public Participation | | | 30,000 | 15,000 | | | 20,000 | | |
| the east lethmus area. It is expected | Zone 6E. The East Isthmus Unit Well will restore lost supply redundancy that the well will need a filter for iron and manganese removal. There is al- | | Drill test well and analysis | | | | | 150,000 | | | | |
| that VOC contamination will be prese | ent due to long term industrial land use on the Isthmus. The treatment plan | t will be | Property Purchase Drill new E. Isthmus Well | | - | 250,000 | | | 677,000 | | | |
| designed with the intention of adding needed, the capital cost will be signif | treatment if necessary. If the test well indicates that iron and manganese | filtration is not | Consultant Design contract | | - | | 75,000 | | 077,000 | 540,000 | | |
| , , | icanny reduced. | | Construction of Filter, Res & | | | | | | | | 0.004.000 | |
| 52 53 | | | Pump Station Pipeline Improvements | | - | | | | | | 6,004,000 | 1,000,000 |
| 54 | | | Construction Administration | | - | | | | | | 360,000 | 1,000,000 |
| 55 | | | Project Total | 150,000 | - | 280,000 | 90,000 | 150,000 | 677,000 | 560,000 | 6,364,000 | 1,000,000 |
| 56 | | 2012 | | | - | | | | | | | |
| 57 Advanced Meter Infrastructure Svs | tre System stem will install an automated meter reading system to the Utility's 65,000 | | Consultant Contract | | - | | | | | | | |
| Travarious motor mirada actaro e y | or and control water use and thereby conserve water reduce system dema | | Other Misc Direct Expenses | 35,000 | | 40,000 | | | | | | |
| improve quetamor consigo ao a recult | n water rates, monitor the system for leaks, evaluate and optimize system | operation and | Procurement and Installation | 5,600,000 | | 6,400,000 | | | | | | |
| 61 Improve customer service as a result | of the Aivil System. | | Project Total | 5,635,000 | - | 6,440,000 | - | - | - | - | - | - |
| 63 | | | | | - | | | | | | | |
| 64 Lakeview Reservoir Reconst | truction | 2013 | | | | | | | | | | |
| | struction in 2013 and be finished and in service in early summer 2014. <u>Re</u> | | Public Participation Plan | 50,000 | 50,000 | 040.000 | | | | | | |
| 66 the Lakeview Reservoir will replace 67 6E on the north side of the City. Impr | an aging storage tank and provide needed additional gravity fed water sto evements to the existing pump station feeding Pressure Zone 5 is also inc | orage in Zone luded in this | Consultant Design contract Construction Services | | _ | 213,000 | 142,000 | | | | | |
| project. This project is justified in the | Water Master Plan and would improve fire fighting capacity and reliability | | Construct Two Zone Lakeview | | - | | , | | | | | |
| 68 system. | | | Reservoir Water Main Improvements | | | | 2,372,000 | 1,000,000 | | | | |
| 69 | | | Upgrade Booster Pumps @ | | - | | | 1,000,000 | | | | |
| 70 | | | Res. 113 | | | | 250,000 | | | | | |
| 71 | | | Water Main Improvements @ Res 113 | | | | 400,000 | | | | | |
| 72 | | | Project Total | 50,000 | 50,000 | 213,000 | 3,164,000 | 1,000,000 | - | - | - | - |
| 73 | | | | | | | | | | | | |
| 74 Booster Pump Station #106 | | 2013 | Public Participation Plan | 50,000 | 50,000 | | | | | | | |
| | np Station 106 is scheduled to start construction in 2013 and be finished a 16 is a critical link between Pressure Zones 6 and 7 and allows water to be | | Consultant Design contract | , | 50,000 | 150,000 | | | | | | |
| zones. The facility is the oldest pump | station in the system and has deteriorated to the point that it is difficult to | maintain. It is | Construction of Pump Station | | | , | 1,500,000 | | | | | |
| | tion up to current safety standards and codes, to improve reliability of ope mployee safety. With the pump station upgrade some pipeline replacemen | | Construction Contract Administration | | | | 90,000 | | | | | |
| | acity. Improvement to this facility provides significant operational flexibility | | Pipeline Improvements | | | | 30,000 | 750,000 | 1,000,000 | | | |
| 80 | - | | Project Total | | 50,000 | 150,000 | 1,590,000 | 750,000 | 1,000,000 | - | - | - |
| 81 | La contra de la contra del la contra de la contra del la contra del la contra de la contra del la c | 2011 | | | | | | | | | | |
| 82 Paterson Street Building Res | model and Upgrade enter at Paterson Street is scheduled to start construction in 2014 and be f | 2014 | Public Participation Plan | | - | | 40,000 | | | | | |
| 84 service in early 2015. The existing fa | cility is outdated and cramped and in need of replacement. The vehicle ma | aintenance area | Architectural Services/Review | | | | 403,000 | | | | | |
| is too small for modern equipment ar | nd compromises employee safety. Building air quality and ventilation does | not meet | Materials Storage Building | | | | | 1,184,000 | | | | |
| | locker rooms and other functional storage spaces do not meet current negaterials handling building that will free up space in the vehicle storage build | | Furnishings and Equipment Construction Admin | | - | | | 252,000 | 350,000 | | | |
| 0/ | and a series of the series of | 3 | Construction Admin | | | | | 252,000 | 1 | | | |

