



Facilities and Services

Office of Sustainability

2014 Annual Report



Hydration Station at Williams Hall

Be a Green Aggie at NMSU!

Table of Contents



2

Table of Contents

3

2014 Summary Letter from Mgr.

4

Office of Sustainability

5

Energy Management

6

Conservation and Modernization Project

8

Green Aggies

10

RecycleMania

11

Green Buildings

12

Waste Reduction

13

Outreach

14

Sustainability Council

15

Acknowledgements

16

2014 in Pictures

"THE FIRST RULE OF SUSTAINABILITY IS TO ALIGN WITH NATURAL FORCES, OR AT LEAST NOT TRY TO DEFY THEM."

PAUL HAWKEN

© Lifetack Studios

**Wait! Wait!
Don't print me!**

2014 was an incredibly busy year. Clean air, water conservation, safe materials, healthy food, and green buildings are just a few of the things that the Office of Sustainability educates on. Read on to find out more about all the things Green Aggies did in 2014 to make our university and the planet a better and healthier place to live, learn, and work.

Major NMSU Sustainability Accomplishments in 2014

- Another LEED certified building, bringing our total count to eight on Las Cruces campus and 16 on all campuses
- Continued to hold to our promise to the American College and University Presidents' Climate Commitment (ACUPCC) to lower our greenhouse gases emitted to the atmosphere.
- Signed contract with Ameresco, an energy services company, to implement budget-positive guaranteed energy savings on main campus
- Placed fourth in RecycleMania competition Grand Champion Division
- Continued to lower our kW usage despite increasing building square footage by 16, 450 sf
- Installed a total of 32 hydration stations
- Continued to educate the campus and Las Cruces community by providing speakers and programs through the all-volunteer Sustainability Council



Letter from the Sustainability Manager

The highlight of the fourth year of the Office of Sustainability was starting the Ameresco “We CARE” (Conserving and Reducing Energy) project to lower energy consumption on campus. The end of 2014 marked the start of the construction of the new Environmental Education Center which portends an exhilarating 2015 with sustainability webinars, movie nights, and green events. Thank you all for continuing to support our efforts to take care of our planet by taking care of our university environment.



Photo by Dael Goodman

Joni Newcomer, ND, LEED AP
Manager Environmental Policy and Sustainability
newcomer@nmsu.edu
<http://sustainability.nmsu.edu>
575-646-7563

Mission Statement

To be a resource for the NMSU community to develop a common vision of sustainability through innovation, education, and action.

2014 Goals

1. Lower energy use, cost, and greenhouse gas emissions
2. Expand role of Sustainability Manager to support the Administration and Finance office
3. Improve effectiveness and efficiency
4. Actively follow Administration and Finance Strategic Plan
5. Strengthen relationships

Sustainability Initiatives

1. Relationships
2. Energy conservation
3. Waste reduction
4. Climate change resilience
5. Education
6. Food and Health
7. Green buildings
8. Transportation
9. Water conservation
10. Materials
11. Social Justice

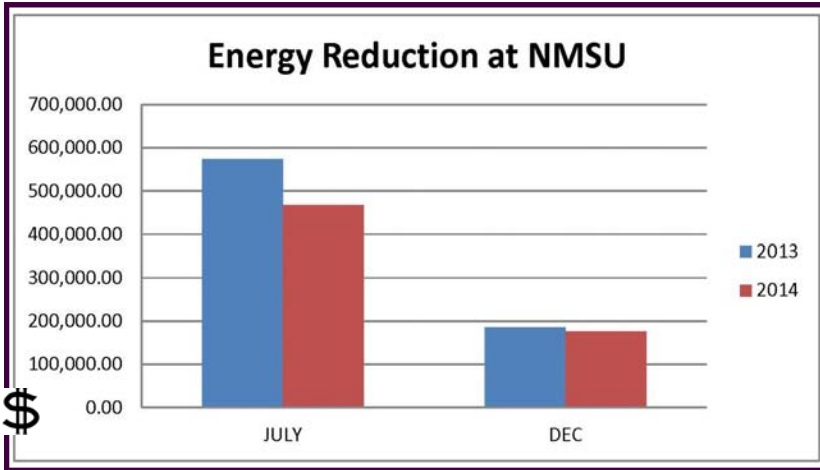


Jett Hall Dean's Office - doing their part to reduce waste on campus by providing ceramic coffee cups instead of paper or Styrofoam cups that end up in the landfill

What is Sustainability at NMSU?

