We call on you, the people, to submit and contribute to this quarterly, on-line publication produced by the Colorado Chapter of The American Society of Landscape Architects.
Welcome to Exposures. The four volumes utilize recurring themes, which include: Planning (Winter issue); Sustainability (Spring Issue); Design (Summer Issue); and Technology (Autumn issue).

Even though the theme for the next issue is Sustainability, submissions for any volume are accepted year round and commonly feature: Articles, Photo Essays, Project/Book reviews, Built Projects, Award Submissions, Event Writeups, Landscape Critiques, Research, ASLA related topics, and anything else related to the practice and performance of landscape architecture in a local, regional, or international context.

Other than that, it is completely up to the author/designer/artist what you present.

And now...a few submission requirements. Every piece needs to be in Word format or some text variation thereto. Each submission must list a title, author, and provide a brief (300 word max.) author bio. Please see past issues on the ASLA Colorado website for examples. Any photos/drawings/renderings that accompany must be minimum 150 dpi, include credits and a caption.

Please direct questions and submissions to Abraham Medina at president@aslacolorado.org.
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CSU LA DAYS

Lectures are held on the following nights at 6 PM in Clark A104 of the Colorado State University campus.

APRIL 2ND
   Gary Hilderbrand
   One of 2 principles at Reed/Hilderbrand; He holds degrees from SUNY College of Environmental Science and Forestry and the Harvard School of Design.

APRIL 3RD
   Peter Walker
   Co-founder of SWA and founder of PWP Landscape Architecture; He holds degrees from the University of California, Berkeley and the Harvard University Graduate School of Design.

APRIL 4TH
   Warren Byrd
   The founding principle at Nelson/Byrd/Woltz; He holds a BS in Horticulture from Virginia Tech and an MLA from the University of Virginia.

APRIL 5TH
   John Bela
   Senior lecturer at California Center of the Arts; He received a BS from the University of Massachusetts and an MLA from the University of California, Berkeley.

APRIL 12TH and 13TH
   Chip Sullivan
   Currently a professor at the University of California, Berkeley; He received a BA in Landscape Architecture and an MA in Urban and Regional Planning from the University of Florida.
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On the cover
California Aqueduct Cascades near Sylmar, CA.
(Courtesy of Oxbow Design Collaborative)

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Chapter Members,

As we roll through the first quarter of 2013, we can’t help but notice the increase of building and development projects occurring around the area. What were once lifeless projects in 2010 are once again busy with construction, and this welcome change brings hope and excitement after years of slow recovery.

Your Board and Council have been busy during the past few months, focusing on planning and developing new and exciting programs for 2013. Programs already in the works include a Small Business Bootcamp that helps new or emerging professionals learn the basics of running a small business, and a Designer Roundtable, a program hosted in conjunction with the Denver Botanic Gardens that connects highly interested homeowners with professional landscape architects and designers who focus on residential design. And of course, we can’t forget our Professional Education Seminars/Lunch and Learns. This year’s lineup is almost complete, and details will be revealed soon.

This year is shaping up to be an exciting one for our Chapter, and we want to say thanks to all of you who have continued your support of ASLA Colorado. As your Board and Council, we are always interested in news, activities, or comments from chapter members, including our friends on the western slope and Wyoming – we haven’t forgotten about you. If you have any news to share, or if you just want to connect with the chapter leadership, please feel free to reach out to us. We are always happy to talk.

Sincerely,

Abraham Medina | PLA, CPRP, ASLA
ASLA Colorado Chapter President
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Executive Committee & Counsel of Directors

The Executive Committee is the governing body of ASLA Colorado and is chaired by Abraham Medina, Chapter President. The committee meets monthly. The Council of Directors meets quarterly to support the executive board by providing direction on issues related to the association programs. The following is a highlight of ASLA Colorado Executive Board, Council of Directors and general chapter activities and events since the last issue of Exposures.

Executive Committee meetings typically occur on the first Wednesday of each month beginning at 5:00 pm and are held at member offices along the Front Range. Attendees typically include those on the Executive Board and Council of Directors although all chapter members are welcome to attend or to participate by teleconference. To be included in meeting email announcements please notify the president.

