

City of Santa Fe Water Conservation and Drought Management Plan 2015: *2020 Addendum*



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The Santa Fe residents to who took time out of their schedules to participate in the public input process.



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Executive Summary

The primary goal of the 2020 Addendum was the incorporation of public input to develop the Water Conservation Goals – Section 4.

This addendum (2020 Addendum) to the City of Santa Fe Water Conservation and Drought Management Plan 2015 (15 Plan) exists to update three sections of the City of Santa Fe Water Conservation and Drought Management Plan 2015: the Water Conservation Goals, Gallons per Capita per Day (GPCD) water usage and findings of the American Water Works Association’s Non-Revenue Water Audit (AWWA Audit). This report will be submitted to the New Mexico Office of the State Engineer (NMOSE) in fulfillment of permit requirements and consistent with New Mexico’s Water Conservation Planning Guide for Public Water Suppliers, also known as Technical Report 53.

Over the past five years, Santa Fe’s GPCD has remained relatively flat and low between 87 and 95 GPCD with an increase in 2018 due to a dry winter and early onset of the irrigation season. This value makes Santa Fe a regional leader in water conservation.

AWWA audit findings, which quantify both the amount of non-revenue water for a year as well as the confidence level of that finding and then makes recommendations for improvements, show low non-revenue water (5-10%) and a low confidence interval which means that more metering is needed to be sure of the outcome. The AWWA audit’s recommendations for improvement are focused on increasing the confidence interval through more detailed metering including backflow prevention, meter calibration, and master metering.

The primary goal of the 2020 Addendum was the incorporation of public input to develop the Water Conservation Goals – Section 4. Incorporation of public input prior to updating this addendum was a primary goal. To develop the goals for this addendum, Water Conservation Office (WCO) staff conducted a series of public meetings designed to collect public input. The full extent of this public input is included as Exhibit D and the input is organized into a Public Input Matrix of initiatives and strategies for addressing the most pressing concerns. The Public Input Matrix is a framework for evaluating projects and opportunities in terms of their consistency with the goals identified through public outreach and is included as Exhibit A. Exhibit C documents the public process used.

A second priority in setting Water Conservation Goals was to find synergy with ongoing or planned City initiatives. Using the framework from the Public Input Matrix, WCO staff evaluated many existing City initiatives and planning documents for points of intersection where projects could augment ongoing City efforts by adding value consistent with the public input obtained. The resulting Planning Matrix, included as Exhibit B, identifies some opportunities for the WCO to add value to ongoing projects in other City departments and provides a process for identifying opportunities as they arise.

The third component of the Water Conservation Goals in this 2020 Addendum was to continue successful projects, such as the rebate program and the Water Conservation Scorecard. The WCO scorecard has been an effective tool to guide, measure, and report on WCO projects and the 5-Year Scorecard, included as section 4.3.2 this report, will be the primary guidance document for the WCO during the planning period. Individual scorecards, starting with the 2020 scorecard – section 4.3.3 – will be developed annually based on the Water Conservation Goals in the 5-Year Scorecard and with public input through an annual meeting and the Public Input Matrix.

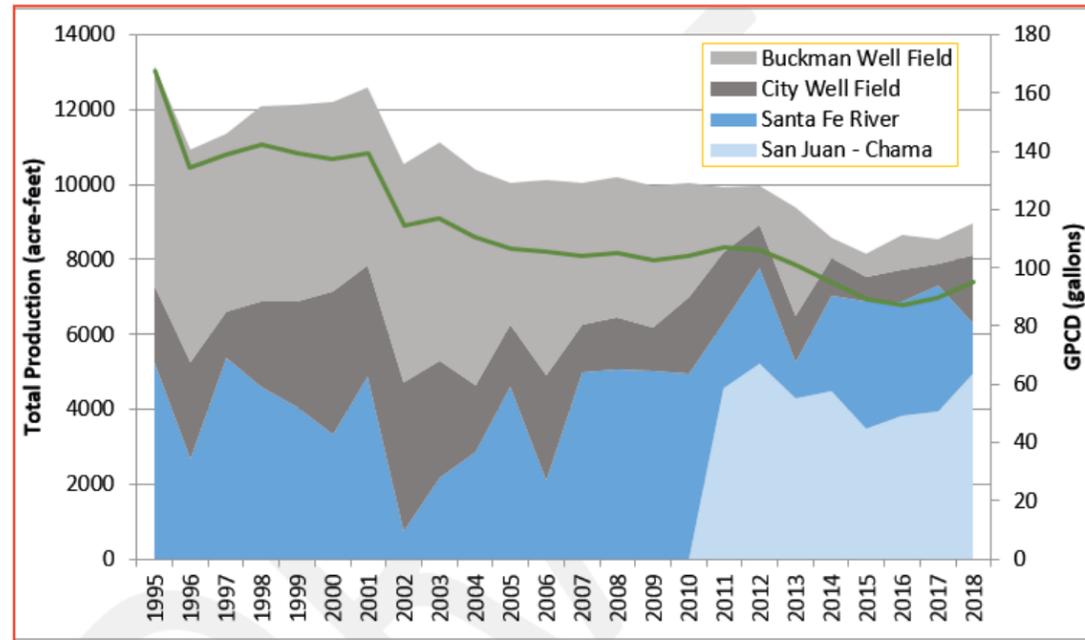
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1 – Introduction

This addendum is divided into four sections: the Introduction, Per Capita Demand, Non-Revenue Water Loss, and Water Conservation Goals. This document is being submitted to the New Mexico Office of the State Engineer (NMOSE) in compliance with permit conditions. Each section of the report is intended as an update to the corresponding section in the 15 Plan, which are based on the guidelines developed by the NMOSE and contained in New Mexico’s Water Conservation Planning Guide for Public Water Suppliers, also known as Technical Report 53.

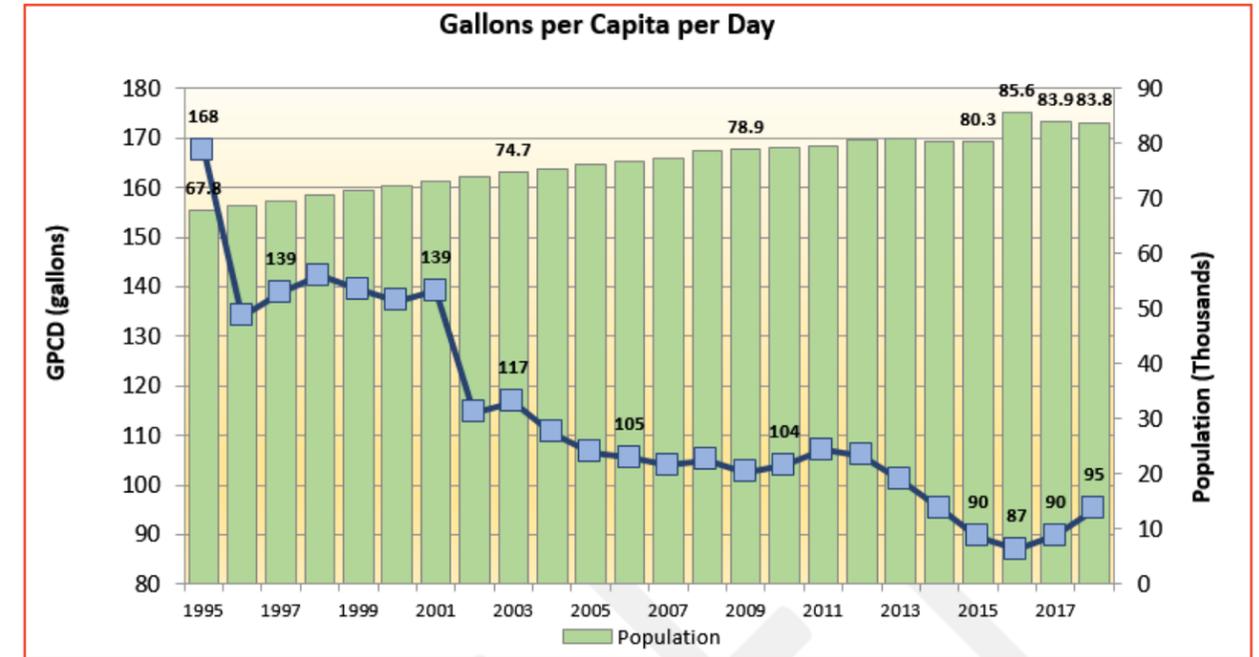
2 – Per Capita Demand



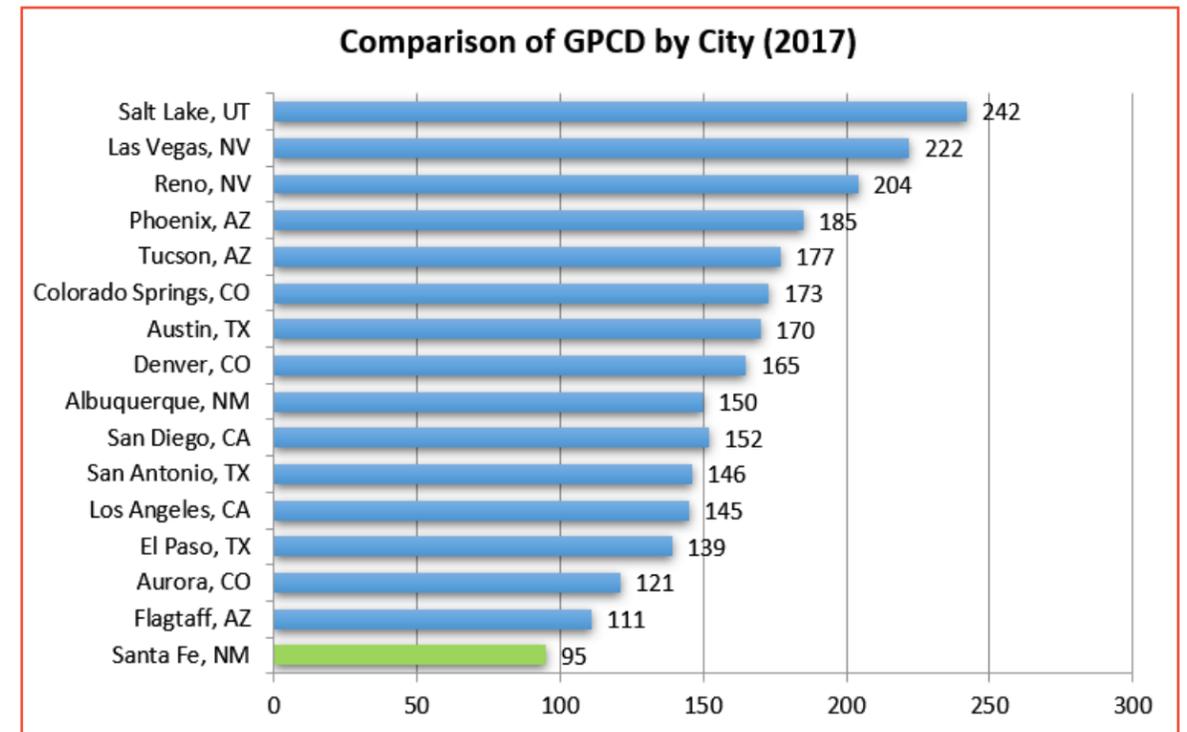
The City of Santa Fe purchased the Sangre de Cristo Water Company from Public Service Company of New Mexico in 1995 and almost immediately faced a significant drought and responded with water restrictions and the creation of the Santa Fe WCO. The WCO has, in 20+ years in existence, pursued numerous demand-side methods for water conservation and water conservation education and has contributed to an overall demand reduction of 30%.

GPCD is calculated as part of NMOSE permit conditions but also as a way to target different population sectors for different water conservation projects. For many years Santa Fe’s GPCD dropped annually and 2018 marks the second consecutive year that the GPCD has increased. The 2017 increase was likely the result of a change in practice for determining the total population – a move from the higher estimates provided by the US census to a more conservative value based on annual estimates. In 2018 the GPCD increased because total water supply increased to meet increased demand associated with drought.

In 20+ years, the Santa Fe Water Conservation Office pursued numerous demand-side methods for water conservation and water conservation education and has contributed to an overall demand and GPCD reduction of over 30%.

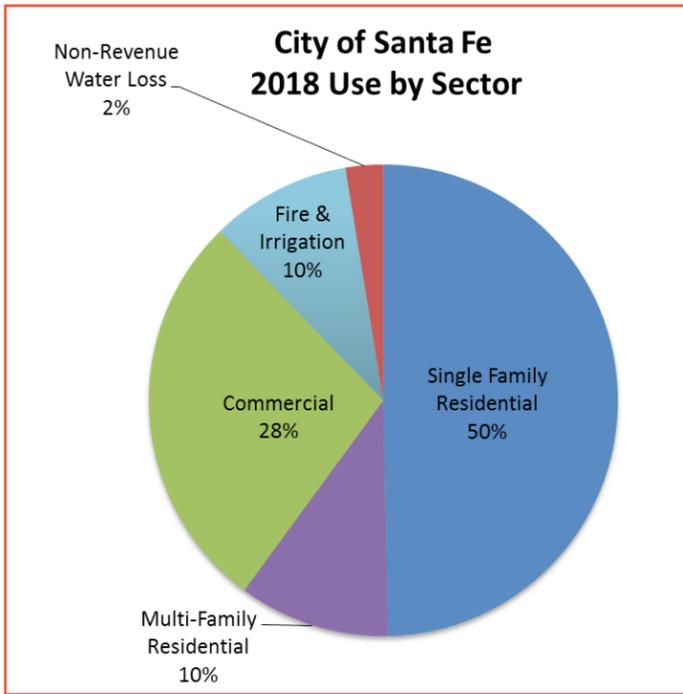


2.1 Total System Per Capita



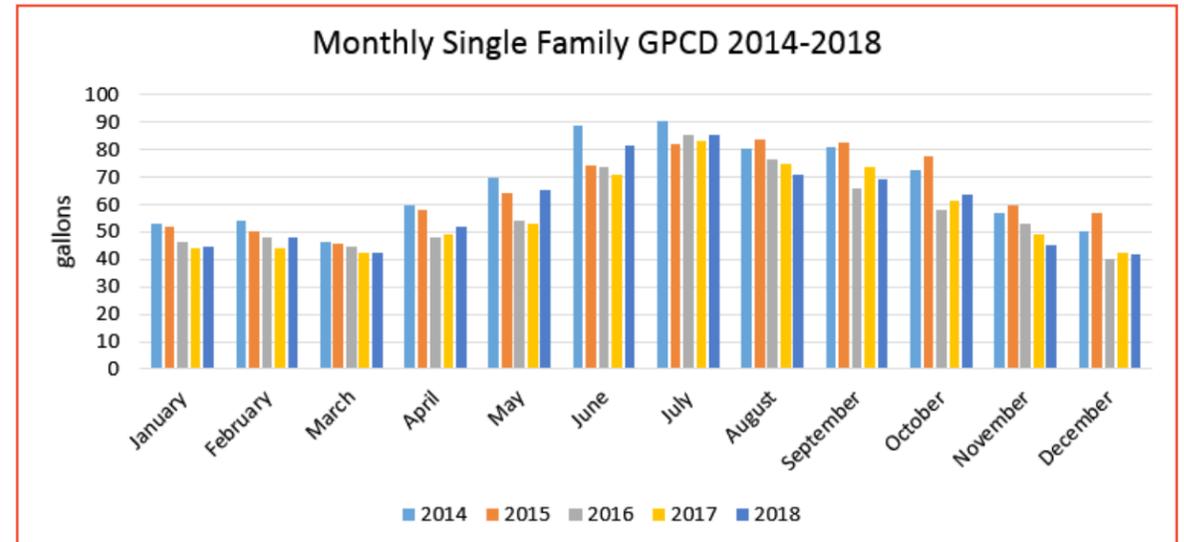
The GPCD for 2018 was 95 for the City of Santa Fe which is significantly lower than most southwestern cities. The previous year, the GPCD was calculated at 90. There are two primary components to the GPCD calculation: total water supply and population. Water imported to the City from the Buckman Direct Diversion, and exported from the City of Santa Fe to Santa Fe County, are included in the determination of total water supply.

In terms of total water supply, significant drought affected Santa Fe in 2018 resulting in an earlier-than-usual spring and summer which lengthened the high demand season, shifted the peak demand month



from July to June, and resulted in increased total water supply from 2.75 to 2.9 billion gallons.

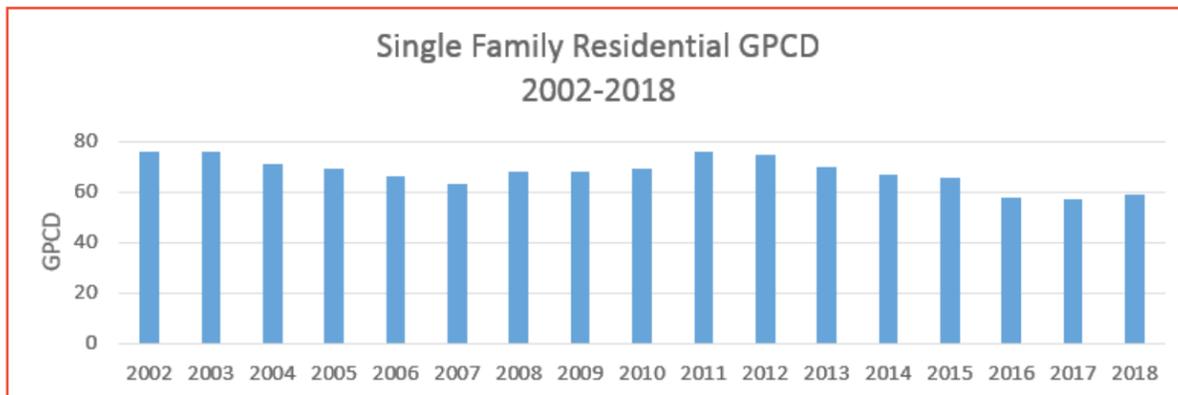
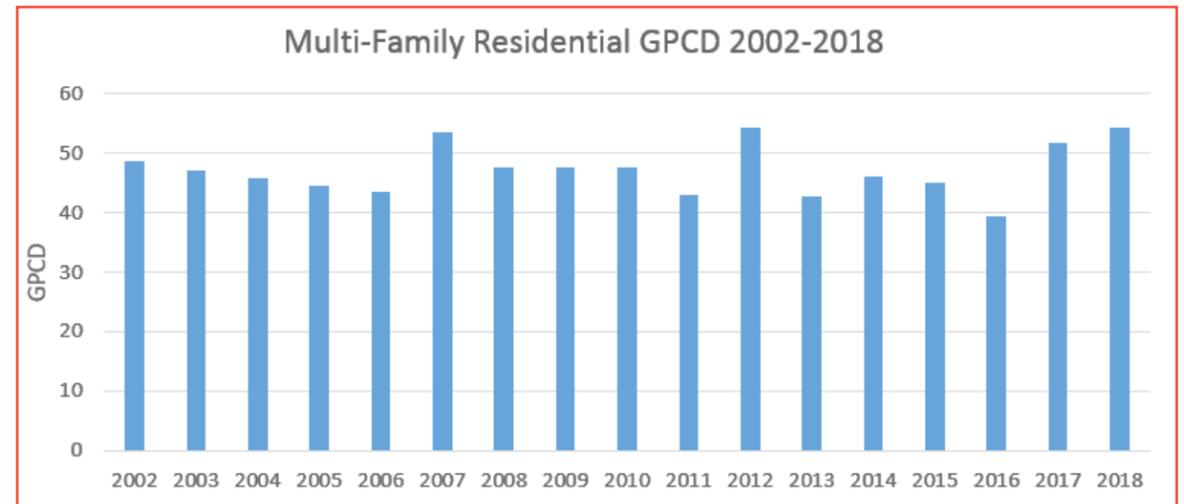
In terms of population, based on input from the Water Conservation Committee (WCC), PEPANNRES (annual estimates of the resident population) were used instead of census data because it is an annual estimate while our local census data is based on growth projections that over-estimate current population and artificially lower the GPCD. The total population considered for the 2017 GPCD was 83,878 and the 2018 value was 83,776. One of the goals over the next five years is to revisit the GPCD calculations between 2015-2020 once the 2020 Census data becomes available to inform how best to determine GPCD moving forward and to make corrections if needed.



2.2 Single Family Residential Per Capita

The NMOSE methodology calculates a per capita for single family homes by taking the number of residential single family connections in the billing system times the person per household calculated from the US Census. Unlike total system GPCD, which considers the entire population of Santa Fe, single family GPCD only considers the portion of the population served by single family residential meters. For this reason, summing the GPCD's by sector does not equal the total system GPCD.

2.3 Multi Family Residential Per Capita



Winter use reached a low of 40 gallons in December of 2016. Outdoor use is considered to be the difference in use between the winter baseline (November – February) and the level of use during the outdoor watering season (May – August). Outdoor use reached a low of 26 gallons in 2016 and a high of 31 gallons in 2018.

The multi-family residential (MFR) per capita primarily represents apartment complexes, condos, retirement communities and complexes that consist of two or more housing units per meter. The population calculation relies on census data to determine the number of multi-family units within the City. A unit includes each separate apartment or condo within a complex. This is different than the SFR population which is determined by single family residential connection. The population in these multi-family units is calculated by number of units times census persons per household minus a vacancy rate. The per capita is determined by dividing the population into the volume of water diverted to those categorized by the City as multi-family accounts.

Unlike total system GPCD, which considers the entire population of Santa Fe, multi-family GPCD only considers the portion of the population served by multi-family meters. For this reason, summing the GPCD's by sector does not equal the total system GPCD.

MFR GPCD has varied significantly over the past five years due, to some extent, to ongoing refinement of the MFR customer category in the City of Santa Fe utility billing system. The customer class was created in 2006 and as mis-categorized units are discovered they have gradually been reclassified as MFR. Another anomaly is the 2015 use, which appears to be low throughout the calendar year

Unlike total system GPCD, which considers the entire population of Santa Fe, multi-family GPCD only considers the portion of the population served by multi-family meters.

with a significant spike in use in December. The anomalous pattern of use in 2015 is the result of meter replacements made in the City during that year. Through most of 2015, estimates – instead of meter reads – were used to determine water use at many meters and the estimates were low. The high level of water use in December 2015 was the result of high billing to correct the under-estimates used earlier in that year. Due to the inaccuracy of monthly billing data in 2015, that year is not considered in the evaluation of indoor / outdoor use for MFR.

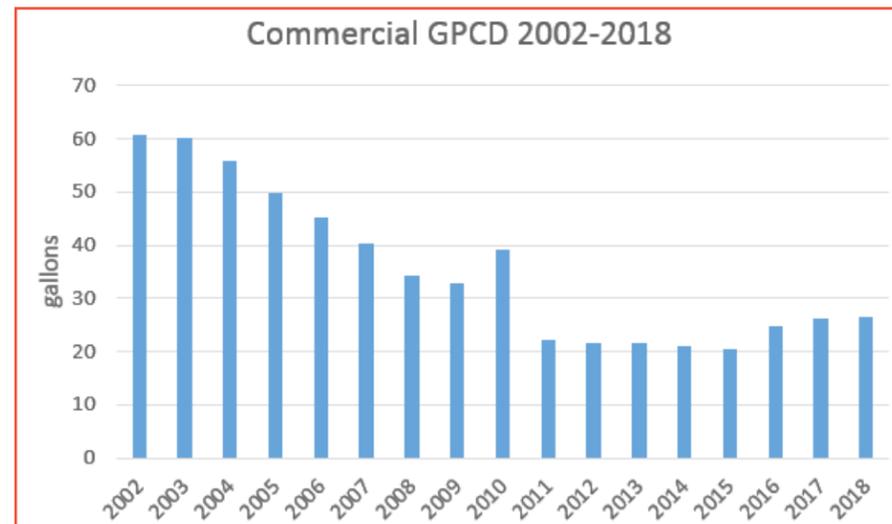
Winter use reached a low of 32 gallons in December of 2016. Outdoor use is considered to be the difference in use between the winter baseline (November – February) and the level of use during the outdoor watering season (May – August) and is generally lower per person in MFR than in SFR. Outdoor MFR use reached a low of 12 gallons in 2016 and a high of 18 gallons in 2018.

2.4 Industrial/Commercial/Institutional Per Capita

In the City of Santa Fe, the Institutional, Commercial, and Industrial (ICI) Sector includes primarily commercial accounts as well as other metered water use including irrigation and fire meters. Traditional institutional categories, such as schools, churches or government buildings are classified as commercial with a few of the smaller users falling into the residential category. An

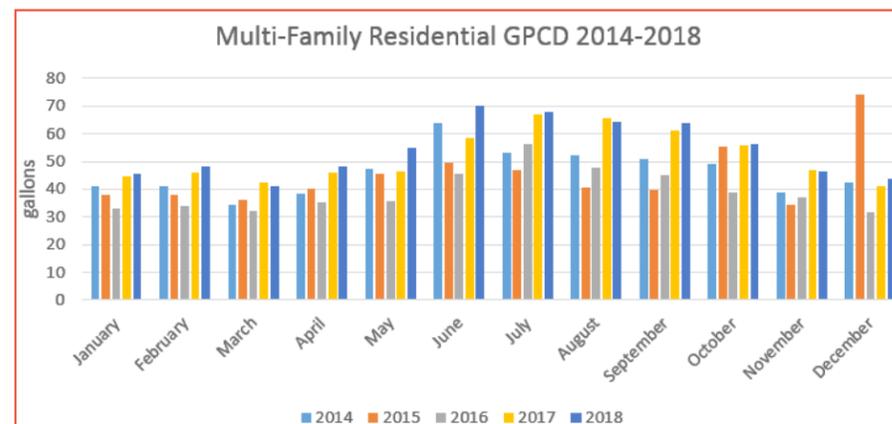
institutional designation does not exist within the current billing system. All of these categories are under review as the City is upgrading its billing system.