| | Madison Water Utility | | | | | | | | | | | |
|--|---|---------------------|--|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Į | | | | | | | | | | | | |
| Quality and Reliability since 1892 | 2011-2030 Capital Improvem | ent Bud | get | | | | | | | | | |
| Madison | LInd | ated: June 18, | 2011 | | | | | | | | | |
| Water IIII Utility mwu | DRAFT | atod. Gano 10, | | \$ 18,118,300 | \$ 1,860,000 | \$ 21,263,300 | \$ 28,648,200 | \$ 26,097,460 | \$ 28,786,920 | \$ 30,438,980 | \$ 28,969,760 | \$ 26,974,400 |
| | | | | | 2244.2 | | | | | | | |
| | | Primary | | | 2011 Carryover | | | | | | | |
| Line Project improve efficiency during winter oper | Date/Description/Purpose | Year | Tasks | 2011 | to 2012 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| | auoris. | | Vehicle Maintenance Building | | | | | 3,849,000 | | | | |
| 88 89 | | | Construction Project Total | - | - | _ | 443,000 | 5,285,000 | 350,000 | - | - | |
| 90 | | | 110,000 10101 | _ | _ | _ | 445,000 | 3,203,000 | 330,000 | _ | _ | |
| 91 Zone 7 & 8 Supplemental Su | ipply - Whitney Way | 2015 | | | | | | | | | | |
| 92 The Water Master Plan recommends | s an additional well to serve Pressure Zones 7 and 8. The well project is so | cheduled to start | Public Participation Plan | | | 50,000 | | 25,000 | | | | - |
| 93 construction in 2015 and be finished | and in service in 2016. Adding a well to the area with the ability to pump v | vater to either | Property Purchase | | | | 250,000 | | | | | |
| | water supply capacity the area and significant operational flexibility to the L | | Drill test well | 130,000 | - | | 130,000 | 0=0.000 | | | | |
| | ticipation process will be used to site a well and identify water quality issu ntified in the Water Master Plan to address projected system demands an | | Drill production Well Consultant Design contract for | | _ | | | 658,000 | | | | |
| 96 needed system redundancy to the ar | | a providea | Unit Well | | | 80,000 | | 419,000 | | | | |
| , , , , , , , , , , , , , , , , , , , | | | Construction of Filter, Reservoir | | - | 00,000 | | 410,000 | | | | - |
| 97 | | | and Pump Station | | _ | | | | 5,240,000 | | | |
| | | | Consultant Contract | | | | | | | | | |
| 98 | | | Administration | | _ | | | | 314,000 | | 600,000 | 1,000,000 |
| 99 | | | Pipeline Improvements Project Total | | | 130,000 | 380,000 | 1,102,000 | 5,554,000 | | 600,000 | 1,000,000 |
| 101 | | | Project rotal | 300,000 | - | 130,000 | 360,000 | 1,102,000 | 5,554,000 | - | 600,000 | 1,000,000 |
| 102 East Side Supplemental Wat | ter Supply | 2016 | | | - | | | | | | | - |
| | ed an additional well on the east side that could provide water to Zones 6E | | Public Participation Plan | | - | | 53,000 | | | | | - |
| THE Water Master Flam recommission | Utility has property for this purpose on Hoepker Road and could also con | | Drill test well | | - | | | 134,000 | | | | |
