



Water Efficient Landscaping Standards (WELS)

3rd Party Irrigation Audit

Updated June 1, 2025

Property Address: _____

Irrigation Designer: _____

Irrigation Installer: _____

Name of Certified Auditor, with Credentials _____

Date Audit Performed: _____ Weather Conditions: _____

WELS Section 6.1.1: All landscape irrigation audits shall be conducted by a third-party Certified Landscape Irrigation Auditor. Irrigation audits shall not be conducted by the person or company who designed or installed the irrigation system.

(WELS Section 6.1.3)

a. INSPECTION DETAILS

- i. Summary Description of Irrigation System Inspection: (*Note: All zones should be operated to confirm appropriate area of application*).

- ii. Other items to look for (check box if needs to be addressed):

- high pressure/low pressure
- valve malfunction
- broken pipes
- unmatched PR
- mixed emission devices
- no head-to-head coverage
- uneven spacing
- excessive overspray
- tilted heads
- broken or missing nozzles
- blocked spray
- leaky seals
- clogged nozzles
- low head drainage
- heads not rotating

_____ Initials of Auditor

b. SYSTEM TEST with DISTRIBUTION UNIFORMITY (DU)

PLEASE USE THE CHART ON PAGE 4 TO SHOW CATCH CAN/DU TEST CALCULATIONS

i. All Turf Areas

Turf Zone	DU	Notes

Note: The auditor may elect to perform DU tests on one-third to one-half of the turf zones to get an average value that could be applied to zones that are identical i.e., same sprinkler head, nozzle, spacing, and operating pressure.

ii. At least 10% of any other overhead zones or well-represented collection of zones

Overhead Zone	DU	Notes

Note: This should be performed on any other overhead irrigation areas.

iii. Drip Irrigation System Testing for at least 50% of drip zones: (Note: it's not practical to test the DU of drip irrigation systems therefore testing should focus on site evaluation, pressure testing, and correct installation. If there is more than 20% variance, address the issues in the SYSTEM TUNE-UP/PUNCH LIST RECOMMENDATIONS section below.)

Drip Zone	Pressure at Beginning of Zone	Pressure at End of Zone	Variance between Zones	Notes

iv. Is the installation of drip zones correct? Spacing, depth, emitters, etc.

c. OVERSPRAY/RUNOFF REPORT:

- d. **IRRIGATION SCHEDULE:** Examination of an irrigation schedule, or preparation of one as necessary, including irrigation controller's configuration with Precipitation Rates, Soil Types, Plant Factors, Slope, Exposure, and Other Factors necessary for accurate controller programming: (*Note: The Irrigation Schedule may be submitted in spreadsheet format.*)

- e. **SYSTEM TUNE-UP/PUNCH LIST RECOMMENDATIONS** (in addition to any other recommendations, missing components required by the WELS such as flow sensors, lockable master valve, backflow prevention devices, rain sensors, etc. should be listed here) :

The Applicant will work with the Auditor to comply with the recommendations above. The Auditor must sign off on the Punch List to meet the Standards. (WELS Section 6.1.4)

WATER BUDGET CALCULATIONS ADJUSTMENT

- Average Irrigation Water Need on **WELS- approved** plans: ____ gal/season/SF
- Average Irrigation Water Need **at time of irrigation audit**: ____ gal/season/SF

Note: An as-built water budget worksheet is required for an inspection by City of Aspen Utilities Department.

Auditor's signature _____ Date: _____

Initials of Auditor _____

Catch Can/DU Test Calculation Sheet

Zone Tested: _____

Catch Can Number	Catch Can Volume	Low Quarter
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
SUM		
AVERAGE		

Instructions

- Enter catch can volume (ml) in the second column of the table.
- Enter the depth in inches for cans with straight sides and a flat bottom.
- Identify catch cans in the low quarter and enter the volume (or depth) of these cans in the third column of the table.
- Enter the sum of each column at the bottom of the table.
- Divide the sum of each column by the number of cans in the column to calculate the average for all cans and for the low quarter.
- DU_{LQ} : Divide the average catch volume of the low quarter by the average for all cans. Round to two decimal points.
- PR_{NET} : Use the correct formula depending on whether using volume in ml or depth in inches or centimeters. Round to two decimal points.

Catch Can Throat Area: _____ sq ft

Test Run Time: _____ mins

DU_{LQ} Calculation

$$DU_{LQ} = \frac{\text{Average catch volume of low Quarter}}{\text{Average catch volume of all cans}} = \frac{\boxed{}}{\boxed{}} = \underline{\quad}$$

PR_{NET} Calculation using volume in mL

$$PR_{NET} = \frac{\text{Average Volume of all cans} \times 3.66}{\text{Test run time} \times \text{Catch Can throat area}} = \underline{\quad} \text{ in/hr}$$

PR_{NET} Calculation using depth in inches or cm

$$PR_{NET} = \frac{\text{Average Depth of all cans} \times 60}{\text{Test run time}} = \underline{\quad} \text{ in/hr}$$

Initials of Auditor _____