PLANNING MATTERS

Colorado Chapter

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Considering Hazards in Comprehensive Planning: A Growing Trend

Anne Miller, Senior Planner, Colorado Department of Local Affairs Waverly Klaw, Long-Term Recovery Planner, Colorado Department of Local Affairs Since the recent wildfires and floods of 2012 and 2013, Colorado communities have experienced firsthand the devastating effects of natural hazards. According to Swiss Re's preliminary estimates (http://www.insurancejournal.com/news/international/2014/12/17/350361.htm) for 2014, natural hazards accounted for approximately \$106 billion in economic losses globally. Knowing the high costs of recovery, many communities are turning to mitigation and resilience in order to reduce potential losses due to natural hazards.

Hazard mitigation has traditionally been undertaken in a regional, county, or municipal Hazard Mitigation Plan. The plan typically includes conducting an assessment of risk and prescribing measures to reduce vulnerability to those risks. These FEMA-approved plans enable the jurisdiction to be eligible for federal disaster funds if a federally declared disaster does occur. FEMA requires hazards [Continued on page 3]

Take the Wildfire Challenge

22 Molly Mowery, President and Owner at Wildfire Planning International

It can be easy to think about wildfire hazard as a force of nature entirely beyond human influence or control. We are bombarded with images from the media showing huge flames devouring homes and forests and overwhelming fire fighting resources. In some cases, this situation is absolutely true.

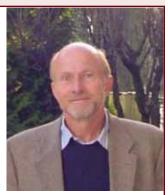
But we don't get off the hook so easily. The truth is that there are a number of actions that we can and should take to reduce the impacts from a wildfire event – and land use planning plays a significant role in this conversation. Without committing ourselves to taking more action, we can continue to expect overstretched firefighting resources, home and property losses, and economic impacts to our communities. The good news is that there are many accessible ways for planners to insert themselves into wildfire hazard planning and promote safer community development.

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PRESIDENT'S LETTER

Stan Clauson, AICP, ASLA

Welcome to the Winter 2015 Edition of Planning Matters. This issue brings articles on one of the hottest new topics in planning: resilience. Emerging from Hurricane Katrina and the recovery efforts of New Orleans, bolstered by the hurricanes that have ravaged the East Coast, and closer to home, the Northern Colorado flooding, the concept of resilience has migrated from the domain of emergency management to that of planning. Can communities incorporate into their comprehensive plans, measures to quickly redress events that occur unexpectedly? Better still, can communities expect that from time to time extraordinary situations will occur and plan to minimize their impacts in advance?



Hopefully, the articles presented here will help to advance a dialogue about these questions. As planners, we have long know the importance of floodplain protection, but even this easily understood concept is often overlooked in granting development permits. The new areas of consideration for community resilience represent even broader fields of discovery. I expect there will be some significant discussion of this at the APA National Conference in Seattle in April, and again at our October state conference to be held in Steamboat Springs.

Speaking of the state conference, there is currently a call out for conference presentation proposals. If you missed the e-mail solicitation, please go to our website to obtain information and forms for submitting a proposal. Session proposals are due by March 6th.

I am pleased to announce that our chapter received a grant from APA national, through its Chapter Presidents Council grant program, for an innovative addition to our website. Tentatively called "PlanFinder," the program will allow interactive research on planning projects throughout the state. Planners will be able to research projects based on location, type of project, and various other criteria. The first phase of development will involve a request for proposals for technical services, soon to be issued. Once up and running, there will be a general solicitation for project information to complete the database. The expected timeline for development will allow us to showcase this program at our fall conference in Steamboat Springs.

Finally, with congratulations and some regret, we say goodbye to our current newsletter editor and Vice-President for Communications, Dylan Grabowski. Dylan will be leaving to take a new position in California, and has graciously extended his work for us to include this newsletter. We will welcome back a familiar face to take on this work. T.J. Dlubac previously served as VP for Communications, and was instrumental in the development of our current website. T.J. will be back with us as newsletter editor and Communications VP. Best of luck, Dylan, and welcome T.J.!

I'm told that there will be lots of late winter snow to augment the lesser snowpack this winter, and the occupancy figures for Colorado resorts are showing an excellent year. So I hope everyone will enjoy some on-snow experiences before we move into spring.

Best regards,

Stan Clauson, Colorado Chapter President

Considering Hazards in Comprehensive Planning: A Growing Trend

(Continued from Page 1)

While hazard mitigation plans can help a community reduce risk, recommendations from the plan often remain siloed from other plans, and emergency managers are typically the ones responsible for developing the plan and carrying out the recommendations.

In order to take a holistic view of the community, some are beginning to view hazard mitigation more broadly in the context of community resilience. According to the National Disaster Recovery Framework, "resilience incorporates hazard mitigation and land use planning strategies; critical infrastructure, environmental and cultural resource protection; and sustainability practices to reconstruct the built environment, and revitalize the economic, social and natural environment." (https://www.fema.gov/national-disaster-recovery-framework-0) Ultimately, a community is more resilient when it can recover more quickly from any major impact, such as a disaster. One way to further community resilience is by bringing hazard mitigation measures into arenas such as a community's comprehensive plan.

In 2012, Adams County was at the forefront of such integration with Imagine Adams County (http://www.co.adams.co.us/index.aspx?NID=1086), which includes not only the comprehensive plan update, but a transportation plan, hazard mitigation plan, and an Open Space, Parks, and Trails Master Plan.

The State of Colorado is currently working to assist municipalities that are interested in integrating resilience and hazard mitigation into their planning efforts. In 2014, the Colorado Department of Local Affairs partnered with FEMA and the American Planning Association Colorado Sustainability Committee to put on two half-day sessions entitled "Planning for a Resilient Community." This workshop, led by Julie Baxter, described the relationship between the impacts of hazards and community design and spelled out specific steps that can be taken to further resilience through various community plans. This course can be offered again, and interested communities or organizations can contact the authors for details.

The American Planning Association is also on the cutting edge of this integrative approach, and has published "Hazard Mitigation: Integrating Best Practices into Planning." (https://www.planning.org/research/hazards/)This guide, developed by natural hazards expert James Schwab, takes the reader through comprehensive plans, sub area plans, zoning and form-based codes, and capital improvements programming with the objective of integrating hazard mitigation into each.

Communities that are located in federally declared disaster areas from the 2012 and 2013 fires and floods are currently eligible to receive Community Development Block Grant for Disaster Recovery (CDBG-DR) Resilience Planning Grant Program funds to embark upon a hazard mitigation-integrated comprehensive plan update. Municipalities such as the Town of Milliken and the City of Longmont are currently engaged in this process using CDBG-DR Planning funds that were granted in 2014. For more information and to track upcoming application deadlines of the CDBG-DR Resilience Planning

Grant Program see the DOLA CDBG-DR website. (http://dola.colorado.gov/cdbg-dr/ content/resilience-planning-and-capacity-building)

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Take the Wildefire Challenge

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Think more about fuels

Wildfire is a physical process. In addition to oxygen and heat, wildfire requires "fuel" – including homes, decks, fences, and vegetation – to keep it burning. When we know how to change the fuel types and fuel arrangements in our environments, we can dramatically reduce fire's ability to sustain itself.

Changing fuel types, from a non-technical perspective, means requiring fire-resistant building materials and vegetation over other less fire-resistant alternatives. For example, communities can have requirements for Class A roofing installations and ban wood shake roofs in areas deemed at higher risk to wildfire. Other ignition resistant construction requirements typically address siding, eaves, soffits, windows, gutters, attic vents, chimneys, decks and foundations.

Changing fuel types at a property's landscape scale (e.g., recommending specific fire-resistant plants, trees, shrubs, and grasses) will vary more across communities because of Take a simple quiz to test your wildfire planning savvy. (Note: in the questions below, "community" can be flexible in terms of its scale – town, municipality, county, etc.):

- 1. Do you know if your community has mapped its local wildfire risk?
- 2. Does your community have a Community Wildfire Protection Plan (CWPP)?
- 3. If wildfire is a potential threat to your community:
 - Is this hazard addressed in your community's Comprehensive Plan?
 - Is this hazard addressed in your community's Land Use and Development Code?
 - Is this hazard addressed during the planning process in other ways (e.g., design guidance on construction and landscaping)?
- 4. Do you have a good relationship with your local Fire Marshal and/or Fire Chief?

If you answered "Yes" to all of these, chances are your community is in great shape or at least heading in the right direction when it comes to addressing its wildfire risk. On the other hand, if you found yourself thinking either "No" or "I really don't know!" -- rest assured. There are many smart planning choices you can make to become better engaged with helping your community reduce its wildfire risk. Read on and familiarize yourself with the article's tips and resources.

differences in ecosystems. For instance, if you work in a higher elevation mountain community in Colorado, the primary fuel types to address are likely to be lodgepole pine, spruce, and fir – all of which carry fire easily under the right conditions. Aspen, on the other hand, has a lower flammability and is considered one of the few mountain trees that are safer to use when landscaping within thirty feet of a home. In lower elevations, ponderosa pine and juniper are the "watch out" fuels that should be kept at least thirty feet from a home due to their high flammability, or replaced with lower flammability shrubs and plants.

Changing fuel arrangements – the proximity of fuels in relation to one another – can also have a big impact on wildfires by reducing how quickly a fire spreads. On a community scale, consider how close homes are to one another within a wildfire-prone subdivision and whether there are appropriately placed setbacks between homes or green spaces between neighborhoods. If setbacks between homes are too low, and there are continuous fuels such as wooden fences and flammable vegetation throughout the subdivision, the result can be disastrous.

The 2012 Waldo Canyon Fire in Colorado Springs offers a prime example of this. Distances of less than thirty feet separated many homes within the mountain shadows

neighborhood. The radiant heat and flames from nearby neighboring homes quickly turn into an urban conflagration – a wildfire that started out on wildland areas and entered a suburban area, causing many home-to-home ignitions. There were also many wooden fences that carried flames between properties, acting as "wicks" throughout the subdivision. Requiring breaks in landscaping features such as defensible space and a minimum distance of 30 feet between structures will decrease the likelihood that fire can carry itself between properties or ignite neighboring structures from the radiant heat of burning homes.

Larger subdivision planning efforts can also help to break up the fuels between natural areas and the built environment. Community buffers with proper landscaping, such as parks, golf courses, and greenbelts with tree crowns spaced at least ten feet apart, can reduce the amount of fuel available to a fire as it moves from a forested area towards a community. Whenever possible, take advantage of other maintained features such as community trails, power lines, or water features (where appropriate). These can act as fire suppression control lines – areas where firefighters can more safely respond to and manage a wildfire to keep it from advancing into neighborhoods. Ensuring wide enough access for fire apparatus to turnaround will also keep your local fire department more able to do their part in response.

Use plans, codes and resources

Addressing fuel types and arrangements (i.e., construction materials, landscaping, site planning) can be done through a number of planning channels: Building Code, Land Use and Development Code, Comprehensive Plan or standalone "Wildland-Urban Interface" (WUI) codes. Other effective planning tools are the Community Wildfire Protection Plan (CWPP) and the Local Hazard Mitigation Plan. CWPPs, when implemented effectively, identify a community's wildfire risk and specify actions to take at multiple scales to reduce risk.

A few additional tips: if your community utilizes multiple plans and codes to address wildfire (which is typically a good thing), ensure that these plans are adequately cross-referenced and compatible. For example, the future land use map should also consider areas at highest risk to wildfire hazard. Are these areas identified as future areas of development? If so, what building and landscaping requirements need to be enacted before development can occur? Better yet, consider redirecting new growth to safer areas with a reduced hazard rating.

These recommendations are just the tip of the iceberg. As a first step, planners should familiarize themselves with their local fire leadership and any wildfire-specific initiatives such as a CWPP or WUI code. Fortunately, many communities are already engaged in wildfire across the state, and make for some fantastic locally grown examples to add to your toolbox:

- Following the Waldo Canyon Fire in 2012, the Colorado Springs Fire Department created an Ignition Resistant Construction Design Manual – a guide to smart con struction and wildfire mitigation in the wildland-urban interface: http://www.springsgov.com/units/fire/wildfire/hillside_wildfire_mitigation_design_manual.pdf

- Colorado State Forest Service maintains a database of completed CWPPs from all over Colorado. Check out if your community has one by going to this list: http://csfs.colostate.edu/pages/CommunityWildfireProtectionPlans.html

- Colorado State Forest Service also provides excellent guidance on fire-resistance landscaping, including recommendations for "defensible space" around a home: http://www.ext.colostate.edu/pubs/natres/06303.html

- Sharing and learning from peers offers insightful opportunities. The national "Fire Adapted Communities Learning Network" emphasizes this peer-to-peer approach and includes two Colorado organizations – Coalition for the Upper South Platte and FireWise Council of Southwest Colorado. Learn more at www.FACNetwork.org.

- Upcoming conferences in the state will provide venues to discuss wildfire resiliency efforts with colleagues: Rocky Mountain Land Use Institute (March 12 & 13, 2015, Denver) and the Colorado Wildland Fire Conference (September 24-26, 2015, Snowmass Village)

- Finally, a more nationally-oriented but excellent best practices guide for plan ners and regulators is from the National Fire Protection Association: Community Wildfire Safety Through Regulation, available at: https://www.nfpa.org/~/media/ Files/Wildland/WildfireBestPracticesGuide.pdf

Molly Mowery is owner of Wildfire Planning International – a consulting firm specialized in finding community risk reduction solutions from wildfire. She can be reached at **Molly@wildfireplanning**. **com**.



Colorado Resiliency Connection

Molly Urbina, Chief Recovery Officer, Colorado Recovery Office Iain Hyde, Deputy Chief Recovery Officer, Colorado Recovery Office Val Beck, Communications and Strategic Implementation Director, Colorado Recovery Office

On September 11, 2013, Colorado suffered the single most devastating natural catastrophe in the state's 138-year history. Unprecedented levels of rain fell on 24 counties, sending high-velocity floodwater coursing through narrow mountain canyons and onto the plains below. The floodwaters ripped apart homes, lives and communities.

Ten Coloradans lost their lives, and more than 18,000 people were forced to evacuate their communities, many by Chinook helicopters flown by Colorado National Guard. Roads and bridges were destroyed, as the powerful currents tore them down, creating new river channels. In the process, the floodwaters destroyed homes and businesses that had co-existed with the streams and rivers for generations.

In all, the Floods of September 2013 wreaked an estimated \$3 billion in damages. As the floodwaters receded, it was clear that the damage was more profound than numbers could express. The state's social and economic fabric was torn apart.

Colorado's geography adds to this story. With its steep mountain canyons, the speed and force of the floodwaters was intensified. The swift large volume of water carried debris - sediment, rocks, trees, roadways and other construction debris - that only magnified the impact of the floodwaters on the communities below. As the waters receded, it was - and continues to be very clear that Coloradans are connected whether it is upstream in the mountains and canyons, or downstream on the plains.

Coloradans know that a part of their way of life involves the beauty and access we have to the mountains, the fertile land of the Eastern Plains, the snowstorms in May and seventy degree December afternoons. The love of our way of life also connects us. In Colorado the days come and go with a certain unpredictability, and we embrace this uniqueness. Not knowing requires people in Colorado to plan to face what might be.

The Governor, state agencies and Colorado communities have all made clear from the onset of this disaster that building back stronger, better - more resilient - will be a cornerstone of our recovery efforts. To honor this priority, and to carry this priority forward before the next disaster, the State is in the process of developing a Colorado Resiliency Framework. The Framework focuses primarily on the idea that we are connected and we care about Colorado's future safety, vitality and quality of life. This framework will guide Colorado's ongoing support for local resiliency efforts for local communities, businesses, and individuals. The framework will engage and serve to support, cultivate and empower a culture of resiliency at the local level.

This strategy of building a framework is only meaningful if we have input from the public, from communities, and from the people that are already working to make Colorado communities more resilient. The State has initiated a robust public engagement and education process to help us shape this framework. There will be multiple ways to participate - through focus groups, surveys, social media, and interviews with experts across communities, sectors and industries. The Colorado Recovery Office will incorporate

incorporate input as we identify and ultimately implement innovative and exciting new ways to focus on resiliency. As planners, you understand that creating guiding principles with solid implementation strategies along with engaging people who live in our communities is very important to this kind of effort.

The Colorado Resiliency Framework is directly connected to the State's application in the National Disaster Resiliency Competition. The Department of Housing and Urban Development has notified states that experienced a presidentially declared disaster post 2011 to participate in the first phase of the National Disaster Resiliency Competition. The competition provides \$1B for innovative resiliency initiatives in communities, and as a declared disaster, Colorado is a qualified applicant to compete for up to \$500M.

There are two phases in this National Disaster Resiliency Competition and the State of Colorado along with all other applicants is currently in phase 1. This first phase the state must outline and document remaining recovery unmet needs and describe how the state will systematically and holistically address resiliency for the declared disasters, and into the future. Our application through Phase 1 and then into Phase 2 is being coordinated with the development of our statewide Colorado Resiliency Framework. Over the course of the month of February, the State will be reaching out to flood and wild-fire impacted communities to seek input into both the framework and the competition application to ensure that they meet not only the needs of the recovery process, but especially those needs to empower communities to become even safer and more resilient into the future. Phase 2 of the competition will begin after HUD reviews Colorado's Phase 1 application and invites the State to continue participation in the competition. During Phase 2, the State will work with communities to identify specific projects and initiatives to support long-term recovery and resiliency needs.

Colorado is well positioned for the National Disaster Resiliency Competition. because We are united and connected to our communities and one another and committed to a resilient present and future. To be a Coloradan is to be part of a strong fabric ready for what might be and come out stronger than before. As planners, you can bring an important perspective into this process and we sincerely hope that your will participate. Please nominate your Resiliency Hero and take the Resiliency Survey at www.ColoradoUnited.com. Likewise, please continue to check back on www.ColoradoUnited.com for further opportunities to participate and help to make Colorado the most resilient state in the nation.

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Character & Community in Colorado: From Metro to Resort

CALL FOR SESSIONS 2015 APA COLORADO STATE CONFERENCE

APA Colorado is now accepting session proposals for our 2015 state conference in Steamboat Springs, September 30th – October 2nd. APA Colorado a professional organization of over 1,400 planners providing vision and leadership for Colorado communities. Conference attendees include private and public sector planners; elected and appointed officials; land use, transportation, design, and environmental experts; non-profits and allied professionals; and many others.

We are seeking dynamic speakers and leaders to share their knowledge, experience, and best practices. The selection panel is looking for creative, innovative, and especially interesting sessions. The three-day conference is attended by more than 300 professionals. Sessions are provided in 90-minute blocks. Submit your session proposal today! <u>CLICK HERE</u> for more information

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Watershed Planning

Chris Sturm, Stream Restoration Cordinator, Colorado Water Conservation Board

In 2013, Colorado suffered from disastrous flooding that had devastating impacts on the state. On September 11, 2013, a prolonged rain event caused a destructive flood event throughout many parts of Colorado. This weather pattern was characterized by only moderate, short-term intensity, but occurred for medium and long durations, the rainfall experienced in a number of locations exceeded a 1,000 year rainfall event. A number of stream reaches experienced flood episodes equaling or exceeding a 100-year streamflow event. In addition, the long duration of the event resulted in heavy erosion in a number of stream reaches that contributed to flooding in areas outside of the regulatory 100-year floodplain. The end result was the deadliest flood since 1976, the costliest flood in state history, and the first presidentially declared flood disaster since 1999.

Those impacted by the flooding and erosion were looking for answers to difficult questions in the wake of the floods. Who is responsible for putting the rivers back in the previous alignments? When will they arrive? Will they listen to input from those directly affected? The Colorado Water Conservation Board (CWCB), a division of the Colorado Department of Natural Resources immediately put together a team of state and federal agencies to help communities strategize the short and long term stabilization and rehabilitation of stream channels. This stream task force advised on all aspects of rehabilitation including: assembling local watershed coalitions, permitting, technical assistance, funding, project design, project prioritization, and project implementation.

The stream task force quickly concluded that no single government entity had jurisdiction over the location of stream channels. The issue was largely an individual property owner decision. It was also determined that a strategy focused on global realignment of channels in their previous locations was not the best path towards creating more resilient stream systems. The locations of the streams needed to be informed through a master planning process, and local watershed coalitions were a vital component of implementing this process. The CWCB, in cooperation with the Colorado Department of Public Safety, developed a special release of the Colorado Watershed Restoration Program. The grant program was designed to provide funding for watershed master planning in flood-affected watersheds. The applicant criteria required that the planning be watershed based (i.e. transcended political boundaries), and that the applicants commit to collaborative approaches involving diverse interests within the watershed, with participation open to all.

The watershed master plan grant program was created to guide communities towards prioritization and implementation of stream restoration projects that improved ecological conditions as well as protecting life and property from flood hazards. The primary objectives of the plan were to develop conceptual channels designs, cost estimates, and project prioritization. Conceptual design of stream channels focused on alignment at different flow elevations, including low flow channel design, average high water flow, and flood flows. Low flow channel design is a critical element to consider as it addresses habitat conditions. Average high water or "bankfull" flows are integral in influencing a stream channel's geometry. These flows are considered to occur every one to two years. Finally, 100-year or greater flood flow design contemplates the entire river corridor, including the active channel and surrounding floodplain. Other elements of the

master plans included channel stabilization strategies, floodplain preservation and restoration, aquatic and terrestrial habitat restoration, wetland restoration, flood control, water supply diversion reconstruction, utility protection, and road and bridge protection.

As a result of this program, ten watershed coalitions were formed. Each submitted successful applications for master planning, hired planning consultants, and began an open dialogue with various interested parties to plan the rehabilitation of the streams in their watershed. Watershed coalitions formed in the following flood affected watersheds: Fish Creek (Estes Park), Fall River (Estes Park), Big Thompson River, Little Thompson River, St. Vrain Creek, Left Hand Creek, Boulder Creek, Fourmile Creek, Middle South Platte River (near Evans), and Fountain Creek.

As the master plans reach completion, these coalitions will look for guidance about funding sources to implement projects identified in their plans. To address these funding issues, the CWCB developed a partnership with the Colorado Department of Local Affairs (DOLA), and this partnership is now spearheading the efforts of the stream task force. DOLA is administering \$199 million of Phase II Community Development Block Grants – Disaster Recovery (CDBG-DR) from the United States Department of Housing and Urban Development (HUD). This Phase II funding will be used for all aspects of flood recovery including infrastructure, housing, economic development, planning, agriculture, private roads/bridges, and watershed resilience. The Watershed Resilience Program is a pilot program that was proposed by both CWCB and DOLA and was accepted by HUD. It is funded through CDBG-DR funds and includes funding for capacity building in existing water coalitions and project implementation. The State of Colorado allocated \$25 million for the pilot program.

The primary function of the Watershed Resilience Program is to support the watershed coalitions developed by the CWCB and local watershed stakeholders. Capacity building grants will include funding for full time watershed coordinators, program assistants, and a CWCB/DOLA managed technical assistance team. Project implementation funding will be used to design and build stream restoration projects and multi-objective projects with a stream restoration component.

The Watershed Resilience Program is the first significant source of grant funds available for watershed coalitions completing their master plans. Other federal, state, local, and private resources will be necessary for the continued implementation of stream restoration projects. The watershed coordinators and their support staff will be tasked with grant writing and fundraising as an essential job duty. The intent of this capacity building portion of the grant is to empower the local watershed groups to successfully implement their master plans by offering the necessary staff and resources. This part of the program was built on the philosopher Maimonides principle, "Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime". The CWCB and DOLA are optimistic that the capacity building portion of the grant will help the watershed coalitions achieve success by offering support beyond that covered by short term federal and state grant programs.

Boulder County Resilience Lessons Learned

Devon Santy, Associate Landscape Designer/Planner, ASLA, Stan Clauson Associates, Inc.

On the Importance of Learning Lessons to inform Local Resilience Planning

Our world is in constant flux. From global issues like climate change and energy security to local processes like elections and natural disasters, changes must be anticipated and prepared for whether they are planned or unforeseen. Planners play critical roles in directing how our communities and cities meet challenges of all kinds. Planning for change at any scale is in essence, "resilience planning."

Today every planner ought to be familiar with 100 Resilient Cities, a program pioneered by the Rockefeller Foundation to facilitate resilience planning for cities around the world. 100 Resilient Cities defines City Resilience as "the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience." Most importantly, this definition does not focus on preparing for natural disasters alone; rather it promotes preparedness for all kinds of disturbances at various temporal scales. Furthermore this definition considers the capacity of many different sectors of a city to prepare for stresses. In the 100 Resilient Cities program, member cities can efficiently share information to learn from each other as they plan their resilient futures. Information exchange and lessons learned from other communities with similar experience is one of the most important tools communities have during the resilience planning process.

Government department caught by surprise; learns on the fly

Flooding events like that of September, 2013 in the Colorado Front Range cannot be predicted. Like most potential disturbances, however, they can be anticipated and planned for. During my tenure with the Boulder County Transportation Department, I helped with the flood recovery process and witnessed lessons being learned first-hand. In the focused realm of private property access, the Department was not ready for such a catastrophic event. Despite the records of past floods in the Flood Information Reports used to enforce floodplain development regulations, the process of getting people safe and permitted access back to their homes was like building an airplane while learning to fly it.

With respect to private bridges damaged or destroyed by the flood, one of the principal impediments to quick recovery was an outdated policy that required an unrealistic conveyance of flood waters in the constricted foothill canyons. The Transportation Department hired a consultant to examine the current policy and effective regulations of municipalities with similar topography and hydrology. The result was a revised policy that allows bridges to be constructed with conveyance for 10-year floods rather than the unrealistic 100-year floods required in the old policy. Other changes to private bridge design criteria including requirements for foundation depth and resistance of the span to hydraulic forces aim to balance damage resistance with the challenges of replacing a damaged bridge. The revised policy will allow for final resolution of the current rebuilding effort in a timely manner, as well as expedite recovery from future disasters.

In the name of resilience, various teams within the department worked to develop solutions and procedures that can provide guidance to future generations of Department employees and residents alike. From debris clean up, to private bridge replacement, to creek master planning, the Boulder County Transportation Department has documented their effective strategies and where appropriate developed new policy and procedures for efficient recovery from future floods. This documentation has set a precedent for other local governments to follow.

Grass roots resilience planning effort blossoms as flood waters recede

Following the September 2013 flood event, local government and community organizations realized the need for resilience initiatives to be put into place in Boulder County. The City of Boulder was accepted into the 100 Resilient Cities program as one of the first 32 member cities, thanks in part to its response to the disaster and subsequent planning for future disasters. Elsewhere in Boulder County, resilience planning is developing as a more grass-roots effort, thanks to cooperation between various organizations and municipalities that understand the need for coordinated efforts. BoCo Strong has sprung up as a local organization bringing government representatives from the county and local towns to the same table as local businesses, NGOs, stakeholders, and local citizens. BoCo Strong's definition of Community Resilience: "Enhancing our ability to manage and adapt to change (both abrupt and gradual) in social, economic, physical, and natural systems" aligns with the short and long term considerations of the 100 Resilient Cities definition, and has capacity to focus on local challenges and define its own methods.

BoCo Strong facilitated 22 meetings around Boulder County to learn from county residents' experience during the flood response and recovery effort. The information and opinions collected have helped the organization define its plan of action and goals. Among many other important responses, common themes from the meeting participants included needs for improved communication between disaster victims and the government, as well as a need for Boulder County to have better procedures in place to respond to disasters. This doesn't come as a surprise given the difficulties with private access.

