Certified Validation Report Template, Part A: Provided by Validator

Validator Provided

Audit Information:

Water System Name: City of Santa Ana

Public Water System Identification (PWSID)[1]: CA3010038

[1]List only 1 PWSID, which should match the PWSID on the FWAS Instructions Tab. For Special cases where multiple water systems are connected with permanent two-way interties, list those additional PWSIDs in the **Notes** below and describe the water distribution system(s) configuration.

PWSID and Water System Configuration Notes (Provided to Validator by Water System):
n/a

Audit Period: 07/2020-06/2021

Validation Date: 11/18/2021

Sufficient Supporting Documents Provided: Yes

Validation Findings & Confirmation Statement:

Key Audit Metrics:

Data Validity Score: 68 Data Validity Band (Level): III

ILI: .99 Real Loss (gal/con/day): 16.24 Apparent Loss (gal/con/day): 12.84

Non-revenue water as percent of cost of operating system: 2.4

Certification Statement by Validator:

This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.

All recommendations on volume derivation and Data Validity Grades were incorporated into the water audit. ☒

If not, rejected recommendations are included here:

Validator Information:

Water Audit Validator: Rachel Davis, Qualifications: Water Audit Validator Certificate issued by the CA-NV Section of the AWWA

Municipal Water District of Orange County

Certified Validation Report Template, Part B: Provided by Utility

Utility Provided

Water System Name: City of Santa Ana

Public Water System Identification (PWSID)[2]: CA3010038

[2]List only 1 PWSID, which should match the PWSID on the FWAS Instructions Tab. For Special cases where multiple water systems are connected with permanent two-way interties, those additional PWSIDs should have been listed in the Notes section on Page 1 by the Validator.

Water Audit & Water Loss Improvement Steps:

1. **Steps Taken**: *Water System to identify steps taken* ***in the preceding 3 years*** *to increase data validity, reduce real loss, and reduce apparent loss as informed by the annual validated water audit:* In the past three years, the City has replaced over 2,000 faulty, high-use or aged water meters to more accurately measure water consumption. Additionally, staff has investigated over 1,750 calls for water meter leaks and replaced over 750 meter valves/curb stops/angle stops. City staff continues to replace targeted transmission and distribution mains that are known to have reliability issues or have exceeded their useful life.

2. **Planned Steps (OPTIONAL):** If your audit reflects *negative real losses or the cost of non-revenue water is greater than 100% of the operating costs (issues for which your audit will not meet code requirements), you will be asked what steps you are planning in the coming year to address these issues. If you already know what steps you plan to take, you may list them here. If not, please prepare a response within 90 days (23 CCR Section 638.6[a]).*

3. Certification Statement by Utility Executive:

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, *Water Audit and Loss Control Programs, Manual M36, Fourth Edition* and in the Free Water Audit Software version 5.

Executive Name (Print)	Executive Position	Signature	Date
Cesar Barrera, P.E.	Public Works Deputy Director, Water Resources Manager		12/8/2021