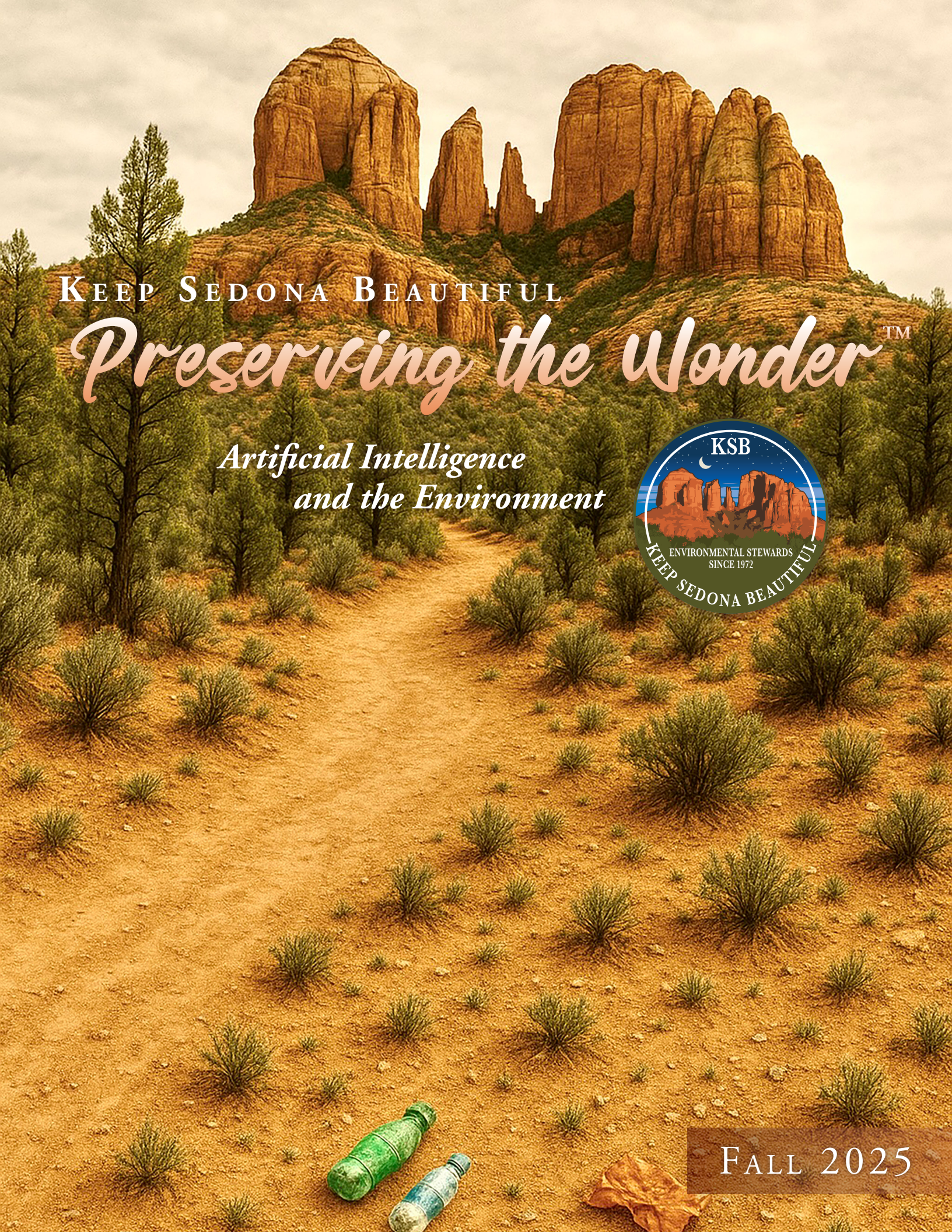
KEEP SEDONA BEAUTIFUL
Preserving the Wonder™
Artificial Intelligence
and the Environment
KSB
ENVIRONMENTAL STEWARDS
SINCE 1972
KEEP SEDONA BEAUTIFUL
FALL 2025

Preserving the Wonder

Fall 2025

KSB's Quarterly Environmental Message: | **In Sedona, the Environment ...IS...the Economy.**

Keep Sedona Beautiful's mission is to protect and sustain the scenic beauty and natural environment of Sedona and the Verde Valley.

GIVE WHERE YOU LIVE • GIVE WHERE YOU LIVE • KSB

10,000+ VOLUNTEER HOURS
OVER 5,000 HOURS
LITTER LIFTING

Join KSB and help us protect the environment of Sedona and the Verde Valley through our programs and initiatives.

PRESIDENT'S MESSAGE

Every day I am gifted with hopeful words and actions from our citizens and business owners and managers. Residents here practice civil discourse, humility and camaraderie like no other area I've experienced, and volunteering is widespread. I'm a volunteer, no different than the thousands of others in the Verde Valley. I enjoy volunteering, because even though I work a lot, it seems less stressful. Volunteering at KSB allows collaboration with people from many levels of management and careers, from banking to building trades. Our skills dovetail together to make an enjoyable team.

Teambuilding feeds our intellectual needs, but many at KSB find inner peace by fulfilling their passions. Volunteers discover serenity working in our interpretive garden, listening to birds sing and watching plants grow. Many litter lifters love walking along roadsides, where vistas are extraordinary and the morning light calmly rises to meet the day. If you're reading this and thinking, hmm…those jobs sound interesting, then give us a call. It's the human interaction that most of us cherish, especially in this burgeoning artificial intelligence world.

No matter how you feel about AI (this issue's theme and cover photo - AI generated), it promises efficiency and knowledge beyond our wildest imagination. Will it satisfy our human interaction needs? Unlikely. In the years ahead, volunteerism may rise to the top because it's where we can still interact, just working together toward a shared purpose. Volunteering is where we can pick and choose how we want to spend our time. I believe it's where people will gravitate for the true human experience.

CERTIFIED SUSTAINABLE Gold Verde Valley Regional Economic Organization

RIVERFRIENDLY BUSINESS 2023 Silver VerdeRiver.org

CITY OF SEDONA SMALL GRANT RECIPIENT

AI AND ENVIRONMENTAL STEWARDSHIP: PROMISE AND PERILS

As we stand at the crossroads of a technological revolution and an environmental crisis, artificial intelligence (AI) is both a powerful tool and a source of legitimate concern for those of us committed to preserving our planet's environment.

From the red rocks of Sedona and the Verde Valley to the vast scope of our global ecosystems, the decisions we make today about AI will shape the environmental legacy we leave for future generations. For members of Keep Sedona Beautiful, understanding both the promise and perils of AI is crucial to harnessing its potential while mitigating its risks.

