

**Inside: David Tisherman on Initial Client Meetings**

# WATER SHAPES

**Design • Engineering • Construction**

Volume 9  
Number 2  
February 2007  
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**Using reflections as a  
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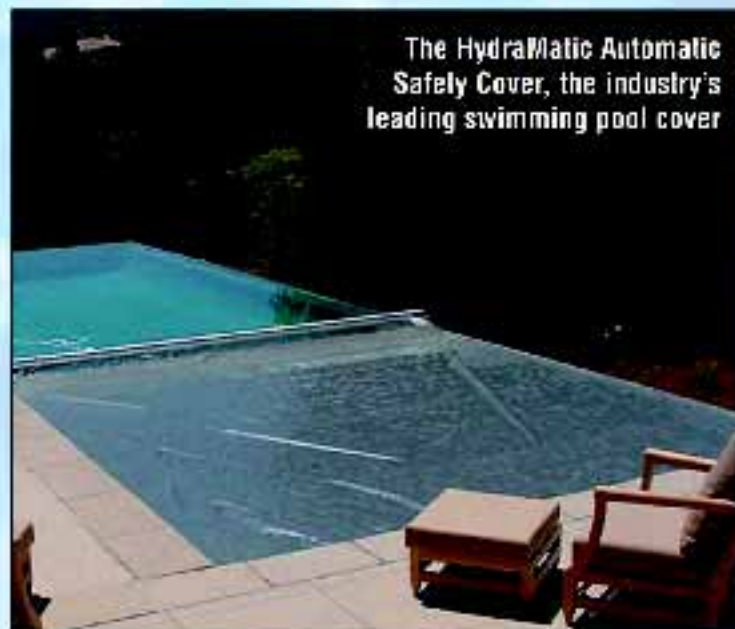


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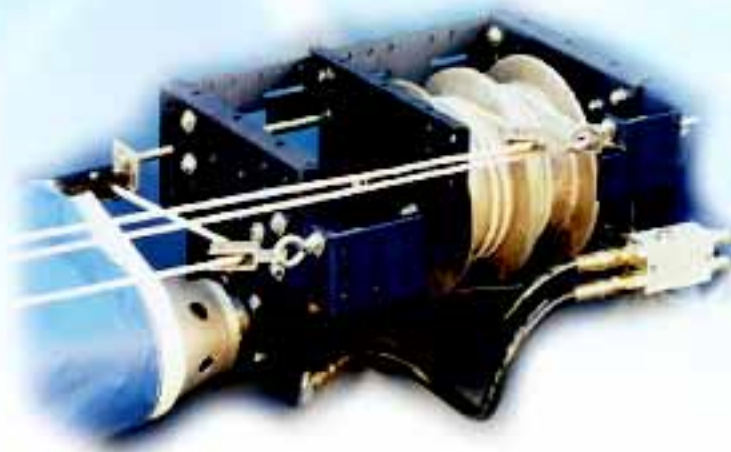
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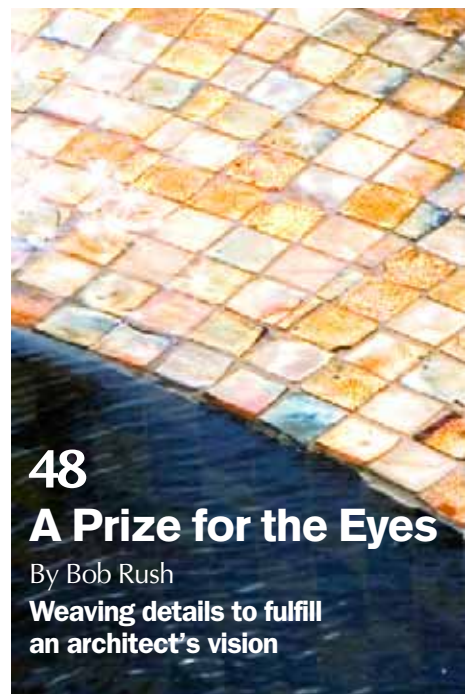
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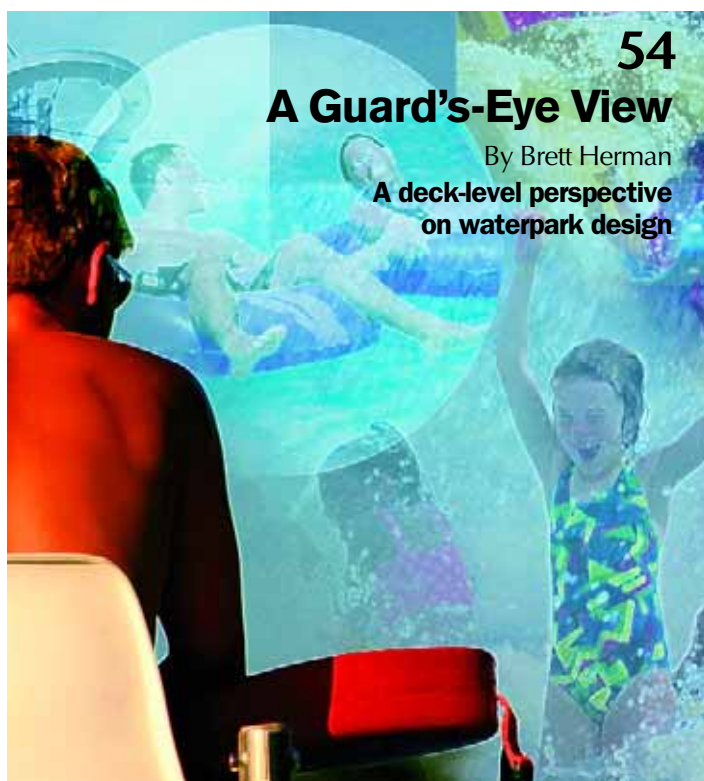
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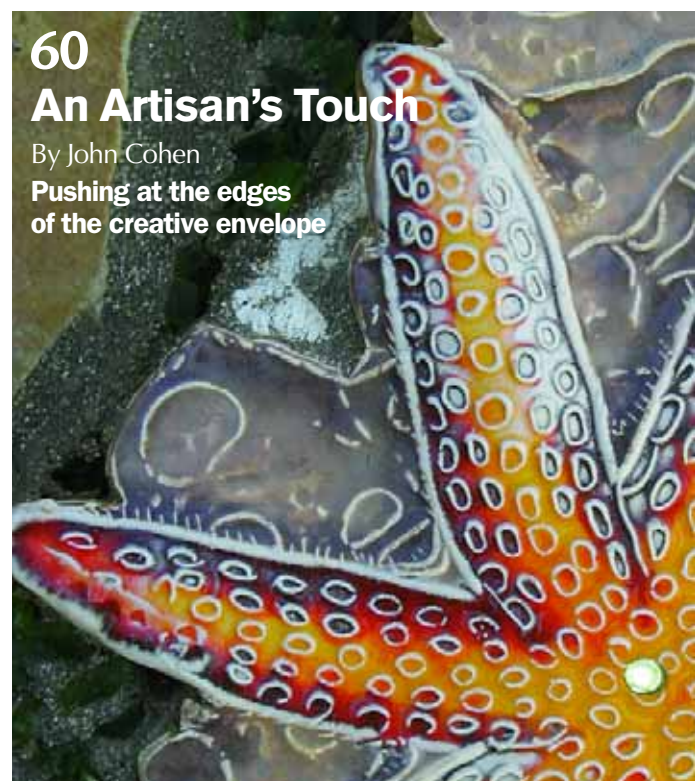


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Photo by Anthony Archer Wills, Copake Falls, N.Y.

WATERSHAPES (ISSN 1522-6581) is published monthly by McCloskey Communications, Inc. 6119 Lockhurst Dr., Woodland Hills, CA 91367. A controlled circulation publication, *WaterShapes* is distributed without charge to qualified subscribers. Non-qualified subscription rates in the U.S., \$30 per year; Canada and Mexico \$48 per year; all other countries \$64 per year, payable in U.S. funds. Single copies \$10 per issue in the U.S. and Canada. All other countries \$15 per issue. Subscription requests must include name, job title, business location, address information and a signature and date.

**POSTMASTER: Send address changes to *WaterShapes*, P.O. Box 1216, Lowell, MA 01853-9930.**

Periodicals postage rates paid at Woodland Hills, CA 91365 and additional mailing offices.

# From the Ground Up

Anyone who's a parent knows that taking pride in their children's accomplishments and personal growth is one of life's greatest joys.

In my case, that pleasure has been one of the defining factors of my existence for the past twenty-plus years – ever since the day my son Brett Herman was born and was joined four years later by his sister, Amanda. I know that I'm right in line with other parents who regard their children as the lights of their lives.

I bring this up here for a special reason, in that Brett is on our roster of contributing authors for this month's edition of *WaterShapes*.

As I've mentioned in this space before, Brett has spent much of his young life participating in aquatic sports, particularly swimming and water polo. He's always loved the water, so much so that my friends used to call him "Aqua Boy."

Brett's now a junior in college and, more significant, has three full years working as a lifeguard under his belt, the last two at Raging Waters, a huge waterpark in San Dimas, Calif., where he is now one of the lead lifeguards. It also bears mentioning that he is an aspiring writer, studying English at California State University Long Beach.

Being the enterprising and ambitious lad that he is, last summer he mentioned an idea he had for an article for *WaterShapes*.

Brett's a smart guy, and I wasn't at all surprised his idea had merit: Having grappled for years with the grind of his sometimes 50-hour-a-week spring and summer job, he proposed writing about waterpark design from the practical perspective of a lifeguard and user. Based on his experience, he explained, the ground-level view of lifeguards is typically not factored into the configuration of these facilities – but it really should be.

After several months of discussion and refinement, I'm proud to point to "A Guard's-Eye View" (page 54), my son's first foray into the world of professional writing.

It's important to note that the views he expresses are entirely his own and do not reflect the dictates of health departments or any other waterpark-governing body. Even so, what Brett offers here is a rich depiction of the sorts of challenges lifeguards face in these settings and how the work of watershape professionals in designing, engineering and building these large interactive systems influences what happens on the ground on a daily basis.

For personal reasons, it gives me great pleasure to publish this article: It's a bit of nepotism in which I'm more than happy to participate.

For much more significant professional reasons, however, I'm confident that those of you who work on waterpark environments as well as any of you who have ever designed an interactive waterfeature in a public space will find his perspective to be eye-opening, instructive and potentially quite helpful.



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**Anthony Archer Wills** is a landscape artist, master watergardener and author based in Copake Falls, N.Y. Growing up close to a lake on his parents' farm in southern England, he was raised with a deep appreciation for water and nature – a respect he developed further at Summerfield's School, a campus abundant in springs, streams and ponds. He began his own aquatic nursery and pond-construction business in the early 1960s, work that resulted in the development of new approaches to the construction of ponds and streams using concrete and flexible liners. The Agricultural Training Board and British Association of Landscape Industries subsequently invited him to train landscape companies in techniques that are now included in textbooks and used throughout the world. Archer Wills tackles projects around the world and has taught regularly at Chelsea Physic

Garden, Inchbald School of Design, Plumpton College and Kew Gardens. He has also lectured at the New York Botanical Garden and at the universities of Miami, Cambridge, York and Durham as well as for the Association of Professional Landscape Designers and the Philosophical Society. He is associated with Genesis 3's programs at the AQUA Show..

**Bob Rush** is owner and president of Arcadia Pools & Spas in Arcadia, Calif. The firm was founded in 1948 by Rush's father, Frank Rush, a pioneering member of Southern California's swimming pool construction industry and one of the area's first members of what was then the National Swimming Pool Institute. Rush's brothers Leslie and Bud took over the business when their father retired in 1985, but they eventually handed the reins over to their



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brother Bob. Rush attended Arizona State University, earning a degree in business administration in 1965. Today, his company focuses primarily on upper mid-range and high-end custom residential pools and spas in the San Gabriel Valley.

**Brett Herman** is a lead lifeguard at Raging Waters in San Dimas, Calif., the largest waterpark in the state and one of the best-attended facilities of its kind in the entire United States. He was a competitive swimmer and water polo player throughout his high school years, garnering several awards and honors for both athletic and academic excellence. He has been passionate about aquatic sports his entire life, an interest that continues to this day. Herman is the son of *WaterShapes*' editor Eric Herman and is a junior at California

State University Long Beach, where he's studying English literature.

**John Cohen** is owner and founder of Christmas Star, a watershaping and landscape-design firm based in Topanga, Calif. Cohen's career began when he was a child, working with his father planting trees and installing landscapes for upscale properties and public spaces in southern California. He founded his own firm in 1975, which adopted its current name in the early '80s. Mostly self-taught, Cohen also studied Chinese gardening in the mid-'70s at UCLA and has been an informal student of visual and performing arts throughout his life. His projects include highly stylized and distinctive watershapes and landscape compositions for upscale clients throughout southern and central California.



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By Brian Van Bower

# Around, Over and Under



It's a given that human beings enjoy being near water. That's why waterfront property generally comes at a premium and beaches are a favored destination for those who live inland. Quite frankly, it's also why the watershaping industry exists: Even if there isn't necessarily an overwhelming desire to get wet, the desire for proximity to water is almost universal.

This built-in need to be close to water is, I believe, resulting in an exciting trend that seems to be taking hold and is in some cases redefining the role that water plays in the environment: More and more often, we designers are being asked to create watershapes that are either integrated into (or immediately adjacent to) interior living spaces. Across a range of styles, people are finding increasingly innovative ways to put themselves on the water, next to it, over it and even underneath it.

These designs represent a significant departure from the longstanding approach in which pools and other bodies of water have essentially been banished from up-close areas. Just the opposite is now often the case, with clients wanting to be as close to the water as physically possible.

This trend has resulted in revolutionary creativity in the way we are exploring cantilevered decks, stepping pads over water surfaces, bridges and panels that bring views of water directly into homes.

More and more often, we designers are being asked to create watershapes that are either integrated into (or immediately adjacent to) interior living spaces.

## entertaining solutions

Personally, I'm thrilled by this concept because it takes the art of watershaping to a place where the water becomes even more a part of my clients' daily lives. With these designs, the way I see it is that they will interact with the water far more frequently and enjoy a greater sense of return on their investments. They don't just own watershapes and visit them occasionally: They actually *live* with them.

At root, I see this as a natural evolutionary step in watershape design. For a long time, after all, clients have been craving outdoor entertainment areas directly adjacent to their swimming pools. That's why swim-up bars and outdoor kitchens and Tikki bars and poolside dining areas have become so popular: It's always great fun to entertain or relax near the water's edge, and clients want more of that experience, not less.

This notion of proximity is something we've worked with for a while; the difference now is that water is becoming part of the home's architecture, bringing the benefits of aquatic adjacency to people even when they're not outdoors.

I'm always excited when asked to work on projects moving in this general direction. Through the last several months, in fact, we've worked with clients on a number of these watershapes, and in many cases they've been among the most beautiful and dynamic of all the designs we've ever generated.

The first example I'll share involves a project we did with Clemens Bruns Schaub Architects & Associates of Vero Beach, Fla. The project was for the brother of one of the principles: He wanted to create exterior views where none really existed.

In this case, we designed a watershape that wraps around the house and runs directly alongside two primary living areas. The floors appear to cantilever over the water, with the outside walls consisting of spectacular floor-to-ceiling windows

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— and there are pedestals that lead directly across the water (Figure 1). One of the most exciting details of the design is the way the water reflects the home's crisp architectural lines: In a sense, the reflections become part of the home itself and magnify its beauty from a variety of angles.

In some respects, this project reminds me of one of the best projects I've seen in *WaterShapes* recently — that is, the pool my friend Juan Roca published in the March 2006 issue ("Floating on Sunshine," page 32). In that case, he butted shallow water directly against all interior spaces on one side of the house, with bridges and decks extending out over the water. What I love about this project is the way it virtually eliminates the boundaries between the wet and the dry spaces.

## window treatments

What's fun about projects like these is that there are various ways to create the close spatial and visual connections. Recently, for example, I completed a de-



Figure 1: Here, the living spaces are inseparable from the water that surrounds them, and the connectedness is only emphasized by the reflections that work from many angles on the site.