Since the publication of the '15 Plan, commercial water use has remained low with a slight and sustained increase in 2016.



2.5 Reuse

Reuse refers to water that has been collected through the sewer system and treated at the wastewater treatment plant before being reused for irrigation. A reuse GPCD is calculated based on the amount of reuse water that is sold, rather than released into the lower Santa Fe River, relative to the total population. For 2018 the GPCD for reuse water was 13.0. Wastewater reuse is not used in the overall calculation of the City's total GPCD.

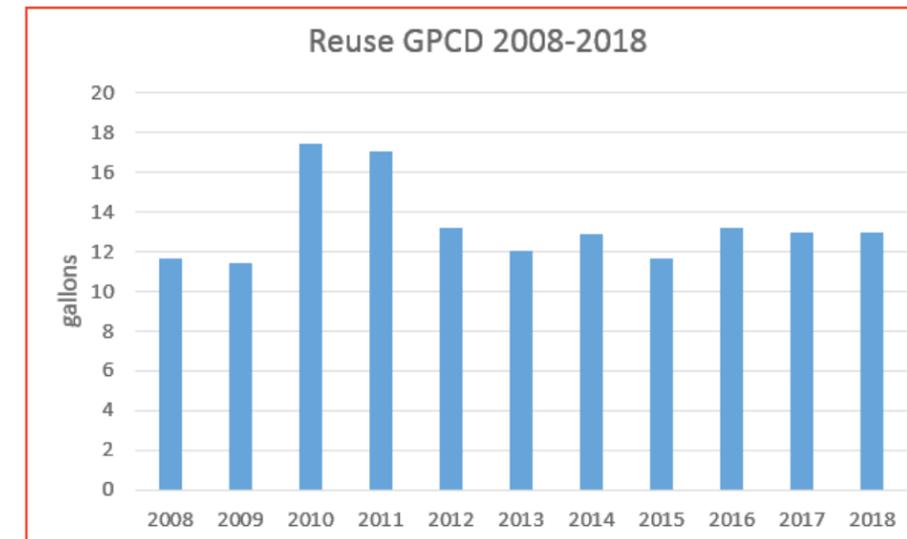


3 Water Loss / AWWA Audit

The City of Santa Fe conducts a non-revenue water audit using an established methodology developed by the American Water Works Association (AWWA). Water audits are designed to help a utility reduce water losses and associated revenue losses, thereby improving the utility's performance. The AWWA audit is the industry source for guidance on audits and has published Water Audits and Loss Control Programs: Manual of Water Supply Practices which provides a methodology that evaluates water loss in two ways: how much water was lost based on data collected, and how reliable the collected data is from which water loss is calculated.

3.1 Summary of Water Loss Audits 2014-2018

Over the 5-year period from 2014 through 2018, The City of Santa Fe has reduced non-revenue water levels and improved data validity primarily by addressing metering inadequacies and the installation of pressure reducing valves. In particular, the implementation of an Automated Metering Infrastructure (AMI) project in 2016 has increased confidence in billed water to customers in addition to providing detailed usage



information to help customers and WCO staff to identify leaks. EyeOnWater provides access for customers and staff to water use in hourly increments from computers and smart devices and offers customers the option of setting leak alerts which will email the customer in the event of a leak being detected.

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The table on the next page shows the results of the AWWA audit including improvements in both data validity and non-revenue water. Revenue water is water that is sold to customers, non-revenue water is water that is produced by the supplier but is not sold due to losses or meter inaccuracies, and data validity is a measure of the accuracy and detail available in making this determination based on production- and customer-meters.

3.2 2018 Non-Revenue Water

Revenue water accounted for 92.3% of total adjusted production in 2018 and non-revenue water accounted for 7.7%. The AWWA audit further breaks down this 7.7% - or 231.74 million gallons – into the following categories: 71.6% potential real water loss, 12.2% total apparent losses, and 16.2% unbilled unmetered water use. For this determination, total production was adjusted by adding 5% of the volume from own sources, and 0.5% of the imported water to account for meter error. The meter error adjustment is an estimate based on meter testing from the previous year.

3.3 Data Validity

The accuracy of a water audit depends on the validity of the data that are the basis of the audit and this is reflected in the Data Validity score for each year's audit. The data validity score can be used to

	2014	2015	2016	2017	2018
Revenue Water (mg)	2564.90	2477.11	2641.56	2692.65	2763.16
Non-Revenue Water (mg)	267.77	207.33	159.158	46.72	231.80
Non-Revenue (%)	9.5%	7.7%	5.7%	4.6%	7.7%
Data Validity (%)	58%	59%	65%	67%	67%

evaluate the reliability of the data and to recommend measures a water system should take to improve the accuracy and comprehensiveness of the data.

Meter error cannot be estimated accurately without performing field testing. Meter testing for the City of Santa Fe has been conducted on an annual basis by PureOps, but the testing was not done in calendar year 2018. Reinstatement of a metering contract and regular testing and calibration of production and customer meters was strongly recommended as a way of improving the City's data validity score.

3.4 Recommendations

Recommendations on how to improve data validity and more closely target specific sources of non-revenue water are developed each year along with the report and have been primarily focused on improved metering over the past five years. Recommendations for improvement in 2019 include:

- Annual testing of large meters
- Replace any Buckman Direct Diversion (BDD) meters that are not performing well, and install the three new master meters needed to implement the BDD master meter agreements with Santa Fe County that were entered into in 2016
- Continue to test a sampling of customer meters each year, repairing or replacing any meters that are found to be faulty - going forward, a program should be developed that combines meter testing with meter replacements
- Develop a backflow program and designate staff to support it
- Work collaboratively with the parks and recreation department to assess current operational practices and identify any opportunities for improvement and/or conservation
- Continue implementing the water line replacement program that is currently underway, replacing critical infrastructure with the highest consequence of failure
- Continue implementing Supervisory Control and Data Acquisition (SCADA) systems to monitor pressures and flows

- Begin to assemble an economic business case for long-term needs based on improved data becoming available through the water audit process
- Establish long-term apparent and real loss reduction goals (+10-year horizon)
- Maintain operating pressures between 40 to 80 psi
- Expand the leak detection program by adding staff to more fully address the daily Beacon software "high / low report" that lists continuous flows - the City should continue implementing physical leak detection technologies

4 2020-2025 Water Conservation Goals

The WCO has been successful with many ongoing projects and this 2020 Addendum is an opportunity to re-envision the goals and programs of the office with the hindsight gained from five more years of operation. There are three sources for the 2020-2025 Water Conservation Goals: public input, synergy with other City departments and plans, and opportunities to augment ongoing conservation projects.

Public outreach was conducted in preparation for writing this plan and input was collected through a series of mediated public meetings and through savewatersantafe.com. This input was organized and prevalent ideas were organized into the Public Input Matrix, attached as Exhibit A. The Public Input Matrix is a tool to evaluate and guide the office in the long- and short-term by providing a metric for evaluating prospective projects. An expanded description of the planning process, including all of the feedback collected, is also included as Exhibits C and D.

Many City departments work in areas where there are opportunities for water conservation, and a desire for the City to lead by example was one of the most common pieces of input we received from the public. This addendum uses the structure of the Public Input Matrix to evaluate existing City plans and programs for points of synergy. The resulting Planning Matrix, attached as Exhibit B, directs and prioritizes potential WCO projects based on the ability to work collaboratively with other City departments.

There are three sources for the 2020-2025 Water Conservation Goals: public input, synergy with other City departments and plans, and opportunities to augment ongoing conservation projects.

The WCO has been part of the City Water Division for more than 20 years and many ongoing projects continue to be successful and will be continued. Projects that will continue include the rebate program, restaurant pilot project, and the WCO scorecard.

The WCO has been successful in using an annual scorecard, developed in conjunction with the WCC, for guidance, tracking, and reporting. The 2020 Addendum uses the existing WCO scorecard format to structure the 2020-2025 Water Conservation Goals, which were developed using the Public Input and Planning Matrices.

4.1 The Public Input Matrix

The Public Input Matrix is one outcome of a series of public meetings held in spring and summer 2019. The first meeting was primarily informational and provided background on the Santa Fe Water Division, the water sources and distribution system, and the role of the WCO. The four remaining meetings each focused on specific areas of interest to the work of the WCO: residential water use, commercial water use, climate change, and partnerships. A detailed description of the process for these meetings and the evaluation of the input collected, as well as a compilation of all of the public input collected, are attached to this addendum as Exhibits C & D.

The input collected from these meetings was entered into a spreadsheet and then evaluated for reoccurring themes. The most prominent themes were then organized into two categories: Initiatives and Strategies.

Public Meeting Topics

- ✓ **General Information & Background**
- ✓ **Residential Water Use**
- ✓ **Commercial Water Use**
- ✓ **Climate Change**
- ✓ **Partnerships**

• *Initiatives are areas of potential focus for WCO projects and form the columns of the Public Input Matrix. The initiatives identified are Outdoor Water Use, Enforcement / Regulation, Urban Forest / Food, Sustainable Tourism, and Sustainable Growth.*

• *Strategies are techniques or tools that can help with the accomplishment of initiatives and form the rows of the Public Input Matrix. The strategies identified are Leading by Example, Partnerships, Education, Water Harvesting, Infiltration, Reduction of Runoff, Incentives, and Public Involvement.*

The cells at the intersection of these two axes – Initiatives and Strategies – contain specific projects, programs, and partnerships collected via public input. The purpose of the Public Input Matrix is to provide a framework for the work of the WCO to help identify and evaluate potential projects in terms of their consistency with the goals of City of Santa Fe water customers.

4.1.1 Ongoing Public Meetings

The accurate reflection of the interests of City of Santa Fe water customers collected through the public input process is one of the underlying reasons for this addendum and the WCO will be holding annual meetings to bring some transparency to WCO operations, to collect feedback on the previous year’s WCO work, and to direct the upcoming year’s priorities. These meetings will be held in July and will likely begin with a format based on the input received from our 2019 outreach.

4.2 Synergy with City Planning and Projects

A broad survey of relevant City planning documents was conducted as part of this plan to search for points of intersection between the 15 Plan and other active planning documents. The goal of this survey is to identify points of intersection between the initiatives and strategies identified through the public involvement process and the goals, themes, projects, and proposals contained in existing City of Santa Fe planning documents and to collaborate with other City departments to incorporate water conservation into ongoing efforts.

The City has a multitude of planning documents and a comprehensive evaluation of each is beyond the scope of the 2020 Addendum, but a group of relevant plans have been reviewed and meetings have been held with other City departments to identify likely partnerships. The Planning Matrix provides a snapshot of points of intersections with some of the City’s planning documents that seem most clearly related to water conservation including the 25-Year Sustainability Plan, Incorporating Green Infrastructure into Roadway Projects in Santa Fe (LID manual), and the Stormwater Master Plan.

The initiatives and strategies are the same as in both matrices and the Planning Matrix adds value by finding points of intersection with other planning documents. This version of the Planning Matrix is not exhaustive: as new plans are drafted and new points of intersection are identified, the overall framework presented here accommodates additions while providing guidance in the development of WCO scorecards to ensure consistency with the desires of the public.

- Ongoing Public Meetings**
- ✓ **Update public (transparency)**
 - ✓ **Collect feedback on previous year’s WCO work**
 - ✓ **Direct upcoming year’s priorities**

4.3 Goals & Scorecards

The WCO uses a scorecard, developed with the WCC, to guide and track the performance of the office. This has been an effective way to focus the work of the office, to report progress to oversight committees, and to develop new programs. Many of these programs are successful ongoing projects that will continue to be a part of the 2020-2025 Water Conservation Goals.

4.3.1 Scorecard

The existing Water Conservation scorecard is the basis for the Water Conservation Goals being developed for this addendum. This report includes a 5-Year Scorecard and a 2020 Annual Scorecard, each of which is divided into the same four categories based on broad goals:

- *Education, Outreach & Communication;*
- *Customer Service;*
- *Partnerships & Pilot Projects; and*
- *Effective Program Management*

The 5-Year Scorecard is designed to provide broad guidance to the WCO and the programs proposed in that document are multi-year goals. The 5-Year Scorecard also evaluates the resource allocation needed to complete the program as well as project alignment with the public input and planning matrices.

The 2020 Annual Scorecard is comprised of specific programs and projects to address the long term goals from the 5-Year Scorecard. The Annual Scorecard is developed by WCO staff, approved by the WCC, and is used to track progress and provide accountability and transparency. The Annual Scorecard is posted on the WCO website and public input will be collected every summer to inform the following year’s scorecard.

This report includes a 5-Year Scorecard and a 2020 Annual Scorecard, each of which is divided into the same four categories based on broad goals.

4.3.2 Five Year Scorecard

Program	Status	Performance Indicators	Public Input Alignment	Planning Alignment	Resource Allocation
Goal: Education, Outreach, & Communication					
Passport Program	Ongoing	<ul style="list-style-type: none"> Passport program to be expanded into middle/high school science classes in SFPS schools Correlate Material with next Generation Science Standards & Common Core Develop peer to peer education opportunities at all levels of the program 	b1, d1, a2, b2,	i1	<ul style="list-style-type: none"> Staff Time – Full time person assigned - Water Conservation Education and Compliance Specialist Educational Materials (models, lesson plans, etc.) Student Materials (Passport Books, Water Bottles, etc.)
Children's Water Fiesta	Ongoing	<ul style="list-style-type: none"> Increase emphasis on the interconnection of the water issues presented Obtain greater feedback / assessment from teachers Celebrate the 20th anniversary of the Water Fiesta in 2022 Work to enhance cohesiveness of presentations Develop an explicit goal and vision Enhanced utilization and data collection for the value of peer to peer work 	b1, d1, a2, b2, c2		<ul style="list-style-type: none"> Staff Time – All Hands During Event Bus Rentals for participating students Parking for all presenters Catering Security T-Shirts & Handouts
Evaluate strategies to work with all sectors of the community	New	<ul style="list-style-type: none"> Use modern polling methods to determine the extent of residents' knowledge Use this information to construct a more effective communication strategy Explore how to most effectively communicate with as broad a portion of the community as possible 	a1, b1, c1, d1, e1, a2, b2, c2, d2, e2		<ul style="list-style-type: none"> Public Relations / Polling Contract

4.3.2 Five Year Scorecard continued

Strategic Marketing Plan	Ongoing	<ul style="list-style-type: none"> Create quarterly plans to support objectives of the water conservation program related to marketing strategies Quarterly reports on progress on all strategic briefs including budget allocations will be created Marketing will be coordinated with other city PR strategies for better alignment 			
Goal: Customer Service					
Advanced Metering Infrastructure Optimization -	Ongoing	<ul style="list-style-type: none"> Continued expansion of Eye on Water participation Spatial analysis of customer data including water usage by tier, areas / neighborhood patterns in tiered usage, rebate utilization, lot size, irrigation practices, etc. Utilize badger data to improve the efficiency of incentive programs, rate structures, communications strategies, etc. Work with legal to determine appropriate levels of aggregation of data to protect privacy and allow for detailed evaluation of water use trends 	a7, b5,		<ul style="list-style-type: none"> ITT support on data collection Customer service coordination on billing data Legal support on information collection
Rebates	Ongoing	<ul style="list-style-type: none"> Annual review of rebate program including alignment with federal standards and industry changes Maintain alignment with Water Division and City initiatives Continue gathering data to improve the outdoor water conservation rebates Work to align Waterbank utilization of conserved water with water conservation goals 	a5, c5, d5, e5, a6, b1,		<ul style="list-style-type: none"> Federal standards to guide changes Alignment with other city initiatives

4.3.2 Five Year Scorecard continued

			<ul style="list-style-type: none"> • More sector specific rebates • Look for high-level opportunities such as: Landowners with rental properties, restaurant equipment supply companies, Santa Fe Public Schools, and State Agencies who manage State properties. 			
Enforcement Program	Ongoing		<ul style="list-style-type: none"> • Build new outdoor conservation program using programs like AB-CWUA as a model 	b1, b2, b3, b4, b5, b6, b7,		<ul style="list-style-type: none"> • Full staff person assigned – Water Conservation Enforcement Officer
Leak Detection	Ongoing		<ul style="list-style-type: none"> • Reduction in water loss due to leaks • Continued implementation of the continuous flow program including calls and letters to account holders showing continuous flow • Develop a program to quantify and reduce demand side leaks 	a7, b7,		<ul style="list-style-type: none"> • Alignment with AWWA audit findings
Goal: Partnerships & Pilot Projects						
Develop and execute two neighborhood pilot projects	New		<ul style="list-style-type: none"> • Focused neighborhood education • Integrate efforts with existing community structure • Identify neighborhoods for pilots 	a2, c4, d7,	i2	<ul style="list-style-type: none"> • Outreach materials • Installation costs
Pilot projects	Ongoing		<ul style="list-style-type: none"> • Continue to expand restaurant program • Continue work with SFCC to train workforce to eventually do hotel audits • Create a hotel pilot with 5-6 hotels • Create a hotel specific rebate and branding program for participating hotels 			

4.3.2 Five Year Scorecard continued

Organizational Collaborations	Ongoing		<ul style="list-style-type: none"> • Continue to leverage community and professional partnerships • NM Water Efficiency Alliance • NM Gas Company • Santa Fe Community College • Santa Fe County • Santa Fe Watershed Association • PNM • Santa Fe Green Chamber 	a1, c1, e1, a2, b2, c2, d2, e2, e3, a4, 4c, d4, e4, e5	i2, i7	<ul style="list-style-type: none"> • Memberships, sponsorships, etc.
Land Use Collaboration: WERS, Water Bank, UPC / Backflow, etc.	Ongoing		<ul style="list-style-type: none"> • Ordinance changes to UPC to address graywater, rainwater, and backflow prevention • Remain engaged in the Midtown District Redevelopment Project • WERS coordination • Waterbank Coordination • Working with the Facilities department to address water efficiency in City buildings 	a1, b1, c1, d1, b2, c2, d2, a3, b3, d3, a4, b4, c4, d4, d5	i4	
Goal: Effective Program Management						
Human Resources	Ongoing		<ul style="list-style-type: none"> • PADP Assessments with improved feedback from staff on program management • Training • Work load alignment with individual programs 			
Financial Resources & Budget	Ongoing		<ul style="list-style-type: none"> • Submit Conservation Budget in February of each year • Track Budget for each project/program for each fiscal year and report budget allocations for each program on an annual basis 			

4.3.2 Five Year Scorecard continued

					<ul style="list-style-type: none"> Update scorecard on an annual basis with feedback from the public and governing body for implementation the following year 		
Organizational Development	Ongoing				<ul style="list-style-type: none"> Training for staff Work load alignment with individual programs 		
Water Conservation Committee	Ongoing				<ul style="list-style-type: none"> Water Conservation Manager to be liaison to Water Conservation Committee Coordinate Committee and sub-committee work with Water Conservation Office 		
Safety	New				<ul style="list-style-type: none"> Develop a safety program for the department that includes monthly safety trainings 		
Integration with Water Resources	Ongoing				<ul style="list-style-type: none"> GPCD Analysis AWWA Audit Annual Water Report 		

4.3.3 2020 Scorecard

Program	Status	Key Performance Indicators
Goal: Education, Outreach, & Communication		
Passport Program	Ongoing	<ul style="list-style-type: none"> Improved Feedback Mechanism Incorporate 2019-2020 Lessons Learned into Revisions for 2020-2021 Correlate Material with next Generation Science Standards & Common Core Virtual tour of passport program on website
Passport Expansion Program	Expansion	<ul style="list-style-type: none"> 5th grade component in alignment with the “My Water My Watershed” Program Pilot 6th Grade Component with Small Group of Classes Evaluate Opportunities for Middle School/High School Expansion
Children’s Water Fiesta	Ongoing	<ul style="list-style-type: none"> Increase emphasis on the interconnection of the water issues presented Develop Detailed Presentations with High School Student Presenters Develop an explicit goal and vision for 18th annual event Enhanced utilization and data collection for the value of peer to peer work
Expand Adult Outreach Programs	New	<ul style="list-style-type: none"> Education and tours for City staff to increase awareness of water and conservation issues Create passport program for adults with facility tours/ presentations Seek out opportunities to partner with art related events to expand the reach of the conservation message Work to partner with planned events/ workshops already planned for 2020 Identify groups such as HOA’s, community clubs, community events that will provide education to more diverse groups Align with Next Generation Water Summit to provide a community education event Use of Demonstration Gardens for training/ community engagement
Strategic Marketing Plan	Ongoing	<ul style="list-style-type: none"> Create quarterly plans to support objectives of the water conservation program related to marketing strategies Quarterly reports on progress on all strategic briefs including budget allocations will be created Marketing will be coordinated with other city PR strategies for better alignment
Goal: Customer Service		
EyeOnWater Optimization	Expansion	<ul style="list-style-type: none"> Market increased participation with EyeOnWater app with emphasis on threshold setting and alerts Geographic analysis of customer data including water usage by tier, area / neighborhood, rebate utilization, lot size, irrigation practices, etc. Work with legal to determine appropriate levels of aggregation of data to protect privacy and allow for detailed evaluation of water use trends Build a science citizen program demonstrating use of EyeOnWater data in a household/ business

4.3.3 2020 Scorecard continued

		<ul style="list-style-type: none"> Build EyeOnWater success stories for website/ social media Align EyeOnWater with current Leak Adjustment requirements Spatial analysis of rebate distribution Align opportunities with rebates given by PNM and NM Gas Company Maintain alignment with City and Water Division goals Continue to exam Commercial rebate opportunities by sector Streamline rebate application and processing Align rebates with federal standards and industry changes Continue to identify continuous flow and send out letters and calls and work in collaboration with customer service Track Eye on Water adoption rates for recipients of continuous flow letters Spatial tracking of continuous flow program and data tracking for amount of water saved Build new outdoor water conservation program using programs like ABCWUA as a model Spatial tracking analysis of enforcement activities Incorporate new technology into enforcement program such as EyeOnWater Align time of day messaging with the County for joint messaging opportunities
Rebate Program	Ongoing	
Leak Detection	Ongoing	
Enforcement Program	Ongoing	
Goal: Partnerships & Pilot Projects		
Neighborhood Pilot Project	New	<ul style="list-style-type: none"> LID Pilot Project with Public Works Spatial analysis of rooftop disconnection potential Review of rainwater harvesting rebate opportunities Align the rebate structure with stormwater fees Development of neighborhood education program with HOA of pilot neighborhood
Organizational Collaborations	Ongoing	<ul style="list-style-type: none"> NM Water Conservation Alliance (NMWCA) NM Gas Company and PNM Santa Fe Community College (SFCC) Santa Fe County Santa Fe Green Chamber of Commerce (SFGCC) Santa Fe Watershed Association (SFWA) Alliance for Water Efficiency (AWE) Santa Fe Public Schools (SFPS)
Cooling Tower Pilot	Ongoing	<ul style="list-style-type: none"> Continue work with the AWE to look at water savings potential with cooling towers to look at potential rebate opportunities

4.3.3 2020 Scorecard continued

Hotel Pilot	New	<ul style="list-style-type: none"> Continue to train staff on auditing hotel facilities Research opportunities to develop a hotel pilot
Restaurant Pilot Project	Ongoing	<ul style="list-style-type: none"> Continue Pilot with Uponsor/ Phyn Continue work with SFCC to train workforce to do restaurant audits Continue with SFCC to develop online training in coordination with Lane Community College and the National Science Foundation grant Work with Green Chamber of Commerce to coordinate work with restaurants Develop administrative procedures for restaurant rebates
Goal: Effective Program Management		
Human Resources	Ongoing	<ul style="list-style-type: none"> PADP Assessments with improved feedback from staff on program management Training Work load alignment with individual programs
Financial Resources & Budget	Ongoing	<ul style="list-style-type: none"> Submit Conservation Budget by February 2020 Track Budget for each project/ program for FY19/20-20/21 Track deposits from rebates into water bank Staff cross-trained on all programs Staff certified as relevant to program (QWEL, WERS, CLIA, ARCISA, Backflow, etc.)
Organizational Development		
Facility Management	New	<ul style="list-style-type: none"> Maintenance of two demonstration gardens including weeding, irrigation system repair, pruning and plant care Building maintenance Installation of charging station for hybrid vehicle Installation of security barrier for water conservation office
Water Conservation Committee	Ongoing	<ul style="list-style-type: none"> Water Conservation Manager to be liaison to Water Conservation Committee Coordinate Committee and subcommittee work with Water Conservation Office Assist with Joint City/ County work as it relates to water conservation Develop better succession plan for vacancies
Safety	New	<ul style="list-style-type: none"> Conduct monthly safety meetings as related to water conservation office work
Reporting and Accountability	New	<ul style="list-style-type: none"> Report quarterly work against the scorecard to governing body and to Water Conservation Committee End of FY reports to Stormwater division as it relates to MS4 permit End of FY reports to Sustainability Department as it relates to goals in the sustainability plan Public input gathered in July of 2020 with public meetings and website to develop 2021 scorecard

