

The Gateway's Bajada Nature Trail



The Arizona Game and Fish Department considers the McDowell Mountains and the adjacent Sonoran Desert the most significant wildlife habitat in the Valley outside the Tonto National Forest.



You Are Here

Trail Length
1/2 Mile

Each Loop
1/4 Mile



Stable



1%



Avg 3%
Max 5%



32"
wide





MSC has worked successfully to expand and diversify our events and activities, create new partnerships, and grow our ability to effectively care for the Preserve. Ask those within the organization about our recent past and they would summarize it in one word – growth. Now it is time to pause before moving forward, reinforce our foundation and plan for the next growth phase.

During the upcoming fiscal year (July 2009 to June 2010) MSC will launch one new program, Nature Guides, which I describe in the feature article of this issue Creating an Experience, found on pages 4 and 5. As the weather gets cooler, you will soon have the opportunity to enjoy this new program and all of the programming we regularly

offer each year including free public hikes, events like the McDowell Sonoran Challenge, and Pathfinders at trailheads.

In the upcoming fiscal year, in addition to keeping people connected through these activities, we will give priority to achieve the following goals:

- 1: **Recruit 120 new stewards (MSC volunteers):** Last year, three new trails were built and a major trailhead opened. This year the new Bajada Nature Trail opens, and there is a chance that land within the Preserve boundary to the north will be acquired. We plan a push for additional volunteers to meet the need to increase our stewardship efforts, as well as to continue current activities. As a Preserve supporter, I hope you will consider becoming one of these much-needed stewards!
- 2: **Build our Base of Support:** We have been awarded a Public Ally through ASU's Public Allies Arizona program, to help develop our capacity. This program provides training and salary for a full-time employee for 10 months. Our Ally, June Cho, will help build capacity through MSC outreach into the community, with the objective of creating community awareness of both the Preserve and the community's effect on the Preserve.
- 3: **Establish a Long-range Plan:** State land reform and a Desert Discovery Center are two of many impactful things that may be on the horizon for the Preserve. MSC has worked this year to begin to implement the Sonoran Field Institute research program in the Preserve and a junior high and high school program that will engage students in current ecological issues, and will continue that work. Adding "experience enhancement" to the Bajada Nature Trail is also a priority. To achieve these goals and others, MSC's planning this year will look at a longer time-frame.

I hope you will join us this year by participating in an activity, becoming a steward, contributing financially, or introducing a friend to MSC. You continue to make us strong and effective. Even in this tough economy, MSC's supporters showed their commitment to our mission by contributing more than in the prior year. Thank you for your ongoing and generous commitment to MSC.

See you on the trails!

Ruthie

About The MSC

The McDowell Sonoran Conservancy champions the completion and sustainability of the McDowell Sonoran Preserve for the benefit of this and future generations.

We connect the community to the Preserve through public and private partnerships, environmental education and stewardship.

Mountain Lines

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The McDowell Sonoran Conservancy is a 501(c)(3) non-profit organization

Creative design donated by Debra Doss.

Welcome New Directors

Leslie Dashew

Leslie Dashew is the President of Human Side of Enterprise and a partner in the Aspen Family Business Group. Her career has focused on helping people in organizations to utilize, develop, and appreciate their capabilities and those of the people whose lives they touch. She is also a community volunteer. Since moving to Arizona 10 years ago, she has served on the boards of the Scottsdale Cultural Council and the Scottsdale Center for the Performing Arts, and has been involved with the Arizona Women's Forum.

Tom Headley

Before Tom and his wife Judy moved to Scottsdale in 2002, Tom spent 28 years helping to create and grow companies in the medical device industry. He founded Transfusion Technologies Corporation and served as president and CEO and as Chairman of the Board. Since moving to Scottsdale, Tom has pursued entrepreneurial interests and served in various volunteer capacities in his neighborhood and as a mentor with ASU Technopolis.

Peter Rusin

Peter Rusin is the Executive Director of Health World, an organization committed to improving the standards of community. He has a long career in health care administration, working in various hospital departments, before becoming president and executive director of a major health care hospital. He currently serves on various boards and community organizations, including the Scottsdale Charros. Peter is also involved as a volunteer with the Paradise Valley Unified and Scottsdale Unified School Districts.

