

# 2015 Land & Water Summit

## WATERSHED CPR:

Restoring Natural, Built and  
Human Environments



**February 19-20, 2015**

Sheraton Albuquerque Airport Hotel  
2910 Yale Boulevard S.E.  
Albuquerque • NM

**Presented by:**



**Xeriscape**  
Council of New Mexico



**Green Infrastructure  
Low Impact Development  
in Arid Environments**

# Thank You To Our Sponsors And Major Supporters

In our efforts to continue the Land & Water Summit, the Xeriscape Council of New Mexico and Arid Low Impact Development are supported by an increasing number of contributors including:

**Watershed Sponsors:** Bernalillo County Stormwater Program, Bernalillo County Conservation Program, and Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA).

**River Sponsors:** City of Rio Rancho, Sites Southwest, Waterwise Landscape, Inc., and Cooney Watson.

**Stream Sponsors:** Mid Rio Grande Stormwater Quality Team.

**Acequia Sponsors:** City of Santa Fe, New Mexico Water Conservation Alliance, and the American Society of Landscape Architects.

Special thanks to Bernalillo County Stormwater Program and SSCAFCA for sponsoring this year preconference workshop, Flood Control for Watershed Health and the third edition of Middle Rio Grande Low Impact Developments: Projects for Storm Water Management.

Additional thanks goes to Bookworks, one of Albuquerque's last independent bookstores, for once again bringing the best of the written word on related subjects to the Summit.

We are extremely pleased with this diverse and generous support and with the fact that it demonstrates increasing community involvement in supporting water conservation. It is due to this support and the support of you, the life-long learners with strong commitments to their professions and to their communities who attend this conference, that we are able to provide such high quality speakers.

## Xeriscape Council of NM & Arid Low Impact Design

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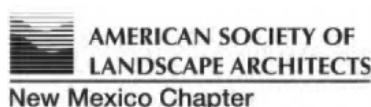
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# Welcome to the Land & Water Summit, our 20th Water Conservation Conference!

The seeds of the Xeriscape Council of New Mexico were planted in 1987 at the first Xeriscape Conference held in Los Alamos, New Mexico. The founding members were a diverse group of private and public sector professionals with a common desire to make landscape design and construction more environmentally responsible in the southwest. Climate extremes have made our original message about water conservative, resource efficient, beautiful landscaping evolve into our 2015 focus, Watershed CPR. The increasing impact of climate variability on the way we develop spaces impels us to reassess our treatment of natural, built and human environments. From the beginning our small group of volunteers has worked together relentlessly to educate people locally and regionally. Much has changed in the water conservation and landscape industry over the years: watershed health and sustainability, biofiltration, urban heat island and ecosystem services are part of the landscape lexicon.

Our partnership with Arid LID continues the cooperative approach to built and planted solutions to water management and urban heating and reflects the broad focus needed to tackle land and water use effectively. Drought as an opportunity to create positive change in the way we design and build remains high on our agenda. Rather than end the program with an artist, this year keynote Peter McBride, filmmaker of *Chasing*

*Water* and author of *The Colorado River: Flowing through Conflict* will kick off the Summit with an awe-inspiring look at the watersheds we rely on and stories of his experiences exploring them. On Friday we wrap up with the roundtable, Innovations for Watershed Health, a dialogue between green infrastructure activists, scientists and the audience: ideas for resuscitating our watersheds and the human capital to make change, YOU.

Other speakers this year will discuss what watershed resilience might look like on the Rio Grande, case studies for monitoring watershed health and our roles as regenerative activists for community health in both urban and agricultural landscapes. We will hear about collaboration to solve stormwater problems while creating green spaces for people and wildlife right here in rio city as well as south of the border. Our presenters offer both practical strategies and the larger context they fit.

Watershed health is everyone's concern. We invite you to listen, talk and discuss these concepts together and take them out into your practice to make this Land and Water Summit one of our best and most impactful collaborations yet. As always, we hope you find yourself inspired and energized to make positive change happen.

Thank you for coming.

