

TEXAS WATER DEVELOPMENT BOARD

P.O. BOX 13231, CAPITOL STATION

AUSTIN, TX 78711-3231

2025 WATER AUDIT REPORT

General Information

A. Water Utility General Information

1. Water Utility Name: CITY OF HAYS

1a. Regional Water Planning Area: K

- Having more than 3,300 connections
- Having received financial assistance from TWDB
- Every five years

1b. Address: PO BOX 1285  
BUDA, TX 78610-1285

2. Contact Information

2a. Auditor Name: Lindsey Allen

Have you completed Water Loss Auditor Training?

2b. Telephone Number: (512) 894-3322

Yes

2c. Email Address: Lindsey@pgms.net

No

3. Reporting Period:

3a. Start Date: 01/01/2025

3b. End Date: 12/31/2025

4. Source Water Utilization:

4a. Surface Water: 0.00 %

4b. Ground Water: 100.00 %

5. Retail Population Served:

267

6. Length of Mains LM:

1.50 miles

7. Total Retail Metered Connections - Active and Inactive:

89

8. Service Connections SC:

89

9. Service Connection Density:

59.33 connections per mile

10. Average Operating Pressure AOP:

75.00 psi

11. Volume Units of Measure:

Gallons

Input and Consumption

B. System Input Volume

12. Volume of Water Intake: 5,431,600 gallons

13. Volume Treated VT: 5,431,600 gallons

13a. Volume Treated Meter Accuracy VTMA: 99.40 %

13b. Corrected Volume Treated: 5,464,386 gallons

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14. Treated Purchased TP:	<u>0</u>	gallons
14a. Treated Purchased Meter Accuracy TPMA:	<u>0.00</u>	%
14b. Corrected Treated Purchased:	<u>0</u>	gallons
15. Treated Sales (Wholesale) TS:	<u>0</u>	gallons
15a. Treated Sales Meter Accuracy TSMA:	<u>0.00</u>	%
15b. Corrected Treated Sales:	<u>0</u>	gallons
15c. Percent of Treated Sales Transported through the Treated Distribution System:	<u>0</u>	%
16. Total System Input Volume: Line 13b + Line 14b - Line 15b	<u>5,464,386</u>	gallons

**C. Authorized Consumption**

17. Billed Metered BMAC:	<u>4,826,200</u>	gallons
18. Billed Unmetered BUAC:	<u>0</u>	gallons
19. Unbilled Metered UMAC:	<u>0</u>	gallons
20. Unbilled Unmetered UUAC:	<u>35,000</u>	gallons
21. Total Authorized Consumption:	<u>4,861,200</u>	gallons

**D. Water Loss**

22. Water Loss: Line 16 - Line 21	<u>603,186</u>	gallons
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**E. Apparent Loss**

23. Customer Meter Accuracy CMA:	<u>98.00</u>	%
24. Customer Meter Accuracy Loss:	<u>98,494</u>	gallons
25. Systematic Data Handling Errors SDHE:	<u>12,066</u>	gallons
26. Unauthorized Consumption UC:	<u>12,066</u>	gallons
27. Total Apparent Loss:	<u>122,626</u>	gallons

**F. Real Loss**

28. Reported Breaks and Leaks:	<u>50,000</u>	gallons
29. Unreported Loss:	<u>430,560</u>	gallons
30. Total Real Loss: Line 28 + Line 29	<u>480,560</u>	gallons
31. Total Water Loss: Line 27 + Line 30	<u>603,186</u>	gallons
32. Non-Revenue Water: Line 31 + Line 19 + Line 20	<u>638,186</u>	gallons

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**Water Loss KPIs**

**G. Technical Performance Indicator for Apparent Loss**

33. Apparent Loss per Connection per Day: 3.77 gallons  
Line 27 / Line 8 / 365

**H. Technical Performance Indicators for Real Loss**

34. Total Real Loss: 480,560 gallons  
Line 30

35. Unavoidable Annual Real Loss (UARL): 0 gallons  
 $(5.41 * \text{Line 6} + (\text{Line 8} * 0.15)) * 365 * \text{Line 10}$

36. Infrastructure Leakage Index (ILI): 0.00 gallons  
Line 34 / Line 35

37. Real Loss per Connection per Day: 14.79 gallons  
Line 34 / Line 8 / 365

38. Real Loss per Mile per Day: 0.00 gallons  
Line 34 / Line 6 / 365

**I. Technical Performance Indicator for Water Loss**

39. Total Water Loss per Connection per Day: 18.57 gallons  
Line 22 / Line 8 / 365

**J. Financial Performance Indicators**

40. Total Apparent Loss: 122,626 gallons  
Line 27

41. Retail Price of Water RPW: 0.00250 \$ per gallon

42. Cost of Apparent Loss: \$307  
Line 40 x Line 41

43. Total Real Loss: 480,560 gallons  
Line 30

44. Variable Production Cost VPC: 0.001465 \$ per gallon

45. Cost of Real Loss: \$704  
Line 43 x Line 44

46. Total Cost of Water Loss: \$1,011  
Line 42 + Line 45

**K. Gallons per Capita per Day (GPCD) for Water Conservation Planning**

47. GPCD Input: 56  
Line 16 / Line 5 / 365

48. GPCD Loss: 6

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Line 31 / Line 5 / 365

**Comments**

<b>General Information:</b>
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<b>Input &amp; Consumption:</b>
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<b>Water Loss:</b>
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<b>Water Loss KPIs:</b>
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**Assessment Report**

Length of Mains LM =	8
Service Connections SC =	10
Average Operating Pressure AOP =	7
Volume Treated VT =	7
Volume Treated Meter Accuracy VTMA =	10
Treated Purchased TP =	0
Treated Purchased Meter Accuracy TPMA =	0
Treated Sales TS =	0
Treated Sales Meter Accuracy TSMA =	0
Billed Metered Authorized Consumption BMAC =	8
Billed Unmetered Authorized Consumption BUAC =	0
Unbilled Metered Authorized Consumption UMAC =	0
Unbilled Unmetered Authorized Consumption UUAC =	10
Customer Meter Accuracy CMA =	6
Systematic Data Handling Errors SDHE =	3
Unauthorized Consumption UC =	3
Retail Price of Water RPW =	5
Variable Production Cost VPC =	8

**Final Assessment Score =**

71

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**PRIORITY AREAS FOR ATTENTION TO IMPROVE DATA VALIDITY**

Based on the information provided, audit reliability can be most improved by addressing the following components:
