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ANNUAL REPORT 2014

INTRODUCTION

Mission

Environmental, Health and Safety supports the NMSU mission by promoting a safe, healthful environment in a proactive and cost effective manner that helps the University community minimize their risk.

EH&S is committed to facilitating University safety, health and environmental protection by providing and coordinating programs and services that support teaching, learning and research activities. Through these EH&S programs and our partnerships with various constituents of the campus and regulatory agencies, we prevent personal injury, recognize and control hazards, minimize risk and loss, and provide leadership in environmental stewardship.

EH&S fulfills its mission by implementing programs and services in nine major areas.

- 1. Education and training
- 2. Research and laboratory safety including radiation licensing
- 3. Chemical and hazardous waste management
- 4. Occupational safety for shops, agriculture and office work
- 5. Campus safety
- 6. Accident, incident and exposure investigations
- 7. Loss prevention and loss control
- 8. Emergency preparedness
- 9. Environmental compliance

VISION

NMSU will be a recognized leader by customers, regulators, and our peers in establishing an effective safety culture which holds employees at all levels accountable for environment, health, and safety performance. Our goals are to have a workplace free of injuries and hazardous exposures, to prevent or minimize any adverse impact to the environment, to provide services of the highest quality to the NMSU system and to be recognized as leaders in the areas of environmental protection, health and safety. Responsibility for health, safety and environmental protection will be an integral requirement of all employees and students of New Mexico State University.

Department Values

Our department will be comprised of individuals committed to our mission, our vision and the highest professional practices and standards. We provide quality services to our customers by understanding their individual needs and measuring our effectiveness. We carry out our responsibilities with knowledgeable professionalism. We provide creative, reasonable and timely solutions. We empower and require accountability of our team in a supportive work environment where we can achieve our full potential.

The EH&S Team will practice their profession by following recognized scientific principles and management practices, factually informing affected parties of their findings in an honest, straightforward manner, exhibit the highest level of integrity, honesty and empathy, while never compromising the public's welfare. Our team will strive to be involved in continual education and professional development, to provide superior customer service in all areas, to perform service only in the areas of their competence, and maintain information as confidential when appropriate. **OVERVIEW OF 2014**

- NMSU Animal and Range Sciences Interim Department Head, Dr. Dennis Hallford, honored with Friend of Safety Award.
- EH&S scores high in customer satisfaction. Every category showed improvement from 2013.
- EH&S facilitated 6 external regulatory compliance inspections with no penalties.
- Research support continued with expanded services such as detailed protocol reviews and focus on lab decommissioning.
- Transitioned management of employee safety training records and safety class registration functions from an internal system over to the centralized NMSU Training Central system.
- Safety training was provided to more than 4500 persons in just over 250 safety classes.
- Employee injury and illnesses continued with five year average showing a 43% reduction in cases with lost or restricted work days when compared to previous five year average!!
- Loss control program includes facility inspections, lab and shop inspections, safety equipment certifications, activity reviews, hazardous materials spill response, accident investigation and air complaint reviews.
- Remote campuses and Ag. Science Centers were serviced by EH&S to include annual room and lab inspections, and instructor led safety training and certifications.
- The total number of general room and lab inspections completed increased by 58%; this is due to a new safety inspector and a concentrated focus on main campus building inspections.
- There was a slight reduction in poor and failing lab inspections this year.
- EH&S completed certification inspections on 455 units of laboratory safety equipment, using student inspectors. The eyewash and shower inspections became the responsibility of the Fire Department in May of 2014.
- There were 166 responses to incidents primarily involving indoor air quality complaints and minor hazardous materials spills/incidents.
- Responded to 9 hazmat spill emergency calls.
- Issued validation for 1230 drivers permits, of which 250 were for utility cart use.
- Asbestos abatement project support increased as shown by number and duration of projects and

state required permit under NESHAP.

- EH&S oversaw two major asbestos abatements projects; Corbett Center was completed in 309 days and Jacob's Hall/Hardman Hall, 48 days.
- Picked up, processed, and shipped 47,000 pounds of waste in 2014 compared to 55,000 pounds averaged over the previous five years. The cost per pound was 14% less than the previous year. The team managed over 3,000 waste items.
- EH&S managed multiple special waste disposal projects throughout the year to include the Chemistry Department clean out and the Aldershot Greenhouse Chemical clean out. These projects added 17,852 pounds of waste.
- The NM Radiation Control Bureau performed an unannounced inspection of the activities authorized under the Type AB Broad-Scope License and the X-Ray Certificates of Registration. No deficiencies were noted.
- NMSU Radiation Safety Manual was revised, updated and published.
- Type AB Broad-Scope Radioactive Materials License was renewed for another 5 years.
- A reciprocity agreement between NMSU and the NRC was signed to use a nuclear gauge at a federal facility in Alamogordo, NM.
- Continued support of Biosafety Program through committee application reviews, monthly training support and disposal of biohazardous wastes.
- Title V Permit was revised, updated and renewed for another 5 years.
- Completed nine reports in compliance with NMSU's Title V and NSR Air Permits including emissions inventory and testing and Federal Greenhouse Gas Management Plan.
- In the Stormwater Program, the 2013 69% achievement of measureable BMP goals was increased to 86% for 2014.
- Lead activities related to closure of former NMSU landfill.
- The City of Las Cruces performed a joint inspection with the EPA for wastewater operations. No deficiencies were noted.
- Received approval by FEMA for NMSU's Hazard Mitigation Plan as incorporated in the Dona Ana County Hazard Mitigation Plan