| | icipation process is expected to developed the details of this project. This | | Drill Production Well | | | | | | 677,000 | | | |
| | 16 and be finished and in service by 2017. Development pressure on the | east side and the | | | _ | | | | 500,000 | | | |
| need for reliability and redundancy in | n the water system is the focus of this project. | | Construction of Unit Well, Filter, | | | | | | | | | |
| 107 | | | Reservoir and Pump Station | | | | | | | 6,244,000 | | |
| 107 | | | Consultant Contract | | - | | - | | | 0,244,000 | | |
| 108 | | | Administration | | | | | | | 375,000 | | |
| 109 | | | Pipelines | | | | | | | | | 750,000 |
| 110 | | | Project Total | - | - | - | 53,000 | 134,000 | 1,177,000 | 6,619,000 | - | 750,000 |
| 111 | <u> </u> | 0047 | | | _ | | | | | | | |
| 112 Zone 11 - Blackhawk Elevate | | 2017 | Public Participation Plan | | | | | | 56,000 | | | |
| Pressure Zone 11 serves the far wes develops and fills in construction of tl | st side of the distribution system and currently does not have storage capa he Blackhawk Elevated Reservoir will provide the needed emergency sup | nly storage and | Consultant Design contract | | | | | | 56,000 | 199,280 | | |
| | or the area. The reservoir is scheduled for construction in 2017 and will be | | Construction Services | | | | | | | 155,200 | 149,460 | |
| 2018. The Blackhawk Elevated Res | servoir project will upgrade the service from pumped to gravity. This proje | ct is identified in | Construct 750,000 gallon | | - | | | | | | , | |
| the Master Plan as part of the long to | erm needs in Pressure Zone 11. | | reservoir | | _ | | | | | | 2,491,000 | |
| | | | Reservoir piping improvements | | | | | | | | 050 000 | |
| 117 | | | Water Main Improvements | | - | | | | | | 250,000 | 500,000 |
| 119 | | | Project Total | - | - | - | | | 56,000 | 199,280 | 2,890,460 | 500,000 |
| 120 | | | | | | | | | 23,000 | .55,200 | 2,000,400 | |
| 121 Booster Pump Station 114 | | 2018 | | | | | | | | | | |
| | de the ability to move water from Pressure Zone 6W to Zone 8. This impro | ves the | Public Participation Plan | | | | | | | 58,000 | | |
| operational flexibility of the system at | nd provides the means of spreading out the capacity within the system. C | onstruction is | Consultant Design contract | | | | | | | | 124,000 | |
| | ished and in service by 2019. Construction of BPS 114 will benefit custom | ners through | Construction Services | | | | | | | | | 83,000 |
| gained system reliability and redunda | ансу. | | Construct BPS 114 | | - | | | | | | 900.000 | 1,382,000 |
| 126 | | | Water Main Improvements Project Total | | - | | | - | | 58.000 | , | 1,465,000 |
| 127 | | | Project Total | - | - | - | - | - | - | 50,000 | 1,024,000 | 1,400,000 |
| 129 Pressure Zone 9 Storage | | 2015 | | | | | | | | | | |
| | | 2010 | Public Participation Plan | | | | 53,000 | | | | | |