Building on the impressive response from the meeting participants, BoCo Strong has developed a plan defined by four goals for their efforts to build community resilience for Boulder County. They will be using this plan to apply for a Community Development Block Grant – Disaster Recovery (CDBG-DR) Regional Resilience Planning Grant. The four goals paraphrased here, present an example of resilience planning that accounts for lessons learned locally and beyond.

1. Create a County-wide resilience network to strengthen connections, deepen understanding, and leverage resources.

2. Support the development and launching of an independent local Volunteer Organizations Aiding in Disasters (VOAD) group.

3. Develop and apply a common approach and methodology for county-wide resilience assessment.

4. Increase neighborhood capacity, preparedness, and resilience.

It is important to mention that a key element of the third goal is to learn from local and outside experience. Learning from beyond the recent local recovery effort will be accomplished through communication with other communities who have completed successful resilience planning efforts similar to that which BoCo Strong is undertaking. Furthermore, all of these goals present the opportunity to consider resilience against all disturbances, not just local natural hazards. BoCo Strong's holistic effort presents an excellent example that planners around the country can look to when considering their own local resilience planning.

Final thoughts

<u>New</u> Urbanism

BoCo Strong included learning from disturbances as a guiding principle of the organization. As described, Boulder County Transportation Department has translated lessons from the flood recovery effort into important plans and policies to inform the next occurrence. An important reminder is necessary here: planners can help initiate resilience planning that anticipates shocks and stresses of all types to social, cultural, and infrastructural systems. If the focus remains on natural hazards alone, we miss the true meaning of "resilience," a term with much more holistic connotations. Planners can initiate interdisciplinary projects locally, which capitalize on lessons from similar communities with similar disturbances. In doing so, planners will help create stronger, more resilient communities for the future.

Devon Santy is a planner and landscape designer with Stan Clauson Associates, Inc. in Aspen. He formerly worked for the Boulder County Transportation Department, where he worked with flood-affected properties. He holds a Master's Degree in landscape architecture and an Bachelors of Science in in geology.

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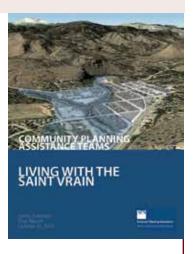
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Living with the Saint Vrain: A Report from the Lyons CPAT

Darrin Punchard, AICP, CFM – Principal Consultant, MWH Global

"The Town of Lyons is so very appreciative of the timely support of APA and the extremely helpful efforts of the CPAT. The team was very responsive to the community's needs and very professional in every aspect of their work here. They helped us focus our efforts on recovery at a very challenging time and were extremely patient with us as we struggled with the daunting tasks ahead of us. The CPAT produced professional maps and documents that our small town does not have the resources to produce, and they developed useful and applicable recommendations that will assist us in our recovery efforts."



- Victoria Simonsen, Lyons Town Administrator

The town of Lyons was one of the communities most drastically affected by the historic floods in September 2013. The event severely altered the landscape, particularly the Confluence area where the north and south tributaries of the Saint Vrain River merge. Lyons suffered major damage to homes, infrastructure, parks, and the river corridor, and it will take many years to fully recover.

In February 2014, in response to a proposal from the Town in collaboration with the Colorado Department of Local Affairs, APA organized a Community Planning Assistance Team (CPAT) to support Lyons with an advisory flood hazard mitigation and recovery planning project. CPATs are multidisciplinary teams of subject matter experts assembled by APA from around the country to provide quick turnaround, pro bono services to communities on a range of challenging planning issues. The CPAT for Lyons was charged with providing technical assistance to the Town as it contemplated many difficult decisions on how to guide post-disaster redevelopment efforts in a way that supported the community's goals for sustainable neighborhood design, affordable housing, environmental preservation, resilience, and economic sustainability.

Following a preliminary site visit in February by team leader Gavin Smith, AICP and APA staff member Ryan Scherzinger, the team refined the scope of work to more specifically focus on the Town's immediate recovery priorities, including options available for rebuilding and reducing risk in the Confluence area while also fostering future hazard resilience for the whole community. Key tasks included a review of existing plans, policies and development regulations; recommendation of actionable mitigation measures and recovery strategies to operationalize resilience to current and future flood hazards; and visual depiction of various redevelopment scenarios for the most heavily damaged areas of the river corridor, including various combinations of land acquisition and on-site housing repair and rebuilding. In completing these tasks, the CPAT would leverage and build upon much of the work already completed in Lyons, including a series of successful community engagement and planning activities performed before and after the flood such as the development and adoption of the Lyons Comprehensive Plan in 2010. Grounding the team's eventual recommendations in recognition of these earlier efforts was deemed critical to success.

The CPAT visited Lyons from May 12-16, 2014. Prior to arriving the team reviewed existing plans, policies and reports of ongoing disaster recovery efforts – including the draft Lyons Recovery Action Plan released in March. The team's onsite schedule included a tour of the town and multiple meetings with Lyons residents, Confluence area neighbors, Town staff, and State and Federal government officials. In between and after all of these stakeholder meetings, the CPAT members gathered to review and discuss their observations and to work toward their eventual findings and draft recommendations, which were shared in a public presentation for



Lyons CPAT members Andrew Rumbach, David Perkes, Darrin Punchard, and Gavin Smith.

additional community input prior to leaving town. Yes, it was an intense week!

The CPAT members prepared a final report in the months following which became officially released by APA in October 2014. The report describes the flood event, the initiation of the recovery process and key challenges, and the results of the local plan and policy review. It also includes some of the architectural and landscape design renderings used to help convey the range of options and/or implications of various recovery planning decisions based on the team's observations and final recommendations as outlined below.