December 2012. The Annual Awards event was held December 11th at the Four Seasons Hotel and was attended by approximately 145 landscape architects, guests, and sponsors. In addition to presenting the awards over $18,000 in sponsor pledges were made. The board met with representatives of the Denver Botanic Gardens to discuss future events and collaboration opportunities. Initial plans were made for the Doors open Denver event, for the 2013 Lunch and Learn series, and final plans were made for the annual Pro Green Expo.

January 2013. The board signed a contract with ASLA National concerning the 2014 ASLA National Convention which will be held in Denver. The 2013 draft budget was reviewed. Additional plans were made for the Doors Open Denver event and for Landscape Architecture Month in April. The board began a monthly “workshop session” program which will serve as a board orientation and training opportunity. The Government Affairs Committee testified on rules changes at the State Board of Landscape Architects meeting at the Colorado Department of Regulatory Agencies (see the Government Affairs Update for more information).

February 2013. The board and council met jointly. The 2013 budget was reviewed and approved. A draft document retention and destruction policy was discussed and will be finalized at a future meeting. The 2013 Lunch and Learn series was discussed. Plans for a membership survey were discussed. It was agreed that ASLA Colorado will hold a “Small Business Boot Camp” in the fall. The sponsorship program was expanded to include large landscape architecture firms, follow-up contacts were made with sponsors who had pledged but not yet paid, and additional potential sponsors were identified for board members to contact.

Government Affairs

ASLA Colorado has been awarded a matching grant from ASLA National to conduct a study of Landscape Architecture and Public Welfare in Colorado. ASLA Colorado’s project will build upon the information presented in the groundbreaking foundation paper “Landscape Architecture and Public Welfare”, for CLARB in 2010. Public welfare is the least understood of the three primary justifications for professional licensure (public health, safety and welfare). It is clear that landscape architects affect public health and safety, but, as stewards of our public spaces and natural environments, our work is intrinsically related to the public welfare. This research will increase awareness of our professions positive effects on public welfare, and help us to build the case for continued licensure when our Statute is up for Sunset Review in 2017.

The Architects, Professional Engineers and Professional land Surveyors Professional Licensing Act is currently up for Sunset Review. ASLA Colorado fully supports continued licensure for the allied professions in Colorado. We will be monitoring the Sunset Review process in preparation for Sunset Review of the landscape architecture statute in 2017.

The State Board of landscape Architects voted at the January meeting to approve modifications to the Rules, relating to interpretation of the exemptions for related professions. The new wording to be effective March 17, 2013 will read:

Exemptions

“The Board interprets the language of Sections 12-45-118, C.R.S., as follows:
(a) The practice of architecture, professional engineering, and professional land surveying as defined in Title 12, Article 25, C.R.S., is exempt by Section 12-45-118(1)(a), (b) and (c), C.R.S., respectively; pursuant to Section 12-45-113(2)(o), C.R.S., however, architects, professional engineers, and professional land surveyors are subject to disciplinary or other action if they hold themselves out as a licensed landscape architect or employ any title restricted by these Rules or Title 12, Article 45, C.R.S. without being licensed as a landscape architect.”

The ASLA Colorado is actively promoting compliance by municipal and county government agencies with the “Landscape Architects Professional Licensing Act”, passed by the State in 2007. We are seeing a positive trend towards compliance with the state law. Are your city and county government agencies in compliance with the state law? If not let them know. Let’s help them understand and implement the State Licensing Act. ASLA Colorado has created an advocacy package to educate local government agencies about the Licensing Act and to help persuade them to update their
codes and procedures to be in alignment with provisions of the State Law. The advocacy documents can now be downloaded from the advocacy page of our website, under the heading "Licensure Compliance Materials". If you would like hard copies of the advocacy package to promote compliance in your community, please let us know.

ASLA Colorado meets regularly with the GreenCo Legislative Committee (and their lobbyists) to keep apprised of ongoing and upcoming issues of legislative and regulatory importance. ASLA Colorado is represented in the legislature and before state agencies by the Colorado Council of Landscape Architects. Gregory Williams of Redpoint Resources LLC, and Scott Meiklejohn of Meiklejohn Consulting LLC are under contract to monitor state legislative activity and regulatory developments. They also represent ASLA Colorado at meetings involving other allied organizations on new and ongoing issues of mutual concern. Neil McLane is Vice President of Government Affairs and chair of the ASLA Colorado Government Affairs committee. This committee also oversees the activities of the Colorado Council of Landscape Architects. Neil can be reached at ndsneilm@gmail.com.