300,000

Public Participation Plan

Reservoir Property Purchase

130 Storage capacity within Pressure Zone 9 was identified in the Water Master Plan as being deficient. With the replacement of the elevated reservoir on Prairie Road in 2011 and 2012, this situation was partially mitigated. A second reservoir will resolve

| | | ı | T | | | | | | Ī | Ī | | |
|---|--|-----------------------|--|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 1 | Madison Water Utility | | | | | | | | | | | |
| Quality and Ediability since 1882 | 2011-2030 Capital Improvem | ent Bud | get | | - | | | | | | | |
| Madison Water | Und | lated: June 18. | 2011 | | | | | | | | | |
| Water Till Www | DRAFT | dica. Garie 10, | | \$ 18,118,300 | \$ 1,860,000 | \$ 21,263,300 | \$ 28,648,200 | \$ 26,097,460 | \$ 28,786,920 | \$ 30,438,980 | \$ 28,969,760 | \$ 26,974,400 |
| | | | | | , | | | . , , | | | | |
| | | Primary | | | 2011 Carryover | | | | | | | |
| Line Project | Date/Description/Purpose | Year | Tasks | 2011 | to 2012 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| | struction of the proposed reservoir is scheduled to start in 2015 and be co | | Consultant Design Services | | | | | 168,000 | | | | |
| | has developed significantly with not only residential but commercial and i have increased due to this development to the point that current facilities | | Construct 750,000 gallon elevated reservoir | | | | | | 2,105,000 | | | |
| | in proposes to construct storage on the west side of the zone to hydraulic | | Construction Contract | | _ | | | | 2,105,000 | | | |
| 134 system. | | | Administration | | | | | | 126,000 | | | |
| l | | | Reservoir Pipeline Construction | | | | | | 400.000 | | | |
| 135 | | | Project Total | _ | - | _ | 53,000 | 468.000 | 2,631,000 | _ | - 1 | |
| 137 | | | Project rotal | | - | | 33,000 | 400,000 | 2,031,000 | - | - | |
| 138 Pump Station 220 - Raymon | nd Road PS | 2019 | | | | | | | | | | |
| 139 Construction of a booster pump stati | ion on the west side to move water between Zones 9 and 10 is scheduled | | Public Participation Plan | | | | | | | | 60,000 | - |
| and be finished and in service by the | e end of the year. The <u>Pump Station 220 - Raymond Road Pump Station</u> | <u>n</u> project will | Dual Zone Pump Station Design | | | | | | | | | 445.000 |
| | essure Zones 9 and 10. The station will transfer water from Zone 7 to Zone ration will provide the ability to share water supply resources between zone. | | Dual Zone Pump Station | | _ | | | | | | | 115,000 |
| | ional flexibility. The project will also provide supply redundancy to the far v | | Construction | | | | | | | | | |
| 142 | | | PRV station | | _ | | | | | | | |
| 143 | | | Booster Station Piping Upgrade | | | | | | | | | |
| 143 | | | Project Total | _ | - | _ | - 1 | | - | _ | 60.000 | 115,000 |
| 145 | | | 110,0011014 | | | | | | | | 55,555 | 110,000 |
