

DATE:

September 7, 2010

TO:

Audit Committee, Agenda of September 13, 2010

FROM:

Alex Ruiz, Interim Director of Public Utilities

SUBJECT: Public Utilities Department Bid to Goal Programs - Third Party Goal Assessment

The Public Utilities Department seeks Audit Committee support for the following item:

Accept the Third Party Goal Assessment as submitted by Brown and Caldwell on September 1, 2010 (copy attached).

At the Audit Committee meetings of March 22, 2010, April 12, 2010 and May 10, 2010, the Committee made multiple recommendations to improve the overall accountability and performance of the B2G Program. One of the recommendations was to engage a firm to provide a Third Party Review of the FY2011 B2G goals to evaluate and comment on the reasonableness and challenge levels of the goals based on industry benchmarks and standards.

As agreed upon in the Audit Committee meeting of May 10, 2010, the Department utilized *Brown and Caldwell*, a firm that is expert in the fields of water and wastewater engineering and consulting. The Department's goal was to receive Brown and Caldwell's evaluative feedback of 50% of the goals in the month of August so adjustment of goals, if required, could be completed within the first quarter of FY2011. This action was accomplished and as a result of the value of that feedback, the department requested that the remainder of the goals be evaluated.

### Summary Observations and Conclusions (from the Brown and Caldwell Report)

Based on review of all FY 2011 Goals, a few noteworthy observations and conclusions are summarized below:

1. 90% of all goals reviewed are recommended for inclusion in the program. Brown and Caldwell judged these goals to be worthy of the Gainsharing Program, even with the recommended modifications related to scope, structure, or award metrics specifically proposed for some of the goals.

Page 2 Audit Committee September 7, 2010

- 2. A majority of the 7 goals determined not to be worthy of the Gainsharing program are, nevertheless, meaningful for continued organizational effectiveness and efficiency and Brown and Caldwell recommends that the Department pursue these Goals outside of the Gainsharing Program.
- 3. The process of soliciting front-line staff input and the team-based Goal filtering approach puts the Department among the very top tier of public utilities promoting a performance culture. As stated in the report,

"While a number of high performing utilities in water and wastewater sector have performance metrics, the Goal monitoring, measuring and renewal process--an essential feature of the B2G Program-- is neither as common nor as rigorous among other agencies".

4. The Goals cover a diverse and significantly important spectrum of operational categories, which the report confirms as essential for organizational improvement.

The Department has revised all goals proposed for revision and provided them to *Brown and Caldwell* for a confirmation review. The FY 2011 program can be effectively administered with the 63 remaining goals.

We believe the report by Brown and Caldwell provides valuable input in further improving the performance and efficiency improvement efforts under Bid To Goal. As a result, we are recommending these changes in the successor program.

Alex Ruiz

Interim Director of Public Utilities

Attachment:

Third Party Goal Assessment, as submitted by Brown and Caldwell on

September 1, 2010

cc:

Jay Goldstone, Chief Operating Officer

Andrea Tevlin, Director/Independent Budget Analyst

Eduardo Luna, City Auditor

<sup>&</sup>lt;sup>1</sup> "Third Party Assessment of City Bid-to-Goal Program," Brown and Caldwell, Sept. 1, 2010. p.8

# THIRD PARTY ASSESSMENT OF CITY OF SAN DIEGO'S BID-TO-GOAL PROGRAM

Prepared for City of San Diego, California September 1, 2010



Prepared by:

Pervaiz Anwar, P.E., Senior Vice President

Technical Review:

Ken Harlow, Vice Rresident

QA/QC Review:

Ane Deister, Vice President



# TABLE OF CONTENTS

LIST OF FIGURES		II
LIST OF TABLES		II
LIST OF ABBREVIATIO	DNS	١\
PREFACE		PRE-
Report Context Approach and Meth Goal Analyses Recommendations	for Future Third Party Reviews.	ES-2 ES-2 ES-6
<ul> <li>2.1 Information So</li> <li>2.1.1 Backgr</li> <li>2.1.2 Bench</li> <li>2.2 Goal Sampling</li> <li>2.2.1 Goal C</li> <li>2.2.2 Selecte</li> <li>2.3 Assessment F</li> </ul>	ETHODOLOGY	
3. GENERAL OBSERV	ATIONS	
<ul><li>4.1 Goals Recomm</li><li>4.2 Goals Recomm</li></ul>	ECTED GOALS mended for Inclusion with Minor or No Revisions mended for Inclusion with Significant Revisions commended for Inclusion	10 19
<ul><li>5.1 Goal Setting C</li><li>5.2 Review of Prod</li></ul>	NS FOR FUTURE THIRD PARTY REVIEWScriteriacriteriacess Improvementshmarking.	26 26
6. ADDENDUM		28
	mended for Inclusion with Minor or No Revisions	
	mended for Inclusion with Significant Revisions	
		45

# LIST OF FIGURES

Figure 2-1. Balanced Scorecard	18
LIST OF TABLES	
ES-1. Goals Recommended for Inclusion with Minor or No Revisions	ES-2
ES-2. Goals Recommended for Inclusion with Significant Revisions	
ES-3. Goals Not Recommended for Inclusion	ES-5
Table 2-1. B2G 2011 Goal Development Summary Table	4
Table 4-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions	11
Table 4-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions	19
Table 4-3. B2G 2011 Goals Not Recommended for Inclusion	24
Table 6-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions	29
Table 6-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions	42
Table 6-3, B2G 2011 Goals Not Recommended for Inclusion	

# LIST OF ABBREVIATIONS

B2G Bid to Goal

CMUD Charlotte Municip al Utilities District
EBMUD East Bay Municip al Utilities District
EMWD Eastern Municip al Water District
PUD Public Utilities Department
SPU Seattle Public Utilities
SOW Statement of Work
SSO Sewer System Overflow

# ASSESSMENT OF THE CITY OF SAN DIEGO'S BID-TO-GOAL PROGRAM

#### **PREFACE**

This document is composed of three parts: Part 1, Executive Summary; Part 2, Initial Report (Sections 1 through 5); and Part 3, Addendum Report (Section 6). The two Reports respond to two separate scope authorizations by the City.

Brown and Caldwell (BC) initially submitted our Draft Report (the "Initial Report") on July 16, 2010. As required by the original scope of work, this Report assessed a select sample of the FY 2011 Gainsharing Goals proposed by the Public Utilities Department (Department). Followingtheir review of this Report, the Department management felt that given the value they received from the independent assessment, it would be very beneficial for BC to also review all the remainingGoals, not included in the Initial Report. An amendment to the BC scope asked for this follow up review, which is the subject of the Addendum Report.

The Executive Summary highlights key features of both Reports, provides a quick snapshot of the recommendations related to each Goal, and underscores major observations and conclusions.

Thanks to all of the Department Executives and selected staffwe contacted for their responsiveness and professionalism in responding to our information requests and in accepting our feedback.

# ASSESSMENT OF THE CITY OF SAN DIEGO'S BID-TO-GOAL PROGRAM

#### **EXECUTIVE SUMMARY**

## **Report Context**

The City's Bid to Goal (B2G) Program was initially conceived and implemented by the City's Metropolitan Wastewater Department in 1998. It has progressed over the years and now encompasses all Divisions under the recently reorganized Public Utilities Department (Department). The Program currently incorporates both a bid process and a Gainsharing Incentive Program, under which employees are incentivized to improve performance through optimization of resources. Part of the documented savings from increased efficiency and performance gains are distributed in the form of a bonus based on group performance.

In order to ensure that the City's B2G Program is valuable and the Goals are meaningful, relevant and challenging, the City Council Audit Committee asked for the assessment of the Program by a third party reviewer, starting with Goals proposed for FY 2011. This report describes the reviewprocess and methodology and provides detailed recommendations and Goal improvement ideas, as warranted. General observations regarding the Program and suggested refinements to future Third Party Reviews are also included.

## **Study Scope and Report Structure**

The original scope of work called for an assessment of a representative sample of Goals from a total of 70 Goals proposed by various Divisions within the Department. A Draft Report (the "Initial Report"), summarizing the assessment recommendations related to each of the Goals included in the sample was submitted to the City on July 16, 2010. Appreciating the value and significance of this independent assessment, the Department management concluded that it would be very beneficial for Brown and Caldwell (BC) to also review all the remaining Goals, not included in the Initial Report. A scope amendment was issued to BC for assessment of the remaining Goals as an Addendum to the Initial Report. To retain the value of systematic analyses performed in selecting and assessingthe initial sample of Goals, and to eliminate any unnecessaryrework, this document presents both the Initial Report (Sections 1 through 5) and the Addendum Report (Section 6) in two separate, but complementary, parts. However, this Executive Summary covers both.

# **Approach and Methodology**

To the extent possible, the assessment included the consideration of reliable industry benchmarks and/or established industry practices. For benchmarking purposes, senior level managers from four peer agencies (water and wastewater) were interviewed. These included Eastern Municipal Water District (EMWD), Perris, CA; Seattle Public Utilities (SPU), Seattle, WA; East Bay Municipal Utilities District (EBMUD), Oakland, CA; and Charlotte-Mecklenburg Utilities District (CMUD), Charlotte, NC. Relevant information sources from these and other similar agencies were reviewed for benchmarking comparisons. Our familiarity with the industry's Effective UtilityManagement (EUM) Primer for Water and Wastewater Utilities also aided in the assessment process. Additionally, some of the PUD staf fwas contacted to seek clarifications on the B2G Goal setting process, and additional information on the Goals themselves.

### **Goal Analyses**

This document provides our general observations regarding the Goal setting process as well as our judgments of the relevance, challenge level, diversity, measurability, and characteristics of various Goals. As noted above, detailed analyses of the initial sample of Goals are included in the Initial Report, whereas the analyses of all remaining Goals are provided in the Addendum Report. These analyses are discussed under three distinct categories, reflecting our recommendations for inclusion or exclusion of Goals for the 2011 performance year: 1) Goals recommended for inclusion with minor on no revisions; 2) Goals recommended for inclusion with significant revisions; and 3) Goals not recommended for inclusion. Our recommendations are supported in each case by relevant analyses and, where warranted, suggested improvements. The Tables below list each Goal by the relevant category and provide quick references to detailed commentary.

ES-1. Goals Recommended for Inclusion with Minor or No Revisions				
Branch/Division	Goal Description	Report Page No.		
	WastewaterBranch			
WWTD Division				
Goal #1:	Electronic Monitoring and Data Storage for Treatment Plant OperatorRounds and Chemical Delivery Data	11		
Goal #3:	PLWTP Pilot Study - Flow Paced Chemical Dosing Based on Influent Solids Load	11		
Goal #4:	Reduce Reclaimed Water Discharge to the Ocean Outfall or Sewer at Water Reclamation Plants to 1.5 MGD per Plant	29		
Goal #5:	Update Bills-of-Material, Stocking Policies, and Warehouse Policies for Critical Plant Equipment	29		
Goal #6:	Minimize Recordable Injuries to Fewerthan Previous 5 Year Average	29		
<b>WWC Division</b>				
Goal #1:	Improve Efficiency of Main Cleaning Section in order to Increase Miles of Main Cleaned	11		
Goal #2:	Improve Efficiency of FEWD Section to Minimize Number of Expired Permits	30		
Goal #5:	Decrease Number of Valid Claims Over Previous Fiscal Year	12		
Goal #7:	Collection System Sewer Spill Reduction	12		
Goal #8:	Minimize Recordable Injuries to Fewerthan Previous 5 Year Average	12		
<b>EMTS Division</b>				
Goal #1:	Improve EMTS Storeroom Business Practices	13		
Goal #2:	Develop a Disaster Response Capability for the Protection of Drinking Water	13		
Goal #3:	PLWTP Pilot Study - Flow Paced Chemical Dosing Based on Influent Solids Load	31		
Goal #4:	Evaluate the Efficiency of Analyzing Carbon Samples for Total % Sulfur	31		
Goal #5:	Perform a Pilot Study to Evaluate the Value of Replacing the SAS Statistical Tools with R as partof the Ocean Monitoring Program	31		
Goal #6:	Automate Billing for Imported Flows and Trucked Sludge	14		
Goal #7:	Perform Survey to Characterize Dentist's Implementation of ADA's Voluntary Mercury BMPs	32		
Goal #8:	Maintain Recordable Injury Rate Below the California Industry Average	32		
EPM Division				
Goal #1:	Condition Assessment of Water Pump Stations	14		
Goal #2:	Produce Energy and Climate Protection Audit Report for the Miramar Water Treatment Plant (MWTP)	33		
Goal #3:	Mitigation and Revegetation Projects GIS Inventory	34		
Goal #5:	Facility Information Management	34		

	ES-1. Goals Recommended for Inclusion with Minor or No Revisions	
Branch/Division	Goal Description	Report Page No.
Goal #7:	Establish Muni Pump Station Flow Database	34
Goal #8:	Reduce Established Average Number of Review Cycles for Approval of Develop mentPlans	14
Goal #9:	Prepare Six (6) 10% Design Reports on Redirection of Flow	34
	WaterBranch	
WaterOperations		
Goal #4:	RepairReported Distribution Service Leaks within Three Working Days	15
Goal #6:	Reduce Recordable Injuries to Less Than the Previous 5-year Average	35
Goal #7:	Complete 98% (3,870) of all Planned Tasks for the Reservoir and Recreation Program. Tasks include preventative maintenance, property and watershed inspections, readings, and measurements on the raw water infrastructure.	15
Goal #8:	Replace City-owned Small Meters 1" and smaller 17,515* Meters	15
	Business SupportBranch	
LRP & WR		
Goal #1:	Brine Disposal Evaluation	16
Goal #3:	Locate, Assess, and Plan for Rural Property Boundaries	36
Goal #4:	Public Outreach for Groundwater Program	36
Goal #5:	Assessment of Developer-built Recycled Water Sites and Customer Outreach	16
Goal #6:	Develop and Conduct a Multi-family WATERUSE Survey Program	36
ES & IC Division		
Goal #1:	Development of Four e-Learning Courses (with FIT Division)	16
Goal #4:	Records Management System for Safety Program	37
Goal #5:	Minimize Recordable Injuries	37
Goal #6:	Improve Hiring Process	17
Goal #7:	Reduction of the Three Year Average Incident Rate by 10%	38
CS Division		
Goal #2:	Increase the Number of Privately Maintained Backflows Tested Annually	38
Goal #4:	Minimize Recordable Injuries	39
Goal #5:	Maximize the Accuracy of Utility Billing by Reducing Billing Errors Due to Incorrect Reads	17
Goal #6:	Create an Information Repository for the Division	39
FIT Division		
	Creation of Budget Calendar	40
	Retrieve and Maintain Current Year Monitoring Information through the Use of Business Objects Reports	40
	Develop and Enhance Interagency Agreements Reporting	41
	Development of Cross-divisional, 5-year Internal Budgetary Outlook	41
Goal #7:	Conduct IT Customer Service Survey/Publish Service Catalog/Create Trainings/Develop Projects	41

ES-2. Goals Recommended for Inclusion with Significant Revisions				
Branch/Division	Goal Description	Report Page No.		
	WastewaterBranch			
WWTD Division				
Goal #2:	Complete Pump Station Dry Weather Projects	19		
WWC Division				
Goal #3:	Reduce Overtime Costs Without Adverse Impacts to Current Performance Levels	19		
Goal #6:	Complete WastewaterCollection Division Engineering Operational Referrals within Nine Working Days of Receipt	42		
Goal #9:	Manage WastewaterCollection Division Labor Activities to Reduce Preventable Vehicle Accidents by 15% Compared to the Previous 5-Year Average	42		
<b>EPM Division</b>				
Goal #4:	Water Ten Percent Design Studies	20		
	WaterBranch			
WaterOperations				
Goal #1:	Perform Preventive Maintenance on 453 Control/RegulatorValves	20		
Goal #2:	Reduce the number of main breaks to less than XXX(#TBD for FY11) During the FiscalYear	21		
Goal #3:	Perform Preventative Maintenance on 16,500 Potable Water Distribution System Appurtenances	42		
Goal #5:	Manage Water Operations Division Labor Activities to Reduce Preventable Vehicle Accidents by 15% Compared to the previous 5-Year Average	21		
Goal #9:	Test Commercial Meters and Backflow Assemblies	43		
	Business Support Branch			
ES & IC Division				
Goal #2:	Cell Phone Usage Monitoring	22		
Goal #3:	Establish and Implementa Mentorship Program	43		
CS Division				
Goal #1:	Enhance Customer Service by Improving Completion Time of Customer Requested Investigations	22		
Goal #8:	Reduce the Number of Customer Telephone Calls to the Customer Service Office (CSO) Call Center by 8% from FY10	44		
FIT Division				
Goal #4:	Increase Grant and Loan Revenue	23		

