

Key Performance Indicator (KPI)	<p align="center">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p align="center">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
CUSTOMERS	
Objective CR-A. Foster customer satisfaction	
<p>CR 1.1 Percent of retail customers surveyed that rate SFPUC as good or better</p>	<p>ACSI 2014: Municipal Utilities reported a customer satisfaction rate of 77.4% for energy services in 2013 and again this year, for 2013-14.</p> <p>Albuquerque (ABCWUA) benchmarked its 2014 customer satisfaction rate at 3.4 for technical quality complaints per 1,000 customer accounts. Heading toward zero, this is an improvement over its 2011 rate of 5.5. (Approved 2015 Performance Plan, p.128)</p> <p>AWWA 2012 Benchmarking: Stakeholder Outreach Index (%) (p.53) Encourages utility companies to "regularly conduct customer satisfaction surveys that result in a statistically significant measure for customer satisfaction." And furthermore to "use the results of customer satisfaction surveys to improve processes, practices and systems." The top quartile for Combined Operations is 83% with the median at 75%.</p> <p>City West Water's Customer Service satisfaction was 94.9% for 2013, down a bit from its 95.6% for 2012. (Appendix 2, Annual Report for year ended 30 June 2013)</p> <p>EBMUD: Although it did not conduct an overall customer survey in FY13 (one of its 13 customer satisfaction/emergency preparedness performance indicators), it did meet 7 of its targets for FY13. The remaining 5 are new indicators and results will be included in the next report. (Strategic Plan 2014)</p> <p>EUM (2008) recommends measuring customer satisfaction as part of effective utility management.</p> <p>GRI (2013) G4: G4-PR5: Results of surveys measuring customer satisfaction. G4-PR8: Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data. Results of surveys measuring customer satisfaction. GRI encourages companies to "report the results or key conclusions of customer satisfaction surveys (based on statistically relevant sample sizes) conducted in the reporting period..."</p> <p>ISO (2010) (International Order for Standardization) 26000: Clauses 6.7.1 & 6.7.2 Consumer Issues, and Clauses 6.7.6 Consumer Service support, 6.7.7 Complaint & dispute resolution; & 6.7.8 Consumer data protection & privacy.</p>
<p>CR 1.2 Average Wholesale Customer Satisfaction (1 to 5 scale)</p>	<p>AWWA 2012 Benchmarking: Stakeholder Outreach Index (%) (p.53) Report encourages utility companies to "regularly conduct customer satisfaction surveys that result in a statistically significant measure for customer satisfaction." And furthermore to "use the results of customer satisfaction surveys to improve processes, practices and systems." (p.53)</p> <p>GRI G4 2013: G4-PR5: Results of surveys measuring customer satisfaction: "report the results or key conclusions of customer satisfaction surveys (based on statistically relevant sample sizes) conducted in the reporting period..."</p> <p>WRF (2014) Performance Benchmarking for Effective Utilities Report #4313b: Customer Satisfaction: # of service and # of technical quality complaints per 1,000 customers (p.B1-14)</p>
Objective CR-B. Enhance meter reading technology and billing accuracy	
<p>CR 3.1 Billing Accuracy (billing errors per 10,000 completed for Water and Wastewater combined, and billing errors for Power for which 100% of (primarily municipal) accounts are reviewed prior to billing)</p>	<p>AWWA QualServe #9: Billing Accuracy measures the number of error-driven bill adjustments per 10,000 bills issued during the reporting year.</p> <p>AWWA 2012 Benchmarking Report: the median for Combined Operations was 99.9% & 100% for the top quartile. The median for utilities serving more than 500,000 people was 99.94% and 99.7% for the top quartile.</p> <p>WRF (2014) Performance Benchmarking for Effective Utilities Report #4313b: Customer Satisfaction: Accurate meter reading & billing: % bills accurate per 10,000 bills (p.B1-14)</p> <p>Measuring billing accuracy has also been advocated by the U.S EPA (Environmental Protection Agency), EUM (Effective Utility Management: A Primer for Water and Wastewater Utilities, 2008), AMWA (Assn. of American Water Agencies), APWA (American Public Works Assn.), NACWA (Nat'l Assn of Clean Water Agencies), NAWC (Nat'l Assn of Water Companies), and WEF (Water Environment Federation).</p>
<p>CR 3.3 Percent of customers that are metered</p> <p>a. Wholesale water b. Retail water c. Power</p>	<p>AWWA 2012 Benchmarking Report: Customer metering is a key component of revenue generation for operations: Water audits and loss control: apparent and real losses.</p> <p>Florida Power & Light Co: 75% of customers are smart metered (8/22/2012)</p> <p>PG&E: Installed 8,609,147 Smart Meters as of September 28, 2011. Smart meter installation progress. (9/28/2011). --93% customers (6/12/2012)</p> <p>WRF (2014) Performance Benchmarking for Effective Utilities Report #4313b: Customer Satisfaction (p.B1-14)</p>
<p>CR 3.4 Water meter reading accuracy (number of errors per 1,000 reads)</p>	<p>According to Municipal Benchmarks: Assessing Local Performance and Establishing Community Standards: Santa Barbara, CA had a percentage accuracy of meters read: 99.99% (2009); Sunnyvale, CA had a percentage of water meters read correctly the first time: 99.99% (2008); Palo Alto, CA had a meter reading accuracy of 99.88% for electric, gas, and water (2008), and Anaheim, CA had a meter reading error rate of .027% (2007).</p> <p>Arlington, TX: Reports 99.85% meter reading accuracy. City of Arlington, Arlington Public Utilities. (2011). Customer service : billing and rates : your water meter</p> <p>CPUC: Compliance at +/- 2% accuracy of meters for power meters (2007). Opinion modifying decision 06-08-028 regarding metering accuracy and monitoring requirements (COM/MP1/h12).</p> <p>PG&E: Provided Smart Meter accuracy data to the CPUC through a report done by Structure Consulting Group. Their analysis of customer bill complaints from meters with advanced metering technology (Smart Meters) yielded zero inaccurate meters and approximately 0.3% malfunctioning meters. California Public Utilities Commission, (2010). PG&E advanced metering assessment report: commissioned by the California public utilities commission</p> <p>Reporting on meter reading accuracy is also advocated by AWWA, AMWA, APWA, EPA, EUM, NACWA, NAWC and WEF</p> <p>WRF (2014) Performance Benchmarking for Effective Utilities Report #4313b: Customer Satisfaction: Accurate meter reading & billing: % accurate readings per 10,000 bills (p.B1-14)</p>

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CUSTOMERS	
Objective CR-C. Align rate structure to reflect conservation, full costs of providing service, and affordability	
<p>CR 5.1 Average residential Water, Wastewater, and Power bill as a percent of median income in San Francisco</p>	<p>AWWA 2011 Benchmarking for combined W & WWE <u>target the affordability rate at less than 2.5% of household income</u> citing US EPA guidelines. AWWA 2012 Benchmarking for combined W & WWE: Metric: Average residential monthly water bill x 12, divided by Real median annual household income = service affordability (%): for > 500,000 accounts: Water top quartile = 0.73%, and median = .83%; Wastewater top quartile = 0.52%, and median = 0.79%.</p> <p>U.S. EPA: The EPA defines water affordability as a rate below 4% of MHI—2% for water and 2% for wastewater. Eskaf, S. (2010). Water rates affordability and affordability programs. Proceedings of the Florida rural water association annual conference.</p> <p>Proceedings of the 2010 Florida rural water association annual conference: The Safe Drinking Water Act established special assistance for communities with rates over 2% of MHI each for water and wastewater: Water rates affordability and affordability programs: Eskaf, S. (2010) report argues that water should be priced based on a rate of 2% of individual low income households, rather than MHI—some households may skew the data otherwise.</p> <p>SFPUC Commission 8/2012 Policy endorsing SSIP LOS Goal of combined W&WWE bill at < 2.5% of median household income (MHI)</p> <p>Vermont: The Vermont Department of Public Service and The Republic of Macedonia define power affordability as being 6% of MHI for heating and electricity, and 2% for heating alone. Frankel, D. Vermont Department of Public Service, (2004). Energy affordability: the energy regulatory commission of the republic of Macedonia and the Vermont public service board.</p> <p>WRF 2014 Report#4313b: Financial viability: percent change over time; Set rates and financial forecasts for annual or multi-year period with 3 metrics p.B1-12: Community sustainability : Promote customer service affordability : Measure affordability as percent of household income p.B1-18</p>
<p>CR 6.3 Percent of rate and fee structure that reflects cost of service (including funding capital investment, O&M and contribution to reserve)</p> <p>a. Water b. Wastewater c. Power</p>	<p>AWWA 2012 Benchmarking Report: Organizational best practice: #2 Long-term financial planning</p> <p>The EPA's Office of Water recommends full-cost pricing as part of water and/or wastewater utilities' revenue stream. Appendix D. Findings and recommendations for a water utility sector management strategy (pp. 13).</p> <p>Full cost pricing is advocated by AWWA, AMWA, APWA, EPA, NACWA, NAWC, and WEF. Effective utility management: a primer for water and wastewater utilities. (2008, June).</p> <p>GRI G4 2013: G4-EC7: Development and impact of infrastructure investments and services supported</p> <p>WRF 2014 Report #4313b: Financial viability: Percent change over time; Set rates and financial forecasts for annual or multi-year period with 3 metrics (p.B1-12): Community sustainability : Promote customer service affordability : Measure affordability as percent of household income (p.B1-18)</p>
<p>CR 6.4 Percent retail rate and fee structure that encourages conservation and is designed to reduce peak demands on the system</p> <p>a. Water b. Wastewater c. Power</p>	<p>AMWA advocates: elimination of declining block rates; elimination of uniform monthly water rates without a usage component; promotion of seasonal rates, surcharges, increasing block rates and other rate structures that encourage wise water use options when appropriate for local circumstances particularly during periods of water shortages, drought, rising demand, or rising water system costs.</p> <p>AWWA 2012 Benchmarking Report: Organizational best practice: #2 Long-term financial planning</p> <p>The EPA encourages conservation rates and includes a discussion of conservation rate structures in its "Water Conservation Plan Guidelines".</p> <p>To encourage greater conservation in the summer, when demand is higher and supply is lower, Seattle Public Utilities has established seasonal rates, including a three-tiered rate structure for summertime (peak) residential water use. The rates charged for higher consumption increase dramatically from \$2.88 per CCF for 10 CCF or less to \$8.55 per CCF for over 36 CCF. Wholesale customer rates are also based on peak use.</p>
COMMUNITY	
Objective CY-A. Promote Environmental Justice	
<p>CY 1.1 Efforts to prevent, address, and lessen disproportionate environmental impacts attributable to the SFPUC</p>	<p>Accountability AA1000 Stakeholder Engagement Standard - Principles: Inclusivity, materiality, responsiveness</p> <p>AWWA 2012 Benchmarking Report: ref. Organizational, TBL and Stakeholder indices and aggregate benchmarking: to institutionalize policies into strategic planning, programs, projects and action, and measure performance.</p> <p>CA EPA Environmental Justice Standards</p> <p>City's Precautionary Principle: Ord. 171-03, File No. 030422, App. 7/3/2003</p> <p>City's 2002 Proposition E: CCSF Art. viii Sec.8B.123(3)</p> <p>Fed EPA Environmental Justice Standards: & Action Plan: The agency has proposed to integrate its new environmental justice plan throughout the Office of Enforcement and Compliance Assurance. Plan EJ 2014 has a compliance and enforcement component, a community-based action plan, and the agency has begun development of a tool for other agencies to use in managing EJ issues. The EJ Interagency Working Group (EJ IWG) was convened by the EPA and the Council on Environmental Quality (CEQ) in order to assist federal agencies with EJ</p> <p>GRI G4 2013: G4-14: Commitments to external initiatives: Report whether and how the precautionary approach or principle is addressed by the organization G4-24: Provide a list of stakeholder groups engaged by the organization G4-25: Report the basis for identification and selection of stakeholders with whom to engage G4-26: report the organization's approach to stakeholder engagement, including frequency or engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process. G4-27: Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns. G4-SO1: Report the percentage of operations with implemented local community engagement, impact assessments, and development programs. G4-SO2: Report operations with significant actual and potential negative impacts on local communities.</p> <p>SFPUC Environmental Justice Policy Adopted October 2009</p>