**George Radnovich, Hunter Ten Broeck, Teresa Harner, Judith Phillips, Marian Wrage, Catherine Conran, Caryn Grosse, Cheri Vogel, Jim Brooks, Roxie Carpenter**

**The 2015 Land & Water Summit Planning Committee**

# Day 1 Agenda

Thursday, February 19

8:00 – 8:30	<b>Opening Remarks and Conference Kick-Off:</b> George Radnovich, President XCNM
8:30 – 9:45	<b>Keynote:</b> Pete McBride, National Geographic Photographer
9:45 – 10:00	<b>Break</b>
10:00 – 10:45	<b>Precipitation CPR: How to End a Drought in New Mexico:</b> Dr. David Gutzler, UNM Climate Scientist
10:45 – 11:45	<b>What Might Resilience Look Like for New Mexico's Social Systems, Water and Landscape in the Face of Climate change?</b> Dagmar Llewellyn, U.S. Bureau of Reclamation
11:45 – 1:15	<b>Lunch</b>
1:15 – 2:00	<b>LID Case Studies: Modeling and Monitoring of Impacts on Watershed Health:</b> Robin Kirschbaum, PE, LEED AP
2:00 – 2:45	<b>We are the Watershed: Regenerative Landscape Design as Eco-Cultural Activism:</b> Christie Green, Down to Earth LLC
2:45 – 3:00	<b>Break</b>
3:00 – 4:00	<b>Acequia Survival in the 21st Century: Watershed Function, Climate Change, and Stakeholders in Water Administration:</b> Miguel Santistevan, SolFeliz Farm
4:00 – 5:00	<b>We Still Need Rain Spirits: Cultural Resilience and Agriculture in the Southwest:</b> Enrique Salmon, Director of American Indian Studies and Chair of the Department of Ethnic Studies, Cal State University East Bay

# Day 2 Agenda

Friday, February 20

8:15 – 8:30	<b>Introduction</b> – George Radnovich
8:30 – 9:30	<b>Using Collaboration to Benefit ALL – Turning a Problem into an Asset:</b> Jennifer Owen White, US Fish and Wildlife, Valle de Oro National Wildlife Refuge
9:30 – 10:15	<b>Rio Grande Water Fund: A Long-Term Program for Wildfire and Water Source Protection:</b> Dr. Brent Racher, Racher Resource Management, LLC and Laura McCarthy, The Nature Conservancy
10:15 – 10:30	<b>Break</b>
10:30 – 11:15	<b>A Framework for Green Stormwater Infrastructure in Los Pedregales, Mexico City:</b> Pedro Camarena Berruecos, MDS, Universidad Nacional Autónoma de México and Maggie Messerschmidt, MPA/MSES, Indiana University
11:15 – 12:00	<b>GI: The Guts of Community Health:</b> Irene Ogata, City of Tucson
12:00 – 1:00	<b>Lunch</b>
1:00 – 1:45	<b>Classification of Residential Landscapes Reveals that Water Use Depends More on Plant Cover than Plant Type:</b> Rolston St. Hilaire, NMSU, Professor
1:45 – 2:30	<b>How to Improve the Health of an Urban Forest with Limited Resources:</b> Joran Viers, Urban Forester, City of Albuquerque
2:30 – 4:00	<b>Roundtable: Innovations for Watershed Health</b> <ul style="list-style-type: none"> <li>• Introduction by Howard Passell, Sandia Labs</li> <li>• Howard Passell, Sandia Labs</li> <li>• Irene Ogata, City of Tucson</li> <li>• Rolston St. Hilaire, Professor NMSU</li> <li>• Dagmar Llewellyn, U.S. Bureau of Reclamation</li> </ul>



# Speakers

## Key Note: Peter McBride

Native Coloradan Pete McBride has spent almost two decades studying the world with his camera. A self-taught, award-winning photographer, filmmaker and writer, he has traveled on assignment to over 60 countries for the publications of the National Geographic Society, Smithsonian, Outside, Men's Journal, Esquire, STERN and many others.