NMSU Animal and Range Sciences Interim Department Head Honored with Friend of Safety Award

Writer: Angela Simental

Dr. Dennis Hallford, New Mexico State University's Animal and Range Sciences interim department head, past chair of the Institutional Animal Care and Use Committee and chair of the University Radiation Safety Committee received this year's annual Friend of Safety Award for his contributions to the longstanding improvement of safety in these areas.

Katrina Doolittle, Executive Director for NMSU's Environmental Health & Safety, presented the golden globe award to Dr. Hallford. The Friend of Safety distinction and award is given to a NMSU employee who has implemented safety programs or policies that have positively and significantly impacted their department or college and resulted in improved safety culture overall.

"The safety achievements that are recognized by this award must be more than what the person is responsible for in their day-to-day work," Doolittle said. "We only recognize those who go above and beyond what is required, and do it in such a way that it persist over time. The accomplishments must be far-reaching and considered a permanent improvement in the safety program that they are responsible for creating."

Hallford received the award because of his

commitment to research oversight committees at NMSU for 30 years, adding elements of safety that did not previously exist.



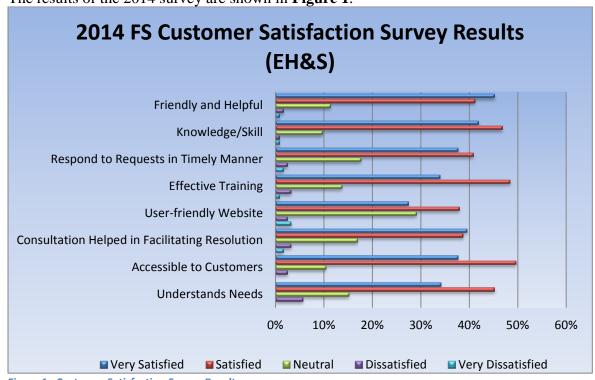
"With his leadership and the support of the committee, we now have strong safety programs for all animal workers and all who use ionizing radiation at NMSU. He not only ensured compliance, he took it to the next level with the safety components of these programs," Doolittle said. "I have watched the safety culture of the workers improve in these areas of research where there are animal handling risks, potential disease and radiation hazards. Dr. Hallford kept the safety of the individual and good safe science at the forefront, and he is also responsible for the compliance improvements that are now core safety programs in both areas."

FACILITIES AND SERVICES CUSTOMER SATISFACTION SURVEY

Environmental Health & Safety was reorganized to Facilities and Services (FS) in July 2010 and has participated in FS's customer satisfaction survey each year with positive improvements. In 2014 there were about 125 respondents to the survey. According to the survey results report, "The high level of satisfaction noted with this unit in past surveys continued with this survey, and every question showed some degree of improvement for 2014 compared to 2013". (Table 1)

| Area – Satisfied and Very Satisfied | 2013 Result | 2014 Result |
|--|-------------|----------------|
| EH&S team members are friendly and helpful when contacted | 84% | 86% |
| EH&S team members are knowledgeable in their areas of specialty | 86% | 89% |
| EH&S team members respond to all requests in a timely manner | 73% | 78% |
| EH&S team members provide effective training | 76% | 82% |
| EH&S website is user friendly and helpful in providing access to information that a user needs | 63% | 65% |
| EH&S consultation helped facilitate the resolution of the user's request | 74% | 78% |
| EH&S is accessible to its customers | 81% | 87% |
| EH&S understands the needs and requirements of the user's department | 77% | 79% |

Table 1. Areas of improvement in the categories of Satisfied and Very Satisfied.

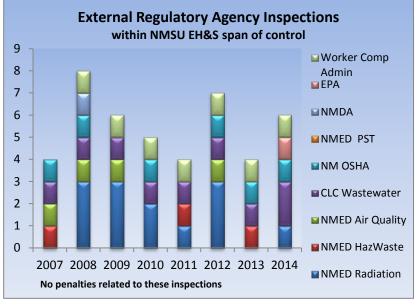


The results of the 2014 survey are shown in Figure 1.

Figure 1. Customer Satisfaction Survey Results

COMPLIANCE INITIATIVES & RESEARCH SUPPORT

The realm of regulatory compliance and span of responsibility for EH&S is growing. These areas are highly visible and frequently audited. EH&S environmental program compliance



responsibilities were recently expanded and now include: Stormwater Management, Drinking Water, Solid Waste, Wastewater and Spill Prevention Controls and Countermeasures.

Every year, EH&S facilitates several regulatory compliance inspections from various State of NM and City of Las Cruces agencies (**Figure 2**). Audits by the controlling agencies may have some findings, however, quick and effective

resolutions have resulted in no penalties since 1993 for all EH&S operated programs.

