

Inspiring the Future: Riccardo Magni Santa Maria Teacher Honored with National Award



Riccardo Magni with his students in his classroom at Pioneer Valley High School celebrating his achievement.

In April, Riccardo Magni, a science teacher at Pioneer Valley High School in Santa Maria, was selected for a national Presidential Innovation Award for Environmental Educators from the White House Council on Environmental Quality and the U.S. Environmental Protection Agency (EPA). Magni was one of only 18 teachers in the country selected for the award, and was the only recipient in EPA Region 9, which includes California, Nevada, Arizona, Hawaii, all of the U.S. territories in the South Pacific, and almost 150 tribes.

Magni was nominated for the award by Santa Barbara County Air Pollution Control District (APCD), and in May the APCD

Board approved a Resolution of Recognition for Magni that stated "Riccardo Magni has brought great honor to Pioneer Valley High School, the Santa Maria Joint Union High School District, and Santa Barbara County in his leadership in environmental education and through all the achievements that resulted in his selection for this award."

Magni, who is also Santa Barbara County Teacher of the Year for 2012-2013, has been a leader in air quality education, inviting the APCD to his classroom for presentations, and receiving several "Care for our Earth" grants to do innovative environmental projects with his students, as part of an initiative

sponsored by the APCD, the Santa Barbara County Education Office, Pacific Gas & Electric Company, and other partners.

At a special ceremony in June at the school recognizing Magni, two former students sang his praises. Daisy Cortes, now a student at San Diego State University, remarked, "At first I was scared of him, and the class was a lot of work. But he believed in us, and that helped us believe in ourselves. It was the only class in high school that was like a college class, it really prepared me."

Antoinette Gonzalez, who is studying Society and Environment at University of California at

Berkeley said, "He expected a lot from us. And it was a wonderful experience—he always went above and beyond, and would always ask if you needed help. It was great inspiration and wonderful motivation. I would like to be a teacher one day—because of that experience in his class."

School Principal Shanda Herrera noted, "He's not just teaching the subject, he's helping the kids become conscious about the environment. He brings so many experiences to his students—it's not just about the textbooks. He is really a pioneer in environmental science education."

Magni shared his perspective on teaching: "Education is power. If you can change people's minds—not to persuade them to your point of view, but to teach them how to analyze things and

(continued on page two)

Inside...

-  **County Solar Array**
-  **Meet an Inspector**
-  **Winds, Weather, Wildfires**
-  **Earth Day and CycleMAYnia**

Riccardo Magni (cont'd)

think independently—then you’ve done something powerful. If the students are able to look at things critically then I’ve done my job.”

Pioneer Valley High School is considered a federal Title I School based on a high percentage of students from low-income families. Magni remarked, “We have a lot of students whose parents are working in the fields. I can relate, I was the first in my family to go to college, and my dad immigrated to New York from Italy when he was 17, and didn’t speak a word of English.”

Magni grew up on Long Island, New York, and graduated from Haverford College in 1996 with a Bachelor of Science degree in Molecular Biology and a teaching credential, then moved to Northern California. There he taught at several high schools, and received his Masters of Science in Education from National University in San Jose. His wife Teri is from Santa Maria, and they moved to Santa Maria in August 2001. She teaches English at Santa Maria High School, where Magni taught for three years



Riccardo Magni with former students Antoinette Gonzalez (left), currently a student at the University of California at Berkeley, and Daisy Cortes (right), now at San Diego State University.

before starting at Pioneer Valley High School in 2004.

He teaches Advanced Placement (AP) Environmental Science, AP Biology, Biology for language learners, and a class he started called “Intervention Biology,” designed for students with the lowest science test scores from 9th grade. He remarked,

“I’ve had good success with this class. Most kids by the end of the school year have moved up an entire level in their science test scores. Some two levels, and some even three levels.”

