Irrigation Efficiency Evaluation Reports

The two main types of irrigation efficiency evaluations are irrigation assessments and irrigation audits. An assessment is a more general overview to identify obvious improvements without detailed system testing. An audit is a more detailed evaluation of an existing system that includes performance testing to quantify water use efficiency.

An irrigation assessment, at the minimum, is required for multi-family and commercial properties to receive additional rebates for eligible equipment purchases. Requested equipment rebates should align with the recommendations from the evaluation report. An irrigation evaluation is recommended but not required for single-family residential rebates. The evaluation report must be submitted with the rebate application form and must include the requirements described below.

Irrigation Assessment Report Requirements

1. Property and System Information
    - Property address and owner
    - Date of assessment
    - Name, company and certification of assessor
    - Irrigated area description (landscape type and square footage)
2. System Components Summary
    - Irrigation controller type, brand, and condition
    - Number of irrigation zones/stations
    - Type of emitters or sprinklers used per zone (e.g. fixed spray, rotor, drip)
    - Presence of rain or soil moisture sensors
3. Visual Observations
    - Noted leaks, breaks, or malfunctioning components
    - Evidence of runoff, overspray, or misting due to high pressure
    - Head-to-head coverage issues or spacing concerns
    - Visible clogged or missing nozzles/emitters
4. List of Corrective Actions
    - Suggested repairs (e.g. replace broken heads)
    - Suggested efficiency improvements (e.g. convert to drip, install pressure regulation, upgrade to smart controller)
5. Photos
    - Representative photos documenting major issues or areas of improvement

Additional Expectations from an Irrigation Audit Report

If you would like a more in-depth analysis opt for an Irrigation Audit, here are some aspects of an audit to expect in addition to what is included in an Irrigation Assessment.

1. System Components
    - Nozzle type and arc (where applicable)
    - Pressure readings (static and/or dynamic) at the point of connection or zone
2. Performance Testing Data
    - Distribution Uniformity (DU) test results for at least representative turf or large irrigated areas, including:
        i. Catch-cup test data with location layout diagram
        ii. Calculated DU or SC (Scheduling Coefficient) for each tested zone
    - Precipitation rate calculation for tested zones
3. Controller Scheduling Review
    - Current irrigation schedule per zone (run times, days per week, cycle/soak)
    - Evaluation of schedule appropriateness based on plant type, soil type, season, and local ET
4. Detailed List of Corrective Actions
    - Repairs needed to correct malfunctioning components
    - System adjustments to improve uniformity and efficiency (e.g. pressure regulation, nozzle changes, correcting head spacing)
    - Scheduling recommendations to reduce water use while meeting landscape needs
    - Recommended retrofits or upgrades for improved performance (e.g. smart controller, drip conversion, pressure regulating heads)
    - A cost vs water saving benefit to determine which corrections should be done first
5. Photos
    - Photos demonstrating testing setup, problem areas, and recommended improvements

Summary Table Comparing Irrigation Assessment and Audits

Requirement	Assessment Report	Audit Report
Property info	Yes	Yes
System summary	Basic	Detailed (includes pressure)
Visual observations	Yes	Yes
Performance testing	No	Yes (catch can DU test)
Scheduling review	Optional	Yes
Recommendations	Basic	Detailed with scheduling
Photos	Yes	Yes
Certification statement	Yes	Yes