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This article views Water Resource Management in Designed Landscapes of the American West. Our most critical natural resource will be discussed through the lens of contemporary landscape architectural practice in terms of Planning, which is necessary to confront the issue of water scarcity.

Here is a land where life is written in water.
-Colorado’s late Poet Laureate, Thomas Hornsby Ferril

If you have ever visited the Eastern Sierra Mountains along Highway 395 in California, you can recall that it is a beautifully dramatic landscape with 14,000 ft. snow-capped peaks that abruptly rise up off the desert floor. It is a vast desert landscape, sparsely populated and stark, with miles of preserved open space, an abundance of biodiversity, and endless recreational opportunities. As a young person from the east I recall this landscape very well as it is beautiful and altogether different than anything east of the Mississippi. On one trip in particular, my destination was the Owens River Gorge, which lies to the east of the Sierra Nevada escarpment in the shadow of the high mountains. I distinctly remember a strikingly incongruent landmark: a 12’ diameter pipeline guarded by chain link fence that headed off as far as the eye could see through the otherwise completely natural landscape. The signage on the fence and the lettering on the pipeline read “Property of LADWP.” LADWP stands for Los Angeles Department of Water and Power. The pipeline is a part of the Los Angeles Aqueduct built in 1908 to serve the City of Los Angeles, bringing water from the Owens River overland 338 miles to allow for prosperity in places far too dry to sustain a growing population. The Owens River and Owens Lake are part of the Great Basin and therefore, do not drain naturally to the ocean. Rather, surface water flows into various inland lakes and has since been pumped south to serve the City of Los Angeles. Today, Owens Lake is a dry lake bed and the Owens River flows at a fraction of its native volume.
Twentieth century water infrastructure like the Los Angeles Aqueduct and the Hoover Damn were marvelous engineering feats for their time, and demonstrate just how far the cities of the American West will go to secure a reliable water supply and a future existence. At great financial, political, and ecological expense, vast and complex water storage facilities and distribution networks were created to serve the needs of a growing population. Cities expanded at exponential rates on lands that would have been thought to be illogical, infeasible, even laughable one hundred years ago. Our water infrastructure and green lawns symbolize the great transformation of the western landscape – and sets the stage for our contemporary water predicament.

From the 100th Meridian to the California coast, the American West is unique and ever-changing in many regards but one identifying characteristic remains the same – the West has limited and unpredictable patterns of precipitation. Despite obvious difficulty, transformation of this strange and dry country was inevitable. Early explorers and researchers saw the challenges that the Western climate posed to human industry. In 1878, after his expedition down the Colorado River, John Wesley Powell delivered a report to Congress entitled “Report on the Lands of the Arid Region of the United States.” It stated, “The physical conditions which exist in the arid lands, and which inexorably control the operations of men, are such that the industries of the West are necessarily unlike those of the East.” At the time of this report, the arid lands became a unique natural resources problem. In the late 19th and early 20th centuries, one solution in particular enjoyed broad-based support: “rain follows the plow.” The basic idea was that if enough arid land could be irrigated and planted, eventually it would become more temperate – an absurdly grandiose solution that did not prove successful. Similarly, a century later there are still grandiose solutions offered; like the construction of a 600 mile pipeline from the Missouri River to new development along Colorado’s Front Range. Nonetheless, other solutions were realized: reservoirs, dams, pipelines, and irrigation ditches mark the Western landscape and provide water and electricity to millions of people. Every year in Colorado, pipes carry thousands of acre-feet of water from the relatively water-rich mountains over a hundred miles to water-poor Front Range cities. When a resource is so precious, it requires special protections. Just as law and policy responds to rights such as intellectual property and land, unique laws and policies have formed around Western systems for collecting, storing, and distributing water.

The famous quote attributed to Mark Twain, “whiskey is for drinking, water is for fighting over,” is as true now as it was 150 years ago. In the late 19th century, greater numbers of settlers moved west, fueled by incentives such as the Homestead Act of 1862. It became apparent that a formal system of water allocation was needed to provide enough water during times of shortage.
Colorado’s Doctrine of Prior Appropriation, or “first in time, first in right,” became the water law standard for most states west of the Mississippi River. It states that older, senior water rights take precedence over younger, junior rights. This allows all senior water rights greater certainty of access to their water. The doctrine also states that the right to divert unappropriated waters of any natural stream to beneficial uses – as determined under the law – will never be denied. Whether you agree or disagree with the laws in their conception or in application, these policies reflect a ‘finders keepers’ logic that is unlikely to change in the near future because of the valuable property rights issues involved. Any progress made to allow for greater innovation in water resources planning will likely require a very unique solution that works within the existing legal framework and acknowledges the expenses and efforts of current water rights holders. That said, progress is needed and current laws may have to adjust in response to massive changes coming to the West.