Sustainability at NMSU is a lifestyle and a responsibility. It features ways to improve and maintain the quality of human life while preserving the integrity, stability, and beauty of ecological systems for the future.

Lowering Energy = Lower Utility Bills

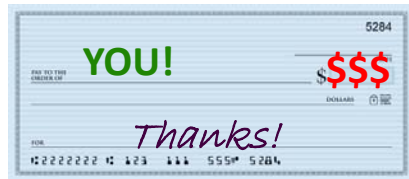


Thanks to El Paso Electric's CLEAResult "SCORE Plus" program, based on NMSU total estimated annual kWh savings from our Ameresco project for twelve buildings*, we **reduced our total greenhouse gasses by 580.2 metric tons of CO2 equivalent.**

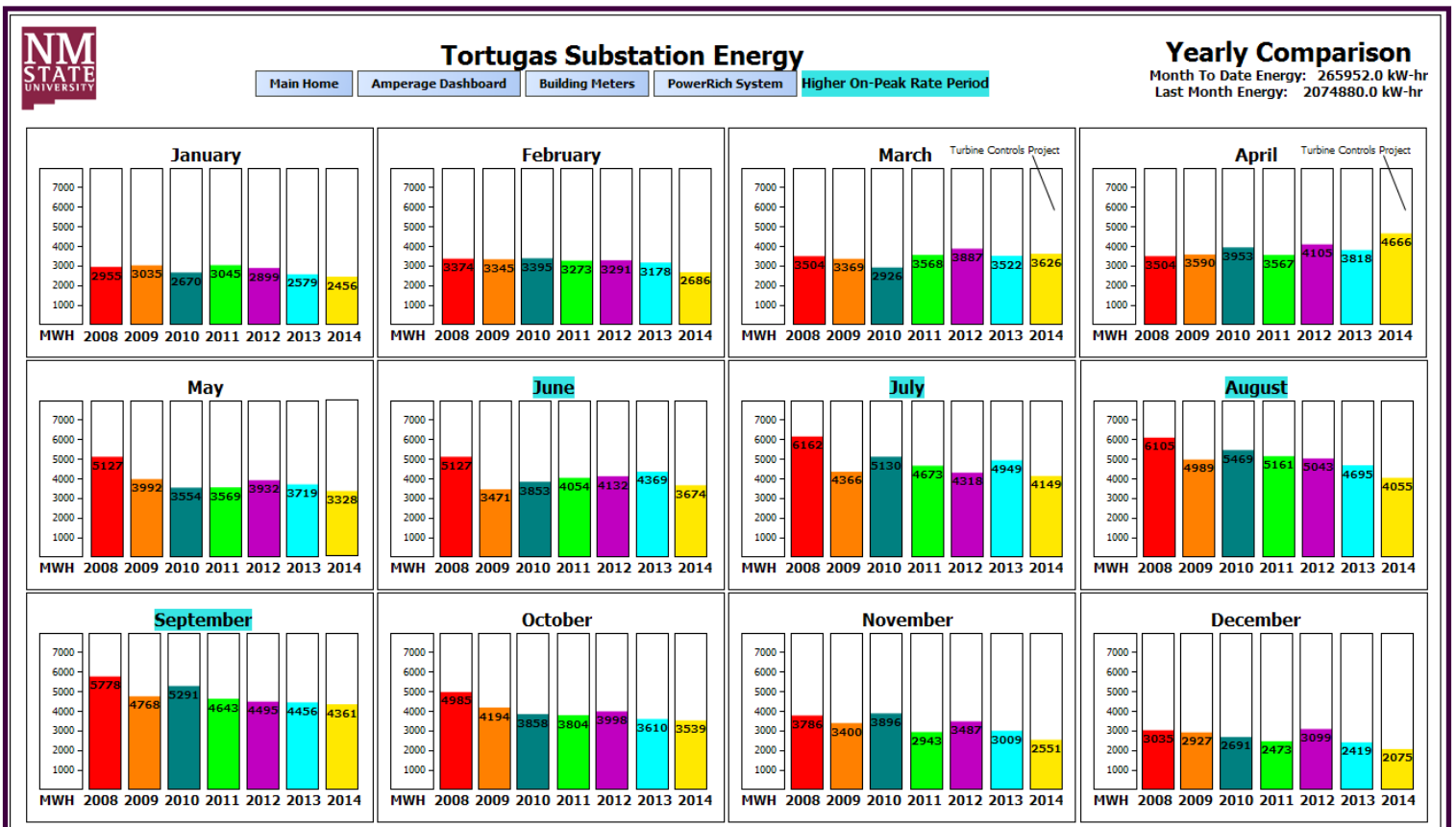
This is equivalent to **eliminating the annual greenhouse gas emissions of:**
 121 passenger vehicles, or
 65,045 gallons of gasoline, or
 29 homes