| 146 Iron and Manganese Filter at | t Well 19 | 2016 | | | | | | | | | | |
| | nese Filter at Well 19 will address the water quality issues and resulting of | | Public Participation | | | | | | 60,000 | | | |
| fluching being required to minimize the | ell 19. The accumulation of iron and manganese solids in the system resu the risk of colored water reaching customers. A filter would improve finishe | | UW 19 - Filter Design | | | | | | | | | |
| and reduce the need for flushing in the | the Well 19 service area. The project will benefit existing customers in the | | Documents Property Purchase | | _ | | | | 296,000 | | | |
| area The budget anticipates constru | uction of a filter in 2016 following a significant public participation process | and evaluation. | Construction Admin Services | | _ | | | | | 197,000 | | |
| 130 | | | Well 19 Fe and Mn Filter | | - | | | | | 157,000 | | - |
| 151 | + | | Construction | | | | | | | 3,290,000 | | |
| 152 | | | Project Total | - | - | - | - | - | 356,000 | 3,487,000 | - | - |
| 153 154 Iron and Manganese Filter at | at Wall 20 | 2018 | | | _ | | | | | | | |
| | rese Filter at Well 30 will address the water quality issues and resulting co | | Public Participation | | - | | + | | | | 60,000 | |
| customer complaints that exist at We | ell 30. The accumulation of iron and manganese solids in the system resu | lts in annual | UW 30 - Filter Design | | | | | | | | 00,000 | |
| | the risk of colored water reaching customers. A filter would improve finishe | | Documents | | | | | | | | 320,000 | |
| and reduce the need for annual flush following a significant public participa | hing in the Well 30 service area. The budget anticipates construction of a ation process and evaluation. | iiilel III 2019 | Property Purchase | | | | | | _ | _ | | |
| 158 | | | Construction Admin Services | | | | | | | | | 214,000 |
| 159 | | | Well 30 Fe and Mn Filter Construction | | | | | | | | | 3,560,000 |
| 160 | | | Project Total | - | l - | - | - 1 | | - | - | 380.000 | 3,774,000 |
| 161 | | | | | | | | | | | 223,200 | -,,500 |
| 162 Booster Pump Station 129 R | Reconstruction | 2016 | | | | | | | | | | |
| | booster pump station 129 is scheduled for 2016. This project will replace | | Public Participation Plan | | | | | 55,000 | 100 | | | |
| | ell 29 site in 1990. Pump Station 129 will continue to transfer water from Zo s operation will provide supply and fire flow capability to the far east side o | | Design Construction Services | | | | | | 102,000 | 77.000 | | |
| | d reliability and flexibility of operations. | i uic sysiciii. Il | Water Main Improvements | | | | | | | 900,000 | | |
| 167 | | | Construct BPS 129 | | | | | | | 1,277,000 | | |
| 168 | | | Project Total | - | - | - | - | 55,000 | 102,000 | 2,254,000 | - | - |
| 169 | | 0000 | | | | | | | | | | |
| 200 Zone 10 Far West Elevated F | Reservoir | 2020 | Dublic Porticipation Plan | | - | | | | | | | 61 000 |