As you read below about the promise of AI, it's crucial to recognize that AI is not a silver bullet for solving the climate crisis. Technology alone cannot solve problems that are fundamentally rooted in human behavior, economic systems, and political choices. The most sophisticated AI system can't replace the need for individual action, policy changes, and shifts in cultural values. AI can provide us with better tools, more accurate information, and more efficient systems, but it cannot make the fundamental choices about how we live on this planet.

When discussing AI below, we're NOT referring to chatbots that mimic human discussions or that generate images like our cover photo. Instead, we're focusing on the sophisticated tools that support and enhance scientific discovery. If you use AI for any reason, we urge you to always do your own separate fact checking. AI remains prone to error, but it strives to provide answers even when its data is incomplete.

THE PROMISE OF ARTIFICIAL INTELLIGENCE

The climate crisis demands solutions that operate at unprecedented speed and scale, and AI is beginning to prove itself a powerful tool in this fight. Current AI applications are revolutionizing how we monitor, understand, and respond to environmental challenges, while expected advances promise even more dramatic breakthroughs.

For climate monitoring and prediction, AI systems are processing vast amounts of data to track deforestation in real-time with accuracy that would have been impossible just a decade ago. Google's AI platform can now identify individual tree species from space, enabling precise monitoring of forest health and biodiversity loss. Microsoft's "AI for Earth" initiative uses machine learning models that can predict wildfire behavior with remarkable accuracy, allowing for more effective prevention and response strategies. When mature and deployed widely, these systems will analyze weather patterns, soil moisture, vegetation health and historical fire data to provide early warnings that may help prevent disasters like the recent devastating fire on the North Rim of the Grand Canyon.

The energy sector is experiencing perhaps the most transformative impact of AI. Smart grid systems powered by AI are optimizing renewable energy distribution, predicting wind and solar generation patterns, and reducing energy waste by up to 15% in some implementations. DeepMind's AI has improved the efficiency of Google's data centers by 40%, while similar systems are being deployed to optimize heating and cooling in buildings. In transportation, AI is accelerating the development of electric vehicle technology, optimizing battery performance, and creating more efficient route planning systems that reduce emissions from logistics and delivery services.

Solving the microplastic crisis, a growing threat to both terrestrial and marine ecosystems, is also benefiting. Researchers have developed machine learning algorithms that can identify and track microplastic particles in water samples with greater speed and accuracy than traditional methods. AI-powered systems are being deployed in water treatment facilities to better filter these contaminants, while predictive models help scientists understand how microplastics move through ecosystems and accumulate in food chains. Cleaning up plastic in our oceans is being aided by AI.

Other ocean conservation efforts are also leveraging AI. The Nature Conservancy uses machine learning to analyze underwater footage and automatically identify marine species, track population changes, and monitor coral reef health. AI systems can now detect illegal fishing activities by analyzing satellite imagery and vessel tracking data, helping protect marine sanctuaries and endangered species. Similarly, AI is revolutionizing wildlife conservation on land through automated camera trap analysis, acoustic monitoring of bird and mammal populations, and predictive modeling of habitat needs under changing climate conditions.

In agriculture, AI is enabling precision farming techniques that dramatically reduce water usage, minimize pesticide applications, and optimize crop yields. Machine learning algorithms analyze soil conditions, weather patterns, and plant health to provide farmers with specific recommendations about when, where, and how much to water, fertilize, and treat their crops. This technology is particularly promising for reducing agriculture's environmental footprint while maintaining food security for a growing global population.

Breakthrough advances in AI-powered fusion energy could provide clean, abundant power, while AI-designed carbon-neutral materials could replace plastics and other environmentally harmful substances. Smart cities powered by AI could optimize many aspects of urban life, from traffic flow to waste management.

AI is accelerating materials science at a pace that seemed impossible just five years ago. Machine learning algorithms can now predict the properties of millions of potential compounds without physical testing, dramatically speeding the development of revolutionary technologies: solar panels with efficiency rates approaching 50%, batteries that store renewable energy for weeks and carbon capture materials that could economically remove gigatons of CO_2 from the atmosphere.

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Artificial intelligence is revolutionizing medical research by accelerating discoveries that could take human research decades. Machine learning algorithms are analyzing vast genomic datasets to identify new drug targets, while AI models trained on millions of medical images can detect early-stage cancers with remarkable precision. AI systems like DeepMind's AlphaFold have solved the decades-old protein folding problem, predicting the 3D structures of nearly every known protein and opening pathways for drug development. From discovering new antibiotics by screening millions of molecular compounds in days rather than years to personalizing treatments based on individual genetic profiles, AI is increasing our ability to develop solutions that seemed impossible just a few years ago.

Another exciting area for conservationists is AI's potential to orchestrate ecosystem restoration efforts across vast landscapes. Drone networks guided by AI could plant millions of trees in optimal locations, monitor their growth in real-time, and adjust care protocols based on individual plant needs. Machine learning systems could design restoration strategies that account for climate change projections, ensuring today's plantings will thrive in tomorrow's conditions.

However, the promise of AI in environmental stewardship will be best realized when it amplifies and accelerates human wisdom and commitment, not when it replaces the need for personal responsibility and collective action.

THE PERILS OF ARTIFICIAL INTELLIGENCE

Despite its tremendous potential for good, AI also presents significant risks that must be understood and addressed. These perils range from direct environmental impacts to broader systemic and ethical risks that could undermine the benefits:

- ***Lack of transparency***: AI decisions are often made in a 'black box' with little insight into how they were reached.
- ***Data privacy risks***: Some AI tools collect data without clear consent.
- ***Equity gaps***: Wealthier individuals, countries and corporations have more access to AI, potentially widening the divide between the rich and poor.
- ***Environmental impact***: AI is currently resource intensive.

The most immediate environmental concern is AI's enormous thirst for energy. Training and using large AI models requires massive computational resources, often consuming as much electricity as entire cities. The carbon footprint of training a single large language model can exceed 600,000 pounds of CO_2 emissions, equivalent to the lifetime emissions of five average cars. By 2030, data centers that power these systems are projected to consume up to 8% of global electricity, potentially offsetting the emissions reductions that AI helps achieve in other sectors. As just one example, a new data center in Wyoming will use 5 times more power than all of the state's residents.