Raised on a Colorado cattle ranch, Pete is passionate about storytelling and unique, gripping ways to communicate them, whether it involves vantages from 20,000 feet or swimming below icebergs. His perspective on capturing water-related stories led American Photo Magazine to list Pete as "one of the top five water photographers" in the nation.

After a decade working mostly abroad, Pete decided to focus his cameras closer to home on a subject closer to his heart. Combining his passion for aviation and his belief in conservation, he spent over two years documenting his local river — the Colorado. This journey culminated in the acclaimed coffee table book: "The Colorado River: Flowing Through Conflict", an award-winning short film, "Chasing Water" and a traveling museum exhibit/ lecture currently touring the U.S.

In 2011 and 2012, his film "Chasing Water" won over 20 film festival awards including "Best Short Documentary" at Canada's Banff Mtn. Film Festival, "Best Environmental Film" at England's Kendal Mtn. Festival and "Best Documentary" at Florida's Clear Water Festival, to name a few.

His photography honors include awards from Pictures of the Year International, Photo Week DC, Communications Arts, The Society of Professional Journalists and a Knight Fellowship for Professional Journalists at Stanford University. In 2011, he was awarded "River Conservator" by the Roaring Fork Conservancy for his ongoing awareness work with water conservation.

When not on assignment, you can find Peter in the mountains or on the rivers around the Roaring Fork Valley, Colorado.



## Christie Green

Since 1999 as founding principal of Down to Earth, LLC in Santa Fe, NM, a landscape design firm for residential, commercial and non-profit clients in northern New Mexico, Christie has consulted with individuals, schools, plant nurseries and public agencies to educate about the importance of heirloom edible landscapes, native plant species, water conservation, soil-building, and innovative land restoration techniques and landscape design, development and education for non-profit and commercial clients. With approximately 350 projects during her first 10 years of business including land planning, fundraising and educational program development, she has served as land steward of seven- and two-acre agricultural, wetland and rural northern New Mexico properties, presented and taught in diverse educational settings, and served on local governmental committees and professional peer organizations.

A 2013 graduate of University of New Mexico, School of Architecture and Planning, Master of Landscape Architecture, she received an NMASLA Award for Academic Excellence in 2011, national University Olmsted Scholar designation for student leadership in sustainable landscape design 2012 and the City of Santa Fe Sustainable Award for Water Conservation at The Academy for the Love of Learning site in 2012. In 2014 she established radicle studio/office space and product line extension of Down to Earth, LLC to cultivate interaction, collaboration and artful, activist innovation.



## **Pedro Camarena Berruecos**

Pedro Camarena Berruecos, author of *The Nature of Cities*, is a landscape architect who studied at the National Autonomous University of Mexico (1998) and has a Masters from the University of Lanús, Argentina (2009). He is cofounder of LAAP, Landscape Architecture Arquitectura y Paisaje, where he has created works of landscape urbanism one of which, *Arqueología de Paisaje Ruta de la Amistad*, in México City, was a finalist for the Rosa Barba Prize at the International Biennial of Landscape Architecture in Barcelona, Spain in September 2014. He has held positions in various sectors of government, Ministry of the Environment of the City of Mexico (2001-2004). He has taught since 2001 at the Design Workshop at the Academic Unit of Landscape Architecture, Faculty of Architecture, served as advisor to the Ecological Reserve Pedregal in Ciudad Universitaria, UNAM and is president of the Society of Landscape Architects of Mexico (SAPM) 2013-15.



## **Dr. David S. Gutzler**

David Gutzler is Professor of Meteorology and Climatology at the University of New Mexico. He and his students combine observed data and large-scale model output to assess the causes of global and regional climate variability, and to improve the skill and application of hydroclimatic predictions on seasonal and longer time scales. He holds degrees from the University of California at Berkeley (B.S., Engineering Physics) and MIT (PhD, Meteorology). He is a former Editor of the American Meteorological Society's *Journal of Climate*. He served as a lead author for the fifth assessment report of the U.N. Intergovernmental Panel on Climate Change, published in 2013. He received the UNM College of Arts & Sciences' award for outstanding teaching in 2008 and was named a Fellow in the university's new Center for Teaching Excellence this year.



## **Rolston St. Hilaire, Professor**

Rolston St. Hilaire is a professor and assistant department head in the Department of Plant and Environmental Sciences at New Mexico State University. He teaches courses in landscape horticulture and environmental stress physiology. Dr. St. Hilaire's research focuses on plant stress physiology, the development of tools that promote efficient water use in residential landscapes, and mapping and categorizing land cover in urban ecosystems.



## **Robin L. Kirschbaum, PE, LEED AP**

Robin L. Kirschbaum, PE, LEED®AP is a civil engineer with 17 years of experience, specializing in stormwater management, hydrologic/ hydraulic modeling, Low Impact Development (LID), Green Stormwater Infrastructure (GSI), and municipal National Pollutant Discharge Elimination System (NPDES) permit support. She is HDR's Washington Stormwater Lead, where she recently co-authored the Eastern Washington LID Guidance Manual for arid environments. She routinely assists public agencies with development of LID engineering design standards and code updates, supports design review for complex LID development projects, and trains municipal staff on design, construction, and maintenance of LID facilities. Robin has a bachelor's degree from the University of Texas at Austin and a master of science in civil engineering degree from the University of Washington.



## **Dagmar Llewellyn**

Dagmar Llewellyn is a hydrologist, with an educational background in geosciences and civil engineering, and post-graduate studies in climate dynamics, paleo-climatology, river restoration, GIS, and water law and management. Since 2000, her work has focused on water-management and endangered-species issues in the Upper Rio Grande Basin. Her work has involved water supply and demand evaluation, groundwater/surface-water interaction, irrigation efficiency, habitat and hydrologic requirements of endangered species, accounting under the Rio Grande Compact, and Reclamation project operations. After 25 years in environmental and water-resource consulting, her interest in working for the federal government was sparked by the passage of the SECURE Water Act, which assigned to the Bureau of Reclamation a west-wide evaluation of the potential hydrologic implications of climate change. Since 2010, she has worked Reclamation on programs authorized under the SECURE Water Act, as well as on Rio Grande water management and endangered species / environmental compliance issues.



## **Laura McCarthy**

Laura McCarthy is Director of Conservation Programs for the Nature Conservancy in New Mexico. She manages the Conservancy's programs in the Rio Grande, Gila and San Juan basins. She has been with the Conservancy since 2005, including seven years as the Conservancy's National Policy Advisor for federal wildland fire appropriations, fire management, and forest restoration.

Laura's prior work includes more than a decade with the USDA Forest Service as a firefighter and planner. She has also worked for a State Forester and the Santa Fe-based Forest Guild.

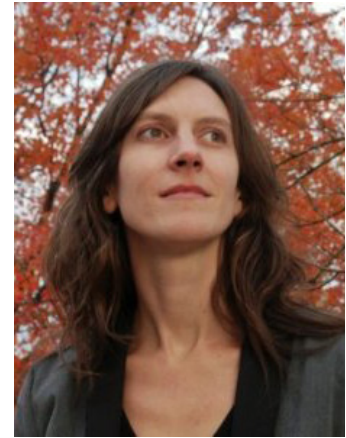
Laura's professional life was significantly altered by the Cerro Grande Fire in 2000, which she watched from across the valley and that fostered her interest in better policy and management of forested watersheds. Laura has earned several awards for her work, most notably the Society of American Forester's Young Forester Leadership Award in 1998 and USDA Secretary's Honor Award in 1995. Laura's degrees are in Forestry (M.F. 1987 Yale University) and Government (B.A. 1983, Bowdoin College).





## **Maggie Messerschmidt, MPA/MSES**

Maggie Messerschmidt graduated in December from Indiana University's School of Public and Environmental Affairs where she received an MPA (Public Affairs) and MSES (Environmental Science). She has initiated participatory processes for watershed and forest management in Honduras and Peru as a Peace Corps Volunteer. Her research in Mexico and in Indiana focus on the impacts of green infrastructure on water quality and hydrologic performance. She plans to continue to work at the interface of water management and ecological landscape-level design. Maggie is inspired by the fields of eco-hydrology and Integrated Water Resource Management (IWRM), and their application for improved resource equity.