	ES-3. Goals Not Recommended for Inclusion			
Branch/Division	Goal Description	Report Page No.		
	WastewaterBranch			
<b>WWC Division</b>				
Goal #4:	Develop and Implementa Pump Station Piping Preservation Program	45		
	WaterBranch			
WaterOperations				
Goal #10:	Perform Preventive Maintenance on 201 Pump Motors, 25 Generators, 2755 Telemetry Instruments (Water Treatment Plants and Distribution System) for FY11	45		
	Business Support Branch			
LRP & WR				
Goal #2:	Establish a Comprehensive Photographic Library	46		
Goal #7:	Hold a Water Conservation Day Mini-festival in Each City Council District	24		
<b>CS Division</b>				
Goal #3:	Improve the Accuracy of Sewer Utility Billing by Increasing the Number and Frequency of Sewer Classification Investigations	46		
Goal #7:	Improve Customer Complaints Resolution Time	24		
Fit Division				
Goal #1:	Reduction of CIP Overtime Hours	25		

# **Summary Observations and Conclusions**

Based on review of all FY 2011 Goals, a few noteworthy observations and conclusions are summarized below:

- 1. As shown in the tables above, 48 of the 70 Goals (69%) are recommended with minor or no revisions for inclusion in the Gainsharing Program; another 15 Goals (21%) are recommended for inclusion with significant revisions; and 7 Goals (10%) are judged by us to lack justification for inclusion in the Program. The Goals placed under the two "recommended" categories total 90 % of all Goals. We judged these Goals to be worthy of the Gainsharing Program, even with the recommended modifications related to scope, structure, or award metrics specifically proposed for some Goals. Given the shear number of Goals, we believe this "pass rate" underscores the legitimacy of the Gainsharing Program and quality of Goal planning, Goal creation, and Goal relevance.
- 2. A majority of the Goals from the category we judged not to be worthy of the Gainsharing program are, nevertheless, meaningful for continued organizational effectiveness and efficiency and we recommend that the Department should still pursue these Goals outside of the Gainsharing Program.
- 3. The very process of Goal setting, coupled with the "bottom up" approach of soliciting front-line staff input and team-based Goal filtering process, puts the Department among the very top tier of public utilities promoting a performance culture. While a number of high performing utilities in water and wastewater sector have performance metrics, the Goal monitoring, measuring and renewal process--an essential feature of the B2G Program-- is neither as common nor as rigorous among other agencies.
- 4. We found the Goals to cover a remarkably diverse and significantly important spectrum of categories, all essential for organizational improvement.
- 5. Many of the improvement ideas in the Report relate to Goal scope, structure, and measurement criteria. Through follow up discussions with the Department management, we found that the Department was

very receptive to all those recommendations and agreed to revise Goals to incorporate the recommendations we made.

# **Recommendations for Future Third Party Reviews**

This review was constrained by two noteworthy elements: 1) the timing of the review, which took place after the Goals had already been set and the performance time clock was ticking; and 2) the tight schedule of the review. Both elements limited the scope of the review and the ability to engage with the stafffor deeper understanding of the supporting data related to Goals. Our suggested improvement ideas for future reviews include:

- Engage a third partyreviewer who works with the senior management staffand serves both as a facilitator and a reviewer at the onset of Goal development process.
- Work with the facilitator/reviewer to establish and communicate a Department -wide Goal development framework for the types of Goals that align with customer service levels and Departmental improvement initiatives. This "top down" framework will allow all Divisions to focus on Goals that bring the greatest value.
- Have the reviewer review the Goals being proposed by various Divisions to look for linkages between Goals to the framework noted immediately above.
- Short list Goals based on the Goal setting criteria.
- Formalize and communicate Goals to the City staff.

# ASSESSMENT OF THE CITY OF SAN DIEGO'S BID-TO-GOAL PROGRAM

#### 1. REPORT CONTEXT

Public sector water and wastewater utilities typically face financial, regulatory, and operational pressures. Aging infrastructure needs to be tended to and expansion of water and wastewater utilities may be necessary due to factors such as population growth. Allotting resources for repair, replacement, and expansion can be difficult because of budgetary issues.

In the late 1990s, water and wastewater system privatization became a politically appealing alternative as private companies offered proposals to help minimize rate increases, provide capital for system expansion and deferred maintenance, and meet increasing water quality standards. The City's Water and Wastewater Departments were also dealing with public and political pressures based on budget and performance issues and violations of the Clean Water Act. The City leadership favored managed competition. Following the Zero-Based Management Reviews of water and wastewater operations, which identified ineffective management and cost controls among other things, the Wastewater Department began the B2G program in fiscal year 1998. The intent of the program was to improve efficiency by bringing together the top elements of the public and private sectors. City employees vied with private sector benchmarks and a Gainsharing incentive program was developed to encourage staffto achieve performance Goals and cost savings. Although the wastewater and water functions were merged into the Public Utilities Department in 2009, separate B2G contracts are still utilized.

The B2G program has progressed over the years and currently incorporates both a bid process and a Gainsharing Incentive Program—previously known as Pay for Performance. The rationale behind the bid process is to have the City compete with benchmarks set forth by a private company. Based on a statement of work (SOW) set by City employees and managers, and on industry data, a private consultingfirm provides a hypothetical "private market proposal" to establish the benchmark cost for the private sector to perform the work described in the SOW.

In addition to the bid process, B2G also includes a Gainsharing Incentive Program. Employees are incentivized to improve performance through optimization of resources. Part of the savings from increased efficiencies and performance gains are distributed in the form of a bonus based on group performance.

In order to ensure that the City B2G programs are efficient, the City's Audit Committee Chairman Kevin Falconer and City Council Member Carl DeMaio requested that an Audit Committee evaluate the programs. The general findings of the Audit Committee were that efficiencies have been achieved, but improvements are needed in documentation, management, and internal review of the program. The Audit Committee also recommended a third party review be performed of the B2G Goal setting process and FY 2011 Goals. As a result, Brown and Caldwell was engaged to provide this third party review.

This report summarizes the observations and conclusions of our assessment of the City's B2G Program. The report also includes the basis for our findings and conclusions, and suggests improvements in Goal setting, and monitoring/measurement processes, where warranted, for greater effectiveness.

Brown and Caldwell understands this is the inaugural third party review of the City's B2G program and that subsequent annual reviews are intended. Therefore, recommendations are also made regarding improvements to the future third party review process.

#### 2. APPROACH AND METHODOLOGY

#### 2.1 Information Sources

The information sources included background information on the City's B2G Program and available comparative data (benchmarking information) as described below.

### 2.1.1 Background Information

Pertinent documents related to the City's B2G Program were collected and reviewed. Specific documents reviewed included:

- Gainsharing Goals for each Division describing the 2011 Goals associated with the B2G Program
- February 2010 Audit Report by the office of City Auditor
- Special Audit Committee 3/22/10 Meeting Agenda/Notes
- Bid to Goal Intranet site
- Bid to Goal Policy and Procedures Manual (rev. June 16, 2010)
- City of San Diego's Public Utilities Department's AMWA Gold Award Application Summary
- City of San Diego's Public Utilities Department's Mission Statement

In addition, telephone interviews with the following Citystaf fwere held to clarify the Goal setting process and to understand how performance against Goals is documented and measured.

- Jennifer Casamassima, Interim Deputy Director, Long Range Planning and Water Resources
- Jim Fisher, Assistant Director, Water Operations
- Stan Griffith, Deputy Director, Wastewater Collection
- Ann Sasaki, Assistant Director, Wastewater Operations

#### 2.1.2 Benchmark Information

For comparative or benchmarking purposes two information sources were relied on: 1) Brown and Caldwell's resident knowledge on relevant industry benchmarks; and 2) Peer agency data collected through agency interviews. Four candidate agencies/utilities (SPU, EBMUD, EMWD, and CMUD) were interviewed over the phone for benchmarking purposes based on similarity of missions, functions and issues. Note that all of these public sector agencies own and operate water supply, treatment and distribution facilities as well as wastewater collection systems. All, except SPU, also have their own wastewater treatment and disposal facilities. Each agency's Goal setting process and the appropriateness, effectiveness, and degree of difficulty associated with these Goals were discussed and documented.

The following agency personnel were interviewed. Briefinterview notes are presented in Appendix A.

- Terry Martin, Acting Director, Asset Management and Economic Services, SPU
- Mike Wallis, Director Operations and Maintenance, EBMUD
- Mike Luker, Assistant General Manager Operations, EMWD
- Barry Gullet, Director, CMUD

## 2.2 Goal Sampling Methodology

The scope of this assessment effort called for selection of roughly50 percent of the Goals from the total number of Goals (70) developed by all PUD divisions. Brown and Caldwell considered it important that the selected sample adequately represent the entire Goal population without favoring or rejecting any Goals based on degree of difficulty, historical performance, or gainsharing potential. To eliminate any potential for bias, a random selection of Goals was initially considered, but it became evident fairly quickly that such a selection could easilyskip certain categories of Goals entirely, thus making the selection non-representative of overall Goal diversity. Therefore, we first established categories that uniquely characterized each Goal. We then selected 32 Goals for detailed review based on two parameters: 1) representation of every single division; and 2) representation of every single Goal category. We used our best judgment in selecting Goals within these parameters so that overlapping, similar, or identical Goals from various divisions were not repeated (e.g., those related to personnel safety, or Goals shared between two or more divisions). This characterization of Goals resulted in eight unique categories; which, as summarized below, serve as directly relevant descriptors of Goals from Brown and Caldwell's perspective; they may or may not have any direct linkages to Goal setting criteria conceived by the PUD staff.

### 2.2.1 Goal Categories

- Technology, Process, and System Improvements. Goals that serve to implement or enhance technologies, business processes, or internal systems for increased organizational effectiveness, efficiency, or cost savings.
- 2. **Resource Availability and Staff Capability Improvements.** Goals that improve staffcapability through training, mentorship, and other means for greater resource availability for needed functions.
- 3. **Special Studies, Surveys or Projects.** Goals that are focused on planning, developing, or completing various "projects" that potentially benefit various divisions within the organization through subsequent process, system or service delivery improvements.
- 4. **Personnel Safety.** Goals aimed at personnel health, safety, and well being, with a specific focus on reducing injuries and accidents.
- 5. **Public/Stakeholder Outreach and Customer Service.** Goals for awareness and education of utility customers, improving customer relations, conducting customer outreach efforts, and reducing customer complaints and response times.
- 6. **Asset Management.** Goals related to operating, maintaining, rehabilitating, or replacingutilityassets for system sustainability, functionality, regulatory compliance, or improved efficiency.
- 7. **Labor Optimization.** Goals for reducing labor costs or optimizing labor utilization.
- 8. **Funding, financing and CIP Reduction.** Goals for reducing capital outlays through increased subsidies (e.g., SRF loans) or reduced financing costs.

#### 2.2.2 Selected Goals

Table 2-1 lists all FY 2011 Goals by the various branches and divisions and shows the most relevant category assigned to each Goal. It also highlights (in bold print) the Goals selected for a more detailed review based on the parameters discussed above.

Branch/Division Goal Description		Goal Category (See category descriptions below)
	WastewaterBranch	
WWTD Division		
Goal #1:	Electronic Monitoring and Data Storage for Treatment Plant OperatorRounds and Chemical Delivery Data	1
Goal #2:	Complete Pump Station Dry Weather Projects	6
Goal #3:	PLWTP Pilot Study - Flow Paced Chemical Dosing Based on Influent Solids Load	3
Goal #4:	Reduce Reclaimed Water Discharge to the Ocean Outfall or Sewer at Water Reclamation Plants to 1.5 MGD per Plant	1
Goal #5:	Update Bills-of-Material, Stocking Policies, and Warehouse Policies for Critical Plant Equip ment	1
Goal #6:	Minimize Recordable Injuries	4
WWC Division		
Goal #1:	Improve Efficiency of Main Cleaning Section in order to Increase Miles of Main Cleaned	6
Goal #2:	Improve Efficiency of FEWD Section to Minimize Number of Expired Permits	1
Goal #3:	Reduce Overtime Costs Without Adverse Impacts to Current Performance Levels	7
Goal #4:	Develop and Implement a Pump Station Piping Preservation Program	6
Goal #5:	Decrease Number of Valid Claims Over Previous Fiscal Year	6
Goal #6:	Complete WastewaterCollection Division Engineering Operational Referrals within Nine Working Days of Receipt	1
Goal #7:	Collection System Sewer Spill Reduction	6
Goal #8:	Minimize Recordable Injuries	4
Goal #9:	Goal #9: Manage WastewaterCollection Division Labor Activities to Reduce Preventable Vehicle Accidents by 15% Compared to the Previous 5-YearAverage	
EMTS Division		
Goal #1:	Improve Environmental Monitoring and Technical Services (EMTS) Storeroom Business Practices	1
Goal #2:	Develop a Disaster Response Capability for the Protection of Drinking Water	2
Goal #3:	PLWTP Pilot Study - Flow Paced Chemical Dosing Based on Influent Solids Load	3
Goal #4:	Evaluate the Efficiency of Analyzing Carbon Samples for Total % Sulfur	3
Goal #5:	Perform a Pilot Study to Evaluate the Value of Replacing the SAS Statistical Tools with R as partof the Ocean Monitoring Program	3
Goal #6:	Automate Billing for Imported Flows and Trucked Sludge	1
Goal #7:	Perform Survey to Characterize Dentists' Implementation of ADA's Voluntary Mercury BMPs	3
Goal #8:	Maintain Recordable Injury Rate Below the California Industry Average	4
EPM Division		
Goal #1:	Condition Assessment of Water Pump Stations	6
Goal #2:	Produce Energy and Climate Protection Audit Report for the Miramar Water Treatment Plant (MWTP)	3
Goal #3:	Mitigation and Revegetation Projects GIS Inventory	3
Goal #4:	WaterTen Percent Design Studies	3

	Table 2-1. B2G 2011 Goal Development Summary Table	
Branch/Division	Goal Description	Goal Category (See category descriptions below)
Goal #5:	Facility Information Management	3
Goal #7:	Establish Muni Pump Station Flow Database	3
Goal #8:	Reduce Established Average Number of Review Cycles for Approval of Development Plans	1
Goal #9:	Prepare Six (6) 10% Design Reports on Redirection of Flow	3
	WaterBranch	
WaterOperations		
Goal #1:	Perform Preventive Maintenance on 453 Control/Regulator Valves	6
Goal #2:	Reducethenumberof main breaksto less than XXX (#TBD forFY11) During the Fiscal Year	6
Goal #3:	Perform Preventative Maintenance on 16,500 Potable Water Distribution System Appurtenances	6
Goal #4:	RepairReported Distribution Service Leaks within Three Working Days	6
Goal #5:	Manage Water Operations Division Labor Activities to Reduce Preventable Vehicle Accidents by 15% Compared to the previous 5-Year Average	4
Goal #6:	Reduce Recordable Injuries to Less Than the Previous 5-year Average	4
Goal #7:	Complete 98% (3,870) of all Planned Tasks for the Reservoirand Recreation Program. Tasks include preventative maintenance, property and watershed inspections, readings, and measurements on the raw water infrastructure.	6
Goal #8:	Replace City-owned Small Meters 1" and smaller 17,515* Meters	6
Goal #9:	Test Commercial Meters and BackflowAssemblies.	6
Goal #10: Perform Preventive Maintenance on 201 Pump Motors, 25 Generators, 2755 Telemetry Instruments (WaterTreatment Plants and Distribution System) for FY11		6
	Business Support Branch	
LRP & WR		
Goal #1:	Brine Disposal Evaluation	3
Goal #2:	Establish a Comprehensive Photographic Library	3
Goal #3:	Locate, Assess, and Plan for Rural Property Boundaries	1
Goal #4:	Public Outreach for Groundwater Program	5
Goal #5:	Assessment of Developer-built Recycled Water Sites and Customer Outreach	3
Goal #6:	Develop and Conduct a Multi-family WATERUSE Survey Program	3
Goal #7:	Hold a Water Conservation Day Mini-festival in Each City Council District	5
ES & IC Division		
Goal #1:	Development of Four e-Learning Courses (with FIT Division)	2
Goal #2:	Cell Phone Usage Monitoring	1
Goal #3:	Establish and Implement a Mentorship Program	2
Goal #4:	Records Management System for Safety Program	1
Goal #5:	Minimize Recordable Injuries (with EPM, FIT, and LRP & WR)	4
Goal #6:	Improve Hiring Process	7
Goal #7:	Reduction of the Three Year Average Incident Rate by 10%	4