Bajada Nature Trail Donor Profile

The Bajada Nature Trail was made possible through the generous support of long-time McDowell Sonoran Conservancy donors, the Richard and Christine Kovach Family. This transformational gift to the McDowell Sonoran Conservancy was used to provide the resources needed to create the Bajada Nature Trail, as well as the funds necessary to fabricate the leading-edge signage along the trail.

Along this 1/2 mile trail, the visitor is both immersed in nature, as well as provided with the opportunity to learn and interact through signage describing the animals, plants and geological features a visitor can find in the Bajada and activities to engage them with the natural environment.

In addition to offering an innovative nature experience for those who would like to learn more about Arizona's unique Sonoran Desert, the trail was constructed to accommodate everyone, from small children to the elderly. It is barrier free, allowing members of the disabled community to experience the McDowell Sonoran Preserve. The trail meets the strictest ADA standards in its surface, grade (avg. 3%, max 5%), cant (side-to-side % variability) and width so it is fully wheelchair accessible.

These features were what first attracted the Kovach Family to the project. Christine explained, "There has always been the intention to provide broad access in this area. I can't think of a better way to get people involved in the Preserve than through the Gateway and this trail. When the City and MSC approached us regarding donating toward the trail's construction, we knew right away this was something we wanted to be involved in. I think they were surprised when we said yes to the entire project."

The Kovach family initially became involved in preservation through a rezoning case on land nearby their planned home in 1991. While fighting this zoning change, Christine learned of a group working to protect the McDowell Mountains in north Scottsdale. She attended one of the initial meetings of the group at the Mustang Library, and a year later she was elected as Chairman of the Board of the McDowell Sonoran Conservancy (back then known as the McDowell Sonoran Land Trust). Those early

meetings ended up being a critical first effort that resulted in creating a preservation plan for the McDowell Sonoran Preserve. Christine continued and increased her involvement with this effort, serving on the first two terms of the newly created McDowell Sonoran Preserve Commission, and a subsequent third term a few years later. She chaired the Preserve Commissions Promotion Committee, served on the campaign committee to get the first tax passed by voters in May 2005, and was elected as chairman of the McDowell Sonoran Conservancy Board of Directors a total of four years. Throughout their continued involvement, the Kovach's are raising three children - all still school age, Christine's business is out of state and Rick's contracting company keeps him traveling overseas, currently to the Middle East.

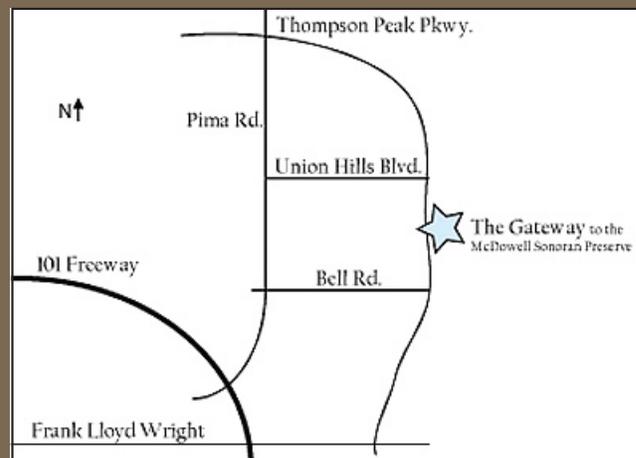
The Kovach's also enjoy what they have worked so hard to protect! From youth group outings to hiking as a family, to simply enjoying a sunset view, the natural open space found in the Preserve is considered a benefit and resource for time to spend together. Their eldest son, Daniel, recently hiked with Rick across the McDowell Mountains to coincide with the Grand Opening of the Gateway Access Area in May 2009. They began at Lost Dog Wash trailhead early in the morning, arriving at the Gateway just in time for the release of a rehabilitated hawk. Daniel hopes to identify an Eagle Scout project in the Preserve in the next 2 years. Their middle son, Nick and youngest daughter Alison, are also involved in scouting and love the outdoors...a next generation of possible Preserve Stewards!

In addition to the significant gift creating the trail, the Kovach's have provided an additional gift to seed programming needs for the disabled community and school children at the trail. To make a gift in honor of the Kovach Family and toward this fund, please go to mcdowellsonoran.org/donation.