## **Irene Ogata**

Irene has always had an interest in overall conditions of health – human, urban form, environments and social-economics. Currently she is the Urban Landscape Manager with the City of Tucson, Office of Integrated Planning; and Past-President of the Arizona chapter of the American Society of Landscape Architects (ASLA). She is involved in city wide landscape issues and policies affecting public facilities. She has been involved professionally for over twenty years in Tucson community issues such as urban heat island and its relationship to street tree/urban canopy; stormwater harvesting/ green infrastructure/low impact development; nexus between water and energy; issues of climate change; food security and; social equity/ accessibility. Irene received her undergraduate and graduate degrees from the University of Arizona in Nursing (College of Nursing), Sociology (College of Behavioral and Social Science), Landscape Architecture (College of Agriculture) and Urban Planning (College of Architecture, Planning, Landscape Architecture).



## **Brent J. Racher, Ph.D.**

Dr. Brent Racher is a manager or partner for two natural resource management companies in New Mexico, Racher Resource Management and Restoration Solutions; and two woody biomass supply/ utilization/development companies, Western Biomass and Southwestern Biomass. After receiving his B.S. from New Mexico State University in Range Science, he completed an M.S. and Ph.D. specializing in range ecology, fire ecology/behavior, and range improvements from Texas Tech University.

Dr. Racher's knowledge and experience in fire behavior, fire ecology, and the land managers' need for expertise in prescribed burning prompted him to start Racher Resource Management, LLC. In this endeavor, he has provided private and government entities with expert fire management for planning and operations, much of the time as a turn-key service. Once in private industry, he also realized that vegetation and habitat management in rangelands, forests, and riparian ecosystems largely lacked the capitalized resources that could obtain a set of objectives and implement them. So, he helped form Restoration Solutions, LLC to bring a combination of the most progressive mechanical and chemical vegetative manipulation to the land managers in need of that expertise. Currently, Dr. Racher is collaborating to expand renewable energy resources in the West through the utilization of ecologically unbalanced biomass in forests, woodlands, and non-native phreatophyte communities. He is currently serving as the President of the New Mexico Forest Industry Association.

## Enrique Salmon, PhD.

Enrique Salmón has dedicated his studies to Ethnoecology and Traditional Ecological Knowledge in order to better understand his own and other cultural perceptions of culture, landscapes, and place. Dr. Salmon's recent studies have led him to seriously consider the connections between Climate Change and Indigenous traditional foodways. He feels that in order to maintain the sustainable food producing capacities of our landscapes we need to look to places of resilience for solutions to how to adapt to increasing climate changes and continue to feed human populations. Indigenous homelands are regions able to offer solutions for ways to feed the planet due to the resilience of traditional foodways and land management practices. Dr. Salmon has published a book focused on small-scale Native farmer of the Greater Southwest and their role in maintaining biocultural diversity. Enrique has a B.S. from Western New Mexico University, an MAT in Southwestern Studies from Colorado College, and PhD. in anthropology from Arizona State University. His dissertation was a study of how the bio-region of the Rarámuri people of the Sierra Madres of Chihuahua, Mexico influences their language and thought. Enrique has been a Scholar in Residence at the Heard Museum, on the Board of Directors of the Society of Ethnobiology, and has published several articles and chapters on Indigenous Ethnobotany, agriculture, nutrition, and traditional ecological knowledge. He is Director of American Indian Studies at Cal State University East Bay and Chair of the Department of Ethnic Studies.