The hardware requirements for AI systems create additional environmental burdens. The production of specialized chips and high-performance computing equipment requires rare earth minerals, often extracted through environmentally damaging mining practices. The rapid pace of AI development also contributes to electronic waste, as older hardware becomes obsolete and is discarded. The semiconductor industry's water usage for chip manufacturing is another concern, particularly in regions already facing water scarcity like the Phoenix area. Data centers also require massive amounts of water.

Beyond direct environmental impacts, AI poses risks through potential misuse and unintended consequences. Authoritarian governments will use AI surveillance systems to suppress dissent and silence those advocating for climate action. The same facial recognition and behavioral analysis tools that could help monitor illegal logging or poaching may also be used to identify and prosecute environmental protesters or indigenous communities attempting to protect their land.

AI systems can perpetuate and amplify existing biases, directing climate adaptation resources away from vulnerable communities that need them most. If training data reflects historical inequities in environmental protection and resource allocation, AI systems might systematically undervalue the needs of marginalized populations, worsening environmental injustice.

The autonomous weapons applications of AI technology raise profound concerns about global stability. Military conflicts not only cause immediate humanitarian crises but also create massive environmental destruction, diverting resources from climate action and potentially destabilizing the international cooperation necessary to address global environmental challenges. The war in Ukraine is unfortunately serving as a training ground for use of AI in warfare.

There are also risks related to AI's potential impact on employment and economic systems. While AI may create new green jobs, it will also displace large numbers of workers in traditional industries, creating social instability that makes long-term environmental planning more difficult. The concentration of AI capabilities in the hands of a few large technology companies could lead to monopolistic control over essential climate technologies, limiting innovation and access.

Another significant challenge is AI-driven acceleration of unsustainable consumption patterns. Highly effective AI marketing systems may manipulate consumer behavior in ways that increase consumption, counteracting the efficiency gains that AI provides in other areas. The persuasive capabilities of AI may make overconsumption more appealing and addictive.

Finally, there's the risk of overreliance on AI solutions, leading to a false sense of security that could delay necessary policy changes and individual behavior modifications. People who believe that AI will solve the climate crisis are less likely to be motivated to make personal sacrifices or support difficult policy changes.

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A BALANCED PATH FORWARD

Despite these very real and significant perils, the potential for AI to contribute to environmental stewardship remains positive, particularly if we approach its development and deployment with caution, transparency, and strong ethical frameworks.

The key lies in ensuring that AI development itself becomes more sustainable. This means investing in renewable energy infrastructure for data centers, developing more efficient algorithms and chips that require less power, and creating hardware that lasts longer and can be recycled more effectively. Some companies are already leading in this area, with Google achieving carbon neutrality for its operations and Microsoft committing to be carbon negative by 2030.

Equally important is ensuring that AI governance includes strong environmental considerations. We need policies that require environmental impact assessments for major AI deployments, regulations that prevent the use of AI to suppress environmental activism, and international agreements that ensure AI-powered climate solutions are shared globally rather than hoarded by wealthy nations or corporations. These goals are easy to articulate, but enormously difficult to implement.

Communities in the Verde Valley can begin using the power of Artificial Intelligence to help address local issues, recognizing that anything generated by AI requires careful examination and vetting. It is a groundbreaking but new tool that remains prone to error. The most promising path forward involves treating AI as just that - a powerful tool that augments human environmental stewardship rather than replacing it. Just as we wouldn't hand a chainsaw to someone without training, we shouldn't deploy AI systems without careful consideration of their environmental implications and proper safeguards to prevent misuse.

The future of AI and environmental stewardship depends on the choices we make today. If we remain passive observers of AI development, we risk seeing this powerful technology deployed in ways that worsen environmental and social problems. But if we actively engage with AI development, advocate for sustainable practices, and maintain our commitment to personal and collective environmental responsibility, AI could become one of our most valuable allies in preserving the natural wonder that makes places like the Verde Valley so precious.

Our red rocks have stood for millions of years. They remind us that both resilience and adaptation are possible, even in the face of dramatic transformation. As we navigate the promise and perils of artificial intelligence, we can draw inspiration from the red rocks while working to ensure that future generations will have the same opportunity to marvel at their beauty in a healthy, thriving natural world.

The choice is ours: we can harness AI's power to help heal our planet, or we can allow it to accelerate our environmental challenges. The members of Keep Sedona Beautiful, with their deep commitment to environmental stewardship and their understanding of the interconnectedness of local and global environmental health, are positioned to help guide this choice toward sustainability and the preservation of natural wonder.

We urge you to let your elected officials know that you support responsible regulation of how Artificial Intelligence systems are developed and deployed. You can refer to our webpage Contact Your Elected Officials.

JAMES HAVENS WORKSHOP

James Havens, a renowned Alaska painter and sculptor, will be in Sedona for two weeks in October to paint a mural at the Ranger Station Barn on Brewer Road, near KSB's EcoHub. James creates large-scale museum pieces exploring history, conservation, global eco-systems and endangered species. The Ranger Station Barn mural, entitled *Red Rock Soul, Sedona Sky*, will commemorate the station's history and overall conservation theme. Local children and adults will paint parts of the mural, which creates a hands-on opportunity to learn from a master artist and discover more about the subject. The City of Sedona, Arizona Community Foundation and Keep Sedona Beautiful are event sponsors.

If interested in participating in this event or owning an original or signed print of *James's Sedona Canvas 1* below, please contact ksb@keepsedonabeautiful.org. Fifty percent of profits are donated to Keep Sedona Beautiful.

THE GROWING THREAT OF **OF PLASTIC POLLUTION**

The scale of global plastic production is staggering - and accelerating at an unprecedented rate. Approximately 460 million metric tons of plastic are being created each year. Without controls on its growth, by 2050 we're expected to be generating nearly four times the current production levels each year. Even more alarming are the cumulative projections. In 2017, cumulative global plastic production reached 8.3 billion metric tons. This figure is expected to increase to 34 billion metric tons by 2050.

The reason these huge numbers are so frightening are that precious little of the plastic we generate is being recycled. Instead, it remains in the environment, steadily breaking down into microplastics that pose a clear and present danger to the entire ecosystem. And it can remain in the environment for hundreds of years.

Keep Sedona Beautiful believes that the relentless accumulation of plastic in our environment is among the most pressing issues of our time.

THE RECYCLING REALITY CHECK

Despite decades of recycling campaigns and growing environmental awareness, the reality of plastic recycling is sobering. Current global recycling rates remain under 10% of all plastic waste ever produced, with the vast majority ending up in landfills, incinerated, or released directly into the environment. Even in highly developed nations with established recycling infrastructure, rates rarely exceed 30% for most plastic types.