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COMMUNITY	
Objective CY-B. Advance Community Benefits	
<p>CY 2.1 Percent of progress on Community Benefits Program initiatives</p>	<p>Accountability AA1000 Stakeholder Engagement Standard - Principles: Inclusivity, materiality, responsiveness</p> <p>AMWA: The Association of Metropolitan Water Agencies advocates reporting on this indicator. Appendix D. Findings and recommendations for a water utility sector management strategy (pp. 13).</p> <p>AWWA 2012 Benchmarking Performance: ref. Organizational, TBL and Stakeholder indices and aggregate benchmarking: to institutionalize policies into strategic planning, programs, projects and action, and measure performance</p> <p>CAL EPA Environmental Justice Standards</p> <p>City's Precautionary Principle: Ord. 171-03, File No. 030422, App. 7/3/2003</p> <p>City's 2002 Proposition E: CCSF Art.viii Sec.8B.123(3)</p> <p>Fed EPA Environmental Justice Standards & Action Plan: The agency has proposed to integrate its new environmental justice plan throughout the Office of Enforcement and Compliance Assurance. Plan EJ 2014 has a compliance and enforcement component, a community-based action plan, and the agency has begun development of a tool for other agencies to use in managing EJ issues. The EJ Interagency Working Group (EJ IWG) was convened by the EPA and the Council on Environmental Quality (CEQ) in order to assist federal agencies with EJ.</p> <p>GRI G4 2013: G4-14: Commitments to external initiatives: Report whether and how the precautionary approach or principle is addressed by the organization G4-24: Provide a list of stakeholder groups engaged by the organization G4-25: Report the basis for identification and selection of stakeholders with whom to engage G4-26: report the organization's approach to stakeholder engagement, including frequency or engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process. G4-27: Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns. G4-SO1: Report the percentage of operations with implemented local community engagement, impact assessments, and development programs. G4-SO2: Report operations with significant actual and potential negative impacts on local communities.</p> <p>ISO 26000 2010: Clauses 3-7: Descriptive guidance from principles of social responsibility to steps for maximizing an organization's contribution to sustainable development e.g. Clause 6.8.9 (social investment)</p> <p>Lakeland, FL: The city posts events on a calendar where it is easy for the public to see at once which events are coming up nearby. City of Lakeland, FL: water utilities public events. (2011).</p> <p>SFPUC Environmental Justice Policy Adopted October 2009</p> <p>South East Water: SEW lists its current projects with descriptions of each, and offers educational information on its website. Additionally, the utility won the Australian Water Association award for excellence, as well as others, for its Community Engagement Framework and Industrial Ecology Program. South east water: community. (2010).</p> <p>Sustainable Water Utility Performance by CSIRO and Awwa Research Foundation (AwwaRF) advocate reporting on net employment creation.</p> <p>WRF 2014 Benchmarking Report#4313b: Community Sustainability: Support customer service affordability and community programs (p.B1-18)</p>
<p>CY 3.1 Percent of labor hours worked by Service Territory Residents covered by the WSIP Project Labor Agreement</p> <p>a. Percent labor hours worked by SFPUC Service Territory Residents as percent of all hours worked.</p> <p>b. Percent apprentice labor hours worked by Service Territory Residents Apprentices as a percent of all Apprentice hours worked.</p>	<p>Accountability AA1000 Stakeholder Engagement Standard - Principles: Inclusivity, materiality, responsiveness</p> <p>AWWA 2011 Benchmarking Performance: ref. Organizational, TBL and Stakeholder indices and aggregate benchmarking: to institutionalize policies into strategic planning, programs, projects and action and measure performance.</p> <p>GRI G4 2013: G4-14: Report whether and how the precautionary approach or principle is addressed by the organization. G4-EC7: Development and impact of infrastructure investments and services supported G4-EC8: Significant indirect economic impacts, including the extent of impacts</p> <p>ISO 26000 2010: Clauses 6.8.5 (employment creation...) and 6.8.9 (social investment)</p> <p>Los Angeles, CA: Community Workforce Agreements typically require that 30-40% of new construction projects employ people who live adjacent to, or near, the project. For example, the first CWA implemented by the city developed during construction of the North East Sewer Interceptor. Community workforce agreement examples: city of Los Angeles. (2010).</p> <p>Portland, OR: Community-Based Residential Energy Retrofits program brought together Portland community members and partners, including two utilities from the Portland area. They created a workforce agreement that led to a worked hour percentage for underrepresented people of 51.3%. Kuley, M. (2011). Community based residential energy retrofits. Retrieved from.</p> <p>SFPUC PLA: (The Project Labor Agreement of March 2007), governing the Water System Improvement Program, (WSIP) provides for labor stability on all covered construction projects and has set a goal of 50% of Total Hours and 50% of Total Apprentice Hours to be performed by SFPUC Service Territory Residents (includes SF residents).</p> <p>WEF 2012: Sustainability Reporting Statements for Wastewater Systems: Economic Considerations: 7.7 Local Purchasing and Hiring.</p>
<p>CY 3.2 Percent of labor hours worked by local residents on SFPUC construction projects covered by the City's Local Hiring Ordinance</p> <p>a. Labor hours worked by local residents as percent of all hours worked</p> <p>b. Labor hours worked by local resident apprentices as a percent of all apprentice hours worked.</p>	<p>Accountability AA1000 Stakeholder Engagement Standard - Principles: Inclusivity, materiality, responsiveness</p> <p>AWWA 2011 Benchmarking Performance: ref. Organizational, TBL and Stakeholder indices and aggregate benchmarking: to institutionalize policies into strategic planning, programs, projects and action and measure performance.</p> <p>City & County of San Francisco Local Hire Ordinance (LHO) requires public work or improvement contracts over \$400K to hire residents of San Francisco on the project beginning with a 20% requirement and increasing by 5% each year until it reaches the maximum threshold of 50%</p> <p>GRI G4 2013: G4-EC7: Development and impact of infrastructure investments and services supported G4-EC8: Significant indirect economic impacts, including the extent of impacts</p> <p>ISO 26000 2010: Clauses 6.8.5 (employment creation...) and 6.8.9 (social investment)</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Economic Considerations: 7.7 Local Purchasing and Hiring</p>

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COMMUNITY	
Objective CY-C. Foster engagement with current and developing stakeholder groups	
<p>CY 4.1 Stakeholder Access/Exchange a. Percent of traffic increase in SFPUC social media platforms, electronic formats, and online engagement. b. Percent of projects for which engagement is timely, effective, and for which stakeholder feedback is included in early input (i.e. at design or other early planning stage) c. Key stakeholder groups that engage on a regular basis to advance communication, education, and community interaction</p>	<p>Accountability AA1000 Stakeholder Engagement Standard - Principles: Inclusivity, materiality, responsiveness</p> <p>AMWA: Appendix D. Findings and recommendations for a water utility sector management strategy (pp. 13).</p> <p>AWWA 2012 Benchmarking: Stakeholder Outreach Index (%) (p.53) Report encourages utility companies to "regularly conduct customer satisfaction surveys that result in a statistically significant measure for customer satisfaction." And furthermore to "use the results of customer satisfaction surveys to improve processes, practices and systems." (p.53)</p> <p>US EPA 2011: Promotes the use of social media in its Water Sense water efficiency program: Saving water and energy: reducing greenhouse gases by improving efficiency.</p> <p>CAL EPA Environmental Justice Action Plan</p> <p>City's Precautionary Principle: Ord. 171-03, File No. 030422, App. 7/3/2003</p> <p>City's 2002 Proposition E: CCSF Art.viii Sec.8B.123(3)</p> <p>GRI G4 2013: G4-24: Provide a list of stakeholder groups engaged by the organization G4-25: Report the basis for identification and selection of stakeholders with whom to engage G4-26: report the organization's approach to stakeholder engagement, including frequency or engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process. G4-27: Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns. G4-SO1: Report the percentage of operations with implemented local community engagement, impact assessments, and development programs. G4-SO2: Report operations with significant actual and potential negative impacts on local communities.</p> <p>ISO 26000 Clauses 3-7: Descriptive guidance from principles of social responsibility to steps for maximizing an organization's contribution to sustainable development</p> <p>Lakeland, FL: The city posts events on a calendar where it is easy for the public to see at once which events are coming up nearby. City of Lakeland, FL: water utilities public events. (2011).</p> <p>*Not a percentage* Nashville Electric Service provides power to about 300,000 customers and has more than 3,300 Facebook "followers." The SFPUC has 2,700 Facebook followers, but given its combined operations (and even for water service alone), serves a much larger customer base. Nashville electric service: social media efforts. (2011, June 22).</p> <p>SFPUC Environmental Justice Policy Adopted October 2009</p> <p>South East Water: SEW lists its current projects with descriptions of each, and offers educational information on its website. Additionally, the utility won the Australian Water Association award for excellence, as well as others, for its Community Engagement Framework and Industrial Ecology Program. South east water: community. (2010).</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: 8.2.1 Community Outreach, Involvement and Education</p> <p>WRF 2014 Benchmarking Report#4313b: • Stakeholder Understanding and Support: Stakeholder outreach index; frequency of meetings with stakeholder groups; demonstration of stakeholder support in customer opinion survey; develop client satisfaction index with 0 to 10 scale (p.B1-13) • Customer satisfaction: Use of social media: followers per 1,000 customer accounts (p. B1-14) Other: # community events; avg. monthly visits to website; % customers reading newsletter; etc. (p. B1-15)</p>
ENVIRONMENT & NATURAL RESOURCES	
Objective EN-A. Become a leader in Environmental Stewardship, e.g. habitat, biodiversity, and land management	
<p>EN 2.2 Percent of all staff who have undergone training on Environmental Stewardship</p>	<p>AWWA 2012 Benchmarking Report: ref. Organizational, TBL and Stakeholder indices and aggregate benchmarking</p> <p>EWP: The European Water Partnership advocates for training on water stewardship to promote internal awareness and preparedness. European Union, European Water Partnership.</p> <p>GRI G4 2013: G4-LA10: Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings G4-EN27: Extent of impact mitigation of environmental impacts of products and services</p> <p>ISO 26000 2010: Clauses: 6.4.7 human development and training in the workplace; 6.8.5 employment creation and skills development.</p> <p>NHDOT: While the use of this indicator does not seem to be standard yet among public utilities, it is more common among transportation departments and agencies. For example, the New Hampshire Department of Transportation includes this indicator in its EMS. New Hampshire Department of Transportation, (2009). Policy 501.01: environmental policy.</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: 8.3.5 Staff Training and Education</p> <p>Yarra Valley Water: In the early 2000s, YVW implemented a wide variety of initiatives, including staff development training on sustainability. The organization emphasizes four core components in its strategy: Customer, Environment, Efficiency, and Culture. YVW has implemented group project initiatives, environmental training programs, and created 15 strategic objectives to help guide decision-making. Commonwealth of Australia, Department of the Environment, Water, Heritage and the Arts. (2010). Taking action for the future.</p> <p>Paper on the merits of environmental stewardship in a variety of organizations: How the HR department can help create a culture of stewardship. Liebowitz, J. (2010). The role of hr. in achieving a sustainability culture. Journal of sustainable development, 3(4), 50-57.</p>