In addition to providing regulatory guidance to faculty, EH&S department personnel provide protocol review, experimental plan assistance, annual inspection, training and hazardous material disposal for research; all of these services are integral to our faculty's undertaking safe and legally compliant research. We increased focus on experimental plan reviews and lab decommissioning this year. There are three faculty research oversight committees with significant EH&S implications: the Radiation Safety Committee, the Institutional Biosafety Committee, and the Animal Care and Use Committee. These committees fulfill specific federal regulatory requirements in the areas of safe use and containment of radioactive and biological materials research and animal protections at NMSU. EH&S is a regular member on two of these faculty research oversight committees.

UNIVERSITY GROWTH AND EH&S SUPPORT

Figure 3 shows a trend of increasing footprint of usable space and the challenge is maintaining a corresponding increase in safety personnel to provide safety services. Increasing safety staff for basic services and university compliance is a primary goal and focus of EH&S and Facilities and Services.

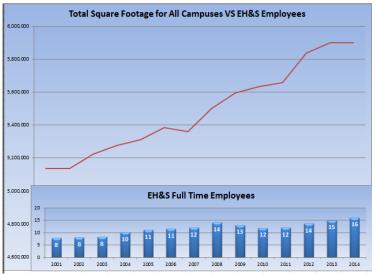


Figure 3. Square Footage and EH&S Employees

Figure 2. External Regulatory Agency Inspections

CENTRALIZED SAFETY TRAINING

In 2014, EH&S transitioned management of employee safety training records and EH&S safety class registration functions from an internal system over to the NMSU Training Central system. Over the year, more than 17,000 safety training records for active employees were imported into the system. Employees can now check their training history, view course offerings and register for EH&S safety classes using a single, centralized system.

The EH&S team delivered over 250 training classes, covering a diverse set of safety-related

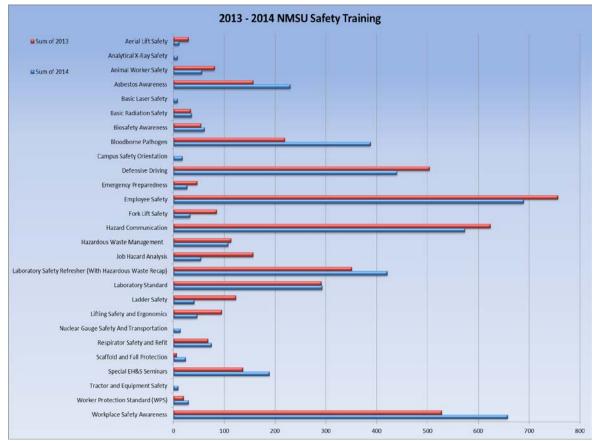
topics, to more than 4500 people in 2014 (**Figure 4** & **Figure 5**). The number of individuals that completed a safety training class increased 1% over the last year and the trend has steadily increased since 2005.

Both on-line and instructor lead classroom training were delivered to NMSU facilities state-wide including the Las Cruces main campus, our remote campuses, community colleges, agricultural research



Figure 4. Employee Safety Training 2005-2014

centers and other affiliated remote facilities. The training classes are designed to meet the employee training requirements of specific state and federal regulations and reduce injuries.

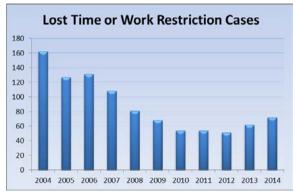




Overall, we have developed strong partnerships with academic, research and operations departments through our safety training program. This is evidenced in repeated requests for the EH&S team to present special sessions on current safety issues which helps departments comply with multiple regulatory training requirements of annual refreshers.

Highlights of these special classes given in 2014 are:

- Annual Refresher of Laboratory Safety for 421 faculty, staff and students working in a • lab environment.
- Annual Refresher of Workforce Safety Training for Facilities employees to include ~150 employees that received 4 hours of focused safety training.
- Annual Float Safety Training for staff participating in Homecoming parade and float ٠ inspections.
- A Lab Safety Webinar regarding the University of Minnesota Laboratory Explosion, • Evaluating the Hazards and Communicating Lessons Learned.

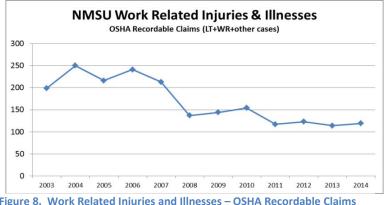




EMPLOYEE INJURY & ILLNESS

Figure 6 shows a continued trend of less injury and illness cases over the current five year period compared to previous five year period; about 43% decrease in number of cases with lost or restricted work days. Also over the past three years, we have maintained a 41% reduction in lost days compared to previous five year average. (Figure 7, ignoring the The OSHA severity rate is based on total number of lost work days and anomaly in 2008) total hours worked, the NMSU severity rate remains 40% below prior 10 year average.

The decrease in the more severe cases (**Figure 8**) correlates with several initiatives including:



addition of new safety inspectors, expanded training in Spanish, increased funding for building safety repairs and safety upgrades, delivery of safety training related to injury trends, increasing number of building and hazardous area inspections and a new workers compensation coordinator position that started in 2008.