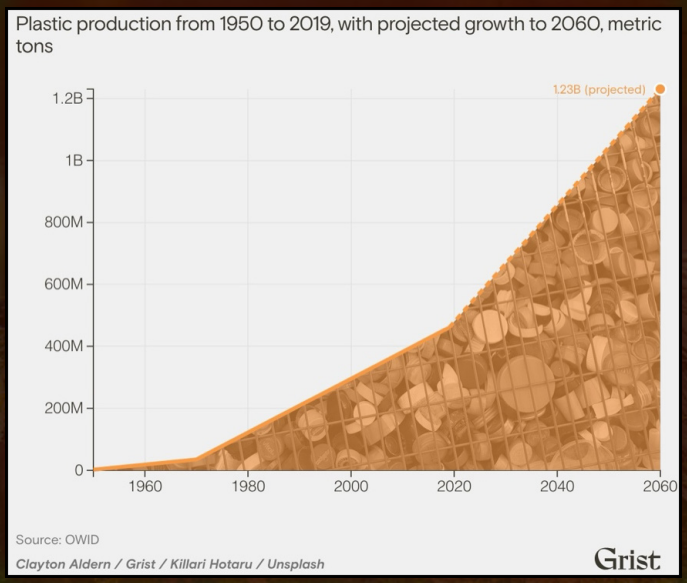
The problem lies not just in consumer behavior, but in the fundamental challenges of plastic recycling itself. Many plastics cannot be effectively recycled using existing technologies due to chemical contamination, mixed materials, or degradation during the recycling process. Single-use plastics, which make up a significant portion of production, are particularly problematic, as they're designed for convenience rather than reuse.

UNDERSTANDING MICROPLASTICS

Perhaps the most harmful aspect of plastic pollution is the creation of microplastics. These are fragments smaller than 5 millimeters that result from the breakdown of larger plastic items. These microscopic particles are now everywhere in our environment: in the deepest ocean trenches, atop the highest mountains, in remote polar ice and even in our brains.

The implications for human health are actively being investigated, but early research reveals alarming trends. Microplastics have been detected in human blood, lungs, placental tissue and breast milk, indicating that these particles can cross biological barriers once thought impermeable. Studies suggest potential links to inflammation, cellular damage and disruption of hormonal systems. The plastic particles can act as vectors for harmful chemicals, including persistent organic pollutants and endocrine disruptors, potentially amplifying their toxic effects.

Photo by Rebecca Bliklen *on Unsplash*



Respiratory exposure to airborne microplastics is of particular concern, with potential links to asthma, lung inflammation and other respiratory conditions. The long-term health consequences remain largely unknown, but the widespread presence of these particles in human tissue suggests that we are all unwitting participants in a massive, uncontrolled experiment.

The effects on animals are more immediately observable and equally alarming. Marine life, from tiny zooplankton to massive whales, ingests plastics regularly, causing internal injuries, creating false feelings of satiation leading to malnutrition and introducing toxic chemicals into the food web. Sea birds, marine mammals and fish show accumulating levels of plastic debris in their digestive systems, often leading to death.

Terrestrial animals face similar challenges. Microplastics in soil affect earthworms and other soil organisms crucial for ecosystem health. Even insects, the foundation of many food chains, are increasingly found with plastic particles in their systems.

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Recent research reveals that microplastics can interfere with plant growth and reproduction. In soil, these particles can alter water retention, nutrient availability and microbial communities essential for plant health. Plants can absorb plastics through their root systems, potentially affecting crop yields and food security.

At the ecosystem level, microplastics are altering marine and terrestrial food chains in unpredictable ways. They contribute to the formation of "plastisphere", unique microbial communities that grow on plastic surfaces, which may facilitate the spread of pathogenic bacteria and invasive species across geographic boundaries.

THE POLITICAL CHALLENGE

The urgency of the plastic crisis prompted an attempt at international cooperation through the Intergovernmental Negotiating Committee (INC) process, aimed at developing a legally binding global treaty on plastic pollution. The second part of the fifth session of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment (INC-5.2), took place in August, 2025 in Geneva, Switzerland.

Negotiators considered potential actions like capping plastic production and phasing out certain chemicals and products. However, the path to agreement has been fraught with obstacles, particularly from nations with significant oil and petrochemical industries.

The oil industry and a handful of nations have mounted fierce resistance to meaningful production limits, arguing that such measures would harm economic development and that the focus should remain on waste management rather than production controls. The influence of petrochemical lobbying has been particularly evident in negotiations, with industry representatives outnumbering some national delegations. This has led to the weakening of proposed language around production caps, chemical phase-outs and binding reduction targets. Parties expressed both disappointment and determination as they anticipate another international meeting in 2025.

In the United States, the current administration seems determined to focus on supporting the petrochemical industry, dismissing health and environmental concerns.

Artificial Intelligence: A New Hope for Solutions

Despite these political challenges, technological innovation offers promising pathways forward, with artificial intelligence emerging as a tool in the fight against plastic pollution.

DEVELOPING BIODEGRADABLE ALTERNATIVES

AI-driven material innovation may be transformative for recycling plastic. Machine learning models may be able to design biodegradable and/or recyclable alternatives to traditional plastics by predicting material properties and performance.

AI algorithms can analyze huge databases of molecular structures and properties to identify candidate biodegradable materials that could replace conventional plastics. By simulating material behavior under various conditions, researchers can then rapidly test thousands of formulations without the time and expense of physical prototyping.

REVOLUTIONIZING RECYCLING TECHNOLOGY

AI has enhanced the precision in sorting and identifying plastic types, significantly reducing contamination rates and improving processing efficiency. These algorithms not only optimize the identification process with high-tech optical sensors and infrared spectroscopy but also refine the entire recycling workflow. Computer vision systems, when combined with machine learning techniques and AI analytics, can distinguish between different types of plastics, including compostable and biodegradable plastics.

AI may enable recycling of previously non-recyclable plastics through advanced chemical processing techniques. Machine learning algorithms can optimize reaction conditions, predict optimal processing parameters and identify new pathways for breaking down complex plastic polymers into reusable components.

AI applications are being developed to track and predict the movement of plastic pollution through environmental systems, enabling more targeted cleanup efforts and prevention strategies. These models can help identify pollution hotspots, predict seasonal variations in plastic accumulation and optimize resource allocation for environmental cleanup.

Of course, all of these AI driven advances have to be affordable, suggesting that implementation will occur gradually. For example, Sedona Recycles will not be able to afford advanced sorting equipment, nor can many poorer nations.

