

Irrigation Audit Checklist

A. Project & Auditor Information

Inspection Date _____
Project Name _____
Project Address _____
Application Number _____
Irrigation Auditor Name _____
Irrigation Auditor Company _____
Irrigation Auditor Address _____
Irrigation Auditor Phone Number _____
Irrigation Auditor Email _____

Auditor Certified by EPA WaterSense program:

- Irrigation Association
- QWEL
- CLCA WMCP
- G3 Watershed Wise Professional
- Other EPA Certified _____

Note: For large projects or projects with multiple landscape installations (i.e. production home developments), an auditing rate of 1 in 7 lots or approximately 15% satisfies the audit requirement.

Meter Type & Location	Static Water Pressure	Manual Shutoff
<input type="checkbox"/> Customer Service Water Meter <input type="checkbox"/> Submeter	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
Location _____	PSI	

Backflow Prevention	Master Valve	Flow Sensor
RP AVB Anti-siphon DCVA	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Location _____	Location _____	Location _____
Location _____		Connected to Master Valve? <input type="checkbox"/> Yes <input type="checkbox"/> No

Pressure Reducing Valve	Controller Type	Controller set to Establishment
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
Location _____	WBIC Soil	
Mulch <input type="checkbox"/> Yes <input type="checkbox"/> No	Total Number of Active Stations	Irrigation Schedule Posted <input type="checkbox"/> Yes <input type="checkbox"/> No
	Hyrdozone Map kept with controller <input type="checkbox"/> Yes <input type="checkbox"/> No	

Controller Station No.	SQ. FT.	Plant Type	Sun Exposure	Slope	Soil Type	Irrigation Method	Zone Pressure	Water Type
							1. 2. 3.	
							1. 2. 3.	
							1. 2. 3.	
							1. 2. 3.	
							1. 2. 3.	
							1. 2. 3.	

Plant Type: Turf (T), High (H), Medium (M), Low (L), VL (VL)
 Sun Exposure: Full (F), Mostly (M), Partial Sun (PS), Partial Shade (PSH), Full Shade (FSH), Mostly Shade (MSH)
 Slope: None (N), Steep (S), Gentle (G)
 Soil Type: Clay (C), Clay/Loam (CL), Loam (L), Sandy (S), Sandy/loam (SL)
 Irrigation Method: Drip (D), Spray (S), Rotating Nozzles (RN), Rotor (R), Bubbler (B), Microspray (M)
 Water Type: Potable (P), Recycled (R), Graywater (G), Stormwater (S)

Note: Zone Pressure taken at beginning (1), middle (2) and end (3) of audit
 Note: Microspray does not comply with MWEL0

B. Audit Report

Table 1 B. Audit Report

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	1. Separate landscape customer service water meter or private submeter has been installed as applicable:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	a. Non-residential projects: Greater than 1,000 sf landscape area	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Residential projects: Greater than 5,000 sf landscape area	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2. The irrigation audit report includes:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	a. System inspection	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Inspect for leaks	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. System tune-up	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d. Test the operating pressure of the irrigation system	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e. Test to determine distribution uniformity	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f. Test to determine precipitation rate of representative overhead irrigation valves	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	g. Confirm matched precipitation rates on valves with sprinkler heads, rotors and other emission devices	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	h. Report of any overspray or broken irrigation equipment	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	i. Report of overspray or run off that causes overland flow	<input type="checkbox"/>	<input type="checkbox"/>

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	j. Written recommendations to improve performance of the irrigation system	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	k. Preparation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and any other factors necessary for accurate programming	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	l. Other:	<input type="checkbox"/>	<input type="checkbox"/>

