

AIR & WASTE MANAGEMENT ASSOCIATION Nevada Section



What's In The News:

- Sustainable Food
- Carbon Sequestration
- Clean Air



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More from our 2011 Board

By: David Lam

The temperature is dropping, the holidays are on their way, and it's time for another news-letter update!

As you may recall, we held elections for our 2011 Section Board of Directors in June. Starting in our Summer 2011 newsletter, we will be hearing from each member of our Board on their views of A&WMA and their vision for our organization.

This quarter, we will be hearing from our Section Membership Director, Brian Loffman, and our Eastern Sierra Chapter Chair, Daniel Inouye.

Why did you join the NV Section/Board?

[Brian] I joined the NV Section Board to broaden my knowledge and participation within the Air & Waste industry. I also enjoy meeting and working with people to establish new friend/professional relationships.

[Daniel] I've been a member of A&WMA since 1987 and have always appreciated the net-working opportunities. Serving in this leadership role is a way to give back to the organi-zation.

What's your favorite AWMA memory/event in the past year?

[Brian] No one event in particular, I enjoy all the events.

[Daniel] My favorite highlight of the year (so far) is being recognized by the A&WMA Sec-tions & Chapters Council as one of the top performing chapters for membership develop-ment. It's a nice award for all the hard work by our Chapter and Section Boards.

What's the one thing you hope to accomplish during your term on the Board?

[Brian] My goal is to promote the personal and professional benefits of the Air & Waste Management Association and expand our current member base. A&WMA membership offers a tremendous number of resources for professional development and networking and I hope to make more people in our industry aware of this.

[Daniel] I hope to increase membership in the Student and Young Professional categories because that is where we're going to find tomorrow's leaders of A&WMA.







Nevada Section Board

- Chairperson:** Jon Bell
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- Secretary:** Sarah Hoffman
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- Treasurer:** Shawna DeSart
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- Programming Director:** Robert Cromwell
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- Media Director:** David Lam
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- Membership Director:** Brian Loffman
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- Eastern Sierra Chapter Chairperson (ESC Representative):** Dan Inouye
dinouye@washocounty.us
- Chair Emeritus:** Kyle Hansen
k56hansen@hotmail.com

Used Battery Disposal

By: David Lam

Americans purchase 3 billion dry-cell batteries every year (EPA) and according to Earth911.com, Americans throw out almost 180,000 tons of batteries each year. Here are the proper disposal methods for the most common battery types.

Battery Type	Commonly Found In	Disposal (call2recycle.com)
<p><i>Alkaline</i></p> 	<ul style="list-style-type: none"> • Alarm Clocks • Calculators • Flashlights • TV remote controls • Remote control toys 	<p>If you're unable to find a local recycling option, you can consider mail-in recycling programs. They are also accepted for recycling at all Batteries Plus locations. Recycling these batteries can recover steel and zinc, two valuable metals. In the case of steel, it can be reprocessed into rebar.</p>
<p><i>Lithium Primary</i></p> 	<ul style="list-style-type: none"> • Car keyless entry remotes • Watches • Pacemakers • Fire alarm devices 	<p>In the cases of both Lithium Primary and Alkaline cell batteries, your best bet is to look for a local drop-off location on the web site: www.call2recycle.org</p> <p>It is always a good idea to tape over the battery terminals with electrical tape to minimize the risk of accidental discharge and explosion.</p>
<p><i>Nickel Cadmium</i></p> 	<ul style="list-style-type: none"> • Cordless Power Tools • Cordless Phones • Digital Cameras and Video Cameras • Two-Way Radios 	<p>In 1994, the rechargeable battery industry formed the Rechargeable Battery Recycling Corporation (RBRC), which provides collection locations for both Ni-Cd and Ni-MH batteries in thousands of retail stores and public agencies.</p>
<p><i>Nickel Metal Hydride</i></p> 	<ul style="list-style-type: none"> • Cell Phones • Cordless Power Tools • Cordless Phones • Digital Cameras • Two-Way Radios 	<p>Same as Ni-Cd—in the case of both batteries, recycling involves using heat to separate the high temperature metals, such as nickel and iron, from the low temperature ones, like zinc and cadmium. Some of the metals solidify after they melt, while others are reprocessed as metal oxides. These metals all have value.</p>
<p><i>Lithium Ion</i></p> 	<ul style="list-style-type: none"> • Cell Phones • Cordless Power Tools • Cordless Phones • Digital Cameras • Laptop Computers • Two-Way Radios 	<p>It's likely that you'll be disposing a Li-ion battery along with an electronic device, such as upgrading a cell phone or selling a laptop. In most cases, the company that handles your electronic device will accept the battery as well. The RBRC program also covers these batteries, so finding recycling locations should not be a challenge.</p>
<p><i>Sealed Small Lead Acid</i></p> 	<ul style="list-style-type: none"> • Mobility Scooters • Fire Emergency Devices • Emergency Exit Signs • UPS Back-Up Batteries 	<p>Just keep doing what you're probably already doing. Lead-acid batteries have a 97 percent recycling rate, the highest of any consumer product in the U.S., which is good because they're one of the most harmful products in a landfill with a mixture of lead and sulfuric acid.</p>