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ENVIRONMENT & NATURAL RESOURCES	
Objective EN-A. Become a leader in Environmental Stewardship, e.g. habitat, biodiversity, and land management	
<p>EN 2.3 Show progress on habitats protected, restored or preserved</p>	<p>AWWA 2012 Benchmarking Report: Organizational Best Practices #9: Source Water Protection Plan: from ANSI/AWWA Standard G300 Source Water Protection Plan</p> <p>CEQA: SF Habitat Conservation Plan for Alameda Creek Watershed. SPU owns and protects 99.9% of the Cedar River Municipal Watershed's 90,638 acres for drinking water, salmon flows, and habitat protection.</p> <p>GRI G4 2013: G4-EN1: Report the total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period G4-EN2: Report the percentage of recycled input materials used to manufacture the organization's primary products and services G4-EN11: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas G4-EN12: Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas G4-EN13: Habitats Protected or restored G4-EN14: Total number of IUCN red list species and national conservation list species with habitats in areas affected by operations, by level of extinction risk G4-EN26: Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff G4-EN27: Extent of impact mitigation of environmental impacts of products and services G4-EN31: Total environmental protection expenditures and investments by type</p> <p>ISO 26000 (2010) :Environmental 6.5.4: Materials: Sustainable Resource Use; Clause 6.5.6: Biodiversity: Protection of the environment, biodiversity and restoration of natural habitats</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: 6.6 Facility Footprint: 6.6.1: Land Use and Biodiversity Effect 6.6.2: Restoration and Protection of Habitat</p> <p>Improvement in indices of key species and habitat: SPU: Seattle Public Utilities displays the results of specific restoration projects throughout its watersheds, remediation efforts, and the status of indigenous animals. For example: [City of Seattle, Seattle Public Utilities. (2011). City of Seattle, Seattle Public Utilities (2011); Water system: watersheds: water supply and treatment.</p> <p>Percent of total SFPUC land ecologically monitored: Santa Clara Valley Water District (SCVWD) contracted an ecological monitoring study on the Coyote Creek watershed, but not on its entire land holdings. The District used the California Rapid Assessment Method (CRAM) to determine the condition of wetlands in the Coyote Creek and Upper Penitencia Creek watersheds. Coyote Creek: 10% High/Good Condition, 69% Medium, and 21% Low. No portions of the watershed were characterized as Very Low. Upper Penitencia: 26% High, 60% Medium, and 14% Low. [Stream ecosystem condition profile: coyote creek watershed including the upper penitencia creek sub watershed. (2011). Ecological Monitoring and Assessment Framework,</p>
ENVIRONMENT & NATURAL RESOURCES	
Objective EN-B. Diversify high quality water sources and advance water efficiency, conservation and reuse	
<p>EN 6.1 Total amount of water delivered / sold to customers:</p> <p>a. Total amount of water delivered per capita to retail customers in gallons per capita per day (gpcd) Excludes suburban</p> <p>b. Total amount of water sold to San Francisco residential customers in gallons per capita per day (gpcd)</p> <p>c. Total amount of water delivered to wholesale customers in million gallons per day (mgd)</p> <p>d. Total City and Suburban water demand in million gallons per day (mgd)</p>	<p>AWWA 2012 Benchmarking Report: Measure current water demand: suggested metric: demand = 5 yr. avg (MG) divided by avg available supply based on current yield (MG): 2012 Top quartile for combined operations is 33%, top quartile for Region 4 western utilities is 38%, & top quartile for >500,000 customers is 51.2%</p> <p>AWWA: U.S. National INDOOR residential average is about 69.3 gpcd (**Note: does not include outdoor use; SFPUC's residential per capita number DOES include outdoor use, so AWWA's metrics are not directly comparable): cites average daily household water use as 350 gallons, 2010</p> <p>CA FY2009-10 Statewide average gross per capita use: 160.2 gallons per capita per day (gpcd) • CA FY2009-10 Statewide average residential per capita use: 98.04 gpcd **calculation based on estimated statewide average per capita for FY2009-10 using data drawn from about 35 2010 Urban Water Management Plans spring 2012. (Therefore, that is a number SFPUC calculated internally, and it is not officially reported by DWR.) • CA 2010 Urban Water Management Plans: 198 gpcd = Statewide average 10-year gross per capita</p> <p>GRI G4 2013 : G4-EN1: Report the total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period G4-EN2: Report the percentage of recycled input materials used to manufacture the organization's primary products and services</p> <p>ISO (2010) 26000 Environment: Sustainable Resource Use: Clauses 6.5.1-6.5.2</p> <p>PWB: FY2009-10 Residential retail usage was 61 gpcd. Charter sponsor profile: Portland water bureau. (3/1/2011)</p> <p>WRF 2014 Benchmarking Report #4313b: Water Resource Adequacy: Track current water demand (p.B1-8)</p>
<p>EN 8.2 Percent of total water supplied by alternative sources to retail customers</p>	<p>AWWA 2012 Benchmarking Report: Organizational Best Practices: #1 Strategic Planning; TBL Index d: policies, systems and processes to affect results of TBL goals and objectives</p> <p>Ceres: The Ceres Aqua Gauge: A framework for 21st Century Water Risk Management (2011)</p> <p>GRI G4 2013: G4-EN8: Total water withdrawal by source G4-EN9: Water sources significantly affected by withdrawal of water G4-EN10: Percentage and total volume of water recycled and reused</p> <p>ISO 26000 2010: Sustainable resource use 6.5.4</p> <p>SFPUC WSIP Level of Service (LOS) Goals</p> <p>Examples best practice: California Cities of Cotati, Rohnert Park, Santa Rosa, and Sebastopol: One of the largest recycled water projects in the US is the reclamation system shared by these municipalities in which 4 billion gallons of water annually irrigates farms, vineyards and public landscaping, including school grounds.</p>

Key Performance Indicator (KPI)	<p style="text-align: center;">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p style="text-align: center;">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
ENVIRONMENT & NATURAL RESOURCES	
Objective EN-C. Reduce inflows to the sewer system and ensure quality effluent	
<p>EN 9.4 Percent sewage sludge (the residual, semi-solid material left from the sewage treatment process) going to beneficial uses: Class A and Class B</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practices # 1 Strategic Planning and #11 Continuous Improvement Program (WEF's National Biosolids Partnership; TBL Index d. policies and management systems to affect the results of our TBL goals and objectives</p> <p>California State Water Resources Control Board: CSWRCB adopted its General Order for land application of bio solids in 2004. U.S. Environmental Protection Agency, Region 9: NPDES. (2011). Npdes wastewater and storm water permits: sewage sludge and bio solids program.</p> <p>Clean Water Act (CWA): Title 40, Part 503 regulates the use and disposal of sewage sludge, and the regulations are current as of August, 2011. U.S. Government Printing Office, Electronic Code of Federal Regulations. (2011). Title 40: protection of environment: part 503—standards for the use or disposal of sewage sludge: subpart c—surface disposal</p> <p>GRI G4 2013: G4-EN2: Report the percentage of recycled input materials used to manufacture the organization's primary products and services G4-EN23: Total weight of waste by type and disposal method</p> <p>ISO 26000 2010: Clause 6.5.4 Sustainable resource use</p> <p>Thames Water 2011: 72% percent treated and recycled for agricultural use (bio solids). The remaining 28% is used for power generation or land restoration. Thames water: our approach to managing sewage sludge (5/22/11)</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: 6.4 Resource Recovery & Protection: 6.4.1: Nutrient recovery: nutrients recovered in kilograms (pounds) compared to capabilities of harvesting nutrients 6.4.2: Water reuse by (external) end users: reclaimed water in cubic meters (gallons) 6.4.3: Biosolids reuse: biosolids reused in metric tons (short tons): divide weight of biosolids reused by total weight of biosolids produced 6.4.4: Energy production: renewable energy produced in kilowatt hours</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Operational Resiliency: avg % biosolids disposed as Class A; Product Quality: % biosolids diverted to compost</p>
<p>EN 10.1 Number of unauthorized discharges from the combined sewer system</p>	<p>AWWA 2012 Benchmarking Report: Aggregate data for SSO rate/100 miles of pipe for top quartile for combined operations = 0.9 (p.72)</p> <p>Federal EPA: 1) 2009 National Water Quality report, published 2011. 2) 2009 Providing Safe Drinking Water in America: national public water systems compliance report (EPA 305R11001)</p> <p>GRI G4 2013: G4-EN24: total number & volume significant spills G4-EN34: Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms.</p> <p>ISO 26000 2010: Clause 6.5.3 Prevention of pollution</p> <p>WEF 2012 Sustainability Reporting Systems for Wastewater Systems: Environmental Considerations 6.2.2: Effluent Discharge (liquid waste or emission)</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Product Quality,: Prevent Sanitary Sewer Overflows: # or % SSOs/100 miles collection piping</p>
<p>EN 10.2 Percent annual wet and dry weather flow treated before discharged per year (by level of quality)</p>	<p>AWWA 2012 Benchmarking Report: Aggregate data for wastewater treatment effectiveness rate for top quartile for combined operations = 100%. (p.36 & p.68 respectively).</p> <p>GRI G4 2013: G4-EN22: Total water discharge by quality and destination</p> <p>NPDES permitting requirements. U.S. Environmental Protection Agency, (2003). 40 cfr parts 122 and 133: national pollutant discharge elimination system (npdes) permit (fr07no03-24)</p> <p>Ontario Municipal Benchmarking Initiative 2008 document with municipal best practices, including a recommendation to measure the percentage of wastewater bypassing treatment. Ontario center for municipal best practices: best practice summary report. (2008, February).</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Product Quality: Provide safe high quality water: # violations...</p>
<p>EN 11.3 Reduction in peak storm flows to combined system due to low impact development initiatives and/or surface drainage management plans</p>	<p>The California State Water Resources Control Board regulates storm water permitting through the Regional Water Quality Control Boards, which have adopted the EPA's NPDES General Permit storm water permits. California Environmental Protection Agency, State Water Resources Control Board. (2006). Storm water program: municipal program.</p> <p>U.S. EPA CWA (2009): Section 404: regulates permitting of LID. Also see Section 402(p) for the performance standard on maximum extent practicable (MEP) pollutant discharge. U.S. EPA Green Infrastructure. (2009). Managing wet weather with green infrastructure</p> <p>GRI G4 2013: G4-EN1: Report the total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period G4-EN2: Report the percentage of recycled input materials used to manufacture the organization's primary products and services</p> <p>ISO 2600 2010: Clause: Sustainable Resource Use 6.5.4</p> <p>Philadelphia, Pennsylvania 2006: estimates that its green infrastructure projects, will save 25 billion gallons of CSO inputs and \$170 million, thanks to low impact development projects such as bioswales, and a rate structure based on impervious surface area.</p> <p>Portland, Oregon 2007: Where implemented, Portland's green infrastructure projects have reduced peak storm flows by 80-95%. Green infrastructure Community Profile</p> <p>WEF 2012 Sustainability Reporting Systems for Wastewater Systems: Environmental Considerations 6.5.1: Construction and Demolition Materials</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Product Quality,: Prevent Sanitary Sewer Overflows: # or % SSOs/100 miles collection piping</p>

Key Performance Indicator (KPI)	<p align="center">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p align="center">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
<p align="center">ENVIRONMENT & NATURAL RESOURCES</p>	
<p align="center">Objective EN-D. Increase energy efficiency and conservation</p>	
<p>EN 12.1 Quantify energy use by City municipal buildings and streetlights</p> <p>a. Total calendar year energy use intensity for municipal buildings (kBTU/ sq. ft.)</p> <p>b. Average monthly electricity used per SFPUC street light (in kWh)</p>	<p>U.S DOE 2013 : http://www1.eere.energy.gov/buildings/commercial/bpd.html; https://bpd.lbl.gov/ US DOE: Buildings Performance Database: Commercial, Government, Residential buildings across U.S., including e.g. Peer group tool, Energy codes, & High performance bldgs. database</p> <p>U.S. EPA: offers a Portfolio Manager tool designed to assess energy intensity in buildings. Municipal organizations can use the tool to calculate their energy intensity based on weather and square footage. (U.S. Environmental Protection Agency, Energy Star. Portfolio manager overview).</p> <p>GRI G4 2013: G4-EN3: Energy consumption within the organization G4-EN4: Energy consumption outside of the organization G4-EN5: Energy intensity G4-EN6: Reduction of energy consumption G4-EN7: Reductions in energy requirements of products and services G4-EN19: Reduction of greenhouse gas (GHG) emissions</p> <p>SFPUC: For building types where an ENERGY STAR rating is applicable, SFPUC uses EPA's Portfolio Manager tool to determine a 1-00 ENERGY STAR score. Since ENERGY STAR is designed for commercial building types Note, only approximately 10% of benchmarked municipal buildings can receive a 1-100 score, but the remaining buildings can be benchmarked based on energy use per square foot. SFPUC used per employee normalization factor prior to FY2010-11 due to insufficient per sq. ft. data. Beginning with calendar year 2011, SFPUC began reporting as recommended for all City departments. With SFPUC's publication of this annual report, San Francisco is the first city on the west coast to publicly release municipal energy use data in this format SFPUC Note: Prior Standard used for FY2005-06 and FY2008-09 reporting: CCSF requirements according to EIA average electricity use in office space is 17.3kWh/sf, and in SF climate zone is 14.5kWh/sf.--Note that "office space" was not applicable or relevant to most City buildings.</p> <p>UIA World Congress, Durban 2014: DECLARATION 2050 IMPERATIVE: sets path for global building sector to phase out carbon dioxide emissions by 2050</p> <p>World Resource Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 'GHG Protocol Corporate Accounting and Reporting Standard', 2011.</p>
<p>EN 12.2 Quantify reductions in customer electricity and gas consumption</p> <p>a. Annual peak load reduction (kW)</p> <p>b. Total electricity reduction achieved by customers (MWh)</p> <p>c. Total gas reduction achieved by customers (therms)</p>	<p>FEMP: The Federal Energy Management Program's Energy Independence and Security Act of 2007 mandates yearly reductions in energy intensity based on 2003 levels for all federal agencies. While this does not apply to SFPUC, it is a good standard by which to benchmark SFPUC energy performance.</p> <p>GRI G4 2014: G4-EN4: Energy consumption outside of the organization G4-EN6: Reduction of energy consumption G4-EN19: Reduction of greenhouse gas (GHG) emissions</p> <p>ISO 26000 2010: Clauses 6.5.4 Sustainable resource use and 6.5.5 Climate change mitigation and adaptation</p>
<p align="center">Objective EN-E. Advance high quality and emissions-free power supply sources</p>	
<p>EN 13.2 Percent of electricity supplied from GHG-emissions-free and/or renewable sources:</p> <p>a. Percent of electricity supplied to retail and municipal customers that is GHG-free and/or renewables as shown on the SFPUC's Power Content Label</p> <p>b. Percent of GHG-free and/or renewable electricity sold to all customers (wholesale and retail)</p>	<p>CA: SBX1-2 passed and signed into law April 2011, and effective Dec. 10, 2011, replaces existing law regarding renewable portfolio standards (RPS). Prior to this change, California's RPS did not apply to publicly-owned utilities (POUs). Under SBX1-2, most California electric utilities must meet 20% of their retail needs with RPS-eligible renewable supplies 2011-2013, increasing to 33% by 2020. The California RPS includes alternative compliance language for the SFPUC as the result of its Hetch Hetchy generation, such that the SFPUC must meet 100% of its retail needs with either Hetch Hetchy generation or RPS-eligible supplies.</p> <p>GRI G4 2013: G4-EN7: Reductions in energy requirements of products and services</p> <p>ISO 26000 2010: Clauses 6.5.4. Sustainable resource use and 6.5.5 Climate change mitigation and adaptation</p> <p>Peer practice examples: Note that data from the following utilities is of interest but subject to different and likely varying requirements with respect to identification and use of renewable supplies:</p> <ul style="list-style-type: none"> • SMUD: Energy mix (2009): 60% natural gas, 20% hydro, 8% biomass, 8% wind, 1% coal, and 3% geothermal, solar, and small hydro. • SMUD Power Content Label (2010): RPS renewables = 21% • LADWP: 2010: RPS renewables = 20.1% • Silicon Valley Power (SVP): 2010: RPS renewables = 25.7%; 2012: RPS renewables = 29%
<p align="center">Objective EN-F. Address SFPUC in-house emissions contributing to climate change</p>	
<p>EN 16.1 Annual greenhouse gas (GHG) emissions due to:</p> <p>a. SFPUC's electricity and/or natural gas consumption for provision of all SFPUC services (metric tons)</p> <p>b. SFPUC's fleet fuel consumption (metric tons)</p>	<p>AWWA 2012 Benchmarking report: Water and Wastewater energy consumption for production / services</p> <p>GHG Protocol (WRI, WBCSD), The Climate Registry (sets standards to calculate, verify and report GHG emissions), and CA Climate Action Registry (CCAR)</p> <p>GRI G4 2013: G4-EN15: Direct Greenhouse Gas (GHG) Emissions (Scope 1) G4-EN16: Energy indirect Greenhouse Gas (GHG) Emissions (Scope 2) G4-EN19: Reduction of greenhouse gas (GHG) emissions G4-EN30: Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce</p> <p>ISO 14064 GHG Standard 2006 ISO 26000 2010: Clauses 6.5.4 sustainable resource use, 6.5.5 Climate change mitigation and adaptation, 6.6.6 Promoting social responsibility in the value chain</p> <p>San Francisco city-wide carbon reduction strategy: City's Climate Action Plan: established the CO2 emission reduction target of 10% below 1990 levels by 2012.</p> <p>San Francisco CCSF Ordinance 81-08 (BOS): endorses a goal of a greenhouse gas (GHG) free electric system by 2030</p> <p>Standards Note: Per draft of 2012 ICF 3rd party verification of 2010 SFE CAP, ICF used San Francisco-wide community "revised" total of 6,149,440 metric tons of CO2 equivalent (CO2e) for 1990 emissions (Community Baseline); however, emissions factor/formula/protocol for getting 1990 baseline total(s) still not reported, and no Departmental (i.e. SFPUC-specific) or sector (electricity, natural gas, fleet fuel, other sources of GHG emissions) breakdowns are provided for the 1990 gross baseline number. As a result, appropriate targets for SFPUC are not available.</p> <p>UIA World Congress, Durban 2014: DECLARATION 2050 IMPERATIVE: sets path for global building sector to phase out carbon dioxide emissions by 2050</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: 6.0 Environmental Consideration: 6.2.3 GHG emissions (process facilities and transportation)</p>