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sign for a naturalistic, lagoon-style pool (currently under construction) for which the homeowners wanted a dock to extend several feet out over the water's surface as an adjunct to prime entertaining space inside the home.

In another instance (and in fact one of the first projects I completed using this "extreme proximity" approach), I developed a design for a client who wanted water right next to his bedroom. The plan included a swimming pool right outside French doors that opened over the pool: The first step outside was directly into water – again, no visual or physical separation at all.

In yet another, I'm currently developing a design for a home that has a sub-grade playroom. To "feel" the presence of water, the owners want to install a pool right up against the home and insert an eight-by-eight foot acrylic window (two-thirds submerged) to give everyone who steps into the room a dramatic underwater view. In this situation, the view of the water will completely define the ex-



Figure 2: At Jade Mountain, the presence of water at such close range completely obliterates the distinctions between interior and exterior spaces.

perience of being in the interior space, and in dramatic fashion.

Topping the list of work I've seen that follows this pattern is the Jade Mountain resort on St. Lucia. I recently stayed in one of its 26 terraced rooms, each of

which has its own vanishing-edge pool that extends into the room itself. That side of the room is completely open to the air, and the water's surface literally bonds the interior space with spectacular ocean views beyond (Figure 2). It's an amazing

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“room,” completely private and romantic but separated in no way from its breathtaking surroundings.

It also bears mentioning that because the water was so close at hand, I found myself dipping into it several times a day. If, by contrast, I’d had to journey out of my room to swim in some common area, I might never have gotten wet at all. Although this notion of an indoor/outdoor pool is not new, I’ve never seen it used quite so effectively before.

(Please note: The editor tells me that *WaterShapes* will be publishing a special issue on Jade Mountain within the next few months.)

My point in rolling through just these few projects is that there’s no end to the ways water can be tightly integrated with interior spaces. Another of my favorites is using a shallow lounging area as a transition from the interior to the exterior space (Figure 3). I’ve always loved the way these shallow shelves bridge dry and wet: They invite people inside a house to move



Figure 3: In this case, a shallow lounging area provides a bridge from interior to exterior spaces – and the raised structure beyond rises over the water’s edge as an ideal space for sitting and enjoying the view.

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## immediate destinations

This proximity, it must be noted, yields an entirely different experience than is the case when a watershape is a separate destination within a landscape. There's nothing wrong with that tried-and-true ap-

proach, and there are sites where setting the body of water away from the home is not only the best thing for the setting but is also exactly what the client wants. All I'm saying is that this new approach gives watershapers a fresh design angle — and one that promises to yield dynamic results.

What this means, of course, is that you need to weigh some of your aesthetic de-

**Sound is another big factor: If you put your clients right up there next to the water, the sounds your design makes will typically carry right into the house.**

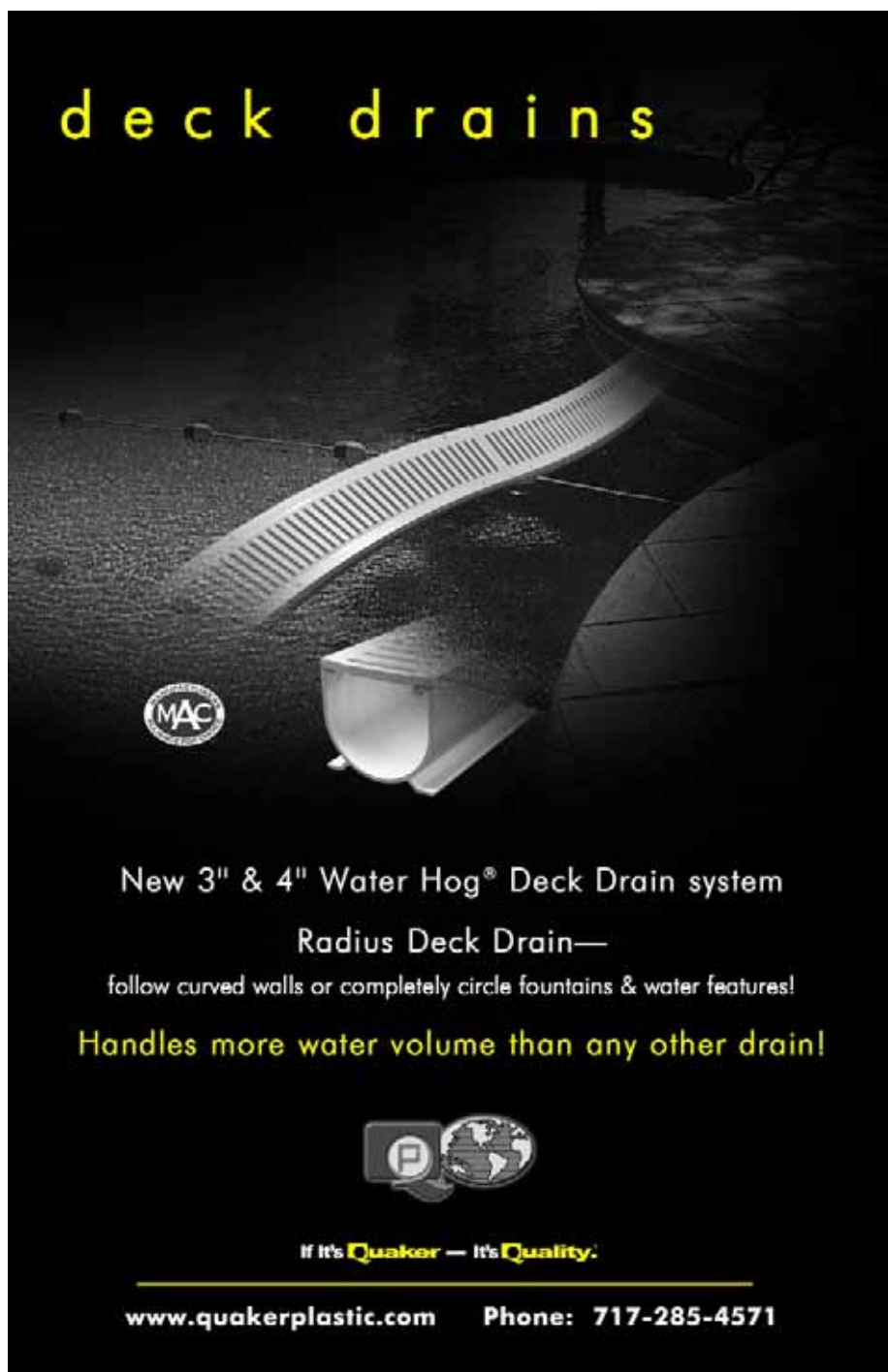
cisions with special care. Material choices, for example, are even more critical in up-close designs because the home's occupants and their guests will be looking at their watershapes much more closely and much more frequently. You also need to consider that what someone sees below the surface of the water will be in almost constant view — almost a component of the home's interior décor.

There's also the fact that many of these designs require unusually close work with a home's architect, because quite often portions of the watershape will be part of the home's structure (or will at least appear that way). It's not at all unusual, for example, for a pool to share a wall or serve as part of the foundation of the home. In that technical sense, these projects require hand-in-glove interaction with architects and the engineers who develop their construction details.

And then there's the fact that water quality is an even greater consideration in up-close projects. If that pool I mentioned above with the acrylic window ends up with murky water, that dismal appearance will have a major effect on how the homeowners' children and their friends feel about being in that playroom. And the same is true of any other job like this, because everyone will be close enough to become keenly aware of the water's clarity.

Sound is another big factor: If you put your clients right up there next to the water, the sounds your design makes will typically carry right into the house. So if you haven't quite figured out how to suppress the gurgling noises so many inadequately designed slot-overflow systems make, you might want to avoid that potential annoyance and come up with a different approach.

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You need to anticipate which noises will be heard, how loudly they will be heard, their general direction of travel and the potential your design has to overwhelm the adjacent interior space with noise, however pleasant it may seem. For similar reasons, how you light these water-shapes is another important factor.

In sum, proximity heightens the importance of every design decision you make, basically because the watershape becomes far more significant in the daily lives of the people who will live right next to it.

### into the mix

At this point, I can't be sure whether this upswing in demand for up-close watershapes is simply a passing trend or represents the onset of a major and exciting new direction for watershaping.

Time will tell on that, but right now I know that in every case in which we've shaped water so that it becomes part of an adjacent living space, the clients almost always say they love it and see the water as a significant point of pride in home ownership. Often, people who ask for these sorts of treatments have seen similar designs elsewhere and have been captivated by the influence water has when it's so close: Having a slice of this particular heaven to themselves is just what the doctor ordered.

Certainly, water used in this way will not be for every client or every space, but even so, it seems a remarkably flexible idea. For spaces with spectacular views, the water links the interior with the view. Where there is no view, the water then *becomes* the view and adds a sense of drama to an area that might otherwise be seen as lacking.

With all of this going for the proximity approach, my guess is that this notion is here to stay. **WS**

**Brian Van Bower** runs Aquatic Consultants, a design firm based in Miami, Fla., and is a co-founder of the Genesis 3 Design Group; dedicated to top-of-the-line performance in aquatic design and construction, this organization conducts schools for like-minded pool designers and builders. He can be reached at [bvanbower@aol.com](mailto:bvanbower@aol.com).



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By Stephanie Rose

## Too Little, Too Late?



**M**any watershapers have a single-minded focus, doing all they can to deliver quality shells and surrounding decks to their clients. Quite often, however, that narrow focus means that inadequate space is left for planting – a problem I face quite often as a *landshaper*.

It's clear in many cases that no thought at all was given to the landscape – and certain that no design professional was consulted before laying out and installing the hardscape. The result all too often is that there simply isn't enough room to allow for good-size planter beds.

I often find myself rolling my eyes and lamenting the missed opportunities to use certain plants or even to install ones big enough to make a visual statement. It's obvious to me that these situations could easily have been prevented by better planning and communication: Sometimes there will be no option to cramped planting spaces, but in the majority of cases I've seen, it's simply that the possibilities were never even considered.

That's a pity, but it's something I and other designers have learned to live with. Somehow, we manage to make things work.

I often find myself rolling my eyes and lamenting missed opportunities in situations that could easily have been prevented by better planning and communication.

### staying calm

More often than not, what's happening in these cases is that the homeowner expects the contractor to accommodate (or even do) all the landscaping work, including planting design, only to find that the contractor really doesn't know all that much about plants. At that point, whoever is brought in is left with unusual planting spaces but still needs to meet the homeowner's desires.

Panic is never in order. True, we can't plant 24-inch boxes in 12-inch-wide spaces, but that's no reason to surrender. Instead, it's time to think creatively, and I always start by coming up with a list of options from which to choose.

Let's take a situation in which the contractor has built a concrete patio that leaves only 12 inches between the new deck and the foundation of the house. This is a case where a small tree would do a great job of softening up the façade, but there are a number of other approaches you can take with these vertical spaces.

With only that small gap, however, tree choices are truly limited. In these situations, I develop a list of those grown in five-gallon containers, because I know that's about all that will fit. Many trees start out this small, of course, but some nurseries don't stock them and you need to find out about availability before you commit yourself to anything with your client. (As a rule, I keep my thoughts to myself until I've worked through the possibilities completely, as sometimes clients get stuck on something that just won't work.)

In my area, Weeping Birches (*Betula pendula*) are widely available and may be a good choice for this sort of application. Using that tree for illustration, I would next consider whether there's enough space for the roots to

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## 1) High maintenance-

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- If rocks are placed on the bottom of the pond to hide the liner they will create pockets for fish waste and leaves to collect. As these leaves decay they will give off tannic acid which will cause the pond water to turn to a "root beer" color. The only way to solve the problem is to remove the fish from the pond, completely drain it and then pressure wash the whole pond bottom. This could be an all day project, not to mention, very stressful to the fish.

## 2) Poor pond shape and contour-

- Many ponds are built too small to properly support koi. There is a good chance that you will be unhappy with a pond that is less than 1500 gallons.
- A pond should be at least 4 feet deep with no area of the pond less than 2 feet deep. Ponds with shallow areas near the edge will allow predators to dine on your fish. Even shelves for plants create a potential problem with predators. A pond built with even one shallow area will eventually need to have a net placed over it to protect the fish.
- A pond with a flat bottom, even if it has a bottom drain return, will be hard to keep clean.

## 3) Poor Filtration-

- The filter is the heart of a koi pond. Unwisely, this is where people often times try to conserve money. A filter that is not properly designed or too small for the pond will never provide clean, healthy water. Many filters are also, extremely hard to maintain, requiring regular washing of mats, brushes and sponges full of fish waste. This is a real area of complaint with many pond owners.

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spread out in the gap and under the decking so that the tree will be fed adequately – or if the tree will suffer because its feeder roots can't access water and nutrients. In some cases, this isn't a problem, but the tree must be one that is hardy, noninvasive and adaptable to minimal space or I'll keep looking for other candidates.

Of course, containers are always an option when we're faced with these difficult situations. Here, I take my cues from roof gardens, where there is no ground-level planting space at all and well-placed containers are just the ticket for defining spaces and giving them a sense of dimension and flow. Containers, however, are a substantial topic on their own and will be dealt with at another time.

### weighing options

Next, I'd consider vertically-oriented plants and shrubs that will grow to a specific height against the wall. On the average eight-foot exterior wall, the plants I choose will either define a good balance between the plant material and open wall space (five-foot-tall plants under three feet of wall space) – or leave a big blank with two or three feet of plants under five or six feet of wall space.

If it's the former condition, you'd have no need to do anything more: It may not be what you'd hoped for, but the balance created between the plant material and the wall may be enough to satisfy your client. And you might be able to cinch the deal by suggesting that the wall should be painted to contrast the plants' color to create more visual interest.

In cases in which the chosen plants stay low and leave a big, blank wall, there are lots of ways to fill the space. Placing artwork on the wall, for example, will easily fill the void – and in a highly interesting way. There are so many choices available these days of art pieces that withstand the elements.

I spend a good bit of time looking at these possibilities at statuary yards or garden centers, and I've also seen projects in which incredible compositions in art tile or mosaics have completely transformed outdoor spaces.

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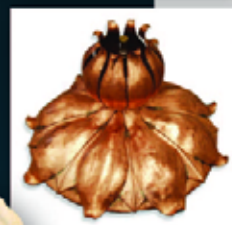
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# LANDSCAPE DESIGN

that space. I've recently been intrigued by a marble called Rainforest that would, all on its own, make an excellent choice for a piece of flat artwork against a blank exterior wall. A single slab with either a chiseled or polished edge would not only pick up contours seen in nature, but it would also tie into colors and textures occurring in most garden settings.

If nothing seems to make the client happy, I will often suggest increasing the size of the planter by removing some of the hardscape. Most often, this inspires such horror (especially if the deck is brand-new) that the owner will cooperate in development of less-destructive options. In cases in which the client is going to be forever unhappy, however, this may be the best option.

And of course, these planter-space problems often happen away from the house and over at the equipment pad, where the watershaper leaves me that same 12-inch planter space pinioned between the pad and the decking. The walls

in front of pool equipment are generally quite imposing, so the challenge is to find a solution that minimizes their visual presence.

## always the visuals

I faced this exact situation recently, and removing hardscape was simply not an option. The client hated the wall and still wanted it completely covered, so I planted Creeping Fig to create a green wall that blended into the planting *behind* the pool equipment in a way that still left most of the narrow space available for other plants.

This, by the way, is the client I've mentioned in a couple of recent columns who wanted the all-white garden — a plan that severely limited my plant options, particularly in this small space. Happily, we had enough room to plant Iceberg Roses, Bacopa and White Agapanthus (all client favorites) in a way that set off their white blooms against the green backdrop. This pulled the vi-

sual focus away from the wall and took as much advantage of the planting space as possible within the strict parameters of the design.

I have to admit I'm not *totally* satisfied with the outcome, but since all the plants are small, if we need to replant or add other selections for interest, we haven't created the sort of situation where the client has spent too much money to want to change things.