The McDowell Sonoran Conservancy sincerely appreciates the vision and generosity of the Kovach family.

Visit the Bajada Nature Trail!

The Bajada Nature Trail is located at The Gateway to the McDowell Sonoran Preserve, 18333 North Thompson Peak Parkway, the largest and most strategically located access point into the Preserve. Gates open at sunrise, and close at sunset. The Gateway includes an amphitheater for public education activities and events, shade ramadas and seating areas, restrooms, water fountains, wayfinding and interpretive signage, an equestrian staging area with trailer parking, water troughs, hitching rails, a dog comfort station and parking.



Creating an Experience and an Action

As part of our stewardship of the McDowell Sonoran Preserve, we focus a great deal of resources on fostering these attitudes in those who use the Preserve, local residents whose proximity to the Preserve creates an impact, and legislators. These target groups, however, make up only a fraction of the “owners” of the Preserve—the citizens of Scottsdale—and an even smaller percentage of the regional population who benefit from a healthy Preserve. As the largest urban preserve in the nation, its sphere of influence is substantial.

One way to expand our messaging capacity became possible through the generosity of the Richard and Christine Kovach family. Their gift of funding allowed MSC and the City of Scottsdale to build an interpretive trail at the Gateway to the Preserve. Their trust in us inspired us to think boldly. We decided to try and go beyond delivering information to creating a value shift in those who visit the trail. We hope to “infect” those who visit with the spirit of stewardship!

The Bajada Nature Trail Project

The creation of the Bajada Nature Trail will occur in three phases. The first phase, “hardscape,” will be complete this September with the installation of the trail, exhibits, and accessibility features. The second phase, “people,” involves training volunteer trailside educators to supplement the exhibits and will launch in the spring of 2010. The last phase, “resources,” includes an audio tour and other supplemental materials for visitors and teachers, slated for implementation over the next two years.



the subject. Therefore the information must be delivered in a way that promotes discussion to meet the desired social interaction and is neither too sophisticated nor too simple. Space for groups to stop and discuss or observe exhibits is also important.

Motivators for visitors engaged in informal learning experiences are intrinsic, such as the excitement of making a discovery, feeling knowledgeable, having a sense of affinity for the place or topic, or even simply being comfortable. Hindrances, therefore, include feeling that the experience requires too much effort, feeling that the topic isn't relevant, feeling inferior or superior to the information, or being physically uncomfortable.



left: Smooth, compacted trails allow visitors to focus on the setting and exhibits rather than their footing. They also allow those with stability issues or in wheelchairs to visit the Preserve while still feeling immersed in nature. *above:* Seating made out of rock removed from the trail was created as a comfort feature, to allow people to rest and enjoy nature.

Because of this understanding of the physical, social and intellectual needs of the participants, we set the following goals for phase 1:

- to create the sense of being immersed in the desert environment
- to see plants and animals in their natural setting
- ensure that there are no physical barriers to the experience and that comfort is addressed
- to coax visitors into investigating the setting rather than the exhibits
- to put biodiversity into a context that is intelligible to the layperson

Our first step was to interview visitors to find out what they knew and didn't know about the desert. We asked what they were curious about, what they found interesting, and why. We also asked about their fears about going into the desert. The general content and messages that we wanted to deliver were then compared with this data in order to determine the content for the exhibit panels.

Phase 1: Hardscape

The first step in creating an ideal setting for informal learning is to design the space. Informal learners, those outside the classroom, have specific motivations and impediments that must be addressed before delivering content. Visitors to settings like nature centers and museums are self-motivated, self-directed, and self-paced. Therefore, the site, without considering the exhibits, must have three characteristics. It must be interesting enough to motivate a visitor to explore. A visitor should be able to move through the site as they choose without needing to follow a specific route in order to have a positive experience. Lastly, the site must be easy to navigate through as anxiety about finding the restroom, exit, or other destination will negatively impact the experience regardless of how well-implemented the exhibits.

Informal setting visitors usually participate in small groups made up of family or friends whose first goal is to spend time together. They all may have a different knowledge level of and interest in

A team of 30 stewards, community members and staff then spent a week mocking up potential exhibits. These were taken out to the trail's future location and other stewards, community leaders, students and residents went through the exhibits with clipboards, making detailed notes. They evaluated the amount and level of content, their interest in the content, and the proposed delivery methods.