Key Performance Indicator (KPI)	<p align="center">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p align="center">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
ENVIRONMENT & NATURAL RESOURCES	
Objective EN-G. Reduce SFPUC in-house environmental impacts	
<p>EN 16.3 NOx and Sox air emissions by weight (applies across all SFPUC operations including fleet)</p>	<p>U.S. EPA: Requires operators of regulated facilities to report NOx, SOx, and CO2 emissions under the Acid Rain Program, Title IV of the Clean Air Act.</p> <p>GHG Protocol: Recommended Guidelines (partnership between the WRI and the WBCSD)</p> <p>GRI G4 2013: G4-EN21: NOx, SOx, and other significant air emissions</p> <p>ISO 26000 2010: Clause 6.5.3 Prevention of pollution</p> <p>SEC: In corporate reporting, the SEC recommends thorough climate risk disclosure for potential investors. The EPA contributed to the SEC's recommendations. The PUC should keep such thoroughness in mind while considering potential partners, as well as current and future customers.</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: 6.0 Environmental Consideration; 6.2.4 Air emissions</p>
<p>EN 17.1 Direct energy consumption broken down by source = Energy Intensity (EI metric):</p> <p>a. MWh energy used per million gallons of water delivered (In-City Retail Water)</p> <p>b. MWh energy used per million gallons of water delivered (Regional water system delivered)</p> <p>c. MWh energy used per million gallons of wastewater treated</p>	<p>AWWA 2012 Benchmarking report [Note change of energy metric]: p.66 for Water, p. 77 for wastewater: Direct energy consumed (kBTU/yr./MG) to supply water or wastewater: metric = energy consumption (all fuels minus stored amounts in kBTU) divided by average daily production x 365 days. Aggregate operations top quartile for Water = 4,186 kBTU; for Wastewater = 6,062. For utilities serving more than 500,000 customers, the top quartile for Water = 4,487; for Wastewater = 6,062 kBTU</p> <p>AwwaRF: The median 50% of utilities serving populations greater than 10,000 used electricity at rates of 1.0 - 2.5 MWh/MG delivered. New York city water summit: future water/wastewater issues utility perspective. (2010).</p> <p>Energy Star: Through the Energy Star program, the EPA advocates benchmarking energy usage for water and wastewater organizations, in order to assess options for efficiency gains. U.S. Environmental Protection Agency, (2009). Energy star: water and water utilities.</p> <p>U.S. EPA cites energy efficiency measures implemented by NYSERDA as best practice examples for reducing wastewater utilities' energy usage. NYSERDA recommends that wastewater utilities conduct annual surveys in order to capitalize on opportunities for energy efficiency (2010). U.S. Environmental Protection Agency, (2010). Increasing energy efficiency through arra funding: new York state wastewater initiatives</p> <p>'GHG Protocol Corporate Accounting and Reporting Standard', 2011: World Resource Institute (WRI) and World Business Council for Sustainable Development (WBCSD),</p> <p>GRI G4 2013: G4-EN3: Energy consumption within the organization G4-EN5: Energy Intensity</p> <p>ISO 2010 Clause 6.5.4: Sustainable Resource Use: Clause</p> <p>Wisconsin utilities 2006: serving a customer base greater than 4,000 use an average of 1.51 kWh/1,000 gallons, or 1.51 mWh/million gallons. Among these utilities, energy usage averages 2.288 mWh/million gallons for activated sludge treatment. The best practice benchmark for Wisconsin wastewater utilities is 1.760 mWh/million gallons treated (2006). Water and wastewater energy best practice guidebook. (2006).</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Energy optimization kWh/water delivered, wastewater treated etc. (B1-16)</p>
<p>EN 17.3 Advance and measure SFPUC IT energy efficiencies and IT energy efficiencies and IT energy use reductions</p> <p>a. Percent of laptops, desktops and monitors that meet the EPEAT Gold standard</p> <p>b. Percent of printers and servers that meet the Climate Savers Computing Base standard</p>	<p>CA Energy Commission: Energy Aware Planning Guide</p> <p>CA EPP: California Public Contract Code 12400-12404 requires the procurement of goods and services that have a reduced impact on human health and the environment as compared to other goods and services serving the same purpose. CA DGS (2010). Buying green: California's guide for sustainable purchasing.</p> <p>U.S. DOE: 10 CFR, Part 436, RIN 1904-AB68. Under FEMP, federal agencies are required to procure energy efficient products.</p> <p>U.S. EPA: EPEAT Gold standard for laptops, desktops and monitors, Climate Savers Computing Base Standard for printers and servers.</p> <p>GRI G4 2013: G4-EN6: Reduction of energy consumption G4-EN7: Reductions in energy requirements of products and services G4-EN19: Reduction of greenhouse gas (GHG) emissions</p> <p>SFE: San Francisco City law requires city agencies and staff to purchase required and/or suggested green products, using limited use products as a last resort. City and County of San Francisco, SF Approved. (2009). Products that meet San Francisco's health and environmental requirements.</p>
<p>EN 19.2 Percent of waste diverted from landfill using three SFPUC San Francisco locations. (excludes biosolids, construction and industrial waste).</p>	<p>City of San Francisco (2011-12) diverts an average of 77% of its waste from landfills, and is targeting zero waste by 2020.</p> <p>City of Copenhagen sends 3% of its waste to landfill; the rest is either recycled or used to power homes. (2010). See Copenhagen's waste plan 2008: Retrieved from http://www.c40cities.org/bestpractices/waste/copenhagen_landfill.jsp</p> <p>GRI G4 2013: G4-EN2: Report the percentage of recycled input materials used to manufacture the organization's primary products and services G4-EN23: Total weight of waste by type and disposal method</p> <p>ISO 26000 2010: Clauses 6.5.3 (prevention of pollution) and 6.7.5 (sustainable consumption)</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Operational Resiliency, : percent solid waste diverted to recycling or composting</p>

Key Performance Indicator (KPI)	<p align="center">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p align="center">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
GOVERNANCE & MANAGEMENT	
Objective GM-A. Provide high quality service to all customers	
<p>GM 1.1 Percent of current services meeting level of service goals for:</p> <p>a. Water b. Wastewater c. Power</p>	<p>GRI G4 2013: G4-EN34: Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms</p> <p>ISO: Advocated in standards 24510, 24511, and 24512: Management of Water and Waste Water Utilities and for the Assessment of Water Services.</p> <p>IWA: Included among International Water Association performance indicators, and supported by AfWA, AIDIS, Consumers International, EUREAU, IWA, NORMAPME, UN-DESA, WHO, World Bank. Rohrhofer, K. J. (2008).</p> <p>Olympia, WA employs three level-of-service determinations, and offers specific standards for level-of-service goals under system performance, sustainability and customer service. Olympia, WA: drinking water. (2011).</p> <p>SFPUC WSIP 2016 and SSIP LOS Goals</p> <p>Tokyo, Japan: world leader in stopping water leakage. (2010) : Serves five million cubic meters of water each day to twelve million citizens. 3.6% leakage and major reductions in CO2 emissions.</p> <p>WECC 2011: in the process of developing a standard regarding contingency reserves for power in order to maintain normal operating service, as well as to prepare for unplanned events & reduce the incidence & severity of power disruptions. (Wick standard bal-002-wecc-1. Proceedings of the Final for Operating Committee Approval / Special Meeting (pp. 1-11).</p> <p>FY2010-11 Performance is the baseline against which to benchmark progress.</p>
Objective GM-B. Ensure compliance with regulatory requirements	
<p>GM 1.2 Quantify compliance with regulatory requirements</p> <p>a. Incidents of, and fines or non-monetary sanctions for non-compliance with applicable laws and regulations</p> <p>b. Drinking water quality compliance rate (percent days in full compliance with drinking water standards)</p>	<p>AWWA 2011 & 2012 Benchmarking reports: Water and Wastewater: percent compliance for Combined operations, top quartile = 100%</p> <p>AWWA QualServe #13: Drinking Water Compliance Rate tallies the percentage of days in the reporting year during which a utility was in full compliance with the maximum contaminant levels and treatment techniques mandated by the US National Primary Drinking Water Regulations</p> <p>BC Hydro's environmental incidents are internally reported, communicated and closed through the intranet-based Environmental Incident Reporting (EIR) system. The direct responses to incidents, root cause analyses and corrective actions (where applicable) are addressed through the Lines of Business Environmental Management Systems.</p> <p>GRI G4 2013: G4-EN24: Total number and volume of significant spills. G4-EN27: Extent of impact mitigation of environmental impacts of products and services G4-EN29: Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations G4-EN34: Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms G4-LA16: Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms G4-HR8: Total number of incidents of violations involving rights of indigenous peoples and actions taken G4-HR12: Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms G4-SO8: Monetary value of significance fines and total number of non-monetary sanctions for non-compliance with laws and regulations G4-SO10: Significant actual and potential negative impacts on society in the supply chain and actions taken G4-SO11: Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms G4-PR2: Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes G4-PR4: Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes. G4-PR7: Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes G4-PR8: Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data G4-PR9: Monetary value or significant fines for non-compliance with laws and regulations concerning the provision and use of products and services</p> <p>ISO 26000 2010: Clause 6.5.3 Prevention of pollution</p> <p>OECD 2011 Guidelines and Health Indicators for Multinational Enterprises</p> <p>U.S. Porter-Cologne Water Quality Control Act and the Clean Water Act.</p>
Objective GM-C. Drive accountability and transparency	
<p>GM 1.4 Management is held accountable for project and division performance through audits and performance reports</p>	<p>CA Dept. of General Services Audit Standards: State Administrative Manual, chapter 20000, State Administrative Manual. (2008).</p> <p>GAO 2010: US Government auditing standards for financial audits, attestation, and performance audits.</p> <p>GRI G4 2013: G4-44: Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Report whether such evaluation is independent or not, and its frequency. Report whether such evaluation is a self-assessment. Report actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics, including, as a minimum, changes in membership and organizational practice SO3: Total number and percentage of operations assessed for risks related to corruption and the significant risks identified SO4: Communications & training on anti-corruption policies & procedures SO5: Confirmed incidents of corruptions and actions taken</p> <p>ISAE 3000: (International Standard on Assurance Engagements): Assurance Engagements other than Audits or Reviews of Historical Financial Information</p> <p>SFPUC Annual Audit Program: Leads best practice in the City & County as the first and only comprehensive Departmental audit and compliance program. Provides view of oversight; encompasses planning, facilitation, implementation of resolutions, follow up, and ongoing monitoring for all audit/review results. Results provide data for more informed decision-making, lending to strategic planning and risk-taking. Program recognized by the eCommission, Board of Supervisor's Government & Audits Oversight Committee, Controller's City Services Auditor, and used as benchmark for other City departments seeking development of similar program. Planning is coordinated with SFPUC Executive and Senior management, City Service Auditor and external constituents.</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Product Quality: Systemic process compliance: % (findings divided by internal audits)</p>