Another circumstance I've faced has to do with an interior atrium. The house completely surrounds this space, which has a water wall on the east end opposite a large picture window. The north and south walls have sliders flanking the water wall, and there's a partial picture window on the south wall.

The space is approximately ten feet wide, with about 18 feet between the water wall and the opposite window. Under that window and up either side, terminating at the sliders, is a planter that's about (you guessed it) 12 inches



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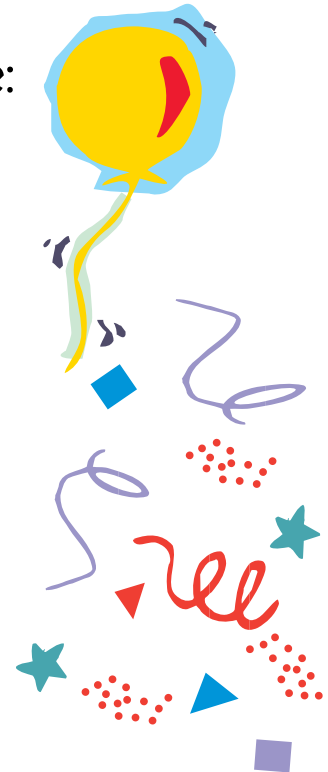
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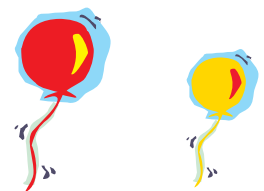
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## natural companions

wide. Removing any hardscape wasn't an option: The client wanted to preserve the area for parties and as a place to sit without having to deal with water or plants.

On the west and south walls, I was limited in the height of the plants I could use, as the windows were only 18 inches above the finished floor. This meant I didn't want any plants that would grow taller than about two-and-a-half feet here, so my palette was limited to small, upright varieties. I selected Juncus, a rigid grass that grows to about the maximum height I wanted. On the north wall, I wanted a little more height, so I chose Kangaroo Paws. This plant has tall flower stalks that reach up into the vertical space.

I've recommended to the client that she consider some artwork on the wall above the Kangaroo Paws, as the space serves as the main view out of the dining room and needs a focal point. The blooms will be delicate enough to complement the right artwork without competing with it.

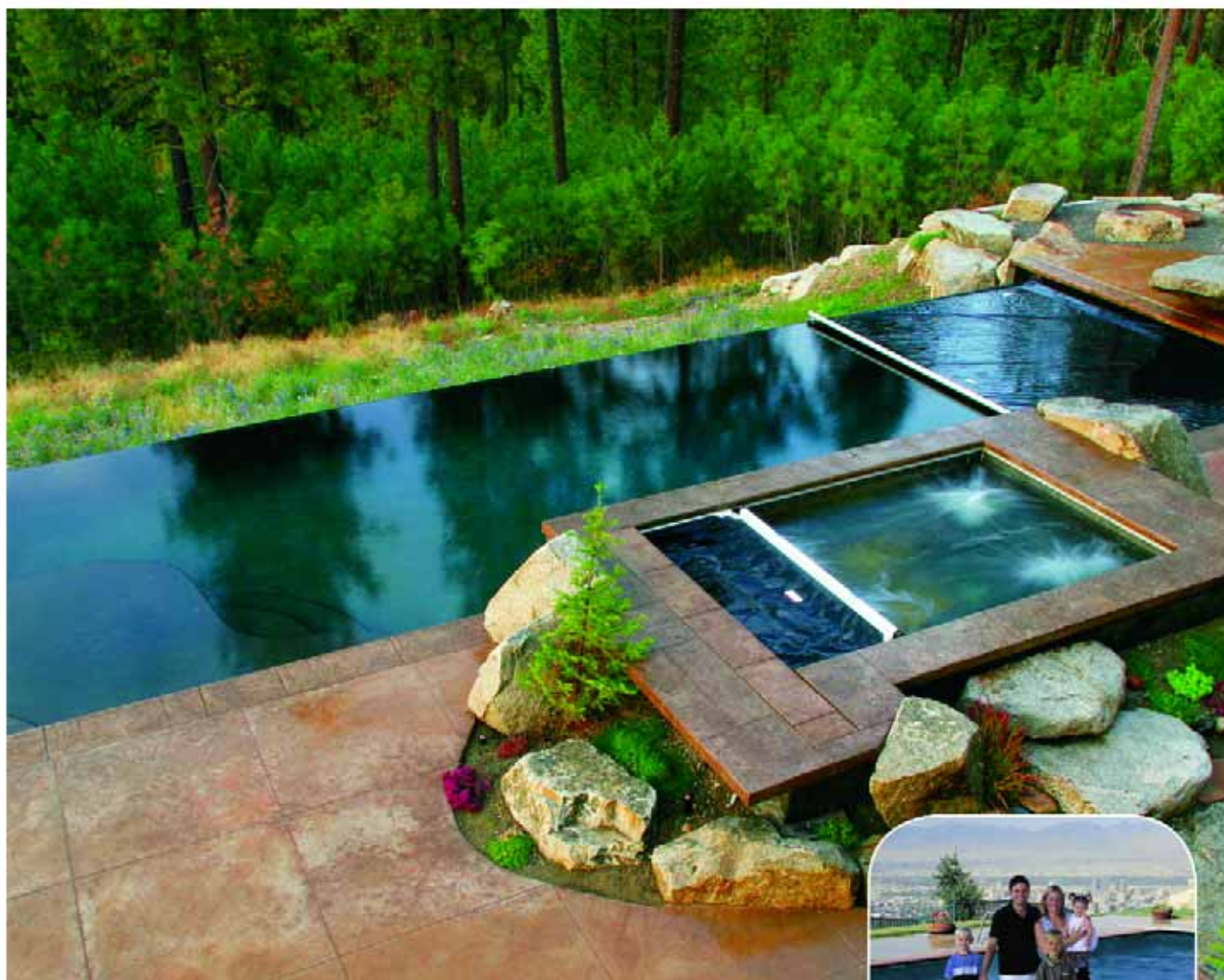
### making it work

The point here is, we can't always control the environments in which we're asked to work. As always, I believe that the greatest tool at our disposal is the ability to communicate effectively with clients and other professionals. Beyond that, we need to fend for ourselves and think creatively.

It never hurts, naturally, to have a few reliable tricks up your sleeve when it comes to solving the problems that come with undersized planting spaces. These approaches can turn unpleasant challenges into visually happy solutions – and make your clients smile at the same time. **WS**

**Stephanie Rose** runs Stephanie Rose Landscape Design in Encino, Calif. A specialist in residential garden design, her projects often include collaboration with custom pool builders. Stephanie is also Editor of LandShapes magazine and an instructor on landscape design for the Genesis 3 Design Group. If you have a specific question about landscaping (or simply want to exchange ideas), e-mail her at [sroseld@earthlink.net](mailto:sroseld@earthlink.net).

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By David Tisherman

# Personal Foundations



**T**ackling large, custom watershaping projects is all about the synergy between my clients and me: There simply must be a fit, or the process just won't work.

Last month, we discussed the importance of setting up proper expectations from the moment a client makes initial contact and you pick up the phone. This time, I'll cover what happens if the early stages of the relationship go well enough that a face-to-face meeting is in order.

This is the session during which I discover whether or not there's *truly* a shared basis for working together. As I've said before, these meetings are not about selling, quoting prices or putting any kind of pressure on clients to sign on the dotted line. Rather, they're about establishing bases for collaboration and letting clients know in no uncertain terms what they can expect throughout the design/construction process.

As should be clear to all of you by now, my interest is in finding clients who are seeking works of art that will make them happy and proud. On that level, it's all about establishing a sense of what they want – analyzing the situation, sizing up their ideas, formulating a reliable plan – and deciding whether we can work together to accomplish great things.

It's all about establishing a sense of what a client wants – analyzing the situation, sizing up their ideas, formulating a reliable plan – and deciding whether we can work together to accomplish great things.

I'm more than willing to walk away from these initial meetings when things just aren't "right" for one reason or another. By contrast, when things go well, I leave these meetings excited and ready to get down to work in applying what I've learned about the clients, using what I know about available materials and technologies and, ultimately, designing something special that no one else has.

### good starts

If your approach to client meetings is based on the idea that you're there to sell them something and feel defeated if you come away with anything less than a signed contract, then my method is probably not for you. I'll never chase a "hot" lead, for example, or race to a meeting to secure a job from an impulsive buyer: Those strategies are the territory of production-oriented operations.

In distinct contrast to the haste with which I see some watershapers pursue projects, I take my time, pay careful attention and make certain my clients are serious. For me, working with them is usually a matter of steady, long-term, near-constant personal interaction: We work closely in generating a design and, as the project is being built, I'm there every step of the way. These are big personal investments for my clients and me, and we make them with great care.

Basically, I will become a fixture in my clients' lives, and it's not unusual for them to expect to see me on the job site almost every day. I can't count the number of times they've made certain my own coffee mug is waiting for me first thing in the morning, and there are cases in which we've become so close that we'll



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travel or go to dinner or out for an evening's entertainment together. These personal relationships extend from the fact that, in my projects, watershaping is an *incredibly* personal proposition. Does this happen with every client? Of course not, but through the years I've developed some wonderful, enduring friendships.

Partly this is because of my personality and open, honest approach to my clients – and I'm the first to recognize that getting so close to them is not for everyone, nor does it have to be. On a practical level, however, I see this type of interpersonal bonding as extremely helpful: The work I do is too complicated, the details are too involved and the work is too unique for me to want to do things any other way.

Let's face it: Ours is a disruptive business, and the human touch can make the hard work of watershaping far more tolerable to clients. In addition, I find that a good personal rapport makes it easier to deal with

**Let's face it: Ours is a disruptive business, and the human touch can make the hard work of watershaping far more tolerable to clients.**

the issues that inevitably arise in the course of a project, from minor glitches to major changes. This goes far beyond being sure my clients can afford the work and have a clear idea about the process: In short, a good rapport puts me in a better position to understand their personalities, tastes and lifestyles.

Thus, at our first meeting, I'm interviewing *them*, not the other way around – despite what they might be thinking. It's all about the fit, and from the first handshake, I'm sizing them up and determining whether or not we'll work well together.

Through the years, this approach has become second nature to me, and I've become expert at quickly recognizing

whether or not we "click." What's fun about this part of the process is that every personality is distinct and each client provides a slightly different profile and set of circumstances. In that sense, there's always an element of shared discovery that informs everything I do and say with clients during that first meeting and from that point forward.

## where and when

Backing up just a bit, there are a couple of key considerations that go into setting up the initial meeting. First of all (and as I mentioned last month), if it's a husband and wife team or some other type of couple, I absolutely insist on both of them being at the meeting, ba-



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sically to avoid the whole session's being a waste of time. I also insist that we meet at the property. That may seem an obvious proviso, but it's critical for a variety of reasons I'll explain below.

As for timing, I do everything I can to avoid evening meetings. For one thing, people are often tired as the day wears on – or impatient to have dinner or anxious to get small children off to bed or distracted by phone calls from family and friends. Even though evening meetings may be convenient, they're never my preference.

If possible, I like to meet in the morning while we're all fresh and relatively undistracted. Also, I find that conducting these meetings during "regular working hours" results in a more businesslike tenor and enables us to focus on the tasks at hand more easily.

Moreover, I've found that high-end clients who set their own schedules tend to prefer weekday-morning meetings. I'll often bring breakfast delicacies such

**I like to meet in the morning. I find that conducting these meetings during 'regular working hours' results in a more businesslike tenor and enables us to focus on the tasks at hand more easily.**

as smoked salmon I've brought back from my regular fishing trips to Alaska to make these occasions special and create a sense of sharing and "family."

If a morning meeting during the week isn't possible for whatever reason, my second choice will always be a weekend morning. There may well be distractions if children are home, but this is much better than evening or late-afternoon conversations.

As to why these meetings must take place at job sites (which in my case is almost always a home, as I seldom design or build commercial projects) and not in some sort of showroom or in my offices, there's the obvious reason that

I can't imagine designing a project without seeing the space I'll be working with and getting a feel for the setting and its views (or lack thereof), the shape of the yard and how the interiors relate to the exteriors.

I'm also called more than occasionally to view bare lots in new developments. In these cases, I end up paying attention to an even broader range of considerations, including drainage, topography and the probable locations of neighboring structures. No master or site plan will tell you exactly what's going on in these spaces, so these projects are a particular challenge.

If the home is in place, however, from



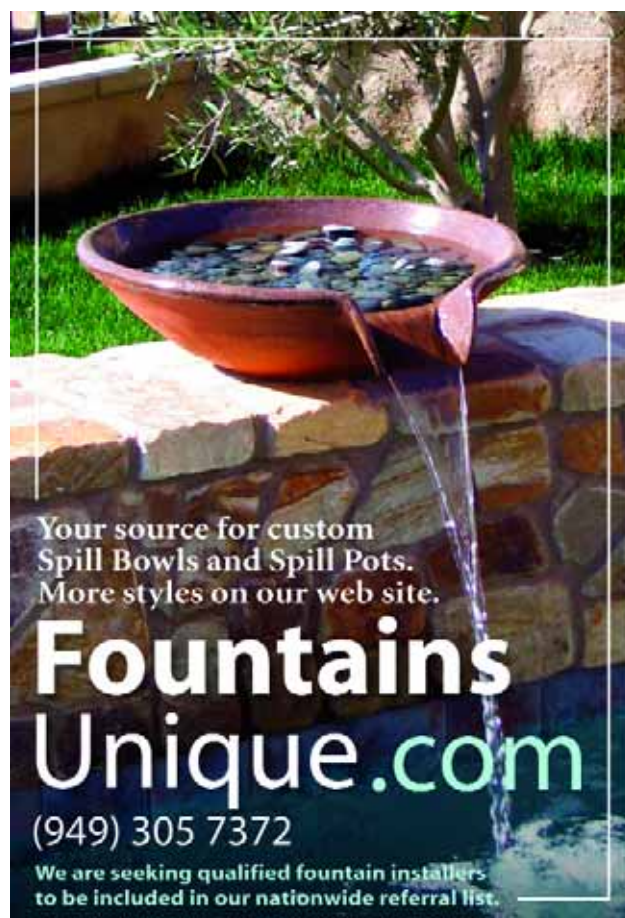
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the moment I walk through the door I pay *extremely* close attention to the way the interior is decorated, especially when it comes to artworks and furnishings. In the vast majority of situations, I'll observe key stylistic preferences and get a sense of how much the homeowners have traveled and how refined are their tastes in art and design. Everything I see and observe – how they talk about their surroundings and subjects upon which they dwell with the most passion – flows into the mix.

I'm also looking for cues into preferred color palettes as evidenced by their choices of furnishings, textiles and interior materials. Rolled together, all of these data points give me important information about personalities, life experiences and the stylistic approaches I'll use with respect to colors and materials selections.

## clear intentions

Once the preliminaries are concluded and we get down to the "business" of our discussion, I insist that they leaf through my three portfolios – big, leather-bound albums that contain 150 eight-by-ten color photographs of my past projects, including one whole volume that's all about construction, materials, details and joinery.

My purpose here isn't to "wow" them with past work as a means of building credibility. That often happens, of course, but it's a side benefit to my real pursuit of finding out what they like and, perhaps more important, what they *don't* like. Many times, I find that knowing what to avoid is a leading indicator of those ideas that *will* work, and listening to them at this stage tells me where to focus my thinking.

At no time in this process do we discuss price in any specific terms: I might say a particular approach is "expensive" or "inexpensive," but that's about it. *I don't sell price*: That's all about production. Instead, I'm all about producing unique and original works of art.

Indeed, if I get any sort of sense that the price tag is their main concern, I'll pack up my materials and take my leave. If I don't, the review of past work gives me a feel for whether they're interest-

**I'm looking for cues into preferred color palettes as evidenced by their choices of furnishings, textiles and interior materials. Rolled together, all of these data points give me important information about personalities, life experiences and the stylistic approaches I'll use with respect to colors and materials selections.**

ed in having something truly special, artistic, elegant and creative – or if what they really want is a more standard type of watershape.