Because of our efforts we received an **incentive check for \$100,851.96.** Hooray!

*Astronomy, Breland, Dove, Goddard, Guthrie, Activity Center, Jornada, Central Utility Plant, Skeen, Campus Health Center, Walden, and Young Hall



NMSU Main Campus Energy Usage Chart from 2008-2014



Ameresco “Conservation and Modernization” project

Starting in August 2014 we began upgrades of the lighting on Las Cruces campus. Using LED’s (Light Emitting Diode), CFL’s (Compact Fluorescent Lamps), and T8 fluorescent tubes, we upgraded almost 30,000 interior lamps (bulbs).

Ameresco’s sub-contractor, Retro-Tech Systems, did a fantastic job! In a total of 50 buildings they retrofitted old fixtures, installed occupancy sensors, used lifts and scaffolding to do a lot of tough work. Since then we have seen some of our **lowest utility bills ever!**

Interior lighting statistics

- 50 buildings on main campus
- 26,994 lamps retrofitted

Exterior lighting statistics

- 33 buildings
- 445 new LED fixtures
- 165 conversion to LED
- 58 re-lamp to lower wattage

Streetlight statistics

- 90 poles
- 149 new LED heads

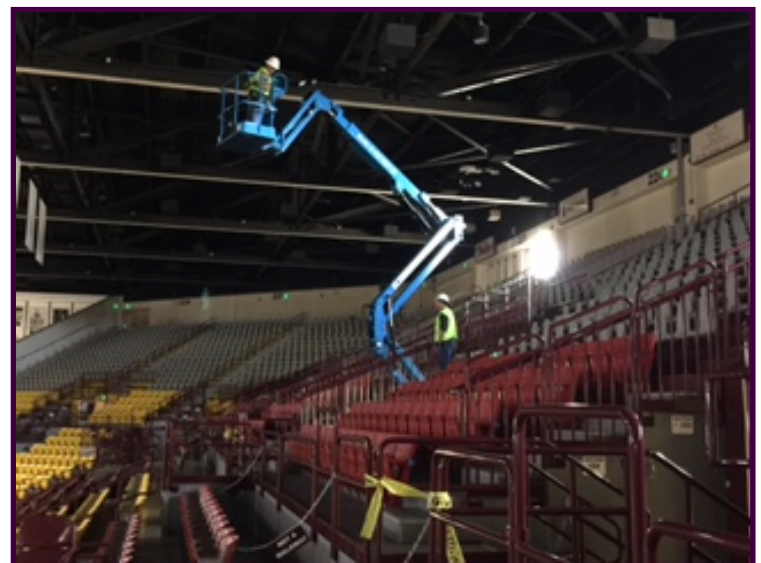


Williams Hall building monitor “Just-in-Time” site walk-through



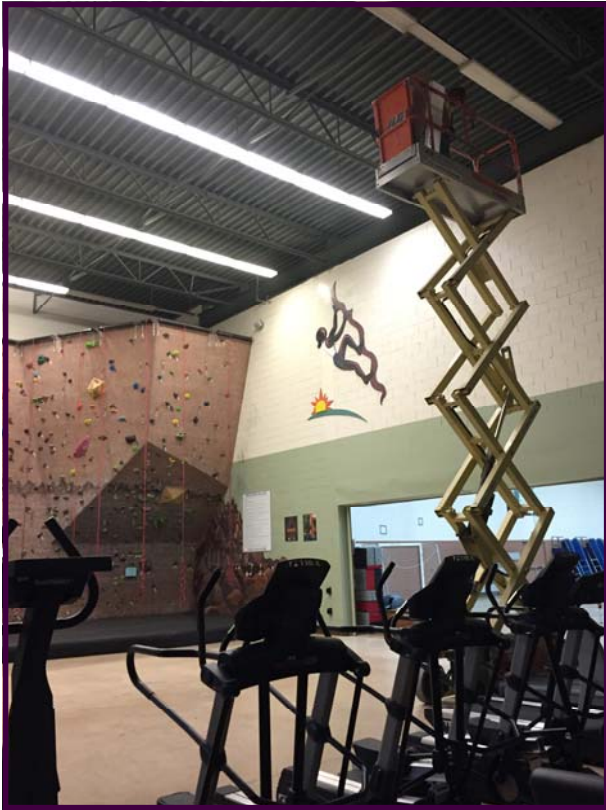
Energy Conservation Measures

- ECM 1 – Interior lighting
- ECM 2 – Exterior lighting
- ECM 3 – Ext. Pole-mounted lighting
- ECM 6 – Retro-commissioning
- ECM 7 – VAV retrofit
- ECM 10 – Economizer upgrade
- ECM 12 – Chilled water pump bypass