Annual Water Report	• Annual Water Report
AWWA non-revenue water Audit	• AWWA non-revenue water Audit
Gallons per Capita per Day (GPCD) analysis	• Gallons per Capita per Day (GPCD) analysis
Assist with work on Domestic Wells	• Assist with work on Domestic Wells
Ongoing	
Integration with Water Resources	

Exhibit A – Public Input Matrix

		a	b	c	d	e
		Outdoor Water Use (116)	Enforcement / Regulation (74)	Urban Forest / Feed (74)	Sustainable Growth (57)	Sustainable Tourism (26)
1	Education (271)	<ul style="list-style-type: none"> City Staff education Customer education Native & xeric planting demonstrations & classes QWEL certification of all City Staff working with outdoor irrigation 	<ul style="list-style-type: none"> Develop strong materials on water regulations & rebates Model best practices at City facilities & provide Educational Materials On-Site Develop Materials and/or hold a meeting to explain the Waterbank Hold a water conservation drive Continue education programs in school 	<ul style="list-style-type: none"> Training opportunities for the public based on successful public & private conservation projects Awards for urban forest enhancement Importance of trees re: heat islands Staff training on healthy trees – pruning, maintenance, etc. Education on how to build raingardens at home 	<ul style="list-style-type: none"> Planning for climate change Smart designs for alternative energy & alternative water Education for kids Focus on adult education 	<ul style="list-style-type: none"> Water conservation advertising at Santa Fe Airport Develop materials for short term rentals (Air BNB, etc.)
2	Partnerships (129)	<ul style="list-style-type: none"> Homeowner’s Associations – education, sharing success stories, promoting rebates, etc. Rain gardens in shared spaces of neighborhoods Schools Government facilities & buildings Neighborhood representatives with access to technical support from the City Reuse treated effluent for watering 	<ul style="list-style-type: none"> HOA coordination on regulations New development infiltrating all increased runoff Coordinated messaging for new homeowners through Land Use Neighborhood associations & HOA’s on restrictions Work with City neighborhood liaison Seek partnerships and models from other cities Work with private well owners 	<ul style="list-style-type: none"> Santa Fe Extension Master Gardeners Group Santa Fe Tree Board Santa Fe National Forest Albuquerque – Bernalillo County Water Utility Authority City Parks Division Community solar advocates Community garden organizations State Agencies – NMED, OSE, etc. Tree planting block parties 	<ul style="list-style-type: none"> Homebuilder trade groups Homeowners Home Owner’s Associations City Land Use department 	<ul style="list-style-type: none"> Tourism Santa Fe (City Tourism Office) New Mexico True (State Tourism Office) Local businesses Chambers of Commerce Santa Fe Arts Institute Artists Publicize pro-conservation businesses in outreach / tourism oriented advertising
3	Water Harvesting (92)	<ul style="list-style-type: none"> Alternative water for irrigation Capture all rainwater from City facility roofs 	<ul style="list-style-type: none"> Mandatory alternative water systems in remodels and new construction 	<ul style="list-style-type: none"> Laundry to landscape case studies Develop garden plans based on roof size / catchment capacity 	<ul style="list-style-type: none"> Alternative use water in new developments More programs to get alternative water systems into new developments 	<ul style="list-style-type: none"> Promotional signage for businesses and public spaces using alternative water
4	Infiltration (91)	<ul style="list-style-type: none"> Promote rain gardens in neighborhoods Utilize permeable paving Rain gardens to replace irrigated areas Promote terracing 	<ul style="list-style-type: none"> Require capture and infiltration of stormwater from buildings and parking lots and gardens Require residential water catchment systems large enough to cope with flood level rain events Reduce impermeable surfaces Create garden and park areas that infiltrate stormwater 	<ul style="list-style-type: none"> Stormwater capture and reuse project Neighborhood scale infiltration / catchment / stormwater reduction project Bioretention, capture and utilize stormwater from parking areas Fewer parking lots 	<ul style="list-style-type: none"> New development should infiltrate increased runoff from site Focused recharge of groundwater in areas where it can be used Permeable paving Upgraded stormwater infrastructure to address larger storms Curb cuts Slow and sink runoff 	<ul style="list-style-type: none"> Signage for historical water sites – Bishop’s Pond, floodplains, springs, etc. – promoting regeneration of groundwater resources Prominent porous paving
5	Incentives (72)	<ul style="list-style-type: none"> Rebate program for outdoor irrigation equipment Rewards for replacing high water use plants with native or xeric 	<ul style="list-style-type: none"> Measure average user per category and reward low users / discourage high users Accelerated business licensing process for water conserving businesses Small business loans paid back through water savings Incentivize terracing Penalize high water users 	<ul style="list-style-type: none"> Encourage native plantings Money for residential drip irrigation Tree planting rebates Food gardening rebates Subsidized native plants Subsidized mulch Assistance for low income homes to pursue infiltration and drainage projects, rain gardens 	<ul style="list-style-type: none"> Promote homeowner reduction in electricity to save water by incentivizing solar and wind Research and promote solutions for residential design to optimize alternative water Pay for water efficiency experts to work with architects and designers developing projects in the city 	<ul style="list-style-type: none"> Promotion and recognition of local businesses that are conserving water
6	Reduce Runoff (61)	<ul style="list-style-type: none"> Promote smart sensor rebates Promote roof-top catchment rebates 	<ul style="list-style-type: none"> Fugitive water campaign Capture stormwater in giant cisterns – pursue change in State law if needed 	<ul style="list-style-type: none"> Trees for bank stabilization & erosion protection Put stormwater to beneficial use Restoration projects that improve flooding resiliency 	<ul style="list-style-type: none"> Promote onsite infiltration Pilot projects for curb cuts Require developers to infiltrate additional runoff created through development in rain gardens 	<ul style="list-style-type: none"> Promotion of rain gardens used for infiltration
7	Leading By Example (51)	<ul style="list-style-type: none"> Turf replacement at City facilities with native / xeric plants Reduce City owned golf course water use Utilize non-potable water sources for irrigation at City facilities Eliminate potable water use at medians Continue to encourage EyeOnWater use 	<ul style="list-style-type: none"> Comply with time of day & fugitive water regulations at City parks & facilities Model best practices re: low flow / alternative water fixtures at City facilities Visible rainwater catchment at all City facilities Improved parks irrigation equipment modeling best practices 	<ul style="list-style-type: none"> Edible landscaping at public facilities Tree health and maintenance prioritized at public spaces Raingardens in public spaces Edible landscaping at City projects 	<ul style="list-style-type: none"> Maintain the Living River High efficiency retrofits for existing buildings Innovative plumbing alternatives Neighborhood pilot projects 	<ul style="list-style-type: none"> Water conservation & ecology incorporated into tourism outreach material Better irrigation infrastructure at public facilities
8	Public Involvement	<ul style="list-style-type: none"> Website 	<ul style="list-style-type: none"> Public marketing 	<ul style="list-style-type: none"> Social media 	<ul style="list-style-type: none"> Stakeholders 	<ul style="list-style-type: none"> Targeted commercial outreach

Exhibit B - Planning Matrix

		f	g	h	i	J
		Outdoor Water Use (116)	Enforcement / Regulation (74)	Urban Forest / Feed (74)	Sustainable Growth (57)	Sustainable Tourism (26)
1	Education (271)	<ul style="list-style-type: none"> Downtown Plan <ul style="list-style-type: none"> Showcase sustainability practices for stormwater management, xeriscape gardening, alternative transportation, energy and education programs 		<ul style="list-style-type: none"> Southwest Master Plan <ul style="list-style-type: none"> Reduce the urban heat island effect Southwest Master Plan <ul style="list-style-type: none"> Reduce the need for potable irrigation Land Use & Urban Design <ul style="list-style-type: none"> support the urban forest Value of tree canopy 	<ul style="list-style-type: none"> Parks Master Plan <ul style="list-style-type: none"> Education opportunities with natural areas and river environments 	<ul style="list-style-type: none"> Parks Master Plan <ul style="list-style-type: none"> Promote environmental stewardship through signage Pollinating Prosperity <ul style="list-style-type: none"> Santa Fe as an industry leader in water harvesting and conservation
2	Partnerships (129)	<ul style="list-style-type: none"> Parks Master Plan <ul style="list-style-type: none"> Neighborhoods and parks stewards involved in parks maintenance Volunteer Based Maintenance 	<ul style="list-style-type: none"> Land Use & Urban Design <ul style="list-style-type: none"> reduce groundwater use through the retirement of domestic wells 25-Year Sustainability Plan <ul style="list-style-type: none"> develop a drought preparedness plan 		<ul style="list-style-type: none"> Southwest Santa Fe River Corridor Master Plan <ul style="list-style-type: none"> Supply of water will affect growth 25-Year Sustainability Plan <ul style="list-style-type: none"> Reduce water use through the built environment Create at least two neighborhood-scale water conservation projects and programs Land Use & Urban Design <ul style="list-style-type: none"> Collaborate with the County, the State, Federal Agencies, and non-Profits Facilitate intergovernmental cooperation in areas of overlapping jurisdiction 	
3	Water Harvesting (92)	<ul style="list-style-type: none"> 25-Year Sustainability Plan <ul style="list-style-type: none"> Increase the number of residential and commercial graywater systems Increase on-site water harvesting, recycling, reuse, and ground infiltration 	<ul style="list-style-type: none"> 25-Year Sustainability Plan <ul style="list-style-type: none"> Increase the use of reclaimed water for municipal operations 	<ul style="list-style-type: none"> Downtown Plan <ul style="list-style-type: none"> Rainwater harvesting and tree catchment systems 		<ul style="list-style-type: none"> Railyard Master Plan <ul style="list-style-type: none"> Innovative use of rain- and stormwater
4	Infiltration (91)	<ul style="list-style-type: none"> Land Use & Urban Design <ul style="list-style-type: none"> Integrate capture & infiltration into projects, especially road projects Coordinate stormwater management BMP's Green Infrastructure <ul style="list-style-type: none"> Bioretention systems Tree Trenches 	<ul style="list-style-type: none"> 25-Year Sustainability Plan <ul style="list-style-type: none"> Increase the number of public and private use of raingarden and other infiltration projects 	<ul style="list-style-type: none"> Downtown Plan <ul style="list-style-type: none"> Retention / infiltration ponds Reduced hardscape: increased permeable materials 	<ul style="list-style-type: none"> Green Infrastructure <ul style="list-style-type: none"> Permeable pavement Impervious surface reduction Parks Master Plan <ul style="list-style-type: none"> Capture water for parks landscapes and incorporate Low Impact Development (LID) Land Use & Urban Design <ul style="list-style-type: none"> Require new development to protect and enhance the urban forest 	<ul style="list-style-type: none"> Land Use & Urban Design <ul style="list-style-type: none"> support the urban forest as an important element of the City's civic space
5	Incentives (72)	<ul style="list-style-type: none"> Southwest Master Plan <ul style="list-style-type: none"> Proactively support existing City goals by incentivizing or requiring the use of multifunctioning landscapes on private and public land 	<ul style="list-style-type: none"> 25-Year Sustainability Plan <ul style="list-style-type: none"> Incentivized technology for enhanced leak detection 	<ul style="list-style-type: none"> Land Use & Urban Design <ul style="list-style-type: none"> Urban Trees – Support and Encourage the planting of trees and enhancing of Santa Fe's urban forest Pollinating Prosperity <ul style="list-style-type: none"> Promotion of water smart 'heritage foods' 		
6	Reduce Runoff (61)	<ul style="list-style-type: none"> Green Infrastructure <ul style="list-style-type: none"> BioSwales 		<ul style="list-style-type: none"> Downtown Plan <ul style="list-style-type: none"> Reduction of flood water velocity Protection and maintenance of streams, watershed and groundwater; West Santa Fe River Corridor Plan <ul style="list-style-type: none"> Porous Surfaces Only 	<ul style="list-style-type: none"> West Santa Fe River Corridor Plan <ul style="list-style-type: none"> Encourage green infrastructure Minimize the impact and presence of impervious surfaces 	<ul style="list-style-type: none"> Railyard Master Plan <ul style="list-style-type: none"> Drainage ponds designed to function as natural water harvesting and wetlands Features. They will be designed as landscape improvements that are also engineered to control stormwater.
7	Leading By Example (51)	<ul style="list-style-type: none"> Land Use & Urban Design Plan <ul style="list-style-type: none"> turf alternatives for parks – where possible and use of natural turf alternatives 25-Year Sustainability Plan <ul style="list-style-type: none"> Showcase water efficient city facilities Parks Master Plan <ul style="list-style-type: none"> Irrigation Infrastructure Improvements on parks and trails 		<ul style="list-style-type: none"> 25-Year Sustainability Plan <ul style="list-style-type: none"> Enhance urban forest stewardship Develop urban ecosystems improvements Parks Master Plan <ul style="list-style-type: none"> Increase person-power for IPM of invasives Southwest Master Plan <ul style="list-style-type: none"> Provide wildlife habitat & migration corridors 	<ul style="list-style-type: none"> Land Use & urban Design Plan <ul style="list-style-type: none"> Prepare for climate change Optimize reclaimed wastewater re-use Parks Master Plan <ul style="list-style-type: none"> Improved river environment and watershed health along the Santa Fe River 25-Year Sustainability Plan <ul style="list-style-type: none"> magnify staff efforts through collaboration 	<ul style="list-style-type: none"> 25-Year Sustainability Plan <ul style="list-style-type: none"> The City of Santa Fe is already a recognized sustainability leader and the organization can continue to take the lead in inspiring the community to engage in more sustainable practices.
8	Public Involvement					

Exhibit C – Public Input Process, Questions, and Feedback



One of the primary goals of the 2020 Addendum was to effectively collect public input about priorities and projects that the community would like to see in the next 5 years. This section of the report details the process used for the collection of public input, how that data was organized, how it has been incorporated into this plan, how input will continue to be collected, and how all that input – old and new – will continue to influence annual planning priorities for the WCO during the 5-Year planning period.

C.1 Public meetings

Five public meetings were held to collect input for this plan with the first meeting designed to provide information about the City of Santa Fe's water operations – organizationally and in terms of water sources and delivery. Each of the following four meetings was intended to target a specific area of interest and to collect information on a specific topic: residential water use, commercial water use, climate change, and partnerships. Staff and WCC members had expected to draw a different crowd to each meeting based on individual areas of interest but most participants came to all of the meetings. Had this attendance pattern been better anticipated, the questions used in the sessions could have been designed differently.

Meeting	Location	Date
Water Forum	Genoveva Chavez Community Center	March 2, 2019
Residential Water in Santa Fe	Fogelson Library – Santa Fe University of Art & Design	March 30, 2019
Commercial Water Efficiency Solutions	Main Library Downtown	April 11, 2019
Facing Climate Change & Drought	Southside Library	April 13, 2019

C.2 Input Process

The public input meetings were structured to collect public input and to facilitate discussion and development of ideas in small groups. WCO manager Christine Chavez designed the input process based on a consensus model learned at the New Mexico Land & Water Summit. The meetings were run by staff and WCC members with the intention of keeping things simple, providing transparency and direct access to City staff, and to help the WCO to develop replicable processes that staff could use to communicate with the public.

The meetings were arranged with a PowerPoint screen and projector on one side of the room and a series of tables with ~6 chairs at each. Each table had a moderator with a prepared envelope of materials including index cards and pens and copies of the questions that would be asked. As

Questions were designed to generate discussion to solicit input targeted at areas where the 2020 Addendum would benefit from guidance.

participants arrived at the meeting, they were met at the door by a WCO staff member and assigned to a table with the intention of distributing folks evenly to best facilitate discussion and to ensure that everyone had roughly the same amount of time to speak and to write comments.

Each meeting began with introductions from Christine Chavez, WCO manager, who would explain the process, introduce staff and WCC members. Two slides were used for each question: one slide with background information relevant to the question, and a second slide with the question plainly legible. Each of the tables would take a few minutes to write responses to the posted question and then – once everyone had time to compose thoughts and get them on paper – the facilitator at the table would ask each person at the table to discuss his/her thoughts and take time to make sure that all parties had time to speak. Comments could then be finalized and collected by the moderator, and Christine would then give some background for the next question.

Each meeting had four questions – including one question about the input process itself which was repeated at each meeting. Questions were designed to generate discussion and to solicit input targeted at areas where the 2020 Addendum would benefit from guidance. A complete list of the questions, as well as the answers solicited, is included as Exhibit D to this report.

In addition, comments were submitted online through the Save Water Santa Fe website, those comments are also included as Exhibit D.

C.3 Organizing Public Input

The strategy used to solicit input was highly effective – four questions per meeting and most answers tended to be in bullet points so there are several pieces of input collected from each person on each card and a minimum of four cards per participant per meeting. In order to look through that amount of input, the first step was to go through all the cards and type in the answers. Once the answers were on the computer, individual concepts – bullet points from each card – were broken out and WCO staff analyzed the comments to identify themes. Comments took many forms and some of the themes had to do with conservation initiatives – issues like outdoor watering, enforcement & regulation, and accommodating growth – while others identified strategies for conservation and better water stewardship – leading by example at city facilities, infiltration, and rainwater catchment.

One of the most frequent responses from participants about the process is that they would like to see it continue both in terms of reporting from the WCO on ongoing projects and also to continue to provide an opportunity for participants to provide input.

C.4 Ongoing Public Involvement

One of the most frequent responses from participants about the process is that they would like to see it continue both in terms of reporting from the WCO on ongoing projects and also to continue to provide an opportunity for participants to provide input to the WCO. The design of this plan, with broad targets and strategies for conservation work over the next five years and specific goals developed annually, is intended to provide opportunities for continued public input to be considered for the annual scorecard. Each fall the scorecard for the upcoming year will be developed following public input sessions in July. The current scorecard will also be put on the website and progress made against it will be made available to the public on a quarterly basis.

Exhibit D – Public Input

D.1 Meeting #1 – Residential

<p>City customers have already done a great job reducing residential GPCD. In the summer months we still see 2-3x more water being used than in the winter. What programs can you think of that will help reduce summer residential irrigation?</p>
<ul style="list-style-type: none"> • Smart irrigation, more efficient use • Landscape design that would include shading structures, establishing trees to create microclimates • Perhaps rebates or incentives for landscape consulting. Contest for best reduction in garden water use.
<ul style="list-style-type: none"> • Mechanical devices should be encouraged – but not permitted/charged • Grants to neighborhoods for xeriscaping and tree care • More enforcement of water abuse • Engage professionals to help homeowners
<ul style="list-style-type: none"> • Discourage green lawns & encourage xeriscaping • Leave green lawns to public spaces (parks)
<ul style="list-style-type: none"> • Education re: dangers to future water availability as climate changes (“don’t take it for granted”) – reality of our reliance on Colorado River & groundwater pumping • Education re: water harvesting & re-use – info in water bills, free classes and demo areas • Incentives program expanded – for water harvesting infrastructure especially (not rain barrels) • More education on rebates • Incentivize use of water meters within the yard to track outdoor use
<ul style="list-style-type: none"> • Education on drought tolerant native planting • Rain barrel (giveaways?) • New developments should be built to limit run off and capture rainwater for residential use • Greywater – irrigation in new building
<ul style="list-style-type: none"> • Require xeriscape and native plants starting with new construction and remodels • Sprinkler Days • Outlaw Carwash Hose
<ul style="list-style-type: none"> • Xeriscape – plant selection – HOA • Irrigation and timing • Rain monitors • Leak notification
<ul style="list-style-type: none"> • Education opportunities for homeowners to learn how their irrigation systems work. (Basics of residential irrigation design and operation). • Educational opportunities to learn vegetation selection and water needs
<ul style="list-style-type: none"> • Harvesting water from roof and storing • Harvesting gray water • Terracing property • Mulching property • Government Money for incentives for all of the above • Ditto education • Ditto marketing • Education in Elementary Schools

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> • Inform temporary residents / 2nd home owners of city's priority for water conservation • Impose mandatory lawn / plant competitions to "waterwise plants" by all owners of property. • Information needs to be provided in English and Spanish • Home Water Storage • Reach out to Pueblos to learn about their water practices – dwelling development, etc. • Terracing
<ul style="list-style-type: none"> • Summer residential irrigation can be reduced by providing storage e.g. barrels, cisterns, especially if it can be done at no or low cost • A two-storied water rate for homeowner occupied vs. not homeowner occupied
<ul style="list-style-type: none"> • Education about the value of mulch and gutters as a water conservation strategy • Education about the cost of water that is lost to leaks or other unintended water losses.
<ul style="list-style-type: none"> • Education – at local high schools • Water Rates – increase water cost during summer
<ul style="list-style-type: none"> • Water harvesting
<ul style="list-style-type: none"> • Both commercial and residential is somewhat "voluntarily" down, but with the added enforcement of fines. I suggest raising the fine. • Tax that goes to a fund to address current and future • Make it easy to use black and gray water - Fuji Clean
<ul style="list-style-type: none"> • Mulch lots and laborers (students?) to spread mulch in folks' yards at little or no cost • Some way to collect and distribute shower water to outdoors – pails with wheels (I carry my pail, but am getting older) • Info and rebate offers included in paperwork and any home transfer and info too (maybe a free plant)
<ul style="list-style-type: none"> • Plant native plants and trees that need no supplemental water once established. Incentive program. Promote their beauty – most people are surprised at the range and variety of flowering desert plants. • Increase rebates for larger water collection systems or perhaps provide a tax break for them. • Outlaw lawns – we live in the desert.
<ul style="list-style-type: none"> • Use no irrigation • Thick Mulching • Planting natives specific to location of yard • Install water tanks (>450 gallons) – then hand water only plants that need water • Install meters on sewage since not all water into tap goes into sewer • Collect shower and faucet water and use to water outside
<ul style="list-style-type: none"> • When a customer water down to x # of gallons for 2 months they get a gift certificate for a drought tolerant plant or get a free bag of mulch or a soaker hose • Call water conservation for a free assessment of summer garden suggestions • Seminars monthly with guest speakers about native plants
<ul style="list-style-type: none"> • Tiered rates by usage • Educate and support xeriscape • Gray water education and code support, requirements • Harvesting (economics?) • Irrigation doesn't need filtering, softening, chlorination. • Compost, mulch, plants

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> • Cistern rebates – assistance with cost & installation • Offer classes on alternative planting methods, i.e. heat tolerant plants that have rocks over to help retain water
<ul style="list-style-type: none"> • Install rain barrels and use for outdoor watering • Install drip irrigation systems w/ timers • Plant drought tolerant species • City could limit watering times/days • Residents use leak alert app to monitor leaks/faults in irrigation systems
<ul style="list-style-type: none"> • 3 Golf courses - ~1/3-1/2 in summer • Go to artificial turf all at once as a City program
<p>Now with the EyeOnWater app our customers can find leaks and monitor water use in their homes on a real-time basis. Are you currently signed up for EyeOnWater? How has it changed your behavior and if you haven't how do you think it could?</p>
<ul style="list-style-type: none"> • We are not currently signed up for the app and absolutely will not sign up. Do not have a smart phone and will not. If I signed up – will not likely change already have reduced usage to about 45 gallons per day per person. There has to be another way to regulate usage.
<ul style="list-style-type: none"> • Not currently signed up for EyeOnWater because I'm in the county ... and on a well. If I did I'd be more aware of my behavior and single use. • To encourage use: Share success stories somehow, advertise. Make using it seem fun and cool.
<ul style="list-style-type: none"> • Make it fun for kids and grandparents to monitor and change family behavior – Collect & publish stories. Don't have either cell phone or internet/ computer at home. Instead install meter in house and monitor that.
<ul style="list-style-type: none"> • Yes – no input (1+ yrs.) Tenants should know water use.
<ul style="list-style-type: none"> • As a renter I have not signed up but will ask the home owner if he has signed up. I pay for water usage as part of my rent but am curious about how my usage could be cut. Have landscapers promote the app to their customers.
<ul style="list-style-type: none"> • I'm signed up, haven't used it much yet. Will use it a lot when I start irrigating garden. Specifically to help tune irrigation use. Will also see if leaks are occurring.
<ul style="list-style-type: none"> • No can't as not available in Rancho Viejo. Tried though. Alert for leaks. Monitor/change consumption.
<ul style="list-style-type: none"> • Downloaded the app, but haven't yet used- will do so. • Contests/ enhancements for signing up for EyeOnWater.
<ul style="list-style-type: none"> • No, not signed up would definitely help with awareness of water use. • Use to implement "Challenge with incentives (Monthly) (Annually)
<ul style="list-style-type: none"> • No, Yes, Leaks, Market program Incentive – No water bill
<ul style="list-style-type: none"> • No, education in laundromats about use, double/ triple rinsing. Intergenerational- children helping parents/ grandparents monitor family usage using app
<ul style="list-style-type: none"> • Yes, I have the EyeOnWater app. It has not changed my behavior, I dislike having to use the computer beyond necessary. I see what water I'm using in the house and rarely use city water outside.
<ul style="list-style-type: none"> • Not currently signed up. Our usage is very low (20 gal/person/day) for 2 person avg. 1200 gal / month. App would have helped us detect a H2O-heater leak sooner than we did.
<ul style="list-style-type: none"> • EyeOnWater, Yes I have enrolled doesn't changed behavior.
<ul style="list-style-type: none"> • Don't have a monitoring device, Won't Change.
<ul style="list-style-type: none"> • Don't have it yet. Will sign up. Hope it will keep me informed. I have heard it is difficult to sign up if he has a mac. I have a master meter.
<ul style="list-style-type: none"> • I tried to sign up in 2017. I do have a working "smart" meter. I spent several hours on the phone trying to sign up, but I use Safari on a Mac, so I have been unable to sign up. I would gladly sign up and pay close attention to my water use.