	Table 2-1. B2G 2011 Goal Development Summary Table	
Branch/Division	Goal Description	Goal Category (See category descriptions below)
CS Division		
Goal #1:	Enhance Customer Service by Improving Completion Time of Customer Requested Investigations	5
Goal #2:	Increase the Number of Privately Maintained Backflows Tested Annually	6
Goal #3:	Improve the Accuracy of Sewer Utility Billing by Increasing the Number and Frequency of Sewer Classification Investigations	1
Goal #4:	Minimize Recordable Injuries	4
Goal #5:	Maximize the Accuracy of Utility Billing by Reducing Billing Errors Due to Incorrect Reads	1
Goal #6:	Create an Information Repository for the Division	1
Goal #7:	Improve Customer Complaints Resolution Time	5
Goal #8:	Reduce the Number of Customer Telephone Calls to the Customer Service Office (CSO) Call Center by 8% from FY10	5
FIT Division		
Goal #1:	Reduction of CIP Overtime Hours	7
Goal #2:	Creation of Budget Calendar	1
Goal #3:	Retrieve and Maintain Current Year Monitoring Information through the Use of Business Objects Reports	1
Goal #4:	Increase Grant and Loan Revenue	8
Goal #5:	Develop and Enhance Interagency Agreements Reporting	1
Goal #6:	Development of Cross-divisional, 5-year Internal Budgetary Outlook	1
Goal #7:	Conduct IT Customer Service Survey/Publish Service Catalog/Create Trainings/Develop Projects	2
Category Descriptions:	<ol> <li>Technology, processes, and systems improvements</li> <li>Resource availability and staff capability improvements</li> <li>Specialstudies, surveys or projects</li> <li>Personnel safety</li> <li>Public/stakeholder outreach and customer service</li> <li>Asset management(maintenance, rehab and replacement)</li> <li>Labor optimization</li> <li>Funding, financing and CIP reduction</li> </ol>	

#### 2.3 Assessment Framework

We based our assessment of the selected Goals largely on the degree to which they align with the Gainsharing Goal Development Policy, contained in the Bid to Goal Policy and Procedures Manual, Chapter 6, page 15. This Policy states that the Goals should:

- Be challenging, yet attainable;
- Be measurable and easily tracked;
- Put focus on desired performance/accomplishment for improvement;

- Motivate employees to work as a team to meet expectations; and
- Withstand public scrutiny.

Not that the above policy statement is in general agreement with the widely-used SMART Goal setting framework; which calls for the Goals to be:

Specific

Measurable

**A**chievable

Realistic, and

Time-bound

In addition, to test for the linkages of the Gainsharing Goals to PUD's strategic objectives, we considered how the Goals aligned with the Balanced Scorecard framework, a measurement system that enables the organization to translate broad strategies to more specific Goals based on four core elements for organizational success: Customer Satisfaction, Financial Sustainability, Business Process Excellence, and Staff Learning and Growth (see Figure 2-1). PUD's GuidingPrinciples appear to be based on the core elements of the Balanced Scorecard.

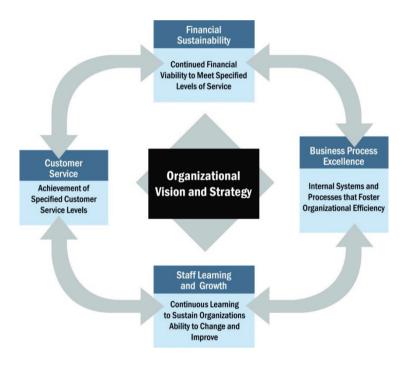


Figure 2-1. Balanced Scorecard

### 3. GENERAL OBSERVATIONS

The paragraphs below discuss our general observations regarding the Goals, followed by a more detailed commentary on each of the Goals selected for assessment. Any comparative, or "benchmarking," information where available through published sources, Brown and Caldwell's source library, or our discussions with the peer agencies specifically contracted for this assessment, is also presented together with the relevant Goals discussed.

One observation of fundamental importance to this review must be highlighted upfront: the goal creation, measurement, and management process is a complex undertaking, particularly for an organization as large and diverse as the PUD. Linking such goals to a unique incentive mechanism, such as the City's Gainsharing Program, and maintaining essential relevance to the customer service levels, adds to this complexity. While every well conceived organizational goalhas some intrinsic value, the barfor a Gainsharing Goal--as well as the 'Burden of proof'--is significantly higher. We believe that given the sefactors, the PUD and its various Divisions haved one a commendable jobestablishing a large majority of Goals which will lead to tangible organizational improvements and sustained benefits to their customers, both internal and external. The City can feel good about it; based on our knowledge of other high performing utilities of similar size and complexity, many would likely not do as well under the same level of scrutiny. Furthermore, just as they early Goals are intended to be the underpinnings for continuous performance improvements, the Goal setting process itself should also be expected to evolve and improve over time. The recommendations made through this Third-Party-Review should be considered an integral part of that improvement process.

#### Below are some additional observations.

- 1. The very process of Goal setting, coupled with the "bottom up" approach of soliciting front-line staff input and team-based Goal filtering process, puts the City PUD among the very top tier of public utilities promoting a performance culture. While a number of high performing utilities in water and wastewater sector have performance metrics, the Goal monitoring, measuring and renewal process--an essential feature of the B2G Program-- is neither as common nor as rigorous among other agencies.
- 2. Our categorization of Goals discussed earlier was intended to serve as a relevant "filter" for short-listing Goals for detailed review. However, this process revealed that the Goals cover a remarkably diverse and significantly important spectrum of categories, all essential for organizational improvements. The Goals align with all four components of the Balanced Scorecard, whether intentional or not.
- 3. To emphasize its wide array of responsibilities as a public utility, the PUD has endorsed and adopted *The Ten Attributes of Effectively Managed Utilities*, a recently developed compendium of Attributes developed by various nationally prominent industry organizations for systematic, long term improvements, in utility performance. All proposed Goals attempt to identify linkages to one or more of these Attributes. These linkages are important because they convey the emphasis PUD is placing in its journey towards excellence in water and wastewater utility management. It should be noted, however, that the Attributes serve as higher level (strategic) touchstones, while the Goals are essentially tactical: the basic building blocks but not the entire structure comprising an Attribute.
- 4. The involvement of every single organizational Division, including those that have no direct role in serving the external customers of PUD (e.g. those that have the responsibility of managing, maintaining, refurbishing, or replacing assets that directly impact utility customers), is a big plus. It recognizes the importance of support Divisions in facilitating the achievement of Goals that ultimately affect utility Customers or other stakeholders.

- 5. Many Goals have well defined tracking and measurement mechanisms, including specific timelines for milestone achievements. However, the intended benefits of some Goals, while perhaps intuitively understood, are not immediately obvious. This is particularly true for Goals that call for the accomplishment of projects or other activities that have no apparent links to customer service or costs of service.
- 6. While many Goals appear to have been conceived to promote continuous improvement, it is not clear in some cases whether the resource allocation has been based on greatest leverage and payback (ROI), especially considering isk costs.
- 7. Many of the Goals are based on internal thresholds. They call for a certain level of improvement over performance duringprevious years. Internal thresholds within high performing utilities can be very powerful because they inspire staffto continuously improving outcomes. One great example in this category is the performance of the Wastewater Collection Division in sanitarysewer overflow(SSO) reduction. However, they can also lead to Goals with performance bars set too low, particularly if historical performance against Goals has been lacking. While this process can still lead to improvements over time, it does call into question whether any significant progress can be made when comparisons are based on less than "challenging" performance levels.
- 8. Some of the Goals specify important targets based on percentages, which can be misleading in terms of challenge level if the absolute numerical impacts are marginal. For example, a 10 percent improvement in customer complaints over a defined time period may be rather insignificant if the historical norm is low to begin with (say, 5 complaints).
- 9. The Goals can generally be classified into two broad groups: 1) those that have clearly defined and measurable benefits; and 2) those that may lead to benefits, but the benefits are neither defined nor recognizable. The first group aims mostly at quantified outcomes (such as reduction in SSOs), while the second group deals mostly with process refinements, project completions, or other "due diligence" type activities that may lead to future beneficial outcomes, but the relationships between the investments required and potential benefits are not defined.
- 10. A majority of the Goals from the category we judged not to be worthy of the Gainsharing program are, nevertheless, meaningful for continued organizational effectiveness and efficiency and we recommend that the Department should still pursue these Goals outside of the Gainsharing Program.

#### 4. ANALYSIS OF SELECTED GOALS

The 32 Sample Goals selected using the methodology described above were reviewed to assess their relevance, significance, value, challenge level, specificity, and stated or potential outcomes. One of the major objectives of this Review was to analyze selected Goals based on available "industry benchmarks." As noted above, four peer agencies were contacted (EBMUD, SPU, CMUD, and EMWD) to discuss their Goal setting and measurement processes and to seek information on their performance on specific Goals that could be directly related to the selected Goals.

One important prerequisite for any benchmarking exercise is that the Goals must be measurable in identical or standard ways if they are to be translatable from one entity to the other. A majority of the FY 2011 Gainsharing Goals do not neatly comply with these benchmarking parameters, because they are either: a) unique to the City (e.g., a number of project oriented Goals), b) have no stated or measurable outcomes that can be benchmarked, or c) have insufficient supporting information for direct correlations with potential benchmarks. During our discussions with the peer agencies, we attempted to find any threads that could lead to valid comparisons between some of the City's Gainsharing Goals and those of the other agencies. Few were found, principally because of the unique nature of the many Goals subject to this assessment. Even when we found similarities, there were still enough differences in underlying conditions to make comparisons meaningless or irrelevant.

Good examples are some of the preventive maintenance Goals, such as miles of sewers cleaned per year. While this type of Goal has definitively proven to be of value in reducing SSOs and potentially extending the life of collection system assets, there is no real benchmark for cleaning magnitude or frequency. Every utility faces unique local challenges dictating unique and local solutions. For example, one system might be largely cleaned using a high-efficiency method; another might require significant bucket cleaning or manual rodding, resulting in reduced overall efficiency as measured by miles of pipe cleaned per crew per year. The real benchmarks in this categoryare outcome based--such as SSOs.

Our observations, conclusions and suggested improvements, where warranted, are presented below under three separate categories: 1) Goals recommended for inclusion with minor or no revisions; 2) Goals recommended for inclusion with significant revisions; and 3) Goals not recommended for inclusion.

# **4.1 Goals Recommended for Inclusion with Minor or No Revisions**

Our review indicates that these goals should be retained for inclusion in the FY 2011 Gainsharing Program because they provide appropriate returns, challenge level, and outcomes. Minor improvements are recommended where warranted. Table 4-1 below discusses our observations, conclusions and suggested improvements for this category of Goals.

Table 4-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions				
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements	
		WastewaterBranch		
WWTD Divis	sion			
Goal #1:	Electronic Monitoring and Data Storage for Treatment Plant OperatorRounds and Chemical Delivery Data	<ul> <li>Goal is aimed at improving staffefficiency and data accuracy, both will yield tangible benefits.</li> <li>Staffinvolvement in develop mentand implementation of the system and training of others creates the added benefit of quicker adoption and buy-in by the end users.</li> </ul>	The stated impact of this Goal includes stafftime savings (2 person hours per day). Careful documentation of actual savings achieved during the future years would be important for justification, communication, and potential	
		There is no specific industry benchmark for this goal but technological advancement with clear connection to improvements in effectiveness and efficiency of job functions is increasingly common with higher performing utilities.	enhancement of technology driven improvement goals in the subsequent years.	
		<ul> <li>The goal meets the SMART criteria and will significantly challenge staff.</li> </ul>		
		The performance milestones are reasonable.		
Goal #3:	PLWTP Pilot Study - Flow Paced Chemical Dosing Based on InfluentSolids Load	<ul> <li>The benefits are well worth the effort. While the savings will accrue over the subsequent years, it is clearly an optimization concep that has been widely proven in the industry.</li> <li>The benefits go well beyond financial; they include operational stability as well as social and environmental benefits through reduction in chemical usage, trucktraffic and labor costs.</li> </ul>	The Goal achievement criterion (final evaluation of pilotstudy) should include a projection of cost savings—both labor and chemicals.	
WWC Division				
Goal #1:	Improve Efficiency of Main Cleaning Section in order to Increase Miles of Main Cleaned	There is amp le evidence from the City's experience and other agencies (notably, EMWD) that frequent sewer line cleaning leads to reduction in SSOs. The dramatic SSO reductions achieved by the City over the last few years have directly resulted form an aggressive cleaning schedule. This goal is based on further improvements in the	The Goal measurement milestones should be revised, as follows:  Documented productivity improvements over the previous year (i.e., miles of sewers cleaned perunit of labor effort) be established and measured. It is recommended that a minimum 50% of the award earnings	

- productivity of cleaning crew while striving for ever-increasing effectiveness in controlling SSOs.
- Note that the biggest indicator of the effectiveness of the sewer cleaning effort is the number of SSOs. Relevant EPA regulations set the performance level of SSOs at zero, which of course isn't practically achievable. However, the regulators are increasingly focusing on the "due diligence" actions by the collection systems in accessing their performance, and frequentcleaning is considered a fundamentally important action for reducing sewer overflows.
- The Goal will continue to challenge staffto furtherreduce SSOs by staying ahead of the line blockages through increased line cleaning while showing productivity improvements by the cleaning crew.

- minimum 50% of the award earnings be based on productivity improvements over the previous year.
- -The balance of the award should be based on the following achievements of the length of the sewers cleaned:
  - > 1900 miles = 50%
- > 1800 miles = 30%
- < 1750 miles = 0%
- We understand that a predominant amount of SSOs from the City's collection system result from the root intrusion or the accumulation of Fats Oils and Grease (FOG). A suggested future goal would be to study the impact and potential mitigation of these root causes, in conjunction with pipe cleaning, rehab and replacement actions.

injuries/illnesses for a given year. IR

	Table 4-1. B2G 2011	Goals Recommended for Inclusion with Min	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
Goal #5:	Decrease Number of Valid Claims Over Previous Fiscal Year	<ul> <li>This is a customer-focused goal with bigger rewards than the pure cost savings (in fixes and claims) might imply. It also encourages a greater diligence in maintenance and construction activities without increases in any associated costs.</li> <li>While many agencies aim at reducing customer claims, to our knowledge there are no directly</li> </ul>	
		relatable benchmarkdata available on such goal.	
		<ul> <li>The Goal provides an opportunity for a number of divisions to worktogether in achieving important objectives.</li> </ul>	
Goal #7:	Collection System Sewer Spill Reduction	<ul> <li>SSO reduction is—and clearly should be—the most important measurable objective for the WWC Division. It is one that the community, the ratepayers and the regulators single out as the most significant and visible indicator of a wastewatercollection system's performance.</li> <li>The Department's performance improvement over the last 3 to 4 years in terms of SSO reduction has been remarkable—from over 360 overflows in the year 2000 to less than 40 last year. In fact, based on the SSO data gathered by the State Water Resources Control Board (SWRCB) for SSOs per 100 miles of sewers for all of the reporting entities* the City stands out among the top performers.         *(See SSO Data Figures 4-1 and 4-2 immediately following this table.)</li> <li>Our own benchmarking with SPU and EMWD, two of the higher performing agencies for SSO reductions, shows that the Department's performance is much better and its SSO reduction Goal is more challenging.</li> </ul>	Even though the City is clearly a pacesettein its emp hasis and performance in SSO reduction, it should be noted that not all SSOs have equal consequences. A small overflow in a sparsely populated area is obviously not the same as a major sewer failure downtown, yet each is counted as one. Therefore, we recommend that, as a minimum, the Division establish its future goals based on the current SWRCB reporting categories (categories 1 and 2) to distinguish between high and low consequence overflows. Going forward, a more advanced approach would be base on the potential risk costs associated with failures (likelihood of failure multiplied by dollar consequences of failure). This approach would create a potentitool for the Department to allocate its asset management investments based on risk costs.
Goal #8:	Minimize Recordable Injuries to Fewerthan Previous 5 Year Average	<ul> <li>This goal, in slightly varying forms, is common to virtually every PUD Division and as such signifies the importance the City is placing on employee health and safety. As with many agencies, particularly those which, by necessity, have to engage in work that can expose staffto uncommon safety hazards, the City of San Diego wishes to make safety an integral part of its employee culture. To create needed impetus and momentum towards this important objective, the City is incentivizing staff through this Gainsharing Goal.</li> <li>It is clear that reduction in injuries is an extremely importantobjective from a number of perspectives, including the health and safety of the staff, improved staffproductivity, reduced medical care expenses, reduced time loss, and</li> </ul>	<ul> <li>Note that the year-end reward criterion needs to be reset at a lower number because, as proposed, the 50% award is achievable at simply meeting the previous 5-year average performance.</li> <li>Many utilities underscore the important of safety as part of their "corporate" imperatives and benchmark their performance based on Bureau of Labor Statistics (BLS) recordable injury data, not based on their internal historical performance. Any real improvements in this category—and the Goal challenge level—can only be measured when compared against BLS data which provides industry-specific information o Incident Rates (IR) for work related</li> </ul>