Sources: <http://www.call2recycle.org> , <http://earth911.com> , <http://www.epa.gov>

Monthly Section Luncheons

The Nevada Section conducts monthly luncheon meetings on the **second Wednesday of every month**. During each luncheon, a presentation is given on various topics related to environmental issues and impacts facing Southern Nevada.

Luncheons are held at the **The Platinum Hotel** @ 211 E Flamingo Rd, Las Vegas, NV 89109

Check-in: 11:15 a.m. to 11:30 a.m. **Lunch Begins:** 11:30 a.m. **Presentation:** 12:00 p.m. to 12:30 p.m.

Cost: Members: \$20.00 Non-Members: \$30.00 Full Time Students: \$10.00

There are no dress code restrictions. Parking is valet only. AWMA will cover the cost of valet parking, so please do not tip the attendants. Alternative parking is available nearby if you choose to forego valet service.

For more information, or to RSVP please contact **Victoria Hansen** no later than noon on Monday the week of the luncheon by email at geoknightv@gmail.com. All interested parties are welcome.

Upcoming Speakers



October 12th, 2011 - Mindy Unger-Wadkins, Project Manager, Unger Development – “Overview of Three Kids Mine”

*Speakers and topics are subject to change. Please contact our Programming Director, Rob Cromwell, if you have a suggestion for future speakers or topics.

Ash Meadows Field Trip

*Please join us!
Saturday October 29,
2011
8am to 2pm*



We will rendezvous at HDR's parking lot to take a bus to Ash Meadows NWR. Ash Meadows is located about 90 miles northwest of Las Vegas in the Amargosa Valley. We will be on a guided tour of their spring-fed wetlands, and expect to see Crystal Spring and Devil's Hole, among other planned stops. After our guided tour a picnic lunch will be provided before our bus ride back to Las Vegas.

E-mail Sarah Hoffman with any questions or to RSVP:

Sarah.Hoffman@HDRinc.com

- OR -

Register online on Constant Contact!

Cost is FREE for members; \$5 for non-members

Lunch will be catered by Spicy Pickle and you have the choice of a turkey sandwich (turkey, provolone cheese, EVOO mayo, lettuce and tomato served on a marble rye), or a vegetarian wrap (Swiss cheese, honey mustard, fresh apple and spinach wrapped in a spinach tortilla).

Las Vegas Valley Water District Field Trip

By: Victoria Hansen

The trip was fun and had a good turnout! I had 20 RSVPs and 17 people in attendance. The food was great and our tour guide, Erin Cole, was super! She did a great job of explaining the artificial recharge and dual-use wells, and had a nice presentation with hydrographs of the wells we viewed. We first stopped at the reinjection well field near Buffalo and Charleston, then moved north to the Harvey E. Luce Reservoir Site near Smoke Ranch and Buffalo. Lastly, we stopped the Durango Hills Water Resource Center; this area has dual use wells and a water treatment plant - a joint venture between CLV and the LVVWD. Dan Fischer was at the tour as well, and was able to give us all info on the water treatment side - so it was two tours in one!