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> • Not signed up will sign up & check for leaks. I'm glad it will alert me to leaks as I won't check it very often. Every house should have a water shut off accessible to the owner. It should be turned off if the resident is not there for an extended period.
<ul style="list-style-type: none"> • Have not signed up. I supposed it could help if I know what average usage is and what the avg. is for specific tasks.
<ul style="list-style-type: none"> • No I live in an apartment and I don't have individual access for monitoring a leak in my water supply. Also our meters are done for each 12 buildings and we are charged for an equal portion of consumption by numbers of residents. Perhaps the management could monitor each building with this app
<ul style="list-style-type: none"> • No. Really poor tech skills, probably not use my phone rarely
<ul style="list-style-type: none"> • Do not have it yet, will sign up. Hope it will keep me informed. I have heard it is difficult to deal with.
<ul style="list-style-type: none"> • Don't have a monitoring device. Won't change.
<ul style="list-style-type: none"> • I am investigating putting in a recirculation pump on my water heater to reduce the time it requires to heat up which is on the opposite side of the house.
<ul style="list-style-type: none"> • I'm not signed up, behavior will take a while to change. Look forward to this new technology.

<p>If you had to permanently use 20% less water due to shortage what changes would you make?</p>
<ul style="list-style-type: none"> • I already have, long ago. • Down to 9 gallons/day average – 500/month • Be aware of every drop • Bucket in the shower to flush the toilet • Full loads only in front loading washing machine • If it's yellow, let it mellow / If it's brown, flush it down = BUMPER STICKERS • Home Audits for behavior change
<ul style="list-style-type: none"> • Probably consolidate better loads of laundry and dishwasher (2-person family) • Reconsider greywater system or partial use incentives • Publicize water audits thru City to get more involvement
<ul style="list-style-type: none"> • City audits for residential use • Publicizing the information on the City's webpage. I'm not viewing the webpage frequently enough to know about H2O saving measures and products.
<ul style="list-style-type: none"> • Revamp landscape – fewer plants, more drought-tolerant • Revamp washing protocols (dishes, clothes) inside • Try to install grey water system – major challenge on an old house. • Look at using in-ground water sensors to control irrigation
<ul style="list-style-type: none"> • Immediately reduce use of water dependent appliances (washing machine and dishwasher) • Stop new plantings, reduce all irrigation to only most critical plantings
<ul style="list-style-type: none"> • Hot water recirculation so no wait flow • Garbage – no need to clean containers

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> • Never wash dishes by hand • 2 min showers • Never use water for irrigation that's not been collected from roof
<ul style="list-style-type: none"> • Capture rainwater • Eliminate irrigation via City water • Increase water saving fixtures and faucets • More water efficient appliances
<ul style="list-style-type: none"> • Bundle washing dishes • Reuse certain clothing items before washing them • Educate on consumer choices and how that affects water consumption • Harvest water – all apartment complexes and housing complexes
<ul style="list-style-type: none"> • Use bottled water in jugs from east of the Mississippi for drinking and cooking
<ul style="list-style-type: none"> • Showers instead of baths (but greywater in warm months would be reduced) • Convert one bathtub + washer to greywater • Measure water for dishes and decide most efficient way • Ban reverse osmosis that uses 2 gallons to produce 1 • Ban plastic water bottles and change culture so folks bring thermoses like the ones handed out
<ul style="list-style-type: none"> • Reduce irrigation by eliminating some trees • Install on demand water heater(s) • Install 3 more rain barrels • Shower songs – 2 minutes a la Capetown, South Africa
<ul style="list-style-type: none"> • Reduce bathing to once every 6 months, whether you need it or not.
<ul style="list-style-type: none"> • Fewer baths / laundry • Landscape decisions – more water harvesting, more mulching • Shower songs • Bricks in toilets
<ul style="list-style-type: none"> • Bricks in tank • Mellow Yellow • Let part of the yard go fallow – natives • Reduce/eliminate lawn
<ul style="list-style-type: none"> • We have minimized our water usage already and are concerned that restrictions on water use would unfairly penalize us as people who use lots of water. • In a pinch, we could take fewer baths, flush toilets even less often than we do, wash clothes less often, etc. But these are probably only short term solutions.
<ul style="list-style-type: none"> • All that we have done since buying a Stamm home Jan 2018: • Catch all water from faucets • Install >450 gallon rain water barrels for water catchment and use it to grow food • Plant only natives in landscaping with 8-12" wood chips • Install good quality water filter and remove fluoride that's bad for health • Don't flush toilets all the time • Yellow is mellow, brown goes down

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> Water only my trees and maybe major shrubs in the yard Not much else I can do since I catch all water coming out of faucets, have 0.8 gallon per flush toilet, shower once a week & catch that water, have water barrels . . . hmm, tough question.
<ul style="list-style-type: none"> If I had my own washing machine (I live in an apartment complex where we have a laundry in each building), I would use “small loads” in the machine of my choice. Not flush toilets every time after urinating – if I owned my toilet I would have a dual flush toilet
<ul style="list-style-type: none"> Change out older toilet sacrificing color scheme of bathroom Composting toilet in new shed Change out plants that require more than the minimum water Shower outdoors in solar bag
<ul style="list-style-type: none"> Outdoor irrigation is main target. Would consider significant investment in xeriscape and irrigation system. Toilets are relatively new, could improve Difficult – have already installed aerators, flow restrict, low use washer, un-installed water softener
<ul style="list-style-type: none"> Buy a different shower head Get rid of hot tub No non-edible plants or flowers

<p>Santa Fe has maintained a culture of water conservation. What motivates you to save water? How do you think others can be motivated?</p>
<ul style="list-style-type: none"> My motivation is just being aware of climate change and its effect on water supply. Others - keeping the public aware of science. Publicize and award local good/efficient water users.
<ul style="list-style-type: none"> My well-being, my community. We all have to take care of each other. Others – incentives to reduce my rate. My bills show long term reduction, where is my reduced rate?
<ul style="list-style-type: none"> I’ve always saved water. Grew up in Santa Fe – haven’t always been in a drought. To incentivize others to reduce by 20% - make it a competition and publicly applaud those who conserve. Since shaming doesn’t seem to work. Add a lower tier water use rate for those who are low users.
<ul style="list-style-type: none"> Saving water is my motivation. For others you could give a break on water cost for low water use
<ul style="list-style-type: none"> I am personally motivated by my concern of climate change and worry that by the time my grandchildren are adults their lives will be heavily impacted. I do believe education about smart use of water is key – drought years are felt by everyone and should raise awareness. If education doesn’t work – raise water rates
<ul style="list-style-type: none"> I am motivated by my awareness of coming water shortages, my desire to learn more so I can teach more and water rates. For others education to tell people about coming water crisis/ more education on ways to conserve water and on rebate programs. Awards for reduced use and low use (new building/landscapes) can help motivate. Educated landscapers regarding water harvesting and rebate programs available.
<ul style="list-style-type: none"> My desire to help the planet and provide enough water for future generations. Motivate others through kids’ education in schools – bring that home to parents

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> I am motivated to save water by my conviction that God placed us as stewards and guardians of what he’s given us. How we steward effects everyone. You should do more faith based group outreach. Educating the community on the reality of water/climate, etc. School education/curriculum requirement/standards and history of irrigation/water use in New Mexico
<ul style="list-style-type: none"> Motivated to save water, save money and for the environment. You can motivate others by education and promotion and by saving water for future generations.
<ul style="list-style-type: none"> The price of water motivates me. What could motivate others would be the availability of conservation technology and water use data and current info on the hydrologic cycle, weekly.
<ul style="list-style-type: none"> Knowing and cherishing that I am a part of a community and want to thrive personally but want the same for my community. Things that might motivate others would be featuring neighborhoods or groups that are doing a great job. Also educating the community on how/why everyone’s effort is important.
<ul style="list-style-type: none"> What motivates me primarily is to live at peace with all my fellow inhabitants on our planet with limited resources. Also for me and for others if Santa Fe dries up property values will fall, tourism will cease and the city will become smaller and broke.
<ul style="list-style-type: none"> It’s part of the way I live. I feel guilty if I mistakenly use too much. Peer pressure; being pointed out as a squanderer Financial; fines, penalties and rewards
<ul style="list-style-type: none"> My understanding of climate change and the future of water in NM. Also, litigation TX vs. NM. Get public officials to speak more often about climate change.
<ul style="list-style-type: none"> Shame heavy users, feature waterwise gardens and not inappropriate gardens.
<ul style="list-style-type: none"> I think it is fun to do the right thing – and it is good to be part of a community that is water conscious. To help “educate” public – raise water rates, publicly support restaurants that are water savers.
<ul style="list-style-type: none"> Pass city ordinances barring thirsty plants, trees and traditional cultural practices.
<ul style="list-style-type: none"> Nature is in control. We live in the desert and need to honor that reality. This is already not enough water to support the population. Ground water is a limited resource that is being misused. And you can’t keep draining. Education about desert living needs to be taught in the schools and should also be sent regularly to consumers with their water bill. Monetary incentives speak.
<ul style="list-style-type: none"> Water = today’s gold. Born in the desert and having worked for a county with waste agency in the LA foothills also dependent on surface water. I “get it” that nature is in control. Others – probably motivated mostly by money. Lawns= fee to have them. Swimming pools, annual fees to have based on gallons. Bonuses/credits given for annual reduction in a household or business’ water use. Limit City’s population to what the water availability can handle. Insist/prevent businesses from selling inappropriate plants.

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> • At least since the 80's, concerns are on the earth in general. • Work up a culture about caring about the earth and others. I don't think we can succeed without increasing awareness of interrelatedness.
<ul style="list-style-type: none"> • As an environmental science teacher, I have been involved with water conservation (in Michigan) for 40 years or so. I have developed my own approach in my residences. • I think City rebates coupled with an intense education program could help others, especially low-income residents – and emphasize conservation in multi-family and commercial situations.
<ul style="list-style-type: none"> • My motivation comes from the concern for long term viability of water supply. • Money – nobody wants high water bills or fines. • Guilt – don't want to see my name in the reporter. • Do-goodism – save water saves the planet = environmentalism.
<ul style="list-style-type: none"> • What motivates me is just knowing that I don't have a large water bill. • Others – keep showing how xeriscaping is beautiful and rewards for less use.
<ul style="list-style-type: none"> • Offer a rebate to replace hot water tank heaters with on demand heaters.

<p>How did you feel about our process today? What are other ways we can collect input from the community?</p>
<ul style="list-style-type: none"> • Good for get small groups talking. • Best to get ideas written down • Shorter time, smaller material • Scope • Change or add focus on environment to “most productive use of water” • Every drop counts – best use of it
<ul style="list-style-type: none"> • Small group discussion was good, but didn't seem enough time to thoroughly contemplate and discuss each question • Solicit web input with newspaper articles and other publicity
<ul style="list-style-type: none"> • Location is considerably better than the Chavez center • Signage for the location was sub-par. A sign at the entrance to the campus would have saved us a trip around the campus. • The process was v. good but participation seemed low considering the size of the city. Maybe a public survey, via USPS mail including a SASE.
<ul style="list-style-type: none"> • Process is a bit tricky due to time limits for answering. Is there a place on website for follow up / further comments? (from participants, from community). • How to motivate/other ways to collect input – announce meetings/potential for website/mail-in input in water bills, local radio stations (KSFR), rewards for participation – water bottle was unexpected bonus; • hold meetings w/ neighborhood groups • webinars
<ul style="list-style-type: none"> • The small group process worked well, great discussions but I'd like to hear what other groups were saying in addition to my own. • Input from the community could be requested in billing statements, at city council meetings, at public libraries, spreading the word through the schools, community college and non-profit organizations
<ul style="list-style-type: none"> • Process was informal but effective • Best to ask for community input and embrace the ideas of those who care enough to show up – exactly what you are doing.

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> • I really love the small groups and discussions • City-wide questionnaire sent out with water bills to help gauge consumer knowledge, care, etc. • Target specific parts of town and/or peoples groups with educational outcomes, collaboration, etc.
<ul style="list-style-type: none"> • Good process • Interaction • Breakfast/lunch?
<ul style="list-style-type: none"> • Process was good. • Temporary loop the facility for hearing loss • Fruit instead of so much sugar • More diverse folk needed • Door to door education of the public. Cards/info at the libraries gives with book checkouts. Engage schools with flyers to be taken home by students
<ul style="list-style-type: none"> • Liked small groups, yay for snacks, coffee! • Great facilitator / better venue • Use/engage the help of people working in communities to engage neighborhoods. i.e., chainbreakers, earth care, etc.
<ul style="list-style-type: none"> • Process was well planned, well executed, productive and inspiring • Send a representative from your office to attend HOA meetings to solicit further input and provide education • Global warming mostly puts more water into the atmosphere – so, as Gary Nabhan has stated, drought comes with floods. Latter should be addressed at April 13 meeting
<ul style="list-style-type: none"> • Need lots of communication – process is good • There are many options for conservation the more we can show them the better • We all come from different backgrounds and all points of view are helpful
<ul style="list-style-type: none"> • Good Process – I learned lots • Educate kids and they will teach parents – maybe Comics!
<ul style="list-style-type: none"> • Break • Comic Books on Water Conservation to school children at school
<ul style="list-style-type: none"> • Need recommended consumption for size of household ideally by month
<ul style="list-style-type: none"> • Good process today – I would like more of a re-cap in person – to discuss – and on the website • Comic books for young and old people (similar to the ranked choice voting comics)
<ul style="list-style-type: none"> • Excellent process – well thought out and organized. • Find some ways to talk to the people who don't come to these meetings and don't care how much water they use – perhaps send direct invitations to high water users to come to a meeting to address their needs and issues
<ul style="list-style-type: none"> • SUPER Process • Other ways: • Undertake same / similar process with facility communities + large employers (Lunch?) • Pose 1 or 2 questions to homeowners via returnable post cards. • Get on a few call in radio shows • Have booths at Santa Fe place mall, De Vargas, the plaza, outside libraries and at library meetings • Speak at political meetings, professional societies

D.1 Meeting #1 - Residential continued

<ul style="list-style-type: none"> • Excellent process today! Great space! • Christine Chavez was outstanding • Water conservation fans • Letters to every address in Santa Fe to obtain information – private and business • Have volunteers go door to door to each residence and business
<ul style="list-style-type: none"> • Surveys with X # of bills – some small incentive to return them filled out by 6 surveys • Experience – great process
<ul style="list-style-type: none"> • Very Good Process • Put questionnaire or survey in billing with some kind of a “reward” for returning it • Hold event at downtown and southside plaza
<ul style="list-style-type: none"> • Great format: small groups with moderators works well, although I would like to know what others said and discussed. • Online surveys with reward
<ul style="list-style-type: none"> • Very good process for this meeting • Good questions • Good information • Perhaps hold similar basic meetings (not 4 separate topics) with local organizations where people who would not attend one of these series would be present – example, SF Woman’s Club • Also, Earth Day at the Railyard

D.2 Meeting #2 – Commercial

How can businesses in Santa Fe be motivated to save even more water?
<ul style="list-style-type: none"> • Separate metering • Show money saved • Publicize / Market • Rate penalties
<ul style="list-style-type: none"> • Businesses need to know how much water they use to understand any water savings they can accomplish so first step would be to provide meters • Motivation could include being able to use the fact that they are saving water in their advertising as a draw for more customers, also to reduce costs (impact on rent changed?)
<ul style="list-style-type: none"> • Serve water on request • No continuous flow in dip wells – flow shut off • Laundry – side load • Commercial rates same as residential and increase in cost will encourage businesses to save water
<ul style="list-style-type: none"> • Education: explanation of where they fit into the big picture of water use and water availability • Rebates – set a water budget that is “industry specific” and then give rebates or incentives to businesses that are under their budget, annual, quarterly, etc.
<ul style="list-style-type: none"> • Reduced fees (water bills) • City placard / acknowledgement • City Local awards for most compliant • Highest rating / most compliant restaurants will stay open if the situation becomes drier, and restaurants would be required to close during drought. • Seasonal times for certain water-needed businesses e.g., closing golf courses

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Incentive • Advertisement opportunities • Signage - % of usage • Competition • PR • Mayor Power
<ul style="list-style-type: none"> • Awards • Publicity for greatest saving • Recognition for: <ul style="list-style-type: none"> ○ Biggest investment ○ Most saving ○ Greatest messaging to clients ○ Highest # of employees who have signed up for EyeOnWater
<ul style="list-style-type: none"> • Education for city workers who work in irrigation • Meter • Install monitors to measure moisture
<ul style="list-style-type: none"> • Sub meters required • Meet business standards for use
<ul style="list-style-type: none"> • Education of all state – from the very basic: water is finite, water is life, where our water comes from • Create graphics – cool creative imaginative graphics about the above posted in restaurants, businesses above all sinks, toilets, etc.
<ul style="list-style-type: none"> • Attract more customers with same values • Brag about water savings to customers • Fresh produce washing stats • Coordinate with health department regs and inspections – what is really necessary? • Smaller glass of water offered • Haven’t thought about businesses – offices • Ice melt throw away to gray water recycling for plants
<ul style="list-style-type: none"> • Offer rebates for purchase / installation / use of water efficient appliances and equipment by businesses • Pay for water efficiency consultant to work with architects and developers to make their projects as efficient as possible. • Provide publicity for businesses taking conservation steps – including providing window decals, certificates, lists in newspapers, etc. • Pay for water use audits for businesses and for consultants to recommend efficient responses • Provide counseling to business owners on dollar amount that can be saved monthly or annually
<ul style="list-style-type: none"> • Offer incentives in cash or in some permit or regulatory procedure • E.g., the long process to get a business license could be shortened if permittee agrees to install water conserving appliances.
<ul style="list-style-type: none"> • Educate and emphasize the PROFIT motive – i.e., show opportunities for saving water and money • Place responsibility by ordinance on landlord not tenant for updating capital (toilets, pipes, etc.)
<ul style="list-style-type: none"> • Upcharges for “above average” consumption • Rewards for customers education – i.e, water conservation

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • A business “water miser” rating for businesses that use less than others of the same type. • Commercial WERS rating • Reporting program
<ul style="list-style-type: none"> • Learn from household program similar to what is done for households. • Rebates for more efficient equipment • Rate structure adjustments • Education
<ul style="list-style-type: none"> • Install water meter, get “subsidy” • City subsidize and publicize i.e., free ad water saving devices
<ul style="list-style-type: none"> • Need recognition • Need a “drive” • Perhaps slogan, etc? – “keep Santa Fe a leader in water conservation” or something. Purpose: customers recognition especially among out of area • Explain presence of aerator, etc.
<ul style="list-style-type: none"> • Provide sufficient financial incentives • Pretty much pay for technologies that save water • Pay for installation costs • Small business loan can be paid off through the water savings
<ul style="list-style-type: none"> • Enforce existing regulation for restaurants – customers must ask for water • Provide incentives for independently certified equipment • Retrofit establishments with low flow toilets • Signage for water conscious businesses • Reward / acknowledge top water savers • Use city website for announcements – not social media
<ul style="list-style-type: none"> • Put ice on plants • Smaller glasses in restaurants • Bonus for saving water • Put meters in water wells within the City of Santa Fe • Water saving washing machines
<ul style="list-style-type: none"> • Charge more for commercial use • Charge more based on amount of water used • Give business free exposure and advertising or put star on business for top 10 water savings
<ul style="list-style-type: none"> • Technology – educate, incentivize, provide • Require / incentivize audits. What you don’t know . . . • Low flow trade out • Tax on purchase of high flow capture / store water – state law 42 hours • State conservation policy • Rewards, awards, free exposure

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Contests • Promotion by the city of top 10 water savers • Raise rates with exceptions for food growing • PENALIZE • Incentivize
<ul style="list-style-type: none"> • Break out “commercial” category. Parse usage, pertinent conservation technology, motivation, monitoring • Possible reduction of restaurant usage from 10 acre-feet to 5 acre-feet through single conservation / metering – VERY DRAMATIC SUCCESS STORY • Without metering on every usage – difficult to discover conservation technology / motivation • If all usage were metered – price/technology can be drafted
<ul style="list-style-type: none"> • I would like the City to pass an ordinance for restaurants to not bring water unless the customer requests it • City parks should water during allowed times that minimize evaporation, lead by example, etc. • Businesses should have updates about new rebates that would reduce their costs • Businesses should get quarterly updates on water use and water situation in the city / county based on rain, snowpack, etc. • Institute an award to business innovation to decrease use
<ul style="list-style-type: none"> • Make certain that operator of businesses receive benefits of conservation, resolve tenant landlord issues • Publicize businesses that make a real effort on conservation • Incentives for conservation among entrepreneurs who are starting new businesses • Sub-metering of individual businesses • Focus on government sector
<p>If you had to permanently use 20% less water due to shortage what changes would you make?</p>
<ul style="list-style-type: none"> • Water audit to find issues and opportunities • Install water conserving fixtures • For hotels, really don’t wash sheets and towels every day
<ul style="list-style-type: none"> • Employee training • Landscaping reduction • Retrofit toilets
<ul style="list-style-type: none"> • Hand wash all used plates – do not use the washing machine. Paper towel all plates, etc.
<ul style="list-style-type: none"> • Bucket in the shower in hotels for plants and toilets • Encourage water efficient equipment • Encourage less toilet flushing • No water served at restaurants unless requested • No taps in the bathroom (sanitizer wipes) • Drought menus – serve food that requires less water in its preparation • Cleaning methods that are less water intensive • Paying attention to when they water outside • Gray water systems

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Chemical hand sanitizers in all bathrooms and disconnect sink water supply • Put up notices in all restrooms or places people use water explaining the water crisis and personal limits (i.e., Capetown’s 13 gallons per person per day) • 2 minute shower notices in hotel bathrooms. Offer playlist songs that are 2 minutes long. • All bathtub plugs removed from bathtubs in hotels • Spread mantra – “if it’s yellow then it’s mellow” for all public bathrooms
<ul style="list-style-type: none"> • Encourage businesses to collect roof water runoff – maybe a reduced fee for implementing systems
<ul style="list-style-type: none"> • Reduce turf footprint to sport specific needs (Parks / Sports complexes, etc.) • Continue integrating new water saving technology and plant species • Begin looking at what are luxuries vs. necessities in terms of services and educate consumers on needs to cut luxury services • Incorporate water collection and reuse systems
<ul style="list-style-type: none"> • Decrease gardening water usage • Change restroom set • Use collected water for toilets • Improve our washing processes • Ask ourselves if we want water to drink • Xeriscaping
<ul style="list-style-type: none"> • Have commercial entities check their outdoor pipes daily to make sure that they are not spewing water on to pavement or street
<ul style="list-style-type: none"> • Install greywater systems and rainwater systems in all parks, buildings, schools. Especially focused on watering landscapes – • Plant more trees! Trees hold water and replenish aquifers. • Do away with retention ponds (too much evaporation) • Double flush toilets • Automatic shut off valves on all sinks • Source food locally • Reduce packaging • All new businesses have to install water-saving devices – all businesses must do the same
<ul style="list-style-type: none"> • Parks – separate meter, change time, day, length, and engineering • Water plants, not sidewalks, streets, or parking lots • Mandatory flush handles for yellow vs. brown in public toilets • Mandatory roof capture for landscaping over some minimum – or – share with neighbors • Permeable pavers and rain gardens mandatory in parking lots • Budgets with penalties
<ul style="list-style-type: none"> • Shower with a friend – showering alone is for the lonely!
<ul style="list-style-type: none"> • Turn off water certain hours of the day • Require 20% less use or else? Fines and public humiliation. • Rain gardens

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Build storm runoff reservoirs at shopping centers, major institutions, and use for irrigation and landscaping • Ensure all toilets are highest efficiency – replace all that aren’t • Tap sources of gray water and either use for landscaping, irrigation or reprocess on site to potable standards • Train all staff in opportunities for conserving water • Use consultants to identify water inefficient equipment and appliances, then replace with most efficient equipment and appliances • Install auto on / auto off controls on all faucets (motion activated) • Re-plumb all city outdoor properties, including parks and schools, so no water goes on streets or walks or down gutters
<ul style="list-style-type: none"> • Reuse of gray water
<ul style="list-style-type: none"> • Use only xeric landscaping • Never ask for water or ice at a restaurant • Increase incentives for solar power (i.e., rooftop solar) because electricity requires enormous amounts of water if conventionally generated
<ul style="list-style-type: none"> • By law, businesses may not use local surface or ground water for drinking or cooking – this water must be purchased from US regions with excessive water. • By law, all businesses with EyeOnWater
<ul style="list-style-type: none"> • This would be hard. Some businesses are already very efficient, others are not • Audit your water use = what operation uses the most water – might depend on indoor vs. outdoor use • Fix all leaks • Install more efficient equipment – increase incentives • Specific actions would depend on the nature of the business
<ul style="list-style-type: none"> • Use laundries that recycle water like Luna Laundry • Target landscapes to provide shade and carbon sequestration with less water • Dishwashers that are more efficient • Reuse greywater for landscaping and clean for toilets and landscaping • District water recycling – some to drinking water standards using clean energy for the processing.
<ul style="list-style-type: none"> • Restaurants serving drinking water on request • How efficient plumbing installed and appropriate • Efficient washing machines • Low water use limits on development and commercial sites
<ul style="list-style-type: none"> • Conserve water in parks • Train state health inspectors to advise businesses on water waste which they see (but which may not be a health problem) also on water rebates, etc. • Put off washing vehicles
<ul style="list-style-type: none"> • Low-flow devices • Restaurants – use paper plates and cups • Carwash – recycle water
<ul style="list-style-type: none"> • Waterless urinals • Behavioral change

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Again, focus on enforcing existing regulations • Incentivize companies who do reduce water usage by percentage. • Develop city program to help businesses see how to do this • Prioritize efforts towards businesses that are the biggest water users – restaurants are a good example and start
<ul style="list-style-type: none"> • Use plastic grass instead of sod wherever possible
<ul style="list-style-type: none"> • Incentivize the use of stormwater for landscaping and for drinking and household use
<ul style="list-style-type: none"> • Allow for new and existing commercial enterprises to convert to waterless urinals and composting toilets • We could start a new toilet elimination (elimination elimination, elimination squared) program
<ul style="list-style-type: none"> • Internal water recycling / reuse • Utilize low flow toilets and alternate waste systems • Find ways to adopt new processes, i.e., use low water landscaping • Change policies to allow water saving technology • Sensors and low flow for sinks • Reuse of grey water on construction sites • Require water audit
<ul style="list-style-type: none"> • Permeable pavers in parking lots • More xeriscape plantings • Keep covers on pools • City change all toilets out to low flow and male too • No water after 10 am – 6 pm strictly enforced • Low flow washers • Require used recycled effluent to keep dust down on construction sites • Require audit as condition of certificate of occupancy
<ul style="list-style-type: none"> • Be aware of consumerism – reduce buying products that impact water use • Require businesses to create their own water reduction plan based on water audits • Require apartment complexes, housing authority, housing developments to know what their water use is • Trailer parks, business tenants, and owners should work together to resolve leaks
<ul style="list-style-type: none"> • Meter 1st – and watch and pay attention • Technology 2nd • 3rd Price water per meter + use – set priorities • Homes – grey water / water audit • Restaurants – recycle waste water • Parks – buffalo grass
<ul style="list-style-type: none"> • Improve water efficiency of any outdoor landscaping • Use only high efficiency appliances and equipment • Instill a culture of water conservation among the work force – employees share in the benefits of conservation

Currently our enforcement program in the summer conducts enforcement runs that look for water waste throughout the City. Fines are currently issued. What is a better approach to working with our businesses to save water and educate them on water conservation practices and efficiencies?