Once I'm comfortable that we're still a good fit, I'll start talking about my approach to selecting materials and colors. As the need arises, I'll also talk about my own personal influences and how many of the strongest themes they see in my work are derived from details I've personally observed in the ancient ruins of Greece, Rome and Turkey. I'll talk about architects and artists who've influenced my work, from Walter Gropius and Corbu to Jasper Johns and Piet Mondrian. I'll also talk about colors, textures and materials in response to the directions in which these conversations carry us – all to get them excited about and engaged in the process.

Throughout, I'm *always* giving them insights into my methods and letting them know clearly that in turning to me for a watershape, they are making a choice for true artistry without compromise when it comes to quality or attention to detail. I share my feelings that swimming pools and other watershapes can be an adjunct to the spaces they occupy or a dominant focal point and how all elements of the exterior space (and even interior areas) should work together to create harmonious settings that express their tastes and personalities.

I ask some personal questions, too, getting them to chat about their lifestyles and their personal and business backgrounds, their travel experiences and what they like to do for fun and enjoyment. Those discussions feed into very direct questions about how they're going to use their pools,

spas and surrounding spaces.

This is a huge point: I don't want to know about how they're going to use the watershape during the one or two times each year they have a big party; rather, I want to know what's going to happen on a daily basis or over a typical weekend. Is the pool strictly an aesthetic element, or will they be using it for exercise on a regular basis? Will children be swimming and playing in the water and, if so, how many and how often? Do they like entertaining and cooking outdoors, or are they more into reading and relaxing outside? If the latter, when – mornings, weekends, evenings?

## what's next?

This is a whole bunch of ground to cover, but I've found that once we get into it, the interactions unfold naturally and easily and at no time do I have the sense that I'm asking questions off some sort of checklist. I've done this long enough that I proceed intuitively, always directing my clients toward a clear understanding of the way I work and what I need to know to make them happy.

When we've covered all of this information to the necessary level of detail, it's usually pretty obvious whether or not we're going to end up working together. At some point, they always want to know about the next steps.

Now is when we talk about the importance of soils evaluations and the engineering process in great detail. As I've written in these pages before, all foundations and details of structural engineering depend almost entirely on the geological conditions on site, so in almost all cases where the municipality

doesn't require one anyway, I will insist on having a soils report in hand before beginning any design work.

This is, I explain to them, the foundation for creating any sort of realistic, reliable design that will meet the aesthetic goals we've established. Included in these considerations are the watershape and its total environment, including decks and shade structures and pool houses and fountains and water walls and outdoor kitchens.

I'll also tell them that they have two options to consider: If I'm to build everything, I will take control as general contractor and will handle everything from the doorsills outward. I will contract with others for irrigation, lighting and plantings, but I will set terms for those contractors and govern things from the visual standpoint.

This choice is advantageous because it saves the clients the expense of having me generate the detailed sets of drawings (other than structural) re-

quired to make certain everything will be built to my standards and specifications. If I'm in charge, which happens about 99 percent of the time, that documentation does not need to be generated in such fullness because I know the materials I've chosen and how everything will come together and will be there on the job site to supervise every detail.

Once this is settled, I tell them that I will go to my studio and develop a proposal that will indicate in specific terms how long the project we've been discussing will take based on all the elements they've indicated should be included. Once they receive the proposal, it's in their hands: If they send me a check (which happens a good 85 percent of the time), I put pencil to paper and begin the design work in earnest.

If they don't send a check, I assume they've chosen another path and that's pretty much it for me: I won't call, I won't bargain, I won't do anything un-

less and until a check arrives. The way I see it, if they want something for peanuts, they should hire monkeys and elephants to do the work. Speaking for myself, I work for U.S. dollars and accept no substitutes.

If they come through – and as I say, they usually do – I know we're all on the same page, all have accepted a general sequence of activities and that it's time for me to get to work. Now everything is directed toward a *presentation* – my topic next time. **MS**

**David Tisherman** is the principal in two design/construction firms: David Tisherman's Visuals of Manhattan Beach, Calif., and Liquid Design of Cherry Hill, N.J. He is also co-founder and principal instructor for Genesis 3, A Design Group, which offers education aimed at top-of-the-line performance in aquatic design and construction. He can be reached at tisherman@verizon.net



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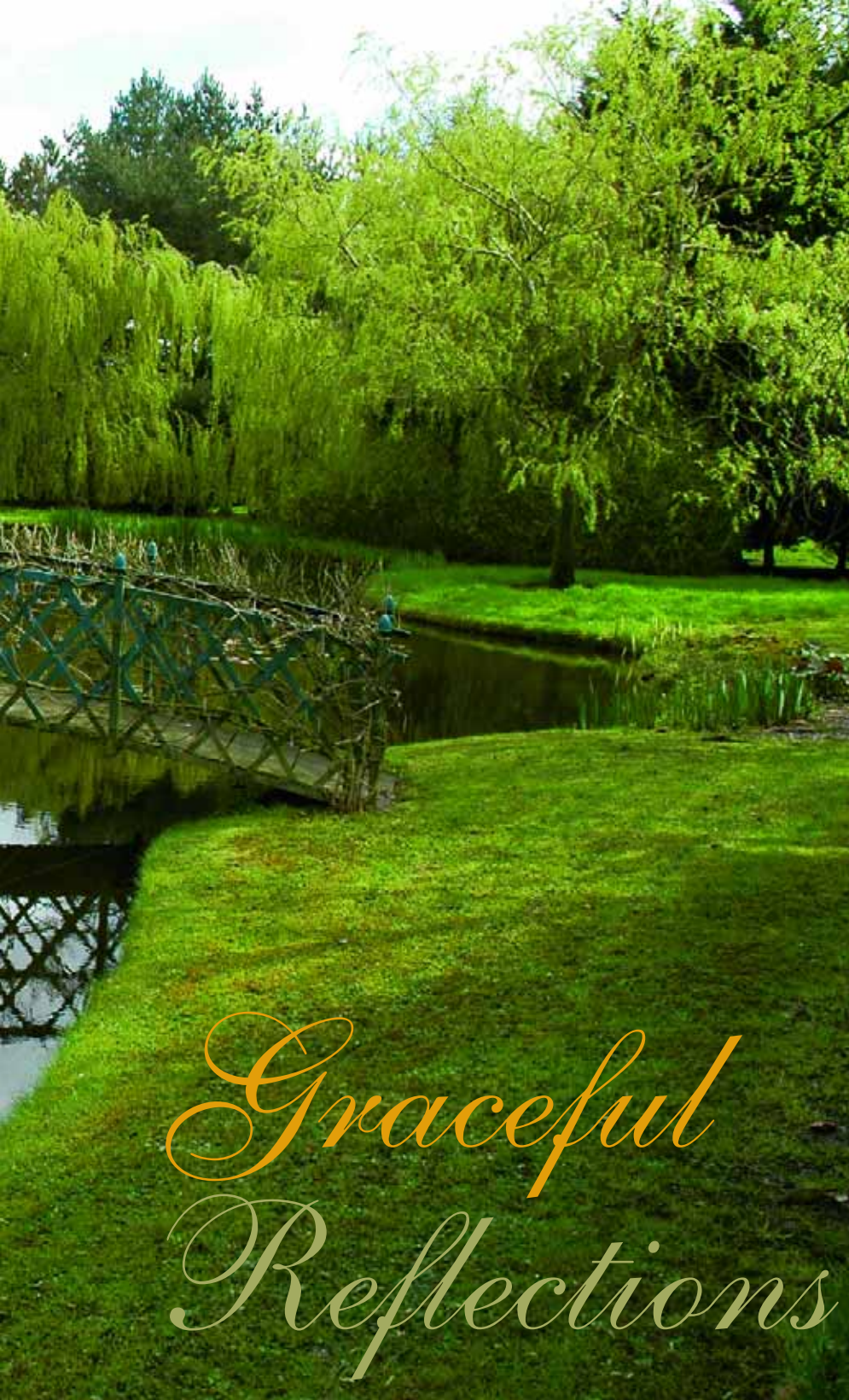
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*The potency of water's reflective nature is a component of watershaping that is all too often ignored or left to chance, says renowned environmental artist Anthony Archer Wills. When considered from the outset of a project, however, the brilliance and subtlety of a reflection is something he uses to completely transform the experience of viewing water in ways that become ongoing sources of delight and fascination for his clients.*



# Graceful Reflections

*By Anthony Archer Wills*

In all my many years of working with water, I've never grown tired of its remarkable beauty and complexity – or of the variations it encompasses, the ways it changes and the endless fascination it offers to those who come into its presence.

At the heart of water's ability to inspire us and rivet our attention is its capacity to reflect. There's something truly magical about the way water mirrors the sky, a surrounding landscape, nearby architecture or a well-placed work of art. It's a gift of sorts, a timeless bounty that has captured imaginations ever since Narcissus fell in love with his own image on a still pool of water.

What's so amazing about reflections is that, as watershapers, we have the opportunity to wield them in ways that will create constant delight and enjoyment for our clients. Whether it's a simple pond, an architectural waterfeature or some other body of water, we can deliberately use the play of light on water to great effect. Some truly curious surprises await, however, unless we understand the consequences of setting what is virtually a mirror at our feet.

## *From the Beginning*

Using reflection to the greatest effect requires us, I think, to consider it from the outset of a project. In fact, when I visit a site for the first time and begin to feel the inspiration of a design materializing, I quite often focus on how reflections will work as *the* key feature of the entire composition.

This is no small task, because there are huge differences in the outcome that may be achieved depending upon the location of the water relative to the main viewing areas and the sun. As a result, issues of directionality and points of view become extremely important, as do edge treatments, surrounding landscaping decisions, associated rockwork and/or placements of works of art. There is often a trade-off between the need to use a particular location versus the spot where the



best reflection will be achieved.

A great potential awaits that magical moment when a waterfeature is finally filled and takes on its role as mirror – but allow me to mention some of the pitfalls and a few of the mistakes or unintended consequences that commonly occur when reflections are part of the water-shaping package.

For myself, I learned early on that reflections are a two-edged sword that can be used wonderfully well – or amplify design flaws. As an example, I once installed a pond that had a beautiful, curved wooden bridge crossing over part of it. I love the way architectural elements such as bridges are reflected and thought this particular bridge would add beauty to the whole scene.

As it turned out, all sorts of conduits and plumbing had been run on the underside of the bridge – a not unreasonable way to conceal such items. When we filled up the pond, however, all of those unsightly colored pipes and lines were *vividly* reflected on the water's surface,

and we ended up having to encase them all to solve the problem.

That was an easy correction, but finding solutions is more difficult when the problem has to do with a failure to consider the way the edges will be reflected. As already intimated, reflections shine a particularly harsh light on basic mistakes. If, for example, you have rocks at the edges that are not seated below the waterline, you can end up with a reflection of the *underside* of the rock on the water – a startlingly unnatural look.

As another example, if you have a band of rock or brick at the water's edge, you can assume that it will appear *twice* as tall – that is, your well-proportioned, 6-inch band of brickwork will appear as a foot-high wall when reflected and may end up visually overpowering the entire pond. That's *not* what we try to achieve in most cases, and the result is shrinkage of the appearance of a body of water that creates what I consider an undesirable, closed-in effect.

In similar fashion, I've seen situations

in which nearby walls or fences are reflected in the water and inadvertently form massive blocks on the surface, resulting at times in a terribly dominating or unbalanced look. A rim or wall on the far side of a pond that slopes from left to right or right to left is an unnerving sight, for example, and should be avoided: It makes the water surface seem tilted.

In other words, there is a premium on considering all structures that surround the water, including those that are at some distance from the water itself.

### *To Great Effect*

Avoiding such pitfalls and mistakes is really a simple matter of considering these issues as you plan the work and recognizing that the deliberate use of reflections raises the stakes for many of the design decisions you're making. That in mind, the question then becomes not only one of how we avoid errors, but also and much more important, how we maximize reflective qualities to create the most beautiful body of water we possibly can in a given setting.



Reflections offer extraordinary optical options: One moment the water surface can be viewed as *water continuing to the very edge*, then, with a blink of the eyes, the image changes to one of an *upside down landscape or structure*. The situation is such that the water surface seems to *expand and contract at will*.

To me, the real work with reflections begins with edge treatments. As I've mentioned in past articles, I have a great love of brimming water. To me, water surrounded by steep banks and tall edges tends to look imprisoned, diminished in scale and half empty. This appearance is greatly exaggerated by the reflection, meaning one must remember that anything on the edge will double in size and can make a body of water seem much smaller than it actually is.

By contrast, when we work with water that rises to within an inch or two of the rim, we create the opposite effect, giving the impression that the water is free and unfettered. This brimming water also creates what is effectively a larger reflective surface and encourages our eyes to explore the transitions between the water and the surrounding landscape. We get the further sense that the water is the

key to the landscape or garden and perceive a delightful augmentation of the dramatic essence of the space.

This is one of the main reasons, by the way, that I always favor upsizing bodies of water

relative to their surroundings. As suggested above, reflections of surrounding trees, architecture or other features at the edge may make the surface of the water look smaller. If the body of water is small at the outset, then a large, featureless object reflected in the water will make the vessel seem diminutive, even forlorn. Just as plants that encroach from the edges reduce the effective surface area, so, too, do reflections.

A quarter-acre pond located a few hundred feet away from a home or other significant viewing position is going to seem quite small and will offer little by way of compelling reflections. In that same setting, however, a half-acre pond will seem

triumphant and capture reflections that will command attention.

In a situation where the water *must* be enclosed by some form of raised edge – perhaps a small retaining wall to hold back a slope – then focus on making it attractive by using an interesting natural stone or brick courses or some other decorative treatment. Perhaps one could make the edge a sculptural element and use the reflection to complete a shape or pattern. In one project, for example, I used a reflection to form the bottom half of an eye I'd shaped in stone. It was quite dramatic and surprising.

Reflections and architecture are a particularly great pairing that has stood the test of time. In addition to the Taj Mahal and the reflecting pond on the Mall in Washington, it has found brilliant applications with modern architecture as well. In all these cases, reflections are used to enhance an already beautiful structure, adding substance and elegance to a scene that could not be achieved in any other way.



### *Proximity Issues*

Not quite hidden in this discussion so far is the observation that reflections and their use magnifies the need to pay attention to balance, scale and proportion in designing a comprehensive space. As noted above, designs that seem perfect in all relevant ways can be diminished if you haven't considered the role reflections will play once the water is introduced.

Another issue concerning reflections that needs to be considered from the start is the simple matter of proximity to the water's surface of both viewers and the objects being reflected – that is, the basic geometry of the setting.

If, for example, you have a raised terrace or deck that hovers over the water's edge, viewers in that location will be looking almost straight down at the water, and most of the reflection they'll see will be of the sky – magnificent in its own right but not, perhaps, what you had in mind as a designer.

Conversely, if you put those same viewers on a platform that's down at the level of the water's surface and back some distance from the edge, the viewing angle is quite oblique and they're only going to see the very low features on the opposite side of the water – and the sky will

be reflected not at all. Indeed, it is the bank and emergent plants on the other side of the pond that will be reflected.

In most cases, it's not practical or even necessary to alter the lay of the land in service to reflection, but it is important to organize features that can play key roles here, including stands of trees, rock formations or edge treatments that are attractive to viewers on available lines of sight. We must always be mindful of the positions viewers will take, whether they're inside the house itself or are standing or sitting in some location that's been set up for relaxation.

By designing pathways and places of repose, we can essentially control where people will go in relation to the water and the angles at which they will see it. It's these focal points that must be most fully considered: This is where the designer takes control and is given opportunities to surprise or reward those who travel along a path or reach some destination. Perhaps that final position on a bench overlooking the water will be the *only* position in the yard from which the ideal intended reflection is seen.

This mandatory viewing point is particularly effective when your intention

is to showcase a piece of sculpture or an architectural feature – the classic example being a half-moon bridge that forms a circle in the water only when viewed from a particular position on the shore. When done correctly, the effect is unbelievably dramatic, and I must say that this is an approach I've found myself increasingly interested in using. It's not a new idea by any means: In fact, no matter the era, sculpture and water have always gone together in an almost symbiotic way.