Figure 8. Work Related Injuries and Illnesses – OSHA Recordable Claims

Figure 6. Cases with Lost Time or Work Restriction

Figure 7. NMSU Days of Lost Time

The worker compensation insurance premiums are based on five years of experience and a decrease in premium is evident (**Figure 9**) and a reflection of the history of reduced injury rates. The continued reduction in workers compensation claims has a significant positive financial impact. When compared to 2010 premium expense, within four years we avoided 1,245,000 in premium cost – that's equivalent to the EHS budget for one year. More importantly, reduced injury ensures higher quality lives of our greatest resource.

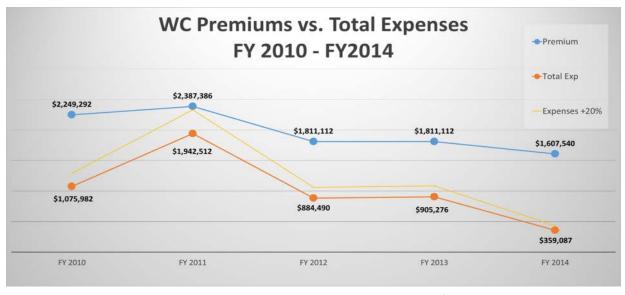


Figure 9. Worker Compensation Premium versus Total Worker Comp Claim Expense

Worker Compensation Losses FY 2010 – FY 2014

Listed below are the injury types with the highest treatment cost for FY 2010 - 2014. These six categories account for 98% of injury costs.

| Injury Type | Cost | % of Total Injuries |
|-------------|-------------|---------------------|
| Strain | \$2,558,565 | 49.51% |
| Contusion | \$1,186,544 | 22.96% |
| Fracture | \$978,631 | 18.94% |
| Sprain | \$167,216 | 3.24% |
| Laceration | \$101,460 | 1.96% |
| Concussion | \$43,677 | .85% |

Table 2. Worker Compensation Losses for Fiscal Years 2010 through 2014

LOSS PREVENTION AND LOSS CONTROL PROGRAM OVERVIEW

To minimize and reduce personnel losses from work related injury and illness EH&S provides NMSU with an aggressive, proactive loss prevention and control program. This is multiapproach safety surveillance of workers and workplace as well as after the fact injury investigation to prevent similar incidents. Over 90% of EH&S services focus on proactive inspection of hazardous work areas and ensuring safety equipment is functioning properly.

Figure 10, shown below, demonstrates the services provided by the EH&S team throughout 2014.

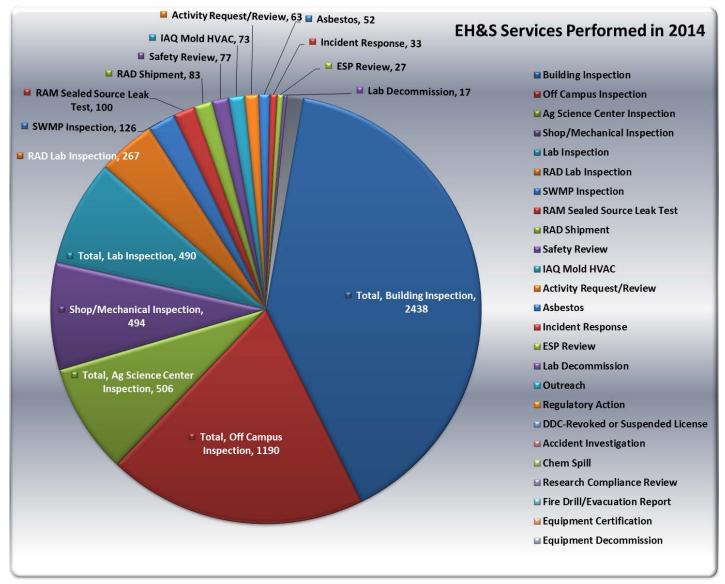


Figure 10. EH&S Services Performed in 2014

GENERAL SAFETY INSPECTIONS

LABORATORY AND BUILDING INSPECTIONS

In 2014, EH&S completed laboratory and building inspections throughout the state including the Las Cruces campus, branch campuses, agricultural science centers and other affiliated NMSU facilities. As part of the inspection process, EH&S invested approximately \$75,000 of BRR funding via an estimated 497 work orders on the Las Cruces campus. EH&S generated detailed inspection reports which identified safety concerns and dangerous conditions at each location.

The annual inspections of specific **high hazard areas** include: labs, shops, chemical storage areas, and mechanical rooms. These annual safety inspections are required by a variety of local, federal and state regulatory agencies including the State of New Mexico Loss Prevention and Control Bureau.

Throughout the years, the method of tracking these inspections has continuously evolved to the current method, as shown in **Figure 11**. In 2014, the total number of inspections increased by 58% from 2013.

This increase is attributed to the addition of a new inspector as well as a focused approach to increase building inspections. There were 16 more buildings inspected on main campus in 2014 than in 2013.

