



**G3 Sustainable Landscape Certified Professional Path:
Intensive Seminar
Syllabus 2011**

Module #1: A SOD STORY

Module Overview: History and myths of the American turf grass phenomenon including overview of problems caused by current landscape practices relying upon turf grass. Participants will learn how to read their water bill and interpret the impact on it by the choices they've made in their landscape design. Participants explore the various actual costs of maintaining a turf grass-dominated landscape and the multitude of benefits derived from installing more climate-appropriate landscaping and Ocean-Friendly Gardens.

G3 Calc Toolkit: Calculations for determining landscape water use/savings by understanding ETo (CA AB1881 MAWA and ETWU), irrigation efficiency, and permeability factors.

Mandatory Prerequisite: G3 Core Concepts Workshop

G3 Takeaways: Strategies for reducing the environmental impact of maintaining turf grass and for ensuring the health of plant material used to replace turf grass will be discussed. Participants learn how to find ET data and use it in the necessary calculations of Water Budgeting, Designed Water Plan, and Actual Water Used in their landscapes. Alternatives to "standard" turf will be presented: native grasses, meadows, climate-appropriate plants and ground covers, as well as reuse of space. What works and doesn't in practical applications will be discussed by the group.

Module #2: WHERE HAS ALL THE GOOD SOIL GONE?

Module Overview: Insight provided on ways that current landscape practices destroy soil health. Participants will learn how to determine the condition and health of their site soil and how to effectively use professional biological soil testing facilities to develop a plan for remediation. A site-specific case study will be used to illustrate the various factors that commonly contribute to unhealthy/healthy soil conditions and their related effects on the success of the landscape. Participants also will learn how to determine, effectively communicate, and implement a course of action for rebuilding soil structure and health, and returning their site into a sponge of Living Soil.

G3 Calc Toolkit: Calculations for determining percolation and quantities of amendments required for remediation.

Recommended Prerequisite: Description of recent encounter with degraded soil (soil test results from laboratory are helpful, but not required); ***Teaming with Microbes: A Gardener's Guide to the Soil Food Web*** by Jeff Lowenfels and Wayne Lewis with Elaine Ingham.

G3 Takeaways: Recipes for remediating poor soil conditions using organic and inorganic materials and biological remediation with compost tea. Determining the larger environmental impact of soil remediation will be discussed, including testing the idea of not removing soil from a site. Case studies will be used to present viable solutions for restoring and maintaining overall landscape soil health, including “do not disturb” approaches.

Module #3: DESIGNED RIGHT IRRIGATION PRIMER (DRIP)

Module Overview: Landscape irrigation systems will be discussed and evaluated for their site-specific contributions to water waste/efficiency and overall health of the landscape. Participants will learn how to identify irrigation-related problems in the landscape and obtain clues to whether or not the irrigation system has been installed according to specifications and/or local building code guidelines. The soil/water/plant relationship will be discussed with the consideration of Living Soil and Zero Runoff. G3's DRIP philosophy allows designers to think about landscapes from irrigation designers' point of view, emphasizing various low-flow irrigation and water-saving techniques including using WUCOLS and Sunset zones to determine anticipated plant water usage and hydrozone design. State and local irrigation-related ordinances will be discussed and strategies for cost-effectively renovating existing irrigation systems will be explored by the group.

G3 Calc Toolkit: Calculations for determining efficient irrigation layout, format for gathering and crunching data on hydrozoning, precipitation rates, and

Recommended Prerequisite: Ability to read a water bill and calculate water use/savings using ETo.

G3 Takeaways: Strategies for determining and selling more water-efficient irrigation including hydrozoning and zero-runoff methods, climate-appropriate irrigation and no irrigation designs, and WBIC (Weather-based Irrigation Controller) installation. "Flash cards" will be used to teach participants how to identify irrigation components – the good, bad, and ugly!

Module #4: GO WITH THE FLOW – ZERO RUNOFF

Module Overview: History and insight into the grading practices typically employed in residential landscapes, and the resistance to changing the traditional direction of water flow on a property. Participants will learn how to map the permeability of their site and determine the quantity of water that is not captured by their landscape, as well as identify the sources of toxicity that need to be remediated before water flows off the property. The role of trees in the overall reduction of urban runoff will be discussed at length, as well as techniques for retaining rainwater on the property and eliminating all runoff, including the pros and cons of infiltration and grading.

G3 Calc Toolkit: Calculations for determining quantity and quality of runoff from permeable and impermeable areas of the landscape, and the required size of BMPs (Best Management Practices) needed to remediate the runoff generated, as well as the cost/benefit of such BMPs.

Recommended Prerequisite: Understanding of Living Soil; *Rainwater Harvesting for Drylands and Beyond (vol. 1 –3)*, by Brad Lancaster.

G3 Takeaways: Ideas for creative restorative grading practices including boosting permeable retention through tree planting and compost teas, constructing dry creek beds and vernal pools, employing rain chains, slow beds, fast streams, and vegetative swales, and contouring for water reclamation.

Module #5: SINGING IN THE RAIN – CATCHMENT AND REUSE

Module Overview: History of catchment techniques used to ensure or extend water supplies. Case studies will be utilized to introduce the group to a wide variety of technologies and systems available for catchment and reuse, including subterranean cisterns, gray water systems, surface storage, and green roofs. Participants will explore the role of the urban forest and restored native habitat in the development of large and small-scale systems for water reclamation and reuse, as well as the role of State and local public policy makers in promoting or discouraging catchment and reuse systems.

G3 Calc Toolkit: Calculations for determining the materials necessary for constructing the catchment systems and for soil displacement caused by subterranean installations as well as the cost/benefit of installing such systems.

Recommended Prerequisite: Ability to calculate quantity and quality of runoff from permeable and impermeable areas of the landscape and determine percolation and quantities of amendments required for remediation. Ability to read a water bill, calculate water use/savings using ETo, and determine water pressure and flow through the various elements of an irrigation system.

G3 Takeaways: Techniques for determining and communicating the value of the various catchment and reuse systems, including local resources for the materials and knowledgeable labor necessary for construction and maintenance of these systems. Case studies will be used to illustrate the necessity of integrating catchment and reuse systems into other sustainable landscape practices including water conservation, soil restoration, and climate-appropriate, habitat-building and native planting.

Module #6: DESIGN CHARRETTE

Module Overview: Discussion of the central role of the “Sense of Place” in sustainable design and the development of viable restored or adapted habitats. Participants will be asked to work in teams to create Conceptual Plans for the Front Entry of the Doubletree Hotel Berkeley Marina – 200 Marina Blvd. Berkeley, CA. These plans will be pitched to the group at the closing dinner on Friday evening.

G3 Calc Toolkit: G3 Research Protocols for determining your “Sense of Place.”

Recommended Prerequisite: Three (3) Google Images pictures including (1) map of specific site, (2) map of specific site relative to nearest large street, and (3) map of specific site relative to nearest large body of water (bay or ocean). ***California Native Plants for the Garden***, by Carol Bornstein, David Fross, and Bart O’Brien.

G3 Takeaways: The G3LA Research Protocols are specific tools for determining and effectively communicating your “Sense of Place,” and underpin all strategies and techniques for developing a more sustainable landscape design. These Protocols utilize the five senses to help designers and clients embrace the incalculable value of the sustainable landscape paradigm shift.

Mini-Module: MAKING THE MOST OF YOUR G3 CERTIFICATION

Module Overview: Two-hour presentation about positioning your company and yourself as an expert, once you successfully complete the G3 Certification Examination. Discussion about how to work with both your Berkeley G3 Cohort and the wider group of G3 Associates in making changes in your community.