The mock-ups and this information were used to guide the team in making revisions. Some exhibits received high marks and went straight to development. Others required reworking. Some were eliminated entirely. Feedback ranged from “too much text” and “not enough interaction” to “I’m so glad you included insects” and “I didn’t expect to learn so much!” The evaluation resulted in deciding on fifteen topics to be included on the trail and the different sub-topics of each that would be explored.



Community members offered their thoughts and ideas of initial mock-ups. This testing provided vital feedback before moving to the design stage.

Interestingly, the most controversial topics were those specifically addressing people’s behavior and responsibility toward the environment. Based on this, many organizations would have decided to leave these messages out, only telling the stories of the plants, animals, and rocks, and hoping that people would leave the trail somehow “changed.” It was at this point that the team decided to take the risk of including messages that may cause some controversy leading to the inclusion of three exhibits: Local Conservation Efforts, Why is Nature Important to You?, and You Matter.

The next two months saw a flurry of activity. Phil Weddle and Brandon Gowen, architects with WeddleGilmore, responded to every crazy idea with a way to accomplish it. I asked for a perfectly scaled, 3-D model of the Preserve—no problem. How about a 14-foot long sign that arcs like the Earth’s horizon—sure!

When the decision was made to try something unique—to illustrate the trail entirely with photographs—professional and amateur photographers rose to the challenge. Rarely can an exhibit development team acquire the photographs that illustrate all of the details needed to tell an exhibit’s complete story. No request to the photographers went unanswered—including one for a packrat, a shy nocturnal animal, carrying something man-made—which came back promptly after the request was sent. Barry White, of Photographic Insights, spent countless hours perfecting and placing over 200 photographs into the exhibit files. Ed Mertz, a fine art nature photographer, used a computer to

take a single, 180 degree panoramic image of the entire McDowell mountain range. Marianne Jensen, author of the photographic Flora Guide to the McDowells and Don Bierman, former head of photography for the Chicago Tribune, photographed more plants, animals, rocks, and microbes than they thought existed!

Much attention was focused on the interactivity of the exhibits. All institutions want to produce interactive exhibits. However, unless the “action” enhances the learning, the activity is wasted or worse, can be a distraction. Effective interactivity results in engagement and deeper understanding of the subject. Some of the exhibits we developed ask questions with answers revealed under a flip-up panel, others ask participants to look for items around the exhibit. One, which may turn out to be terrific or terrible, is a game board with movable, magnetic pieces. The development team is taking bets on the time before the first magnet disappears. But – we are taking risks in order to achieve our goal.

Sign text was carefully crafted to be interesting, easy to read, and scientifically accurate. Drafts were sent to a review panel that included staff at ASU, Arizona Game and Fish, the Arizona Geologic Survey, the Desert Botanical Garden and more. Steve Jones, a long-time friend of MSC and expert desert botanist, spent many hours fact-checking the panel’s input. The panels were then proofread by a team of volunteers, sent to freelance editor Barby Grant, and submitted to the fabricator. In mid-September, the exhibit framework was installed and the exhibit panels glued into place.

The final stage of Phase 1 is to conduct a post-installation evaluation. Volunteers will observe visitors to determine if they are using the interactives as intended, whether the accessibility features are effective, and if the messages are being delivered. Interviews will determine what meaning (in the broadest sense) the visitor has created from his/her experience, their overall enjoyment and



Finding photographs that illustrate specific messages is challenging. The photography team, however, managed to supply many difficult-to-acquire images. For example, the following message needed a supporting photograph that showed both animals and housing. Marianne Jensen snapped this perfect image.

Are Local Bajadas Disappearing? Yes. Just as plants and animals like to live on the bajada, so do people. The gentle slope provides beautiful views of the valley, wildlife is present, and the surrounding landscape is rich with plants. Many of the area’s bajadas have been developed into residential communities. The rapid loss of this habitat may cause some plant and animal species to disappear or for their numbers to severely decline.



Stewards Joni M., Don B., and Leslie A. plant cacti that were removed during the construction of the trail. They have become experts at planting in a way that look completely natural.

areas of frustration, and attempt to determine whether participants have changed their opinions about the value they accord the environment.