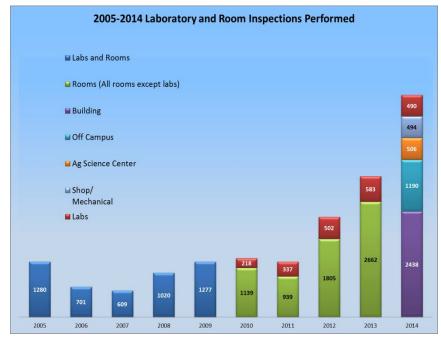


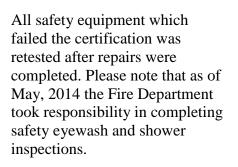
Figure 11. Laboratory and Room Inspections

There was a 16% reduction in lab inspections in 2014 from 2013. This was primarily due to three reasons:

- 1. A drop in the number of mandatory laboratory re-inspections needed in 2014. In 2014 fewer laboratories scored in the "Poor" or "Failing" category than in 2013.
- 2. Several rooms inspected as laboratory space in 2013 were discovered not be laboratory space or were in the process of being converted from laboratory space to a non-laboratory uses at the time of inspection. These areas were not inspected as laboratories in 2014.
- 3. Laboratories at some remote facilities were inspected as part of an overall facility inspection and not counted as separate laboratory inspections in 2014.

EQUIPMENT INSPECTIONS

Operable safety equipment is a critical component of an effective safety program. EH&S completed certification inspections on laboratory safety equipment, including eyewashes, emergency showers and exhaust hoods using student inspectors (**Figure 12**).



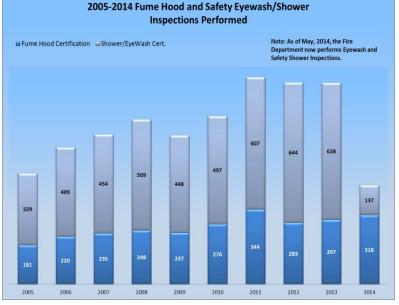


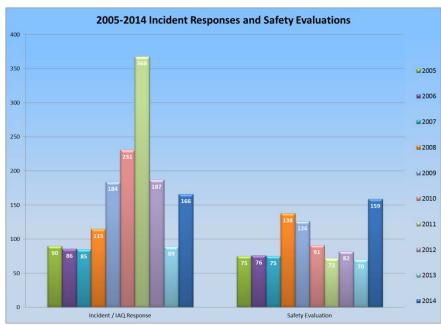
Figure 12. Equipment Inspections

SAFETY SERVICES

In addition to general safety inspection EH&S also provides many other services to minimize loss and risk. Some of the additional services are described in the following paragraphs.

INCIDENT RESPONSE AND SAFETY EVALUATIONS

There were 166 responses to incidents primarily involving indoor air quality concerns and minor hazardous materials spills and incidents, an 87% increase compared to last year



(Figure 13).

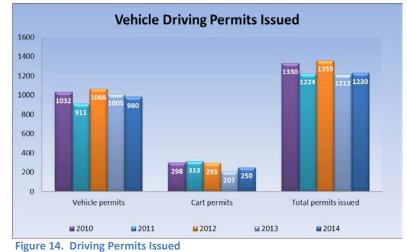
EH&S perform safety evaluations of various work activities, research experiments, and nonroutine campus events. These evaluations are performed to ensure all regulatory requirements are met and that safe practices are in place before an activity or an experiment occurs. In 2014, EH&S performed 159 of these safety evaluations (**Figure 13**).

Figure 13. Incident Responses and Safety Evaluations

VEHICLE AND UTILITY CART SAFETY

As part of the NMSU Driving Policy and the State Risk Management Loss Prevention and Control, all employees must be issued either a NMSU driver's permit or a utility cart permit to

be eligible to drive university owned vehicles. EH&S provides the defensive driving course as well as completes driver history checks to ensure validity of their driver's license. EH&S performs this license validation for every new driver and for three year permit renewals. This year there were 440 people that attended the Defensive Driving Course



and a total of 1230 driver's licenses were validated and permits issued (Figure 14).

Out of the 1230 permits issued, 250 of them were for utility cart permits (**Figure 14**). The utility cart permit does not require the defensive driving course, but does require a license validation.

BICYCLE SAFETY







On December 5, 2014, the sign for the NMSU Bronze

Bike Friendly University award was installed at the corner of Espina and North

Horseshoe. NMSU was awarded the Bronze Bicycle Friendly University award in February

2013 for promoting and providing a more bicycle-friendly campus for students, staff and visitors. EH&S hosted several bike safety events this year including:

- Aggie Family Bike Event with a safety course, how to repair bikes and assist with proper helmet use.
- Set up Ghost bike as a memorial for cyclists killed or severely injured by motor vehicle.
- Safety promoting campus bicycle ride.
- NMSU bicycling community on Facebook.



SAFETY EYEWEAR

The EH&S Department provides all safety eyewear to employees that is applicable to their job

function. This service is beneficial to NMSU as a mechanism to ensure safety eye protection meets the OSHA requirements for protective eyewear (OSHA 1926.102), as well as the American National Standards Institute (ANSI) standards.