"Preserving the Wonder™ means Protecting the World. If we each protect the habitat where we live, we are also helping to protect the earth worldwide."

- WENDY HEALD

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INTERNATIONAL ACTION

The global nature of plastic pollution demands coordinated international action across multiple fronts:

- ***Regulatory Frameworks:*** Implement binding international agreements that establish production caps, mandate extended producer responsibility and phase out the most problematic plastic products and chemicals.
- ***Economic Instruments:*** Develop carbon pricing mechanisms that account for the full lifecycle environmental costs of plastic production. Implement plastic taxes, deposit return systems and subsidies for sustainable alternatives to shift market incentives toward circular economy models.
- ***Innovation Investment:*** Dramatically increase public funding for research into biodegradable materials, advanced recycling technologies and circular design principles. Establish international technology sharing agreements to ensure innovations reach developing nations.
- ***Infrastructure Development:*** Support developing countries in building waste management and recycling infrastructure through technology transfer, financing mechanisms and capacity building programs.
- ***Supply Chain Transparency:*** Mandate corporate disclosure of plastic use, waste generation and end-of-life management throughout global supply chains. Establish international standards for plastic accounting and reporting.
- ***Marine Protection:*** Strengthen international maritime law to prevent plastic waste dumping and establish liability mechanisms for marine plastic pollution. Expand marine protected areas and enhance monitoring of ocean plastic accumulation.
- ***Local Responsibility:*** Allow municipalities like Sedona, Cottonwood and Camp Verde to implement and enforce common sense regulations like banning single-use plastic bags.

"Preserving the Wonder™ means taking personal responsibility for protecting the land: advocating for the health of our environment, keeping our water pure, our skies dark and our wildlife safe. It means doing the little things that add up, like supporting sustainable tourism, picking up litter on the roads and trails or advocating for responsible development. Finally, it means living the principle of seven generation sustainability requiring that in our every deliberation, we must consider the impact of our decisions on the next seven generations."

- CRAIG SWANSON

INDIVIDUAL ACTION

While coordinated governmental action is essential, individual actions need to be taken by all of us:

Photo by Rebecca Bliklen on Unsplash

- ***Reduce Consumption:*** Prioritize reusable alternatives to single-use plastics. Choose products with minimal packaging, buy in bulk and opt for items made from sustainable materials.
- ***Smart Shopping:*** Support companies committed to plastic reduction and circular design. Read labels carefully and choose products packaged in recyclable or compostable materials. Avoid purchasing from companies that engage in "greenwashing."
- ***Proper Disposal:*** Learn your local recycling guidelines and follow them precisely. Contamination from improper recycling can render entire batches of recyclable materials unusable.
- ***Community Engagement:*** Participate in local cleanup efforts like the Oak Creek Collaborative Cleanup, support plastic-free initiatives and advocate for state and municipal policies that reduce single-use plastics.
- ***Consumer Pressure:*** Use your purchasing power and voice to pressure companies and governments to adopt more sustainable practices. Support businesses that demonstrate genuine commitment to environmental responsibility.
- ***Education and Awareness:*** Share knowledge about plastic pollution with friends, family and colleagues. Educate others about microplastics and the importance of systemic solutions.
- ***Political Advocacy:*** Contact your elected representatives to support ambitious plastic reduction policies, international cooperation on pollution control and investments in sustainable alternatives.

Preserving Wonder™ FOR FUTURE GENERATIONS

As stewards of our area's natural beauty, we understand that environmental protection requires both local action and global thinking. The challenge is immense, but so is our collective capacity for innovation, cooperation and transformation. By combining cutting-edge technology with ancient wisdom about living in harmony with natural systems, we can create a world where the wonder of places like Red Rock Country remains unspoiled for generations to come.

The time for incremental change has passed. The plastic crisis demands bold action, unprecedented cooperation and a fundamental reimagining of our relationship with the materials that shape our modern world. Each of us has a role to play in writing this next chapter of environmental stewardship, not just for the Verde Valley, but for the beautiful and interconnected planet we all call home.

SEDONA RECYCLES NEEDS YOUR HELP: THEIR BALER IS FAILING

Sedona Recycles is facing an urgent challenge. KSB is reaching out to our members and friends with this important message, hoping the environmental community will help.

The baler, the essential machine that compresses recyclables so they can be transported and sold, is at the end of its life. Without it, recycling operations in Sedona could come to a halt. Sedona Recycles can't move materials without it.

Sedona Recycles is launching an emergency campaign to raise $340,000 — the full cost of purchasing, shipping, and installing a new baler.

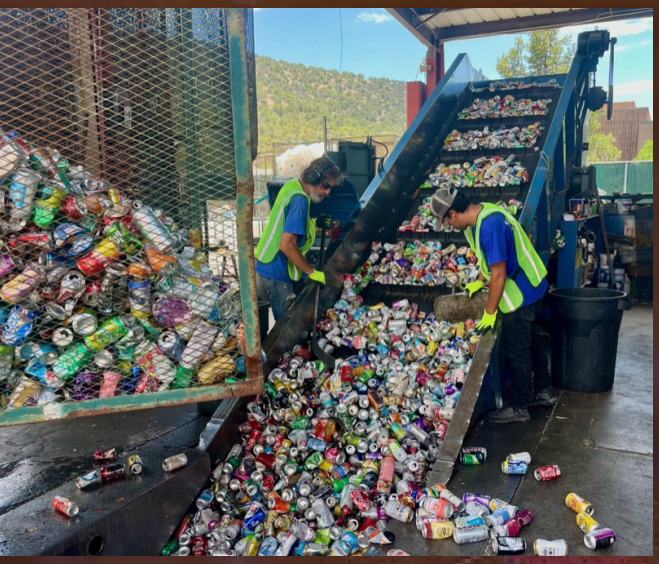
This isn't just a machine. It's what makes it possible for them to continue keeping millions of pounds of waste out of the landfill, providing accessible recycling for Verde Valley residents and visitors, and protecting the environment we all cherish.

Every donation, no matter the size, makes a meaningful difference. Whether it's $10 or $1,000, your gift helps ensure that recycling in our region doesn't skip a beat.

Donate today at sedonarecycles.org/donate.

Checks are also accepted and can be mailed to:

Sedona Recycles
2280 Shelby Drive
Sedona, AZ 86336



Our new Preserving the Wonder Legacy Family Donor plaque is now proudly hanging in our conference room. Light from a skylight shines down, illuminating the names printed on the tree's colorful leaves.