## Miguel Santistevan

With a Bachelor of Science degree in Biology from the University of New Mexico and a Master of Science degree in Ecology from the University of California, Davis, Miguel Santistevan is currently a Ph.D. Candidate in Biology at the University of New Mexico. His research interests are in the traditional acequia-irrigated and dryland agricultural systems of the Upper Rio Grande and Sangre de Cristo mountains. Miguel is certified in Permaculture and ZERI Design and has directed youth-in-agriculture programs such as ePlaza of Hands Across Cultures and the Regional Development Corporation and the Sembrando Semillas youth-in-agriculture project of the New Mexico Acequia Association (NMAA). He has produced video and public radio programming (¡Que Vivan las Acequias!) with the NMAA and Cultural Energy. He maintains a conservation farm with his wife and daughter in Taos called Sol Feliz where many visitors have participated in educational presentations, tours, and hands-on workshops ([www.solfelizfarm.org](http://www.solfelizfarm.org)). Miguel serves as Executive Director for a youth-in-agriculture, research, and crop adaptation program through the Agriculture Implementation, Research, & Education non-profit organization he co-founded ([www.growfarmers.org](http://www.growfarmers.org)) while he serves as a math and science teacher for Vista Grande High School. Miguel is serving his second term as Chairman of the Acequia Madre del Sur de Río Don Fernando de Taos of which he is a parciante (irrigator) and past Mayordomo (ditch boss).



## Joran Viers

Joran Viers is the City Forester with City of Albuquerque Parks and Recreation Department. Prior to taking this position, he worked for the New Mexico State University Cooperative Extension Service, first as a County Horticulture Agent and County Director in Bernalillo County, and then as State Urban Small Farm Horticulture Agent. Viers was born in Albuquerque, but grew up in California, Costa Rica and Arkansas. He has a life-long love of plants and the natural sciences. He has a Bachelor's degree in Biology from the University of New Mexico, and a Master's degree in Botany from the University of Florida. Mr. Viers has been an ISA-Certified Arborist since 2008.



## Jennifer Owen-White

Jennifer Owen-White is the first refuge manager of the new Valle de Oro National Wildlife Refuge in Albuquerque. Valle de Oro is the first urban refuge in the Southwest and part of a larger push by U.S. Fish and Wildlife to reach urban audiences and connect them to the important habitats and wildlife that the Service protects. Before taking the position at Valle de Oro, Jennifer was the Refuge Manager at the Santa Ana National Wildlife Refuge and also served as the Visitor Service manager for the South Texas Refuge Complex. Jennifer is proud to be both a biologist and visitor services specialist. She was born in Chicago, grew up in Houston, and has a B.S. in Biology as well as an M.S. in Wildlife Science from Texas Tech University. Jennifer is completing her PhD in Forestry and Natural Resource Interpretation from Stephen F. Austin State University where she has focused on connecting urban communities to conservation and the outdoors.



## About Xeriscape Council of New Mexico



### **OFFICERS:**

George Radnovich, President • Hunter Ten Broeck, Vice President • Teresa Harner, Treasurer • Marian Wrage, Secretary

### **COUNCIL MEMBERS:**

Hunter Ten Broeck • George Radnovich • Teresa Harner • Judith Phillips • Marian Wrage • Cheri Vogel

### **CONTACT INFORMATION:**

Xeriscape Council of New Mexico • PO Box 6186, Albuquerque, NM 87197 • [www.xeriscapenm.com](http://www.xeriscapenm.com) • [xquestions@xeriscapenm.com](mailto:xquestions@xeriscapenm.com)

### ***Council Projects***

The Xeriscape Council is education and project oriented. Its primary project is an annual conference on topics in water conservation and landscape. The Council brings high-level locally and globally recognized experts and speakers to Albuquerque for the two-day conference.

The Xeriscape Council incorporated in 1998 and received 501(c)(3) status in 1999. It conducts educational programs, training sessions and conferences on the general topic of xeriscaping and its role in water conservation.

### ***Mission & Goals:***

The Xeriscape Council's main goal is to educate New Mexicans and others about water conservation, and to promote native, low-water plants and landscaping/irrigation methods in New Mexico as a means of water conservation. According to Council President George Radnovich, the Xeriscape Council of New Mexico has accomplished its original goal through multiple promotional means, while influencing the City of Albuquerque in its current water-conservation initiatives. Those initiatives include a water-conservation ordinance with associated rebate programs that encourages water-conserving landscapes and irrigation methods, as well as indoor water-saving technologies.