In 2014 EH&S dispensed and billed to other departments a total of 92 requests for safety eyewear consisting of 29 pairs of prescription and 63 nonprescription safety eyewear (**Figure 15**). There were also 293

pairs of safety eye protection

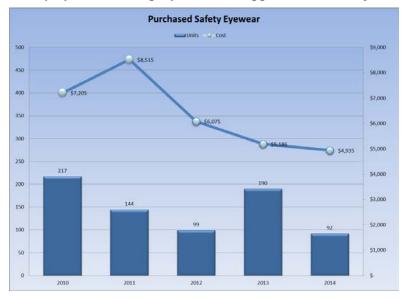


Figure 15. Safety Eyewear Purchased

distributed to new lab personnel taking the Laboratory Standard class.

SAFETY INITIATIVES AND EMERGENCY PREPAREDNESS

Since the events of 9/11, Environmental Health & Safety has coordinated Safety & Security Initiatives at the beginning of each semester to raise awareness and collaborate with other departments in emergency planning and training. The emergency preparedness events this year include:

- > Distribution of NMSU Safety, Health & Security initiatives and annual refreshers.
- > Update and distribution of All Hazards Emergency Operations Plan.
- > Testing of department Emergency Action Plans through unannounced fire drills.
- Testing of the Emergency Notification tools and updating emergency contact lists.
- Chairing University Safety Committee and Communicable Disease Preparedness Committee
- Conducing Continuity of Operations Plan
- Establish process for CoOP and designation of essential personnel.
- Ebola Preparedness Workshop.
- Monthly collaboration with key NMSU staff on Emergency Planning Committee.
- Culture of Safety and Loss Prevention presentation for Engineering faculty and staff.
- > Participated in new faculty orientation fair.
- Enhanced safety message reinforcing supervisory responsibility for safety training and protective equipment signed by the President of the University.
- NMSU participated with Dona Ana County in development of a Hazards Mitigation Plan that was approved by FEMA February 2014.



Ebola Preparedness Workshop

SPECIALTY PROGRAM MANAGEMENT

EH&S manages several specialty programs designed to meet a variety of local, state and federal worker safety and environmental protection regulations:

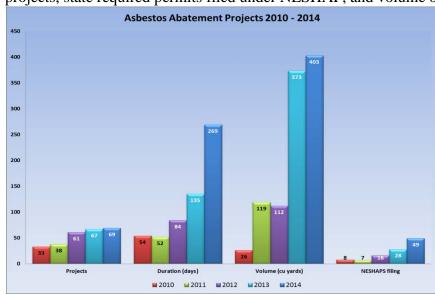
- 1. Asbestos Abatement Program
- 2. Hazardous Waste Program
- 3. Radiation Safety Program
- 4. Biosafety Program
- 5. Environmental Compliance Program

Each of these programs is discussed in more detail below.

ASBESTOS ABATEMENT PROGRAM

In 2014 EH&S continued to provide NMSU departments with timely and professional response in regard to asbestos as well as mold and lead management. EH&S established a NMSU Asbestos Management Program in 2009. The program is designed to ensure proper identification and management of asbestos containing materials in the older (pre-1981) NMSU buildings. Asbestos abatement for minor building remodels and general maintenance is sub-contracted to an outside licensed vendor with EH&S project oversight and funded by the BR&R account.

EH&S has one dedicated employee and an alternate which are both qualified annually as asbestos inspectors. EH&S responsibilities are to provide immediate initial inspections, perform surveys and monitoring to assess potential environmental hazards, and conduct Asbestos Awareness Training for campus personnel. Facilities maintenance personnel attend the annual awareness training that provides information on potential locations of asbestos, types of materials that may contain asbestos and the NMSU procedure for notification.



EH&S asbestos project support increased overall (**Figure 16**), by number and duration of projects, state required permits filed under NESHAP, and volume of waste produced in 2014.

During the year EH&S completed 69 abatement projects, 49 of which required permitting through NESHAP. Two of the larger projects overseen by EH&S this year, were the Corbett Center remodel and demolition of Jacobs Hall and partial demolition of Hardman Hall, in order to begin construction on the new Undergraduate Center.

Figure 16. Asbestos Abatement Projects

HAZARDOUS WASTE PROGRAM

The EH&S environmental compliance team picked up, researched, processed, and shipped just over 47,000 pounds of hazardous waste in 2014 compared to 55,000 pounds averaged over the previous five years (**Figure 17**). A trend of decreasing hazardous waste poundage is evident. A significant reason why the poundage of hazardous waste has decreased is because large poundage items like old oil filled transformers and industrial labs with higher volume work have been removed from campus.