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GOVERNANCE & MANAGEMENT	
Objective GM-D. Strengthen financial performance	
<p>GM 2.1 Credit rating for:</p> <p>a. Water b. Wastewater</p>	<p>Contra Costa: AA (Public Com, 207), AA+ (Water, 2012) /Aa2 (County, 2010)</p> <p>GRI G4 2013: G4-EC1: Direct economic value generated and distributed G4-EC8: Significant indirect economic impacts, including the extent of impacts</p> <p>Los Angeles Det. of Water & Power: Water: AA / Aa2 (2012)</p> <p>Orange County: AAA (2009) / Aa3 (County, 2012), Aa1 (Water, 2011), Aa2 (Wastewater, 2010)</p> <p>PG&E: Power: BBB+/A3 (2011)</p> <p>S&P/Moody's: Benchmark Ratings</p> <p>Santa Clara: Aa2 (County, 2012) / AA+/A-1+ (County, 2011)</p> <p>San Diego: Aa1 (County, 2012), Aa2/Aa3 (Water, 2011) / A+ (City/County, 2002), AA+ (Water, 2011)</p> <p>Seattle Public Utilities: Water: AA+ / Aa1 (2012); Wastewater: AA+ / Aa1 (2012)</p> <p>WRF 2014 Performance Benchmarking..., Web Report #4313b: Financial Viability: pp. B1-11 - B1-12.</p>
<p>GM 2.2 Operating cost coverage (total operational revenues/total operating costs) for:</p> <p>a. Water b. Wastewater c. Power</p>	<p>Reporting on this indicator is advocated by AWWA, EPA, AMWA, APWA, NACWA, NAWC, and WEF. Effective utility management: a primer for water and wastewater utilities. (2008, June).</p> <p>GASB-34: 7_1999: Requirements for Annual financial reporting by state and local governments throughout the United States</p> <p>GRI G4 2013: G4-EC1: Direct economic value generated and distributed G4-EC2: Report risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure G4-EC7: Development and impact of infrastructure investments and services supported G4-EC8: Significant indirect economic impacts, including the extent of impacts</p> <p>IASB/ IFRS 8 Operating Segments, 2006: IAS 12 Income Taxes, 18 Revenues, 19 Employee Benefits, 2001</p> <p>IBNET 2008: recommends reporting on this indicator. (ibnet maintains a global database of the water sector's performance).</p>
<p>GM 2.3 Enterprise Operating Fund Balance is sufficient to comply with Fund Balance Reserve Policy</p>	<p>Reporting on this indicator is advocated by AWWA, EPA, AMWA, APWA, NACWA, NAWC, and WEF. Effective utility management: a primer for water and wastewater utilities. (2008, June).</p> <p>AWWA 2011 Benchmarking report. The median for Water Operations was 36% (top quartile: 24.3%), the median for Wastewater Operations was 49.8%, and the median for Combined Operations was 31.6% (top quartile: 17.9%). By Region, Southwest: the median was 26.6% (top quartile 21.3%). Utilities serving 500,000+ customers: the median was 52% (top quartile: 38.3%).</p> <p>AwwaRF & CSIRO: In the manual for Triple Bottom Line Reporting of Sustainable Water Utility Performance, CSIRO & AwwaRF recommend reporting on debt ratio.</p> <p>AWWA QualServe #10: report on Debt Ratio as a measure of utility indebtedness.</p> <p>GRI G4 2013: G4-EC1: Direct economic value generated and distributed G4-EC2: Report risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure G4-EC7: Development and impact of infrastructure investments and services supported G4-EC8: Significant indirect economic impacts, including the extent of impacts</p> <p>IBNET: recommends reporting on this indicator. Ibnet: a global database of the water sector's performance. (2008, June).</p> <p>SFPUC Fund Balance Reserve Policy: (www.sfwater.org/modules/showdocument.aspx?documentid=420)</p>
Objective GM-E. Implement and improve supply chain and contracting procedures	
<p>GM 3.1 Percent of contracts certified within specific parameters:</p> <p>a. Percent of completion within 45 days from Commission Award to Certification of components of professional service contracts that are within SFPUC control</p> <p>b. Percent of completion within 60 days from Commission Award to Certification of components of construction contracts that are within SFPUC control</p>	<p>GRI G4 2013: G4-EC1: Direct economic value generated and distributed G4-EC7: Development and impact of infrastructure investments and services supported G4-EC8: Significant indirect economic impacts, including the extent of impacts G4-EC9: Proportion of spending on local suppliers at significant locations of operation.</p> <p>ISO 26000 2010: Clauses 6.8.1 - 6.8.3; 6.8.5 - 6.8.9</p> <p>ISO 9001:2008 Certified Quality Management System for Performance-Based Contract Administration (PBCA) activities. See Quadel consulting: ISO certification. (2011).</p> <p>U.S. GSA: Recommends implementing policies to process contracts in a timely manner; 1994: Acquisition. A guide to best practices for contract administration: office of federal procurement policy (ofpp)</p>

Key Performance Indicator (KPI)	<p style="text-align: center;">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p style="text-align: center;">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
GOVERNANCE & MANAGEMENT	
Objective GM-E. Implement and improve supply chain and contracting procedures	
<p>GM 3.2 Percent of professional service firms for which post-project quality and satisfaction reviews have been carried out (does not include construction contracts)</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practice ...#11 Continuous Improvement Program...consultant reviews</p> <p>City Services Auditor (CSA - San Francisco) released their citywide performance audit report entitled "Adopting Leading Practices Could Improve the City's Construction Contractor Bid Pool" May 2014, related to construction contractor performance evaluation. [URL link: http://sfcontroller.org/Modules/ShowDocument.aspx?documentid=5377]</p> <p>CSA noted: City departments do not adequately assess contractor performance, nor consider past performance in the construction contract award process...Recommendations were made for the City to adopt leading practices inclusive of:</p> <ul style="list-style-type: none"> • Requiring the completion of contractor performance evaluations. • Considering evaluations in the contract award process. • Using a standardized performance evaluation form. • Allowing contractor feedback on evaluation results. • Maintaining a centralized database for evaluation results. <p>GRI G4 2013: G4-EC1: Direct economic value generated and distributed G4-EC7: Development and impact of infrastructure investments and services supported G4-EC8: Significant indirect economic impacts, including the extent of impacts G4-EC9: Proportion of spending on local suppliers at significant locations of operation.</p> <p>ISO 26000 2010: Clauses 6.8.1 - 6.8.3: Community involvement & development; Clauses 6.8.5 - 6.8.9: Employment creation & skills development & social investment</p> <p>U.S. Executive Office of the President, Office of Federal Procurement Policy. (2011). Memorandum for chief acquisition officers and senior procurement executives. Federal Acquisition Regulations: For example, FAR Case 2009-042 amended the Office of Management and Budget's policy on past contractor assessments, in order to increase the likelihood of quality future service. This came as a response to the Government Accountability Office's demand for more thorough assessments of services procured. Among agencies evaluated on "Sufficient Narrative for Quality of Product/Service," NASA scored highest with 62.8%. GSA scored just over 21%, which suggests that their controls regarding contract assessment need attention.</p> <p>U.S.GSA: Recommends implementing policies to assess contractor performance: (1994). A guide to best practices for contract administration: office of federal procurement policy (OFPP).</p>
<p>GM 3.3 Percent of purchasing decisions that have been screened for compliance with the City's environmentally preferable purchasing ordinance.</p>	<p>AWWA 2012 Benchmarking Report: Triple Bottom Line Index d.: policies, management systems & decision-making processes to affect results of TBL goals & objectives</p> <p>According to the City's environmentally-friendly purchasing ordinance, all purchasing should be screened: SFE. San Francisco City law requires city agencies and staff to purchase required and/or suggested green products, using limited use products as a last resort, and products that meet San Francisco's health and environmental requirements.</p> <p>California Environmentally Preferable Purchasing (EPP): California Public Contract Code 12400-12404 requires the procurement of goods and services that have a reduced impact on human health and the environment as compared to other goods and services serving the same purpose. California Department of General Services, 2010: Buying green: California's guide for sustainable purchasing</p> <p>GRI G4 2013: G4-EN1: Report the total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period G4-EN2: Report the percentage of recycled input materials used to manufacture the organization's primary products and services G4-EN32: Percentage of new suppliers that were screened using environmental criteria G4-EN33: Significant actual and potential negative environmental impacts in the supply chain and actions taken G4-LA14: Percentage of new suppliers that were screened using labor practices criteria G4-SO9: Percentage of new suppliers that were screened using criteria for impacts on society G4-PR1: Percentage of significant product and service categories for which health and safety impacts are assessed for improvement G4-PR2: Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes</p> <p>ISO 2600 2010: Clause 6.3.5: Avoidance of complicity; Clause 6.3.6: Promote social responsibility in the value chain; Clause 6.5.4: Sustainable resource use; Clauses 6.7.1 & 6.7.2: Consumer issues; Clause 7.3.1: Due diligence</p> <p>U.S GSA 2014: includes carbon emissions in contract award decisions for domestic delivery services per the 2009 White House Executive Order - including initial benchmarks, future goals for alternative fuel and vehicle use, annual report on emission: uses estimates to compare the economic impacts of those emissions between companies. Additional requirements for other Fed. Govt GSA and OASIS (One Acquisition Solution for Integrated Services) acquisition, service and supply contracts.</p> <p>UN Framework 2011: United Nations 'Guiding Principles on Business and Human Rights, Implementing the United Nations "Protect, Respect and Remedy" Framework : Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, John Ruggie, 2011.</p> <p>WEF 2012 Sustainability Reporting Systems for Wastewater Systems: Environmental Considerations: 6.5.1: Construction and Demolition Materials</p>
Objective GM-F. Optimize relevant technological innovations	
<p>GM 4.1 Number of innovative and/or pilot projects using new technology(ies) that target the Objective and improve quality of services</p>	<p>SFPUC Sept 2012 adopted by Commission Resolution: Business Services Technology Policy will both guide the management of and be implemented for operations and capital programs, covering physical plant assets, facilities, systems, processes and procedures.</p> <p>Example Best Practice: Hong Kong: Retrofitting government buildings and schools with dual flush cisterns, low flow sensor-type water taps, low flow showerheads, and sensor-type urinals. The reduction in water use is expected to save the equivalent of 1.5 million kWh of electricity use per year. Hong Kong: retrofitting plumbing appurtenance with water saving devices in government buildings and schools. (2010). Retrieved from http://www.c40cities.org/bestpractices/water/hongkong_water_saving_devices.jsp</p>