C. Irrigation Equipment

Table 2 C. Irrigation Equipment

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	1. Irrigation equipment is installed (location, type and size) as shown in the approved plans:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	a. Automatic controller is ET-based or soil moisture-based and includes:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	I. Irrigation scheduling parameters	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	II. Hydrozone map	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Sensors installed include rain, frost (if necessary) and wind sensors (if necessary)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Point of connection includes:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	I. Backflow prevention devices (if necessary)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	II. Manual shut-off valve (gate, ball, butterfly valve)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	III. Master shut-off valve	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	IV. Flow sensor for landscapes over 5,000 sf only	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d. Valves (station)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	I. Flow rate (gpm)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	II. Application rates (in/hr)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	III. Design operating pressure:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e. If static pressure is above or below required dynamic pressure of the system, pressure-regulating devices are installed	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2. Main and lateral lines	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	3. Sprinklers	<input type="checkbox"/>	<input type="checkbox"/>

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	a. No spray heads within 24 inches of non-permeable surface	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Sprinkler heads and other emission devices have matched precipitation rates	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Swing joints or other riser protection provided in high traffic areas and areas near hardscape	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	4. Drip	<input type="checkbox"/>	<input type="checkbox"/>
c	a. Emitter type and model match plan	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Emitter location around plants	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Operating pressure checked	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d. Valve matches plan, specifications, height, flow rate	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e. Valve box properly set and identified	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f. Filter installed and serviceable	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	g. Pressure regulator installed	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	h. Wire connections meet specifications	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	i. Proper pipe type and size installed	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	j. Piping is anchored or buried as per specifications	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	k. Flush plugs are installed	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	l. Drip system activated by controller	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	m. Piping is anchored or buried as per specifications	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	5. Low volume irrigation (drip, drip lines, and bubblers) is used in mulched planting areas (no spray irrigation) and in areas less than 10 feet wide	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	6. Slopes greater than 25% are irrigated with an application rate not exceeding 0.75 inches per hour	<input type="checkbox"/>	<input type="checkbox"/>

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	7. Runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas are prevented	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	8. Check valves or anti-drain valves are installed to prevent low head drainage	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	9. Pressure regulating devices are used if the static water pressure at the connection of the public water system does not match the water pressure needs of the irrigation system	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	10. Check irrigation legend and manufacturer's online data that sprinkler heads and other emission devices have matched precipitation rates	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	11. Confirm that swing joints or other riser protection are provided in high traffic areas and areas near hardscape	<input type="checkbox"/>	<input type="checkbox"/>

D. Hydrozones*Table 3 D. Hydrozones*

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	1. Match on the landscape plan and irrigation plan	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2. Are irrigated by valves with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	3. Trees are on separate valves	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	4. Biotreatment areas are on separate valves	<input type="checkbox"/>	<input type="checkbox"/>

E. Water Features*Table 4 E. Water Features*

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	1. Use recirculating water systems	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2. Use recycled water if available	<input type="checkbox"/>	<input type="checkbox"/>

F. Irrigation Schedules

Table 5 F. Irrigation Schedules

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	1. Irrigation schedules have been developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	a. Irrigation scheduling is regulated by automatic irrigation controllers	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Overhead irrigation is scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2. The irrigation schedules have been developed to include the parameters used to set the automatic controller and are submitted for each of the following:	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	a. Plant establishment period	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	b. Established landscape	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Temporarily irrigated areas	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	3. Each irrigation schedule includes the following that apply for each station (valve):	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	a. Irrigation interval (days between irrigation)	<input type="checkbox"/>	<input type="checkbox"/>

Applicant: Write the Plan Sheet Number	Item: Description of Document	Reviewer: Pass	Reviewer: Fail/NA
<input type="checkbox"/>	b. Irrigation run times (hours or minutes per irrigation event to avoid runoff)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	c. Number of cycle starts required for each irrigation event to avoid runoff	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	d. Amount of applied water scheduled to be applied on a monthly basis	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	e. Application rate setting	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	f. Root depth setting	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	g. Plant type setting	<input type="checkbox"/>	<input type="checkbox"/>
c	h. Soil type	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	i. Slope factor setting	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	j. Shade factor setting	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	k. Irrigation uniformity or efficiency setting	<input type="checkbox"/>	<input type="checkbox"/>

G. Reviewer Comments