In summary the report includes the following key observations:

- Lyons can achieve a prosperous and balanced future in living with the Saint Vrain River, including its natural assets and risks, through thoughtful planning and design approaches that are tied to a vision that embraces sustainability and disaster resilience principles.

- Rebuilding and living safely within and adjacent to known flood hazard areas will require informed decision-making and constant communication between the Town and private property owners with regard to the benefits, costs and implications of various redevelopment alternatives. This includes promoting resilient housing design in the floodplain and the provision of suitable replacement housing elsewhere.

- Although a devastating event, the flood provided Lyons with significant opportunities and resources to restore and enhance the river landscape, public trails and riparian access, and to expand and redefine the town's legacy of parks and open space – including a range of compatible uses for acquired/vacant lots in the floodplain, and better connections with improved wayfinding between parks and downtown Lyons.

The final report identifies and describes the following policy recommendations for the Town of Lyons to consider as it continues to move down the path of long-term community recovery:

- 1. Improve the mapping of flood hazard areas
- 2. Adopt procedures for post-disaster building moratoria
- 3. Provide disaster reconstruction guidance
- 4. Prepare a post-disaster redevelopment plan and recovery ordinance
- 5. Adopt higher floodplain management standards: strategic disinvestments in the floodplain
- 6. Consider joining the Community Rating System and adopting No Adverse Impact approaches to floodplain management
- 7. Improve flood risk communication and the ability to describe the implications of development choices
- 8. Apply mediation and other dispute resolution techniques to resolve recovery policy issues
- 9. Enhance existing plans to improve resilience



CPAT used a variety of illustrations to depict its design recommendations and the range of redevelopment

The Lyons CPAT played a small but important role in advancing the community's understanding and consideration of the many planning issues and decisions it has been forced to confront as a result of the flood. Although more than a year has passed since the event, the people of Lyons continue to show tremendous perseverance in responding to inconceivable challenges that lie in its wake, particularly with regard to long-term housing recovery.

As stated in the final report, the CPAT team hopes its recommendations, coupled with the Town's strong and enduring community spirit, dedicated staff and citizenry, and commitment to a participatory decision-making process will help to ensure that Lyons remains what makes it such a special place while also taking steps to reduce flood risk and increase its overall resilience. More information on the CPAT project including the team's public presentation and final report can be found at: www.planning.org/communityassistance/teams/lyons/

To learn more about the CPAT program in general and how communities and volunteer planners can participate, please visit: www.planning.org/communityassistance/teams/

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CHAPTER ADMINISTRATOR MESSAGE

Shelia Booth, AICP

Be Resilient - Be a Support

Resilient: (adj.) Capable of bouncing back from or adjusting to challenges and change Planning, and planners especially, get a hard wrap. We are beauracrats. We stand in the way of development and economic growth. And, I'm sure there are many other things we have been called and accused of doing. The key is not to fall victim to these labels and allow them to guide who we are individually and who we are as a profession. Planners need to come together more to revive our minds and our souls. We need to be reminded of why we chose this profession. Why we opt to work long, hard hours for sometimes very little, if any, reward or thanks. Planners in general are resilient, but let's make an effort to be more so. Take time this year to meet with your fellow planners outside of the 8-5 and share your frustrations, your challenges, and your triumphs. Take advantage of the training, social and networking events that APA Colorado offers, and if you don't think we're offering enough, contact us and let us know. We're here for you. You're here for planning. So, what do we have planned?

It's the start of a new year and believe it or not, things are already underway in preparation for the 2015 APA Colorado State Conference in Steamboat Springs September 30th – October 2nd. Our Local Host Committee, comprised of public and private sector planners and non-planners in the Steamboat Springs area, are hard at work finding places for us to tour, socialize and learn. Make sure to mark your calendars and come join us for another great time in Colorado.

In April, the 12th Annual Spring Transportation Symposium, hosted by APA Colorado, WTS, ITE, ITS, ACEC and ACSE, will be held on April 10th at the Colorado Convention Center. Come join us and our partner organizations for a day of transportation planning inspiration. Also in April we will once again be hosting a reception for the Colorado Chapter at the National APA conference in Seattle. Last year we partnered with APA New Mexico and APA Utah and we hope to do that again this year. For those that are planning to attend the national conference, the reception is a great opportunity to meet and greet our neighbors to the west and south, as well as your Colorado comrades. The event is free to all APA Colorado members, and those that RSVP to the event even get a free drink ticket. So, if you register for the national conference, keep an eye out for your reception invitation via email.

Lastly, the Board and I want to make sure we're meeting your needs for training, social, and networking events. Please take a moment to reach out to your Area Representative and let them know what you would like to have planned in your community. Or, if you're willing to do a training session or host a social event, contact us and let us see if we can get something planned. Planners need to be resilient and often times, we get that resiliency back after getting together and reminding each other of our value. Here's to planning a great 2015.



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Emerging Planning Professionals Committee Update

With their hard-hats, safety glasses, gloves and reflective safety vests on, APA-CO's Emerging Planning Professionals (EPP) headed toward their exclusive, construction tour of Denver International Airport's newest addition- the DIA Hotel, Convention, & Transit Center. The Hotel, Convention, and Transit Center has been a long promised addition to DIA, full of intrigue, conspiracy theories, and plenty of stimulating planning-related discussions. With a ribbon cutting date on the calendar and the project more than halfway complete, the EPPs' private tour of the facility began at the belly of the transit center, which will connect the airport to Union Station via a commuter train. Throughout the tour, EPPs were able to ask probing questions of the project management team. Discussions ranged from public art installations to future infrastructure planning that is being integrated into the facility's design. From these questions, EPPs were able to further understand the subtleties behind hotel and conference center planning. The tour moved on to explore the convention center conference and hotel rooms under various stages of construction. The EPPs were even given access to explore the hotel pool and hot tub area located in saddle of the hotel's curvaceous top profile. From this point, patrons will enjoy a view of the beautiful Rocky Mountains, and the Denver city skyline as well as the magnificent DIA tents.