Today we are faced with an unprecedented set of issues that call for new approaches to western water resource management. The issue of water supply has joined the need to plan for climate change and population growth. Not only are these issues difficult to address, but they are facing us in an environment that is increasingly unpredictable and complex. The traditional and arguably static planning model that called for predictions and plans will need to be replaced with a much more flexible, adaptable, and dynamic model that embraces change as the new norm and works toward a more resilient and sustainable American West.

The vast networks of collection, storage, and distribution systems have made our large western cities possible, and were built for the world of the 20th century, when water was scarce but snow in the Rocky Mountains was generally plentiful and populations were manageable. Reservoirs that today store water for millions of new residents along Colorado’s Front Range rely completely on slowly-melting snowpack from the previous winter and spring’s precipitation. In the west, higher than average temperatures and frequent drought is becoming the norm. In 2012, “the contiguous United States experienced its warmest year since national record keeping began in 1895,” reported the National Oceanic and Atmospheric Administration’s National Climatic Data Center. Southern California relies heavily on the historically consistent reservoirs of Lakes Powell and Mead on the Colorado River. The California Department of Water Resources has reported that “Powell has been below average in 10 of the past 13 years, resulting in reduced storage levels” in both Mead and Powell. With the Department predicting a drier than normal forecast for the Colorado River Basin, and the US Drought Monitor confirming that January 2013 saw drought conditions throughout the Basin and in southern California, it is probable that lean times will continue for California and all those who rely on the Colorado River Basin for water – over 100 cities including Denver, Albuquerque, Las Vegas, Los Angeles, San Diego, and Phoenix to name a few. "I think, unfortunately, 2012 really may well be the new normal," said Daniel Lashof, Director of the Climate and Clean Air Program at the Natural Resources Defense Council, a U.S. environmental group. "It's the kind of year we expect, given the global warming trend is ongoing."

While many urban policymakers are beginning to understand that the 21st century will bring increased drought frequency and severity, many land use policies and practices that affect our citywide water consumption behaviors are still stuck in the 20th century. The highest consumptive use of water in any given Western city is irrigation for landscaping, ranging from around 40 percent to as high as 75 percent. Residential properties in the Las Vegas Valley, for example, use on average 70 percent of their water outdoors. Many of the current municipal landscape ordinances and Home Owners’ Association rules encourage the waste of water by requiring large expanses of bluegrass turf. On Colorado’s Front Range, grass cannot survive on precipitation alone; it needs an average of an additional 28” of water each year. A smallish grass yard of about 5,000 square feet needs over 85,000 gallons of water each year to stay healthy. That amount of water would serve five people with all of their indoor water needs for a year. City policymakers, planners, residents, and landscape professionals can work together to support and even incentivize water-smart landscaping to reduce the “water footprint” or urban spaces.
As we look back to the century that has passed for lessons learned, one unanticipated consequence of our highly engineered water solutions has become abundantly clear: our culture has become dependent on expensive and static systems that regulate and deliver a resource with which we have little conscious relationship. Our systems are costly but individuals are not confronted with an obvious cost. The water bill is low. The drained creek is not in our backyard. From a sustainability and community standpoint, our current solutions have created a disconnect with the general public. The notion that we can simply turn on the faucet and water will flow without limit and at a fraction of its true cost will no longer suffice in this time of population growth and climate change. New regulations at all levels of government, emerging technologies, and conservation efforts are protecting water resources, but there is something missing: we do not have a strong cultural and emotional connection to the resource. As we look forward to the future, we must move beyond engineering solutions and reinvigorate our culture’s relationship to water. Individuals must learn to consciously value water, to consider its origin, and realize that they are not its only dependents. Consequently, whether conscious or not, it is through this resource that our culture, landforms, weather, agriculture, and cities are understood and interpreted. Over time, this relationship can emerge and be cultivated to encompass not only an understanding of water as a resource but a sense of connection to the land, and ultimately, a connection to the future.