Phase 2: People

After determining the effectiveness of the trail and exhibits, we will begin developing a trailside education program. The volunteers, called Nature Guides, will be specially trained on both the content of the trail and delivery methods. They will focus on “five sense” education—using items that allow people to touch, hear, and even taste things that will enhance their learning. We are actively looking to recruit community members with physical challenges as volunteers in this program since this is one of the nation’s few fully accessible teaching trails.

Phase 3: Resources

During the initial planning for the trail, we intended to meet every visitor’s need, be it Braille for the sight-impaired, audio for the hearing-impaired, foreign language translations, and more. While we haven’t veered from this goal, we learned that it would take more time and funding to achieve. This fall we will establish an advisory board to help us achieve this high level of access. For example, we are already investigating ways to solar-power the exhibits so that they can literally speak.

Phases 2 and 3 will require community involvement, supplying the knowledge and funds to bring these enhancements to reality. Anyone interested in sharing their expertise or in learning new skills to help accomplish these goals should contact me. If you are interested in supporting these efforts with a financial gift, please contact MSC’s Community and Development Director, Linda Raish.

We know that information alone doesn’t move people to care or to take action. It is things that we value that catalyze us into action. It is our hope that we can inspire those who visit the Bajada Nature Trail to value the Preserve and to extend that value to the environment in general. Then people can choose their own ways to act. For some, action might be to become a steward. For others, it’s voting for environmentally friendly candidates or writing letters to elected officials. Some may buy environmentally friendly products or conduct energy audits of their homes. The only undesirable outcome would be if those who experience the trail are unmoved to any action.

I was excited when asked to be involved in providing photographs for the new Bajada Nature Trail. I knew that compelling pictures would make visitors want to explore the extensive diversity and beauty of the desert preserve. My challenge was to capture the McDowell Mountains in a single photograph.

To best acquire the incredible complexity of the terrain in vivid detail, I used a large format view camera and a Better Light 144-megapixel digital scanning back with a panoramic stage. The camera was mounted on a 10-foot high platform and rotated through 200 degrees to produce the mountain image as one very large 1.2 gigabyte digital file. The exposure took nearly 3 minutes.

— Ed Mertz - Photographer

Conrad J. Storad

Director of the Office of Research Communication
Arizona State University

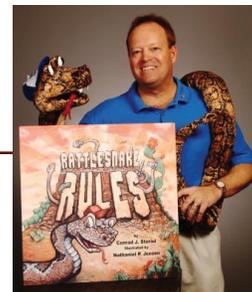
Conrad J. Storad currently is director of the Office of Research Communications at Arizona State University where he now edits and writes for the brand new Research Stories Web site. For the previous 24 years he edited and wrote for the national award winning ASU Research Magazine. He also is the founding editor of Chain Reaction, an award-winning magazine for young readers that explores science, learning, and creative activities taking place at ASU. Conrad is the author of more than 30 science and nature books for children and young adults (some of which are available at MSC's gift shop). In 2001, the Arizona Library Association named him the "Arizona Children's Author of the Year." He was a Year 2000 inductee to the Cronkite School's Journalism Hall of Fame.

When did you first develop an interest in nature?

Growing up in Barberton, Ohio, I was the little boy you'd always find wading through the pond, poking around rotten stumps in the woods, or lifting up rocks to look for insects and snakes and other wild treasures. We had a wonderful area of woods and wetland near my parent's home. It was a natural playground and provided a new learning experience every day. I also figured out early how to channel my interest in science and nature into entrepreneurial activity. At age 10, my buddies and I set up a business to catch and sell insects to the high school girls of the neighborhood. They were required to create an insect collection for biology class in those days. We made a tidy sum of "Dairy Queen" money catching butterflies, beetles, and creepy crawlers of every shape and size for those young girls. Dragonflies were the big money makers. We charged 50 cents each for a blue darner or a snake doctor. They were tough to catch.

Science writers who write for the general public strive to simplify information, rather than 'dumb it down'. What is your take on this statement?

