



Table of Contents

Background of Auditor Program.....	vii	Run Stations	49	
Preface.....	vii	Worksheets for Sprinkler Zones 1–5 for Example Residence	53	
Introduction to Auditing	viii	Chapter 4 — Calculate System Performance		
Section 1: Auditing Procedures				
Chapter 1 — Irrigation System and Site Inspection		Performance Calculations	58	
The Steps of Irrigation Performance Auditing.....	2	Distribution Uniformity	58	
Getting Started	2	Application Efficiency	59	
System Inspection.....	3	Lower Quarter Distribution Uniformity	60	
System Pressure.....	9	Expected Low Quarter Distribution Uniformity	61	
Site Inspection.....	12	Scheduling Multiplier	61	
Practice Questions	17	Precipitation Rate	62	
Forms and Worksheets	18	Gross or Theoretical Precipitation Rate	63	
Chapter 2 — Irrigation System Tune-up		Precipitation Rate for Irregular-Shaped Areas.....	63	
System Tune-Up	20	Precipitation Rate Equations.....	64	
Sprinkler System Review.....	23	Net Precipitation Rate	65	
Adjusting Sprinkler Heads	24	Practice Questions	67	
Example Site Inspection and System Review	25	Example Audit and Practice Problem.....	69	
Chapter 3 — System Test — Field Procedures		Chapter 5 — Report Findings..... 91		
Guidelines for Audits	32	Section 2: Scheduling		
Recommended Audit Guidelines	32	Chapter 6 — Simple Schedule		
Auditing Equipment	34	Types of Irrigation Schedules	92	
Data Recording Worksheets	35	Calculating a Simple Schedule	93	
Preparing for Field Work.....	39	Practice Questions	97	
Verify Test Conditions	39	Chapter 7 — Designated Watering Days		
Identify Test Areas	41	Plant Water Requirement.....	103	
Linking	42	Weather and Plants	103	
Test Set-up.....	42	Evapotranspiration	104	
Catch Devices (Catch Cans)	43	Sprinkler Performance.....	112	
		Scheduling Parameters.....	113	



Landscape Irrigation Auditor

3rd Edition

ISBN-13: 978-1-935324-13-3

ISBN-10: 1-935324-13-6

Developed
for the



February 2013

Table of Contents, cont.

Chapter 7, cont.

Cycle and Soak	116
Variations on Watering Restrictions	119
Practice Questions	121

Chapter 8 — Managing Soil Moisture

Soil Moisture.....	129
Infiltration Rate and Intake Rate.....	134
Percolation Rate and Deep Percolation.....	135
Practice Problems.....	137

Chapter 9 — Auditing and Scheduling

Drip Irrigation Systems

Drip Irrigation Auditing.....	140
Drip/Microirrigation System Equipment.....	143
Precipitation Rate Equations for Drip Irrigation...	147
Flow Test	148
Practice Problems.....	151

Appendix A — Soils	159
Appendix B — Reports	163
Appendix C — Scheduling.....	183
Appendix D — ET Sources.....	197
Appendix E — Auditor Catch Devices.....	201
Appendix F — Answers to Practice Problems	205
Appendix G — Blank Worksheets.....	217
Index.....	231