Using a lift in Pan Am stadium to retrofit interior lighting

Ameresco and Retro-Tech Systems Electricians on the Job

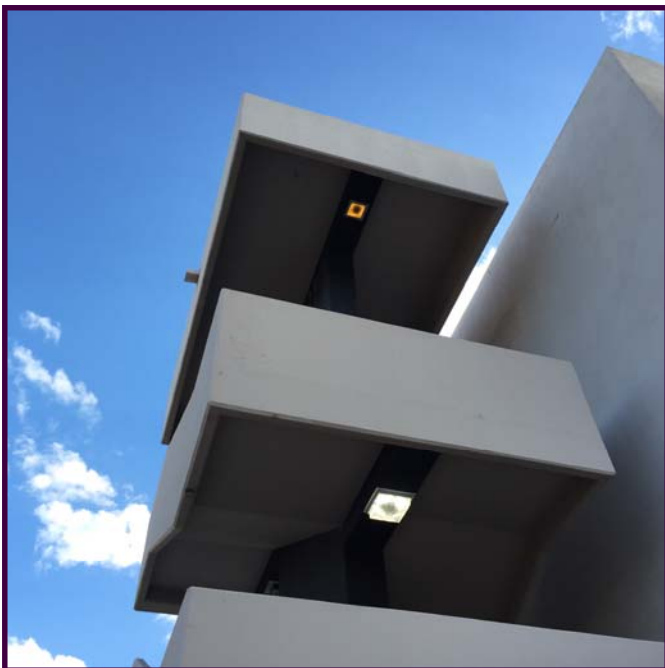


Using a scissor-lift at the Activity Center climbing wall to install new energy-efficient lamps



Instead of retrofitting, installing entirely new fixtures in Zuhl Library stacks

AMERESCO 
Green • Clean • Sustainable



Old (top) and new LED (bottom) exterior light fixtures



Branson Library - working by headlight isn't easy!

Green Aggies



Reaching out to Faculty

During the semester, Dr. Carol Campbell's Geography class toured the **Aggie Recycling Center**. Anyone is welcome to set up a personal tour to see just how your recycling efforts make a difference and how much you should appreciate the work of the "**Green Hornets**" who take care of our blue bins!

You can **schedule your class tour** through Art Lucero, Aggie Recycling Manager, at 575-932-9748.

Advancing Leaders Program

The **Advancing Leaders Program** is comprised of a cohort drawn from different colleges across NMSU. Faculty build ongoing networking opportunities, connect with a mentor from upper administration, and learn about the core values and best practices at NMSU. **The topic for 2014 was sustainability.** The cohort chose to update the sustainability website and create a map of sustainability-related places on campus. The program ran fall and spring semesters 2014/2015, so the results of the faculty efforts will be reported in the 2015 annual report.