Benefactors who give $25,000 or more receive their name on a leaf. There are several donators who are close to the $25,000, so call Jan at KSB to discover the total amount you have given to KSB since 2006. This plaque is one way we are honoring our legacy donors.

Find out how you can be a legacy donor by going to keepsedonabeautiful.org and click at the top on Donate.

THANK YOU LEGACY DONORS!

In Memory of BILL PUMPHREY

"To Inspire….to move someone to act, create, or feel emotion, to arouse someone to write a letter for comment or do something new or unusual, to give you new ideas and a strong feeling of enthusiasm and motivation."
Merriam Webster and Collins Dictionary

This definition of what it means to inspire began Bill Pumphrey's 2019 message of inspiration to the members, volunteers, and friends of Keep Sedona Beautiful. His message continued, *"Everywhere in our community and beyond are those that inspire us. I want to share a partial list of those that have and continue to have a strong influence on me. Inspiration leads to involvement and engagement and can change the world."*

Former VOC resident and KSB President Bill Pumphrey passed away on June 7, 2025. He was a true inspiration through his actions and deeds.

Bill's list of those who inspired him outside of KSB included individuals in our community who started the first ever Thrift Shop in the VOC to benefit the Humane Society of Sedona, world-wide animal protection groups, Sedona community citizens of the year, Yavapai Food Neighbors Project, and those who were committed to all aspects of volunteering for decades of their lives. Bill stated, *"Volunteers- you all inspire me. We need more."*

How did Bill first recognize his passion for KSB is expressed in this quote:

"I knew while visiting Sedona on a sunny 70-degree January day, that I would end up living here. Finding KSB was a dream come true. I had little time and opportunity during my working career to devote time to the environmental concerns I hold dear. Once retired and in Sedona, I met former KSB President Joan McClelland who brought me to a KSB board meeting and that was it. I found many personal interests on the meeting agenda from dark skies, air quality, and litter to roadway signs and unreasonable land use."

During Bill's tenure at KSB as a Board Trustee, Executive Vice President, President (2003-2005; 2019-2022), and Litter Lifter Chair, he spearheaded many of the important achievements that Keep Sedona Beautiful has accomplished. Bill received the McGee award in 2005, given from time to time to one or more individuals who have demonstrated outstanding dedication and service to Keep Sedona Beautiful, above and beyond normal expectations for enough years to make such attributes apparent. He also received the Ken Corey award in 2006 for his extensive work on the Historical building and grounds of Keep Sedona Beautiful.

Bill embodied the mission of Keep Sedona Beautiful beginning early on as the Litter Lifter Committee Chair which led to his crafting and championing of Sedona's Covered Load Ordinance, which was adopted by the Sedona City Council in 2006, making litter resulting from an unsecured load an enforceable offense.

He went on to cherish the use of native plants and proudly worked to support the KSB Annual Native Plant Workshop. In the following quote, Bill explains his admiration for native plants and the people who appreciate them.

"One of my fondest memories was helping former KSB President Norm Herkenham prepare for the KSB Annual Native Plant Workshop. A trained botanist, KSB honored Norm's passion for local native plants by creating the KSB Norman Herkenham Award to commend those in the community that further the use of native plant landscaping."

Bill Pumphrey represents the best of humanity. He inspired us and will be genuinely missed. We can hear him asking, "What inspires you, and how have you taken action?"

If you feel inspired to become a KSB volunteer, please contact Wendy at ksb2@keepsedonabeautiful.org or call 928-282-4938. Visit KeepSedonaBeautiful.org for more ways to support our mission.

A tree planting is planned for this fall in KSB's new Educational Garden in honor of Bill Pumphrey's dedication to KSB. An Arizona Ash will be planted in an area of the garden where it can display its fall colors in full.

"When I look around, I am struck by the majesty of Mother Earth and I feel the responsibility given to us to steward the lands. When I think of the span of time of the Verde Valley - the red rocks were formed over 300 million years ago. Early human presence dates back at least 37,000 years, with Native American cultures including the Sinagua emerging around 1000 years ago. And the town of Sedona was officially founded on 1902. We are here for a blink of an eye, a speck of sand on a vast beach. But to be our best selves, we should leave things a little better than we found them, if possible. That to me is Preserving the Wonder™."

- HOLLACE DAVIDS

LITTER LIFTERS NEEDED

If being outdoors and cleaning up civilization's assault on Nature's beauty is your thing, please join Keep Sedona Beautiful's team of dedicated litter lifters.

One routes is now available in VOC, but others may be available by the time you contact us:

- VOC - Beaverhead Flat between Mileposts 3-4

You get to be your own boss! KSB asks that each litter lifter clean their route at least once per month any time they choose. KSB will provide safety equipment, guidelines and support.

If you are more of a freelancer, substitutes are always needed and welcome.

For more information, please view KSB's website: https://keepsedonabeautiful.org/litter-lifters/.

Email ksb2@keepsedonabeautiful.org if you would like to volunteer.

PRESERVING THE WONDER SPEAKER SERIES SAVE THE DATES!

All events will be held at the KSB EcoHub, located at 360 Brewer Road in Sedona. Events begin at 5:00 PM, with doors opening at 4:30 PM.

October 15, 2025: Bruce Babbitt will speak on "Protecting the Waters of the Verde Valley." Having served as Attorney General of Arizona from 1975 to 1978, Governor of Arizona from 1978 to 1987 and Secretary of the Interior from 1993 to 2001, he will discuss the Oak Creek and Verde Valley watershed, groundwater threats and issues in our area, rural groundwater legislation in the upcoming session of the Arizona Legislature and ways we can support preserving this critical resource. Don't miss the opportunity to hear one of Arizona's preeminent public servants discuss this critical issue.

November 19, 2025: Ken Zoll will discuss "The Crane Petroglyph Heritage Site and V Bar V Historic Ranch." In his talk, Ken Zoll will discuss findings from his 2024 book written with Peter Pilles, retired archaeologist for the Coconino National Forest, that describes the prehistoric and historic aspects of the Crane Petroglyph Heritage Site and V Bar V historic ranch, including the owners of the ranch such as one who was murdered in a love affair, another who was a German Baron, and a third who unsuccessfully ran for Governor and Senator of Arizona. Ken will show some of the public rock art on the property, as well as some at inaccessible locations. Lastly, he will discuss the solar calendar that he discovered at the site. If you've heard Ken Zoll speak before, you know that the evening will be both enlightening and entertaining.

Prior to these programs, attendees are encouraged to walk through KSB's newly completed fire-wise and community educational garden. Come early, save a seat, and tour the garden!