He said, “I love teaching science. If you teach math you have to do the same thing every year. But science is changing every day. We can’t even predict what’s coming next. I do a lot of current events in class. Science is super relevant to everything going on today—health care, new discoveries, technology. And we really need our students to learn about protecting the environment. They need to learn what’s going on. It’s reality. It’s not Disneyland. They need to be prepared for it, to hear about events like the Gulf Oil Spill, like the loss of endangered species. They need to be able to make informed decisions when they vote.”

He continued, “We need our students to read the papers. If we

can get kids to understand there may be two or more different stories and the truth may be somewhere in the middle then we’ve done a lot. And I think the main thing is to explain to the kids that we are all accountable for the things that we do, so they can make good choices in their own lives.”

Many of Magni’s students have gone on to successful college and other careers; one former student who graduated from University of California at Santa Barbara is a substitute teacher for Magni. A current student is one of a handful of students in the country to receive a Gates Millennium scholarship, which will provide him with free schooling until he is 35 years old. Kevin Anderson will attend the University of California at Los Angeles in the fall, and plans to attend medical school after receiving his bachelor’s degree.

Magni has some goals for his tenure as County Teacher of the Year for 2012-2013: “As County Teacher of the Year I would love to get more elementary teachers to try science. I understand some elementary teachers don’t get the science training they need, and so they don’t always feel as prepared. And science is expensive. But there are ways to get around that. And people are so interested in science. There’s a reason there are all these television channels on science topics. Kids love it. We all love it.”

So far, Magni has not been tempted to change career paths. He remarked, “In my 16 years of teaching I can remember only a few times when I didn’t feel like going to work. I love going to work. I love my job.”



District Director Dave Van Mullem talks with Petti Pfau, Director of Teacher Programs at Santa Barbara County Education Office, at the event honoring Magni.

Winds, Weather, and Wildfire Season

APCD Board Roundup

Following are the highlights of the May Board meeting.

May

- Changed schedule so Board meetings will start at 1:00 PM.
- Received and filed the Fiscal Year 2010-11 Financial Audit.
- Executed Grant Agreement with Gold Coast Farms, Inc. of Santa Maria for \$156,000 toward the replacement of a tractor under the District's Carl Moyer Program.
- Adopted Resolution of Appreciation for Jim Swihart on his retirement.
- Adopted Resolution of Recognition for Riccardo Magni on his selection for a national Environmental Educators Award.
- Considered the Fiscal Year 2012-13 Proposed Budget, and scheduled a budget adoption hearing for June 21, 2012.

Predicting wind conditions and weather patterns in Southern California is especially challenging, according to David Gomberg, Senior Forecaster and Fire Weather Program Manager at the National Weather Service in Oxnard. He remarked, "Many people don't understand the unique small-scale subtleties that can make a difference for the weather and the fire environment in Southern California. In other parts of the country you can talk about bigger events that have more homogeneous weather conditions. But because of our terrain and proximity to the ocean, we have many microclimates. For example, some areas can have winds blowing 40-50 miles per hour and a few miles down the road it's calm."

During the Tea Fire in the fall of 2008 he saw that the sensor in the Montecito Hills was registering wind gusts over 70 miles per hour, "And I couldn't find any other sensor in the county showing gusts over 30 miles per hour." Gomberg works with fire chiefs in Southern

California to predict fire weather patterns, always emphasizing the need for more sensors, especially in the wind-prone canyons. He said, "We have a good network of sensors, but you can never have enough because of these microclimates."

According to Predictive Services in Riverside, there is a near normal risk for large fires in coastal areas of the county for this current fire season. However there is an above-average risk for larger fires across interior sections, especially in the summer and fall months. December, January and February were exceptionally dry across Santa Barbara County, and although rains in March and April helped increase moisture levels, rainfall totals were still well below normal. The Los Padres National Forest reported that fuel moisture levels in the Forest remain below normal, and some atypical fires occurred in the Forest this winter during the dry period.