EarthDay365

Webinars

During the lunch hours we joined various webcasts for discussions from higher education and climate leaders to **learn about the role of campuses in adapting to a changing climate, innovations in climate resilience and mitigation, and community partnerships.** The broadcasts featured presentations and discussions from panelists, touching on leadership and practical issues related to campuses, community, and addressed both opportunity and responsibility in a changing climate.

Greening the Curriculum

Beyond the growing trend of "going green" New Mexico State University has caught on to the universal movement **transforming the job market for graduating students** – a movement that benefits the student, the university, and the planet.

By implementing **four sustainability minors** housed in the colleges of Engineering, Agricultural, Consumer and Environmental Sciences, Business, and Arts and Sciences, management professor and faculty coordinator **David Boje** is "**greening the curriculum.**" The 18-credit, university-wide undergraduate minor offered in three tracks allows students to explore challenges in local and global sustainability.

Read the NMSU News Center article for more Information [here](#)

Green Aggies



Facilities and Services Green Aggies ride utility trikes instead of cars or trucks



New environmentally friendly carpet squares in Hadley Hall elevator



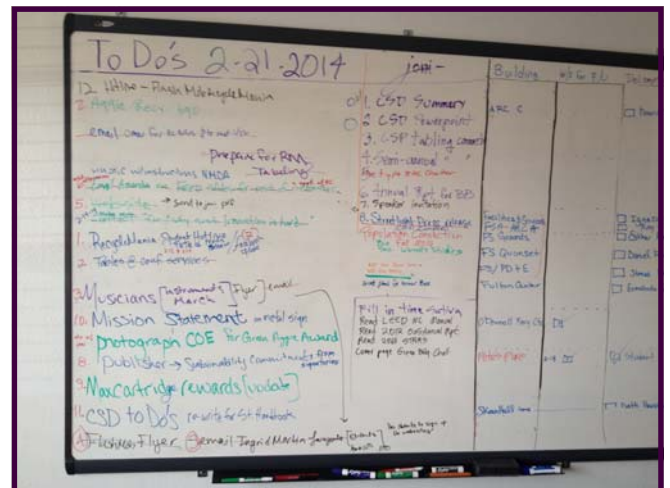
Sustainably-oriented tees advertising the OoS and EEC



Zero Waste is not that difficult with bamboo utensils, a PeopleTowel®, and NMSU to-go box



OASIS student organization leadership team



No lack of things to do at the Environmental Education Center

RecycleMania

The Office of Sustainability and Environmental Science Student Organization (ESSO) students helped market the 2014 RecycleMania competition for Aggie Recycling. We had a successful competition coming in 4th place at the end of the year with a diversion rate of 74%. The Aggie Recycling **"Green Hornets"** are the workers you see picking up the recyclables in your office. They deserve a big hand for the work they do, so if you see one of them please offer a big **"thanks!"** for their efforts.

Watch the RecycleMania video [here](#) (created by Emily Kelley)



Statistics for 2014

Colleges and Universities: 461
Students and Staff: 6.3 million
Total Recycling and Composting: 85.6 million lbs

TOTAL GREENHOUSE GASES
REDUCED in 2014 COMPETITION:
137,452
METRIC TONS OF CO2 EQUIVALENT



Environmental Science Student Organization (ESSO) helped with RecycleMania by making recycled musical instruments and participating in the *March of the RecycleManiacs* with Pistol Pete

Go Aggies! Go Green!