You know the worth of water when the well runs dry.
- Ben Franklin

As planners and design professionals capable of envisioning and communicating what the future in the West looks like we have a very unique opportunity to seize a lead role in changing our cultural relationship to water. As planning and design leaders we should encourage awareness through dialogue, provide education through the use of language that clearly articulates the issue, and inspiration through visualization that will allow access to built projects and unlock potential aesthetic and functional outcomes. What does the West look like in 50 years? 100 years? Will we adopt a methodology of a more simple time - to design and engineer our way through any problem or any shortage no matter what the difficulty, expense or cost to limited resources? Or will we see an opportunity to use our knowledge, skills, and abilities as designers to imagine and communicate a future that looks different and more sustainable? Through awareness, dialogue, and action, a grassroots movement focused on water scarcity can foster a broad-based emotion-
al connection to the resource that will gather momentum in much the same fashion as the recycling movement. Is there any good reason why people living in the West would undervalue its most precious resource? It is true that water scarcity is our most pressing issue but by no means does it exist in isolation. This is where the true opportunity lies. Design and planning innovation is at the center of the water, energy, and climate nexus and the reality is that we cannot treat them as mutually exclusive. Rather, we should treat the issue as the connective tissue that connects our health, well-being, and safety in the West. If our efforts stop short at simply conserving water—without a cultural message and without making the connection to climate change and energy issues—then we may be marginally successful on the supply side but we will not recognize the gravity of the issue nor will we have addressed the root cause of the problem. Alternatively, if we take a leadership role on this issue we can not only conserve water, we can help drive the political discourse and ultimately, lead us down a more sustainable path.

Consensus on this topic says there is not one idea, one policy, one cultural shift that will lead us into a future with a reliable water supply. Rather, it is a combination of efforts on the part of many working together from the ground up that will design, plan, and innovate our way into a sustainable future—a future that has a responsible and inclusive decision making apparatus that allows everyone into the process and allows a heightened relationship with the resource to emerge.


David Gregory is a landscape architect and urban designer with Oxbow Design Collaborative, a multi-disciplinary design practice located in Denver, Colorado that is focused in the areas of site planning, environmental design, and landscape architecture. Recently, he has been exploring the relationship between water resource management and contemporary landscape architectural practice in the West in an attempt to realize the performance and aesthetic goals of designed landscapes in a climate of water scarcity. David can be reached at david@oxbowdbc.com.

Diana Denwood is a water conservationist specializing in xeriscape maintenance and design. Always at the heart of her work are the principles of resource conservation, ecological preservation, and sustainable living. After earning a Master’s degree from the University of Colorado-Denver’s Urban and Regional Planning program in 2010, she supported energy efficiency and renewable energy projects for a municipal planning department. Currently, Diana supports water conservation and community garden initiatives in Colorado.
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Landscape Architects may have more in common with the prehistoric inhabitants of Colorado than anyone might expect. Landscape architects design projects that appeal to most if not all of the human senses of perception, not just our sense of vision, and they do so from the micro to the macro level. Landscape architecture and the design components associated with this creative endeavor, like rock art, often involve more than just visual production.

It should therefore come as no surprise to landscape architects that the prehistoric peoples of Colorado who took the time to make rock art (for the last several thousand years) apparently did so from a multi-sensory perspective as well. Colorado is home to a wide variety of rock art styles and designs that were created over many centuries by many different contemporary, historic, and prehistoric peoples. Rock art holds a special public fascination and is an ongoing area of intensive study for archaeologists and for others in many different disciplines.

According to David Whitley’s Introduction to Rock Art Research Second Edition (2011), rock art is landscape art. It consists of pictures, motifs (images), and designs placed on natural surfaces such as cliff and boulder faces. Sometimes it is pecked into the surface as a petroglyph. Sometimes it is painted onto a surface as a pictograph. Sometimes both techniques are used at the same location.

It is an example of how people modify the natural landscape in order to create meaning and by its very presence a natural “space” is transformed into a cultural “place”. Many of the images represent animals found in nature yet many are abstract or geometric in design. It is quite common to find recent images superimposed on top of older images and it is clearly not something that can be “read” from left to right in sequential order much as you would read this printed article. Understanding the “meaning” or “purpose” of rock art is something that can elude even the most experienced researcher.
Archaeologists, as anthropologists, often consult with Native Americans in order to try to understand rock art from a non-Western perspective. Many of the images have sacred and symbolic meaning and they relate to the important myths and legends of indigenous peoples.