### ***Membership***

Membership in the Xeriscape Council is open to the public; however, only active members may serve on its board of directors. Members include landscape architects and designers, horticulturists, management consultants, landscapers, Master Gardeners, extension agency professionals, homeowners, and grounds maintenance workers. The Council meets monthly throughout the year to plan and manage its activities. .

Interested in joining the Council, email us at [xquestions@xeriscapenm.com](mailto:xquestions@xeriscapenm.com).

### ***Resources***

The Xeriscape Council of New Mexico has moved all resources to our website, [www.xeriscapenm.com](http://www.xeriscapenm.com). Please visit our website to find our favorite resources.



## ***Regional Demonstration Gardens***

Bachechi Open Space Park Corner Of Alameda And Rio Grande NW, Albuquerque, NM

Rio Grande Botanical Garden 2601 Central Ave. SW, Albuquerque, NM (505) 764-6200

Rio Grande Nature Center State Park 2901 Candelaria Rd. Albuquerque, NM (505) 344-7204

Rio Rancho, Waterwise Demonstration Garden Pinetree Road And Southern Blvd, Rio Rancho, NM (505) 891-5000

Bosque Del Apache National Wildlife Refuge Visitor Center South Of Socorro, NM (505) 835-1828

Denver Water 1600 York St., Denver, CO (303) 628-6348

Denver Botanic Gardens 1600 W. 12Th Street, Denver, CO (303) 331-4000

Mesa Water Xeriscape Demonstration Gardens, Colorado Springs, CO (719) 636-5407

Santa Fe Botanical Garden, Santa Fe, NM (505) 471-9103

## **About Arid LID**

AridLID.org was originally established to serve as the official website for the *2010 Albuquerque Area Green Infrastructure & Low Impact Development Workshop*. Due to the success of that workshop, as well as the growing interest in using GI & LID in arid climates, this website has since transitioned into a resource and information center.



### ***Intro to LID & GI***

**Green Infrastructure:** The term Green Infrastructure (GI) simply refers to a class of stormwater control measures or practices that slow, capture, treat, infiltrate and/or store runoff at its source, and includes both structural (e.g. stormwater capture and treatment) and non-structural (e.g. preservation of open space) approaches.

GI can be applied at the site (e.g. green roofs, porous pavement and cisterns), neighborhood (e.g. green streets and green detention facilities) or regional scale (e.g. urban forestry and open space preservation).

**Low Impact Development:** LID approaches and principles include: minimizing land disturbance during development, incorporating and preserving natural features in the development, decentralizing stormwater management and treating it at the source through the use of GI and other techniques, reducing and disconnecting impervious surfaces in the development, and understanding and mimicking pre-development hydrology.

The terms LID and GI are often used interchangeably.

### ***LID Demonstration Sites***

Please see our separate handout for more Green Infrastructure and Arid Low Impact Design sites.

SSCAFCA Office Building, 1041 Commercial Dr. SE Rio Rancho, NM 87124

Rooftop capture for landscape watering, cisterns, pervious pavement, on-site ponding, and photovoltaic panels

Fidelity Investments , Mesa Del Sol, 5401 Watson Dr. SE, Albuquerque, NM 87106

Permeable pavement, depressed landscaping, retention ponds, water harvesting

Desert Fountain, Albuquerque Museum, 2000 Mountain Road NW, Albuquerque, NM 87104

Rainwater fountain

Hahn Arroyo Project (AMAFCA and the City of Albuquerque), Montgomery Park, Albuquerque, NM

Treated stormwater for landscape watering



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FLOOD CONTROL FOR WATERSHED HEALTH**



“The Bell Keepers” portrays a Spanish Padre and a parishioner rescuing a Chapel bell from the flood waters. This statue at the entry plaza of Bachechi Open Space Park exemplifies Bernalillo County’s commitment to preserving not only the property of its citizens, but the rich culture and beautiful environment of Bernalillo County,