Green Buildings

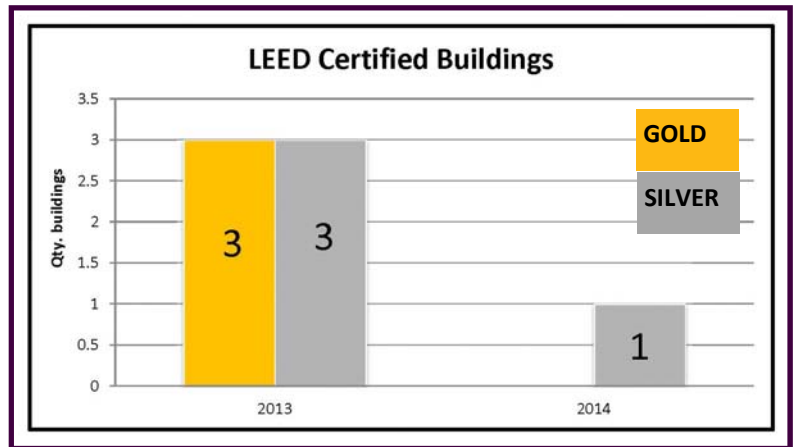
2014 LEED Certified Buildings

Building	Pts. Achieved	Certification Level	Architect
DACC Sunland Park Phase III	52	Silver	Williams Design Group

In 2006 an Executive Order was signed that requires all executive branch state agencies, including the Higher Education Department, to adopt the US Green Building Council’s Leadership in Environmental Design ([LEED](#)) rating system.

In 2013 DACC Sunland Park Phase III received a **LEED Silver** rating achieving **52 points** out of a possible 110 using the LEED v 3.0 rating system.

We continue to build to LEED standards in our new Undergraduate Learning Center as well as the new Domenici Building (completed in 2014, but not yet certified). The Corbett Center remodel under construction in 2014 will not be LEED certified due to the difficulty of the remodel.



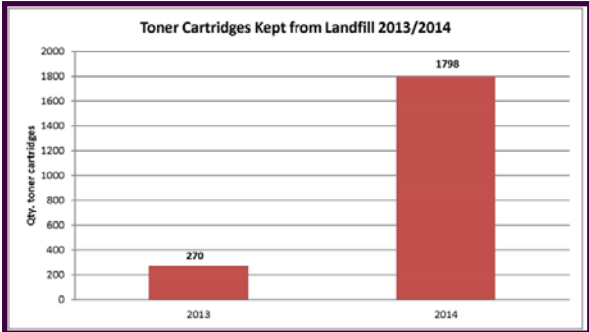
452,260 total gross square feet LEED certified campus-wide!



Sunland Park Phase III

Go Aggies! Go Green!

Toner Recycling



In partnership with OfficeMax, the Office of Sustainability has a **Toner Recycling Program**. There is no charge for this program. Call joni at 6-7563 to get a box for your office.



Skeen Hall toner recycling box in 2nd floor break room

For each cartridge we recycle, money is donated by OfficeMax to **Feeding America**. In 2014 we helped **donate \$345.60**. FS movers picked up a total of 1798 cartridges—reducing waste *and* helping others.

Hydration Stations

In 2012 our first hydration station was installed in the lobby of the Activity Center thanks to a student group “Take Back the Tap”. By the end of 2014, **32 drinking fountains were installed that have bottle filling capabilities**. The new drinking fountains allow you to fill your own reusable bottle quickly and easily. This helps us decrease the waste that goes to the landfill, thus saving the university money in “tipping fees” as well as keeping bottles out of the landscape and the ocean.

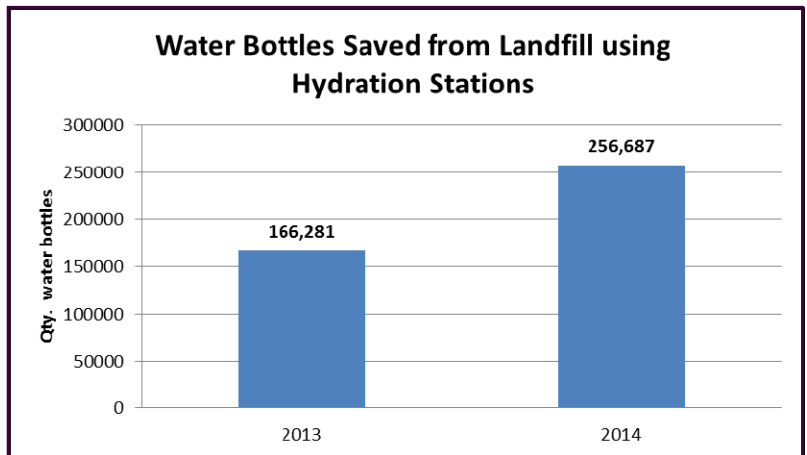
Aquatic Center Hydration Stations

Reasons to Reuse:

- Save money
- Help the environment
- Eliminate waste
- Stop ingesting chemicals that leach from plastic bottles
- Enjoy cool filtered water from Hydration Stations!