### *Great Expectations*

Another point is raised by the story of the unsightly conduits under the bridge: On occasion, reflections will reveal something that's not visible from the point of view of a person standing or sitting by the water.

I recall a situation in which a beautiful weathervane was visible in a reflection in the water even though it was hidden from direct view by a stand of trees on the opposite side of the pond. If you were to lie on your back in the middle of the pond and look up, you could spot the weathervane just under the line of trees, but from an observer's normal position, it was



There's a reflective benefit to size: While stunning images can be mirrored in even the smallest of dark pools, truly large expanses of water enable the reflections to be clearly understood and greatly enhance the drama. In these situations, special effects may be achieved merely through the positioning of one object relative to another.





A pond thoughtfully positioned will be able to capitalize on the reflection of a nearby house or, as in this case, provide a view toward the unique ‘completion’ of an unusual sculpture. These are bonuses that come with the water’s primary role as focal point and mirror – and this potential must be anticipated in order to design landscape features that conduct people to suitable viewing positions.

cases cannot be altered.

Another fascinating piece of the puzzle has to do with the positioning of the body of water relative to both the house and the sun. In the Northern Hemisphere, for example, the north side of any house or building is usually in shadow. If that structure is tall, then a garden beyond will consistently be darkened and in the shade – unless, that is, we use reflections off water to change the situation.

Providentially, if we place an expanse of water to the north of such a building, suddenly all of the sunlight that falls on the trees or landscape on the far side of the pool or pond is reflected in the water. These may easily be reflections from a neighbor’s property that lies beyond the shade – thus giving a new slant to “borrowed” landscape: Now you’ve created a situation in which the sunlit branches are at your very feet and being reflected up into your eyes.

Moreover, all that brilliant light reflecting off the leaves and branches of the trees will bounce up through the windows and into the house, which leads to the observation that one can actually light interior spaces simply through the placement of a body of water. The upshot is that a view that is distant moves much closer and we’ve used the sunlight originating in the south to light an otherwise dark area.

### *Directional Play*

This awareness of the sun’s orientation opens a rich cluster of opportunities to be achieved with water and reflections, but there are some cautions to consider.

If the water is located to the *south* of a building, for example, you’re likely to see pleasing ripples of light reflected onto

hidden – and came into view only as its reflection in the water.

Again, this is an effect that can be used to great advantage – or it can be an utter disaster if what’s being reflected isn’t something you want anyone to see.

Of course, it’s unreasonable to think you can anticipate every single possibility along these lines, but the more you consider the viewer’s perspective and the nature of the reflected scenery, the more

you’ll be able to control the consequences when the waterfeature is finally filled.

In that same vein, we must always be aware that reflections will reveal the undersides of “structures,” whether they are trees, arches, bridges or the eaves of a building. If these forms are attractive, the resulting reflection can be extremely positive; if they’re not, however, the opposite is true and you can find yourself with a reflected visual that in some



## Black Water

It has long been apparent that dark, acidic water carries beautiful reflections on its surface – in contrast to the pale, alkaline or chalky water of a white-plaster swimming pool that shows little or nothing by way of reflections.

For years now, I've enhanced this contrast by using a product from Pylam Products Co. (Garden City, N.Y.) – a wonderful black dye that, in just tiny amounts, turns water a wonderfully sharp, jet black and thus dramatically enhances any reflections perceived on the water's surface. It is non-toxic, doesn't hurt fish or aquatic plants and doesn't seem to stain the surfaces it touches.

Of course, if the idea is to see what's going on beneath the water's surface, this isn't the way to go. But if your aim is to create dramatic reflections, there's absolutely nothing like it.

On occasion, I've used it in a sleight-of-hand trick that lends a sense of drama to unveiling reflections for my clients: If you add the dye to water in just one place, it will spread slowly across the water, and as this happens, vivid reflected images will appear as though I am unrolling a huge painting.

The effect of this momentary astonishment is quite unforgettable, but the lasting effect on the darkened water is a mirror-like perfection that is its own longer-term source of satisfaction.

—A.A.W.



Dark water forms a brilliantly reflective mirror, and indeed, the best reflections to be had anywhere occur naturally on black, acidic, peaty ponds. On ponds like these – or on man-made expanses in which the water is artificially darkened – the reflections on a still evening can be utterly breathtaking.

the ceiling as the sun streams in through the windows. But the sun is shining from *behind* the water, so the reflections will be poor and confined to the dark silhouettes of whatever objects stand between the pond and the light source. Also, the brilliant sunlight will be reflected directly up into the viewers' eyes, which is why it's not unusual in these situations that the homeowner will end up installing shades or other window treatments to reduce the glare.

Although it is rarely my preference to work with water close to the south side of a home or some other major viewing area, I must say that this can actually be

an advantage in northern climes: Essentially, you see two suns and the extra light adds warmth on chilly winter days. With that exception, however, it's rarely advantageous to be looking south across a body of water if what you seek to exploit is reflections.

In the main, I prefer working with water either to the west or east of a home or its prime viewing spaces. If it's to the *west*, there will be wonderful, cool reflections in the morning, and in the evening trees and landforms on the other side of the water will be revealed in exciting black silhouette with beautiful sunset colors behind them. Many people especially enjoy the sunset and twilight hours, and an expanse of water essentially creates a clearance in which trees or other objects do not block the light. Thus, the fading light bounces off the surface of the water and creates terrific views from a deck or outdoor cooking area.

Conversely, if the water's to the *east* of



## *Reflections in Motion*

As a rule, working with reflections means working with still water. As we all know, however, when you drop a pebble into flat water, the spreading, concentric circles disrupt reflections until the ripples subside – and I, for one, have always loved looking at that effect, as when the first few drops of rain fall to distort reflected images with their spreading, undulating rings.

By extension I have used this same effect when working on streams where there might not be much by way of clear reflections because the surface is riddled with the waves, ripples, eddies and currents of water in motion. Despite this diffusion of reflections, it's still possible to create fascinating views.

If you place a stand of trees that have brilliant foliage as a backdrop, for example, the reflection in the moving water will become bands of brilliant light similar to stripes hastily put down with oil paint onto a canvas. You won't see the forms or textures, but the colors on the moving water can be truly spectacular in their own unique ways.

–A.A.W.

the house, the rich golden evening light will provide spectacular warm reflections of foliage beyond. This effect can be truly spectacular in autumn and winter: When leaves turn colors in the fall, it's as if the water is on fire with the warmth of reds, oranges, yellows and gold. And in winter, it's easy to enjoy the terrific potential of colored stems, berries and bark. No matter where you are, as the air grows still toward dusk, there will be stunning images lingering on the mirror the water provides.

For this reason, it's particularly important to be aware of colors in the landscape and the textures and forms of trunks and stems. Those issues are always important, of course, but with water to the east, you can never forget that the selections you're making will be part of an amazing late-afternoon/early-evening spectacle.

In many situations, naturally, you'll have no choice about where the water is located relative to the house, but it's important

to be aware of the effects of directionality and plan accordingly. It's also useful to discuss these issues with clients as the work is being planned: After all, they need to understand how reflected sunlight will play into their daily lives.

## *In the Eyes*

When people ask me about reflections and how best to wield their mesmerizing power, I always say that the key is to consider them much more fully than one might initially think would be necessary. In a very true sense, reflection is at the very core of why being near water is so fantastic. This is why we, as designers, need to consider what we want to see – and recognize just as fully what we *don't* want to see. Either way, the importance of reflections cannot be overstated.

Through thoughtful use of reflections, we have the ability to create aesthetic bonuses with water that simply cannot be achieved in any other way. Yes, there will be situations in which the reflective



Once you begin thinking about reflections in a deliberate way, all sorts of opportunities present themselves. Take the case of monotonous masonry, which might have a restrictive effect on water sited close to architecture (A): In this case, a spout producing small ripples or perhaps some sculptural additions to a wall will alleviate this. In other cases, you might have the inspiration to add some organic object or a structure (B, C) – and sometimes you might be just plain lucky and find that nature has created a piece of sculpture for you (D). Such bounties can be exalted by providing a special viewing point for their enjoyment.



quality of the water is not the focal point, including cases where the “underwater landscape” is the star feature ( a wonderful topic for future discussion), but even in those cases, when viewers stand back from the water’s edge, reflections very likely will come into play.

This leads to one final point: Whether you think about what you’re doing or not, working with water *inevitably* means working with its reflective qualities. You don’t really have a choice, as it’s a matter of optical physics. So the question is, do you leave it to chance or consider its effects so that your watershapes embrace all of their potential?

For me, there’s nothing quite like the feeling I get when I see reflections in water I’ve shaped for the very first time: It’s as if a curtain has been pulled back and a spectacular scene that’s never been witnessed before is unveiled. As long as my eyes are working, the thrill of seeing such reflections will never cease to bring me great joy.





**A wonderful example of the way basic watershape forms can be elevated to play key roles in well-composed architectural/landscape schemes, the award-winning project seen here uses water, stone and an abundance of glass tile to create a transition between interior and exterior spaces. It's more than enough, says watershaper Bob Rush, to satisfy the needs of an architect/ client who was after something both unique and beautiful for his own home.**

# A Prize for the Eyes

By Bob Rush

As custom watershapers, we all know that each combination of client and project presents a unique profile with respect to scope, design goals and the overall mission. In the project seen here, however, that common formulation was elevated by virtue of the fact that we were working with an accomplished architect on what was to be his own home.

He came to the table with strong, distinct ideas about style and project direction, but he was also willing to collaborate with us when it came to the details and practicalities of developing a watershape composition that suited both his needs and a spectacular setting. The property – a gently sloping two-acre lot – is located in an exclusive neighborhood in San Marino, Calif., and our work there took place in concert with construction of a gorgeous new home in a classic Mediterranean style.

My company, Arcadia Pools & Spas of Arcadia, Calif., had worked with the architect before on a fountain for a commercial property, so we already had a good operating relationship. But we knew from the start that this particular set of watershapes was going to be something very special and that we'd have to be at the top of our game in executing aesthetic details that would be extremely important both to the client and the overall visual success of the project.



## EXPANDING THEMES

Before we arrived on site, he had already developed a general scheme for the watershapes, which were to include a raised circular spa, a rectilinear pool with a vanishing edge and a large trough that was to double as a reflecting pool. He'd tucked this assemblage next to the house alongside a stone-covered deck, and our footprint included two stone columns that supported a cantilevered portion of the second floor.

By the time the client brought us in on the project, the house had reached its final construction phases and had gone through a series of modifications along the way. Straight through, he had been modifying the plans for the watershapes as well – and it was clear that he wanted our input on a range of details extending from materials selection all the way through to setting precise shapes and configurations for the vessels.

Ultimately, we wound up tucking part of the eight-foot-diameter raised spa beneath the cantilever and between the columns and set up the 15-by-36-foot

pool with radii on both ends and 90-degree corner cuts to pick up details of the home's architectural style. Opposite the spa, we set up a 20-foot vanishing edge that flows into a large trough.

The basic concept was that the three interconnected bodies of water would provide layered views leading the eye along the water surfaces and out into the surrounding landscape. This step-wise program required some careful planning with regard to elevations, especially since the client wanted the reflective surface of the vanishing-edge basin to be visible from the deck area to serve as an invitation to a waterside seating area out in the yard and onward into the landscape itself.

The landscape program was equally refined, with a set of intricate brick pathways, mature trees and plantings, a series of berms and a number of intimate destinations. In essence, the watershapes were to form a beautiful, harmonious transition between the home's interior spaces, the deck and the yard beyond. By

design, in other words, it was to be a highly “structured” setting – one filled with rich materials that were to play off the subtle colorations of the travertine flooring inside the house and on the deck as well as a number of other colors that transitioned to the landscape.

In my book, this seamless blending of shapes, styles, colors and textures encompasses the best potential of residential design, inside and out. In this context, we knew our watershapes were to be a thoughtful enhancement to the setting rather than something that would stand apart.

## STEPPING OUT

In excavating the site, we soon uncovered the footings for the columns. This led us to contact Ron Lacher of Pool Engineering (Anaheim, Calif.) to obtain a structural detail for handling the surcharge that would result from the existing structure butting up against the bond beam of the new watershapes. He responded that same day, enabling us to



move forward without delay.

As mentioned above, the lot slopes only slightly – no more than a few feet from front to back of a large space – so in addition to clearing the site for the spa, pool and basin, we also dug away a portion of the backside of the site down approximately three feet to accommodate our vertical transitions.

The spa rises just a foot above the deck and falls a short 18 inches into the pool. In turn, the pool falls just two feet over the vanishing-edge wall into the basin, which reaches five feet out into the landscape. It's an unusual treatment for a vanishing-edge system – one we'd never tried before – but the result is compelling: In effect, the shallow slope and outthrust basin let the system provide its own water-on-water view. And at the same time, the reflections link everything to the greenery beyond.

The basin itself is completely finished in glass tile to draw the eye out across the terraced water surfaces and provide gorgeous reflections of the surrounding land-

scape. The basin's edge rises 18 inches above the grade we established and now serves as extra seating. From this low wall, decomposed-granite pathways radiate into the surrounding garden areas.

The pool was designed as a visual draw as well – in this case toward the vanishing edge. The vessel is seven feet deep on one end and three-and-a-half feet deep in a shallow end that features radiused steps that mimic the outside contours of the vessel.

Along the far wall of the pool beneath the vanishing edge, we installed a long bench that runs the length of the pool. This provides seating that gives bathers a perfect spot for viewing the basin below as well as the reflections and the landscape all around. It also provides close proximity to anyone sitting along the beam of the basin – another means of weaving the spaces together.

## INSIDE MOVES

As is the case with most top-notch projects, materials selections were critical to

Although it is structurally isolated from the surrounding architecture and hardscape, the slightly raised spa seems a fully integrated part of the home because of the way we tucked it between two load-bearing columns and hid the expansion joints on the deck. The shimmering tile detail on the spa's dam wall offers an additional note of integration, reaching to the floor of the pool to align it visually with the treatment of the vanishing-edge wall on the pool's opposite wall.

the success of the resulting visuals. The key choice here was for 600 square feet of glass tile provided by Oceanside Glasstile (Carlsbad, Calif.) – a stunning blend called “Gold Coast” that includes a light beige, two shades of brown and a deep ebony.

This particular blend ties in beautifully with colors selected for the home's interiors and also serves as a visual link among the three vessels. We knew this would be a key decision and spent a good bit of time with the client rolling through possibilities, but when we saw this blend, we all knew

it was the perfect choice – rich and colorful but with an understated elegance.

The entire vanishing-edge basin is lined in this tile, as is the vanishing-edge dam wall – down to the bench on the pool side and all the way down on the basin side. The pool's waterline also has this tile, and so do the raised beam and vertical bench surfaces of the spa. The spillover from the spa into the pool is finished in tile as well – down to 24 inches below the waterline, essentially matching the finish of the dam wall on the opposite side.

Inside the spa, we finished the horizontal bench surfaces in travertine, which we also used in the pool on the flat portions of the steps and benches. The spa floor is finished in a polished beige stone that was used in several interior rooms. (Both the polished stone and travertine were treated with a penetrating sealer to protect them from the corrosive effects of chemicals and water.)

Finally, the remaining interior surfaces of the swimming pool were finished in a soft-looking, off-white Hydrazzo supplied by Aquavations of South Miami, Fla. In ordinary circumstances, I would have had reservations about specifying four different interior finishes, but in this case all the colors blended so beautifully that, rather than looking busy, the entire effect is one of deftly interwoven colors and textures.

## KEY DETAILS

Along with a huge range of aesthetic details, we were also charged with tackling a range of practical issues – keys not only to the overall visual performance of the work but also to its soundness and operation.

► The watershapes are structurally independent of the stone deck, columns and home, so we set up expansion joints to allow our vessels to move separately from those other structures. The client did not want to see the joint, however, so we brought the travertine right over its top, lining the decking's grout joints up with the expansion joints below. This way, the worst thing that will happen if there's any minor movement is that the joints will crack – but the cut stones will remain intact.