2012 Long Range Cap Bdgt Printed: 11/17/2011

61,000

Public Participation Plan

Consultant Design contract
Construction Services

Construction of the Zone 10 Far West Side Elevated Reservoir is scheduled for 2020 and will follow a significant public participation process and evaluation. The *Zone 10 Far West Elevated Reservoir* project will provide additional water storage capacity within Pressure Zone 10. As Pressure Zone 10 has developed with not only residential but commercial and

| 1 | Madison Water Utility | | | | | | | | | | | 1 |
|---|--|-----------------|---|------------------------|----------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Quality and Reliability since 1882 | 2011-2030 Capital Improvement | ont Bude | not | | | | | | | | | |
| Madicon | 2011-2030 Capital Improvem | ent buuţ | geı | | | | | | | | | |
| Water IIII | Upda | ated: June 18, | 2011 | | | | | | | | | |
| Utility mwu | _DRAFT | | Annual Totals | \$ 18,118,300 | \$ 1,860,000 | \$ 21,263,300 | \$ 28,648,200 | \$ 26,097,460 | \$ 28,786,920 | \$ 30,438,980 | \$ 28,969,760 | \$ 26,974,400 |
| | | Primary | | | 2011 Carryover | | | | | | | |
| Line <i>Project</i> | Date/Description/Purpose | Year | Tasks | 2011 | to 2012 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| | vated tank on High Point Road no longer provides sufficient emergency re | | Construct 750,000 gallon | | | | | | | | | |
| Providing minimum fire flow requirem project is identified in the Master Plai | nents to this area of the distribution system is necessary to meet minimum n. | Standards. This | reservoir Reservoir piping improvements | | | | | | | | | |
| 175 | | | | | | | | | | | | |
| 176 | | | Water Main Improvements | | | | | | | | | C4 000 |
| 177 178 | | | Project Total | - | - | - | - | - | - | - | - | 61,000 |
| Near West Side Water Suppl | ly Project | 2021 | | | | | | | | | | |
| | scheduled for 2021. The Water Master Plan has identified this well project | | Public Participation Plan | | | | | | | | 60,000 | |
| | 6 and 7. The <i>Near West Side Water Supply Project</i> project will provide a The final location of the proposed well will be determined following a signi | | Drill Test Well Drill production Well | | | | | | | | | 151,000 |
| participation process and evaluation | | iicani public | Consultant Design contract for | | | | | | | | | |
| | | | Unit Well, Reservoir and Pump | | | | | | | | | |
| 183 | | | Station Construction of Unit Well. Filter. | | | | | | | | | |
| | | | Reservoir and Pump Station | | | | | | | | | |
| 184 | | | 0 | | | | | | | | | |
| 185 | | | Construction Contract Administration | | | | | | | | | |
| | | | Water Main Hydraulic | | | • | | | | | | |
| 186 | | | Improvements | | | , | | | | | | 454.000 |
| 187 188 | | | Project Total | - | - | - | - | - | - | - | 60,000 | 151,000 |
| 189 Booster Pump Station 320 | | 2024 | | | | • | | | | | | |
| 190 This project is scheduled to be const | ructed in 2024. Booster Pump Station 320 project will provide the Utility | | Public Participation Plan | | | | | | | | | |
| | in will transfer water from Zone 6 to Zones 7 and 8 and back again through arce of supply to the west side of the system. It will benefit customers throu | | Consultant Design contract | | | | | | | | | |