Sundowner wind events are typical in the county (see graphic). While May and June

often produce some of the strongest sundowner wind events, the vegetation moisture levels are typically higher at this time of year. He remarked, "Once you get into July and August your greater probability is of larger fires in the mountains caused by tremendous heat, very low humidity and dry fuel. And fires in the mountains are often in inaccessible areas, compounding the threat for large fire growth. We call these fuel-driven fires." Gomberg then added that "a secondary peak of sundowner wind events occurs in the fall. These winds can potentially bring an even higher fire risk to the county due to lower fuel moisture levels."

Gomberg noted that "one of the keys to wind forecasting is looking at pressure differences." Depending on how high and low pressure weather systems set up, sharp differences in pressure can result in large-scale windy conditions. When systems produce winds from a northerly direction, in the case of a sundowner, winds can funnel down canyons at high velocities, warming quickly as they descend towards the coast. Such down-sloping winds can warm and dry the air rapidly, enhancing potential for rapid spread of wildfire.



The graphic shows a sundowner wind event that can occur typically in late spring and fall in the county. Sharp differences in pressure between the interior and coastal portions of the county can produce northerly winds that travel down the canyons, getting warmer and drier as they go. Sundowners have been associated with rapid spread of wildfires in the Santa Barbara County front country. Image courtesy of National Weather Service-Oxnard.



APCD Board Calendar

Board of Directors

- Supervisor Salud Carbajal
*First District
Santa Barbara County*
- Supervisor Janet Wolf
*Second District
Santa Barbara County*
- Supervisor Doreen Farr
*Third District
Santa Barbara County*
- Supervisor Joni Gray
*Fourth District
Santa Barbara County*
- Supervisor Steve Lavagnino
*Chair
Fifth District, Santa Barbara County*
- Mayor Holly Sierra
City of Buellton
- Councilmember Kathleen Reddington
City of Carpinteria
- Mayor Lupe Alvarez
City of Guadalupe
- Councilmember Cecilia Martner
City of Lompoc
- Mayor Helene Schneider
City of Santa Barbara
- Mayor Larry Lavagnino
City of Santa Maria
- Mayor Jim Richardson
*Vice-Chair
City of Solvang*
- Mayor Pro Tem Roger Aceves
City of Goleta

All meetings start at 1:00 p.m.
For final meeting agendas, call Sara Hunt, 961-8853, or see www.OurAir.org/apcd/agenda.htm.

June 21
Board of Supervisors'
Hearing Room
105 East Anapamu Street
Santa Barbara, California 93101

August 16
Board of Supervisors'
Hearing Room
105 East Anapamu Street
Santa Barbara, California 93101

October 18
Board of Supervisors'
Hearing Room
105 East Anapamu Street
Santa Barbara, California 93101

December 20
Board of Supervisors'
Hearing Room
105 East Anapamu Street
Santa Barbara, California 93101

Community Advisory Council

The APCD Community Advisory Council meets as needed at the Days Motor Inn in Buellton. The public is welcome. For more information, call Sara Hunt, 961-8853.

Earth Day and CycleMAYnia



Kim Stanley-Zimmerman leads a group on the Medieval Family Ride during CycleMAYnia.

In April, the District participated in the Santa Barbara Earth Day Festival. Over 35,000 people attended over the weekend, and 8,710 of these came car free. More than 700 people registered at the District's booth to win prizes as part of a Come to Earth Day Car Free promotion. Prizes included bus passes from

Santa Barbara Metropolitan Transit District, passes for the Santa Barbara Maritime Museum, an excursion from Santa Barbara Airbus, a private city tour from Dee Tours, Amtrak Pacific Surfliner® tickets, and a Grand Prize trip for two to Portland or Seattle on Amtrak Coast Starlight.

In May, SBCAG Traffic Solutions and many partners, including the District, participated in CycleMAYnia, a month-long celebration of cycling. Two District teams competed in the Bike Challenge, making over 150 (roundtrip) bike trips, and biking almost 1,000 miles.