► The equipment pad is located some thirty feet away from the water, which



made installation easy. We kept things simple hydraulically, deploying three WhisperFlo pumps from Pentair Water Pool & Spa (Sanford, N.C.) – one each, respectively, for the spa, pool and vanishing edge. Everything is run on three-inch plumbing to ensure efficiency. We also used a diatomaceous-earth filter from Pentair and control systems from Jandy Pool Products (Petaluma, Calif.).

► There are three 300-watt halogen lights in the pool and one in the spa along with two 200-watt fountain lights in the basin. All are on their own dimmer circuits, so the client can manage outdoor moods at the touch of a button.

The pool features a long bench opposite the spa – the perfect place to sit and chat with those gathered in the seating area we established around the catch basin just below. The pool's overall symmetry aligns it with the formal style of the adjacent home, while the tile details visually link the pool to both the spa above and the catch basin below.



► Although we didn't install the pathways around the basin, they are an important element in the overall setting. Three feet wide, they are finished in several pattern variations that change every ten feet, providing both beauty and visual interest for anyone moving through the landscape and to and from the seating area around the vanishing-edge basin.

In an unusual twist, the landscaping was installed before watershape construction began: The client wanted everything to look completely finished once our work was done. That was a rare treat: On the day we filled the pool, the scene was complete and looked as though it had been there for several seasons of maturation.

### A CLEAN FINISH

Watershaping involves such a range of visual elements that there's always a sense of anticipation that goes along with adding water and seeing how everything looks and works when complete. It's the culmination of months of planning and visualizing and attending to details – and the payoff can be most gratifying when everything comes together.

In this case, and particularly because we had worked so closely with an architect/client who has a tremendous sense of style (not to mention strong ideas about how he wanted everything to work together in forming a cohesive environment), we were utterly delighted when the pumps kicked in and the visuals worked out just as we had foreseen.

I can honestly say that there's nothing about this project that I would've done differently: It all blends together as a seamless composition of water, materials, light and landscape that I know will always stand among our very best efforts. Yes, bigger jobs may await us, but when it comes to successfully melding visual elements, this one truly takes the prize.



At night, the finish materials show brilliantly when lit, creating just the look of elegance the client was seeking and completing the sense of aesthetic accomplishment we developed with each succeeding step of the project.

### First Place

If there's one element in this project that stands out among the rest, it's the rich glass tile detailing mentioned in the accompanying text: In all, we installed 600 square feet of the "Gold Coast" blend from Oceanside Glasstile (Carlsbad, Calif.) on key surfaces of the spa, pool and vanishing-edge basin.

Once we'd finished our work, company representatives who'd seen the project asked us to enter it in its 2006 design competition. We were happy to oblige – and flattered, because the company's glass tile, which is all made with recycled glass, finds its way into lots of appealing designs and we were proud to be invited to participate.

Although we knew this project was something very special, we were surprised and delighted when it walked away with first place in the competition. Oceanside Glasstile has since used images of the project in a variety of ads and promotional materials, and we're proud that our work is being used in this way to represent glass tile at its finest.

– B.R.



**Waterpark design is typically about delivering the fun, comfort, safety and excitement guests have come to expect from these expansive aquatic playgrounds. Here, experienced theme-park lifeguard Brett Herman offers his deck-level perspective on key factors to be considered in making these environments work not only for the paying public, but also for the young people charged with the practicalities of managing these busy spaces.**

**By Brett Herman**

**O**n any given day in some spot around the globe, a waterpark will add some new feature or other or open its doors for the very first time, and the design focus is always about developing systems and mechanisms that will lead to a strong popular response and increasing financial success.

If there's a fly in the ointment here, it's that these facilities are very often managed at deck level by young, inexperienced employees – a fact that places a special burden of responsibility on designers of a waterpark's individual features as well as its overall layout.

As lifeguards who interact constantly with both water and guests in these settings, my colleagues and I see a different side of waterparks than do those who design these unique facilities. We all want

### **In the Moment**

Customer service is a lifeguard's basic, minute-to-minute job, but safety and accident prevention are his or her principle responsibilities. No lifeguard team can be everywhere at once to enforce every rule, however, which means guests are left to pursue their own courses.

In smaller facilities, managing guests of any temperament can be accomplished with relative ease, but in mega-parks in which up to 10,000 visitors might gather on a summer's day, lifeguards must rely on physical layout and ride selection to keep things under control.

With large crowds, it's all about throughput: Most guests come for the rides, and when they show up in droves, it helps immeasurably if the park has a

trally located for ready access by the greatest possible surge of visitors.

It's also important that the facility has an effective system of rules that can be conveyed to guests quickly and clearly. Excitement will distract many of them, of course, so the rules must be posted prominently and in multiple locations along the queue – and must be heard as well through a sound system – or through attendants who repeat the message as guests approach the ride.

Another key with high-capacity attractions has to do with exiting the ride. If several riders are dispatched at the same time with another group to follow, all must be able to see clearly how they are to exit the ride when it's over. Building this awareness starts at the top

***We* all want happy, informed and (above all) safe guests, but what few designers experience directly is the reality that people in waterparks can be anxious, overstimulated, embarrassed, tired, confused, annoyed and angry – sometimes all at once.**

happy, informed and (above all) *safe* guests, but what few designers experience directly is the reality that people in waterparks can be anxious, overstimulated, embarrassed, tired, confused, annoyed and angry – sometimes all at once – and that our lives can be made simpler on those occasions with a few distinctive design details.

Indeed, how well a park is designed has *everything* to do with how effectively we can deal with these guests and keep them coming back for more. If waterparks are well designed and carefully thought out with respect to the multiple “behaviors” they inspire, we can work smoothly and efficiently. By contrast, when basic issues of traffic and lifeguards’ needs are *not* considered at the design stage, our work becomes nearly impossible – and the waterpark ultimately will suffer as a result.

range of high-capacity, quick-turnover attractions waiting for them. On crowded days, a slide that can be used by five or eight people every minute is much more conducive to fun and contentment than one that handles just two people in the same amount of time.

This is, in fact, the key to the entire waterpark experience, and designers should have park capacity and peak traffic in mind in selecting which rides to include and which to omit. The biggest frustration we see in guests results not from long lines, but from lines that move too slowly. This is why having multi-lane race slides or those that employ large tubes that fit several people at once are so important: These lines move much more quickly than do one-guest-at-a-time rides, and these features should be cen-

ter of the ride by using ropes and fences to define paths and by using a number system or on-deck dots for soon-to-be riders to stand on as they receive their instructions. When guests are left to form their own lines, chaos is the inevitable result. When there's order up top, it's much more likely it will carry through to the end of the ride and that riders will quickly clear the splash area.

Whether it is arrows on the ground, assertive attendants or just plain good visual and physical design, guests who've completed a ride must quickly flow away from the splash area and exit the pool. In my experience, however, guests take structures more seriously than lifeguards and are much more likely to get moving if it is a bright yellow arrow, for example, that is “telling” them where to go.

## Places to Be

Beyond effective management of lines, waterpark designers also must account for the fact that each guest in the park counts as a body – meaning there must be sufficient equipment, furniture and shade for all of them.

On rides such as lazy rivers and wave pools, for example, designers (and ultimately on-site managers) must ensure that there are enough tubes or other flotation devices to go around. The difficulty here is that daily wear and tear causes a surprisingly high rate of tube attrition – and this can lead to problems even a few weeks into the season.

In that same vein, nothing is more difficult for waterpark staff than dealing with guests who come into conflict over shade or chairs. Hot, tired people are understandably touchy, and these preventable altercations must be taken into account when designing and stocking a park. While many facilities make some extra money by renting out chairs and lounges, it's my sense that return guests spend more money than do those who rent a chair on their only visit. Profitability must be maintained, but again, from a deck-

level perspective, guest safety and happiness are the main concerns – and a relatively delicate balancing act.

Many slides, of course, require cycling of riding equipment that must get back up to the top of the ride for repeat runs. The best-case scenario here is to have an automatic retrieval system, usually in the form of a conveyor that moves directly from the splash area to the head of the slide. (This is the only choice on rides with larger rafts: These inflatables are just too heavy to be carried.)

If riders wait in a line at the bottom and are issued a raft to carry as they move up in line, extra precautions should be taken to prevent several issues such a system can spawn. Ride attendants, for example, must make sure guests surrender rafts or mats once their rides are complete instead of letting them slide back into line – a sure cause of conflicts. In addition, guests who have received their equipment should move into an active queue, otherwise a park will quickly find itself overrun with misplaced and abandoned equipment. (This thins the number of rafts or mats available to other riders, creating additional frustration.)

Lazy rivers and wave pools benefit from the same sort of smart distribution and control of riding equipment. As these guests do not have a strictly defined riding period (unlike slides), they are free to use the equipment as long as they like – a fact that can also lead to problems and gets even worse if tubes are in short supply or disrepair. To keep guests happy, a reasonable number of tubes must be available at all times despite the fact that the demand is unpredictable.

## Meandering Currents

Not all waterpark features are about thrills and excitement. Indeed, the main draw of a lazy river is almost certainly its relaxing nature – and much of that feeling derives from the ride's aesthetic appeal and the flora and decorative architecture that line the river's path.

Unfortunately, however, these beautifying details can be a lifeguard's worst enemy. In an ideal world, there would be an easy way for lifeguards to add and subtract tubes from the water as needed – along with an open, accessible deck in which they might be stored when not in use. More important, these features

**Lazy rivers are meant to be relaxing – and it's probably safe to say they all work on that level – but when the need arises, they must also be adequate when it comes to a lifeguard's ability to see riders without obstruction and gain access to any spot along the watercourse as needed to extract a waterpark user who has been injured.**



would be designed with emergency preparedness in mind.

While many lazy rivers are set up with these sorts of convenience, safety and response issues in mind, many are treated as low-risk rides and are designed that way. Personally, I haven't had to do anything more dramatic than evacuate one of these attractions over a water-quality issue, but that hasn't kept me from worrying about what might happen in the event of an emergency in an inconvenient place on a river's course.

In fact, due to the long, twisting nature of most rivers and the intensity of their visual trimmings, they are often the most lifeguard-intensive of all attractions in any given park, sometimes requiring up to a dozen of us working as a team to ensure safety. These extra lifeguards can be a boon during an emergency, but not if the ride is working against them.

A simple point of design and safety management enters the picture here – and it applies to every attraction at every waterpark, lazy rivers most of all: Rescuers must be able to extract victims from *any* point in the water.

It may be regrettable in visual terms, but aesthetics can never be allowed to outweigh safety considerations. A hedge or rock formation may look great, but lifeguards won't be able to get a backboard to a guest in trouble in such a spot if he or she has a neck injury. In these cases, rescuers have no more than three minutes to extricate the victim from the water before shock sets in. If half of that time is spent just getting to an acceptable extraction point, the outcome will be grim indeed.

In that same spirit, every ride must be reachable on foot. Rescue personnel who wear and need to keep electronic-communications equipment on their persons will not be able to enter the water to help, so they must be able to reach the extraction point as quickly as the lifeguards can get the victim out. Also, should the immediate evacuation of a ride be required, multiple exit paths are always appreciated by emergency-response teams.

## At High Speeds

No designer, of course, would ever confuse a lazy river with a high-speed thrill



There are few experiences more thrilling than riding down a high-speed waterslide, especially when the ride involves the excitement of a race with another waterpark guest. But speed of this sort can lead to injuries, so both crowd-control measures and the design of the splash pool or run-off areas are important to making these rides as safe as can be.

slide when it comes to risk preparedness. These rides can feature tube, mat or body-only transit and come with a huge range of variations, but from a lifeguard's perspective, they all boil down to two types: There are those that end in a splash pool and those that end in a shallow run-off.

With rides in the former category, zip-ping down a tube and shooting out into a big pool is one of the greatest experiences waterparks have to offer. With the exception of wave pools, these are as close as a lifeguard gets to managing a substantial amount of water and typically offer the easiest rescues and emergency responses.

The most common injuries on these slides are to the spine, which means back-boarding equipment should be readily available at all times and the pool should be designed to allow for easy extraction. A deck with an overhanging edge or cantilever – even if it's just an inch – will make things difficult and may result in lifeguards having to carry a backboard over to and up the pool's exit steps, which invariably takes more time than does moving the victim straight to the side and out of the water.

One complicating factor here can be the currents created by the water flowing into the pool – even a large one. This motion can easily injure a victim further, which is why emergency-stop systems should be readily accessible on deck. In my experience, quicker-stopping rides facilitate quicker rescues; by contrast, slides with slow-responding “instant” termination systems increase risk in the event of accidents.

As for slides that terminate in run-offs, they offer different rescue challenges. Although drowning is much less likely given the fact that these run-offs hold just a few inches of water, effective neck-injury treatment can be extremely difficult because the sides of the run-offs are generally not much wider than the average rider. This can make getting a backboard under a victim a matter of great difficulty.

If the run-off is wide enough, an in-the-water, log-roll maneuver can be used to insert the backboard from the side – not a bad option by comparison to rides with narrow run-offs that force rescuers to insert the backboard either head or feet



**Wave pools imitate beaches in more ways than one – including the presence of rip currents that can bedevil inexperienced or exhausted swimmers. Signage is a help, but these watershapes hold lots of guests, presenting special challenges to the lifeguard crew and requiring a filtration system adequate to providing a high level of water clarity.**

first and move it lengthwise down or up the body. It is very difficult to do this even in a few inches of water – and almost impossible during a real rescue situation.

If narrow run-offs are in place, park operators, emergency-response agencies and lifeguards must practice the skills involved in rescue operations. There is no best choice between splash pools and run-offs, as both present their specific challenges. The key is for designers to recognize the risks each approach offers and communicate appropriate safety information to waterpark management before an attraction is opened to the public.

### **Surging Tides**

The third component in the triad of major waterpark attractions is the wave pool – which is also most dynamic and potentially risky of all.

It's no secret to lifeguards or staff that these systems are the locus for more injuries and even deaths than all other attractions – a fact that requires skilled and diligent lifeguards and effective guest instruction. Much like the beaches they imitate, for example, all wave pools have a

riptide. Lifeguards need to know where it is, and signage must inform guests about the specific risks.

Wave-pool configurations may differ, but in all cases staff will be confronted by guests who have a tendency to overestimate their swimming abilities. Signage is a help in alerting guests to specific dangers associated with a specific pool, but no amount of red block lettering on the wall will do the whole job. It can't hurt, of course, but it's no substitute for vigilance and, as necessary, direct intervention.

The sheer popularity of these attractions is a substantial complicating factor: More people in the water means a denser pool population, more distractions and less visibility. It also means that filtration systems must be able to keep up with the demand placed on them so that adequate water quality and clarity can be maintained.

Having a system that ensures crystalline water just for the maximum capacity of the pool is, from my perspective, inadequate to the purpose. A swimmer who has been in the pool for an hour does not contribute the same

amount of murkiness-forming solids than they did upon first entering the water. A pool whose bather population keeps changing presents a much larger challenge and requires upsizing if the filtering capacity is to keep pace with demand.

When the water gets too cloudy, the lifeguards must be quick to deploy a mobile barrier, preferably some kind of highly visible buoy line, upon instruction from their supervisors.

As is suggested at several points above, capping off the needs of these facilities is an absolute requirement for lifeguard and staff training. Those designated as first-aid staff, for example, must be well trained and available and able to respond to emergencies.

Ideally, a major first-aid station should be centrally located, visible and easily accessible for all guests, as walk-in injuries are far more common than are those in which responders must rush to the scene of an incident. If first aid is not effectively stationed, lifeguards and

their direct supervisors can find themselves alone for several minutes dealing with both critical injuries and substantial crowd-control issues.

## Safety by Design

This issue of first-aid stationing is an area in which designers of waterparks can be particularly helpful.

Ideally, first-aid equipment should be available everywhere throughout the park, and every ride should have a complete stock of materials needed to deal with any injuries that might occur. That's a costly approach, however, so the usual decision is to place these stations at key spots throughout the park and develop systems to make certain they are fully stocked each day.

Along those same lines, waterpark designers also should consider the need for security services and personnel. For a variety of reasons, fights often start among guests. Lifeguards are also confronted on occasion by angry and even violent indi-

viduals and can't be expected to break things up or resolve the issues themselves. This is why security needs to be on patrol at all times: Fights can escalate and may even become deadly, but lifeguards can't be distracted from their primary duties to deal with such matters.