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • New resident orientation / welcome package • More workshops, education • Business license attachment • Reward / recognition for business of the month for water reduction
<ul style="list-style-type: none"> • Rewards for using below standard for the purpose
<ul style="list-style-type: none"> • Civic pride is generally important to businesses – if a business has a reputation – put them on a list with other violators that is publicly available in the New Mexican • For well performing businesses – give them a certificate they can post
<ul style="list-style-type: none"> • Fine those who are not in compliance • People comply to leaks if the City SERIOUSLY fines – do it for personal and corporate
<ul style="list-style-type: none"> • Incentives for education (online) • Increase the fines • Educate before pay fines – bills online – give rebate
<ul style="list-style-type: none"> • Base fines on water lost (gallons) instead of baseline • Permitting for water use with requirements similar to how USDA issues permits for natural resource harvesting • Require certified persons only to use water systems (business specific) i.e., water managers
<ul style="list-style-type: none"> • Look at how other cities do water enforcement – what penalty structure is • Have meetings with large commercial users to discuss
<ul style="list-style-type: none"> • Encourage people to work it out by themselves and talk to neighbors • City shut off • Meter restricted / governor wells
<ul style="list-style-type: none"> • City should seek legislation permitting cities and counties to require metering of all private owned wells and reporting to the jurisdiction establishing the metering requirement • Increase fines for water conservation requirement violations so that they are an effective deterrent • IMPORTANT: using an array of educational and incentive efforts to encourage conservation is extremely important. But these efforts must not replace enforcement. While it should be and is last preference, when education and incentive efforts fail, enforcement is crucial. It should be sufficiently painful to be an effective deterrent to waste and violation and it should be predictable and dependable. • Publicize – newspapers, etc. – on weekly basis the names and addresses of violators
<ul style="list-style-type: none"> • More enforcer people • Meter grandfathered wells and report the same as us • Real fines – cost effective – add a zero! • Buddy / mentor to work with offenders • Awards and incentives for drastic positive changed – monthly report • Plant trees and pollinators without penalizing for extra / new water use • Incentive rebate • Remove water hogging plants reward - replace with good environmental plants
<ul style="list-style-type: none"> • Fines should be charged for commercial water use – should be higher. Current fines are cheaper than it costs businesses for maintenance and repair costs • Invite the business that makes the most progress in saving water to the mayor’s ball to honor them

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Create signage posted on every toilet, sink that informs each person about the value of water • Education – water is finite, water is life • Tour the wastewater treatment plant • Where does our water come from • Increase fines - \$100 first offense, \$200 second offense, \$500 third OR MORE • Who has used the least amount of water? • Native plants, trees, shrubs
<ul style="list-style-type: none"> • Relentless public education for all ages, for business owners and the public • City already does a good job, but we need to do more.
<ul style="list-style-type: none"> • Business owners who violate ordinances must undergo an (onerous) # of hours of education regarding water conservation, alternative energy, local farm to table food, etc.
<ul style="list-style-type: none"> • Mandatory training rather than low initial fine – say a 3 hour class • Look at city codes which may interfere with enforcement • Look at what it would take to make code enforcement self-supporting
<ul style="list-style-type: none"> • Use tiered rates and higher fined to pay for enforcement staff and find other programs that save water (and energy due to the water energy nexus) • Summer intern program to find leaks and help property owners repair them
<ul style="list-style-type: none"> • Increase fines • Publish violators names in paper • Neighborhood association workshops
<ul style="list-style-type: none"> • Fines – start at \$20 then step it up more steeply if behavior doesn't change • Every few years re-run old campaigns • Ongoing information on how much landscape watering is necessary – especially trees • Ongoing information on suggested (target) consumption based on family size
<ul style="list-style-type: none"> • Check business summer usage. Target those which have big increase and do your best.
<ul style="list-style-type: none"> • The group tended to education
<ul style="list-style-type: none"> • Update antiquated enforcement regulations • Re-educate businesses about city regs • Increase fine structures • Public exposure to water wasters (a la Santa Fe reporter)
<ul style="list-style-type: none"> • Meter wells and at least have data to use • Get rid of potted flowers on the plaza • Monthly list of 10 top water conservation users • Fines need to be higher • Get cooperative agreements with feds and state to conserve water especially landscaping • Renter information so they can learn to use and save water • Change in law regarding use it or lose it • Address leaks – 8% of total
<ul style="list-style-type: none"> • PUBLIC SHAMING!! • Similar to the health department's review / report that is published in the paper

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Higher fines • Create cooperative relationship with fed and state entities that are exempt • Water monitoring for renters without water bills • Developers stop building with 50+ year old process – incentivize and require progressive resilient building • Publicize offenders – PUBLIC SHAMING • Permit with high fee to have a carwash fundraiser • Require water audit when usage is unusually high – don't wait for businesses or residents to act.
<ul style="list-style-type: none"> • Develop internships for high school and college kids to work at water conservation offices for educating the business community, housing, schools, etc on water issues – in language. • Community driven posters, presentations, etc. that are culture and language specific • Homewise housing authority trust fund so part of their assistant to home buyers / renters they incorporate "water education" and info on city programs that benefit them
<ul style="list-style-type: none"> • Enforcement – can be counter productive • How much water does city waste • Enforcement budget – fine – not useful • Price the water and let the user know how they can use water more efficiently • Eliminate enforcement budget and increase education / how to di it = Better budget
<ul style="list-style-type: none"> • Use positive incentives more than enforcement for waste • For enforcement, focus in serious violations, and increase fines for these • Offer rebates for low water usage; publicize good corporate citizens.

The City of Santa Fe should be leading by example. What are ways that the City itself can be more water conservative?

<ul style="list-style-type: none"> • Reprocess wastewater • Convert golf courses • Publicize municipal water savings. What are you doing to keep up? • State is water starving • Give prizes for most water savings
<ul style="list-style-type: none"> • Xeric – all medians • Confine water used in parks and other areas which are irrigated • Replace water thirsty vegetation with xeric • Mulch • Change design standards to use less water • Not water MRC at 11 am on a windy day
<ul style="list-style-type: none"> • Lead by example • Institute best practices in all City operations – the City should do what it expects and wants its citizens to do in regard to equipment, irrigation practices, etc. • Use internal City budgeting to help provide incentives • Possibly involve neighbors for small City parks
<ul style="list-style-type: none"> • Plan extreme water reuse with senior system planning to allow working to net zero water without unintended consequences • Create distributed mini water treatment plants that can treat to drinking water standards, paired with solar energy and batteries, to be used to supply energy and drinking water in emergency and non-drinking water for non-potable uses at other times.

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Make sure that parks and playgrounds have the most water-conservative species of grass available
<ul style="list-style-type: none"> • Lead by example – follow all ordinances and even non-mandated practices in all public buildings. • Include water conservation in all public (all ages) school curricula
<ul style="list-style-type: none"> • Parks water plants not hardscape • Public Works – check for leaks and fix • More rain gardens everywhere water flows on a street or parking lot • Land Use code changes • Be honest and report more often • Revise rate structures with better classifications and equitable use rates • Keep up the good work!
<ul style="list-style-type: none"> • The City needs to post its water conservation posters in all its facilities and restrooms – especially places like the convention center where out of town visitors may realize we are in a dry desert and lack water. • Post water usage of the entire city daily online and in newspaper to promote awareness
<ul style="list-style-type: none"> • Install greywater systems in all City buildings – • Catch and use rainwater to irrigate – • Plant native trees, shrubs, and flowers. • Grow food instead of lawns • Educational gardens • Permeable asphalt in all parking areas • Do curb cuts on streets to move water to plants • Create a tree planting program • Give neighborhoods trees (free!) • Plant trees along sidewalks with the community • Get stewards for these trees to water them / care for them • Have a way to have the people be able to report on the health and welfare of their trees • Cool signage on trees that identify the kind of tree and that this is a stewarded tree
<ul style="list-style-type: none"> • Establish systems to use only product of sewage treatment plants on turf
<ul style="list-style-type: none"> • Establish systems to use only (i) product of sewage treatment plant on (ii) stormwater from roofs on parking lots or (iii) graywater for landscaping irrigation – for schools, city properties, and parks. • Construct underground reservoirs in tanks as necessary. Obtain changes in state law if required to permit these approaches. • Ensure all City buildings use only the most efficient toilets and urinals – and replace those that aren’t. • Ensure all sinks in all City buildings use motion detector activated faucets • Have an effective check-up program for all water using equipment facilities so they are checked once a month for leaks / improper operation • Post water conservation signage in all restrooms, kitchens in a city building
<ul style="list-style-type: none"> • Capture stormwater for irrigation and infiltration • Public bathrooms
<ul style="list-style-type: none"> • Require City departments consuming water, hire water managers who oversee water budgets and usage • Require personnel who actively apply water be certified (QWEL or similar) or not allowed to apply water. • “Water Applicators Certification” with monetary incentives (higher wages) • More funding from governing body to keep irrigation systems up to date

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Make sure our equipment has water conservation rating • Need to look at how we irrigate our own parks / turf what is the awareness and education level of staff • Have a water saving message / culture at work should permeate all our facilities • Grasses / Plants drought tolerant • Fully implement storm water plan • Capture water • Demonstration and education for what others can do
<ul style="list-style-type: none"> • Mandatory water collection on all city roofs • Mandatory toilet low-flow systems initiated • FINE for all businesses and residences • City xeriscaping most parks – change parks (e.g., to parks like railyard park) • Collecting water from arroyo flows to be reserved for landscaping. • Artificial lakes in city
<ul style="list-style-type: none"> • Better infrastructure • Collect more water • Improve the system at parks • Advertisements or campaign • Educate through example – the City has been lacking that
<ul style="list-style-type: none"> • Make sure all City offices / buildings are metered and post water use on City websites • Consider whether grass (lawns) are needed around City buildings • Install low water usage fixtures • Find more efficient ways to water flowers, etc. in the summer • Do water audits
<ul style="list-style-type: none"> • Automatic shut-off faucets in all city owned faucets • Monthly report on water use in city council meetings • Have a “water” column in newspapers
<ul style="list-style-type: none"> • Retrofit older buildings – toilets, water fountains • Employee indoctrination • Reduce turf
<ul style="list-style-type: none"> • Be a Leader City • Broadcast Success • Broadcast Usage vs. Supply • How much reduction of leaks in lines • How much runoff returned to underground reservoir / aquifer • Comparison to city in Israel / Lebanon where water management is focused • More efficient development
<ul style="list-style-type: none"> • Publicize its water use data; compare to other city governments • Focus on efficient water use in parks and other public spaces – lead by example • Rationalize organizational structure of conservation / sustainability – too many entities and poor communication • Resolve / publicize issues associated with cost of production of water (maintain system) vs. drive to produce less water through conservation

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Use all sources of media / information to broadcast water use, conservation efforts, etc. • Feature a monthly business that has improved water usage and conservation efforts • Ensure that all City buildings have been retrofitted with water conservation, capturing units • Promote known solutions in other cities that could be implemented in Santa Fe • Residents need to know sources of toxic waste affecting our drinking water
<ul style="list-style-type: none"> • Parks could use plastic grass • Plaza could use plastic grass
<ul style="list-style-type: none"> • City needs to follow restrictions on hours • No flower pots on the plaza • More native plants • Cover outdoor pool • Use Saudi Arabian type landscaping – different type of sand • Not grass
<ul style="list-style-type: none"> • Watering systems in parks more efficient / follow restriction times • Revise and create policies that permit more innovation in homes and businesses • Why do we even allow heavy flow appliances / toilets in renovations & new construction? • Encourage economic development for developing technologies that conserve recycle water • How do we make water conservation affordable! Tax rebates. • More collaboration to get alignment with state and federal laws to support water conservation technologies • How do we change our cultural expectations!?
<ul style="list-style-type: none"> • Lead by example when watering public places • Use Las Campanas standards for watering – even with treated effluent
<ul style="list-style-type: none"> • Convert live turf areas to alternative landscape type • Closely monitor consumption at city facilities • Program for developmental native sources

<p>How do you feel about our process today? How can we improve it for future sessions?</p>
<ul style="list-style-type: none"> • Good process – works well for in-depth discussion
<ul style="list-style-type: none"> • Good Job Christine!
<ul style="list-style-type: none"> • Please make sure that water use for EDIBLES (and urban farming) is not penalized
<ul style="list-style-type: none"> • Please get City Land Use Department, Water Department, Wastewater Division, and Planning Division to help aquaponics (which recycle water) projects through the process with reduced or eliminated impact fees, fewer requirements that cost money and time. THANKS!
<ul style="list-style-type: none"> • Appreciate participating in a process where input is considered and makes a difference • Get more people involved – glad there are numerous ways to participate • I think this process is good because it made me more deeply thoughtful and aware
<ul style="list-style-type: none"> • More public outreach regarding use of website to make comments or questions • Need more time. Would have been better if more people = I know that is not within your control • Use of Facebook excludes certain segments. Needs centralized clearing house public web page makes most sense – most egalitarian
<ul style="list-style-type: none"> • Great idea – input before policy! • How do we increase attendance?

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • Enjoyed! • Stay away from community room at Chavez • Invite suggestions on water bill – give x gallons credit on next bill for response • Rental incentive / education to renter / tenant • “per person” water use is not the critical measure – Total water use is the real measure that counts!
<ul style="list-style-type: none"> • This process is a great idea – might be good to have larger groups – 5-6 people per table rather than 3-4 - would allow more interchange • Timers • Try putting some sort of flyer in water bills – would get low response rate but it might still generate a wider cross section of the community
<ul style="list-style-type: none"> • Good process. • Solicit input from water customers through water bills • Provide speakers at church groups & neighborhood associations
<ul style="list-style-type: none"> • Use a meditation “alarm” to let people know to stop talking in a “Zen” way (or a small gong) • Take some of the more complex suggestions and hold charrettes to design how they could work, be funded, include all ideas, etc.
<ul style="list-style-type: none"> • Great process – keep it up!
<ul style="list-style-type: none"> • Involve HOA’s – insinuate water committee members into HOA meetings • Repeat similar format meetings city-wide DESIGNED FOR YOUNG CHILDREN TO PARTICIPATE • ADD FLOODS TO THE AGENDA
<ul style="list-style-type: none"> • Try neighborhood meetings like Hopewell, southside areas, schools – high schools, especially, send out online surveys to all in city • How can we be assured that we have been heard – our ideas put into practice? Other than this the process is good although more people need to be here – more youth
<ul style="list-style-type: none"> • The process was great! • It was very inclusive and our moderator had a very good system in place. • Have high school students have a competition and maybe a scholarship for water saving ideas and innovative technologies
<ul style="list-style-type: none"> • Ask high schools, public and private, to have their seniors and maybe juniors provide input on some questions • Good conversation today, producing some good ideas • Ask homeowners and condo associations in Santa Fe to respond to some questions
<ul style="list-style-type: none"> • Love it – do it more • Keep it up! • Bumper sticker: How Low Can We Go? Conserve water all ways
<ul style="list-style-type: none"> • Hair and nail salons • Pet groomers • Coffee shops • Food producers and bakers • Grocery stores – butcher, produce, deli • Business sectors – attorneys • Make challenges & Competitions
<ul style="list-style-type: none"> • Have a “late table” for those that come late
<ul style="list-style-type: none"> • The small group discussion is really amazing • More advertisement in New Mexican, thrifty nickel, reporter, etc. with links to websites etc.

D.2 Meeting #2 – Commercial continued

<ul style="list-style-type: none"> • It was a great opportunity to meet and connect with the community • Try to find a way to bring more people
<ul style="list-style-type: none"> • All advertisement for this event should include request for public comment for those who cannot attend (email address)
<ul style="list-style-type: none"> • Great format • Really enjoyed
<ul style="list-style-type: none"> • The process seems to be a good way to engage the community. Once people find out about it, I am sure more people would participate because it is informative and interesting
<ul style="list-style-type: none"> • Great. Keep going.
<ul style="list-style-type: none"> • Questions are too similar • Evening gatherings may not be best for business / commercial input. A breakfast or lunch for businesses only

D.3 Meeting #3 – Climate Change

<p>What are your biggest concerns related to climate change relative to water challenges our City might face?</p>
<ul style="list-style-type: none"> • Do we really need to provide “free” (treated effluent) to golf courses? Charge the public a modest fee to cover water expenses • Are we applying the latest technology in irrigating parks and golf courses? We need to change our mindset now.
<ul style="list-style-type: none"> • Water quantity for sustainability, growth could be impeded. • How can quantity be improved • Possible more restrictions and how can this impact quality of life and is this sustainable?
<ul style="list-style-type: none"> • Older buildings retrofitting restrooms • Water collection • Irrigation • Swimming pools
<ul style="list-style-type: none"> • Depletion of groundwater • Depletion of soil structure and viability • Endangerment of native vegetation species and wildlife habitats • Poor water quality and availability for my children
<ul style="list-style-type: none"> • How far can growth go before conservation becomes uncomfortable? Cost and available water. • How many private wells are in the city (900)? • How much water is used? • Why are they not monitored? • How long will the boom have room (Greg Brown) • How will the city keep providing water for the Santa Fe River?
<ul style="list-style-type: none"> • Population increasing • Weather changing –more or less water? • Not enough water for population growth • Limit population and new construction
<ul style="list-style-type: none"> • Education across the city to help involvement in water conservation; this includes the City’s needing to be pro-active about pesticide use – a ban on Monsanto’s Round Up, etc., would be good. • Gray water and black water reuse

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Conversion to residential graywater use • Balance of water conservation and increase in community / neighborhood gardens now established and in the future • Use (greater) of AC as climate warms • Greater use of parks
<ul style="list-style-type: none"> • Ban round up! • Be Proactive! • Engage and informing wider community – hoping that can be achieved. It’s always a challenge – public involvement. • Colorado River shortages affecting flows to Chama to New Mexico’s SJC contractors (who get RGSJ water) – specific effects on Albuquerque and Santa Fe’s surface water diversions. We count on that source now big time. As long as it flows! • Trees! Losing trees and green turf / vegetation – Adjusting to new reality – will be challenging for all • Public perception about city’s water situation – that we’re “running out,” don’t have enough and how to handle that – keep folks educated together so we come up with solutions together • City/county regional cooperation • Greywater – county and neighborhood gardens
<ul style="list-style-type: none"> • Sustainability of groundwater • Conservation • Growth in the City and County • Ability to successfully implement conjunctive use • Water quality
<ul style="list-style-type: none"> • Better use of building materials such as hempcrete that is a fire retardant and great insulator • Plant hemp for industrial and commercial use
<ul style="list-style-type: none"> • Climate Change usually means less water • Encourage using less water with more efficient equipment • Educate ordinary people to use less water – taxes a small group of people who refuse to abide by general conservation principles – TOUGH LOVE
<ul style="list-style-type: none"> • I am concerned about the health of our urban forest, as I think it is very important to maintain a comfortable environment for plants, animals and people and it also helps reduce the heat island effect. • I am also concerned that our growth is outpacing our water supply
<ul style="list-style-type: none"> • Low river flow (Rio Grande) and/or something that interrupts the reservoirs like forest fire. Especially if they are at the same time. • Loss of forest cover in town due to pests or climate change. Also more forest fires. • Increased use of water with increased heat – water plants more, evaporative cooling, etc.
<ul style="list-style-type: none"> • The city heavily depends on the tourist trade, I think it is important that we message our efforts on water conservation in all our publications targeting tourists. • It is important to keep messaging all areas of our community in all languages about different conservation efforts. • I fear we will become complacent or cynical
<ul style="list-style-type: none"> • Concerned about reduced surface water availability • Concerned we won’t take BIG steps until it’s too late • Concerned about growth and tourism as economic drivers • Concerned about over-reliance on groundwater

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Variability – there will not be a steady, predictable progression • Be prepared for all eventualities • Be flexible and adaptable • Be sympathetic and tolerant of climate change driven frustrations and fears
<ul style="list-style-type: none"> • That people do not water trees on private property due to cost and we lose more of our trees since most are on private land • That we do not have systems that adequately harvest grey water – how to retrofit homes
<ul style="list-style-type: none"> • Residents uninformed so still will wash their cars, driveways, and sidewalks – no penalty for doing so establish significant penalties and enforce them • Residents rely on automatic watering of plants, trees, etc. Need to outlaw! • Focusing on just dealing with climate change – need to focus on how to media climate change
<ul style="list-style-type: none"> • Long term – no water unless we find a new source. My answer is bigger than anyone else has imagined. But, having peace on our southern border is the way to get unlimited water for our state which is the most at risk of all southern border states • My answer is the JUMPP which is the Joint US – Mexico Pipeline of Peace that will belong to we the people of both the US and Mexico. Which is a joint effort of both countries.
<ul style="list-style-type: none"> • Completely running out of water • Figuring out where to then get water once snow levels dissipate and the Rio Grande gets lower and lower
<ul style="list-style-type: none"> • Increasing aridification – aquifer depletion / contamination • Severity of wildfires • Increasing storm severity • Increasing growth • Watershed threats due to the proposed forest resiliency project not done with an EIS but only an EA • Water awareness and the coming water insecurity • WUI Wildland Urban Interface • Construction
<ul style="list-style-type: none"> • Water contamination / filtration • Sources – reliance on surface water • Lack of reuse / gray water • Lack of understanding / consciousness • Lack of climate / water education in schools
<ul style="list-style-type: none"> • Drought • Poor water quality – contamination dependent on effluent • Complete collapse of system • How to get people to conserve more? • Too much development – lack of restrictions • Fracking
<ul style="list-style-type: none"> • Not having enough water for growing City and County • Changes due to flooding (in landscape) • How to conserve what we do have and protect it for the future or save water that might come in a big precipitation event. • How to keep waterways clean and sacred

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Long term droughts, • Increased risk of fire, • Limits to consumption, • Challenges to recharge of aquifers, • Increased flash floods, • Decrease or change to wildlife, • Risk to sports (skiing, etc.) and recreation (camping, hiking, hunting, fishing) • Risk to tourism, • Political confrontations from water use competitors • Limits to population and business growth • Changes to flora and fauna • Need to do more conservation • Better water quality protection
<ul style="list-style-type: none"> • Balancing the growth of the City with the changing climate in a way that doesn't leave us all high and dry unexpectedly. Seems that it may be changing faster than was predicted to action now seems important.
<ul style="list-style-type: none"> • More building does use more water no matter how efficient. • Conservation can only go so far • Managing shortage vs more housing – how is that solved?
<ul style="list-style-type: none"> • My greatest concerns are 2 • Government reluctance to take climate change seriously as a clear and present danger and mandate behavior in the public interest • Neglect of the threat of flooding as well as drought – net effect of global warming is more water in the atmosphere from ocean evaporation
<ul style="list-style-type: none"> • With continued warming we need to be prepared for increasing variability in precipitation (longer and deeper drought) punctuated by larger precipitation events and years. These extremes can include fire that negatively affects our water supply sources and more 1000 year thunderstorms that negatively impact homes, infrastructure, and people
<ul style="list-style-type: none"> • What are the risks of running out of water? • How can we limit growth based on water availability? • What kind of draw down is occurring in groundwater? How can it be changed? • What steps need to be taken to reduce water consumption in future? Landscaping, recycling, and reuse • Reluctance of government and population to change – this is key!
<ul style="list-style-type: none"> • TRUTH – what water are we recycling? Need to hear from gov. what is really happening • In this era we citizens really don't trust government. This should change to be successful.
<ul style="list-style-type: none"> • How do people learn about the diversity of water sources – put in bill at month with #'s
<ul style="list-style-type: none"> • Temperatures will affect how long we are able to retain the precip we get
<ul style="list-style-type: none"> • Flooding from changing storm patterns (fewer, heavier storms) flooding in places that didn't previously flood. • Shortages: with less snowpack in the Santa Fe and Colorado watersheds, and hotter, drier conditions, we may run out of water. • Also concerned that too much conservation will lead to demand hardening and worsen the crisis. • Catastrophic Wildfire. Concerned that we will lose many neighborhoods and the reservoir capacity to wildfires like those that occurred in California. • Will also worsen flooding.