Key Performance Indicator (KPI)	<p style="text-align: center;">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p style="text-align: center;">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
GOVERNANCE & MANAGEMENT	
Objective GM-G. Optimize planning to meet water, wastewater, and power demand	
<p>GM 4.2 Show progress on long term, integrated resource planning to meet future water, wastewater, and power demand in a reliable and sustainable manner for:</p> <p>a. Water b. Wastewater c. Power</p>	<p>AWWA 2012 Benchmarking report: (%) current 5-yr avg divided by avg annual available water supplies based on current yield = (years) Available Water Supply ((p.65); EI data for Water and Wastewater (pp 66 & 77) AWWA 2008 M50 Manual: integrated resource planning: recommends long-term integrated resource planning</p> <p>AwwaRF 2007: Development of a Strategic Planning Process" recommends strategic planning to "...provide a bridge between strategic goals and annual budget..." Triple Bottom Line Reporting of Sustainable Water Utility Performance: recommends developing, implementing and reporting on measures to support TBL strategic and sustainability performance.</p> <p>AwwaRF & CSIRO: Triple Bottom Line Reporting of Sustainable Water Utility Performance: recommends reporting on organizational best practice, including TBL reporting and strategic planning; Short list indicator D3.</p> <p>GRI G4 2013: G4-46: Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics G4-SO3: Total number and percentage of operations assessed for risks related to corruption and the significant risks identified</p> <p>PURPA: The EISA of 2007 added four new Federal standards to PURPA section 111(d), including Integrated Resource Planning, details under Section 532(a). [U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability. Public utility regulatory policies act of 1978 (purpa).</p> <p>Murray-Darling Basin Water: A. Australian Commonwealth Scientific and Industrial Research Organization's (CSIRO) Murray-Darling Basin Sustainable Yields Project used three GHG emissions scenarios while conducting its Integrated Resource Planning: 1) "Best estimate" climate change scenario 2) Extreme wet or dry scenario 3) Worst case scenario. The predictions were made for 2030, relative to 1990 emissions levels. The research provides water utilities and districts with potential scenarios around which to plan for future scenarios with too much or too little water. Australian GOVERNANCE, National Water Commission. (2011). Integrated resource planning for urban water--resource papers.</p> <p>B. The National Water Commission (NWC) of Australia offers guidance on integrated resource planning for long term organizational strategy. A case study of Cabbage Tree Creek and the City of Brisbane, Australia describes a long term investment framework, including "non-market valuations" of key sustainability impacts (e.g. ecosystem valuation or qualitative measures pertaining to wellbeing). Australian GOVERNANCE, National Water Commission. (2011). Integrated resource planning for urban water--resource papers.</p>
<p>GM 4.3 Identify potential climate change risks to the organization and analyze and develop adaption measures that may be needed in the future for:</p> <p>a. Water b. Wastewater c. Power</p>	<p>AWWA's 2012 Benchmarking report: Organizational Best Practices: #3 Risk management planning</p> <p>CA SLC 2010: In planning for sea level rise (SLR), Governor of CA issued an executive order mandating planning for SLR in new development. This document is designed to serve as interim guidance prior to the release of a final report from the NAS regarding climate change adaptation. CA SLC (2010). State of CA sea-level rise interim guidance document.</p> <p>Climate Disclosure Pproject: Guidance for companies responding to the Investor CDP Information Request, updated annually. Climate Disclosure Standards Board: Climate Change Reporting Framework--Edition 1.0, 2010 and Climate Change Reporting Framework Boundary Update, June 2012</p> <p>EBMUD: East Bay MUD ran sensitivity analyses as part of a comprehensive climate change adaptation research program, conducted jointly with the EPA, to determine how specific elements of its water resource system might be affected by climate change.</p> <p>U.S. EPA 2010 research group: Spartanburg Water, SPU and the NYCDEP worked with WEF and AWWA ; conducted climate change scenario planning exercises as part of an EPA Climate change vulnerability assessment: four case studies of water utility practices</p> <p>GRI G4 2013: G4-2: Provide a description of key impacts, risks, and opportunities. G4-EC2: Financial implications and other risks and opportunities for the organization's activities due to climate change.</p> <p>ISO 26000 2010: Social Responsibility Core Subjects: The environment: Clause 6.5.5 Climate change mitigation and adaptation</p> <p>Murray-Darling Basin Water: The Australian CSIRO Murray-Darling Basin Sustainable Yields Project used three GHG emissions scenarios while conducting its Integrated Resource Planning: 1) "Best estimate" climate change scenario 2) Extreme wet or dry scenario 3) Worst case scenario. The predictions were made for 2030, relative to 1990 emissions levels. The research provides water utilities and districts with potential scenarios around which to plan for future scenarios with too much or too little water. Australian GOVERNANCE, National Water Commission. (2011). Integrated resource planning for urban water--resource papers.</p> <p>Seattle Public Utilities and the New York Department of Environmental Protection conducted climate change scenario planning exercises as part of the same EPA research group. Spartanburg Water worked with WEF and AWWA in order to produce its plan. U.S. Environmental Protection Agency, (2010). Climate change vulnerability assessments: four case studies of water utility practices.</p>
<p>GM 4.4 Percent of power supplied vs. forecasted</p>	<p>The USEPA and the Clean Energy Environment State Partnership recommend demand forecasting as part of a utility's successful portfolio management approach. They advise modeling multiple demand scenarios. U.S. Environmental Protection Agency, (2006): Utility planning and incentive structures.</p> <p>Montana-Dakota Utilities produced an Integrated Resource Plan in which they forecast power demand for the next 30 years using econometric equations and models. Each year, these utilities will be able to compare power demand forecast vs. power demand supplied and adjust their predictions accordingly. Montana Dakota utilities integrated resource plan. (2011).</p>

Key Performance Indicator (KPI)	<p align="center">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p align="center">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
GOVERNANCE & MANAGEMENT	
Objective GM-H. Advance strategic sustainability planning, management & decision-making	
<p>GM 5.1 Advance SFPUC-wide Strategic Sustainability Planning (SSP) & annual performance reporting</p> <p>a. Report annually on triple bottom line performance; use annual performance trends for strategic planning, management, and budgeting</p> <p>b. Conduct periodic expert third party assurance of SSP annual performance and report to assure accuracy and adherence to GRI, Accountability, AWWA and relevant sustainability reporting standards</p>	<p>AccountAbility AA1000AS (Assurance Standard) 2010 for periodic 3rd party review and Assurance Statement for SSP framework and reporting including findings and conclusions regarding inclusivity, materiality and responsiveness, and observations and recommendations</p> <p>AWWA's 2012 Benchmarking report: Organizational Best Practices: #1 Strategic planning, #3 Risk management planning; TBL Index (a - j): including f: annual report on performance against TBL goals; Benchmarking Performance (pp. 105 - 130) uses 1 -5 scale for 3 peer categories: utility type, AWWA region & size population served.</p> <ul style="list-style-type: none"> • AWWA Manual: Triple Bottom Line Reporting of Sustainable Water Utility Performance 2007 • AWWA Manual: Development of a Strategic Planning Process 2007 <p>AwwaRF & CSIRO: recommend reporting annually on organizational best practice, including TBL reporting and strategic planning: Short list indicator D3: Triple Bottom Line Reporting of Sustainable Water Utility Performance 2007</p> <p>City & County of SF: 2002 Prop E or City Ordinance 279-08 Sec. 8B 123(A)(3) for creation and annual performance reporting on SFPUC-wide strategic plan [see 2008 SSP and annual performance at www.sfwater/sustainability.org]</p> <p>GRI G4 2013: Sustainability Guidelines: all Principles and Standard Disclosure Aspects including Executive Level (Governance) Role in Risk Management G4-33: Report the organization's policy and current practice with regard to seeking external assurance for the report... G4-45: Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes... G4-47: Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities • GRI July 2014 Study: Trend benchmarks for # of GRI Sustainability Reports externally assured: 2008 U.S. ~5% vs. ~28% global; 2011 U.S. ~10% vs. ~38% global; 2013 U.S. ~16% vs. ~45% global; Trend summary: # of externally assured reports published by US companies has more than tripled between 2008 and 2013, and # for global companies has more than doubled during the same period</p> <p>ISO 26000 2010: Clauses 1 through 7: reporting on core subjects in a range of social responsibility issues.</p> <p>ISAE 3000: Engagements other than Audits or Reviews of Historical Financial Information including Dec. 2013 Amendments approved by IFAC for effective assurance engagements and reports dated on or after 12/2015</p> <p>SEC Regulation S-K Items 101 & 103 re Form 10K filings for disclosure of non-financial material information by publicly held U.S. corporations [See for best practice, & see emerging SASB Sustainability Reporting Standards]</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Reporting Guidelines 2.0 (2.3.4) including e.g. annual reporting, trending (2.1.1.2) and assurance/auditing using AccountAbility AA1000AS (3.1) and more</p> <p>WRF 2014 Web Report #4313a: track and benchmark performance reliably/ quarterly or annually; identify interval to fit data into planned updates for related planning such as strategic plans and capital and operating budget development- pp12-13.</p>
Objective GM-I. Advance relevant public policy and legislation	
<p>GM 5.2 Support and initiate local, state, and federal policy actions that support SFPUC's mission</p>	<p>AWWA's 2012 Benchmarking report: Organizational Best Practices: #1 Strategic planning, #3 Risk management planning, #7 Governing body transparency and accountability; TBL Index a.</p> <p>GRI G4 2013: General Standard Disclosures: Executive Level (Governance) Role in Risk Management G4-45: Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes. G4-47: Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities</p> <p>ISO 26000 2010: Guidance on social responsibility core subjects; General disclosures on management approach: Clauses 6.2 Strategy and analyses and governance and 7.4.3 Building social responsibility into an organization's governance, systems and procedures ISO 31000 2009: Standardizes the practice of risk management. Source: PowerPoint by Deborah Luthi, SFPUC.</p> <p>Washington State Legislature: Created a committee to critically and thoroughly examine the State's exposure to various risks. Washington State Legislature, (2011). State of Washington joint legislative audit and review committee: state risk management practices in Washington preliminary report.</p> <p>WRF 2014 Performance Benchmarking for Effectively Managed Utilities Report #4313b p.B1-10 Risk Management Program: Consistent methodologies that establish risk tolerances & assess inherent , residual & current risk of assets& to prioritize infrastructure needs</p>
Objective GM-J. Develop and implement SFPUC-wide risk assessment and management	
<p>GM 5.3 Percent of organization integrating Enterprise Risk Management (ERM) into sustainability and operational planning, management, and decision-making. Types of risk can include: strategic, operational, financial, reputational, environmental, political, regulatory and license to operate</p>	<p>AWWA's 2012 Benchmarking report: Organizational Best Practices: #1 Strategic planning, #3 Risk management planning, #7 Governing body transparency and accountability; TBL Index a.</p> <p>GRI G4 2013: General Standard Disclosures: Executive Level (Governance) Role in Risk Management G4-45: Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes. G4-47: Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities G4-EC2: Report risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure</p> <p>ISO 26000 2010: Guidance on social responsibility core subjects; General disclosures on management approach: Clauses 6.2 Strategy and analyses and governance and 7.4.3 Building social responsibility into an organization's governance, systems and procedures ISO 31000 2009: Standardizes the practice of risk management. Source: PowerPoint by Deborah Luthi, SFPUC.</p> <p>Washington State Legislature: Created a committee to critically and thoroughly examine the State's exposure to various risks. Washington State Legislature, (2011). State of Washington joint legislative audit and review committee: state risk management practices in Washington preliminary report.</p> <p>WRF 2014 Performance Benchmarking for Effectively Managed Utilities Report #4313b p.B1-10 Risk Management Program: Consistent methodologies that establish risk tolerances & assess inherent , residual & current risk of assets& to prioritize infrastructure needs</p>