Brown AND Caldwell

managed risk costs. Continuous, long term,

	Table 4-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions			
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements	
		improvements in this category will greatly benefit the City, and ultimately, its rate payers.  The award milestones are structured to provide incentives for meeting quarterly benchmarks, in addition to the year end Goal. This will incentivize staffto show on-going improvements throughout the year, not just aim to meet a yearly average.  The Goal will help motivate staffto think safety in almost every job function and will accelerate progress towards a safety culture.	helps one entity measure their incidents for comparison against similar entities within the industry group. IRs are further broken down by Total Recordable Incident Rate (TRIR) and Lost Time Incident Rate (LTIR). We recommend that the City migrate to these measures in establishing its safety related goals during the future years.	
EMTS Divisi	ion			
Goal #1:	Improve EMTS Storeroom Business Practices	<ul> <li>The stated aim of the Goal is to bring efficiency to the storeroom processes within the Division. Enhanced database and inventory management systems will eventually allow the reallocation of stafftime to more important functions.</li> <li>The inventory management system concept envisioned here is in accordance with industry best practices, and while no quantitative goal for stafftime savings has been established, the savings in more effective utilization of staffwill accrue over time.</li> <li>The Goal is certainly challenging because it will require effective deployment of stafftime in conjunction with their daily activities to data scrubbing and source file integration, work instruction and SOP development, and many other facets for this Division wide business support system.</li> </ul>	<ul> <li>The goal requires collaboration with, and assistance from, the IT staff. It is critical that IT sign offon the needs early on, so there is no miscommunication or lack of understanding around the scope and timing of such assistance. Note that the FIT Division Goals do not specifically acknowledge their involvement in this Goal.</li> <li>It is recommended that as part of the demonstration of the up dated storeroom inventory, an assessment be also made as to the changes in work practices (and potential efficiencies) resulting from this project.</li> </ul>	
Goal #2:	Develop a Disaster Response Capability for the Protection of Drinking Water			
		<ul> <li>The Goal will challenge staffand accelerate their learning and growth, yielding longer term benefits for the Department.</li> </ul>		

	Table 4-1. B2G 2011	Goals Recommended for Inclusion with Mino	r or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
Goal #6:	Automate Billing for Imported Flows and Trucked	The Goal is consistent with the industry best practices and should be implemented.	
	Sludge	If properly conceived, develop ed, and implemented, this automation will result in immediate benefits, both in terms of customer service and quicker billing and revenue collection. These benefits can be readily quantified (stafftime savings through reduced billing errors and response to customer complaints, enhanced cash management through reduced account receivables, etc.)	
EPM Divisio	n		
Goal #1:	Condition Assessment of Water Pump Stations	This Goal is consistent with industry best practices for utility asset management.	
		The Goal calls for early development of criteria to determine what should be assessed. It is assumed that the assessment priorities will be based on identification of risks (likelihood of failure and potential consequences of failure) associated with the pump stations targeted for condition assessment. Risk-based prioritization of pump ingstation assessments will be extremely effective in allocating city's resources to those assets which need early attention.	
		<ul> <li>Other utilities, such as SPU, have found that such prioritization (based on risk profiling of assets) saves money and stafftime and leads to better decisions regarding maintenance, repair, rehabilitation, or replacement of assets.</li> </ul>	
Goal #8:	Reduce Established Average Number of Review Cycles for Approval of Development Plans	This is a well conceived goal and easily measurable. It not only defines outcomes but identifies the steps needed to achieve the outcomes.	
		<ul> <li>The Goal aims to meet customer service objectives while reducing internal costs through increased due-diligence and efficiencies.</li> </ul>	
		No benchmarkdata related to this Goal are readily available.	

	Table 4-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions				
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements		
		WaterBranch			
WaterOper	ations				
Goal #4:	RepairReported Distribution Service Leaks within Three Working Days	<ul> <li>The Goal is specific, measurable, and very meaningful, not only in terms of reduced water loss, but also because the leaks in service mains are often precursors to imp ending line damage or failure.</li> <li>The Division's response time of 3 working days for repairing service leaks is a major improvement over the previous performance goal and will challenge staff.</li> <li>The Goal achievement award metrics are appropriate because they require a minimum achievement level of 90% rep aircomp letions for any reward.</li> </ul>	Some agencies prioritize their response to leaks (or breaks) according to severity as a means to strategically allocate resources based on the most critical needs for greatest benefits. For example, CMUD classifies leaks in three categories: 1) Emergency (or "gusher"); 2) Priority—a higher volume leak but not doing significant property damage; and 3) Routine or a "dribbler" with little, if any tangential impacts. There response times are as follows:  —Category 1: Immediate  —Category 2: Within 5 days  —Category 3: Upwards of 12 weeks (they acknowledge it being too high.)  • We suggest that the City consider similar characterization of leaks and establish response goals accordingly.		
Goal #7:	Complete 98% (3,870) of all Planned Tasks for the Reservoirand Recreation Program. Tasks include preventative maintenance, property and watershed inspections, readings, and measurements on the raw waterinfrastructure.	<ul> <li>Accomplishment of planned maintenance tasks is a worthy goal and it will be very challenging given the dispersed locations of the assets.</li> <li>The goal meets multiple objectives, including financial, environmental and social.</li> <li>The criterion for task prioritization is unclear, but it would be importantto establish a prioritization schedule for tasks to be completed this year. This will allow the critical maintenance to be performed on priority bases, while noncritical activities can be postponed, or eliminated, from the list.</li> </ul>	Set achievement award grants based on completion of high priority (critical) tasks, not just any tasks.		
Goal #8:	Replace City-owned Small Meters 1" and smaller 17,515* Meters	<ul> <li>This is potentially a very high return Goal – allowing the City to bill and collect revenues otherwise lost due to inaccurate meters.</li> <li>The age-based criterion for replacements is logical; however, another criterion might be the size of the meter, or meters to the multi-family units, because even a small change in measurement accuracy can have a disproportionally bigger impact on city revenues.</li> <li>The increase over the previous year (219%) creates an appropriate challenge level.</li> </ul>			

Table 4-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions				
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements	
		Business Support Branch		
LRP & WR				
Goal #1:	Brine Disposal Evaluation	<ul> <li>Brine treatmentand disposalis an essential element of the City's waterrecycling program, and alternative analysis for cost-effective treatment technologies and disposal options must be performed.</li> <li>As stated in the Goal narrative, a key benefit, and a major challenge, associated with this Goal is the commitment by the Division staffto perform above evaluation at a cost at least 10% lower than the estimated consultant fees of \$175,000 for the same evaluation.</li> </ul>	Since the immediately quantifiable benefit, the major reason for the Goal justification, is the study cost reduction over the anticipated costs by a consultant for the same work, we recommend that the award earnings be tied solely to the savings at the end of the final, approved report.	
		Given the ultimate benefit of this study in terms of reduced capital costs and the cost efficiency expected in the conduct of this evaluation through the use of in-house staff, this goal clearly justifies its value as a Gainsharing Goal.		
Goal #5:	Assessment of Developer- built Recycled Water Sites and Customer Outreach	The goal enhances City's ability to serve recycled waterwhile reducing the risk of cross-contamination of public water sup p lies. It also provides a prioritized list of potential customers and helps with the City's Public Outreach Program for recycled water.  The Coal guard patrice are receasable.		
ES & IC Divi	ision	The Goal award metrics are reasonable.		
Goal #1:	Development of Four e- Learning Courses (with FIT Division)	<ul> <li>The Goal is consistent with the internal learning and growth component that every high performing utility should have. In conjunction with targeted classroom training, the e-learning can be very effective and efficient because of all the reasons stated in the Goal narrative. In addition, it engenders greater acceptance of the instruction because of the credibility the inhouse experts have in their "tools-of-the-trade."</li> <li>While the emphases vary, e-learning courses are offered by best-in-class utilities and the benefits are gauged not only in cost savings but in the sheer number of peop lethat can be trained without having a major impact on their daily workroutines.</li> </ul>	The Division is embarking on a project it has not undertaken before; therefore a thoughtful advance planning of all training elements will be essential before the initiation of training. The City may already have developed an appropriate training planning and implementation program, in which case key drivers from the planning process should be included in the B2G reference material. If not, the planning, as a minimum, should address:  —Rosterof mandatory participants based on skill levels that must be enhanced  —Schedule of course material development and course-work completions by participants  —List of instructors  —Mechanism for follow-ups and off-line	
			assistance by instructors  —Training budgets  —Mockup and small group demonstration	

	Table 4-1. B2G 2011	I Goals Recommended for Inclusion with Min	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
			— Certifications  — Communication around incentives, opportunities and bottom-line results  • Training programs are not easy to link to quantitative measures. However, establishing training goals is important and one suggested measure would be to tie the achievement awards to the percentof participants trained and certified in required curricula vs. planned.
Goal #6:	Improve Hiring Process	<ul> <li>This Goal aims to improve Department's hiring process to fill critically importantvacancies. The process map pingenvisioned by this Goal is a very effective mechanism for delineating and communicating key steps that make up existing processes, identifying opportunities for streamlining these steps, and charting process modifications reflecting identified improvements.</li> <li>Just-in-time hiring, particularly for a large and complex organization, such as the PUD, depends on timely information flow and coordinated decisions involving the hiring managers responsible for identifying staffing gaps, personnel managers and department executives who must approve the hires, and recruitment personnel charged with identifying candidates and filling the vacancies. A process, such as the one described, can reduce wasted effort, fosterteamwork, and save time and money while meeting the ultimate goal of filling needed vacancies at just the right time.</li> <li>This Goal is consistentwith the process improvements made by other Best-in-Class utilities.</li> <li>The Goal measurement criteria is appropriate.</li> </ul>	
<b>CS</b> Division			
Goal #5:	Maximize the Accuracy of Utility Billing by Reducing Billing Errors Due to Incorrect Reads	<ul> <li>The focus on billing accuracy improves customer satisfaction, reduces staff investigation effort, reduces unnecessary corrective actions, and enhances City's ability to collect timely revenues.</li> <li>With the Division already doing better than the best industry performers (less than 0.4% skipped rate), further reduction in billing errors is a challenging Goal.</li> <li>This specific and measurable goal will result in cost savings and improved customer service and is well worth the Gainsharing incentive.</li> </ul>	As stated, 3/4th of award is achievable at 1/2 the performance against goal. We recommend that the threshold for this award level be increased to be roughly commensurate with the performance against Goal (suggest a minimum of 40% reduction in misread related billing adjustments for achieving 75% award).

Note: Referto WWC Division, Goal#7 for Figures 4-1 and 4-2 below.

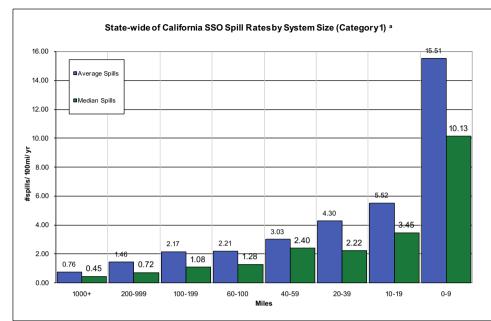


Figure 4-1 Note(s):

- <sup>a</sup> SSOs that meet at leastone of the following three criteria:
- Discharge equal to or greater than 1000gallons
- 2) Discharge to a drainage channelor surface water
- 3) Discharge that reaches a storm drain and is not fully captured

Figure 4-1. State-wide Average SSOs (Category 1)

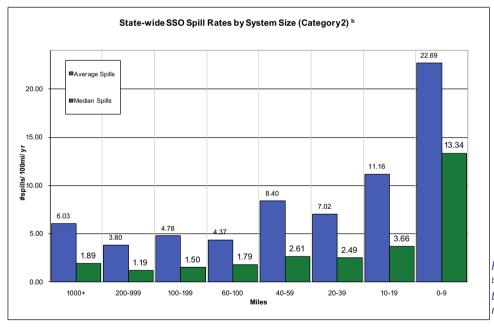


Figure 4-2 Note(s):

<sup>b</sup> SSOs thatdo not meet any of the above Category 1 criteria notedunderTable 4-1.

Figure 4-2. State-wide Average SSOs (Category 2)

# **4.2 Goals Recommended for Inclusion with Significant Revisions**

Our review indicates that these Goals need some rework before inclusion in the 2011 Gainsharing Program. Table 4-2 discusses our observations, conclusions and suggested improvements for this category of Goals.

	Table 4-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions		
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
		WastewaterBranch	
WWTD Divi	sion		
Goal #2:	Complete Pump Station Dry Weather Projects	<ul> <li>Preventive maintenance, when carefully planned and targeted, will avoid significant costs associated with unplanned corrective actions. At its core, this Goal is aimed at mitigating risk costs associated with asset failures.</li> <li>This Goal challenges staffto execute predictive or preventative maintenance work orders that exceed previous performance by 40%.</li> <li>The industry experience has clearly demonstrated that preventive maintenance, when systematically focused on high risk assets, costs substantially less than corrective actions. EMWD notes that roughly 75 to 80 percent of their maintenance activities are preventive in nature. While this goal does not directly relate to this benchmark, it does show the importance being placed by the Division on preventative maintenance.</li> </ul>	All assets do not have the same likelihood or consequences of failures, thus the risk costs associated with asset failures can vary widely. The stated achievement criteria for this Goal establishes reward metrics purely on the numerical completion of projects—and does not suggest any prioritization of maintenance actions based on risks. We recommend that the reward milestones be reset to greatly emphasize the completion of those projects which pose the greatest theoretical risks upon failures. Based on our experience, it is quite conceivable that risk analyses performed priorto the initiation of any of these projects will lead to postponement or complete elimination of certain work orders, and the reallocation of saved resources to other, higher priority, assets. In summary, we recommend:  — Prioritize maintenance work orders based on risk, if not already done.  Reset the Achievement criteria to disproportionally reward completion of high risk maintenance work orders.
WWC Divis			
Goal 3:	Reduce Overtime Costs Without Adverse Impacts to Current Performance Levels	The reduction of overtime costs can be a worthy goal, but when the measurement is a function of the total labor costs (a percentage of overall labor costs), it is misleading, because the goal is also achievable by an increase in the total labor costs. This of course is not the intent of the Division; therefore, the goal must state that the achievement metrics will be based on no net increase in total labor costs (i.e., the denominator in the percentage calculation). There are situations when the use of overtime is not only necessary, it is more cost effective than added personnel.	<ol> <li>In summary, we recommend the following:</li> <li>Clarify that the goal will be based on no net increase in total labor costs.</li> <li>Adjust for any decrease in the line cleaning needs that may result from the suggestion made under Goal #1.</li> <li>Reset the achievement milestones based on absolute dollar savings.</li> </ol>

Table 4-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions				
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements	
		The goal states that there is a potential of savings totaling \$340,000 in overtime costs. An appropriate challenge level for this Goal would be to base various achievement awards at the absolute dollar savings, such as those stated here rather than percentage reductions over the previous years.		
		<ul> <li>This goal is also linked to Goal related to increased line cleaning (Goal #1). As noted above, should the cleaning frequency be adjusted based on the comments made under Goal #1 for this discussion, the overtime hours will likely also be adjusted.</li> </ul>		
		While many utilities are focused on increasing staffefficiencies and maintenance effectiveness, there are no clear benchmarks for overtime percentages. As one can imagine, such a benchmark can not be established because of the variations in the asset types, materials, age, maintenance needs and management practices between agencies.		
EPM Division	on			
Goal #4:	WaterTen Percent Design Studies	<ul> <li>The Goal reflects the Department's objective of accelerating the CIP projects, thus benefiting from the currentfavorable bidding environment. The Goal also states that it is in line with the SOW in the private market proposal.</li> <li>The variabilities in the scope and size of each projectwill impactthe staffing level for 10% design reports. Therefore, the sheer number of reports prepared this year when compared with the number prepared last year is not a good</li> </ul>	The achievement metrics should be based on measured efficiencies in report preparations as opposed to the previous year numerical completions. Preparation of similar work products accompanies natural efficiencies because one can rely on previous experience, data, narratives, or details. One way to create additional efficiencies is to establish lower budgets of similar workproducts	

# WaterBranch

measure of performance, or challenge level.