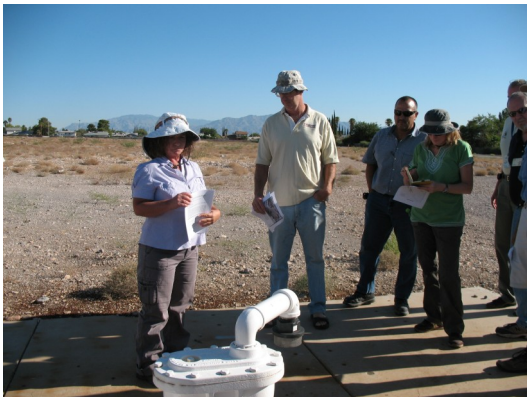
Everyone had a great time!



Harvey E. Luce Reservoir and Well 22A



Durango Hills Presentation



West Central Well Field



Durango Hills Water Resource Center

Las Vegas helping build sustainable food system

By DANIELLE NIERENBERG
AND DANA DRUGMAND
SPECIAL TO THE LAS VEGAS REVIEW-JOURNAL

As the world population approaches 7 billion, Earth's resources are becoming increasingly strained. Fish stocks are rapidly diminishing, forests are being cleared and converted to pasture or farmland, and climate change is exacerbating extreme weather such as drought. Traditional agricultural systems are feeling the pressure of these strains.

Providing enough food to feed a world of more than 7 billion is undoubtedly one of the greatest challenges we face this century. The U.N. Population Fund annual World Population Day, this year slated for Monday, is meant to raise awareness about issues we face with a rapidly increasing global population. Despite the challenges that a growing population presents, new and innovative solutions are emerging to build a sustainable food system, from vertical farming in a Nairobi slum to urban gardening here in Las Vegas.

Tonopah Community Garden, for example, is an urban garden in Las Vegas that provides city residents with fresh, locally-grown food. The organization works to build a community as well as a sustainable food system. Most food in Las Vegas is shipped in from out of state, but projects such as Tonopah Community Garden are encouraging residents to grow their own food here in the city.

Garden Farms of Nevada is a service that helps people start their own vegetable gardens in their backyard at home. Garden Farms provides free at-home consultations, installs the garden boxes, supplies water-saving irrigating systems, and even offers to help people maintain their garden if needed. Through these services, Garden Farms of Nevada promotes urban gardening and sustainable, home-based food production.

Halfway around the world in sub-Saharan Africa, urban gardening has already helped people become self-sufficient in food production. In Kibera, a large slum within Nairobi, Kenya, thousands of local residents have begun to literally dig themselves out of poverty by growing crops in dirt filled sacks. This kind of small-scale, "vertical" farming helped prevent mass starvation in 2008 when national electoral unrest interrupted food imports from the countryside. Mary Mutola, a farmer in Kibera, remarked "the vegetable gardens ... saved our families from starvation during the political crisis of 2008."

This is just one example of the many inspiring innovations discovered by researchers from Worldwatch Institute's

Nourishing the Planet project. We traveled across 25 countries in sub-Saharan Africa over two years unearthing environmentally sustainable solutions to hunger and poverty. Research findings -- including innovations in urban agriculture -- were published in State of the World 2011: Innovations that Nourish the Planet.

Innovations in food waste reduction and management also make it possible to feed people across the planet without increasing agricultural production. According to the U.N. Food and Agriculture Organization, industrialized countries waste 222 million tons of food annually. One company that is working to reduce food waste in Las Vegas is A1 Organics Nevada. A1 Organics has implemented a food waste recycling program, in which waste from some of the city's largest producers, such as restaurants, is captured and recycled into high quality compost and mulches, which are then used in landscaping.