Other CycleMAYnia events ranged from a bike fashion show to a Bike to/from Work Day celebration, and included an event by the Santa Barbara Bicycle Coalition honoring three Santa Barbara women with the Velo Wings Award. The women honored were: Anne Chen for making cycling fun and accessible to women of all levels; Carmen Lozano for making education on bicycle safety available to Santa Barbara's Latino community; and Kim Stanley-Zimmerman for her ongoing commitment to keep Santa Barbara's elementary school children safe while walking and biking to school.

As the Safe Routes to School Coordinator for the Coalition for Sustainable Transportation (COAST), Stanley-Zimmerman works with city law enforcement officials, organizes low-cost helmet distributions at schools and community events, leads bike rodeos for fourth graders, teaches classes for children and parents, and encourages participation in annual Walk to School and Bike to School days.

To find out more about your commute options, see www.trafficsolutions.info. For weekend car free ideas and suggestions for out of town visitors, see www.SantaBarbaraCarFree.org. To find out more about Safe Routes to School, see <http://coast-santabarbara.org/safe-routes-to-school/>.



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- Complaints/Public Information**
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- Air Quality Advisory Information**
(805) 961-8802
- World Wide Web**
www.OurAir.org

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County Unveils One Megawatt Solar Array Clean Energy, Jobs Training, Energy Savings

In May, Santa Barbara County unveiled a one megawatt solar photovoltaic array at the Calle Real campus in Santa Barbara (where the District's Santa Barbara office is located). The project will generate over 1.7 million kWh of electricity per year, and will offset up to one-third of the required energy for the County Jail, and the numerous other facilities at the Calle Real campus. Taken together, these facilities represent the largest energy users for County operations.

Roy Hapeman, County Energy Manager, emphasized: "Local vendors built this project." A Santa Barbara company, Endeloso Energy, began installation in September 2011, and more than 20 other Santa Barbara



Santa Barbara County Energy Manager Roy Hapeman (center) points out features of the new solar array to District Air Quality Specialist Eric Gage (left) and District Engineering and Compliance Division Manager Mike Goldman (right).

County vendors were involved in completing the project. The array is made up of approximately 4,500 individual SolarWorld panels, which were assembled in Camarillo in Ventura County. Hapeman added that Sherriff's Department inmates helped with installation as part of a vocational training program;

when one inmate was released halfway through, he was hired on by the project to continue with installation.

Megan Birney of the Community Environmental Council, who helped keep the project moving forward, remarked, "Getting this project through took some

leadership, and the County did it." She noted that there is very little solar electricity generation in Santa Barbara County: "With this project we go from only nine megawatts of solar energy generation in the County to ten megawatts, a 10 percent increase."

County Second District Supervisor Janet Wolf said, "The project shows the County can be a leader in reducing our own carbon footprint. And it will offer a substantial cost savings in addition to the rebate." The County is receiving a rebate of \$1.7 million from the California Solar Initiative, and is expected to save an estimated \$12 million over the life of the system. The project will also avoid emitting

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Meet an Inspector: Glenn Gazdecki

Second in a series



When Glenn Gazdecki started working at the District in 1988, he did not expect to embark on a career as a District Inspector—he was

on a temporary assignment in the accounting department. After graduating from Westmont College with a double major of Economics-Business and Sociology, he was planning to work for a few weeks to earn money for a plane ticket to Washington D.C. where he interned with U.S. Senator Pete Wilson (California) while in college. After a few weeks at the District, he was hired on full time in accounting, and worked to streamline the District's accounting and billing systems. A year later, he was invited to ride along on an inspection, liked it, and was hired as a District Inspector.

The District's mission is important to him, and is a key reason he stayed. He said, "I believe we are obligated to be good stewards of the environment, and are accountable to the next generation." He added, "In my 22 years as an inspector, I've seen our agency evolve in responsive and practical ways by emphasizing relationships and equitable enforcement and by facilitating compliance. I have a very high regard for the people I work with, and I am truly humbled and inspired by their professionalism, decency and commitment to fairness."