#### **Water Operations**

Goal #1: Perform Preventive Maintenance on 453 Control/Regulator Valves

- The Goal is conceived to perform preventative maintenance on all valves on a 2-year cycle: 50% of the valves each year.
- It is true that preventative maintenance (PM) help's address potential failure risks proactively, but experience at other agencies has proven that the risk and maintenance related costs can be significantly reduced based on systematic prioritization of PM activities based on asset criticality (or risks).
- Establish a risk-based prioritization of PM activities ratherthan an absolute number of valves subjected to PM each year or a cyclical basis. Best in class utilities are moving in this direction.

completed during the previous year, and

achievement mechanism is retained, we recommend that the minimum achievement level for reward should be 12 planning studies to establish an appropriate challenge level.

then measure performance against

• Even if the currently proposed

these budgets.

• Establish Goal achievement metrics based on the number of high priority (critical) valves attended to each year.

	Table 4-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions				
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements		
Goal #2:	Reduce the number of main breaks to less than XXX (#TBD for FY11) During the Fiscal Year	<ul> <li>Reducing the number of main breaks is one of the most important goals for a water utility because it has multi-dimensional benefits, including financial, social, and environmental.</li> <li>The Goal, as presently stated is based on internal threshold (improved performance over previous year). We understand that the previous year goal was not achieved. Therefore, it is not clear that even with the proposed 10% reduction, there is any real progress being made in meeting this critical performance objective.</li> <li>The Benchmarking of number of main-breaks is very difficult because of the wide variability in the age, condition, operating demands, terrain, and construction practices between utilities but a similarly sized utility, SPU, reports about 6 to 10 breaks permonth. We understand that the City's monthly average for 2010 was at the higher end of the SPU's range.</li> </ul>	<ul> <li>Since all main breaks do not have the same consequences, it is very important to establish performance criteria based on the size (or potential consequences) of breaks.</li> <li>A Goal that disproportionately reduces the number of high risk main breaks is the most effective in mitigating City's exposure and costs. Therefore, just as with the sewer system SSOs, the Division should create consequence based goals for reduction of water main breaks.</li> </ul>		
Goal #5:	Manage Water Operations Division Labor Activities to Reduce Preventable Vehicle Accidents by 15% Compared to the Previous 5-Year Average	<ul> <li>This is an extremely important goal but the means to accomplish this goal are not clear. Vehicle accidents are largely a fraction of vehicle miles driven. Maintenance organizations can reduce preventative accidents simply by curtailing the frequency and distances the maintenance personnel have to drive (also known as "windshield time") to inspect, maintain, repair, or rehabilitate assets.</li> <li>If the Division in fact aims to curtail the windshield time through more effective asset management and maintenance functions, the first step should be to develop a plan for improved logistics for reducing the windshield time. In doing so, the goal can also be more clearly stated by establishing measurable reductions in vehicular distances and time spent traveling to and from discrete locations to perform needed asset management functions.</li> <li>Some other utilities, including EMWD have attached GPS devices to all their rolling stock. The windshield time and fuel consumption at EMUD has dropped by more than 10% when compared to the prioryears. In addition, more work orders are being completed while overtime expenses are reduced in excess of 37%. For real improvements in reducing windshield time and vehicle accident rate, this is a tool that can make a major impact.</li> </ul>	An important measurement for the Goal would be to specify reductions in vehicular miles travelled over the previous year.		

Table 4-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions				
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements	
		Business Support Branch		
ES & IC Div	vision			
Goal #2:	Cell Phone Usage Monitoring	<ul> <li>Large scale monitoring of cell phones has had mixed results within public and private sectors. While savings are certainly achievable, the resources needed for managing, monitoring, and controls can add to the Department's bureaucracy and overhead.</li> <li>A more effective and less costly alternative is the development of a clear Departmental policy regarding cell phone usage, coupled with selected audits (say a sample of 5% of cell phone bills). This will bring the needed vigilance without the costs and aggravation normally associated with organization-wide monitoring programs that can have negative effects on the workforce.</li> <li>A net 10% reduction in the cell phone usage costs over the previous fiscal year would be a worthy Goal because it results in significant dollar savings (anticipated to be roughly \$50,000 over FY 2010).</li> </ul>	<ul> <li>The Goal award earnings should be tied solely to the cost savings included in the Goal narrative (i.e., 100% award at 10% net savings over FY 2010).</li> <li>For clarity, the savings should be net of any phone service or rate plan cost reductions and in house costs associated with plan development and Goal measurement and controls.</li> </ul>	
CS Division	1			
Goal #1:	Enhance Customer Service by Improving Completion Time of Customer Requested Investigations	<ul> <li>This goal is aimed at reducing billing-related customer inquiries. While the goal narrative suggests prioritization of customer inquiries, the Goal itself does not distinguish between high priority and low priority inquiries.</li> <li>Systematically reducing the time to resolve customer inquiries will lower PUD costs and improve customer service. Both are important objectives worthy of Gainsharing Program.</li> <li>While a "benchmark" is noted in the Goal narrative, we do not know of any reliable and comparable data related to this Goal.         Therefore, aggressive on going improvements in this area based on internal thresholds should     </li> </ul>	<ul> <li>Establish prioritization criteria for customer investigation. In part, this criteria should include:         <ol> <li>The scope and nature of inquiry;</li> <li>The imp acton the customer;</li> <li>The imp acton the resolution on City's service obligations; and</li> <li>Repetitiveness of the type of inquiry.</li> </ol> </li> <li>Reset Goal to significantly reduce high priority inquiries (Suggested Goal: 4 days or less).</li> <li>Reset Goal for lower priority inquiries (suggested Goal: less than 7 days).</li> </ul>	

continue to serve as importantmileposts.

	Table 4-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions		
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
FIT Division	1		••••••••••••••••••••••••••••••••••••••
Goal #4:	Increase Grantand Loan Revenue	<ul> <li>The Goal is based on previous year's performance of securing Grants and Loans. The challenge level or imp actof this Goal is difficult to gauge without some knowledge of the absolute dollar value of the Grants/Loans secured during 2010, and how they related to the relevant Goals. The availability of loans and grants is largely dependant up on the "readiness" of the projects for construction, and therefore success rate of securing these funding sources can change dramatically from year to year.</li> <li>The process identified for increase in funding is very worthwhile and progress reporting provides needed impetus for keeping up with funding sources, application processes and meaningful networking.</li> </ul>	Tie a large majority of the award (about 80%) to a well-planned Goal outcome (i.e., receipt of planned loan/goal revenue) based on knowledge of project status and external funds availability. The process for securing increased funding is important, as noted above, but the real benefitis in the actual dollar increase in funding and loans.

# 4.3 Goals Not Recommended for Inclusion

We question the value, outcomes, or measurability of these goals. Therefore, we recommend that they be excluded from the 2011 Gainsharing Program. Table 4-3 below discusses our observations, conclusions and suggested improvements related to these Goals.

	Table 4-3. B2G 2011 Goals Not Recommended for Inclusion		
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
		Business Support Branch	
LRP & WR			
Goal #7:	Hold a WaterConservation Day Mini-festival in Each City Council District	<ul> <li>While increasing public awareness and education on the benefits of water conservation is an important objective, it is not clear whether the time investment towards this Goal would have a commensurate return. This is particularly true because the City apparently has other outreach events for water conservation it undertakes routinely, and the personnel slated to undertake this effort are not likely to be trained experts in the public outreach process.</li> <li>If the Division does indeed believe in the value of this Goal and wants to make it a part of its Gainsharing Program, a better first step would be to hold such an event in a single council District, assess the value of the event, and establish whether such value is transferable before expanding these events to other Districts. This process would allow the City to establish a stronger justification for this goal before making significant investment toward it.</li> </ul>	
CS Division	ı		
Goal #7:	Improve Customer Complaints Resolution Time	<ul> <li>While timely resolution of customer complaints is a fundamentally important characteristic of a high performing utility, it is not clear how many of the complaints currently meet the criteria for "escalation to Deputy Direct level." This goal might be meaningless if the number of such complaints is already insignificantly low.</li> <li>No real benchmark data is available on complaint resolution time by City's p eerutilities, because a "complaint" can take many of its different forms and is characterized differently by different utilities.</li> <li>We recommend that given the similar, but more definable, impacts of the Goals 1 and 5 for this Division, this Goal should be excluded from the City's 2011 Gainsharing Program.</li> </ul>	

Table 4-3. B2G 2011 Goals Not Recommended for Inclusion			
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
FIT Division	1		****
Goal #1:	Reduction of CIP Overtime Hours	<ul> <li>As observed for WWC Goal 3, the reduction of overtime, while a worthy goal, does not necessarily translate into a reduction or optimization of Division's total labor costs, or improved performance. This p articulargoal has a few other aspects worth mentioning.</li> <li>The total estimated savings of roughly \$8,000 p eryear ap p earniniscule, esp ecially when one considers the overhead costs related to managing, monitoring and measuring the performance against this Goal.</li> <li>There is no apparent mechanism for achieving this Goal. We understand that previous attempts at reducing overtime costs have not succeeded. Therefore, we susp ect that it will not meet the litmus test of being either realistic or achievable. Goals that aren't considered achievable by those charged with accomplishing them tend to create doubts about the entire goal setting process.</li> <li>Because of the above reasons, we recommend that this Goal be excluded for 2011 Gainsharing Program.</li> </ul>	

### 5. RECOMMENDATIONS FOR FUTURE THIRD PARTY REVIEWS

The Department has done a commendable job in involving stafffrom "ground up" in identifying, selecting, describing, and formalizing its Gainsharing Goals. When the "Goal owners" are also the Goal developers, institutional adaption and buy-in is enhanced and enthusiasm for Goal achievement can inspire the entire organization.

In addition to the clear advantages of the process the Department has used in establishing its Goals, a third party review can be very beneficial, because the reviewer can bring an independent, un-biased, and critical perspective to the Goals that can often result in improved focus on the criteria that matter the most. Such criteria generally include the following:

## 5.1 Goal Setting Criteria

- 9. The value of the Goals from the ultimate customer's (ratepayer's) perspective;
- 10. The true measure of Goal outcomes--either stated or implied—in terms of its impact on service levels delivered or the cost of service; and
- 11. The impact of the Goal on organizational effectiveness and efficiency. Note that while the terms effectiveness and efficiency are sometimes used interchangeably, they do not mean the same; but they must be present together to make a difference. A function may be performed more efficiently, but if it does not lead to organizational effectiveness the value of the function itselfneeds to be questioned. If the effectiveness of a function is improved without commensurate efficiency improvements, it is likely due to heroic (and unsustainable) efforts of vigilant staff.

## **5.2 Review of Process Improvements**

A third party reviewer can perhaps spot the important factors described above much more readily than a person with emotional connections to the Goals he or she had a hand in developing. However, the timing of the third partyreview is as critical as the review itself. When it is done—as was the case here—after the Goals have already gone through the long process of development, vetting, selection and acceptance, the review may be viewed as "second guessing." This can deflate the excitement of a work force that has a pride of authorship in the Goals. The logistics of conductingsuch a review within a tightly compressed time-frame just before the start of the new performance cycle presents its own constraints, including: a) the opportunity for meaningful interaction with Department Stafffor Goal clarification is limited at best. This means that the review relies mostly on written Goal objectives, descriptions, and measurements, which do not necessarily expose the reviewer to the broader discourse and reasoning behind Goal development; and b) any modifications or recommendations resulting from the review eat into the time that should instead be used for achieving the Goals.

We suggest a more facilitative process for Goal development and reviews in the future, as outlined below:

- Engage a third party facilitator/reviewer at the onset of Goal development process.
- Workingwith the facilitator/reviewer, establish and communicate a Department wide Goal development framework for the types of Goals that align with customer service levels, cost savings, and other Departmental improvement initiatives and objectives. This "top down" framework will allow all Divisions to focus only on types of Goals that bring the greatest value.

Brown AND Caldwell

- Have the reviewer review the Goals being proposed by various Divisions to look for linkages between Goals to the framework noted immediately above.
- Short list Goals based on the Goal setting criteria discussed earlier.
- Formalize and communicate Goals to the staff.

This approach brings the "third party reviewer" into the process as a team member with an "outsider's" perspective and mitigates the disadvantages associated with an after-the-fact review. It also exposes the reviewer to the important background information and underlying conditions that impacted Goal development. Given a short 30 day review and report preparation period, this particular assessment could not do any level of background research or back checking that is often important in such reviews.

## 5.3 Industry Benchmarking

Meaningful benchmarking requires an *established standard* by which the performance or practices of an entity can be assessed. It also requires that the measurements have directly relatable bases (e.g., age, scale, use, surrounding environment, etc.) for correlations.

To the extent possible, this assessment considered U.S. public utility benchmarks available through our in house resources as well as those we could glean from the information we received through the peer agency contacts. However, many (even a majority) of the Gainsharing Goals we were assessing were not amenable to true benchmarking, either because they were very specific to a particular division's objectives, which, while organizationally relevant, had no real measures that could be benchmarked against a "standard," or they were aimed at initiatives which, while measurable, were not conducive to a directlyrelatable benchmark. The examples in the former category include projects, such as completion of brine studies or the conduct of water conservation outreach festivals. The examples in the latter categories include progress towards overtime reductions or development of e-learning courses.

Recognizing that all Goals are not necessarily amenable to benchmarking, we recommend that the future Goal setting process consider and specifically document how each Goal would be measured. There could be three different types of measures, depending on the characteristic of the Goal being considered:

Goal Measures		
Characteristic	Measure	
Goals with specifically stated performance (or benefit) measures:	Benchmark against the best in the industry.	
Goals which improve business processes:	Compare with industry-wide best management practices linked to Ten Attributes	
Goals that are specific to Departmental improvement initiatives with no direct industry parallels but which are well defined and validated:	Compare against specific internal (qualitative) measures established at the onset.	

We also recommend that the future Goal setting process limit the number of Goals under the last category, because it can be argued that they should be considered part of normal work.

### 6. ADDENDUM

Our review analyses, summarized in the Draft Report (Report), dated July 16, 2010, focused on a select sample of Goals proposed by various PUD Divisions for the FY 2011 Gainsharing Program. The methodologyfor the sample selection was described in detail in the Report. Following the Report submittal, the City requested that we assess all remainingGoals not included in the sample. This Addendum, serving as a companion document to the Report, responds to that request and, thus, completes the assessment of all proposed Goals for the FY 2011 Gainsharing Program.

Our analyses, below, use the same tabular format established in the Report, and summarize the assessment in three distinct categories, as follows:

- Table 6-1: B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions
- Table 6-2: B2G 2011 Goals Recommended for Inclusion with Significant Revisions
- Table 6-3: B2G 2011 Goals Not recommended for Inclusion

Note that in performing this assessment, phone discussions were held with the following City executives for seeking additional information on a number of Goals:

- Jennifer Casamassima, Interim Deputy Director Long Range Planning and Water Resources Division
- Iim Fisher, Assistant Director Water Operations Branch
- Stan Griffith, Deputy Director Wastewater Collection
- Guann Hwang, Deputy Director Engineering and Program Management Division
- Lee Ann Jones-Santos, Interim Deputy Director Finance and Administration Division
- Steve Meyer, Deputy Director Environmental Monitoring and Technical Services
- Darlene Morrow-Truver, Deputy Director Employee Services and Internal Controls Division
- Mike Vogl, Deputy Director Customer Support Division

# **6.1 Goals Recommended for Inclusion with Minor or No Revisions**

Our review indicates that these goals should be retained for inclusion in the FY 2011 Gainsharing Program because they provide appropriate returns, challenge level, and outcomes. Minor improvements are recommended where warranted. Table 6-1 below discusses our observations, conclusions and suggested improvements for this category of Goals.