Green Aggies Use Reusable Cups and Bottles!

NMSU water meets the US EPA "Safe Drinking Water Standards" No need to use bottled water!



To get a new hydration station in your building write a Customer Request to FS through the AiM system. If budget allows you'll be put on the list for future hydration stations. You can also opt to pay for a new station using department funding. Hydration stations are approximately \$1500 including installation.

Go to <http://sustainability.nmsu.edu/> to find out the locations of all the hydration stations on main campus.



Students here and around the world



ESL student from Ecuador, Susana Quintanilla, worked with joni newcomer on her sustainability report for her final class presentation.



During our many outreach tabling sessions we asked students to write their pledge to be a Green Aggie.

Community Outreach

The Office of Sustainability reaches out regularly to people and organizations in the community. A few 2014 highlights:

- **DACC Architecture Discovery Camp** - joni sat on the introductory panel and presented on sustainability and green design for middle and high school students during this summer camp where students learn about green building and design.
- The Office of Sustainability was the **subject of a study for a DACC marketing class** where students designed marketing flyers and brochures for the OoS.
- Spoke to several NMSU classes about ways to **be a Green Aggie** (Geography 120, Engineering, Ag. Extension)
- Supported the **Urban Sustainability Accelerator** with the City of Las Cruces
- **Chaired the Programs Committee** for the Sustainability Council coordinating guest speakers
- Made presentation to **Innoventure STEM** students on water conservation and general sustainability

Join the Fun! Learn about Sustainability at NMSU!



Council Xmas party



Suzanne Michaels speaking to Council in July

Council Leadership Team

The Council Leadership Team consists of all volunteers. **We are always looking for people to join us and help make a difference for the planet.** To volunteer on the Board, please contact the Chair, Steve Self, NMSU Facilities and Services Space Planning Manager, at stemself@nmsu.edu.

Join us every 2nd Wednesday of the month 1:30 - 2:30 PM in Milton Hall Room 85.

Council Speaker Series

Each month we invite a speaker to share their knowledge on the environment and other sustainability-related topics. The programs are free and everyone is welcome. **If you would like to be a speaker for the Council** please contact the Programs Chair, dr. joni newcomer ,at 646-7563 or newcomer@nmsu.edu

2014 Sustainability Council Educational Programs		
Month	Topic/Company	Speaker
January 8	Planning for 2014	NMSU Green Aggies
February 12	Solar at NMSU	Tom Jenkins, NMSU Professor, Engineering Technology
March 12	Biofuels Research at NMSU	Meghan Downes, Assoc. Prof., Economics and Intl. Business
April 9	Can We Feed Ourselves?	Mark Uchanski, NMSU Assoc. Professor Plant and Env. Sciences
May 7	Green Jobs Outlook	Roseanne Bensley, Assoc. Dir. Career Services
June 11	NMSU Stormwater Management	Jack Kirby, Asst. Director NMSU Environmental Health and Safety
July 9	Glass Recycling	Suzanne Michaels, Owner Suzanne Michaels Communications
August 13	Positive Energy Solar	Paul Heiberger, Employee-Owner
September 10	City of Las Cruces Water Future	Leslie Kryder, Water Coordinator
October 8	National Resources Conservation Services	David White, NRCS Soil Scientist
November 12	Agriculture Carbon Sequestration	David Johnson, Prog. Spec., Waste Mgmt. Educ. + Research Cnsrtium.
December 10	Holiday celebration	NMSU Green Aggies

Acknowledgements

Special thanks to the following people:

NMSU Board of Regents
 Glen Haubold
 José Cerna
 Suzanne Montes
 Sativa Cruz
 Steve Self