WHAT DOES PRESERVING THE WONDER™ MEAN TO YOU?

You'll find quotes throughout this issue from Trustees of Keep Sedona Beautiful highlighting what "Preserving the Wonder" means to them.

Let us know what "Preserving the Wonder™" means to you by emailing us at info@KeepSedonaBeautiful.org. We'll publish these in future issues.

- What is your experience with "Preserving the Wonder™"?
- Share an experience with Keep Sedona Beautiful
- A story you want to share

"The experience of Wonder has long been a motivating and energizing part of my life. I was struck by the Ferlinghetti poem "I am Waiting" (1958) while in H.S. and have tried to kindle a "rebirth of wonder" expressed in the poem and felt in childhood throughout my adult years. Now preserving the Wonder is a personal mission too- having taught young children and seen through their eyes- I want to preserve the wonder for future children and for adults who will be inspired, energized and motivated for preservation as I have been."

- PEGGY CHAIKIN

Over 15 organizations, including KSB, are coming together to care for Oak Creek, an area that sees about 4 million visitors each year. Oak Creek provides a valuable source of drinking water and is one of the few perennial streams in Arizona's high desert region, making it a vital resource to people and wildlife.

A clean Oak Creek is within our reach, so grab a friend and join us for this collaborative clean up event! Save the date and stay tuned for registration information to come.

Meet at Slide Rock State Park on Saturday, November 8, 2025.

What to Bring:

- Water
- Snacks
- Hat & Sun protection
- Closed-toed shoes

"Every human being should be able to experience wonder every moment of their day on this magnificent planet, but the experience seems unattainable for most. To experience wonder is to become lost in that space between your thoughts while witnessing a beauty of such magnitude you are left with awe. The natural wonders of Sedona and the Verde Valley provide an inescapable opportunity, especially when arriving for the very first time. Preserving the Wonder™ means preserving this opportunity to experience wonder as a gift we can share with the world and by doing so, gift ourselves."

- JAN WIND

HOUSEHOLD HAZARDOUS WASTE AND ELECTRONICS COLLECTION EVENT – *October 4*

The city of Sedona and Yavapai County will host the free Household Hazardous Waste and Electronics Collection Event on Saturday, Oct. 4, 2025, from 8 a.m. to noon, at the Sedona Red Rock High School parking lot at 995 Upper Red Rock Loop Rd. In addition to household hazardous waste and electronics, participants may also bring medical waste and paper documents for shredding.

This event is for residents of Sedona and unincorporated Yavapai County.

Photo by John Cameron *on Unsplash*

ACCEPTED WASTE

Waste that will be accepted includes aerosol paints and spray products; antifreeze; batteries except for lead acid or any other vehicle battery; gasoline; household cleaners; kerosene; light bulbs; pesticides; pool chemicals; standard grill and camping propane tanks; oil-based paints; stains; solvents; thinners; adhesives; cameras; VHS/CDs/DVDs and players; computer equipment; credit card machines; desktop and laptop computers; e-readers; flatscreen TVs; up to 20 total CRT TVs/monitors; floppy drives and hard drives; gaming systems; household electronics such as blenders, hair dryers, microwaves, toasters and vacuums; mp3 players; phones; power cables; power tools; printers and scanners; and radios and security equipment.

Medical waste accepted includes expired vitamins, over-the-counter medications, prescriptions and sharps.

Paper documents for shredding will have a limit of four, file-size boxes of paper per household.

NOT ACCEPTED WASTE

Waste that will not be accepted includes ammunition and fireworks, car or other vehicle batteries, commercial business waste, explosives, compressed gas cylinders other than propane such as oxygen, latex or acrylic paints, motor oil and oil filters, plasma or radioactive materials including smoke detectors, tires of any kind or any other material or items not listed in the accepted list.

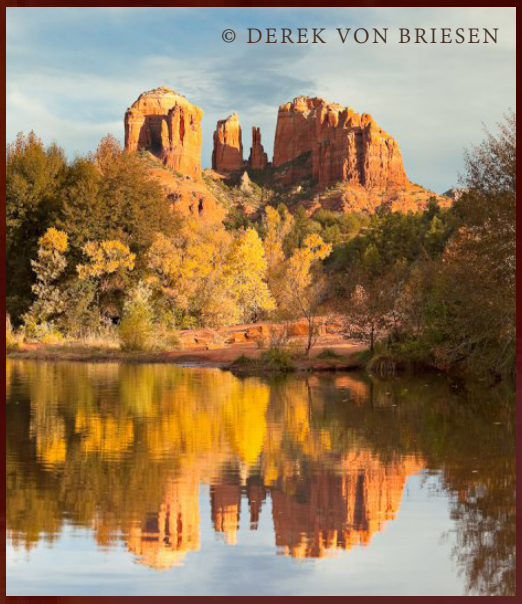
OTHER INFORMATION

Sedona residents in Coconino County may participate in this event in addition to being able to drop off items year-round in Flagstaff via the Flagstaff Hazardous Products Center. Visit www.flagstaff.az.gov/hpc or call 928-213-2159 for more information.

For additional details on the Sedona Household Hazardous Waste and Electronics Collection Event contact the city's Sustainability Department at Sustainability@sedonaaz.gov or visit www.sedonaaz.gov/waste-collection.

"I have had the good fortune to travel to many of the wondrous places in our world. You know, the places that make our jaws drop and say Wow! These are places that touch our hearts with their beauty, grandeur or spiritual nature. These are places that we have a duty to preserve for future generations. Unfortunately, many of these places are suffering from over visitation and lack of oversight and enforcement. Everyone wants a jaw dropping experience, but nature cannot regenerate itself from constant overuse. I have seen the damage to the Great Barrier Reef, the many rivers, lakes and forests around the world and the red rocks of Sedona and the Verde Valley."

- ROB ADAMS



KSB Business Sponsorship

Scan to Join

KSB's Business Sponsorship is an excellent way for businesses to support the protection of Sedona's Red Rock Country and the Verde Valley.

Join now & begin utilizing the various benefits listed below by donation level. Email us at ksb@keepsedonabeautiful.org or call us at (928) 282-4938 for more information.

Good for Business

Keep Sedona Beautiful, Inc. is a 501(c)(3) non-profit organization.