A good science writer should never have to resort to "dumbing down" a topic. Good science writing is really story telling at a different level. That said, I have to confess that writing about science and nature for children is MUCH more difficult than writing for adults. Doing the work and learning the process for reaching young readers has made me a much better writer overall...I believe. What I most love about being a children's author is the opportunity to learn lots and lots about all possible topics. Being a science writer is a dream job. As a teenager, I originally wanted to become a marine biologist or an entomologist. I ended up being a newspaper reporter and editor. Later on, I got the opportunity to blend my interest in science with my writing skills. As a science writer, I've had plenty of opportunities to write about marine biology and entomology, without having to be seasick or spend time in steamy jungles. However, I've also got the chance to write about much, much more, including geology, physics, chemistry, medicine, history, theater, fine art, and music. The really fun thing about being an author is having the ability to share what I learn through the books and magazine articles that I write. Learning and sharing is always satisfying on many different levels.



We need science innovation right away in order to slow global warming, bring clean water to people all over the world, fight new diseases, and more. Why spend your time and talent focused on children whose contribution to science may be 20 or 30 years away?

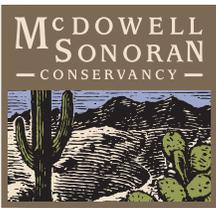
Easy answer. The children ARE our future. We have to get them hooked on learning and teach them an appreciation for nature right now. Their contributions could come much sooner than you think. Helping kids to hone their reading and communication skills is essential as well. If a child doesn't know how to read and write well, he or she will be left behind. Modern society is based on information and communication. We need to know how to communicate clearly, concisely, and quickly. We also need to know how to find information quickly and learn how to use it wisely. Kids need to learn these skills early. They also need to know that reading and writing well is an ongoing process. We should never stop trying to improve our communication skills. They are vital to living a happy, healthy life. Hopefully, a literate society will make wise choices, especially when it comes to the important questions related to preserving our wild lands, appreciating nature, and understanding the power of science.

Do you have specific goals in mind before you write a book?

I do have goals for each and every book that I write. First, I hope that my words provide enjoyment at some level. I try to write books that are actually FUN to read. I also hope that the information I provide might spark a bit of curiosity in the reader. I hope that they actually go beyond what I have written in the search for more information. On a higher level, the goal is that my work might actually demystify a topic for a reader. I try to provide easy to understand and accurate information. If everything works the way I want it to, my words may help the reader to have a greater respect and appreciation for the amazing world in which we live. If I can accomplish any one of these things with a child or an adult, then my work is a success.

If you were trying to explain to someone, child or adult, why the Preserve is important, what would you say?

We are privileged to live in Arizona, especially here in the upper reaches of the Sonoran Desert. It is one of the most beautiful and interesting places on this planet. However, in my mind, progress is not about carving our highways and laying down miles of asphalt, constructing condo towers that block the horizon, or building row after row of cookie cutter homes that crowd the foothills. We see where that notion has taken us. Not pretty. It is essential that we have places like the Preserve. And we must take care of them and nurture them. It is our duty. Once lost, it will be gone forever.



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ORGANIZATION
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COOKOUT AT THE RANCH

It's not just the spectacular desert environment that needs to be saved. It's our history, our wildlife, our quality of life, and the benefits that they bring to our state and community.

WHEN: Saturday, October 3, 2009, 5:30 p.m. to 9:30 p.m.

WHERE: MacDonald's Ranch, 26540 N. Scottsdale Road, North Scottsdale, AZ

WHAT: Go green fundraiser for desert preservation, wildlife rehabilitation, the Desert Foothills Scenic

Drive, and Pinnacle Peak Park, featuring food, western entertainment, exhibits, silent auction, drawings, and a magnificent desert setting.

You can purchase tax-deductible tickets for Cookout at the Ranch XIV and/or the Firewater Drawing on-line, by phone, through the mail, by calling the Cookout Hotline, by visiting MacDonald's Ranch, or at the event.



Tour De Scottsdale

Cyclists are already training for the 6th Annual Tour de Scottsdale, which will launch from Market Street at DC Ranch on Sunday, Oct. 4, at 7 a.m.

Almost two thousand cyclists are expected to participate in the 70-mile bicycling event that winds through Scottsdale, Phoenix, Cave Creek, Carefree, and Fountain Hills, with every mile benefiting the McDowell Sonoran Conservancy. A 2.5-mile Family Fun Ride allows even the youngest competitors to join in the Tour, which is sponsored by DC Ranch Community Council.