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Min	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
		WastewaterBranch	
WWTD Divis	sion		
	Reduce Reclaimed Water Discharge to the Ocean Outfall or Sewer at Water Reclamation Plants to 1.5 MGD perPlant	<ul> <li>Tailoring production of reclaimed water (RW) to match RW demand has many important benefits, including: reduced operational and treatment costs, reduced energy consumption, smaller carbon footprint, sewer and/or treatment capacity recovery, and likely reduction in maintenance requirements for RW production facilities and Rose Canyon Trunk sewer.</li> <li>Matching RW production to fluctuating demands by customers will require astute planning and operational vigilance and will be challenging.</li> </ul>	The specified goal measurement criteria include net present value analysis at the on-set. These analyses will project calculated cost savings up on implementation of this initiative. It is recommended that a mechanism be established to document actual cost savings once the operational changes have been in effectfor a predetermined time frame (say 6 months). This documentation would be help ful in "closing the loop" on this Goal and furthering the effectiveness of the B2G Program related to operational improvements of this type.
Goal #5:	Update Bills-of-Material, Stocking Policies, and Warehouse Policies for Critical Plant Equip ment	<ul> <li>Criticality- based spares and warehousing policies are integral components of asset management best practices. By its design, the Goal will establish appropriate inventory of the parts and kits required for emergency repairs and rebuilds of assets that are judged to be critical.</li> <li>The Goal will lead to cost-effective and timely corrective actions, mitigate asset failure risks, and optimize warehousing and labor efforts, while reducing stocking costs through elimination of unnecessary spare equip ment.</li> <li>The Goal measurement and award criteria appropriately incentivize critical milestones.</li> </ul>	
Goal #6:	Minimize Recordable Injuries to Fewerthan Previous 5 Year Average	<ul> <li>This goal, in slightly varying forms, is common to virtually every PUD Division and as such signifies the importance the City is placing on employee health and safety. As with many agencies, particularly those which, by necessity, have to engage in work that can expose staffto uncommon safety hazards, the City of San Diego wishes to make safety an integral partof its employee culture. To create needed impetus and momentum towards this important objective, the City is incentivizing staff through this Gainsharing Goal.</li> <li>It is clear that reduction in injuries is an extremely importantobjective from a number of perspectives, including the health and safety of the staff, improved staffproductivity, reduced medical care expenses, reduced time loss, and managed risk costs. Continuous, long term, improvements in this category will greatly benefit the City, and ultimately, its rate payers.</li> </ul>	The award milestones are structured to provide incentives for meeting quarterly benchmarks, in addition to the year end Goal. This will incentivize staffto show ongoing improvements throughout the year, not just aim to meet a yearly average. While this structure provides ample challenge to demonstrate improvements, it should be noted that the quarterly Goals are conceivably achievable at a performance number (7 or less per quarter) which, when translated to four full quarters, could exceed the injury data from the previous 5 years. A yearly Goal (26 or less) is similarly problematic. Therefore, the award metrics need to be reset.

### Table 6-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions Branch/ Observations/Conclusions Suggested Improvements **Goal Description** Division • The Goal will help motivate staffto think safety Many utilities underscore the importance of safety as part of their "corporate" in almost every job function and will accelerate imperatives and benchmark their progress towards a safety culture. performance based on BLS recordable injury data, not based on their internal historical performance. Any real improvements in this category—and the Goal challenge level—can only be measured when compared against BLS data which provides industry-specific information on IR for work related injuries/illnesses for a given year. IR helps one entity measure their incidents for comparison against similar entities within the industry group. IRs are furtherbroken down by TRIR and LTIR. We recommend that the City migrate to these measures in establishing its safety related goals during the future years. **WWC Division** Goal #2: Improve Efficiency of FEWD · Accumulation of Fats, Oil and Grease (FOG) in **Section to Minimize Number** sewers is one of the most dominant causes of of Expired Permits SSOs nationwide, and the City sewers are no exception. Much of the WWC Division's sewer cleaning effort--and resulting expenditure-- is aimed at addressing clogging related to FOG (along with root intrusion). This Goal helps mitigate the major cause of SSOs by addressing the FOG releases at its potential sources through active management of the permit process and frequentfacility inspections for compliance with the City's FOG Program. • As commented under Goal #1 for WWC, addressing the FOG problems at the source is a Best Management Practice that should receive higher priority than corrective actions, such as more frequentsewer cleaning. This Goal—in part—does that. An aggressive implementation of the permitting and inspection process, the principal objective of this Goal, will result in significant cost reductions related to sewer system cleaning effort. It could also help prolong the life of collection system assets.

The Goal is very aggressive-- a reduction of expired permits/month from 150 in FY 2010 to 10 or less-- and thus will challenge staff.
The Goal measurement criteria are appropriate.

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Minor o	or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
EMTS Divisi	ion		
Goal #3:	PLWTP Pilot Study - Flow Paced Chemical Dosing Based on Influent Solids Load	<ul> <li>The benefits of this pilot study are well worth the effort. While the savings will accrue over the subsequent years, it is clearly an optimization concep that has been widely proven in the industry.</li> <li>The benefits go well beyond financial; they include operational stability as well as social and environmental benefits through reduction in chemical usage, truck traffic and labor costs.</li> </ul>	
		<ul> <li>The Goal measurement criterion, which requires the completion and final evaluation of the p ilotstudy before the award is earned, is appropriate.</li> </ul>	
Goal #4:	Evaluate the Efficiency of Analyzing Carbon Samples	This is an imp ortantstudy with significant challenge level for the staff.	
	for Total % Sulfur	<ul> <li>The study would likely lead to benefits not limited to cost savings alone. These could include: time savings, flexibilityin staffing deployment, and enhanced risk management.</li> </ul>	
		<ul> <li>Staffinvolvement in the study will provide a great learning opportunity and exposure to new area of research.</li> </ul>	
		<ul> <li>Goal measurement criteria, requiring completed business case and technical study report, are appropriate for this Goal.</li> </ul>	
Goal #5:	Perform a Pilot Study to Evaluate the Value of Replacing the SAS Statistical	<ul> <li>As with Goal 4 above, this Goal is likely to lead to time and cost savings, improved efficiency, and stafflearning.</li> </ul>	
	Tools with R as partof the Ocean Monitoring Program	<ul> <li>The recommended process, involving a pilot study followed by a Business Case Evaluation (BCE) is precisely suited to this Goal.</li> </ul>	
		Even if the results of the BCE do not justify the proposed change in the statistical tools, the analyses themselves would be beneficial in enhanced understanding of the BCE process and could lead to un-anticipated refinements to the currentprogram.      Goal measurement criteria, requiring.	
		Goal measurement criteria, requiring completion of all deliverables before an award is made, is appropriate for this Goal.	

	Table 6-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions		
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
Goal #7:	Perform Survey to Characterize Dentist's Implementation of ADA's Voluntary Mercury BMPs	<ul> <li>Targeting controllable toxics, such as mercury, at the source is an important objective. It is particularly so for the City because of the added scrutiny associated with the City's 301(h) waiver and ever-increasing use of recycled water. The improvements in detection technologies are also bound to make the discharge requirements for heavy metals increasingly stringent. Thus, proactive means to control toxins at the source are critically important to the City.</li> <li>The survey contemplated by this Goal will look at a potentially significant source of mercury within the WWTP service area.</li> <li>The Goal accompanies a significant challenge for staffin terms of added awareness and learning associated with ADA Best Management Practices and technologies, and development of an investigative survey for critical information collection and compliance confirmation.</li> </ul>	
		The Goal measurement criteria are appropriate.	
Goal #8:	Maintain Recordable Injury Rate Below the California Industry Average	<ul> <li>This goal, in slightly varying forms, is common to virtually every PUD Division and as such signifies the importance the City is placing on employee health and safety. As with many agencies, particularly those which, by necessity, have to engage in work that can expose staffto uncommon safety hazards, the City wishes to make safety an integral partof its employee culture. To create needed impetus and momentum towards this important objective, the City is incentivizing staffthrough this Gainsharing Goal.</li> <li>It is clear that reduction in injuries is an extremely important objective from a number of perspectives, including the health and safety of the staff, improved staffproductivity, reduced medical care expenses, reduced time loss, and managed risk costs. Continuous, long term, improvements in this category will greatly benefit the City, and ultimately, its rate payers.</li> <li>The Goal will help motivate staffto think safety in almost every job function and will accelerate progress towards a safety culture.</li> </ul>	<ul> <li>Note that while the Goal Description implies Industry Average as a benchmark, the Goal metric is actually tied to the Division's average over the past 5 years. This discrepancy should be corrected.</li> <li>The award milestones are structured to provide incentives for meeting quarterly benchmarks, in addition to the year end Goal. This will incentivize staffto show on-going improvements throughout the year, not just aim to meet a yearly average. While this structure provides amp le challenge to demonstrate improvements, it should be noted that the quarterly Goals are conceivably achievable at a performance number (1 or less perquarter) which, when translated to four full quarters, could exceed the injury data from the previous 5 years. Therefore, the quarterly award metrics need to be reset.</li> </ul>

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Min	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
			Many utilities underscore the importance of safety as part of their "corporate" imperatives and benchmark their performance based on BLS recordable injury data, not based on their internal historical performance. Any real improvements in this category—and the Goal challenge level—can only be measured when compared against BLS data which provides industry-specific information on IR for work related injuries/illnesses for a given year. IR helps one entity measure their incidents for comparison against similar entities within the industry group. IRs are further broken down by TRIR and LTIR. We recommend that the City migrate to these measures in establishing its safety related goals during the future years.
EPM Division	on		
Goal #2:	Produce Energy and Climate Protection Audit Rep ortfor the Miramar Water Treatment Plant (MWTP)	<ul> <li>Energy audits are becoming increasingly important not only as precursors to energy efficiency measures, but also because they can become the basis for potential actions for reducing Greenhouse Gas Emissions and Utility's carbon footprint. The resulting benefits of these audits can be multi-faceted, including financial, environmental and social. Most of these types audits result in identifying energy saving ideas which directly lead to process, systems, or operational improvements. This Goal would also prepare the City to better respond to the evolving California regulations (AB 32) on Greenhouse Gas Emissions.</li> <li>The Goal presents a major challenge, as well as a learning opportunity for the Audit Team because the Team includes some new personnel who have not been exposed to the audit process previously deployed at the Point Loma WastewaterTreatmentPlant. As compared to the Point Loma effort, which was broken down into three separate audits for the plant, scope of workfor the MWTP, the system's largest water treatment facility, is significantly greater, and potentially more</li> </ul>	

• The Goal measurement criteria are appropriate and well conceived.

complex.

	Table 6-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions		or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
Goal #3:	Mitigation and Revegetation Projects GIS Inventory	<ul> <li>The Goal aims to greatly enhance the accuracy and availability of information or mitigation and revegetation measures and will clearly help the City plan, coordinate, and permitvarious projects. The Goal also serves the needs of internal City customers for status updates on mitigation and revegetation projects. The estimated savings in labor effort in researching, validating and confirming mitigation/ revegetation information are significant.</li> <li>The Best-in-Class utilities are increasingly migrating to GIS-based facility records and this Goal fits that benchmark.</li> <li>The award measurement milestones appear appropriate for this Goal.</li> </ul>	
Goal #5:	Facility Information Management	<ul> <li>This is a high leverage Goal because of the value it has to asset management decision-making across the users group.</li> <li>The Goal will enhance the efficiency and effectiveness of the staffby providing them with accurate, consistent and up dated information on facilities as they undergo field modifications or planned rehabilitation.</li> <li>The Goal is challenging and the reward levels appearappropriate.</li> </ul>	
Goal #7:	Establish Muni Pump Station Flow Database	<ul> <li>The Goal is relevant, challenging, and efficiency oriented. Ready accessibility of up-to-date and accurate data can be used not only for model calibration but also for important asset management functions. Over time, the Dep artmentshould save time and money in not having to research, obtain, and validate data.</li> <li>The estimated efficiency gains in small main modeling work(25%) alone should justify this effort. However, as indicated above, other unquantified benefits, particularly related to smart asset management, should accrue over time.</li> </ul>	The 100% Goal award metric should be tied to 100% of Goal achievement (i.e., completion of 75 p ump station database).
Goal #9:	Prepare Six (6) 10% Design Reports on Redirection of Flow	Based on a number of factors, including City Council directive, the Department is charged with conducting planning studies for feasibility of redirecting sewage out of various canyons and/or environmentally sensitive areas. The impetus behind these studies also comes from the City's Consent Order.  The ultimate benefit of redirecting sewage is a significant reduction in risk costs potentially associated with sewer overflows in environmentally sensitive remote locations and thus it is consistent with financial, environmental and social factors that must be considered by the Best-in-Class utilities in planning and managing their assets.	For appropriate emp hasis on challenge level, we suggest that the award cutoff p oint be established at preparation of four reports or less.

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Min	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
		<ul> <li>The development of six 10% design reports will challenge staff, particularly given a number of other important tasks they need to perform concurrently.</li> <li>With the accomplishment of this Goal, the Department will make significant progress towards establishing a thorough understanding of alternatives based on engineering, operational, financial, and environmental considerations for redirection of sewage flows from the canyons. This will clearly benefit the City's future studies of similar nature.</li> </ul>	
		WaterBranch	
Water Op er Goal #6:	Reduce Recordable Injuries to Less Than the Previous 5-year Average	<ul> <li>This goal, in slightly varying forms, is common to virtually every PUD Division and as such signifies the importance the City is placing on employee health and safety. As with many agencies, particularly those which, by necessity, have to engage in work that can expose staffto uncommon safety hazards, the City wishes to make safety an integral partof its employee culture. To create needed impetus and momentum towards this important objective, the City is incentivizing staffthrough this Gainsharing Goal.</li> <li>It is clear that reduction in injuries is an extremely important objective from a number of perspectives, including the health and safety of the staff, improved staffproductivity, reduced medical care expenses, reduced time loss, and managed risk costs. Continuous, long term, improvements in this category will greatly benefit the City, and ultimately, its rate payers.</li> <li>The Goal will help motivate staffto think safety in almost every job function and will accelerate progress towards a safety culture.</li> </ul>	<ul> <li>The award milestones are structured to provide incentives for meeting quarterly benchmarks, in addition to the year end Goal. This will incentivize staffto show on-going improvements throughout the year, not just aim to meet a yearly average. While this structure provides ample challenge to demonstrate improvements, it should be noted that the Year end Goal number (55 or less) is conceivably achievable by simply replicating the previous 5-year average. Therefore, the year end award metric needs to be reset.</li> <li>Many utilities underscore the importance of safety as part of their "corporate" imperatives and benchmark their performance based on BLS) recordable injury data, not based on their internal historical performance. Any real improvements in this category—and the Goal challenge level—can only be measured when compared against BLS data which provides industry-specific information on IR for work related injuries/illnesses for a given year. IR help s one entity measure their incidents for comparison against similar entities within the industry group. IRs are further broken down by TRIR and LTIR. We recommend that the City migrate to these measures in establishing its safety</li> </ul>

	Table 6-1. B2G 2011 Goals Recommended for Inclusion with Minor or No Revisions			
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements	
		Business Support Branch		
LRP & WR				
Goal #3:	Locate, Assess, and Plan for Rural Property Boundaries	<ul> <li>The Goal is aimed at preserving water quality by assuring that its watershed lands and reservoirs are protected from unauthorized, and potentially p olluting, encroachments. The first step towards this very importantinitiative is to have a better understanding, documentation, and demarcation of the rural lands surrounding these facilities.</li> <li>The Goal provides for a systematic approach to</li> </ul>		
		this importantinitiative and reduces the City's risk exposure related to source water quality. By its nature, this is a very meaningful Goal for the City's supplyof reliable and safe drinking water to its propermanagement of its assets.		
		<ul> <li>The workwill require a well conceived plan for efficiently locating, marking and assessing a large amount of property boundaries; therefore, it will be challenging.</li> </ul>		
		The Goal measurement criteria is appropriate and well designed.		
Goal #4:	Public Outreach for GroundwaterProgram	It is an important outreach effort for a critical program which is often not fully understood or appreciated by the utility customers and other stakeholders. The value of the Goal is measured in the increased awareness of the stakeholders as well as meaningful dialogue that can lead to more efficient and effective implementation of the program.	Design of the roll-out should include a step, following the completion of this presentation material, to establish how the program success will be measured, documented and communicated. In that context, it is highly recommended that the program success is assessed immediately following two to three presentations, so that material and/or logistics of remaining presentations can be modified for a greatervalue.	
			<ul> <li>The summary reportshould also include actual performance against the measures established for program success.</li> </ul>	
Goal #6:	Develop and Conduct a Multi-family WATERUSE Survey Program	The Goal targets a very significant proportion of city residents and help's fulfill an important Best Management Practice for California Urban Water Conservation Counsel MOU.	To create an appropriate challenge level, it is recommended that the cutoffp oint for 0% reward be established at 2/3 of the planned surveys (or at 80% surveys).	
		<ul> <li>The customer engagement in the process is a secondary, but highly meaningful, benefit of this program.</li> </ul>		
		<ul> <li>The Goal encompasses ample challenges, including development of a prioritized list of contacts for a very large number of surveys (see suggested improvement).</li> </ul>		