Key Performance Indicator (KPI)	<p style="text-align: center;">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p style="text-align: center;">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
GOVERNANCE & MANAGEMENT	
Objective GM-K. Advance security, emergency planning, and response	
<p>GM 6.1 SFPUC-wide strategic security plan in place including annual implementation targets</p>	<p>AWWA G430-09 (Catalog 47430): Requirements for establishing & operating a protective security program for water or wastewater utility - standard has been awarded SAFETY Act (of 2002) designation by the U.S. DHS making utility implementing/meeting the standard eligible for liability protections.</p> <p>--J100-10: (Catalog STJ_0072080): Risk & Resilience Management of Water & Wastewater Systems: Requirements for all-hazards risk & resilience analysis & management for water sector ; prescribes methods can be used to address requirements.</p> <p>--G440-11 (Catalog 47440): Emergency Preparedness Practices: Requirements to establish & maintain acceptable level of emergency preparedness based on identified & perceived risks .</p> <p>CA CDPH Division of Drinking Water & Environmental Mgmt. Water Security, Preparedness, and Emergency Response (WSPER 2013); Guidelines related to Security issues, crisis & emergency risk communication, training initiatives etc.</p>
<p>GM 6.2 Emergency drinking water plan in place, and reviewed, updated and tested annually</p>	<p>AWWA 2011 & 2012: Organizational Best Practice Index: Percent emergency response readiness training: 100%x total hrs. training for all employees divided by total employee hrs. worked</p> <p>Falls Church, VA: The AWWA 2011 recommends conducting water use audits for hospitals in preparation for emergencies. Falls Church, VA's Fairfax hospital found that it could cut water use in half, while still providing emergency care to patients. Cross-sector emergency planning for water providers and healthcare facilities (2011).</p> <p>ISO 11830 (check) and standards 24510, 24511, and 24512: Management of Water and Waste Water Utilities and Assessment of Water Services.</p> <p>IWA: Included among International Water Association performance indicators, and supported by AfWA, AIDIS, Consumers International, EUREAU, IWA, NORMAPME, UN-DESA, WHO, World Bank. Rohrhofer, K. J. (2008). Introduction of ISO 24510-24512, management of water and waste water utilities and for the assessment of water services. (pp. 1-45). Rohrhofer and Partners.</p> <p>San Francisco 2012 Resolution 97-003.</p>
<p>GM 6.3 Quantify progress institutionalizing Emergency Operations Plans (EOPs)</p> <p>a. SFPUC EOP in place including required annual review and updates</p> <p>b. SFPUC Enterprise and Bureau EOPs in place including required annual review and updates to be completed</p>	<p>California Emergency Plan: July, 2009. DGS (CA): According to the SAM, state agencies must maintain a disaster recovery plan (DRP) that identifies key computer applications and data sources critical to agency function during and after crises.</p> <p>California Department of General Services, State Administrative Manual. (2009). Agency disaster recovery plan.</p> <p>CCSF: Emergency Response Plan, an element of the Emergency Management Program.</p> <p>San Francisco Department of Emergency Management, (2009). City and county of san Francisco emergency response plan: an element of the ccsf emergency management program.</p> <p>FEMA: 2009: Federal guidelines for non-federal entities (including local government agencies) include Mission Essential Functions and Primary Mission Essential Functions necessary to support the eight National Essential Functions as determined by FEMA. These are functions that must be restored within twelve hours and maintained for 30 days after an emergency (or until normal operations have resumed).</p> <p>FEMA: 2009: Continuity guidance circular 1: continuity guidance for non-federal entities: (states, territories, tribal, and local government jurisdictions and private sector organizations).</p> <p>SFDEM: SF Department of Emergency Management, (2008): San Francisco all-hazards strategic plan: 2008.</p>
INFRASTRUCTURE & ASSETS	
Objective IA-A. Improve capital facilities through construction	
<p>IA 2.1 Lost time incident rate for procured construction hours</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practice ...#11 Continuous Improvement Program</p> <p>BLS: 1.6 is the annual construction industry national average lost time incident rate for 2009</p> <p>GRI G4 2013: G4-EC1: Direct economic value generated and distributed G4-EC7: Development and impact of infrastructure investments and services supported G4-EC8: Significant indirect economic impacts, including the extent of impacts G4-EC9: Proportion of spending on local suppliers at significant locations of operation.</p> <p>ISO 26000 2010: General Disclosures on Management Approach: Clauses 6.8.1 - 6.8.3 and Clauses 6.8.5 - 6.8.9</p> <p>San Francisco City Law requires that in submitting bids for construction contracts, " a bidder has a record of prior timely performance" and a history of "dealing in good faith with the City" . However, the City does not require the evaluation and use of such data in the process of awarding the contract, and does not have a system or centralized data base for the collection and management of such data for purposes of accountability or application of the law. [SF BayGuardian 6/2/14]</p> <p>U.S. Executive Office of the President, Office of Federal Procurement Policy. (2011). Memorandum for chief acquisition officers and senior procurement executives. Federal Acquisition Regulations: For example, FAR Case 2009-042 amended the Office of Management and Budget's policy on past contractor assessments, in order to increase the likelihood of quality future service. This came as a response to the Government Accountability Office's demand for more thorough assessments of services procured. Among agencies evaluated on "Sufficient Narrative for Quality of Product/Service," NASA scored highest with 62.8%. GSA scored just over 21%, which suggests that their controls regarding contract assessment need attention.</p> <p>U.S.GSA: Recommends implementing policies to assess contractor performance: (1994). A guide to best practices for contract administration: office of federal procurement policy (OFPP).</p>
<p>IA 2.2 Deviation in actual vs. planned facilities and project expenditures (in Millions)</p> <p>a. WSIP Local b. WSIP Regional c. SSIP d. WWE</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practices #1 through 11 (pp16-18 and p126)</p> <p>GRI G4 2013: G4-EC7: Development and impact of infrastructure investments and services supported</p> <p>ISO 26000 2010: Guidance on Social responsibility core subjects: Clause 6.3.9</p> <p>SFPUC infrastructure benchmarks against previous projections and targets 2011 - 2014 : Although there is no standard/requirement, project managers strive to minimize deviation in expenditures and schedules.</p>
<p>IA 2.3 Percent of projects completed within the program budget</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practices #1 through 11 (pp16-18 and p126)</p> <p>SFPUC's annual target is 100%</p>

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INFRASTRUCTURE & ASSETS	
Objective IA-A. Improve capital facilities through construction	
<p>IA 2.4 Percent deviation in actual vs. planned capital facilities and project schedules</p> <p>a. WSIP Local b. WSIP Regional c. WWECIP</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practices #1 through 11 (pp16-18 and p126)</p> <p>GRI G4 2013: G4-EC7: Development and impact of infrastructure investments and services supported</p> <p>ISO 26000 2010: Guidance on Social responsibility core subjects: Clause 6.3.9</p> <p>Melbourne Water: MW lists key project timelines, including delays, but does not give an organization-wide percentage. From the data provided, it would be possible—but cumbersome—to produce a percentage of on-schedule capital improvement projects. Australian Government, Victoria. (2009). Melbourne water 2009 water plan Retrieved from http://www.esc.vic.gov.au/NR/rdonlyres/EF41E3B7-14A1-4D6D-8452-29D3B6BDF1C8/0/MW_WaterPlan_Chapters115_20081105.pdf</p>
<p>IA 2.5 Awards or commendations received for best practice demonstrated in capital construction</p>	<p>SFPUC annual target is to lead best practice or equivalent (whether with award-recognition or without)</p> <p>No current standard or best practice</p>
Objective IA-B. Optimize maintenance for Water, Wastewater, and Power assets	
<p>IA 4.1 Develop and implement an SFPUC-wide Asset Management plan</p> <p>a. Percent of operating assets by value covered by asset management plan</p> <p>b. Percent of operating assets with a risk score ranking</p> <p>c. Percent of assets with a condition assessment of "poor", "failed", "renewal required", or "unserviceable"</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practice: #5 Optimized Asset Management Program; and see (pp. 105 - 130) uses 1 -5 scale in 3 peer categories: utility type, AWWA region & size population served</p> <p>U.S. EPA recommends developing and implementing a robust asset management plan, including a determination of assets most critical to operations [U.S. Environmental Protection Agency, (n.d.). Asset management 101 Retrieved from http://water.epa.gov/infrastructure/drinkingwater/pws/cupss/upload/presentation_cupss_am101.pdf]</p> <p>U.S.EPA example definition of asset management:</p> <ul style="list-style-type: none"> • A management paradigm and body of management practice. • Applied to the entire portfolio of infrastructure assets at all levels of the organization. • Seeking to minimize the total costs of acquiring, operating, maintaining and renewing assets within an environment of limited resources • While continuously delivering the service levels customers desire and regulators require • At an acceptable level of risk to the organization <p>(U.S. Environmental Protection Agency, (2011). Water: water infrastructure: sustainable infrastructure: asset management Retrieved from http://water.epa.gov/infrastructure/sustain/asset_management.cfm ; & see (www.epa.gov/ogwdw/smallsystems/pdfs/guide_smallsystems_assetmanagement_bestpractices.pdf))</p> <p>GASB-34: 7_1999: Annual financial reports must include management's discussion and analysis (MD&A) that also incorporates long-term assets and liabilities such as capital assets, including infrastructure, and general obligation debt.</p> <p>GRI G4 2013: G4-EC2: Report risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure</p> <p>ISO 2600 2010: Clause: Sustainable Resource Use 6.5.4; Clauses 6.7.1 and 6.7.2 Consumer issues</p> <p>PWB: eliminated hydrant overhauls, because the benefits of overhauls do not outweigh the costs of repairs and replacements; covered only certain assets under an asset management plan. [U.S. Environmental Protection Agency, (n.d.). Asset management 101 Retrieved from http://water.epa.gov/infrastructure/drinkingwater/pws/cupss/upload/presentation_cupss_am101.pdf]</p> <p>SPU & OCSD: Both have well-developed asset management programs.</p> <p>WEF 2012 Sustainability Reporting Systems for Wastewater Systems: Environmental Considerations: 6.5.1: Construction and Demolition Materials; 9.0: Technical considerations: 9.5 Resiliency and adaptability</p> <p>WRF 2014 Performance Benchmarking for Effectively Managed Utilities Report #4313b: Infrastructure Stability: Develop and Implement strategic asset management plan - 7 metrics: p. B1-10</p>
<p>IA 5.1 Preventive maintenance ratio for Water and Wastewater:</p> <p>a. Preventive maintenance ratio for Water (Percent)</p> <p>b. Preventive maintenance ratio for Wastewater (Percent)</p>	<p>Measuring/reporting performance on this indicator is advocated jointly by the EPA, AWWA, NAWC, NACWA, WEF, and AMWA, as part of a utility's measurement of employee and leadership development. (Effective Utility Management: a Primer for Water and Wastewater Utilities, June 2008.)</p> <p>ABCWUA: FY 2010 plan: Albuquerque's utility lists the median preventive maintenance ratio among utilities serving more than 500,000 people as 60%. (See Albuquerque Bernalillo County, Water Utility Authority, Fiscal year 2010 performance plan.)</p> <p>AWWA 2012 Benchmarking report: Water and Wastewater for planned and corrective maintenance: Percent total time planned maintenance divided by total time planned maintenance plus total time corrective maintenance (for production - hrs./MG), (for distribution - hrs./100 miles pipe): Water Combined top quartile = 70%; Wastewater Combined top quartile = 51%.</p> <p>AWWA 2011 Benchmarking report: median for Water Operations was 50% (top quartile 73%), for Combined Operations was 61% (top quartile: 78%), for Utilities serving 500,000+ customers: was 61% (top quartile: 78%).</p> <p>Boulder, CO Utilities Division: Boulder's water utility had a planned maintenance ratio of 69.7% in 2010. This was slightly lower than their annual average of 73.0%. According to their study, the middle 50% of ratios throughout the western US ranged from about 37-84%. The wastewater utility had a planned maintenance ratio of 94.4%, which was significantly higher than the national 75th percentile. (See City of Boulder Public Works, Utilities Division, 2010 annual report.)</p> <p>GRI G4 2013: G4-EC7: Development and impact of infrastructure investments and services supported</p> <p>ISO 26000 2010: Consumer issues: 6.7.1 and 6.7.2</p>

Key Performance Indicator (KPI)	<p align="center">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p align="center">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
INFRASTRUCTURE & ASSETS	
Objective IA-B. Optimize maintenance for Water, Wastewater, and Power assets	
<p>IA 5.2 Water outages</p> <p>a. Percent of service connections without water for 4 hours or less as a result of an unplanned outage</p> <p>b. Percent of service connections without water for 12 hours or more as a result of an unplanned outage</p>	<p>AWWA 2012 Benchmarking report: Disruptions of Water Service Planned and Unplanned - at Category: Customer Relations: Type: Combined Op's =>4 hours; Top Quartile = 0; median= .75; more than 12 hours: top quartile= 0; median= 0 (per 1000 accounts)</p> <p>AWWA 2011 Benchmarking report: Disruptions of Water Service Planned and Unplanned - at Category: Customer Relations: Type: Combined Op's, Top Quartile = >4 hours = 0.36 plus more than 12 hours: = 0.07 (per 1000 accounts)</p> <p>GRI G4 2013: G4-EC7: Development and impact of infrastructure investments and services supported</p> <p>ISO 26000 2010: Clauses 6.7.1 and 6.7.2 Consumer issues</p> <p>SFPUC LOS Goal: <ul style="list-style-type: none"> • outages equal to or less than 4 hours due to an unplanned outage = 0.1% of service connections/ or ~200 service connections annually; and • Outages equal to or more than 12 hours due to an unplanned outage = 0.01% of service connections/ or ~20 service connections annually. </p>
<p>IA 5.3 System renewable and replacement rates (In-city)</p> <p>a. Water distribution mains (percent and miles)</p> <p>b. Wastewater pipelines (miles)</p>	<p>Measuring performance on this indicator has been advocated jointly by the EPA, AWWA, NAWC, NACWA, WEF, and AMWA, as part of a utility's measurement of employee and leadership development. (Effective utility management: a primer for water and wastewater utilities. (2008, June)).</p> <p>ABCWUA had a 2010 replacement/renewal rate of 1.0%, with a projected 2011 rate of 1.5%. (Albuquerque Bernalillo County, Water Utility Authority. (2010). Fiscal year 2010 performance plan)</p> <p>AWWA 2012 Benchmarking Report: The top quartile for the western region, Water pipes & distribution, was 2.5%, and Wastewater pipeline & collection was 2.0%; the median for each respectively was 1.7% and 2.0%. The top quartile for utilities serving more than 500,000 customers, Water pipes & distribution, was 1.5%, and Wastewater pipeline & collection was 2.1%; the median for each respectively was 0.9% and 1.1%.</p> <p>AWWA QualServe Water Operations 2011: Measure performance as a standard benchmark for water or wastewater utilities as part of ongoing infrastructure stability assessments</p> <p>NRRI 2010: Advocates measuring performance on this indicator: where does your utility stand? a regulator's guide to defining and measuring performance. (2010, August)</p> <p>WRF 2014 Performance Benchmarking for Effectively Managed Utilities Report #4313b: Infrastructure Stability: Rehabilitation & Replacement Rate; Planned Maintenance Effectiveness; Development & Implementation of Strategic Asset Management Plan.</p>
<p>IA 6.2 Non-revenue water in percent and MGD</p>	<p>AWWA 2012 Benchmarking report: Distribution System Water Losses: 2012 Apparent losses for combined operations = median 7.4% and top quartile = 3.2% / 2012 Real losses for combined operations = median 5% and top quartile 2.5% (p,60)</p> <p>AWWA 2012 Benchmarking report: Water Distribution System Integrity: Leaks and Breaks: 2012 leaks for combined operations = median 25/100 miles of pipe and top quartile 9/100 miles of pipe; 2012 breaks for combined operations = median 11/100 miles of pipe and top quartile 3/100 miles of pipe. (p61 for metric)</p> <p>GRI G4 2013: G4-EN8: Total water withdrawal by source</p> <p>IBNET data 2009: gives an average non-revenue water percentage for large Australian water utilities (over 1M customers) of 9.6%, with a low of 3%. In terms of volume, non-revenue water for the period among the same utilities averaged 5.4 m3/km/day, with a low of 2 m3/km/day. Ibnet: the international benchmarking network for water and sanitation utilities. (2009). Retrieved from http://www.ib-net.org/en/production/?action=utility</p> <p>IWA: Focused on improving operations and advancing standards and best practice to reduce water loss, IWA's Task Group on Performance Based Contracts is currently (July 2014) producing a manual of case studies and review articles to be published late in 2014</p> <p>PWD: Real water losses in the Philadelphia system amounted to 53 mgd in 2008, down from 96 mgd in the early 1990s. PWD has been measuring losses in mgd as part of its water loss control program. [Environmental Financial Advisory Board paper on Water Loss Reduction Financing Mechanisms for Drinking Water Distribution Systems, p. 14. According to the same source, there are no requirements at the federal level to report water loss]</p> <p>WRF 2014 "Real Loss Component Analysis: A Tool for Economic Water Loss Control" report #4372a: Best practice countries that pursue proactive leakage management featuring freely available water balance software tools = Australia, Austria, and New Zealand: best of Best Practice = Australia 2011 reported an average real loss volume for water utilities with more than 100,000 service connections of 18.5 gallons/connection/day or 1.85 mgd.</p>
WORKPLACE	
Objective WP-A. Advance positive employee relations through fair labor practices	
<p>WP 1.2 Number of complaints filed regarding equal opportunity violations/discrimination</p>	<p>GRI G4 2013: G4-HR3: Total number of incidents of discrimination and corrective actions taken G4-HR12: Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms</p> <p>ISO 26000 2010: Clause 6.3.7 Discrimination and vulnerable groups; Clause 6.4.3 Employment and employment relationships</p> <p>SFPUC's annual target is 0</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: 8.3 Employees</p>
Objective WP-B. Track workforce turnover and satisfaction	
<p>WP 3.1 Average percent of SFPUC workforce turnover</p>	<p>AWWA 2012 Benchmarking report: Employee turnover rate for Region 4 western combined utilities = 4.0% for the top quartile with a median of 7.5%. For organizations serving more than 500,000 customers, the rate for combined operations = 3.7% for the top quartile with a median of 7.1%.</p> <p>GRI G4 2013: G4-LA1: Total number and rates of new employee hires and employee turnover by age group, gender and region</p> <p>ISO 26000 2010: Clause 6.4.3 Employment & employment relationships</p> <p>SHRM 2011 Human Capital Benchmarking Report cites average annual turnover rates of 9% for municipalities and 8% for utilities.</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: 8.3 Employees</p>