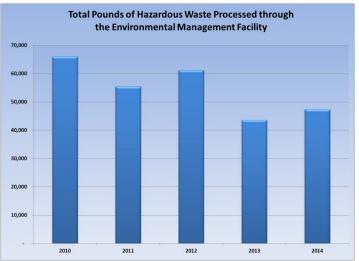


Figure 17. Total Pounds of Hazardous Waste Processed through the EMF

The team managed 3,057 different chemical items compared to 2,994 items averaged over the previous five years (**Figure 18**). Items of hazardous waste increased this year because lab

inspections are focusing on chemical inventory tracking. This focus has resulted in labs disposing of additional expired or excess stock chemicals than in previous years. Stock chemicals still require significant amounts of time to pick up, research, process and ship. Simply stated, an increase in items handled results in increase in staff time spent managing each container. It is approximately ten times cheaper and easier to dispose of a 1,000 pound



Figure 18. Total Items of Hazardous Waste Handled

oil filled transformer, then one pound of old diethyl ether which is potentially explosive. Most large, lower hazard, old chemical containers on campus have already been disposed. Smaller, higher hazard, lab stock chemical containers have not, and present new cost and labor challenges. Most of the non-routine waste workload resulted from large stock chemical clean outs (greater

than 50 chemical items at one time) from 16 different departments/labs: ANRS (4), Chemistry, Biology, SWAT, WERC, Alethea, USDA, PES, Fly Farm, Astronomy, Fire, Agricultural Extension, and Civil Engineering. Overall, all hazardous waste items were disposed of legally and without any incident. Physically opening chemicals and pouring/mixing compatible chemicals into 55gallon drums keeps the cost per pound for disposal low. Mixing chemicals is risky however, and requires keen attention to detail. In cumulative, the 5.0 FTE team spent 46 hours in restrictive.



Hazardous Waste Team Mixing and Bulking Chemicals

encapsulating protective suits and respirators while mixing chemicals on 23 different days. Overall, no adverse reactions occurred during mixing activities.

WASTE VOLUME AND COST TRENDS

Overall, NMSU's 47,000 pounds of routine hazardous waste was disposed of at a total cost of \$97,665. The good news is that there was a decrease in the cost per pound for routine hazardous waste disposal in 2014. The cost per pound in 2013 was \$2.39 versus \$2.06 in 2014 (~14% less). One of the contributing factors of why the disposal cost for hazardous

waste decreased is because EH&S vetted a new local vendor to recycle NMSU lead acid batteries and non-PCB ballasts. The vendor pays NMSU to recycle these materials whereas in the past, NMSU shipped them to Phoenix and paid for disposal. The team coordinates with eight different environmental services contractors for additional cost savings: Clean Harbors, Veolia, Stericycle, **USA** Can Recycling Warehouse, Fuels, ACT,

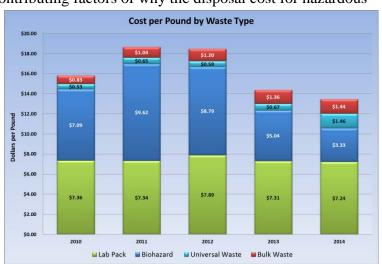


Figure 19. Cost per Pound by Waste Type

Hudson Technologies, and NEMS. By using specialized contractors for different projects, we are often able to reduce disposal/regulatory costs by thousands of dollars. Coordinating with numerous contractors however leads to additional complexities with manifests, transportation, and billing.

Another contribution to controlling disposal cost is that EH&S bulks or co-mingles compatible hazardous waste. It is important to note that the largest waste stream by pound "bulk hazardous waste" is also the lowest cost per pound (**Figure 20**). The average cost per pound of hazardous chemical waste varies by 5 fold with bulk waste being the lowest and lab pack waste being the highest (**Figure 19**).

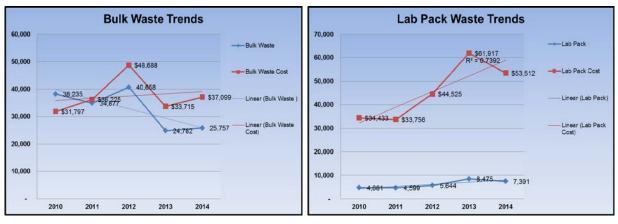


Figure 20. Bulk Waste Trends

EH&S contains the waste cost by researching and combining similar waste types so that 60% of the chemical waste can be shipped in bulk containers for disposal. The cost of bulk waste this year was \$1.44 per pound compared to \$7.24 per pound for lab pack waste (Figure 21) which is shipped off without additional handling. The savings in 2014 was \$150,000 in avoided disposal fees that is due to bulking 60% of the chemical waste versus lab packing.

RECYCLED WASTE

Campus operations, instruction and research programs generate a wide variety of hazardous and special wastes. Although EH&S cannot control the types or volume of wastes being

generated, we do strive to recycle as much as legally possible (Figure 22). Special contracts are established for the routine Universal Waste streams including batteries, mercury containing bulbs, and ballasts. We also recycle used oil whenever possible. Also of particular note is that a non-routine shipment of (16) refrigerant cylinders for recycling was conducted. By sending the refrigerant for recycling to a specialized contractor, NMSU avoided





\$4,000 in hazardous waste disposal costs. The environmental compliance team will continue to dedicate additional effort to seek out alternate disposal solutions in a commitment to sustainability at NMSU.

Figure 21. Lab Pack Waste Trends

HAZARDOUS WASTE REPORTS & INSPECTIONS

Hazardous waste reports, inspections and standard operating procedures (SOPs) are essential components of a successful waste management program. Federal and State mandated reports completed and filed accurately and on time were: Tier II Chemical Inventory, Hazardous Waste Fees, PCB Log, and Biennial Hazardous Waste. There were no external regulatory inspections in 2014. The mandatory DOT "NMSU Hazardous Material Transportation Security Plan" was also updated and special training given to key staff.