Through food waste recycling programs and urban gardens like Tonopah Community Gardens, Las Vegas is finding ways to sustainably feed its people. Let this July 11 World Population Day event be a reminder that discovering and supporting innovations in sustainable agriculture will be key if we are to adequately feed a population of 7 billion.

Danielle Nierenberg is project director of the Worldwatch Institute's Nourishing the Planet project (www.NourishingthePlanet.org). Dana Drugmand is a research intern with Nourishing the Planet. Worldwatch is an environmental think tank located in Washington, D.C.



<http://www.lvrj.com/opinion/las-vegas-helping-build-sustainable-food-system-125285278.html>

Climatic Benefits from Carbon Sequestration Are Largely Offset by Increased Nitrous Oxide Emissions, Study Finds

ScienceDaily (Sep. 3, 2011)



Recent studies have shown that human nitrogen additions to terrestrial ecosystems increase the terrestrial carbon dioxide uptake from the atmosphere. A new study published online in *Nature Geoscience* reports now that the climatic benefits from carbon sequestration are largely offset by increased nitrous oxide emissions, a further side-effect of human nitrogen additions to terrestrial ecosystems.

Human activities have more than doubled nitrogen inputs to the terrestrial biosphere since the 1860s. The two main causes for this are increased atmospheric nitrogen deposition from, for instance, fossil fuel burning, and the application of fertilizers in agriculture. Nitrogen is an essential nutrient for plant and microbial growth, and one of the key limiting nutrients in many natural ecosystems. The anthropogenic perturbations of the nitrogen cycle are known to affect the terrestrial sources and sinks of greenhouse gases such as carbon dioxide (CO₂) and nitrous oxide (N₂O). These changes are potentially very important as they may significantly affect the climate system, but their magnitude is still unknown.

"When added to nitrogen-limited ecosystems, it [nitrogen] can stimulate plant growth and/or suppress soil respiration, thereby leading to increased ecosystem carbon storage" explains Sönke Zaehle. However, there are also potentially negative consequences for adding nitrogen to ecosystems, as increasing nitrogen availability may enhance nitrogen losses from ecosystems, and eventually even have damaging effects on plant

health. Particularly relevant for climate are elevated emissions of nitrous oxide, a long-lived greenhouse gas that is emitted from fertilised fields, as well as nitrogen-rich forest and grassland ecosystems.

Drawing on reconstructions of past and present anthropogenic nitrogen deposition and fertiliser applications, Sönke Zaehle and colleagues used a global computer model of the coupled terrestrial carbon and nitrogen cycles to better understand the consequences of this anthropogenic nitrogen perturbation for the climate system. Their results confirm that the anthropogenic nitrogen perturbation has profoundly affected terrestrial carbon dioxide and nitrous oxide fluxes. Human nitrogen additions are the principle cause for the increase in terrestrial nitrous oxide emission since 1960, and contribute to about one fifth of the current global net carbon uptake (1996-2005).

Sönke Zaehle and colleagues then determined the effect of anthropogenic nitrogen on the atmospheric concentrations of the greenhouse gases CO₂ and N₂O, and assessed the resulting consequences for present-day climate. The key finding is that the climatic effects of the anthropogenic nitrogen perturbation from both gases are very substantial but of opposite signs. The cooling effect due to enhanced carbon uptake of the terrestrial biosphere is more than compensated for by the warming effects from enhanced terrestrial N₂O emissions.

However, "the fact that in our study the N₂O effect appears stronger than the CO₂ effect should not be over-interpreted" cautions Zaehle. Rather, the study highlights the relevance of anthropogenic nitrogen in the climate system and the need to consider the effects of carbon and nitrogen cycling jointly. "I hope that this study fosters further research to better understand the effects of human N on ecosystem dynamics through joint observational and modelling studies," Zaehle adds.