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Min	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
ES & IC Div	ision		
Goal #4:	Records Management System for Safety Program	<ul> <li>The consolidation of the City's Water and WastewaterDepartments under the newly constituted PUD also accompanies a major challenge of integrating two different records management systems with incompatible software. It is also critically important that the Department migrate from some of the paper records to an electronic records system. Before embarking on a major system-wide data integration and information management system, the Department has decided to start with this Goal as a "pilot" so lessons learned can be applied to the future system-wide program.</li> <li>The Goal serves as an efficient precursor to development of a comprehensive records management system that the Department will need for creating, maintaining, and managing its records, and for increased effectiveness in accessing and using information for decision-making across various disciplines.</li> <li>While many of the system efficiencies will result from eventual development of a Department-wide Records Management System, we fully endorse this pilot as the first important step for progress towards that goal. The experience and lessons learned with this pilot will be invaluable.</li> </ul>	
		<ul> <li>The Goal measurement criteria are relevant and appropriate.</li> </ul>	
Goal #5:	Minimize Recordable Injuries	<ul> <li>This goal, in slightly varying forms, is common to virtually every PUD Division and as such signifies the importance the City is placing on employee health and safety. As with many agencies, particularly those which, by necessity, have to engage in workthat can expose staffto uncommon safety hazards, the City wishes to make safety an integral part of its employee culture. To create needed impetus and momentum towards this important objective, the City is incentivizing staffthrough this Gainsharing Goal.</li> <li>It is clear that reduction in injuries is an extremely importantobjective from a number of perspectives, including the health and safety of the staff, improved staffproductivity, reduced medical care expenses, reduced time loss, and managed risk costs. Continuous, long term, improvements in this category will greatly benefitthe City, and ultimately, its rate payers.</li> </ul>	<ul> <li>The award milestones are structured to provide incentives for meeting quarterly benchmarks, in addition to the year end Goal. This will incentivize staffto show on-going improvements throughout the year, not just aim to meet a yearly average.</li> <li>Many utilities underscore the importance of safety as part of their "corporate" imperatives and benchmark their performance based on BLS recordable injury data, not based on their internal historical performance. Any real improvements in this category—and the Goal challenge level—can only be measured when compared against BLS data which provides industry-specific information on IR for work related injuries/illnesses for a given year. IR help's one entity measure their incidents</li> </ul>

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Mind	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
		The Goal will help motivate staffto think safety in almost every job function and will accelerate progress towards a safety culture.	for comparison against similar entities within the industry group. IRs are further broken down by TRIR and LTIR. We recommend that the City migrate to these measures in establishing its safety related goals during the future years.
Goal #7:	Reduction of the Three Year Average Incident Rate by 10%	<ul> <li>This Goal provides for achievement of the over- arching objective of reduced injuries for the entire staff. Given its importance in terms of employee health and safety, productivity, reduced lost time, and reduced organizational risk, it is a worthy Goal</li> </ul>	
<b>CS</b> Division			
Goal #2:	Increase the Number of Privately Maintained Backflows Tested Annually	As the goal states, an effective cross- connection program is required to maintain compliance with the CCR Titles 17 and 22 of the California Water Code. This Goal seeks to significantly increase the testing of the additional backflowdevices not covered under the existing program. The testing program would focus on high priority sites for cross- connection compliance to mitigate p otential risks of non-compliance.	
		The Goal addresses a compliance issue proactively and it appropriately deploys staffto high risk sites for an effective program.	
		<ul> <li>Increased number of investigations related to this high priority activity without an increase in staffing signifies improved process and increased efficiency.</li> </ul>	
		<ul> <li>Award measurement criteria which establish a threshold of a minimum of 800 additional tests for a payout is appropriate.</li> </ul>	

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Min	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
Goal #4:	Minimize Recordable Injuries	<ul> <li>This goal, in slightly varying forms, is common to virtually every PUD Division and as such signifies the importance the City is placing on employee health and safety. As with many agencies, particularly those which, by necessity, have to engage in work that can expose staffto uncommon safety hazards, the City wishes to make safety an integral part of its employee culture. To create needed impetus and momentum towards this important objective, the City is incentivizing staffthrough this Gainsharing Goal.</li> <li>It is clear that reduction in injuries is an extremely importantobjective from a number of perspectives, including the health and safety of the staff, improved staffproductivity, reduced medical care expenses, reduced time loss, and managed risk costs. Continuous, long term, improvements in this category will greatly benefit the City, and ultimately, its rate payers.</li> <li>The Goal will help motivate staffto think safety in almost every job function and will accelerate progress towards a safety culture.</li> </ul>	<ul> <li>The award milestones are structured to provide incentives for meeting quarterly benchmarks, in addition to the year end Goal. This will incentivize staffto show on-going improvements throughout the year, not just aim to meet a yearly average.</li> <li>Many utilities underscore the importance of safety as part of their "corporate" imperatives and benchmark their performance based on BLS recordable injury data, not based on their internal historical performance. Any real improvements in this category—and the Goal challenge level—can only be measured when compared against BLS data which provides industry-specific information on IR for work related injuries/illnesses for a given year. IR helps one entity measure their incidents for comparison against similar entities within the industry group. IRs are further broken down by TRIR and LTIR. We recommend that the City migrate to these measures in establishing its safety related goals during the future years.</li> </ul>
Goal #6:	Create an Information Repository for the Division	<ul> <li>The Goal sets up a system for easier access and updates to data and reference information and operating procedures for customer sup port. It will clearly benefit the staffin efficiently accessing accurate and the most up-to-date information to respond to inquiries from external and internal customers. Most best-in-class utilities are utilizing technology for housing—and continually updated—information critical for customer sup port.</li> <li>The award metrics are appropriate for this Goal.</li> </ul>	

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Minor	or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
FIT Division			
Goal #2:	Creation of Budget Calendar	<ul> <li>The Goal will lead to organizational efficiency and effectiveness in three areas:</li> <li>1. Elimination of wasted effortin trying to compile needed information from various sources.</li> <li>2. Sp eedierturnaround of critical deliverables through sharing of consistent and accurate information between those responsible for preparing and using information related to deliverables.</li> <li>3. Improved collaboration between interdivisional staffin preparing and anticip ating data which serves as the foundation for the budget calendar.</li> </ul>	
		<ul> <li>The Goal is particularly important given the needs of newly organized PUD and its various divisions.</li> <li>The creation of the proposed calendar and its regular updates requiring input, assistance and team-effort involving other group s, coup led with proposed training, makes the Goal sufficiently challenging for the Division staff.</li> <li>The Goal award metrics are meaningful and appropriate.</li> </ul>	
Goal #3:	Retrieve and Maintain Current Year Monitoring Information through the Use of Business Objects Reports	The expected benefits of this Goal are potential efficiencies and cost savings in maintaining, retrieving and using monitoring information required by the staffinvolved in budgeting and budget monitoring. The automation, as envisioned, will provide ready access to consistent and accurate information, thus the staffcan use their time more effectively on analyzing data, rather than collecting it. The preparation of desk manuals and related training for the budget staffwill help with the learning and adoption process of the new tool.  Any automation initiative which focuses on efficient retrieval and use of data across many discip lines will lead to staffefficiencies and overall organizational effectiveness. This one also accompanies significant challenge for the staffin having to develop the tool, the manuals, and the training material for organizational adoption.  The Goal measurement criteria are relevant and appropriate.	

	Table 6-1. B2G 2011	Goals Recommended for Inclusion with Mine	or or No Revisions
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
Goal #5:	Develop and Enhance Interagency Agreements Reporting	• Timely, uniform, detailed, and regular reporting of the invoices, payments, financial status, flow contributions, and other contractual parameters affecting the Participating Agencies (PAs) would help the department managers with informed decisions based on credible, up-to-date, information. This Best Management Practice will add efficiency to management and coordination of the inter-agency relationships and allow the managers deep erknowledge of the finances affecting utility op erations.	The Goal award criteria app earto be disproportionally focused on the preparation of the front-end schedule of reporting requirements (50% of award). It is recommended that the award metrics be reset to allow most of the earnings to be delivered based on timely, accurate and quality reports.
Goal #6:	Development of Cross- divisional, 5-yearInternal Budgetary Outlook	<ul> <li>Longer term cost and revenue projections are extremely valuable in identifying any funding "gaps." The financial projections envisioned by this Goal could help forecast future rate structure as well as potential borrowing needs. Utilities that have well conceived long range financial plans can proactively analyze financing and funding options for sustaining their infrastructure and generally enjoy more favorable bond ratings, which ultimately benefits all rate p ayers.</li> <li>The Goal measurement criteria focuses on the most important deliverable, the development of the 5-year budgetary outlook.</li> </ul>	
Goal #7:	Conduct IT Customer Service Survey/Publish Service Catalog/Create Trainings/Develop Projects	With the establishment of new groups as part of the reorganized PUD, it has become increasingly necessary for the staffto have a better understanding of various functions and related services IT group provides so the end users can better utilize the IT services for improved productivity.	
		<ul> <li>The development of a "service catalogue" and targeted training enhances the understanding of various user groups for effective access to IT services, which are critically importantfor efficient conduct of their day-to-day responsibilities.</li> </ul>	
		<ul> <li>The customersurvey, included in this Goal, will serve as an important precursor to establishing the exact needs of the end-users so that the service catalogue and training can be specifically targeted to those needs.</li> </ul>	
		<ul> <li>The goal is consistent with the focus Best-in-Class utilities have on productively through IT assets. It also accompanies significant challenge for the IT staff because it asks for tasks and accomplishments beyond the normal "comfort zone."</li> <li>The Goal award metrics are appropriate.</li> </ul>	

# 6.2 Goals Recommended for Inclusion with Significant Revisions

Our review indicates that these Goals need some rework before inclusion in the 2011 Gainsharing Program. Table 6-2 discusses our observations, conclusions and suggested improvements for this category of Goals.

	Table 6-2. B2G 2011	Goals Recommended for Inclusion with Sig	nificant Revisions
Branch/ Division	Goal Description	Observations/Conclusions Suggested Improvements	
		WastewaterBranch	
WWC Divis	ion		
	Complete Wastewater Collection Division Engineering Operational Referrals within Nine Working Days of Receipt	<ul> <li>To be successful, this Goal would require collaboration between engineering and operations staffand, therefore, is a worthy goal for creating the understanding and teamwork that is often lacking between the front-line staff charged with operating and maintaining facility assets and those responsible for planning, designing, and implementing those assets.</li> <li>The Goal accelerates the response time to operational referrals and then imposes a significant challenge in properly communicating, understanding, researching, and resolving the referrals.</li> </ul>	The Goal measurement criteria are based on purely numerical resolutions of referrals. Since all referrals aren't likely to be equally critical, it is recommended that the criteria be reset to provide larger incentives for more critical referrals. This would require the referral initiating personnel to tag each referral by its criticality, potentially based on its urgency or imp acton operations. The current criteria can lead to disproportionate awards for achieving easier (and p erhap s less critical) referrals.
Goal #9	Manage Wastewater Collection Division Labor Activities to Reduce Preventable Vehicle Accidents by 15% Compared to the Previous 5-Year Average	<ul> <li>See discussion for Goal 5 under Water Operations (Table 4-2)</li> </ul>	
		WaterBranch	
WaterOpe	rations		
Goal #3:	Perform Preventative Maintenance on 16,500 Potable Water Distribution System Appurtenances	<ul> <li>While Preventive Maintenance (PM) has become a standard operating practice for major assets at many utilities, this Goal focuses on those critical assets that can often go unattended until failures necessitate corrective actions. This Goal puts a spotlight on these assets and thus will be worthy Gainsharing Goal.</li> <li>Accomplishmentof this Goal will representa significant challenge given the sheer number of assets slated for PM activities.</li> <li>Experience at other agencies has proven that properisk analyses can help target the PM in investments based on asset criticality. Such analyses often reveal that many PM activities can be eliminated because the maintenance expenditures aren't justified by calculated risk costs.</li> </ul>	<ul> <li>Establish risk-based prioritization of PM activities ratherthan an absolute number of appurtenances subjected to PM each year, or on cyclical basis. Bestin-Class utilities are moving in this direction.</li> <li>Reset Goal achievement metrics based on the number of high priority (critical) appurtenances attended to each year.</li> </ul>

Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
Goal #9:	Test Commercial Meters and Backflow Assemblies	<ul> <li>Annual testing of backflow assemblies is a State mandate and testing of commercial meters is a good asset management practice. Both of these tasks should be part of the basic maintenance program for the Water Op erations Branch and, by themselves, do not necessarily qualify for the Gainsharing Program. However, given that the crews involved in the maintenance activities related to the Goal would essentially be the same charged with the replacement of the City-owned small meters as part of Goal 8 (see Table 4-1), it would be prudentto combine Goals 8 and 9 as a single Goal. This will incentivize staffto accomplish both through properplanning, prioritization, and deployment of the same resources, thus presenting a challenge worthy of a Gainsharing Goal.</li> <li>In a follow-up discussion with Mr. Jim Fisher, it was agreed that Goal 8 and Goal 9 would be combined as a single Goal.</li> </ul>	<ul> <li>For a combined Goal 8 and 9, we recommend that the total award be split 65% and 35% between the tasks associated with Goals 8 and 9, respectively. Following the split, the awards may be structured as follows:         <ol> <li>100% of the available award, after the above split, at full completion of tasks of a given category</li> <li>60% of the available award at 90% completion of tasks in a given category</li> </ol> </li> <li>No award below 90% task completion.</li> <li>This measurement mechanism excludes backflowassemblies testing as an award milestone because such testing is a State mandate. It also allocates more of the award to completion of activities under Goal 8 because those activities are more in line with the Gainsharing Program's foundational criteria. This should not imply that the testing of commercial meters is not important—it simply underscores the relative value of the activities under Goal 8 Vs Goal 9.</li> </ul>
		Business Support Branch	
ES & IC Div	ision		
Goal #3:	Establish and Imp lementa Mentorship Program	• Effective mentoring can yield measurable organizational benefits including employee development and retention, increased job satisfaction, and accelerated career development. It can also help create a "learning culture." Therefore, establishment of a mentorship program is a worthy Goal. However, organization-wide programs for formal mentoring, where an organization organizes and manages mentor-mentee relationships, haven't proven to sustain themselves. The quality of mentoring relationships (with the right mentor-mentee tandems) is the most important factorin effective mentoring and most top-down programs cannot necessarily replicate the quality of informal mentor-mentee relationships that can emerge naturally.	Given the rather significant time investment for a dep artment-wide program with questionable sustaining power, it is highly recommended that the program be rolled out in p hases, with a "pilot phase" limited to a single division or significant group within a division. Also, the plan should be structured based on the mentorship skills of the proposed mentors, rather than pure technical skills, experience level, or seniority. The most effective mentormentee relationships are those where a mentee selects his or her mentor—not the other way around.

Table 6-2. B2G 2011 Goals Recommended for Inclusion with Significant Revisions

	Table 6-2. B2G 2011	Goals Recommended for Inclusion with Sig	nificant Revisions		
Branch/ Division	Goal Description	Observations/Conclusions Suggested Improvements			
		<ul> <li>The objective, as currently conceived by this Goal, is to establish and implement a Department-wide mentorship program which will involve significant staffparticipation and time investment. The process of mentor and mentee selection, orientation, program sup port, documentation, and progress management will require a substantial amount of ES &amp; IC staff time, in addition to the time required by the PUD staffselected for mentoring.</li> <li>We believe that the program of this nature is more effective and returns greater value when implemented in phases—each successive p hase benefiting from the lessons learned during the preceding p hases.</li> </ul>	The program can be exp anded or radically modified based on the level of success and institutional energy behind the program. This measured approach will limit time investment, better respond to organizational appetite for the program and effectively manage expectations.		
CS Division	1				
Goal #8:	Reduce the Number of Customer Telephone Calls to the Customer Service Office (CSO) Call Center by 8% from FY10	<ul> <li>This is a worthy goal from two fundamentally important perspectives: 1) It is customer focused—resolving customer service issues and answering customer inquiries with fewer customer interactions or follow-ups; and 2) It reduces organizational costs by not having to revisitsame or similar issues with multip le customers.</li> </ul>	<ul> <li>Reset the awards metrics by tying a majority of the award (over 60%) to resolution of issues with the first customercall.</li> <li>Set the cutoffp oint for the balance of the award (40%) at 7% reduction in median number of calls.</li> </ul>		
		• The improvement in "first-call-resolution" should be a key performance indicator, but it is not appropriately reflected in the award achievement metrics.			
		<ul> <li>For appropriate challenge level see the noted suggest improvements.</li> </ul>			

# 6.3 Goals Not Recommended for Inclusion

We question the value, outcomes, or measurability of these goals. Therefore, we recommend that they be excluded from the 2011 Gainsharing Program. Table 6-3 below discusses our observations, conclusions and suggested improvements related to these Goals.