For example, recent research in Western Colorado (by Dr. Carol Patterson) suggests that some of the “abstract curvilinear” images may in fact be more than just squiggly lines on a rock face. By taking the images and turning them “upside down” and adjusting the scale and then superimposing them on a topographic map archaeologists are sometimes able to discern a network of trails that follow the local landscape including ridges, ravines, drainages, and even mountain peaks. Westerners orient to the North but many Native American groups (including the Utes) orient to the South because this is where the sun is usually seen from the northern latitudes. Nobody thought to turn the squiggly images “upside down” in order to make sense out of them until they consulted with Native Americans. This is an example of how approaching rock art from a different cultural perspective can provide some new insights.

Another research approach (by the author) is to investigate the acoustic or sound properties of rock art locations. This emerging field is called Archaeoacoustics. Archaeologists have often been puzzled by why one location is selected for rock art imagery and another location is not. Often a perfectly good flat vertical rock face or “canvass” found in nature contains absolutely no imagery yet another location a short distance away that is full of boulders, bumps, and ridges is overflowing with petroglyphs.

Interestingly, the acoustic properties of these spaces differ as well. The presence of boulders, big truck-sized boulders, in proximity to a vertical rock face provides the necessary reflective surface for sound waves to bounce back and create an echo. Archaeologists are finding more and more examples of echoes at rock art locations which suggest that, perhaps, performance activities of some kind may have been as important to the prehistoric creators of the rock art as the images themselves. Humans are multi-sensory creatures and we can be very noisy when we sing and dance and play music so it should not come as a surprise that at least some of the rock art is situated in acoustically vibrant locations.

Finally, rock art researchers worldwide have noticed that many of the images actually incorporate the natural rock features and contours into the design. For example, a bump in a rock face may also form part of the rump of an animal and a natural crack or hole in the rock face might form part of a painted or pecked image or be associated with the image in some other fashion. Clearly, the creators of the images were approaching their natural “canvass” from a multi-dimensional and a multi-sensory perspective, just like landscape architects do.

The next time you are on the road, stop in History Colorado’s “Ute Indian Museum” in Montrose, Colorado and inquire about guided tours of the nearby (fenced and gated) Shavano Petroglyph Park where examples of everything discussed in this article can be found. It is mandatory to schedule your visit before your arrival. For more information go to http://www.historycolorado.org/museums/ute-indian-museum-0 or google Shavano Valley Petroglyph Park for postings by visitors. One important note, when visiting rock art sites always be very respectful of the location and never touch the rock art images because you could unintentionally damage it forever.

**Gregory E. Williams** is a Registered Professional Archaeologist in Colorado and a voting member of the Colorado Council of Professional Archaeologists. He teaches rock art classes and publishes occasionally, he is also is an adjunct assistant professor at the University of Colorado Denver. Greg is the principal of Redpoint Resources which is an Association Management Company where he serves as executive director of ASLA Colorado. You can reach him at greg@redpoint-resources.com or visit www.redpoint-resources.com.
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But is it right to go all the way to Spain to get exceptional concrete benches? I wanted to analyze that issue and one of my first questions was how much extra energy is required to transport something that far. I enlisted Don Lavender, one of our engineers, in the study. The results were startling.

It turns out that the mode of transportation is much more important than the distance traveled in determining the amount of fuel used. Here’s why…

A pickup truck gets about 16 mpg but can carry only one bench. So a bench transported by a pickup truck can be transported 16 miles on one gallon of fuel.

An 18 wheel semi truck only gets about 6 mpg, but it can carry about 28 benches, fully loaded. So each bench in that fully loaded semi is getting 168 MPG, so to speak (6 X 28 = 168).

You may have seen the TV ad about freight trains moving a ton of cargo over 400 miles on a gallon of fuel. A single bench on that train would get about 1600 MPG!

A 1600 MPG bench is pretty impressive. But wait. An ocean going container ship tops them all. It can move a single bench almost 6000 miles on a gallon of its fuel! It is said that a container ship can only move its own length on a gallon of fuel, but it’s ability to carry thousands of containers makes it the most efficient mode of transportation by far. On a container ship, a bench crossing the entire Atlantic will require less than one gallon of fuel. It’s the 6000 MPG bench from Barcelona!