Individuals

Sharon Andersen	Mother Nature
Jocelyn Apodaca	Matt Niedzwiecki
Greg Block	Luis Rios
Mike Boyer	David Shearer
Pat Chavez	Dario Silva
Ada Ciuca	Mark Uchanski
Jean Conway	Greg Walke
Sativa Cruz	David White
George Davis	
Gladys De Necochea	
Meghan Downes	
Joyce Gosnell	
Amanda Getchell	
Dael Goodman	
Carrie Hamblen	
Dale Harrell	
Paul Heiberger	
Doug Hill	
Tom Jenkins	
David Johnson	
Jack Kirby	
Leslie Kryder	
Michelle Lebsock	
Mike Luchau	
Suzanne Michaels	
Cesar Molina	

Thanks to the following organizations:

ASNMSU
 OASIS (Organization of Aggie Students Inspiring Sustainability)
 ESSO (Environmental Science Student Organization)
 The Central and Satellite Utility Plant operators
 Sustainability Council volunteers
 Facilities and Services (FS)

Last but not least, thanks to the students who inspire us to do better to ensure their healthy future.

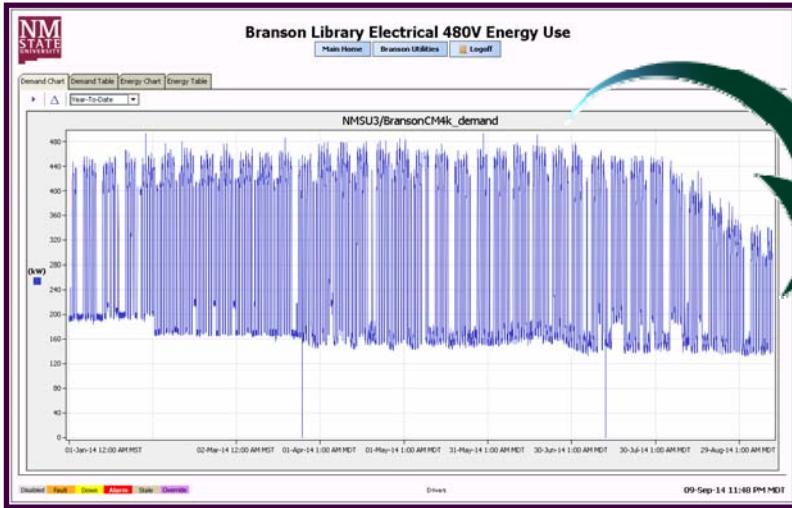


Newly elected President Carruthers “discovering sustainability” with the Sustainability Council

“The plain fact is that the planet does not need more successful people. But it does desperately need more peacemakers, healers, restorers, storytellers, and lovers of every kind. It needs people who live well in their places. It needs people of moral courage willing to join the fight to make the world habitable and humane. And these qualities have little to do with success as we have defined it.”

[David W. Orr, *Ecological Literacy: Educating Our Children for a Sustainable World*](#)

2014 in Pictures



Branson Library energy going down after new interior lighting retrofits

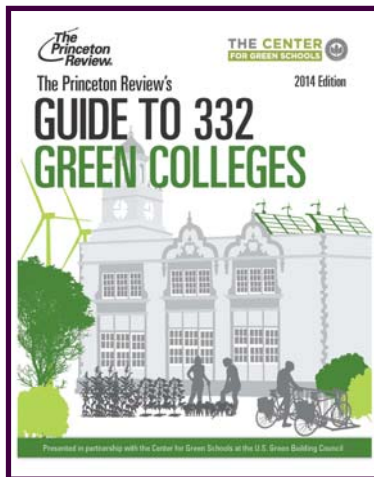


Chancellor Carruthers learning about bamboo as a rapidly renewable material at Freshman Move-In Day



Earth Day tabling

*"Alone we can do so little.
Together we can do so much."
- Helen Keller*



NMSU in the "Guide to 332 Green Colleges"



Showing students at Los Alamitos Middle School in Grants Cibola County what makes the American Indian Student Center a LEED building

Office of Sustainability and Environmental Education Center | Regents Row, Ste. A116
 O: 575.646.7563 | C: 575.202.9989 | sustain@nmsu.edu | www.sustainability.nmsu.edu

Go Aggies! Go Green!