| operation will provide flexibility in sou 193 system reliability. | arce of supply to the west side of the system. It will benefit customers throu | igii gaiileu | Construction Services Construct BPS 320 | | | | | | | | | |
| 194 | | | Water Main Improvements | | | · | | | | | | |
| 195 | | | Project Total | - | - | - | - | - | - | - | - | - |
| 196 197 Unit Well No. 10 - Fe and Mn | Mission | 2025 | | | | | | | | | | |
| | scheduled for 2025. <i>Unit Well No. 10 - Fe and Mn Mitigation</i> will address | | Public Participation | | | | | | | | | |
| quality issues that exist at Well 10 du | ue to iron and manganese levels that exceed the EPA secondary standard | . Due to the | Pilot Study | | | | | | | | | |
| | ntrations, the well has been placed on supply reserve status. Removing th the well to be returned to year around service. The project will benefit exi | | Deep Well reconstruction | | | | | | | | | |
| | r the well to be returned to year around service. The project will benefit exi ng additional supply redundancy and reliability and it would bring the wate | | UW 10 - Filter Design Construction Administration | | | | | | | | | |
| 10 up to minimum Utility water quality | | , , | Services | | | | | | | | | |
| 202 | | | Construction of Unit Well No. 10 | | | | | | | | | 7 |
| 203 | | | Fe and Mn Filter Project Total | - | - | - | - | | - | - | - 1 | |
| 205 | | | | | | | | | | | | |
| 206 SCADA System Upgrade | | Ongoing | | | | | | | | | | |
| The supervisory control and data acc requires regular and routine upgrade | quisition (SCADA) system is a key component to system operation. The co | mputer system | System Wide SCADA Upgrade to PLC (2007 - 2010) | 30,000 | | 32,000 | 34,000 | 36,000 | 38,000 | 250,000 | 263,000 | 276,000 |
| 208 requires regular and routine upgrade | S to maintain effectiveness. | | Project Total | 30,000 | - | 32,000 | 34,000 | 36,000 | 38,000 | | 263,000 | 276,000 |
| 209 | | | | ļ | | , | Pipe Replacem | ent Reinvestment Goal | 13.32 | | | Pipe Replacer |
| 210 Infrastructure System Plan I | - | Ongoing | Total Replacement Budget | 7,310,000 | | 7,816,000 | 7,869,000 | 9,050,000 | 9,593,000 | 10,169,000 | 10,780,000 | 11,426,000 |
| | system replacement and upgrade program that provides for annual main II miles of pipe in the next 40 years to renew the system. A planned annual | | Reconstruction Projects Resurfacing Projects | 3,564,000 3,746,000 | | 3,689,000 3,877,000 | 3,837,000 4,032,000 | 4,413,000 4,637,000 | 4,678,000 4,915,000 | 4,959,000 5,210,000 | 5,257,000 5,523,000 | 5,572,000 5,854,000 |
| spending to accomplish this goal by 2 | 2050 will be continued. The Útility's Water Master Plan also recommends l | nydraulic | East Washington Improvements | | | 0,077,000 | -1,002,000 | -1,007,000 | 7,010,000 | 3,210,000 | 5,525,000 | 0,004,000 |
| | posed to significantly increase pipeline investment for hydraulic needs in 2 5 years to meet Master Plan recommendations. | 2015 and then | Name Dia all' de Constantin | 700.000 | | 250,000 | 202 202 | 4.007.000 | 4.150.000 | 4 000 000 | 4 000 000 | 4 400 000 |
| 214 increase this budget over the next 15 | years to meet waster Plantecommendations. | | New Pipeline Construction | 788,000 | | 835,000 | 893,000 | 1,027,000 | 1,150,000 | 1,236,000 | 1,329,000 | 1,429,000 |