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Big concern: that some people won't be on board and continue excessive water usage. • City will impose restraints in reaction to a few excessive water users
<ul style="list-style-type: none"> • Basin Study says surface water will decline by 30%. As that is +/- 1/3 of Santa Fe's water supply. What can City and County do to increase resilience of the drinking water source?
<ul style="list-style-type: none"> • Drought: lack of water! How to use what we have to give everyone a good life! (not too much – a good life for everyone). This means water for trees, food, growing food, plants, wildlife • How to educate: use creativity • Overbuilding • Catastrophic fires • Floods
<ul style="list-style-type: none"> • Decreasing supply of water – potential need for drastic measures • Loss of vegetation • Uncertainty about when, how much, etc. • Water not harvested
<ul style="list-style-type: none"> • My concern is about not harvesting abundant rainwater that we can use as a main source • Concerned about using out water to increase food security • Equity between those with money and those with little – needs transparency
<ul style="list-style-type: none"> • Keep Santa Fe beautiful while respecting limited water supplies
<ul style="list-style-type: none"> • LASTABILITY – how to work with water conservation at home • Implementation of plans for commercial use
<ul style="list-style-type: none"> • Insufficient rainfall / snowfall to support the population • On the flip side, City's insufficient culvert systems, ability to deal with occasional flooding • Citizens not saving enough water and city's inability to police that

The Santa Fe Waterbank generates revenue by selling conserved water to ensure that new developments have adequate water to support them. What sorts of projects would you like to see the water conservation office pursue with some of this revenue?

<ul style="list-style-type: none"> • Why do we not control our growth? • We are "fortunate" in some respect that we have a very low growth rate. What if we had a booming economy? It is not lack of water that limits growth – it's the economy!
<ul style="list-style-type: none"> • Why does "conservation" provide for growth? • Why can't some of my conserved water (in tier 1) be paid for and put into the Santa Fe River?
<ul style="list-style-type: none"> • Use funds to update and upgrade city water and irrigation infrastructure to current, water efficient technologies / equipment / sprinklers • Offer scholarships for education in water management, agronomy, environmental sciences, etc. • Offer internships • Expand water conservation division / program • Create a city agronomy division / program
<ul style="list-style-type: none"> • Curb growth with long range weather outlooks • Install water sensors with computers to irrigate when plant stress demands on all city properties including golf courses • All non-City owned golf courses should have plant sensors for irrigation • Continue rebates for water saving devices in old build homes • Pass law to use all private wells during severe drought

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • I don't understand the water bank. Why am I conserving water so commercial can buy it?
<ul style="list-style-type: none"> • Support aquifer storage and recovery programs
<ul style="list-style-type: none"> • To grow or not to grow • Affordable housing – encourage and support a wide range of economic classes • Diverse businesses
<ul style="list-style-type: none"> • Confusing Question • Water splash pad • Less personal lawns • More durable lawns – "parks" with green lush grass to play in
<ul style="list-style-type: none"> • Public dissemination of information as more of the public is better informed • More responsibility placed on developers for the cost and accommodations of what they build (i.e., standards of cost / water savings on building units, built in gray water provisions) • Fee waiver not a good idea – or raise the cost considerably • Office could provide oversight on private well enforcement • Prepare for climate change refuge influx which will bring chaotic situations beyond normal pace of planning. Can't plan well if this is ignored. And people need to be informed of this now. We have a short timeline.
<ul style="list-style-type: none"> • Contribute to organizations and efforts already ongoing e.g. gardens (home) for food • Leverage resources – hire people to provide education, information, and technical assistance • Aquifer storage projects • Grey water and all water saving technology
<ul style="list-style-type: none"> • Developers need to be challenged even more • Agricultural rights in conflict • WERS (score at 70 now) rating • Waterbank information – have a meeting that can focus on this "selling" water? This is a version of "in lieu of" that needs to be monitored • To support various projects we need to <u>raise taxes</u> • Enforcement – have the funds to help pay for more enforcement.
<ul style="list-style-type: none"> • A competition to fund conservation / reuse / infiltration proposals from individual neighborhoods
<ul style="list-style-type: none"> • School education projects for all school grades that help kids "love water . . ." including how to protect water from contamination, toxicity, etc. • Teach about chemicals use in the home that can be changed for cleaner options • Work with SFCC of healthier methods to heal the soul that will in turn improve water retention, etc. i.e., mushrooms and algae. • Learn from Tribal communities – how they conserve and protect water • Develop "protected" water areas to clean up areas of town with water toxicity
<ul style="list-style-type: none"> • I know nothing about the business of the Waterbank etc. – let the professionals on the staff handle it – (BIG PICTURE) • ENCOURAGE acclimatization to heat and cold
<ul style="list-style-type: none"> • Rebate to replace evaporative coolers with A/C and / or to install A/C instead of swamp coolers • More spot passive water harvesting projects for street trees • City publicize availability of mulch. Delivery? Clean it up from plastics, etc.

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> Assist with implementation of water conservation strategies in the older parts of town. i.e., grey water systems and rainwater harvesting Develop and implement better stormwater management practices throughout the City and County to help with aquifer recharge and reduce erosion Implement watershed management / forest health Implement and incentive for switching to drought tolerant landscaping
<ul style="list-style-type: none"> Stormwater catchment and retention More rainwater harvest investment Soil remediation projects
<ul style="list-style-type: none"> Fund citizen scientists to assist the City / County in following the health of our forests / wildlife – etc – fund / support urban farms, rooftop gardens (if feasible) – we must be working to ensure we have food / farms in the city and county Fund education (Mandatory) for all residents on water, where our water comes from, etc. Bonuses for those who use the least amount of water? Certificates? Free Parking Passes? Creative art projects – catchment systems etc.
<ul style="list-style-type: none"> Acquire water rights for instream flow in the Santa Fe River Restoration projects that improve climate resiliency
<ul style="list-style-type: none"> Restoration projects that improved climate resiliency (forest health, aquifer recharge through stormwater capture, rain gardens, arroyo restoration, etc.) Strategies to address demand hardening. Not sure what this would be – develop new sources of supply for times of water crisis? Use as match for fed / state grants to do all this stuff
<ul style="list-style-type: none"> Incentives like a % off your water bill for continuous months of reduced usage, both residential and commercial
<ul style="list-style-type: none"> Invest the revenue in projects to increase the resilience of the watershed (thinning, prescribed fire, riparian enhancement such as more beavers)
<ul style="list-style-type: none"> Composting for everyone to stop methane production and sequester carbon Support local agriculture and soil building / land restoration Stop glyphosate poisoning of our lands. Make animal manure toxic and unusable
<ul style="list-style-type: none"> Rain- and Flood-water reclamation for residences – city sponsored
<ul style="list-style-type: none"> Conservation education More rainwater collection / re-use efforts for big water users Sale (discounted) of ollas for home garden / food growth use Contest for lowest use of water
<ul style="list-style-type: none"> Fund a study, getting input on conserving water from the “average joe” not just the very pro-conservation attendees at these workshops
<ul style="list-style-type: none"> Try some new ideas – use it as seed money Support composting systems – the city isn’t always helpful Local agriculture Agricultural Practices Education by City on rain-catchment Hold a contest
<ul style="list-style-type: none"> Maybe a reward system to the very frugal water users – with publication of what these users are doing

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> Make rain gardens to increase groundwater recharge Install groundwater recharge injection wells that use solar energy to power the pumps Reduce reservoir evaporation
<ul style="list-style-type: none"> Have contractors build rain water gardens and other technologies to offset the new water use they cause Encourage residential and commercial native planting vs gravel lawn etc. to reduce heat retention in the city Put educational water information in the monthly water bills
<ul style="list-style-type: none"> Maintain resiliency of the Santa Fe watershed as a major source of our water including environmental use in advantageous locations Focused recharge of runoff to groundwater we can recover Aiding builders and citizens to more efficiently use gray water and roof runoff
<ul style="list-style-type: none"> Mandatory elementary school education about water and energy conservation (and/or middle school and high school) Greatest awareness impact at youngest ages
<ul style="list-style-type: none"> Rain gardens around the City of Santa Fe incentives for residents to lower water use Increased educational programs for youth and other groups Meters on private wells
<ul style="list-style-type: none"> Slow the flow Support hands on projects like gabion construction with middle and high school kids Riparian restoration – beaver reintroduction Buy water rights from ag
<ul style="list-style-type: none"> Put the money into gray water systems and catchment systems for residents and businesses Support farms and food farmers but buy water from alfalfa Mass education Money for residential drip irrigation
<ul style="list-style-type: none"> Tax incentives to retrofit homes Purchasing land to conserve watershed and ecological water services Stronger policies for defining growth we want Innovations and development of new technology and installing new systems Purchase farm land and water rights for growing food Prioritize air water use Put it in a City / State bank to fund community and local people focused initiatives Teach new values through media Incentivize sustainable agricultural practices EDUCATE schools through media campaigns and outreach
<ul style="list-style-type: none"> When old Stamm homes are remodeled give rebates for graywater systems and large water tanks and all water conserving appliances All parks have water catchment City compost system
<ul style="list-style-type: none"> Acquisition of grandfathered well rights and low cost hook up to city water to conserve groundwater for the future Tree planting and food gardening water rebates / offsets to improve hot climate and resiliency
<ul style="list-style-type: none"> Low water use plants and trees in public parks and medians

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Use part of the water bank money to create and market the idea of the JUMPP (Joints US Mexico Pipeline for Peace). I've envisioned the JUMPP to be paid for \$1 at a time from every citizen of the US, Mexico and the rest of the world to commit \$1 to every lawmaker and have our governments give the border to we the people in order to build the pipeline of water that we need. • Promotion of rain barrels – offer them free or rebate for purchase • Greywater system development if possible • Education programs to inform all different populations / ages / areas about water conservation
<ul style="list-style-type: none"> • Investment in public buildings to make them more efficient and decrease consumption and increase conservation • Increase investment in solutions and research for developments , multi-family homes, single family homes • Training and education for kids • Pleased to see 2 children at today's meeting. Good reminder that we're shaping their future.
<ul style="list-style-type: none"> • More incentives to encourage the commercial sector to conserve. • River restoration / aquifer recharge • Public Education • Enforcement
<ul style="list-style-type: none"> • WERS is an excuse to build more. • Water bank is well and good for expansion and building but does nothing in answering to the problem • There needs to be a paradigm shift to change things in the long run
<ul style="list-style-type: none"> • Recharge the aquifer using retention basins • Increase stormwater management • Improve education • Increase programs to conserve water in new developments (greywater) rain barrels, river restoration, cisterns, and other incentives for conservation.

<p>Studies of climate change indicate more extreme rainstorms which we all observed this past summer. What are your ideas on Stormwater projects that might both address flooding issues and provide benefit to our local environment?</p>
<ul style="list-style-type: none"> • Impound water to the legal limits and recharge the aquifer • BTW, what do we really know about our aquifer from a geotechnical perspective • What is the ranking of cost-effective solutions (such as permeable paving)?
<ul style="list-style-type: none"> • Better drain systems – embedded below arroyo surface to pull water into drain to be filtered and used for irrigation.
<ul style="list-style-type: none"> • Underground catchments, water to be used for irrigation (private) or for watering livestock and partnership with the County • Capture for injection back into the aquifer
<ul style="list-style-type: none"> • Stormwater needs to be diverted into catchments, then released – do we have the area for basins? Arroyo can be improved as catchment. • We also have curb cuts which have helped good runoff . . .
<ul style="list-style-type: none"> • A system to move storm water • An infusonator in place to collect and save
<ul style="list-style-type: none"> • Rain gardens • Water harvesting plans • Cisterns and rain barrels • “Clean Storm Drains”

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Stormwater projects • Permeable parking lots • Increase green space and reduce impermeable surfaces • Better and more retention/detention ponds • Flood warning detection systems • Ground water well group
<ul style="list-style-type: none"> • Maintain clean drainage sites, e.g. Alto street gutters and storm drains are clogged with dirt, plants, and made dysfunctional • With what was learned about the Santa Fe River trail in this flood, redesign and rebuild those parts that were poorly designed • We do speed bumps to slow street traffic, could we have something similar for water (maybe more storm drains) • Assure good emergency communications to keep people at home • Assure that developers take into account high water issues and design to forestall such limitations.
<ul style="list-style-type: none"> • Storm water project to address flooding and provide benefits • Capture and store water – water quality is issue • Improve drainage – infrastructure that directs • Emphasize adaptive resilience practices history of cooperation in New Mexico
<ul style="list-style-type: none"> • Stormwater projects <ul style="list-style-type: none"> ◦ More storm drains? • Solutions that benefit the environment and the City of Santa Fe • Education (again!) – preparation • Use what Cienega did – working together • EyeOnWater – Advertise and Educate
<ul style="list-style-type: none"> • Ensure construction takes into account different levels. I live @ Camino Consuelo senior Housing, the lower units got flooded but there was no planning on how to create “tiers” or terracing or dikes? Infiltration pond? Storm Sewers? Ensure they are clean. • Permeable paving for SFUAD
<ul style="list-style-type: none"> • There is no way to control extreme conditions – • Porous pavements / removal of pavements will increase seepage
<ul style="list-style-type: none"> • More storm sewers where water flows down streets and hardscape growing in volume • More infiltration ponds in parks and other public areas
<ul style="list-style-type: none"> • Where possible, reclaim the floodplain. • Create stilling basins to slow water down and encourage infiltration • Create dual retention areas • The City should develop a broad, watershed level plan for stormwater management • Remapping of floodplain – no construction there • Permeable paving areas should be increased!
<ul style="list-style-type: none"> • Look at better integration of stormwater management with the water supply system • Look at overall stormwater management system for the whole City of Santa Fe • Learn from past events
<ul style="list-style-type: none"> • Planting Projects

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • More collection of water by landowners • More terracing • Capture stormwater when it gets extreme • Better / wider culvert system to direct water • More stringent rules re: blacktop use • Stop lying and saying July 23rd was a 1,000 year flood
<ul style="list-style-type: none"> • Retrofit paved areas upstream from parks / natural areas to make them into rainwater harvesting and infiltration areas • Use permeable paving • No more building on floodplains • Restore floodplains when possible (with rock work, etc.)
<ul style="list-style-type: none"> • Healthier soil holds water • More curb cuts • More permeable hard surfaces
<ul style="list-style-type: none"> • Permeable concrete/asphalt all paved surfaces and curb cuts • Eliminate or ban parking lots • Restore Arroyos • Tree Planting • Work with artists and scientists to develop beautiful ways to keep our water in our community and slow it down. • Every house building has to have rainwater catchment systems in place that can cope with flood conditions
<ul style="list-style-type: none"> • Do not allow new construction to increase runoff from private lots a la Portland, Or (circa 1999)
<ul style="list-style-type: none"> • Replace impermeable surfaces with permeable surfaces wherever possible (parking lots, roads, etc.) • Lots and lots more rain gardens, trees, plantings to capture and infiltrate water • Arroyo restoration projects (induced meandering) to reduce damage • Create an updated flood map for the city. • Move/remove vulnerable housing and infrastructure.
<ul style="list-style-type: none"> • Learn from best practices elsewhere (Tucson, etc.) • Slow and sink the water
<ul style="list-style-type: none"> • Have excessive rainfall diverge into huge watersheds along rivers and arroyos
<ul style="list-style-type: none"> • Apply the strategies described in the new stormwater management to support projects that slow down water in the arroyos and place rain gardens at each point where runoff enters an arroyo
<ul style="list-style-type: none"> • Subsidize domestic level terracing of sloping private property • Subsidize domestic level planting of native plants • Subsidize domestic level mulching • All these also increase awareness
<ul style="list-style-type: none"> • Water is a complete and unified hydrologic cycle • Flooding in Santa Fe probably benefitted the Rio Grande
<ul style="list-style-type: none"> • Identify and maintain flood plan areas for short term storage and infiltration of the stormwater • Plan new development and redevelopment for permeable pavement of focused aquifer recharge

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Stormwater – slow it, spread it, sink it, but where!!! • Stormwater in arroyos and acequias wherever possible • Create a better storm drain system in the city for where you can't sink it • Credits for permeable pavement or removal of concrete from driveways • Use native plants and mulch
<ul style="list-style-type: none"> • Develop a neighborhood plan for curb cuts and gardens and implemented with crews and volunteers • Reduce impermeable surfaces • Greater infiltration – parking lots, roofs • Larger catchment with slower release • Bioretention, rain gardens • Change building codes along river arroyos requiring catchment infiltration • Develop along a main road in mountainous watershed areas reducing roads through properties and preserving larger areas for infiltration • Cluster housing!! • Stop further development in flood planes • Build water structures to SLOW THE FLOW
<ul style="list-style-type: none"> • Train the trainers – work force to model and train • State policy action on slowing the flow • FAQ's from City – answer inform on these issues
<ul style="list-style-type: none"> • More permeable surfaces, replace asphalt, neighborhood watch / trained to manage areas around floodplain • Gabions, retention and detention areas • Emergency volunteers / paid crews to monitor and clear storm drains around major events • Adopt a storm drain • Storm drain signage – adopt a drain
<ul style="list-style-type: none"> • Stop building on or near the floodplain • Cluster housing with fewer roads • Set backs • Slow the flow – summer youth crews to assist low income homeowners • Curb cuts
<ul style="list-style-type: none"> • Monitor storm drains before storms • Emergency crews assigned to drains • Create permeable surfaces for water absorption • Help for people living alone with modest means to build French drains, etc.
<ul style="list-style-type: none"> • French drains on property
<ul style="list-style-type: none"> • Adopt every arroyo and apply management to each and every one. • More trees, bank stabilization, capture and beneficial use starting at the top • Require capture on every parking lot, asphalt surface, and roof top. • Permeable surfaces to recharge slow and spread to promote recharge. • Capture
<ul style="list-style-type: none"> • Create catchment systems that will recharge the aquifer all the way down the stream
<ul style="list-style-type: none"> • We need more funds for individuals who are experiencing damage – like our own FEMA – • Private insurance did not help if no flood insurance

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Lots of people had no resource to deal with this and it will continue
<ul style="list-style-type: none"> • Large catchments on public land • Harvest water – present sewer system inadequate to do so
<ul style="list-style-type: none"> • Increase possibility to safely capture storm water to retention basin or flood plain • Clean out of catchment drains near neighborhoods to prevent homes from flooding
<ul style="list-style-type: none"> • As long as we plan for the near average, planning for least damage is all we can do
<ul style="list-style-type: none"> • Household and corporate collection would reduce flooding, risk, and improve conservation through less use
<ul style="list-style-type: none"> • Retention areas that might allow the recharging of the aquifer • Better channels to the Santa Fe River • Garden and Park areas that retain water more than runoff
<ul style="list-style-type: none"> • Build awareness about responsibilities of property owners • Cleaning culverts • Implement the storm water management plan • Paradigm shift that this is a resource not a nuisance • Infrastructure improvements that help water infiltration • More rain gardens

The challenges associated with climate change are difficult to solve overnight but there are inspiring stories of local successes from all over the world. In the next 5-years, at the local level what are some things that we can work on together?

<ul style="list-style-type: none"> • Water conservation • Recycling • Solarizing Santa Fe • Wi-Fi entire City of Santa Fe engage youth in above process • Xeriscaping City owned properties
<ul style="list-style-type: none"> • Lead by example in everything the City does – water conservation (great start), irrigation, solar, recycled water • Take advantage of existing technologies
<ul style="list-style-type: none"> • Partnership – interdepartmental, community, etc. • Partnership with community gardens (Parks Division), watershed, recreation facilities • Education – quarterly seminars (continuing education format) • Reward – reward citizens who are already conserving
<ul style="list-style-type: none"> • Raising awareness • Continue to improve • Conservation • Improve education • The young people are aware and ready to help tackle this problem
<ul style="list-style-type: none"> • What type of ecosystem do we want for the city? I would like people to think about why they are here (not just for jobs and family) but how they fit into the system • Highlight those of us who conserve instead of major water users

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • The “impossible” issue (I think) – • Climate Change is an overwhelming concept for all the globe • How to break it down for folks locally here in Santa Fe • Use the visuals and real life scenarios – flood, cyclones, “bomb storms” – tie some detailed connections to weather and effects (tree die offs) drought pics – SF’s dead parks in 2002-3, etc.
<ul style="list-style-type: none"> • Solve climate change by: • Walk more, drive less • Support organic gardening
<ul style="list-style-type: none"> • Support renewable energy
<ul style="list-style-type: none"> • Increase community garden program especially in the south part of the city (Water installation each is \$10,000 / house ; Jesse Esparza at city) • Tighten enforcement on water use of both residents and commercial • Stronger neighborhood associations – many are weak or non-existent – need to help, encouragement and support
<ul style="list-style-type: none"> • Let’s drive less! • Develop some contests – City and County wide • E.g., who’s lowered their vehicle miles travelled over a week or month long period • Use some of the water savings (bank) for cash prizes? Buy bikes for folks, bike saddle bags, baskets, etc.
<ul style="list-style-type: none"> • Work together • Challenges: • Publicize local accomplishments • Include success stories of working together – e.g., Cienega (feature green tractor farm?) • Publicize EyeOnWater • Use the Ranked Choice Voting model to communicate better
<ul style="list-style-type: none"> • State and local regulations on methane due to oil and gas • Better public transportation • Increase in solar/wind at all levels • Water conservation as earlier discussed • Education, implementation, better planning for growth
<ul style="list-style-type: none"> • Maybe look 50-100 years ahead and work backwards . . . • Retrofit non-permeable surfaces • Retrofit to use stormwater to water plants • Less hard black surfaces • Question: new construction what is the balance of loss of natural landscape to hardscaping that has to be watered forever
<ul style="list-style-type: none"> • Source local = less transportation and co2 • Better construction materials, to lower heating and cooling costs • More use of video conferencing to reduce air travel

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Government buildings need to become energy efficient • Build sustainability in all our actions • Build local food and water sustainability • Encourage sustainability measures in personal actions • Stay informed and take action
<ul style="list-style-type: none"> • Education, education, education • Trained cadres of workers to train neighborhoods on conservation and mitigation • Prioritize cc mitigation and water over everything else • Green jobs emphasis / local training free • Require gray water reuse • Work together to alter state policy
<ul style="list-style-type: none"> • Jobs in water conservation e.g., entry level positions with a focus on recruiting local low income at risk kids • Address zoning issues re: <ul style="list-style-type: none"> • Gray water systems including funding • Tertiary treatment of sewage • Building in the flood plain • Build a larger base of engaged folks • Cesar Chavez’s principles of Organization: inform, alarm, and activate
<ul style="list-style-type: none"> • Build Comment – Learn skills, prepare for the worst, catch water, grown food, do without, simplify, curtail growth, create small groups of allies to support each other, educate ourselves, become politically active, make city more bike accessible, less cars, more carpooling.
<ul style="list-style-type: none"> • A bigger movement, more buy in, more participation • Everybody on the same page working to move forward to community goals – residents, tourists, business government – unifying around changing our relationship to water • Capacity building – pay cadre’s to execute • Water conservation initiatives being more visible in development, transportation, preservation and public institutions / spaces • Opportunities – like this – for people to engage, be involve & participate with changes. • Recreate historic mayordomo, acequia governance to community water
<ul style="list-style-type: none"> • Arroyo clearing – this seems to have decreased a lot as a community project • Stop the use – especially the misuse – of pesticides re groundwater; • Stop dogs pooping in the river bed. Seriously. • Short term – do not allow the new law change allowing division of house into apartments because of loss of landscape possibilities in residential areas
<ul style="list-style-type: none"> • Inspiration and Movement • Set examples, share stories, encourage collaboration, reward good behavior with support and love and care • Try something new, take a risk • Listen • Communicate
<ul style="list-style-type: none"> • At the local level we can begin the jump and bring worldwide awareness to the issue of water. • Agua es vida • Cuando no hay agua, no hay vida