Chimney Rock $250

- Window KSB decal
- Your logo on the KSB Website for one year
- KSB front vehicle plate

Bear Mountain $500

- Your logo on the KSB website with a link to your business website for one year

* All of the benefits above

Wingfield Mesa $1,000

- Your logo included in e-newsletters and the quarterly, emailed Preserving the Wonder magazine for one year

* All of the benefits above

Thunder Mountain $2,500

- Featured logo on front page of one quarterly, emailed Preserving the Wonder magazine per year
- One breakfast with a KSB Board Member

* All of the benefits above

Bell Rock $5,000

- Featured logo on front page of two quarterly, emailed Preserving the Wonder magazine per year
- One lunch with KSB President and Executive Vice President
- Honorable mention at the annual KSB's Award Ceremony

* All of the benefits above

Mingus Mountain $10,000

- Featured logo on the front page of 3 quarterly, emailed Preserving the Wonder magazines per year
- One dinner with KSB President and Executive Vice President
- Tour of KSB grounds and historic Pushmataha Center
- Honorable mention at 9 Speaker Series Events
- Your logo on KSB social media platforms (Facebook & Instagram)

* All of the benefits above

Cathedral Rock $20,000

- Featured logo on the front page of all 4 quarterly, emailed Preserving the Wonder magazines per year
- QR code in Sedona Monthly publication bringing tourists/residents to on-line KSB brochure with your business information
- Sponsor Advertising and logo in Keep Sedona Beautiful brochure

* All of the benefits above

KSB Membership

Our members are concerned citizens sharing a common goal to preserve the scenic beauty and natural environment of Sedona and the Verde Valley. Join today and receive the below-listed benefits by donation level.

Scan to Join

Join today and receive the benefits (per household) by donation level, along with the beautiful KSB 50th Anniversary front vehicle plate. For more info, contact ksb@keepsedonabeautiful.org or call (928) 282-4938.

Agave $50

Ocotillo $500

- Tour of the KSB grounds & Pushmataha Center

Piñon Pine $1,000

- Tour of the KSB grounds and Pushmataha Center
- Verde Valley Photo Notecards

Juniper $2,500

- One breakfast for two with a Board Member

Gambel Oak $5K

- Lunch for two w/ President & Executive Vice President
- Honorable mention at KSB Award Ceremony
- 1-hour historical tour of KSB grounds and Pushmataha Center

Cottonwood $10K

- Dinner for two w/ President & Executive Vice President
- Verbal honorable mention at 9 Speaker Series Events
- 2-hour, private geology tour or narrated tour of the area with respect to the KSB mission

Ponderosa Pine $25K

- Dinner for two with President & Executive Vice President
- 2-hour, private geology tour or narrated tour of the area with respect to the KSB mission
- Name and donation amount on plaque displayed at Pushmataha Center
- Verbal honorable mention at 9 Speaker Series Events
- 1-hour stargazing with local astronomer

360 Brewer Rd. Sedona, AZ 86336 | 928-282-4938 | ksb@keepsedonabeautiful.org | www.KeepSedonaBeautiful.org

Keep Sedona Beautiful, Inc.

2025 BOARD OF OFFICERS

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Craig Swanson, Executive Vice President
Abbie Denton, Treasurer
Lynn Zonakis, Secretary

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Peggy Chaikin
Kevin Cook
Hollace Davids
Mark Lawler
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Richard Sidy

Office Manager: Jan Wind
Executive Assistant: Wendy Heald

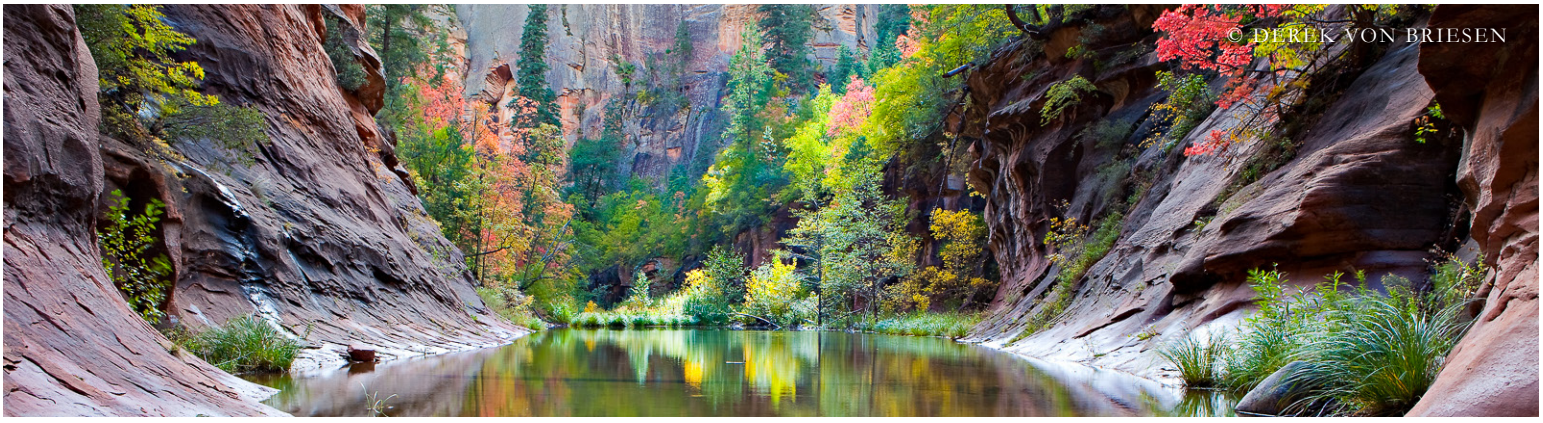
KEEP SEDONA BEAUTIFUL
360 BREWER ROAD, SEDONA, AZ 86336

INVITATION TO OUR MEMBERS:

If You Care About the Beautiful Nature that Surrounds Sedona, THEN IT'S YOU WE ARE LOOKING FOR!

Put your special volunteer talents to work for the greater good of Preserving the Wonder!

www.KeepSedonaBeautiful.org or call KSB at 928-282-4938



THANKS TO KSB's 2024 BUSINESS SPONSORS WHOSE FINANCIAL SUPPORT HELPS US TO MAKE A DIFFERENCE

DENTON ACCOUNTING INC

SEDONA DIGITECH

JODY M SMITH graphic designer

AMBIENTE A LANDSCAPE HOTEL

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DON DIEGO MEXICAN CUISINE

ENCHANTMENT RESORT | Mii amo

L'AUBERGE de SEDONA

Hale's HR ROOFING

VERDE SOLAR POWER

SEDONA PIZZA & PASTA COMPANY
PASTA • WOOD FIRED PIZZA • FULL BAR

OPEN RANGE GRILL & TAVERN