Coming up this year, EPP has a host of professional development and innovation-centric events planned, including a SketchUp workshop in March and a collaborative partnership with DCI which should result in June volunteer opportunities for their pilot Play Unplugged program. Keep an eye out for our annual Trivia Night in April. This will be a great opportunity to show off your obscure planning knowledge or challenge your hours of AICP prep!



Don't forget to like us on Facebook!! https://www.facebook.com/EPPColorado Facebook is the best way to stay in touch with APA-CO EPP! We post upcoming events, photos & summaries from events, planning related jobs, articles and much more!

Emerging Planning Professionals (EPP), part of APA-Colorado, cultivates a vibrant community of entry- to mid-level planning professionals by offering and promoting opportunities for professional development, service, and meaningful, innovative contributions to an evolving, diverse profession.

Dedicated to serving planning professionals across Colorado with eight or fewer years of experience in the field, EPP inspires and supports emerging planners to become community leaders today and tomorrow.



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Professional Development Committee Update

Update from the Professional Development Committee

Last year's annual conference in Crested Butte was one of the pinnacles of 2014 for APA Colorado and its members. I would like to thank the members of the Professional Development Committee for their tireless efforts to ensure that the Chapter's educational events, including the annual conference, served the training needs for APA Colorado's membership. The feedback we received was overwhelmingly positive.

Thank You 2014 Professional Development Committee Members!

Shelia Booth, AICP (Chapter Administrator) Scott Bressler, AICP Erin Fosdick, AICP Greg Moberg Ken Schroeppel, AICP Steve Westbay, AICP (Local Host Committee)

Throughout the year, the Professional Development Committee serves emerging and seasoned planners by providing workshops and preparation materials for prospective AICP exam candidates, ensuring Chapter events qualify for and obtain continuing education credits (CMs), organizing and hosting events using varying technologies, and building on the synergy of the mission of the APA Colorado Chapter and Colorado's institutes of higher learning. We've expanded our committee this year, and look forward to a terrific 2015. We hope to see you all in Steamboat Springs this fall!

Log Your CM Credits!

Remember to log your CM credits for the 2013-2014 reporting period. If you still need to acquire credits, there are plenty of affordable and even free options for online training and local events to get your CM credits while expanding your breadth of knowledge. For a list of upcoming events, please visit the APA Colorado Events Calendar at http://www. apacolorado.org/event-calendar. For other training opportunities, visit the APA National training and workshops page at http://www.planning.org/education/training/.

We warmly welcome your feedback on how the Professional Development Committee can continue to add value to the Chapter and its members. For more information, please contact:

Tareq Wafaie, AICP

Professional Development Officer twafaie@clarionassociates.com 303.830.2890 ext. 32

APA-CO Student Chapter Update

In the efforts to continue to unite students and professionals throughout the state of Colorado, APAS CO and APAS will again offer the APAS CO Job Shadowing Program. This is the third cycle of the program that provides an opportunity for students to spend valuable time with professionals participating within the field of planning. Through interaction and observation, participating students have the opportunity to gain first-hand understanding of the profession while allowing them to reflect on their educational knowledge to prepare them for a future career.

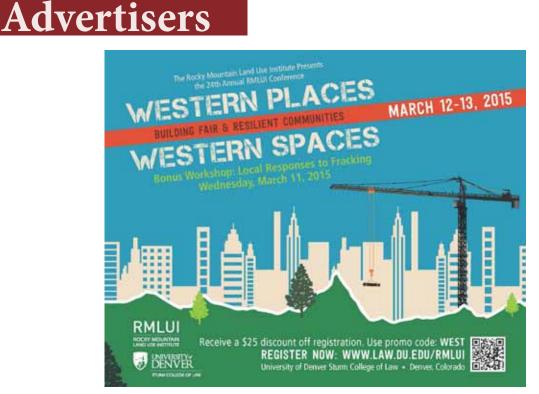
The following is the schedule for the program this spring.

PA Colorado

Host Registration Period:	February 2, 2015- March 6, 2015
Student Application Period:	March 9, 2015- March 27, 2015
Selection Period:	March 30, 2015- April 10, 2015
Shadowing Dates:	April 13, 2015- May 30, 2015

*If you do not participate during this cycle, the next cycle will not commence until the spring of 2016.Both Hosts and Students should understand that this opportunity is voluntary and no compensation is provided or expected from either party.

If you are interested in participating in the Job Shadowing Program and would like more information please contact the APAS Student Representative, Caeli Hill at **apaco.studentrep@gmail.com.**



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2015 APA Colorado Awards Nominations

Deadline: March 13th 5:00 pm

Nominations are now being accepted for the 2015 APA CO Chapter Awards. With 7 project and 3 individual categories, we're sure you'll find one to fit. All planners and students who reside or practice in Colorado are eligible. Nomination packets and instructions are available on the APA CO website at:

www.apacolorado.org/2015-chapter-awardnominations





Awards Categories

- 7 Project Categories:
- Sustainability & Environmental Planning
- Community Engagement
- General Planning Project
- Small Budget Project Innovatvie/Creative Partnerships
- Community Resiliency
- Student Projects

3 Individual Categories:

- Journalism/Papers
- Planning Leadership
- Pioneer Award

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Please look forward to the next edition of Planning Matters, which will be released in the second quarter of 2015!

The theme of the upcoming issue will be: "Planning Healthy Communities."

1st Qtr 2015