| | i | Madison Water Utility | | | | | | | | | | |
|------------|-------------------------------|--|--|---------------|----------------|---------------|---------------|--------------------------|----------------------|----------------------|----------------------|----------------------|
| | ty and Beliebility since 1882 | 2011-2030 Capital Improvement Bud | get | | - | • | | | | | | |
| M | ladison 🚐 | • • | | | _ | | | | | | | |
| W | ater IIII | Updated: June 18, | 2011 | | _ | | | | | | | |
| | tility mwa | DRAFT | Annual Totals | \$ 18,118,300 | \$ 1,860,000 | \$ 21,263,300 | \$ 28,648,200 | \$ 26,097,460 | \$ 28,786,920 | \$ 30,438,980 | \$ 28,969,760 | \$ 26,974,400 |
| | | | | | | | | | | | | |
| | | Primary | | | 2011 Carryover | | | | | | | |
| Line | Project | Date/Description/Purpose Year | Tasks | 2011 | to 2012 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| | 4 | | Long Range Master | | | | | | 0.400.000 | 0.040.000 | 0.050.000 | 0.470.000 |
| 215 216 | - | | Plan Pipelines Upgrade Security Upgrades | 191,000 | _ | 199.000 | 207.000 | 215.000 | 2,139,000 224,000 | 2,246,000 233.000 | 2,358,000 242.000 | 2,476,000 252.000 |
| 217 | | | Project Total | 8,289,000 | | 8.850.000 | 8.969.000 | -, | 13,106,000 | 13.884.000 | 14,709,000 | 15.583.000 |
| 218 | | | 1 Toject Total | 0,203,000 | | 0,030,000 | -,, | Jpgrade Investment Goal | 3.70 | 13,004,000 | 14,703,000 | Pipe Hydraulic U |
| 219 | Misc. Pump Station/PRV/Facil | ity Projects Ongoing | | | | | | ograde Investment Actual | 3.29 | | | Pipe Hydraulic Up |
| 220 | • | us minor improvement projects that are necessary to sustain the established level of | PRV Station Vondron Rd | 50,000 | 50,000 | | | 9 | 0,00 | | | |
| 221 | | e projects are itemized under a single heading. | PRV Station Gammon Rd | , | _ | | | 50,000 | | | | |
| | | | Upgrade Booster Pumps | | | | | | | | | |
| 222 | | | @ UW 20 | 350,000 | 350,000 | | | | | | | |
| 223 | | | Upgrade Booster Pumps @ Res. 115 | | _ | | 175,000 | | | | | |
| | | | Water Main Improvements | | | | === | | | | | |
| 224 | 4 | | @ BPS 115 PRV @ 126 | | | | 750,000 | | 50,000 | | | |
| 225 226 | - | | Generator @ UW 26 | | 235,000 | | | | 50,000 | | | |
| 227 | = | | Misc. Projects | | | 350,000 | 350,000 | 368,000 | 386,000 | 405,000 | 500,000 | 525,000 |
| 228 | | | Consultant Services | | | 42,000 | 153,000 | 50,160 | 52,320 | 48,600 | 60,000 | 63,000 |
| 229 | | | Project Total | 1,831,200 | 724,000 | 392,000 | 1,428,000 | 468,160 | 488,320 | 453,600 | 560,000 | 588,000 |
| 230 | | | | | | | | | | | | |
| 231 | System Wide | Ongoing | | | | | | | | | - | - |
| 232 | | d in the Capital Budget that cover a variety of repair, rehabilitation, and upgrade | Meter Program | 50,000 | | | | 383,000 | 391,000 | 399,000 | 407,000 | 415,000 |
| 233 | | nagement Plan recommends a reinvestment of \$2.5 (2005 dollars) in system facilities to | Safety Additions to the Plant | 25,000 | _ | 26,900 | 28,900 | 31,100 | 33,400 | 35,900 | 38,000 | 40,000 |
| 234 | | This would include Unit Well, pump station, and reservoir improvements and renewal. If for this purpose be started in 2014 and then increased annually to raise it to the | Olin Admin Office Maintenance | 16,600 | | 17,400 | 18,300 | 19,200 | 20,200 | 21.200 | 22,300 | 23,400 |
| 234 | | poses, these projects are itemized under a single heading. | Unit Well Rehab | | | 116,000 | 125,000 | 134,000 | 144,000 | 155,000 | 167,000 | 180,000 |
| 255 | | | Long Range Pumping and | , | | 110,000 | 120,000 | 10-1,000 | 144,000 | 100,000 | 107,000 | 100,000 |
| | | | Storage Facility Renewal | | | | | | | | | |
| 236 | | | Projects | | | | | 500,000 | 575,000 | 661,000 | 760,000 | 874,000 |
| 237 | _ | | General Consultant Services | 55,000 | | 61,000 | 67,000 | 74,000 | 81,000 | 89,000 | 98,000 | 108,000 |
| 238 | | | Paterson Vehicle Storage Bldg Maintenance | 30,000 | | 32,000 | 34,000 | 37,000 | 40,000 | 43,000 | 46,000 | 49,000 |
| 238 | - | | Storage Bldg Maintenance Paterson Office | | | 32,000 | 34,000 | 37,000 | 40,000 | 43,000 | 46,000 | 49,000 |
| 239 | | | and Shop Maintenance | 53,000 | | 56,000 | 59,000 | | | 20,000 | 21,000 | 22,000 |
| 240 | | | Project Total | 337,600 | - | 309,300 | 332,200 | 1,178,300 | 1,284,600 | 1,424,100 | 1,559,300 | 1,711,400 |

18,118,300

1,860,000

Total Estimated Annual Costs

241

242

2012 Long Range Cap Bdgt Page 6 of 6 Printed: 11/17/2011

28,648,200

21,263,300

26,097,460

28,786,920

30,438,980

28,969,760

26,974,400