<http://www.sciencedaily.com/releases/2011/08/110801094301.htm>

The above story is reprinted (with editorial adaptations by ScienceDaily staff) from materials provided by **Max Planck Institute for Biogeochemistry**, via [AlphaGalileo](#).

Bicyclists may be inhaling twice as much soot as pedestrians

By Brett Israel and Environmental Health News



NEW YORK – Even by this city's standards, the Garment District is an imposing place to ride a bike.

A never-ending parade of delivery trucks rumbles along 8th Avenue between 34th and 42nd streets, leaving a wake of gritty exhaust for cyclists to feel, smell and breathe.

After riding in the Garment District, Robert "Rocket" Ruiz, a 13-year veteran of the bike messenger business, would often look into the bathroom mirror and see his face covered in grime.

"I remember having to wash my face three or four times a day," said Ruiz, now the head dispatcher for Quik Trak Messenger Service. "There's nothing but tar and smoke on your face." Ruiz, a star on the [Travel Channel's](#) bike messenger show "Triple Rush," said he once had to miss a day of work to see a doctor because of exhaust burning his eyes.

Pedaling behind pollutant-spewing cars and trucks may not seem as scary as being hit by one, but scientists say it can pose invisible dangers.

Now, for the first time, cycling in heavy traffic has been linked to a heart health risk, Canadian researchers reported last month. A new study found cyclists in Ottawa, Ontario, had heart irregularities in the hours after their exposure to a variety of air pollutants on busy roads.

"Our findings suggest that short-term exposure to traffic may have a significant impact on cardiac autonomic function in healthy adults," the scientists from Health Canada, [Environment Canada](#) and the University of Ottawa wrote in the journal *Environmental Health Perspectives*.

The study does not suggest that bikers would be better off driving, experts say. Rather, the findings intensify the scrutiny on cyclists' pollution exposure, and point to simple solutions for a cleaner ride, such as avoiding busy roads like 8th Avenue whenever possible.

"It's something that actually concerns a lot of people that do cycle," said [Michael Brauer](#), a cyclist and atmospheric scientist at the [University of British Columbia](#) who was not involved in the new study. "People want to understand their risk. They're just thinking all the time, 'Is this good for me? Is this bad for me? I'm doing my part, but there's this car that's throwing this exhaust in my face.' "

For the study, 42 healthy, non-[smoking](#) cyclists wore heart monitors before, during and after cycling for one hour on high- and low-traffic roads between May and September last year. Instruments on the bikes' panniers measured exposure to air pollution.

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Read the rest of the article at: <http://www.scientificamerican.com/article.cfm?id=air-pollution-triggers-cyclists-heart-risks>

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The Air & Waste Management Association (A&WMA) is a nonprofit, non-partisan professional organization that offers individuals a wide array of resources and benefits embodied within the technical and scientific environmental community. Membership benefits include the opportunity for professional development, information exchange, networking opportunities, and public education and outreach. By helping to promote global environmental responsibility, A&WMA hopes to increase the effectiveness of organizations and individuals to make critical decisions that benefit their surrounding communities. These benefits are currently extended to over 8000 environmental professionals in 65 countries. In 2007 A&WMA celebrated its 100th year of providing service to environmental professionals.

For more information and to see how the A&WMA will benefit you, access the links to the following web sites.

<http://www.awma.org/about/index.html>

<http://www.awma.org/join/index.html>



AIR & WASTE MANAGEMENT
ASSOCIATION

Serving the environment by serving our members



Membership Drive

Members and friends, please spread the words to your friends and colleagues about this great opportunity to become a part of the Air and Waste Management Association.

For a limited time, NEW MEMBERS join for the introductory discount price of **\$135**.

That's an instant savings of 25% if you sign up now!

Please contact Brian Loffman, Membership Director, with any membership questions.



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Nevada Section

A&WMA Nevada Section Sponsors



**October's Luncheon Sponsor is:
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- Provide luncheon attendees with business cards, pens, information packets, etc.
- Display your company's logo on the Section's website and here in the newsletter!

For questions, comments, or suggestions, please contact the Media Director:

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