

TEXAS WATER DEVELOPMENT BOARD

P.O. BOX 13231, CAPITOL STATION

AUSTIN, TX 78711-3231

2014 Water Audit Report**A. Water Utility General Information**

1. Water Utility Name: City of Austin Water & Wastewater

2. Contact:

2a. Name Dan Strub

2b. Telephone # (512) 972-0349

2c. Email Address dan.strub@austintexas.gov

3. Reporting Period: From 1/1/2014 To 12/31/2014

4. Source Water Utilization, percentage: Surface Water 100 % Ground Water 0 %

5. Population Served:

5a. Retail Population Served 896,363

5b. Wholesale Population Served 54,966 Assessment Scale

6. Utility's Length of Main Lines, miles 3,793.00 5

7. Number of Wholesale Connections Served 50

8. Total Retail Metered Connections 218,198

9. Service Connection Density 57.53
(Number of retail service connections / miles of main lines)

10. Average Yearly System Operating Pressure (psi) 77.3 5

11. Volume Units of Measure: Gallons

B. System Input Volume

29,148,336,469 gallons

12. Produced Water 4

100.00 %

13. Production Meter Accuracy (enter percentage) 4

29,148,336,469 gallons

14. Corrected Input Volume 15,443,172,848 gallons

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15. Total Water Purchased		gallons	<u>4</u>
	<u>2,579,530,487</u>		
16. Total Wholesale Water Sales		gallons	<u>5</u>
	<u>42,011,978,830</u>		

17. Total System Input Volume

(Corrected input volume, plus imported water, minus exported water)

Assessment
Scale**C. Authorized Consumption**

18. Billed Metered	<u>36,171,058,100</u>	gallons	<u>3</u>
19. Billed Unmetered	<u>3,339,880</u>	gallons	<u>4</u>
20. Unbilled Metered	<u>52,411,165</u>	gallons	<u>2</u>
21. Unbilled Unmetered	<u>148,700,040</u>	gallons	<u>4</u>
22. Total Authorized Consumption	<u>36,375,509,185</u>	gallons	

D. Water Losses**23. Water Losses**

(Line 17 minus Line 22)

5,636,469,645
gallons**E. Apparent Losses**97.90 % 3

24. Average Customer Meter Accuracy (Enter percentage)

775,885,822 gallons

25. Customer Meter Accuracy Loss

gallon

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26. Systematic Data Handling Discrepancy	<u>0</u>	<u>4</u>
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27. Unauthorized Consumption	<u>105,029,947</u>	<u>4</u>
	gallon	
	s	

28. Total Apparent Losses	<u>880,915,769</u>	
	gallons	

F. Real Losses	<u>34,257,090</u>	<u>5</u>
	gallon	
	s	

29. Reported Breaks and Leaks		
(Estimated volume of leaks & breaks repaired during the audit period)		

30. Unreported Loss	<u>4,721,296,786</u>	<u>3</u>
(Includes all unknown water loss)	gallon	
	s	

31. Total Real Losses	<u>4,755,553,876</u>	
(Line 29, plus Line 30)	gallon	
	s	

32. Water Losses (Apparent + Real)	<u>5,636,469,645</u>	
(Line 28 plus Line 31) = Line 23	gallons	

33. Non-revenue Water	<u>5,837,580,850</u>	
(Water Losses + Unbilled Authorized Consumption)	gallon	
(Line 32, plus Line 20, plus Line 21)	s	

G. Technical Performance Indicator for Apparent Loss	<u>11</u>	
	gallon	
	s	

34. Apparent Losses Normalized		
(Apparent Loss Volume / # of Retail Service Connections/365)		

H. Technical Performance Indicators for Real Loss	<u>4,755,553,876</u>	
	gallon	
	s	

35. Real Loss Volume (Line 31)		
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	<u>1,501,347,153</u>	gallon	
		s	
36. Unavoidable Annual Real Losses, volume (calculated)			
	<u>3.16750</u>		
37. Infrastructure Leakage Index (calculated)			
(Equals real loss volume divided by unavoidable annual real losses)			
38. Real Losses Normalized	<u>60</u>	s	
(Real Loss Volume / # of Service Connections / 365)			
(This indicator applies if service connection density is greater than or equal to 32 / mile)			
		gallon	
	<u>0</u>	s	
39. Real Losses Normalized			
(Real Loss Volume/Miles of Main Lines/365)			
(This indicator applies if service connection density is less than 32/mile)			
			Assessment Scale
I. Financial Performance Indicators		gallon	
	<u>880,915,769</u>	s	
40. Total Apparent Losses (Line 28)			
	<u>\$0.00560</u>		
41. Retail Price of Water			<u>5</u>
	<u>\$4,933,128.31</u>		
42. Cost of Apparent Losses			
(Apparent loss volume multiplied by retail cost of water, Line 40 x Line 41)			
	<u>4,755,553,875.56</u>		
43. Total Real Losses (Line 31)			
	<u>\$0.00040</u>		
44. Variable Production Cost of Water*			<u>4</u>
(*Note: in case of water shortage, real losses might be valued at the retail price of water instead of the variable production cost.)			
45. Cost of Real Losses	<u>\$1,911,732.66</u>		
(Real Loss multiplied by variable production cost of water, Line 43 x Line 44)			
46. Total Assessment Scale			<u>68</u>
47. Total Cost Impact of Apparent and Real Losses	<u>\$6,844,860.97</u>		
48. Comments	<p>Since system input volume is no longer water produced by treatment plants, but instead, raw water withdrawn from sources, the production meter accuracy is set to 100% to conform with raw water withdrawals, and water used in treatment process is included in unbilled unmetered water total.</p>		

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49. Total Water Loss %	13.42	%
50. GPCD (Gallons Per Capita Per Day) Input	128.41	
51. GPCD (Gallons Per Capita Per Day) Loss	17.23	