Table 6-3. B2G 2011 Goals Not Recommended for Inclusion				
Branch/ Division	··· Goal Description Observations/Conclusions Suggested Improvemen			
		WastewaterBranch		
WWC Divisi	on			
Goal #4:	Develop and Implement a Pump Station Pip ing Preservation Program	<ul> <li>The Goal appears to pre-suppose scope and magnitude of the preservation activities priorto actual inspections and characterizations of the required actions.</li> <li>Because the prioritization of these anticip ated</li> </ul>		
		maintenance or rehabilitative activities would not be complete before the end of the first quarter, any benefits of the effort, or the challenge level associated with this Goal are yet undetermined.		
		<ul> <li>We recommend that the activities related to this Goal be considered as part of the normal preventive maintenance and rehabilitation duties of the staffbecause the Goal lacks justification for inclusion in the 2011 Gainsharing Program.</li> </ul>		
		WaterBranch		
WaterOper	ations			
Goal #10:	Perform Preventive Maintenance on 201 Pump Motors, 25 Generators, 2755 Telemetry Instruments (WaterTreatmentPlants and Distribution System) for FY11	The preventive maintenance activities described in this Goal are typical of any rational maintenance program and should be part of the standard maintenance procedures of the Water Operations Branch. This Goal does not provide enough justification for its inclusion in the Gainsharing Program.		

	Table 6-3	B. B2G 2011 Goals Not Recommended for Inclus	sion
Branch/ Division	Goal Description	Observations/Conclusions	Suggested Improvements
	(Municipality)	Business Support Branch	1000
LRP & WR			
Goal #2:	Establish a Comprehensive Photographic Library	<ul> <li>The Goal narrative does not make a comp elling case for its inclusion in the FY 2011         Gainsharing Program because of the following reasons:     </li> <li>The absolute need for development of a photographic library is not well established.</li> <li>The challenge level does not justify its elevation to the Gainsharing level.</li> <li>Even if needed, the Goal can potentially be achieved through temporary, lower cost, staffing focused solely in building this library.</li> </ul>	
<b>CS</b> Division	ı		
Goal #3:	Improve the Accuracy of Sewer Utility Billing by Increasing the Number and Frequency of Sewer Classification Investigations	<ul> <li>The Goal states that an acceptable period for completion of investigation requests will be established based on industry standards prior to development of a work plan to prioritize investigations. Such a plan would be essential in applyingappropriate amount of resources to these investigations to assure that the results (benefits) justify the investment toward this program. Without an established plan, which provides the basis for the number of critical investigations to be completed during the year, a Goal which simply increases the number of investigations over previous years would be premature.</li> <li>While the Goal might be challenging, as it would require staffto complete more investigations, the value is not obvious in terms of overall effectiveness of the investigations in the absence of a valid prioritization plan.</li> </ul>	

		Asses	ssment of th	ne City of San Die	go's Bid-to-Goal Pr	ogram
ADDENIDIV A IN	ITED\ /IE\ // O	\^/I <del>T</del> II		4.0ENOV	DEDOONA	
APPENDIX A: IN	IIEKVIEWS	WIIH	PEEK	AGENCY	PERSON!	NEL

### Interview with Barry Gullet - CMUD

7/2/10 - 11:30AM

HDR worked with CMUD as well as the City of San Diego.

CMUD's wastewater mains are twice as long as the City of San Diego's. They are a "classic example of urban sprawl." The City has twice as much capacity as CMUD.

They serve 750-800,000 people (250,000 accounts). The water treatment capacity (at 3 plants) is 181, 25, and 36 MGD (36 MGD depending on who you ask, the plant actually treats less).

CMUD set goals in 1996. What is the current status? The managed competition program is being continued. Every 5 or 6 years, they find that the number of firms that will compete is zero. They have shifted from managed competition to an optimization process (combination of bid-to-goal and benchmarking). For example, when they get a bid for construction of a WWTP, it will be benchmarked across other WWTP builds. The gainsharing is dependant upon producing savings below the target budget number and compliance with performance requirements. They have to operate within NPDES requirements. Performance requirements have become more sophisticated. For example, they have 75 wastewater lift stations. The performance criteria is more complicated with these (involves many factors, such as industry standards). They also have a couple of plants that have ISO certification. That is factored into the optimization costs and that becomes basis for several criteria for ISO certifications.

There are certain basic due diligence that must be done no matter what (NPDES and no-lost-time accident goals) but are a part of CMUD's gainsharing. For example, if they get a NPDES violation, then they can't do gain sharing.

They do not have gainsharing goals for distribution crews. They have them for treatment plants, underground locates and wastewater lift stations. Their sewer system is not combined. There are no goals for SSOs.

They are under an administrative order for SSOs. They are somewhere in the range of 340 SSOs for 4,000 miles. CMUD is in EPA Region 4. They did not set a numeric goal for reducing SSOs but did include information on setting up programs. The capital component is not as severe as some cities have seen. They were only required to do 5 capital projects (4 of which are already finished). They had to do an environmental project and a capacity assurance project (BC helped with this). CMUD also had to do some program reviews. They were generally programmatic type of requirements. Deadlines were set as well.

Are most SSOs related to FOG? About half.

**Any SSOs related to lift stations?** There have not been any big ones related to lift stations in the last few years, but they have happened before.

Wastewater treatment gainsharing goals are pretty straightforward. The main one is related to **budget** and cost. They establish an optimized budget and then the cost is monitored and audited from the outside. The auditors look for all of the costs to be included in what they are reporting and they should be doing what they say they are doing. It takes a long effort to implement and administer.

CMUD has seen instances early in the competition effort that some of the programs (lift stations) really adopted the contractor mentality more than they should have. They were focused almost entirely on cost. That became a problem.

**Does CMUD doing any risk analyses?** They have done some of that. In a lot of cases, they don't have enough data to do a true risk assessment. They do not have a rigorous asset management process yet, but the first phase of it will roll out in a few months. They have done some business case analyses. The short term nature of the contracts in managed competition has not lended itself to risk analyses.

Are there goals for number of outages/leaks/time to respond? There are goals for response to leaks (the words leak and break can be used interchangeably, as a side note). There are 3 categories:

- emergency (immediate response) a "gusher"
- priority (respond within 5 days) higher volume but is not doing significant property damage, sort of a mid-sized leak. It depends on where it is (near buildings, property, roads, etc.). The season may change the priority as well (will water on the road freeze, causing other problems).
- routine (response time is upwards of 12 weeks) "dribblers." More of a leak than a break, no property damage. Response time is longer than it should be (based on budget issues).

They use a balanced scorecard type of approach.

**Is balanced scorecard a part of measuring goals?** No. Gainsharing goals are completely tied to competition (cost only). Balanced scorecard goals/objectives are rolled into a larger report for whole City of Charlotte. The City of San Diego's goals do seem to follow the balanced scorecard.

The balanced scorecard approach was adopted at least 10 years ago. The incentive to adopt the balanced scorecard was because the City of Charlotte did.

If you are trying to meet/beat a private sector proposal, the cost can overwhelm it. It has been hard for CMUD to get a proposal that lines up properly. While they are operating their lift stations at a certain level, they know there are other things they should be doing, but are not (due to budgets, etc.). This extra work may end up in a proposal and then it is not comparable. It is hard to translate and rein scope in.

**Any other goals?** ISO 14001 WWTPs have ISO process related performance goals. These end up as part of the gainsharing goals. They do some benchmarking projects. They have not come away with any action plans yet.

Do you measure activity-based costs (clean certain number of miles of pipeline)? They do some of this, but they are really not structured in a way that makes it easy. Their systems are not robust enough for this.

Any goals related to overtime? They do not have one. They may have one in a year or so. Barry wants to flip his performance objectives and balanced scorecard to a bottom up approach. That is one of his personal goals. Continuous improvements process/methods should be used.

There needs to be a direction and a framework (Pervaiz discussed the large box method).

### Other contacts:

Richard Dixon (finance/accounting). He is monitoring the gainsharing goals. He can be reached at 704-391-5194.

Kim Eagle (used to be close to utilities) - 704-336-5016. She has been heavily involved with balanced scorecard.

#### Interview with Mike Luker-EMWD

6/30/10 - 2PM

**Goal is 0 SSOs.** Where they actually perform is one per 100 miles/year (standard is about seven per 100 miles/year). This is related to line cleaning frequency. Goal is measured against total SSOs, sorted by related to contractor hitting the line, grease/root blockage (maintenance related), or vandalism. About 2/3 of 1 to 2 SSO year is pretty evenly split between the 3 types.

600 miles of pipeline are cleaned a year (1,800 miles total of pipeline are located in the district). They are ahead of schedule at the moment.

**Are there customer-service related goals?** Not that he knows of.

There are four line cleaning 2 person crews and two repair crews (15 total people in group) that raise manholes that do refurbishment (not replacement). There are 47 lift stations and Lift station group has 6 mechanics and 1 supervisor.

There is no overtime goal. GPS has been attached to all rolling stock. Fuel consumption and hours in vehicle have dropped in excess of 10 percent. Overtime has dropped 37% from the prioryear and more work orders are being completed. There appears to be one more hour in the field then driving. 10 agencies have come to look at this program because of its success.

**Is there data on injuries?** There is a weekly report where recordable injuries are tracked by prioryear, industry rates. For example, loss time injuries run at 7% per year. Their injury rate is less than 1% of total hours works. Industry rate is taken from CalOSHA. They are CalOSHA self-certified. Self inspections have been done since 1999. 4.6% is the industry rate.

Is there a strategy for preventative maintenance, such as for lift stations? They have it broken down for various work groups (schedule vs. unscheduled (breakdown reactive maintenance)) and is tracked all the way down to the supervisorlevel. Reactive is down 25% company-wide. Engine oil analysis is done for metals to see if oil changes can go longer. They spend over a million per year on lubrication and would like to spend less. They are using infrared analysis to see where to work and are looking into vibration analyses (which are harder). Infrared is working well.

Water related goals - Are there goals on waterline breaks per year, or any customer related issues on how many hours to fix? Outages are very few. What they found was in reallycold weather, they get more leaks. Metrics are in SCADA system (low pressure, dirty water complaints, etc.). Interruptions of service are so low that it has not been an issue. Most metrics are on the financial side. For example, at the water filtration plants, they attempt to maximize those facilities because their cost to treat is less than Metropolitan's. They still have to buy raw Metropolitan water. Their desalters and groundwater wells are important as well. There is a priority to supply water. They know the capacity of their facilities and track regularly.

**Are there any published goals on their website?** Yes, there are a lot of them available.

Summary of May financials is a good road map on where they are at financially. The financials show water, recycled water, sewer, operating revenue, etc. \$35.6 millionin contributing revenue (doesn't include overhead) from the water groups. There is a significant jump in water revenue, but that is starting to go away (as they are using less Tier 3 and 4 water) so the healthy operating margins may not continue.

Staffing level appears low (and that is how they make money).

There are 674 employees in the company (total). 312 are in O&M.

### Interview with Terry Martin - Seattle Public Utilities

6/23/10 - 1PM

Pervaiz explained the background of the project. Four to five years ago, the City of San Diego (City) was threatened with privatization and put together a hypothetical private sector proposal to run the City. It has evolved to the Bid to Goal program (now the gainsharing program). Every year, the various City divisions evaluate 5-7 goals/division that become the basis for gainsharing. An audit committee has decided a 3<sup>rd</sup> party review should be performed. Questions include whether the goals have meaning and are they enough of a stretch.

The City has a goal to clean certain miles of pipeline a year. Is this beneficial? SPU has a risk-based approach. They originally looked at risk-based CCTV. They CCTV'd 3% of the lines/year (30 year return). SPU decided that based on the results and their resources, 15% of the lines were high risk and 85% "could fail." The CCTV schedule was rearranged accordingly to more of a structural failure risk. Pipes in good condition had the likelihood of failure adjusted. Two years ago, negotiations were held with EPA regarding sewer back ups (roots, grease, and debris). This switched their program back to maintenance-based concerns. Frank McDonald, the Asset Manager could give us more information. A lot of the strategy is now based on the EPA strategy. They are emphasizing clean ups on SSO issues (based on history, CCTV, maintenance). It was noted that a SSO in SD is not like a SSO in Seattle, as Seattle has basements. Pervaiz mentioned that the industry should be gravitating towards industry-based (not EPA mandates, which may not be good). Terry said they had to do risk-based to keep EPA content.

He mentioned there were 13 unions in the area and it as hard to provide incentives to work more.

**Pervaiz asked about the water/distribution side of the house.** SPU has a low break rate and are in a simple water main replacement mode. The social/environmental costs are typical for a water main leak. A model is run monthly for leaky mains. There are 6-10 leaks or breaks/month. If a water main reaches a certain frequency of repair, it will be replaced. The water mains are performing pretty well except for small areas of corrosivity. High priority may be given to responding to a leak based on the severity of the problem perceived by the person calling in.

The corporate asset management group is comprised of economists and engineers. A business case must be performed on all projects that are over \$1 million. Asset management principles must be followed. Mock valve criticality/shutdowns are performed as a business case to add more valves. Pervaiz noted that this group is an internal consultant for the planning department. Terry stated this group is "more corporate" and keeps other departments honest. Ray Hoffman is the director.

Does SPU set yearly goals? Service levels have KPYs (5 dozen internal/external). These include # of water outages (hours accumulated), # SSOs, # miles/month cleaned, and % priority maintenance requests. Updates are delivered to the Council quarterly.

Terry said he could share the goals and would email them. He said we should talk with Frank McDonald (206-386-1838) about the latest on the cleaning of the collection system. He will let Frank know we are calling.

#### Interview with Mike Wallis - EBMUD

6/29/10 - 2PM

Pervaiz explained the privatization background with the City of San Diego. Goals were established with proposal. Goals should lead to reduced costs/provide benefits. Benchmarking will be done against high-ranking utilities.

EBMUD has a set of high-level KPIs. Water level has top 10 KPIs. As you get down in the organization, there are more detailed KPIs. Mike will email Pervaiz these top 10 Water Operation KPIs. The Strategic Plan is online and has some of the KPIs (return to service goals for main breaks, number of breaks per 100 miles of pipe, etc.). KPIs are calculated annually and Strategic Plan goals (that go to the Board) are reviewed on a biannual basis.

Are there any other goals beyond KPIs that are established (internal that don't go to Board)? There are some, such as maintenance work at facilities. Mike thinks there may be too many to share as they are scattered across departments. These are measured annually and reviewed, and may be renewed. Are any of these customer service related? Yes, some are response time related.

How are rates set? How are assets managed? Any goals that are distinctly different than KPIs? These goals could be found in the Strategic Plan. Infrastructure and financially-related goals would be found there.

**How about O&M related goals?** There is a corrective maintenance goal and emergency maintenance goal. Goals are set on asset management information. EMBUD has developed their own system (reliability center maintenance) and will assign criticality. There are reliability goals for each facility. They consider safety and environmental issues as well (matrix-type approach to assign criticality). Criticality also takes into account what new equipment is needed.

Labor utilization goals, such as overtime reduction? EBMUD does not have this type of goal.

There is a reportable injury rate goal/ Loss-time injuries (overall AND O&M groups). It is an OSHA calculation. They assign goal that is 10% less than previous year. They average based on the number of employees (weighted by staff numbers).

Anything else that jumps out that defines how EBMUD manages? One on internal audit findings – have "leading" indicators to audit facilities annually and fix issues within 90 days. This provides a basis for corrective actions. This is aimed at environmental regulations, safety, and emergency preparedness.

They monitor distribution system for leaks. The goal is to monitor 211 miles/year of pipe. No goal for number of leaks, but this is tracked.

They monitor budget and have a KPI for that. EBMUD also has KPI for meeting WQOs and no violations of the environmental permit. EBMUD was part of benchmarking group in the past. They also benchmark with local utilities.

EBMUD keeps track of EUM process and makes sure they are doing these 10 things. They do not have formalized approach and do not plan to have one.