If all of these factors have been considered and accommodated, a waterpark is truly ready to open its gates or expand its offerings to bring new excitement to the waterpark experience. It's all about careful planning, and it's something that ideally should happen in the design studio before construction begins.

In a perfect world, all waterparks would observe the principles outlined here, and everyone – facility managers, lifeguards and guests – would be better off. The reality is somewhat less than perfect, but awareness of these issues is growing right along with the ability of designers to deliver on the promise of safe fun and excitement for waterpark visitors of all ages.

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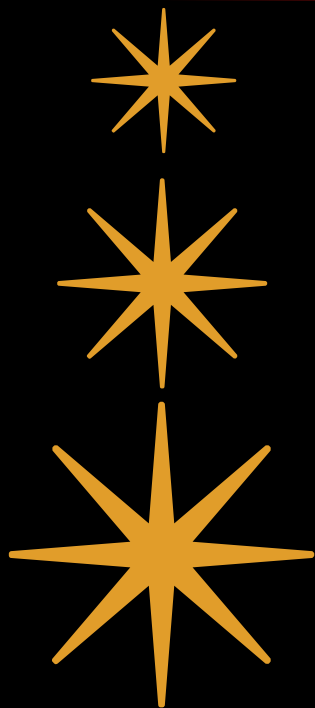
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The watershapes, landscapes and artworks created by John Cohen are among the most fearless and wildly creative to be found anywhere. By



# An Artisan's Touch



## When I was a child,

the conventional part of my education in environmental design came in helping my father, Jay Stang, plant parkways and blocks of Pinus Pinea across the city.

The unconventional part – the part that apparently took firmer root as I grew up – had me admiring the plate he'd made from hardwood with the dozen split avocado pits he'd carved and mounted on the surface; it also had me listening to my mother, Judy Campbell, tell me that the earth was here first, that the garden already exists and that pathways, water-shapes and structures are best built around what we find there.

Those unconventional lessons – one about creativity and vision, the other about respect for nature and a method for approaching it – have stayed with me through the years and have given me access to a number of incredible projects.

As is the case with most intriguing and fascinating designs, the one seen here flowed from a client with whom I developed a close creative connection that resulted in a free exchange of ideas – a synchronized spontaneity that became a pattern for the entire design process. She

always had strong thoughts about what she wanted, but she allowed me to interpret and express her ideas based on our conversations and the nature of the site.

As designers, it's not unusual for us to be called on to use our skills and figure out what a client such as this one really wants and then suggest ideas we think will work. I call this process "environmental psychiatry" because, while so many clients have a sense of what they want and a laundry list of general ideas, few have a direct vision of what might develop on site and it's my job to draw it out.

For this project, I'm happy to report that this exploratory, creative process unfolded with ease, excitement and joy at almost every step of the way.

## A Starting Point

Set on an acre-plus property in an upscale neighborhood in the hills above Los Angeles, the client's home had just undergone a renovation that highlighted a fascinatingly eclectic architecture that leaned toward both Asian and modernized Craftsman influences. The stacked-level house has lots of windows, many connected angular spaces, cherrywood floors and a variety of unique architectural elements.

From the moment I walked through the door, I could see the potential based on the tasteful, sculptural quality of the architecture.

On that first visit, I noticed some striking cracked-glass railing panes along the stairway – an observation that led to an initial concept I brought up as soon as my client mentioned that she wanted to connect the inside to the outside using water and art. My suggestion had to do with installing a large, hanging, sculpted waterfeature in which eleven-foot-tall acrylic panels would be suspended from the ceiling, ending two feet above and dripping freely into a sculpted catch basin.

The opaque acrylic panels would have a roughly textured surface impregnated with deep-blue veins that would run the length of the material. The water would

By John Cohen





drop into a trough filled with glass crystals, and everything – panels and crystals alike – would be lit by fiberoptics. The water would also flow down a stone stairway that would flank the cherry-wood steps leading into the main part of the house.

The client latched right onto this first idea, and I immediately knew we were going to have fun together – although executing this interior waterfeature took quite a bit of doing. In brief, it involved working closely with a Chinese firm that took four months to fabricate the custom acrylic panels and another month to deliver them. Suspending the panels from



**The home's entry hall received the first of the watershapes we designed and built for this project. Here, water washes down a pair of highly textured acrylic panels before dropping into a bed of crystals lit from below with fiberoptics. The small basin is also fed by water flowing across and down stone steps.**



the ceiling with rain bars (not intended to be used the way we used them!) proved difficult, as did setting up the fiberoptic track lights at the top of the panels.

An ever bigger challenge came in mastering the flow of water from on high: Controlling splash was a major issue, and we spent a lot of time adjusting and readjusting the flow and the weir's configuration. The result is unusual and quite vivid, yet tranquil – the sort of thing you'd never be able to pursue without a client who was willing to take chances or a crew with a can-do attitude.

Another cue I'd picked up early on came from the stacked ledger-stone de-

tails that were part of the home's interior. It dawned on me that this gave us the opportunity to combine glass, stone and water in an unusual way that would tie the inside and outside together and give the client something no one else had.

## Crystals and Light

Once we moved beyond the home's front entrance, we were in something of a void: The existing landscape, which featured large trees and an aggressively ordinary rectangular pool, exhibited none of the creative spirit we found in the home's wonderful architecture, so we were all in agreement that what we

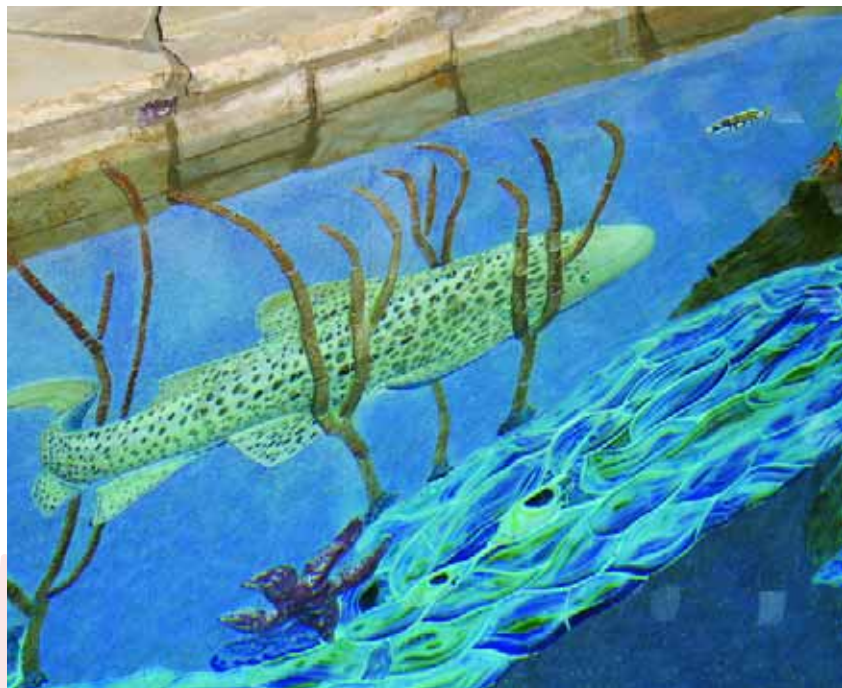
faced (and happily so) was a completely blank canvas.

Our job was to take that space and develop it in such a way that anyone who ever came close would have the feeling of entering a different world – one filled with color, stone, glass, fire and water.

The client, who comes from a Japanese family, wanted everything to have an organic Asian feel while maintaining a sense of line, depth and soft formality. In classic Japanese gardens, the goal is to usher in the Heavenly Spirits by creating such beauty in the environment that a connection is made between the two worlds. This theme was a critical foundation for



The stonework motifs announced inside with the glass-panel waterfeature reach outside to the pool deck, where the fountain is encompassed by a highly detailed composition in stone and crystal. Many of the crystals are backlit to provide a nighttime glow; others are left to reveal their inner beauty with the aid of sunlight.



The interior of the swimming pool has been lined with tile and a pebble finish in a way that portrays a complete underwater world, from the sandy shallows to the darkened depths of the diving well. Colorful fish immediately catch the eye, but further examination reveals a detailed realm filled with visual delights.



everything we did, but we began modestly, commencing with installation of a series of pathways leading from the front of the house to the back yard.

We also worked on stone walls and pilasters featuring stacked ledger stone, crystals, veins and fine architectural details in wood. Throughout, we picked up the home's wonderful stonework, mixing a rich, cinnamon-colored ledger material with Utah Sunrise stone and its red- and rust-colored veins. We also picked up the interior's glass motif as well, mixing red, green and blue crystal pieces in with the ledger stone and lighting them from behind with fiberoptics to give the walls a striking yet subtle glow. We used this same stone-and-crystal approach in the rest of the space as well, making it a recurring motif in several other areas – including the swimming pool.

The original pool had been a plain 16-by-30-foot rectangle, but it has now been transformed into a 20-by-40-foot structure alive with dramatic details. The interior finish, for example, now includes a coral-reef mosaic created by Topanga



**The long spa features imaginative stonework, fine crystals and a multiplicity of hydrotherapy jets in the walls and floor that make for a satisfying soak. The wall rising behind the spa ensures privacy, but it is also a functioning water wall, with streams flowing through various crevices into the vessel before they flow through a network of cracks into the pool below.**



We used stone in various ways throughout the property, generally with some sort of twist to keep things from seeming conventional. On the pool deck, for example, a common flag pattern in light stone is interrupted by a dark-slate 'stream' that flows across the surface. For their part, the walls' rusty-streaked stones seem anything but ordinary.



## A Note of Thanks



A project such as this is too massive for me to forget to give credit to:

- \* My design partner, Jon Heberling of Innovative Theaters (West Hollywood, Calif.) and architect Sean Monahan (Santa Clarita, Calif.), who developed the design scheme for the entire house.

- \* General contractor Bob Potts of Fred E. Potts Co. (Woodland Hills, Calif.), who handled the remodeling project. An excellent craftsman and my good friend, I know I could not have accomplished a thing without his support.

- \* A patient crew and my best friend Jeff Mika of Christmas Star (Topanga, Calif.), an artistic hydraulic engineer and the man who worked and reworked the water flow for the indoor waterfeature until everything was just right.

- \* Landscape contractor Nache Hilton, who, along with her all-woman crew, has brought amazing depth of knowledge in selection and placement of plants and floral arrays to a challenging site.

Also contributing in huge ways were: Mario Arredondo, always on time and available for every new request or change; masonry foreman Tobo Zumaran, who knew just how to fit every crystal in with the stonework; Uvaldo Cano, a master at matching simulated cliff panels to real rock; and Jason Speed and Rob Vanderborgt, who connected every wire and each fiberoptic run and who understood the visual goals we'd set for the extensive lighting arrays.

—J.C.

Art Tile (Topanga, Calif.). The firm is terrific at creating brightly colored scenes using textured, high-relief ceramic tile pieces that give their work three-dimensional character. This mosaic is interwoven with a pebble finish in four shades ranging from blue to purple in dramatic, sweeping patterns that suggest the movement of ocean currents. The beach-entry tile has the same swirls as the Utah Sunrise stone.

The revised vessel also includes large panels of artificial rock made by Rock & Water Creations (Fillmore, Calif.) as well as massive pieces of Kansas Farmer stone quarried in large, rough blocks that we used as decorative elements on the edges of the pool and with the massive diving platform over the deep end. The pool also has a "star surface" fiberoptic treatment that reaches from the bottom of the pool out onto the deck, emanating from both the intricate mosaic tile and the cliff panels.

## Flowing Structure

To allow for jumping and diving, the pool's deep end reaches to nine feet, and

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the mosaics and cliff panels extend roughly to the bottom. The idea here was to create a work of art that was functional for swimming and diving. As it turns out, the client's children and their friends now line up to dive off rocks encrusted with clinging tile starfish and bleeding water through carefully hidden plumbing. Those who jump or dive from the rocks are rewarded by visual details all the way to the bottom, the idea being that when you jump in you're entering a vivid underwater world.

As all of this was unfolding, the client told me that her kids kept telling her she was crazy and that they didn't understand how the thing would look when it was finished. Now that they've used it through the warm summer of 2006, they apparently have gained a newfound respect for their mother's artistic impulses.

It is indeed a spectacular vessel, and the pebble finish, the tile mosaic, the large boulders and the wall panels all combine to create a backyard swimming pool that is as elaborate and uninhibited as any I've ever seen. In fact, time and again, people who see it tell me that they've never seen a watershape that displays such sheer artistic daring.

The message I take from this praise is that the watershape is intrinsically *interesting* – and it just keeps going, too: Adjacent to the shallow end of the pool, for instance, there's a 20-foot-long attached spa that rises above the full width of the pool, fronted by a raised dam wall decked out with ledger stones and crystals. Water from the spa doesn't spill over the edge: Instead, it flows into the pool through cracks in the ledger and the Kansas Farmer stone.

Then there's the 13-foot-long, two-tiered, radiused fire feature that serves as

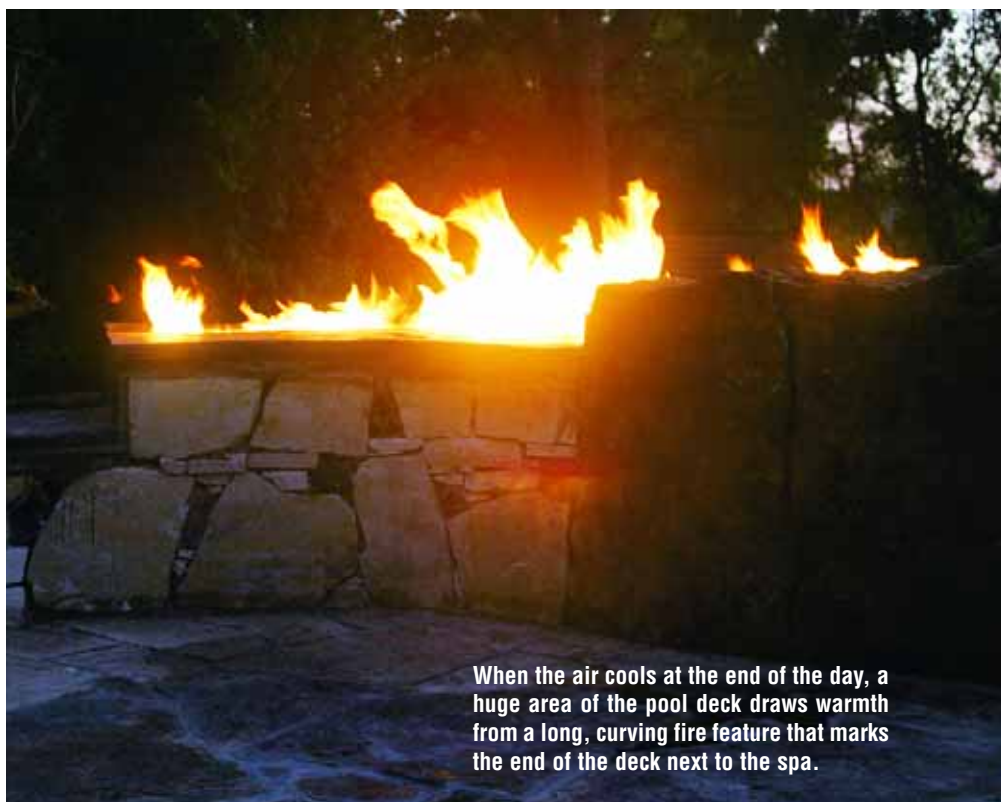


**Large standing stones are a major motif used throughout the landscape and the watershapes: Huge slabs of Kansas Farmer stone frame the walk from the front drive to the pool deck (A); stand as sentinels just off the upper deck, looking out over the sloping yard (B); and serve as jumping platforms at the deep end of the pool (C).**

a backdrop to the pool and spa: It uses the same stone and glass materials, with flickering firelight transmitted through the crystals. Finally, opposite the spa, there's a large water wall with fountain sprays from Fountain Supply of Santa Clarita, Calif. Once again, this area uses the ledger-and-glass details—and the water wall picks up the motif of having water flow out through cracks placed strategically in the stone.

