

Irrigating Your Landscape Based on a Water Budget

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Excessive watering (watering more than what is required by the existing landscape) is like throwing money down the drain. It does not benefit the plant nor your budget. With today's rising cost of water and the need for everyone to become "water wise", property managers need to maintain a level of irrigation savvy for their clients.

Understanding the components of effective irrigation management

Water management—the art of maintaining an aesthetically pleasing landscape while efficiently managing water resources—incorporates both science and skill in producing a desired outcome. To help reach the desired outcome, a skilled water manager will utilize several key elements for the best management practices.

- I. **Landscape Audit:** Know your property. By understanding your landscape and water requirements you can create a water budget based on existing landscape parameters.
- II. **Irrigation Audit:** Know your irrigation system by taking inventory and mapping your system. A well-organized irrigation audit will set the stage for creating an organized Management Plan that is both proactive and sustainable - which helps to successfully meet the desired goals set forth by the collective parties involved.
- III. **Create a Management Plan:** A good management plan sets a defined course of action, making it possible to achieve the end goals. By working on an agreed upon management plan, the irrigation manager can start working on meeting the goals and strategically move toward sustainable irrigation management practices.
- IV. **Maintenance is Necessary:** Proactive irrigation maintenance ensures that a system is operating at its peak performance on an ongoing basis and allows for upgrades to be made efficiently. A property's irrigation system that is kept in good working order will aid in reduced water costs.

While the above elements are all essential, the landscape audit deserves a bit of attention. Let's discuss.

What information does the landscape audit provide?

The landscape audit gives the end user valuable information in the form of water requirements for a given property. All plants have a water requirement value associated with them. For water budgeting purposes we can typically categorize the vegetation areas on a property into three main water requirement categories: turf, shrub and perennial beds and annuals. By calculating the given area of each of these categories on a property, we are able to identify what the water requirements would be for a given property. The first benefit comes as useful knowledge. By identifying a

targeted water budget number, one can calculate how much room there is for improvement and start to formulate a plan to reach that number. In other words, you now can help form expectations of landscape maintenance and the irrigation management contractors. Furthermore, if you have previously separated your irrigation management from your landscape maintenance budget, you can now quantify how well your irrigation manager has been doing his job and at what cost to your client.

The second, and arguably the most important factor in developing a water budget based on a landscape audit, is the information from which the water utilities billing structure will be based on in the not too distant future.

Water entities will most likely be moving toward some form of budget based billing. What is budget based billing and how might it work? The simplest way to explain this type of billing is the following description: A water entity would first identify a property's seasonal water budget based on a landscape audit, then based on that information, bill at different rates. One rate for water within the budget and additional rates for water used beyond the recommended budget, essentially penalizing a property for the excess use of water.

Examples are:

- Calculated indoor water use would be billed at Tier 1 rates, recommended outdoor use based on landscape as Tier 2 rates, then everything over that is Tier 3 or higher. (Higher billing rates for exceeding recommended use)
- A second model would allow for indoor and recommended outdoor use, during summer months, to be billed at Tier 1 rates, then all water use beyond the recommended amounts fall into higher tier rates. (Higher billing rates for exceeding recommended use)

The models above help show the concept of billing based on a water budget. However, there will always be different ways of billing, utilizing the same information. In other words, the data used to identify landscape water budgets will remain the same no matter how the billing is structured and calculated, therefore, the landscape audit is essential in developing a water budget to manage. Moving forward, the goal of the irrigation manager will be to maintain the aesthetics of the property while staying inside the recommended water budget, a goal that can be very difficult to reach in some cases. By setting a goal, you have something to accomplish.

In summary, water management incorporates both science and skill in producing a desired outcome - an outcome that can be both beneficial to your budget and to the aesthetics of a property. ⬆

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