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Citywide composting of all green matter then available to all residence at minimal fee with delivery • Setting goal of city to BE ZERO WASTE by end of 5 year plan
<ul style="list-style-type: none"> • Healthy soils
<ul style="list-style-type: none"> • Support and expand youth and adult education on climate and water issues (like the programs run by the Santa Fe watershed association) to empower people to act • Implement resiliency projects (forest, rain gardens) and teach people how to do them on their private property too • NM is going to be a climate leader for the next 4-8 years. Partner with the governor and NMED to make Santa Fe a leader / model in the State on stormwater management, aquifer, recharge, watershed resiliency, and community engagement
<ul style="list-style-type: none"> • Have contests to determine ways / methods to reduce greenhouse gasses. Good prize. • Impose a small tax on cars / trucks or incentives at a local level to reduce greenhouse gasses
<ul style="list-style-type: none"> • The widespread acceptance of recycling is due in large part to kids guilt-tripping their parents. The same strategy, starting with schools and growing to all youth organizations, could help our community focus productive energy on water and climate change.
<ul style="list-style-type: none"> • Regenerative agriculture in the city and county • Ban pesticides and herbicides and all chemicals (globally insects have been reduced 75-80%) • Plant native pollinator plants shrubs • Engage schools – all of them – to improve their buildings, by eliminating all plastic from school lunches and do what the kids want • Restore arroyos and the Santa Fe river • Engage the art community to collaborate on projects to inspire, illuminate and create change – Positive change
<ul style="list-style-type: none"> • Trees, shrubs, wildlife • Where our water comes from • Education projects targeting girls • Eliminate single use plastics • Education using creativity! • Get people outside!
<ul style="list-style-type: none"> • Producing a lot more food locally • Composting all organic material • Stopping fossil fuel emissions by educating about passive solar retrofits, solar cooking and water heating • Make composting toilets legal and supported • Support bicycle transit
<ul style="list-style-type: none"> • Buy and grow only organic • Refuse round up (glyphosate) agriculture • Support only wise development practices • Education at every level on climate change and its effects
<ul style="list-style-type: none"> • More planting of trees and plants in a fashion appropriate for our dry climate • Maintenance of Santa Fe River and other streams • Clean water act in NM – strengthen locals – not EPA
<ul style="list-style-type: none"> • Together, we can set a goal to be the very best city in the nation for water conservation and set the standard for others. • Together we can commit the City to solar power in a very big way with the community solar systems

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Carbon sequestration – encourage composting, landscaping – water use • More emphasis on water conservation and other adaptations
<ul style="list-style-type: none"> • Reduce energy and water use in existing buildings • Comprehensive transportation reform • Enable working from home • Develop local food development year round • REDUCE CONSUMPTION • Educate girls and promote women’s careers (pay them the same for the same work) • Ensure access to reproductive health • Population growth reduction
<ul style="list-style-type: none"> • Mandatory public education curricula re: water & energy conservation at the household level
<ul style="list-style-type: none"> • Communication needs, successes, best guess for the future. i.e., capture the power of the citizens
<ul style="list-style-type: none"> • Show Tomorrow and Greta Thunberg YouTube in every district in the city for free in multiple showings. Saturate the city with the importance of personal action by everybody now before it is too late. • Undermine Complacency!
<ul style="list-style-type: none"> • Educate on simple things people can do to reduce footprint • Promote individual homeowner reduction in electric use from grid by further incentivizing home solar / wind • Incentivize / Promote local production of staple food – thereby reducing hauling by truck • Find ways to reduce the amount of driving people need to do in their normal day
<ul style="list-style-type: none"> • Engage young people at schools; community organizations; church groups; all people in our community – quarterly to talk about changes, how are we doing? Did what we tried work? What do we tweak? Keep the conversation going . . . • Create neighborhood councils that work on this with elected official for that neighborhood
<ul style="list-style-type: none"> • Neighborhood farms • Multi-landowner infiltration and reuse projects • Lots more local food • Try lots of stuff – even some failures can help with learning
<ul style="list-style-type: none"> • Educate the general public • Newspaper article • Classroom visit • Comic book / super hero publication • Establish standards for home use (GPCD) • Penalize high water users above standard • Reward Low water users
<ul style="list-style-type: none"> • Increase water infiltration – new hardscape materials • City sponsored electric supply
<ul style="list-style-type: none"> • Community solar • Community forums • Create partnerships to engage students in on the ground projects • I think it is important to have intergenerational education opportunities / projects

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> • Damage from catastrophic events • Limit growth • Infiltration into aquifer • Incentives for commercial • Education • Graywater systems • Aquifer mapping • Rain barrels • Active injection • Store water locally, in our aquifers • Rain gardens
<p>How did you feel about our process today? How can we improve it for future sessions?</p>
<ul style="list-style-type: none"> • Valuable for me as an individual and, I hope, for the purposes intended • Intention good – and group facilities helped
<ul style="list-style-type: none"> • Great Process!
<ul style="list-style-type: none"> • Good, very productive
<ul style="list-style-type: none"> • Great process – thank you! • I love being rushed – no joke – gets the brain working! I love the chit chat but it is good to move energetically too
<ul style="list-style-type: none"> • Great process. Thank you. • Well run. Effective. • Nice, informal tone • Flexible with format works better than overly structured processes • Really elicited my own ideas – fresh, new ones (and I’ve been a water professional for 20 years!)
<ul style="list-style-type: none"> • This works – worth the effort • Get this info in the Green Fire Times • Use the water / utility bill to ask for more input. • Invite more people
<ul style="list-style-type: none"> • Door to door canvassing so everyone is included in such process • Christine excellent “leader” – THANK YOU!
<ul style="list-style-type: none"> • Grateful for the process • Really helpful • Genuine, sincere • Proactive! • Hopeful.
<ul style="list-style-type: none"> • I liked the process • Ways to improve: mail business owners to try and get them to attend sessions and then offer incentives to reduce usage
<ul style="list-style-type: none"> • Great process – keep up the good work!

D.3 Meeting #3 – Climate Change continued

<ul style="list-style-type: none"> The small group Q&A worked well. Keeping it to 2 hours was helpful. Have a feedback process to keep participants informed about how our input is considered as the plan is developed. Ask each person who participates to share the information with 5 more, to involve more of the Santa Fe community. Increase outreach to under-represented communities via groups like chainbreaker.
<ul style="list-style-type: none"> Thank you for asking the community for feedback BEFORE creating the plan!!! Too often it happens the other way. This is the right way to do it.
<ul style="list-style-type: none"> Process – good, engaging I loved the videos Keep up the good work Thank you
<ul style="list-style-type: none"> Double flush toilets Install rolling dips on roads
<ul style="list-style-type: none"> Process was great
<ul style="list-style-type: none"> Process is excellent – ability to chat with others, share ideas, influence policy, encourage Christine’s efforts
<ul style="list-style-type: none"> Everyone in the process is already very pro-active conservation. I don’t know how to get broader input.

D.4 Meeting #4 – Partnerships

<p>What are some specific projects or partnerships where the water conservation office could work with existing community groups?</p>
<ul style="list-style-type: none"> In an effort to get younger people interested and educated about water conservation, involve boy and girl scouts, have summer youth projects, expand school projects, etc. Perhaps work with other environmental non-profits in joint projects (in addition to watershed association) for land use to maintain water
<ul style="list-style-type: none"> Conversion of grey water to potable water I’m not sure what group to work with
<ul style="list-style-type: none"> Consider creating programs for homes with wells
<ul style="list-style-type: none"> Make presentations to various realty organizations and educate agents and ask them to become water conservation ambassadors Make presentations to community subdivisions to offer and explain rebate programs and value of water conservation and importance to home values
<ul style="list-style-type: none"> Parks division and community gardens Parks division, public schools, and undeveloped “pocket parks” Faith groups who are looking to serve the community – “Green Fusion” Keep Santa Fe Beautiful and clean up along Santa Fe River and waterways Solicit more foundation money for support and programs
<ul style="list-style-type: none"> City grounds keeping <ul style="list-style-type: none"> Better monitor water use so the sidewalks aren’t being watered Reduce grassy areas; change over to gravel landscaping Educational outreach to property owners / HOA Faith groups / ministers Community Gardens

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> Educate master gardeners about water conservation Students in parks, working, learning, designing, outreach, money for field trips “green fusion” faith groups engaged Get New Mexican to do a weekly water focused article, practical tips Real Estate or Renters being the front line of water wise education for people new to the city
<ul style="list-style-type: none"> I’d like to know more about what large water users (golf courses, hospitals, car washes) are doing to conserve water; voluntary, mandated? Traveling road show, student friendly, grade level, educating students on water sources for City Continue with City/County regional planning Well owners; education, mandates? Religious organizations Educate around water wise plants
<ul style="list-style-type: none"> Meet with home owner associations to educate and identify concerns and possible collaborations Public information / educational seminars at local libraries and schools Meet with local National Guard, army reserves units to review their efforts. Outreach to youth groups, scouts, etc. Church groups and organizations
<ul style="list-style-type: none"> Santa Fe Botanical Gardens American Institute of Architects and Mazria 2030 project SF Board of Realtors SF Association of Interior Designers Various Landscaping businesses throughout the city / county Santa Fe Children’s Museum Santa Fe Community Fund re: financing Acequia Associations
<ul style="list-style-type: none"> Water Quality Monitoring – middle / high school Art of water conservation – art along the river Citizen scientist program for extreme events – also groundwater monitoring My water, my watershed for Cochiti schools
<ul style="list-style-type: none"> Any children and youth! In schools or other groups children bring enthusiasm, original out-of-the-box ideas, and they also inform their parents when often others don’t have access to them
<ul style="list-style-type: none"> Work with real estate folks to underline the importance of: <ul style="list-style-type: none"> Understanding water conservation Promoting the houses, offices, buildings, developments that are water conserving sustainable Be able to explain to customers the importance of what to look for Avoid overly politicizing water issues Architects and builders and contractors need to be encouraged to share their water expertise
<ul style="list-style-type: none"> Work with churches / religious organizations to include water conservation in church school / youth curriculum – stewardship of the earth’s resources. Set up joint educational projects with local members of American Institute of Architects on means of conservation and importance of designing them into all new homes and buildings

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> Senior housing – can the app for water usage be used per unit in the complex? Every unit at the complex should have water collectors. Target education of seniors. Home builders need to work with the city on “limits to growth,” what is our “sustainable” growth considering the number of tourists that come to our city every year. Push native plants, native trees, water run-off prevention The school district can add curriculum on water conservation starting in K-project based learning Permeable parking everywhere!
<ul style="list-style-type: none"> Golf courses – private wells grandfathered in the system
<ul style="list-style-type: none"> Bring family planning area groups that are involved with growth – e.g., Planned Parenthood, etc. into the discussion. What is the limit to growth? We need to plan rather than react to growth.
<ul style="list-style-type: none"> Community Groups Projects / Partners HOA’s are required by law to maintain landscaping – get them to plant more trees Churches – get them to plant more trees and retain more water on grounds, and turn hardscape parking to permeable Neighborhood associations – identify spots that flood or are dry and what to do
<ul style="list-style-type: none"> Collaboration with the home builders association and HOA’s Build homes with cisterns, helping save rain water
<ul style="list-style-type: none"> Outreach to HOA’s throughout the city and county to encourage incorporating water conservation into covenant controlled community’s bylaws and budgets Outreach
<ul style="list-style-type: none"> Building Complex (Santa Fe Complex) – water competition Citadel – residents and local businesses Restaurant competition Businesses recognition At work competition
<ul style="list-style-type: none"> Look for opportunities for outreach to build awareness of our water challenges, solutions, input, and things individuals can do themselves Continue to work with the county
<ul style="list-style-type: none"> Partnerships / Partners Earthcare * Sunset movement Youth!! Global Warming Emergency (used to be global warming express) Kids change how we think – bring positivity to us! Indigenous groups / people – IAIA SFIS ARTISTS!! Nurseries – Plants of the SW, Agua Fria Nursery
<ul style="list-style-type: none"> City collaborate with SFWA to develop a river management plan for the entire watershed City county address cohesive domestic well guidelines <ul style="list-style-type: none"> Maintenance Water Quality Use – meter Regulation Carrots (lowflow toilets @wholesale)

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> Do our ordinances limit growth based on projected water supplies?
<ul style="list-style-type: none"> SFWCC could establish constructive educational and even consultative relationships with HOA’s – attend scheduled meetings, distribute written materials, etc.
<ul style="list-style-type: none"> Update building codes in the city to require cisterns in homes, permaculture, no wells, water saving devices, etc. If not currently required. Same with respect to commercial buildings Restaurants serve large glasses of water, typically more than 8 oz. if serve ask them or require only 8 oz. or less at a time. Much of it gets wasted! Competition. City/county wide. Collective water conservation day to create collective consciousness – not only what can I do individually which often seems insignificant. Do it on Earth Day or Community Day and focus on less consumption, e.g. no water at restaurants, no watering outdoors, competitions, plays, quantity savings on that day.
<ul style="list-style-type: none"> Use water runoff from city water reservoirs to recharge the aquifer actively instead of just letting it run downstream Create a fund (private – public) to buy out City residents with private wells. Incentivize homeowners to sell their water rights

<p>How do you think that the Santa Fe Water Conservation Office could use models like these to develop a water conservation competition of our own?</p>
<ul style="list-style-type: none"> Best water conservation jingle read on the radio & highlighted in the paper Water character promoting conservation
<ul style="list-style-type: none"> By City district, which district can save the most water By schools, which school can save the most water. Categories: high school, middle school, elementary. Recognition by the Mayor and City Council City parks, based on size, which park can save the most water while being efficient and healthy
<ul style="list-style-type: none"> Student water conservation art on t-shirts, reusable bags, bottles, for gift swag and purchase Love the reclaimed brewery idea! Portable water filtration (not a competition, just a cool idea ☺).
<ul style="list-style-type: none"> Award households in various neighborhoods that show the most reduced yearly water usage with a light blue recycling bucket. Give a discount of \$50 to anyone who discovers a leak on their water supply pipe
<ul style="list-style-type: none"> Art Competition on water waste and conservation, examples of efficiency
<ul style="list-style-type: none"> Competition for the best xeriscaped private garden (along lines of English Garden Contests) Best xeriscaping of City Park abandoned areas that are turned over to area schools If landscape planting dies at underpass beneath St. Francis and Cerillos, extension of railyard park – competition for landscaping without plants (i.e., rocks and gravel)
<ul style="list-style-type: none"> Get the Santa Fe New Mexican to publish every week (in pasatiempo? – in a regular place so readers can easily find it) the best water conservation idea submitted that week. Use water conservation committee as judges? Arrange with the SFPS and private schools an essay contest for high school juniors or seniors on ways to conserve water in daily life and why that is important. Publish winning essay in the SFNM.
<ul style="list-style-type: none"> Ask homeowners to compete for greatest reduction in home water use over a 12-mo period and award winner with half-priced water for a year + publicity Do the same with SF service industry owners like restaurants
<ul style="list-style-type: none"> Science projects (STEM) that explore conservation water management / conservation options <ul style="list-style-type: none"> Community organize In collaboration with schools With Scum Fairies
<ul style="list-style-type: none"> Prize (annual, monthly) for largest water reduction (residential, business) 3-minute shower song competition Rain garden for your home Rain garden for your city park

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> Albuquerque’s business startup competition could be adopted to sharing water conservation ideas and projects <ul style="list-style-type: none"> 1 room that seats 100 people 1 local chef to cook a meal \$10 admission – all goes in a pot 5? Contestants – each gets 10 minutes to share their ideas while the others are eating The 100 attendees vote The winning idea gets an instant microloan of \$1000 to put their idea or project in motion
<ul style="list-style-type: none"> Band, musicians to create a 3 minutes or shorter shower song (of south African idea) with the reward being to be heard on the radio – no money Contests should not just have one winner – public reward in the papers – SFNM, Reporter, Green Fire Times, etc. 100 Women Who Care focus on water
<ul style="list-style-type: none"> Consider creating a competition state wide so cities (size categories) can compete with each other and bring expertise into projects. Ask community coffee and speak it over Ask pueblos + participants Create a special integrated committee and generate competition and create recommendations to place before larger group – Chamber of Commerce and Community Foundation can participate.
<ul style="list-style-type: none"> I think creative public art in parks exhibit focused on water conservation might be good. Car wash businesses could compete to recycle more water than advertise that they are the greenest business
<ul style="list-style-type: none"> Have Christine use her Home Magazine column to issue challenges for water conservation ideas and then publish the best ones in later columns.
<ul style="list-style-type: none"> Brew Challenge for sure!! Travelling all over town to all breweries. Lots of publicity. Reduced rates for proven conservation Rebate for trees with 3 year allocation at reduced rates Prize for business that replaces hard parking lot with permeable and rain gardens Rebate for elimination of septic system Home and business scorecards with 5 –year goals. PRIZES! Neighborhood and park demonstration projects Remove conservation charge for those who conserve
<ul style="list-style-type: none"> Profile the largest water users not by name, then show how they reduced consumption (over a year) Profile water renter and show how they conserved water – methods
<ul style="list-style-type: none"> Offer rainbarrels on loan when people set up a new account with a deposit. Have a competition about who can make the most beautiful/food producing/best garden with the water from the barrel
<ul style="list-style-type: none"> The reporter has a best of Santa Fe in several categories – have a best of Santa Fe in water conservation <ul style="list-style-type: none"> Restaurants, lodging, art galleries, etc.
<ul style="list-style-type: none"> Pose the question to children in public schools, libraries, and community organizations and get bank and credit unions to fund the 3 best ideas? Broken up by: young children / elementary, middle school, high school
<ul style="list-style-type: none"> Establish a “science project” concept for schools with a focus on use of effluent for example as well as other groups – churches, HOA’s Clubs, you name it. Each group could design a unique project to save water, use effluent, etc. use a Santa Fe Reporter “best of” model to choose the best one. Prize to the best.
<ul style="list-style-type: none"> Shower song Cartoons Photo contest
<ul style="list-style-type: none"> Definitely pitch to the nm brewers association for statewide competition of brewing with reclaimed water Photo contest with photos of public land with drawing of improvement \$50-100 fix competition of creative impact GSA / BSA of the service groups compete for conservation service badges

What do you think would be a good way to help find good ideas for water conservation on a neighborhood level and work with neighborhoods to help make those projects happen?

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> Create communication requesting opportunity to visit all HOA’s annual meetings to discuss water conservation and use them as a primary source for ideas on conservation (could be contest). Use mayor to promote progress and recognize outstanding HOA efforts of water conservation
<ul style="list-style-type: none"> Work with HOA’s to attend an annual meeting and share ideas that other neighborhoods are implementing. Promote rain gardens in open areas of neighborhood, educate residents on xeriscaping and native plantings Promote rebate program. Master Gardeners, highlight best ideas on city website, next door, and city calendar
<ul style="list-style-type: none"> Our cohousing community is bounded by two large motels. Is there any way that they could be incentivized to make run off water stay on their property and not impact downstream communities? Approach foundations for them to incorporate water conservation into their messaging
<ul style="list-style-type: none"> Community gardens appoint a mayordomo/a as a liaison with the parks division to coordinate water usage and other amenities. Neighborhoods could do likewise, but the City would need a liaison to coordinate with divisions like parks, stormwater, Santa Fe Beautiful, streets, etc. Cooperation projects would be amazing, but the city needs intra-agency cooperation and directive. Maybe create an internal city committee with reps from each division where neighborhood mayordomo/a takes their neighborhood ideas and requests.
<ul style="list-style-type: none"> Trained water conservation squads offering help and support New Mexican featuring existing neighborhood projects as examples Billing inserts offering info/ideas/resources
<ul style="list-style-type: none"> Art Projects for neighborhood schools – yard signs that could be offered to homeowners and then displayed in private yards (perhaps as recycle signs were displayed) posters / poems / essays / plays encourage HOA to set aside 5-10 minutes of yearly meetings to educate homeowners about conservation media outlets – Richard Eeds, SFReporter
<ul style="list-style-type: none"> Meet with homeowners and neighborhood associations to suggest possible water-conserving projects and to solicit new ideas, and then encourage the residents in the area to select one or two and pursue them
<ul style="list-style-type: none"> Develop neighborhood water retention plans Stormwater mapping by mini-watershed Rebates for implementation, house by house Follow acequia governance model (mayordomo, cleanings, democratic process)
<ul style="list-style-type: none"> Contact the neighborhood network – they are very active Afternoon street parties (play the latest shower songs) to share what best practices people are already doing and what the neighborhood wants. Don’t invite Nestle, though, they are terrible manipulators of water world-wide Involve the libraries
<ul style="list-style-type: none"> Gray water harvesting in corporation in home remodels. Through work with land surveyors in collaboration with builders / remodelers. Engage with city land use building department to distribute information to home owners who may be planning Publicize potability of Santa Fe Tap Water Encourage xeric ground cover – preferably with plants

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> • Intersection repair Portland, OR – the City Repair Project • Choose quiet but visible and accessible neighborhood intersections (consensus with all neighbors) • Paint a mandala on the pavement • Rain gardens / ponds at the corners • Tiny libraries (stocked with water books) • Freeboxes (share garden supplies, seeds, and equipment) • Movie screening (also climate, water issues) • Periodic parties to meet neighbors (close intersection foot traffic only), potlucks, idea sharing • Cob benches, seating areas inviting neighbors or pedestrians to stop, sit, ponder, imagine new ways to do community
<ul style="list-style-type: none"> • If a neighborhood has private wells, ask them to be metered to see how much they use compared to those of us who pay for city water • Arroyos – common problem for a neighborhood, but really bad for some individuals
<ul style="list-style-type: none"> • Neighborhood level projects • Meter wells – subsidize costs & report metered city wells to WC Office • Survey (walking and paper) neighborhoods, public meetings, for discussion of results, offer a range of options and helps to do something each of 5 years. • Measure storm water flow during summer events • Identify neighborhoods that rely solely on arroyos for stormwater runoff and help them capture and reuse
<ul style="list-style-type: none"> • Community Education – importance of shifting from I/me thinking to us/we as our survival will be dependent on finding solutions to our water use and water protection – conservation. • Neighbors that have implemented changes could take the lead
<ul style="list-style-type: none"> • It would be helpful to have a person help neighborhoods to actualize some water saving efforts e.g., teach us how to efficiently capture saved water from barrels, cisterns, etc. to gardens, trees, shrubs, gardens, etc.
<ul style="list-style-type: none"> • Next door • HOA's • Curb cuts • Engage stakeholders • Water ombudsman • Social Media • Churches
<ul style="list-style-type: none"> • Make it easier to have block parties or encourage neighborhood potlucks with a focus on water and planting trees, curb cuts, etc. • Neighborhoods need to understand what's possible • The City must meet with neighborhood groups (and not just the official coalitions)! • Do education outreach • Go into schools • Work with Lisa Randall – help them use their rainwater
<ul style="list-style-type: none"> • Involves creating incentives – instilling a sense that all residents are stakeholders • Create a block competition for conservation effort (maybe leading up to an annual block party) • Contests to design curbside xeric gardens, traffic circle gardens, and raingardens • Rain barrel / canale use monitoring and promotion within the neighborhood • Ex. HOA's subsidizing rain barrel purchase and help of payment