The deck features Utah Sunrise stone in a flag pattern, interspersed with large pieces of black Yosemite slate with a gloss finish that appear as "streams" of water "flowing" throughout the decking. We've completed a huge wooden deck and barbecue area that's tied into the rest of the composition with crystals and ledger stone, and there's also a planned Japanese-style bridge that will extend from the deck area toward a new guesthouse. This, too, will include crystals lit by fiberoptics mixed in with the stone.

Malibu Stone & Masonry (Malibu,



When the air cools at the end of the day, a huge area of the pool deck draws warmth from a long, curving fire feature that marks the end of the deck next to the spa.

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Calif.) was a huge help throughout the project, helping us procure the stone we needed in the types and sizes required.

## Japanese Stonehenge

The landscape design for this amazing yard is an amalgam of classic Japanese garden styles with tropical plants added to represent that country's southern regions. There's a small, rock-colored Japanese temple by one of the pathways, lit from the inside with fiber optics and surrounded by moss streams and a collection of world-famous dwarf azaleas, camellias and gardenias from Nuccio's of Altadena, Calif. We also included mottled-glaze urns more than six feet tall, lit from within to uplift large clusters of bamboo stalks.

The major watershape and hardscape features are complete, but we're still hard at work on the landscape and yet-to-be-developed areas of the property. In the entry court, for example, we're working with the client on an elaborate water/light/crystal structure meant to evoke a *Lord of the Rings* experience. We have also installed an LED-illuminated orb/moonlighting system – a programmable array that will dim and raise the lights to create shifting visual effects almost as though the “moon” is working through its phases or changing positions. This starts up with a honeycomb glow in the early evening that turns bright silver later on.

As I hope I've conveyed here, this is a highly unusual project for a unique client, and I trust the photographs help in conveying its colors, styles, textures and materials in ways my words cannot.

One of the reasons I love this project so much is that the blue flowing veins in the interior water panels have been translated to all of the watershapes and hardscape outside – a complex connectedness that creates bold and surprising spaces that are also collectively harmonious and peaceful. The use of color is meant to be eye-catching, but when you spend time here, the contrasts and harmonies work hand in hand, *yin* and *yang*, with enduring beauty.

We may not have 200 years to produce an archetypal Japanese garden, but our love for the beauty of the stone and glass is highly evident in the detailing and eclectic blending seen in our work and has moved everything we've touched in the right direction.

Another source of joy comes in the fact that the project has been pursued by a true community of artisans. Everyone from the masons and suppliers to the general contractor and my own staff have brought passion and creativity to the project and, each in their own ways, left indelible marks on the site. This endeavor was a true labor of love – one that will always conjure feelings of excitement, wonder and pride in everyone involved.



Lighting plays a huge role in the entire composition, from bold lights under the fountain plumes to the subtle lights that peek through tile features in a twinkling starlight effect both on the deck and below the waterline. From the front entry's pagoda to the 'moonlight' effect in the 50-foot trees that line the property, the emphasis is on extending the fun of the backyard experience well into the night.



## Five Phases

As is true of many great projects, the design described in the adjoining text unfolded in several distinct phases, each building and expanding upon the last.

► Phase one included initial discussions with the client, general contractor Bob Potts and architect Sean Moynahan and the design and installation of the elaborate acrylic waterfeature inside the house with lit crystals in a rock wall.

► Phase two involved the initial work on the exterior pathways, walls and landscaping as well as veneering parts of the house in stone. It was here that the governing exterior motifs really took form, with full expression of the Asian-influenced style and creative stone-and-crystal work now seen throughout.

► Phase three took the most time and encompassed creation of the swimming pool, the tile coral reef, the spa, the fire feature, the outdoor water wall and the surrounding stone decking – not to mention the wooden deck, its extensive substructure and the outdoor kitchen.

► Phase four is ongoing and includes work on developing the landscape in collaboration with Nache Hilton and her staff. This phase includes the front entrance, aquatic gardens with arching stone bridges and large vertical Kansas Farmer stone placements we've used to create a "Japanese Stonehenge."

► Phase five will see completion of the Japanese gardens, stone driveways and walkways and the *Lord of the Rings*-inspired courtyard with its giant crystals, subtle waterfeatures, fabulous light shows and sequenced water sprays.


In each of these phases, I've seen instant connections between these myriad concepts and the client's desires as well as an open spirit when it came to fine-tuning design ideas before any work is done.

In each case, naturally, the approach to a given phase is influenced by previous stages, and there's an overriding need to make certain that everything blends, matches and flows with integrated coherence. Our aim, in other words, has always been to leave no sign that the work is taking place in distinct phases.

So far, we've spent more than three years on site. With humble determination and indomitable creative spirit, we should complete this graceful and daring project sometime in 2007.

—J.C.

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## NEW COLORQUARTZ SHADE

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**3M** has added Tahoe Blue 8085 to the other five colors in the company's Trowelable Grade line of Colorquartz Crystals. Specially formulated to provide a more natural-looking blue pool surface than the standard product, using the non-fading material results in watershapes that resemble naturally occurring lakes while offering consumers the durability of quartz – one of the hardest minerals on earth. **3M**, St. Paul, MN.



## POND BACTERIA

### Circle 141 on Reader Service Card



**KASCO MARINE** offers Macro-Zyme Bacteria in two formulations for watergraden applications: Macro-Zyme, for degrading sludge and reducing nitrates, phosphates and odors; Macro-Zyme Plus, which does everything the standard product does but also includes fish-friendly additives and a blue dye that reduces UV penetration while offering a shade indicator for retreatment. **Kasco Marine**, Prescott, WI.

## PAVEMENT BREAKER

### Circle 142 on Reader Service Card

**DEWALT** offers Model D25980K, a heavy-duty pavement breaker designed to provide users with increased durability, great performance and low vibration in breaking up concrete and asphalt on job sites. The device has an electronic control system that provides the unit with a soft start and constant speed under load and allows the breaker to begin breaking as soon as the tool hits the surface. **DeWalt**, Baltimore, MD.



Continued on page 76

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## CAST-BRASS LIGHTING FIXTURES

### Circle 143 on Reader Service Card



ORBIT/EVERGREEN offers Model B141, a heavy-duty, cast-brass landscape lighting fixture. The product has solid-brass construction for greater durability and weather-resistance in all climate conditions; a rotating hood with a key-knuckle for easy on-site adjustment; and a reinforced ground stake for support. It's available in three finishes: antique bronze, antique brass and aged green. **Orbit/Evergreen**, Los Angeles, CA.

## CONCRETE STAINS

### Circle 145 on Reader Service Card



LEGACY DECORATIVE CONCRETE SYSTEMS has introduced Tinté D'Acqua, a full line of water-based stains for concrete. The product is non-hazardous, contains no acids or harmful chemicals and has been designed as an alternative to common reactive acid stains. The material is available in 28 standard colors, but those may be blended to create custom colors. **Legacy Decorative Concrete Systems**, Springfield, IL.

## CHEMICAL CONTROLLER

### Circle 147 on Reader Service Card



CAT CONTROLLERS offers the CAT 2000 Professional Package, a factory-assembled system that includes a pH/ORP controller and a flow cell/sensor array mounted on a PVC backboard. All hardware is marine-grade stainless steel, and the flow chamber is pre-drilled to accommodate two Stenner chemical pumps. The package also includes 30 feet of tubing and speed-fit connectors. **CAT Controllers**, Gaithersburg, MD.

## COMPACT POND FILTER

### Circle 149 on Reader Service Card



SAVIO ENGINEERING has introduced the smallest in its Livingponds line of multi-stage biofilters. Designed to keep water clear while creating a beautiful waterfall, the model 070 features two medium-density filter pads and a ceramic media that offers 10,000 square feet of surface area. The housing has a 16-inch spillway and a heavy-duty top grate to support stones or plants. **Savio Engineering**, Santa Fe, NM.

## TILE CATALOG

### Circle 144 on Reader Service Card

MICHELLE GRIFFOUL STUDIOS has published a catalog on its stoneware and porcelain tiles. The 24-page, full-color booklet covers waterline and border mosaics as well as vivid, high-relief, whimsical porcelain sea life (fish, mammals, crustaceans, turtles and more). The products come in an array of standard as well as custom colors, and complete custom design services are available. **Michelle Griffoul Studios**, Buellton, CA.



## NEW FINISH COLORS

### Circle 146 on Reader Service Card

AQUAVATIONS has added four new colors to its Hydrazzo line. The product, which is now available in Mediterranean Blue, Sahara Sand, Jamaican Mist and Pacific Blue along with eight other classic colors, offers the durability of exposed aggregate along with a silky smooth texture and results in a surface that is resistant to spot etching, topical stains, permanent scale and algae adhesion. **Aquavations**, South Miami, FL.



## ANTI-VORTEX DRAIN COVERS

### Circle 148 on Reader Service Card

AQUASTAR has introduced an anti-vortex drain cover with an unusually low profile and a flow capacity of up to 152 gallons per minute. Made with durable, UV-resistant ABS and fitted with stainless steel mounting screws, the eight-inch covers are flat enough that they won't hang up pool cleaners and are available in eight colors (black, white, light gray, dark gray, blue, bone, taupe and tan). **AquaStar**, San Diego, CA.



## CD FITTING CATALOG

### Circle 150 on Reader Service Card

LASCO FITTINGS has released its catalog in compact-disk format. Organized by product category, the disk highlights new products and includes the most recent editions of the company's product literature; technical data on each product; and links to the company's web site for current price information. New products include large-diameter Schedule 40 fittings, manifold tees and more. **LASCO Fittings**, Brownsville, TN.



## RESISTANCE TRAINER

### Circle 151 on Reader Service Card



**SUPER SWIM** makes a resistance-training system for installation in swimming pools. Designed for use by competitive swimmers, the device offers progressive hydro-resistance and has an adjustable belt to allow bathers to swim in place at their own pace. The system's fiber rod mounts easily in a flush-mounted deck plate and is easily removed for storage. An end-user training video is available. **Super Swim**, Fort Meyers, FL.

## DIGITAL TIMER

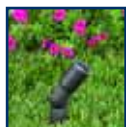
### Circle 153 on Reader Service Card



**INTERMATIC** has expanded its I-Wave series of wireless pool/spa controls with the Model P1353ME three-circuit digital time clock. The device has the ability to program up to three circuits and handles up to six pre-programmed modes of operation. Countdown and override features allow cycle interruptions for pool/spa service, and the system features integrated pump-protection software. **Intermatic**, Spring Grove, IL.

## COMPACT LIGHTING FIXTURES

### Circle 155 on Reader Service Card



**VISTA PROFESSIONAL OUTDOOR LIGHTING** offers Model 2201, a compact, low-voltage lighting fixture made of die-cast aluminum for strength and reliability. The lamp housing has a weather-resistant silicone O-ring gasket, and a clear, tempered, shock- and heat-resistant glass lens safeguards the lamp and optics. The fixture comes in 13 standard colors. **Vista Professional Outdoor Lighting**, Simi Valley, CA.

## URETHANE COATING

### Circle 157 on Reader Service Card



**PERMA-CRETE** offers PermaThane CRU-750, a high-solids, two-component acrylic urethane coating system containing a styrene-acrylic copolymer and aliphatic polyisocyanate – a combination that offers unique elasticity and makes the material ideal for coating the interiors of swimming pools and spas. It also provides remarkable protection against both alkaline and acidic chemicals. **Perma-Crete**, Nashville, TN.

## DECKING TILES

### Circle 152 on Reader Service Card



**GLADDING, McBEAN** manufactures piazza tiles using high-quality clays and unique firing methods that produce rich, fire-flashed colors, rustic character and a durability that means the product can be used in any climate. Available in a range of shapes, colors and sizes, standard products can be combined in new ways to create all-new looks and come in two finishes – smooth or distressed. **Gladding, McBean**, Lincoln, CA.

## POND KIT

### Circle 154 on Reader Service Card



**PENTAIR AQUATICS** offers the PK1200 Pond Kit for use in 1,200-gallon pond projects. The kit includes a skimmer/filter, a 15-by-20-foot, 40-mil rubber liner (and underlayment), a 1,506 gallon-per-hour pump, a waterfall weir, 25 feet of flex tubing, fittings and an easy-to-follow manual for contractor installation. The kit is also compatible with the company's Pondscapes Designware software. **Pentair Aquatics**, El Monte, CA.

## MINI SKID-STEER

### Circle 156 on Reader Service Card



**CHARLES MACHINE WORKS** produces the Ditch Witch Model SK350 mini skid-steer system. Just 36 inches wide, the compact device does the work of larger machines, has a high lift/dump height relative to its size and offers the versatility that comes with the availability of more than 70 attachments. Its stand-on rear platform also keeps operators safely out of the mud and debris. **Charles Machine Works**, Perry, OK.

## WATERFALL PUMPS

### Circle 158 on Reader Service Card



**CAL PUMP** has introduced high-volume, magnetic-drive pumps designed for durability, reliability and energy efficiency in managing the flow in waterfall systems. The pumps, which come in versions handling either 3,700 or 4,200 gallons per minute, are equipped with thermal-protection switches that shut off the pumps before they can be damaged if they become clogged or jammed. **Cal Pump**, Valencia, CA.

By Mike Farley

# Working Dialogues



When it comes to design in the watershaping industry, I see all of us who creatively put pencils to paper as being in states of transition – particularly where I live in the pool/spa realm, where design has traditionally been used as a sales tool and charging for design work was largely unheard of as a service above and beyond construction.

All that is changing – and for the better, I think. But with more and more of us gravitating in the direction of professional design consulting either within companies or on our own, what's to guide us as we reach toward that goal?

A book I've just read may be a big help: Andrew Pressman's *Curing the Fountainheadache: How Architects & Their Clients Communicate* (Sterling Publishing Co., 2006) has led me to recognize that good design is mostly about establishing effective dialogue with clients. Indeed, he has convinced me that the way I talk to my clients – and, as important, how well I listen to what they have to say in return – has *everything* to do with whether or not I'm going to be successful in my design career.

The title refers to Ayn Rand's great novel, *The Fountainhead*, where she uses the life of a visionary, self-determined architect to define a conflict between those who seek to create art and generate distinctive designs rather than burden themselves with the demands of functionality or a client's desires. (See *WaterShapes*, June 2006, page 74, for a detailed commentary on this classic book.)

Although Pressman doesn't mention watershaping directly in the 260-page text, I found his views on striking creativity/practicality balances through designer/client dialogues to be easily transferable to my own endeavors. He

conveys those views through a series of real-life case studies that illuminate the nature of client/designer dialogue, and the fact that most are focused on residential projects rather than commercial work makes the discussions highly relevant to most watershapers.

Some scenarios, however, *do* cover commercial designs, and I found these to be quite helpful because they discuss how designers in that realm must learn to work as parts of teams and balance the input of several parties. There's also a section that turns the perspective on its head, focusing on communication from the client's perspective – quite informative in every way.

The text weighs a range of important issues, including practicalities such as dealing with budgets, establishing the scope of work, setting expectations for timetables and dealing with changes along the way. There's also a strong suggestion that the real challenge is balancing the desires and needs of the client against the designer's desire to create works that stand out from the norm.

When boiled down to its bones, the book does a great job of defining the value of establishing a comfort level with clients, opening channels of communication and, most important, striking balances between creativity and the practical needs and desires common to many clients. Pressman also looks at why communication breaks down and processes fail to move forward – and then offers suggestions about ways to set up dialogues that will help a designer avoid common pitfalls.

Certainly, all clients and situations are different – and knowing how to deal with each case individually is a big part of the designer's job. If you're looking to hone these often-subtle skills, this book is a terrific place to start. **WS**

**Mike Farley** is a landscape architect with more than 20 years of experience and is currently a designer/project manager for Claffey Pools in Southlake, Texas. A graduate of Genesis 3's Level I Design School, he holds a degree in landscape architecture from Texas Tech University and has worked as a watershaper in both California and Texas.



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