Key Performance Indicator (KPI)	<p style="text-align: center;">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p style="text-align: center;">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
WORKPLACE	
Objective WP-B. Track workforce turnover and satisfaction	
<p>WP 3.2 Percent of satisfaction among current employees surveyed (conduct survey annually)</p>	<p>AWWA 2012 Benchmarking Report: TBL Index g. ...Annually seek out views of stakeholders...(employees as stakeholders)</p> <p>Reporting on this indicator is advocated by Society for Human Resource Management (SHRM) and the Society for Industrial and Organizational Psychology</p> <p>SPU: In 2010, Seattle Public Utilities conducted several surveys to assess employee satisfaction. They surveyed new employees following orientation, as well as for branch employees to determine what type of recognition they desire for good work completed.</p> <p>City of Seattle, Seattle Public Utilities. (2011). Seattle public utilities 2010 survey summary report Retrieved from http://clerk.ci.seattle.wa.us/~public/meetingrecords/2011/spunc20110208_6a.pdf</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: 8.3 Employees</p>
Objective WP-C. Ensure employee health and safety	
<p>WP 4.2 Recordable injury & lost time rates & work related fatalities</p> <p>a. Recordable injury rate (OSHA calculation that signifies per total calendar year hours worked)</p> <p>b. Recordable lost time rate (OSHA calculation that signifies per total calendar year hours worked)</p> <p>c. Number of work-related fatalities</p>	<p>AWWA QualServe #2: Employee Health and Safety Severity Rate measures lost workdays per employee per year. It is identical to that contained in OSHA. Note: New York City's water department won the AWWA safety award for 2011. The awards page does not provide specific figures. AWWA streamlines: 2011 AWWA awards. (2011, June 13).</p> <p>GRI G4 2013: G4-LA6: Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender</p> <p>NAICS Standard 2011: a. 6.2 out of 100 total recordable cases (injuries) b. 2.1 out of 100 day away from work due to sickness, injury etc.</p> <p>BLS - Bureau of Labor Statistics, NAICS = North American Industry Classification System (National Public Sector)</p> <p>OSHA Form 300A: Calculation: Use a normalization factor of (200,000 x total workdays away from work)/total hours worked by all employees). The BLS industry standard (utilities close to SFPUC size) for the injury rate is 6.2 and the BLS industry standard (local governments) for the lost time rate is 1.8.</p> <p>WaterRF 17 2010: With the EPA, recommends using a combination of "lagging and leading" indicators. Lagging indicators include measurements such as recordable injury rate and days away from work; leading indicators include employee training and use of Job Hazard Assessment Tools. Water utility safety and health: review of best practices.</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: 8.3 Employees</p>
Objective WP-D. Track effectiveness of internal communications	
<p>WP 5.2 Percent of staff and management surveyed that rate internal communications efforts as good or better</p> <p>a. % employees responding to survey b. % employee breakdown of responses</p>	<p>AWWA 2012 Benchmarking report: Stakeholder outreach index and checklist (employees as stakeholders)</p> <p>EUM 2008: See A Primer for Water and Wastewater Utilities. (2008, June). See http://www.watereum.org/pdf/2008-06EUMprimer.pdf (p. 29).</p> <p>Reporting on this indicator is advocated by AWWA, EPA, AMWA, APWA, NACWA, NAWC, and WEF.</p> <p>SHRM 2013 Job Satisfaction and Engagement Survey reports 50% of employees were satisfied with communication between employees and senior management.</p> <p>WEF 2012: Sustainability Reporting Statements for Wastewater Systems: Social Considerations: Employee recruitment & retention: 8.3.4 Organization structures in place ...to ensure a sustainable workforce</p>
Objective WP-E. Provide effective recruitment	
<p>WP 6.1 Average number of days to fill vacant position from the date the requisition is issued</p>	<p>AWWA 2012 Benchmarking report: Organizational best practices: #1 Strategic and #2 Risk Management planning</p> <p>DWSD 2011: succession planning taskforce predicts that the organization will require an average of three months to fill any position vacancies.</p> <p>Best practices group works on succession planning. In the flow, 10(6), 1-4. SEE http://www.dwsd.org/downloads_n/announcements/in_the_flow/itf_2011/ITF-Spring2011.pdf</p> <p>EUM 2008: Measuring performance on this indicator is advocated jointly by the EPA, AWWA, NAWC, NACWA, WEF, and AMWA, as part of a utility's measurement of employee and leadership development. SEE EUM: a primer for water and wastewater utilities. (2008, June). See http://www.watereum.org/pdf/2008-06EUMprimer.pdf</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: Employee recruitment & retention: 8.3.4 Organization structures in place ...to ensure a sustainable workforce</p>
Objective WP-F. Promote the professional development of staff and perform annual reviews	
<p>WP 7.2 Percent of work force receiving performance reviews on annual basis</p>	<p>ANSI/SHRM 09001 2012: 7.0 Performance Review Standard: 7.3 @ minimum face to face annual review, including dialogue on goals & expectations with documented outcomes of review process</p> <p>City West Water: Uses Performance Development Review, a framework that provides detailed descriptions of competencies required for jobs in the organization. If an employee's performance review should fall short, a supervisor can check specific deficiencies against the job's officially required competencies, and help improve the employee's performance. Employee performance reviews are conducted twice each year.</p> <p>GRI G4 2013: G4-LA11: Percentage of employees receiving regular performance and career development reviews, by gender and by employee category</p> <p>ISO 26000 2010: Human Development & Training in the Workplace: Clause 6.4.7</p> <p>Reporting on this indicator has been advocated jointly by the EPA, AWWA, NAWC, NACWA, WEF, and AMWA, as part of a utility's measurement of employee and leadership development. source: Effective utility management: a primer for water and wastewater utilities. (2008, June).</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: Employees/staff training & education 8.3.5: % employees receiving regular performance reviews</p> <p>Yarra Valley Water: Conducts employee performance reviews every six months. [Sources: Asian development bank: ensuring competent staff in water utilities. Water Operators Partnership Program: Knowledge Series.]</p>

Key Performance Indicator (KPI)	<p style="text-align: center;">SFPUC STRATEGIC SUSTAINABILITY PERFORMANCE STANDARDS and BEST PRACTICES 2014</p> <p style="text-align: center;">[Reference SFPUC SSP Glossary for Acronym Sources]</p>
WORKPLACE	
Objective WP-F. Promote the professional development of staff and perform annual reviews	
<p>WP 8.1 Average hours of training per year per employee</p>	<p>AWWA 2012 Benchmarking report: Organizational Development: Training: (hr./employee) Total training hours completed by all employees during the reporting period divided by total number of FTEs. Aggregate data for combined operations: top quartile = 29, median= 19, bottom quartile= 12</p> <p>AWWA 2007 QualServe survey cites a median value of 22.5 hours spent on employee development among combined water and wastewater utilities.</p> <p>EBMUD: 37.2 hours per employee. East bay municipal utility district: strategic plan: July 2010. (2010).</p> <p>EUM 2008 Effective Utility Management: A Primer for Water and Wastewater Utilities: Measure performance, rate achievement, and rate and rank the indicator's importance of this indicator within the organization as advocated jointly by the EPA, AWWA, NAWC, NACWA, WEF, and AMWA.</p> <p>GRI G4 2013: G4-LA9: Average hours of training per year per employee by gender, and by employee category G4-LA10: Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings</p> <p>ISO 26000 2010: Human Development & Training in the Workplace: Clause 6.4.7</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: 8.3.4 Employees recruitment & retention: Organization structures in place ...to ensure a sustainable workforce</p>
<p>WP 9.1 Advance Succession Planning:</p> <p>a. Implement a competency model framework to be populated as the basis for succession preparedness</p> <p>b. Define process for identification of at-risk positions</p> <p>c. Percent of at-risk positions identified for which populating models finalized</p>	<p>AWWA 2012 Benchmarking report: Organizational Best Practice: #10 Succession Planning...e.g. develop employees to be ready for advancement into key roles. Aggregate data for retirement eligibility for Combined Operations was 9% for the top quartile, 21% for the median and 30% for the bottom quartile.</p> <p>DWSD: With 38% of its workforce expected to retire in the next few years, DWSD planned ahead and created a succession planning task force in 2007 to plan for this eventuality. They have suggested a variety of collaborative training programs designed in part to increase visibility of the utility in potential applicant pools. (2011). Best practices group works on succession planning. In the flow, 10(6), 1-4. Retrieved from http://www.dwsd.org/downloads_n/announcements/in_the_flow/itf_2011/ITF-Spring2011.pdf</p> <p>EUM 2008 Primer for Water and Wastewater Utilities: Measure utility long-term workforce succession planning efforts to ensure critical skills & knowledge over the long term, particularly anticipated retirement in coming years:</p> <ul style="list-style-type: none"> • Key position vacancies: Avg. time critical-skill position are vacant due to staff departures per vacancy per year • Key position recruitment: percent: 100 x (# critical skill positions filled internally -vs- filled thru new staff + total number of position filled per year. • Long-term succession plan coverage: percent: 100 x (# employees covered by a long-term workforce succession plan that accounts for projected retirements & other vacancies in each skill and management area + total number of employees. <p>GRI G4 2013: General Standard Disclosures #10 f.: Report any significant variations in employment numbers (e.g. # employees eligible to retire)</p> <p>ISO 9000: (L. Marini - 2010-11) : The overall results will be evaluated against similar programs instituted at other bay area utilities for benchmarking overall effectiveness. The program structure will be built, measured and maintained based upon the ISO 9000: 2000 standards which link the outcomes of the program to the business drivers. The business drivers in this case are the development of succession plans and development plans which are based upon required core and job specific competencies that produce repeatable and measurable outcomes that support business objectives).</p> <p>ISO 2600 2010: Clause 6.4.3 Employment and employment relationships</p> <p>Reporting & measuring performance on this indicator advocated jointly by the EPA, AWWA, NAWC, NACWA, WEF, and AMWA, as part of a utility's measurement of employee and leadership development.</p> <p>WEF 2012 Sustainability Reporting Statements for Wastewater Systems: Social Considerations: 8.3.4 Employees recruitment & retention: Organization structures in place ...to ensure a sustainable workforce</p> <p>WRF 2014 Performance Benchmarking for Effectively Managed Utilities Report #4313b pB1-3: Employee & Leadership Development: Number of employees eligible to retire in the next 5 years divided by the average number of regular employees; number of positions that have an identified internal successor vs total number of positions; positions that require external competition, etc.</p>