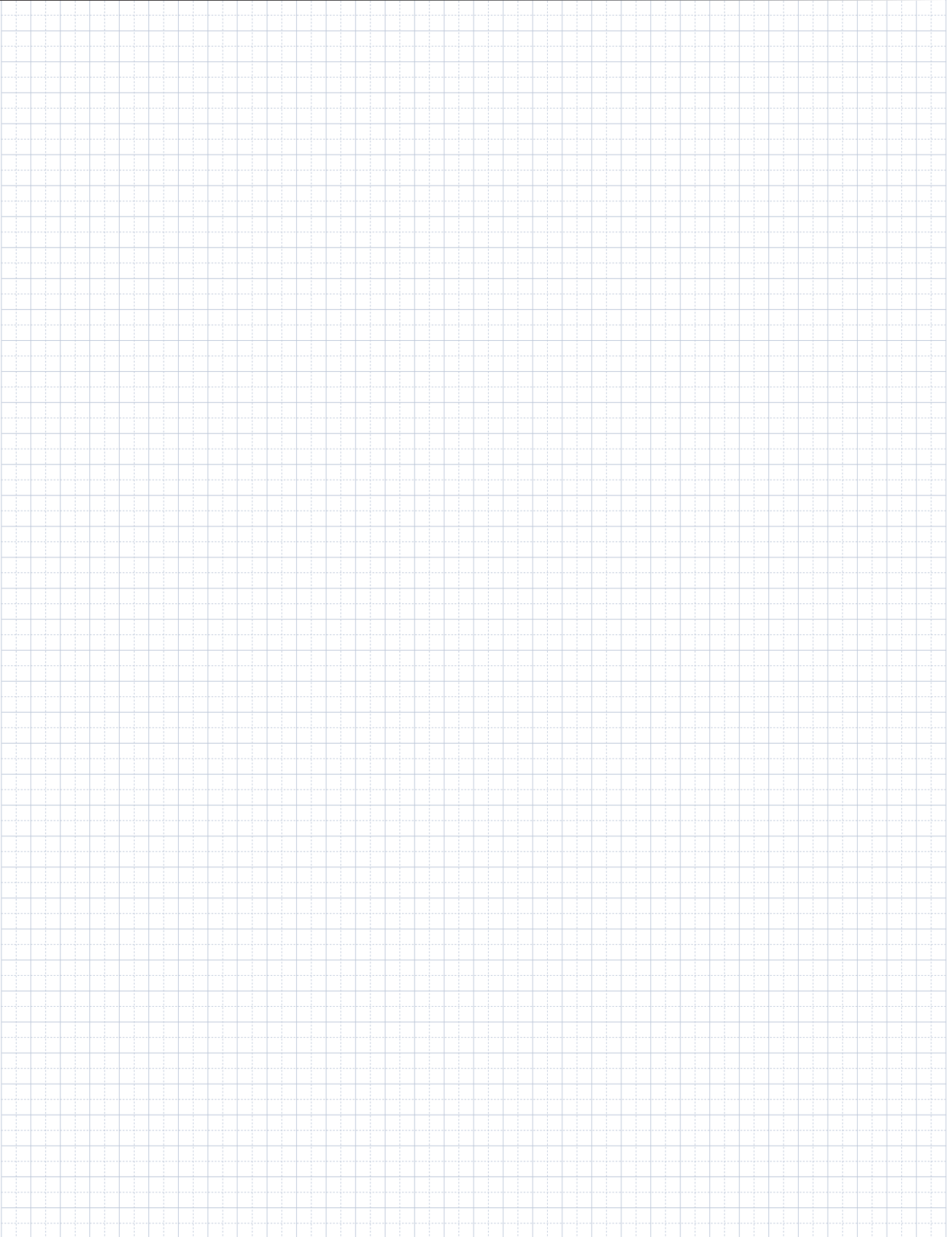
**BERNALILLO COUNTY: WE’RE MORE THAN YOU THINK.**



# Notes



# Notes



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