He remarked, "With all the legal nuances and technical complexities, my job as a regulator is to enforce air pollution laws in a consistent and equitable fashion. It's not always easy, but it's critically important to be fair."

Gazdecki was quick to add that his background in economics and business has played an important and valuable role in his job as an inspector: "I appreciate that regulations are not always static and it requires a financial commitment to comply. So, I like to take time with the businesses I inspect to understand

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Business Focus

Meet an Inspector (cont'd)

their challenges, educate them on upcoming compliance dates, and discuss technologies and the importance of strategic planning.

Most of the businesses I inspect want to comply and be known as good corporate citizens, but they are facing daunting economic challenges. On more than one occasion, I have seen businesses grow as a result of their commitment to compliance. Some have benefitted from greater efficiencies as a result of investing in technology, and others have benefitted from marketing their environmental practices. I have learned that reminding people that they have a good reputation to live up to is sometimes all it takes to motivate them to embrace environmental regulations as opportunities."

Gazdecki inspects all regulated industries, is the District inspector for the Vandenberg Air Force Base facilities, and handles the majority of the complaints from the public in the southern part of Santa Barbara County.

The complaints he responds to can relate to business operations, or to activities by other residents in a neighborhood, including fireplace burning, sandblasting, working on cars, and more. He said, "I take pride in responding



Glenn Gazdecki checks equipment in the lab in preparation for an inspection.

to complaints and being an advocate for public health. My greatest satisfaction is resolving complaints that result in better communications between neighbors and a win-win for all involved. Not long ago, I had the pleasure of meeting a husband and wife that invested in an

efficient wood burning insert for their fireplace out of deference to their complaining neighbor. Initially, they had reservations about doing anything because they did not like how they were approached by their neighbor.

After appealing to their goodness and reasoning with them on the benefits to everyone, they made the choice to invest—and I admire them for it."

He continued, "Overcoming a defensive or adversarial mindset is the hardest part in getting

people to work cooperatively, but it is essential. So, I am always promoting 'the good neighbor policy' (whether industrial or residential neighbors) and asking people if they have approached their neighbor respectfully with their concerns.

I find sometimes if you spend a little extra time with people listening to their concerns, the chances of finding a mutually acceptable resolution increases. It's something that doesn't always show up in the inspection statistics, but it's the stuff I care about."

When not on the job, "My time is spent almost entirely with my family," he said. "I'm like Mr. Mom with my granddaughter. She's seven years, one month and twenty-four days old—and I cherish every day with her. After I pick her up from school, we like to play with the dogs at the school yard, shoot baskets, make up games, or go for walks. It's the greatest way to unwind after a long day."

Solar Array (cont'd)

more than a million pounds of carbon dioxide equivalent per year, producing the same benefits as planting tens of thousands of trees every year.

U.S. Congresswoman Lois Capps remarked, "I wish all my colleagues in Congress were here to see what it's like when a community is forwardlooking.

This project will benefit public health, and economic and environmental welfare." She added, "Projects like this are the key to our future."

To view the solar energy production at the site in real time, look for the "Santa Barbara County Calle Real" site at www.solrenview.com.

New Water Heater NOx Emission Limit

If your business or agency supplies, sells, offers for sale, installs, or solicits the installation of natural gas-fired water heaters for use in Santa Barbara County, you should know that a lower nitrogen oxides (NOx) emissions limit becomes effective on July 1, 2012 for these units.

As of this date, the District's Rule 352 requires natural gas-fired water heaters rated up to 75,000 British thermal units per hour (on

a heat input basis) to be certified as meeting one of the following NOx limits.

☉ 10 nanograms per joule (0.023 pounds of NOx per million British thermal units) of heat output.

☉ 15 parts per million at 3.00 percent stack gas oxygen by volume on a dry basis.

To view Rule 352, and other District rules, visit www.OurAir.org/rules/rules.htm.

Revised Fee Schedule Effective July 1

Revised District fees are effective July 1, and will be posted as of that date on the website at: <http://www.OurAir.org/fees.htm>.