Of course these figures can be affected by many factors such as weather, terrain, loading, etc., and delivery to the final location may be multi-modal, using a ship, a train, and a truck. But you get the general idea. It takes energy to move things and the mode of transport is more important than the distance traveled in determining how much energy is required.

So is it right to go to long distances to get exceptional concrete benches? You can decide for yourself, but I am satisfied that distance is not the issue. Local is great for many things, especially eggs and veggies and such. But for specialized products the story is more complex and understanding the true environmental footprint requires more than just the distance traveled.

By the way, I just bought two Parc Lounge Chairs for my deck. I hauled them home in my little utility trailer. It’s odd to think that the gallon of fuel used doing that could have moved them well around the world on a ship.

Contributed By:
Bill Main, Executive Chairman – Landscape Forms
Contributed: Vivian Kovacs, Landscape Forms

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FIRM NEWS

Consilium Design Announces Partnership Buyout

Craig & Kristie McDowell-Karn
(Courtesy of Kristie McDowell-Karn)

Craig and Kristie McDowell-Karn are pleased to announce that they have purchased the remaining shares of the company from their former partner. Today the Karns are the sole owners of Consilium Design, an innovative international land planning, landscape architecture, and urban design concern headquartered in Centennial, Colorado.

"Since 2005 Consilium Design has been providing exceptional design services in the United States and most recently, China," shares Craig Karn, President. "We remain focused on delivering timely, creative, efficient, effective, sustainable and aesthetically pleasing plans to meet the demands of each environment within which we work."

As the real estate development market continues to improve nationally and internationally the demand for quality land planning & landscape architecture is increasing. Developers are realizing that they must set themselves apart from their competition according to research released from the National Association of Home Builders, the nation's largest construction and development trade association. Karn further notes, "We are ready to meet the increased demands today."

Craig Karn, ASLA, ULI, is the principal of Consilium Design, excellent design, exceptional experience, and effective communication are hallmarks of this nationally and internationally acclaimed team.

Consilium Design Promotes Gabriel Kruse, Landscape Architect

Gabriel Kruse
(Photo courtesy of Kristie McDowell-Karn)

"Consilium Design is pleased to announce the promotion of Gabriel Kruse, Master of Landscape Architecture-Virginia Tech, to a full time position," shares Craig Karn, President and Principal. "We are delighted to celebrate Gabe's promotion as he has become an instrumental associate on our team. His national and international design and construction management skills complement our team members."

"Working with Consilium Design has been a wonderful experience for me as I have been able to use my academic and pragmatic experience both locally and abroad. Our clients afford us the opportunity to use our creative skills to design sustainable and beautiful campuses. I am looking forward to continue seeing our new designs become reality through our land plans, landscape architecture and restoration landscape architecture in mixed use-neighborhoods, residential neighborhoods and parks."

Craig Karn, ASLA, ULI, is the principal of Consilium Design, and land planning, landscape architectural and urban design firm headquartered in Centennial, Colorado. Excellent design, exceptional experience, and effective communication are hallmarks of this nationally and internationally acclaimed team.

Welcome New & Continuing Members

Shihomi Kuriyagawa, Associate ASLA – Civitas Inc.
David Sprunt, Associate ASLA
Ryan Sand, Associate ASLA
Jennifer Baker, Associate ASLA
Anna Bogler, ASLA – Tryba Architects
George Marolt, Affiliate ASLA – GR Marolt and Associates
Greg Oakes, ASLA – Robert Peccia & Associates
William Bowen, ASLA – studioINSITE
Kelly Keicher, ASLA – Netafim USA
Matthew Wilgenbusch, ASLA – Em Dub Design, LLC
Julie Ann Woods, ASLA – Pueblo Department of Planning and Development
Jared Fehringer, Associate ASLA – Civil Engineering Professionals Inc.
Karen Wolf, Associate ASLA – Trinidad History Museum
Patrick Rawley, ASLA – Stan Clauson Associates, Inc.
Jim Birdsall, ASLA – TB Group
Mitchell Workmon, Associate ASLA – PKM Design Group, Inc.
Matthew Blakely, ASLA – TST, Inc. Consulting Engineers
David Gregory, ASLA – Oxbow Design Collaborative
Kim Nelson, ASLA – Nativescape Designs Inc.
Thomas Morton, ASLA – Civitas Inc.
Carol Sperat, ASLA
Barbara O'Dwyer, Associate ASLA
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