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> • Citadel – residences get points / discounts from saving water to use at local businesses that have saving water as well • Water conservancy gathering sponsorship • Botanical gardens free entrance
<ul style="list-style-type: none"> • Next door app • Use pool on social media platforms to get simple answer from the community like Instagram or Facebook • Work with religious communities
<ul style="list-style-type: none"> • Use mayor's new neighborhood / community outreach person to develop ideas among and between neighborhood associations • Block parties • Competition • Education • Rain garden tour (like garden tour)
<ul style="list-style-type: none"> • Combine water with other sustainability issues • Not just about water conservation • See Palo Alto model of app dashboard for sustainability competition on water conservation and other sustainability at neighborhood level • At first incognito but know that eventually names will be revealed • Get the kids in the neighborhood to be the face • Use next door as neighborhood challenge on water conservation. Needs incentives and prizes. • Rain gardens / gutters to harvest water in right way to go toward urban greening and tree
<ul style="list-style-type: none"> • Work with / ask neighborhood associations if they would promote water conservation pilot project e.g., free water barrel program for 100 users for outdoor watering to quantify savings • Have public school competitions to see which school can conserve most water in given day, week
<ul style="list-style-type: none"> • Meet with HOA's to spell out the water issues and solicit their cooperation and seek even more ideas • Conduct and publicize pilot programs. Use trial studies to advantage
<p>In what other ways would you like to see the Water Conservation Office working with students?</p>
<ul style="list-style-type: none"> • Working with science teachers at schools (middle) and high school level introduce a water conservation component to the science fair competition – give local, state, and national awards and promote their ideas
<ul style="list-style-type: none"> • Start working with younger than 4th graders
<ul style="list-style-type: none"> • Make the kids the ambassadors for water conservation in the home and challenge their parents to be responsible users. Turnoff water faucet when not needed.
<ul style="list-style-type: none"> • Peer to peer restorative justice model, but with environmental justice and skills on how to educate and talk about these issues together. • School to school sharing of projects for replication
<ul style="list-style-type: none"> • Educate students to speak to decision makers (school board, city council, county commission) • Travelling show on where our water comes from – link online for teachers to use • Filtration truck, mobile, bring to schools and events • Train cadres of interested students to do conservation projects, also educate a cadre for peer to peer education • Train school groups to educate within their schools – students who want to make change in their school environment

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> • Summer internships with the Water Conservation Office, or connect young people with opportunities to work at private firms involved with water conservation (landscapers, rain gardens, designers, permaculturalists) • Summer art projects at city parks with these of water conservation • Railyard park art installation
<ul style="list-style-type: none"> • Maybe ideas for how they can conserve water in their homes. Children are leading in so many areas • Give them actual devices they can use to monitor at home • Citizen scientist stuff
<ul style="list-style-type: none"> • Opportunities for hands-on projects for students to work with the water itself. Plots at parks for schools to be able to learn about sprinkler irrigation, horticulture, etc. • Allow them opportunities to implement their ideas in the field in addition to on paper and presentation tables. • SWAN park (Capital high and southside) • Ragel or Miles Parks for SF High • Pocket parks for elementary / middle schools
<ul style="list-style-type: none"> • Set up a speakers bureau and in association with the SFPS and private schools • Sponsor essay contest for public and private high school juniors or seniors to tell why water conservation is important and offer innovative ways to conserve. Publish winning essays in local papers. • In cooperation with SFPS and private schools, have dinners for teachers and provide experts to recommend approaches to including water conservation in social studies curriculum at various grade levels. Entice teachers to attend by providing dinner. • Toastmasters have water conservation for a theme for one session annually.
<ul style="list-style-type: none"> • A passport for adults program – maybe coordinate with schools and PTA's? • Being able to talk with their students, their children who will be in the passport the following year – a shorter program? • Creative writing contest about water (mystery? A play? Poetry? Sci-fi?) • Have 2 students work a few days in the water conservation office
<ul style="list-style-type: none"> • Have high school students teach elementary students • Weekend projects: rain gardens, river and arroyo maintenance • Rain garden tour
<ul style="list-style-type: none"> • Teaching youth water management skill that they can apply even in their own home e.g. <ul style="list-style-type: none"> ○ Fixing the mechanism of a toilet so it won't run ○ Fixing leaky faucets / replacing worn out washers, etc. ○ Bring in youth skill training groups e.g., 4-h, YCC, FFA, county Extension, plumbing business ○ Get their noses off the electronic screens
<ul style="list-style-type: none"> • A version of the ABQ GreenBuilt tour, but for youth / students? After they've visited institutions give them chance to visit homes, farms, individuals that have water conservation projects in practice. Let them see that it's not just something to rely on "authority figures" to implement but that they can do, or plan to do, themselves.
<ul style="list-style-type: none"> • Keep inventing projects for upper grades – integrated with school science classes through high school • External garden projects at schools through the summer and into fall • Projects for children to take home and continue with their families
<ul style="list-style-type: none"> • Start with pre-K / Kinder water conservation • Have the pueblos teach us about their techniques incorporating it into history / cultural lessons • Honor and acknowledge native ways of protecting and using water

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> • WCO – bring math into the equation not overwhelming but gallon, acre-foot, cubic foot / second, make these numbers make sense • Also metric conversions • Weight/volume/mass etc.
<ul style="list-style-type: none"> • Set up a forum in which the kids teach the adults what they've learned through the school curriculum
<ul style="list-style-type: none"> • Students do water audits • Movies • Afterschool water program • Water mascot characters • Utilize ranked choice voting
<ul style="list-style-type: none"> • After school or summer camp program focused on water conservation in partnership with other organizations
<ul style="list-style-type: none"> • Students are the built in neighborhood outreach organization • Mentor students to be able to perform water use audits in their neighborhoods • Deploy to identify neighborhood needs and draft a plan to address • Connect to service organizations – special service projects • School competition for best before / after photos showing neighborhood improvement over a school year
<ul style="list-style-type: none"> • Create a Santa Fe Water Day (or weekend or week) city wide with a parade, events, movies, performances, music, processions, etc. • Work with wise fool • Work with artists on your water education ideas – there are beautiful ways to incorporate art into science / water education.
<ul style="list-style-type: none"> • Create a mascot
<ul style="list-style-type: none"> • How do we know what knowledge transfer occurs between parents and kids? • How do we measure the benefit of these children's programs • What about a water fiesta days for parents and other adults
<ul style="list-style-type: none"> • Bring water fiesta to the water summit and give 'em the best booths • How do the students demonstrate the learning with parents – have parents sign pledges which students bring back as homework • Get them in front of decision makers with their ideas – what policy changes do they want to see • Incorporate them into the government process
<ul style="list-style-type: none"> • Field trips to xeric oriented plant nurseries and homes and have students take inventory of home and public plant arrays and vote the plants water demands • Highest water usage in Santa Fe is irrigation at homes
<ul style="list-style-type: none"> • Develop collaboration with pueblos for student field trips to learn ancient conservation practices
<ul style="list-style-type: none"> • The Water Fiesta should be expanded at least one day to include parents or the wider community as students and parents need to be on the same page; create opportunity for exchange of ideas and education
<p>How did you feel about our process today? What are other ways we can collect input from the community OR How can we continue to conduct public meetings to collect and disseminate information to help our work while we execute (instead of create) a plan?</p>
<ul style="list-style-type: none"> • During the process of finalization and dissemination of the plan I hope that you will reach out to residents to hold at least one public forum, put the plan on-line, and update the progress of water usage across the city
<ul style="list-style-type: none"> • Good job

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> • Today’s process was quite effective in that we became actively engaged in the process and became familiar with others ideas. Broadened my perspective and I met people. • Communicate the value of our engagement and the fact that we are all needed • Hand on vs. hands off
<ul style="list-style-type: none"> • I like the format so maybe a quarterly meeting like these. Also why not more in the paper or in the water bills sent out (that would not cost anything) • Why not use water bill mailings as a way to continue to educate and get input
<ul style="list-style-type: none"> • Hold quarterly meetings to update those interested on where the process is at. One quarter in each district. • Yearly updates on where the plan is at the given year • Video updates on the website • Quarterly newsletter with the water bills
<ul style="list-style-type: none"> • Great process, genuine interaction, open • How can the conservation office develop more digital tools teachers could incorporate
<ul style="list-style-type: none"> • Today’s activities were very stimulating. Small enough groups so that exchange was easy.
<ul style="list-style-type: none"> • As well as sharing them on the website, put these cards on a public bulletin board (library? Community center?) as a tangible expression of the community in conversation. Add a place for new input; maybe a stack of blank index cards and a suggestion box to leave them in? • Public chalkboard on a fence with water related questions at the top and plenty of space for comments below from the people who pass by. Examples: water to me is / means _____ or, I wish my town used / cared for water by _____
<ul style="list-style-type: none"> • Will the end justify the means? • Great way to get input on a small manageable level
<ul style="list-style-type: none"> • You’ve collected email addresses for all public hearing participants. Send a blast email once a month with a question and request responses. • Ask local papers to publish the questions and request responses to water conservation office email • Include an insert in the water bills posing a couple of questions and providing water conservation office email address to reply to. Combine with one or two items of info for example about a water conservation related event coming up or EyeOnWater and how sign up.
<ul style="list-style-type: none"> • Today’s process was fun and a pleasure to have and share with the partners at the table • The challenge I see is how to engage community members and sectors that do not so often participate in these kinds of civic activities. Here and church faith communities and social clubs in non-English speaking sectors merit extra outreach. Also consider outreach to SFIS & Somos un Pueblo Unido
<ul style="list-style-type: none"> • Process has been very good, despite my initial reluctance – it has prompted good cross-pollination • Continue with clear explanations of results and have already been done to a few particular actions people can take / participate in. • E.g., announce a water issue movie being shown at the railyard with picnic and food trucks • Explicit, clear announcements of direct action(s) the city will be taking the in the next 6 (?) months. • Use library to publicize and show what has been done • Display the actual cards
<ul style="list-style-type: none"> • Get people to public meeting by saying, “rates are going up” or “we are going to put a governor on your water meter” i.e., your household will get x amount of water – how will you budget what you get?
<ul style="list-style-type: none"> • This has been a great process and it is important for citizens to have a voice. I would like to see more Hispanics participate in the future. • KSFR quarterly updates & public TV show updates of implementation phases • Keep conducting public meetings at least quarterly at public libraries • Pose a question for citizens to answer monthly on the water conservation website

D.4 Meeting #4 – Partnerships continued

<ul style="list-style-type: none"> • Comment sheet with directed questions in water bill – to be returned with payment • League of women voters wants to have a city forum on the 5 year plan – Fall 2019
<ul style="list-style-type: none"> • Don’t know if the Santa Fe Water Division put info about meeting in water bills, but it should and also for input through a circular
<ul style="list-style-type: none"> • Sponsors • Website not clean • All (36) chambers
<ul style="list-style-type: none"> • I passed out the website to my list it could be a bit more user friendly and clear. What exactly are you asking for input on? Water is a big issue. Please direct and contact groups like Earth Care, SFIS, IAIA, personally invite them to participate! Use social media to collect info.
<ul style="list-style-type: none"> • Short shower song • Point collection flow going to specific faucets • Give food at these events • Collaboration from local businesses • Give points to folks who go to these events
<ul style="list-style-type: none"> • Process today was good – nice mix and collaboration • All 3 chambers of commerce – promote and sponsor
<ul style="list-style-type: none"> • Send out a monthly survey through city press release and social media • Go to HOA’s and other places where people gather • Love the shift to gathering input at the beginning and also letting people know about what the WC Office does

D.5 Online Submittals

<p>It is rare that a single choice of ours can have a broad and decisive impact on the climate crisis. We have a moral imperative to choose and advocate for plant-based diets for the health of our planet and the well-being and survival of generations to come.”</p> <p>~ George C. Wang, M.D., Ph.D. is an integrative medicine physician, assistant professor of medicine at Columbia University Medical Center, and adjunct assistant professor of medicine at Johns Hopkins University School of Medicine.</p>
<p>Vegan options on the menu save astronomically more water than any direct i.e. low flush toilets etc. options can do.</p>
<p>Please encourage vegan options on Santa Fe menus. Global impact is local impact and vice versa.</p>
<p>All new housing residential and commercial should be required to install low-flow toilets.</p> <p>Plus: gray water systems and rainwater, storm water gardens. Permeable surfaces. No asphalt. Native trees and shrubs, only. Eliminate asphalt throughout the City.</p> <p>Wild Bee houses: build them with kids, youth, artists- and do a sale of them to raise funds for pollinator plants.</p>
<p>Tax break for instant water heaters and solar water heaters, water rationing if needed.</p>
<p>Restaurants always serve water and/or refill water without being asked. They are not supposed to.</p> <p>People need to xeriscape more and it should be required to plant only drought tolerant plants.</p> <p>Ban lawns already.</p> <p>Help people to redo their landscape with drought tolerant.</p> <p>City parks should use native grasses, native trees, and fruit trees. Why not water trees that can provide food for the community?</p> <p>I think we need to be real with ourselves and limit development already.</p> <p>Composting toilets would be good.</p>

D.5 Online Submittals continued

<p>1/4 pound of beef requires about 460 gallons of water, according to the United States Department of Agriculture. If your beef is local free-range organic, then the water consumption is about twice that due to the longer lifespan and high desert conditions.</p> <p>Since locally produced beef (and other animal foods) is so water intensive, why isn't there more being done to address this issue by Save Water Santa Fe? I see no recommendations to eat lower on the food chain.</p>
<p>The long-term projections I've seen show a 25-30% drop in precipitation in the Southwest, including the Rio Grande and Colorado basins. Many compacts, treaties and other agreements on all scales contain language in terms of absolute numbers of acre-feet. This is spells trouble if the total amount available shrinks. Allocation amounts in any future agreement should be specified as a percentage of the total amount available.</p>
<p>There should be an Advisory Council.</p> <p>I support environmental protection of the Santa Fe River.</p> <p>The City should implement full public input before spending \$ on pipeline design.</p>
<p>From what I've seen the City does not have a contingency plan in the event of prolonged drought other than to continue to mine the aquifer. I have ideas that could be put in place in the event of prolonged drought. They would include changes to the sustainable conservation plan regarding development. Many of the City's water rights on the Rio Grande are junior and paper water rights. Many were purchased from acequias on tributaries to the north of Santa Fe. Buying more and more of these rights ends up depleting the tributaries and the Rio Grande and is not an environmentally correct strategy, especially for a City that touts environmentalism and sustainability. Does the City's 100 year plan consider contingency planning for example?</p> <p>Another thought:</p> <p>Many years ago a group of us submitted a proposal to the City regarding reuse of wastewater for drinking; toilet to tap. The proposal was to pipe the 99% pure wastewater to the filtration plant at Buckman and have it cleaned up to drinking water standards. Instead, I have heard that the City is considering our idea but to just dump it back into the Rio Grande for the return flow credits. For a number of reasons, I think this is a bad idea and would like to discuss it with the people working on it.</p> <p>Another idea I've had is to allow development that is off-grid, using onsite black and greywater systems for reuse. This could be part of the sustainable plan. It would not require expensive hookups or waste systems in difficult to reach areas. It could include federal, city and state rebates and incentives, much like the solar credits.</p> <p>Another idea is large scale surface capture. In areas that do not contribute to the flow of the Rio Grande a pilot project to capture surface water that would normally evaporate could be put in place. The water could either be pumped to the Rio Grande (for return flow credits), injected into the aquifer or be used for development or agriculture. We have some ideas that could be considered.</p>
<p>The idea of growth for the sake of growth is not sustainable, prosperity without growth would be a forward-thinking plan for the City of Santa Fe and I encourage you to consider it. There is plenty of literature and examples on the web.</p>
<p>For new construction: All new building should have water catchment. (Obviously solar as well.)</p> <p>Drainage should be about keeping ALL water on the landscapes to create edible gardens or at least trees. That includes new roads. That alone would double the average rain fall in intensive areas, allowing us to plant native trees, such as cottonwoods.</p> <p>These improvements would increase the value of new development and do much for our cities sustainability.</p> <p>We should review how cities in places like Australia are dealing with water catchment and copy best practices. We have to find ways of keeping all our water.</p> <p>All new landscaping should have drip systems.</p> <p>The longer we put this off the greater the lost opportunity.</p>

D.5 Online Submittals continued

<p>1) You need to use all the information accumulated during the last 50 years on Global Warming.</p> <p>2) You need to take into account that almost all water in the planet is contaminated and continues to be contaminated as I am writing.</p> <p>3) You need to STOP building housing in the city and around it to attract more people to live here because our desert has been in a fast track of desertification and will continue to do so as Global Warming is already unstoppable.</p> <p>4) The city has thousands of square feet of roofs which can collect thousands of gallons of rainwater.</p>
<p>More vegan meals at restaurants (and home obviously) would decrease the massive amount of water used to raise animals for food.</p>
<p>One great way to protect and conserve water locally and globally is to switch to a plant-based diet. More and more, medical professionals, public health professionals, environmental specialists, engineers, and others realize the connections between human, animal, and environmental health. Other cities around the globe are already moving to promoting plant-based meal promotion through city-wide Meat-less Mondays from boroughs in New York to cities in South Africa, or to the promotion of a plant-based diet in other ways. Santa Fe has the opportunity to join these leading cities!</p>
<p>Vegan food requires far less water to produce than meat and dairy. Please encourage local restaurants to offer healthier vegan choices.</p>
<p>I have gotten a rebate on water barrels and for low flow toilets.</p>
<p>I think I did get a rebate 9 or 10 years ago for a clothes washer. But when I had a drip irrigation system put in last year by a contractor, I was never able to get the original receipts for the hardware and that's what the city required for a rebate. The city should figure out a way to provide rebates in situations where the homeowner doesn't personally buy the materials.</p>
<p>Received a small rain barrel rebate about two years ago.</p>
<p>I would like to see a grey water credit for using water from washing machines, dishwashers and showers in gardens/ yards for watering plants, trees, etc. How can I learn more about making these changes to my home?</p> <p>Also, I would like to see a drought resistant plant credit. If I use xeriscaping or add drought resistant plants to my yard, or just the opposite - remove water hog plants from my yard, I think it would be nice to see that reflected in a lower water bill.</p>
<p>I am interested in making my property more water conservative. When the lower flush toilets were offered years ago, I acquired one for each bathroom. And, installed low flow shower heads, etc.</p>
<p>Now, I would like to have rain barrels, front and back. Are there rebate coupons available? That would be as helpful as I live on my social security benefits. I have used small, plastic buckets to catch roof water.</p>
<p>Why has the city not placed a number of cisterns around the city to collect water from rain storms etc. for future use during drought times that would be overseen by the city? Seems like a good use of our tax dollars!</p>
<p>Our city uses holding ponds for overflow during periods of heavy rain, or snow. This is an outmoded system that does not provide any benefit to our trees and shrubs, nor does it do a good job of replenishing our aquifer. It simply becomes a breeding ground for mosquitoes in summer and concentrates oil and gas residues from our parking lots, roads, cars, trucks and buildings in toxic amounts. There are excellent alternatives...such as French drains, and permeable pipes that are beautiful (or underground) that would bring much needed moisture to our trees, shrubs, flowers etc....moving water where water is needed.</p>
<p>Our city also sends a great deal of storm run-off into our sewer system. Is this really the best use of an abundance of water in arid Santa Fe? I think not. Let's support our trees and watershed by letting water nurture our land, and life!</p>

D.5 Online Submittals continued

<p>I attended the first meeting. My impression was the environmental value of water is being under-valued. A dry ditch through town does nothing for residents or visitor, where a flowing river and healthy green riparian corridor is a valuable asset.</p> <p>The Santa Fe Canyon Preserve wetlands above Santa Fe and the cienegas below town, including the Leonora Curtin Wetland Preserve, are also assets to be valued, preserved and promoted to visitors. Although we cannot see them, the aquifers below our feet must be preserved for the city to survive. These should set the limits to growth.</p> <p>How many households can the city sustain during a series of dry years (5 in a row, 10 in a row?) while still letting the Santa Fe River flow, maintaining the riparian corridor, still preserving the wetlands, and not depleting the aquifers. If the city has grown beyond that point then Santa Fe is too big already and growth should stop, because it is likely those runs of dry years will happen and we ignore the environment at our peril, and we cannot afford to deplete the aquifers long-term. Excessive growth and water shortage will be a detriment to property prices and a slow death for developers.</p> <p>One possible way to accomplish some of this might be to open the Water Bank to environmental uses, maintaining the riparian corridor, recharging aquifers, sending it through the Canyon Preserve, rather than just for development and growth. Where the money would come from I don't know, could the City levy an environmental fee, would citizens step up and fund-raise for their river? The idea would be to pay to retire water from the Water Bank and release it into the river channel instead of offering it to developers. This is a potentially viable solution to the danger of demand-hardening, by slowing growth and keeping a reserve for environmental use that could be tapped in exceptionally dry circumstances.</p>
<p>Am a committed conservationist seeking others to create optimal and viable change in consciousness toward stewardship and personal responsibility individually and collectively as community at large toward necessary change?</p> <p>I would like to see these actual changes experienced and implemented with immediacy into the external environment in which we all live. Direct implementation of the existing systems, both intellectually and actually, that will continue to sustain us through awareness, cooperation, collaboration of insights, efforts, skill and science application and funding.</p> <p>All of this is available NOW within this collective community. I see us as the example for how this is done, representing success and mutual thriving in business, science application and humanity that it serves. Let's see this now uniting with all the "natural" resources we have here in new legislature, laws recently passed and new permanent residency from people all over the country who have chosen Santa Fe as home for there and their and their young families' futures.</p>
<p>I am very much in support of the initiative to work with commercial water users--thank you for starting that.</p> <p>I would also like to see more workshops (again) for homeowners and landscapers, aiming especially at the new folks moving in to educate them about how to save water by using native species and regionally adapted species (including landscape maintenance), and how to care for existing large trees.</p>
<p>Restaurateurs should be encouraged to offer more (and delicious) plant-based food entrees, since animal agriculture demands so much water that is wasted on unhealthy animal proteins. Animal ag is the largest consumer of water and the largest polluter of water in NM.</p>
<p>One of the largest expenditures of water comes from animal agriculture. I encourage you to urge restaurants to offer more vegan choices to save water!</p> <p>There is a growing vegan movement world-wide and Santa Fe is no exception. I know a lot of us who are concerned with the state of our environment would welcome more vegan options on local menus and would support the restaurants who offer this.</p>
<p>We need more education on water use. Perhaps more signs at public places about how much water is used when showering with water running nonstop for 15 minutes or more. I see that at the gym everywhere. It is a horrible waste</p> <p>Also I am against Development with so much pavement and not a backyard for trees. Developers want so many houses and leave no space for outdoors greens.</p>
<p>If restaurants in Santa Fe offer more vegan options that will save a lot of water. In addition all restaurants should be required to ask if people want water before they serve it.</p>

D.5 Online Submittals continued

<p>I attended the last two meetings and have a few things to add: Ban full flush toilets (make it illegal for them to be sold in Santa Fe). All new construction (and renovations) must use low flow or dual flush toilets.</p> <p>Plus: I learned at your climate meeting this past Saturday that the city has been buying water rights to sell to developers, so that the developers can put in, say, over 60 two story homes on Agua Fria, or an apartment/condo complex off Cordova, and so on. Some of the people at my table expressed their dislike of this....and I would like to add my voice to theirs. The City of Santa Fe is creating more new, expensive homes, destroying the quality of life, when what is needed is affordable housing for the people who already live here. PLUS there are few (or no?) water regulations that new construction has to follow...no grey water systems and no rain gardens and no native plantings are required. Set up regulations now to require all construction to create rain gardens, grey water systems, and native plantings. Thank you!</p>
<p>Help folks use the water from their kitchen sinks in their gardens!</p>
<p>Water conservation planning must be done in the context of overall water management planning where water supply and demand projections are evaluated comprehensively. The two components of a community's total water demand are: 1) water usage on a per person basis (gallons/capita/day) and 2) the community's population and growth projections. Santa Fe has done a great job reducing its per capita water consumption rendering our city with one of the most efficient water use rates in the country. Excellent!</p> <p>The unfortunate news is that there seems to be very little community discussion about the other determinant of our overall annual water demands - population and future population growth. It is now time to for this discussion to occur! What is a sustainable population for our city/region recognizing that climate change may significantly reduce our annual renewable water supply? While there's obviously room for improved per person water conservation, personally, I am hesitant to ask our citizens to conserve even more when we ignore the "800 pound gorilla" in the room - population growth. I would find the following unacceptable: asking our citizens to use even less water so that we can "free up that saved water" to approve an unsustainable increase in new housing subdivisions and commercial growth. When I was the City's (first) Water Conservation Manager in the late 1990s, I heard this from city residents/water customers quite frequently. e.g. "Why should I conserve even more water just so the City can approve all sorts of new growth?" Without including the population growth discussion and implications, I fear that the water conservation discussion will occur too much in isolation from other important public policy and water management issues. This effort seems to take the UNM population growth projections as a "given". I would suggest that, instead, we have a healthy community discussion about our rate of population growth and what might be an appropriate City/region population level where our population begins to level off. Thank you for the opportunity to provide input!</p>
<p>Trees need be planted and ground needs to be mulched. Trees call water. All parking lots should have them. When our water is low people should empty their toilets with their bath shower water. Many more home practices should be implemented: small containers in sinks for hand washing and dishwashing. Cars should not be allowed to be washed so often. So much is unsustainable with water usage in homes and businesses. People need be educated. All drain areas should have plants. Water saving, beyond barrels, need be taught. Grey water has to start being used without expensive means. Education is the first step to saving water. Waste water could be used to grow ground cover to help color scorched earth. Not familiar with chemical plants, but their usage and safe disposal of water is essential. The ferry Orestes service and partners in the greater Santa Fe forest resiliency project need to stop killing our forest. We need all the ground cover. Please keep me updated and I would like to submit more.</p>
<p>There should be some mechanism for the homeowner of older homes (40+ years) to get a free (or nominal expense) test on supply lines (from meter to home) to make sure there's not a slow (but costly) leak. I believe this is a huge problem in Santa Fe wasting a LOT of water!</p>
<p>Require all new developments to use low flush toilets and gray water!</p>