HAZARDOUS WASTE SPECIAL PROJECTS

In 2014 there were a number of large, special projects managed by the EH&S team:

- Main Campus Chemistry Department Clean Out (Figure 23).
- Main Campus Aldershot Greenhouse Chemical Clean Out
- CEMRC Waste Chemical Shipment
- Carlsbad Community College Waste Chemical Shipment
- Main Campus Chemistry Department High Hazard Shipment
- Main Campus Multiple Departments High Hazard Incident Response

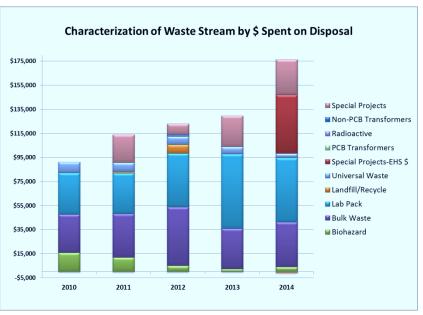


Chemistry Department Clean Out

The above projects are not included in the previous

sections or graphs. These chemicals were too numerous or hazardous to be managed through

the standard hazardous waste disposal program/temporary storage building. The projects required additional man hours to schedule, manage, and complete with multiple contractors. Most of the chemicals were small in weight, but high in quantity and hazards and labpacked directly from the specific locations. The total cost for these "Special projects" was \$85,000, which is equivalent to the cost of a full year's regular hazardous waste disposal on the main campus. Approximately \$30,000 of the



cost was paid by others, remote facilities and projects. Large special waste projects tend to be at much higher Figure 23. Amount (\$) of Special Projects

cost, for example, the Chemistry Department clean out was \$17 per pound of waste shipped compared to our average cost of \$2 per pound.

RADIATION SAFETY PROGRAM

Most radioactive materials and devices that produce ionizing radiation used in research and teaching are regulated through licenses issued to NMSU by the New Mexico Environment Department's Radiation Control Bureau (NMRCB) as authorized under the New Mexico Radiation Protection Regulations (NMAC 20.3). To help ensure compliance, the NMSU administration established the University Radiation Safety Committee (URSC) and charged it with developing university-wide radiation safety policies. The EH&S Radiation Safety Manager (RSM) and technical staff are responsible for many of the day to day administrative and technical functions required to effectively manage the radiation safety program. A detailed description of the URSC and RSM responsibilities can be found in the NMSU Radiation Safety Manual.

RADIOACTIVE MATERIAL LICENSES

The University currently holds two Radioactive Material (RAM) Licenses issued by the NMRCB.

- *Type AB Broad-Scope License* covers Main Campus and most remote NMSU facilities.
- *CEMRC Facility-Specific License* a separate specific license which covers the use of radioactive materials at the Carlsbad Environmental Monitoring & Research Center (CEMRC). The CEMRC is a university research facility located in Carlsbad, NM. The facility contains several radiochemistry labs and an *in-vivo* radiobioassy lab (lung and whole body counter).

Each license defines the type (specific radioisotopes), quantity, and general conditions or limitations for using radioactive materials and devices at the authorized locations listed on the license.

X-RAY DEVICE CERTIFICATES OF REGISTRATION (COR)

The University holds six CORs issued by the NMRCB.

- Analytical X-Ray COR a blanket COR covering the numerous analytical x-ray devices used for teaching and research across the university. Examples of the types of devices under this COR are x-ray diffraction (XRD), x-ray florescence (XRF) and x-ray irradiator devices.
- *NMSU Health Center COR* covers the medical radiography x-ray machine located in the Health Center.
- *DACC Dental Clinic COR* covers several dental x-ray machines located in the Dental Clinic.
- *Athletics Department COR* covers the mobile medical radiography x-ray machine used by the athletics program.
- *Human Performance, Dance and Recreation Department (HPDR) COR* Covers the department's dual-energy x-ray absorptiometry (DXA) system.
- *CEMRC COR* covers a XRD system located in the CEMRC facility in Carlsbad, NM.

Each x-ray CORs covers specific types of x-ray devices, identifies the location the devices can be used and includes a list of conditions or limitations for using the devices.

U.S. NUCLEAR REGULATORY COMMISSION (NRC) RECIPROCITY AGREEMENT

In 2014 the University entered into reciprocity agreement with the NRC which allows NMSU researchers to use a nuclear gauge (soil moisture gauge) at the Bureau of Reclamation's Brackish Groundwater National Desalination Research Facility in Alamogordo, NM. The NRC has exclusive jurisdiction over the use of radioactive materials or devices on most federal lands and facilities that are not under the jurisdiction of the U.S. Department of Energy (DOE) or U.S. Department of Defense (DOD).

EH&S RADIATION SAFETY SERVICES

EH&S supports the URSC and university radiation user community in many ways including:

- Records management for the NMSU Radiation Safety program
- University-wide RAM inventory tracking
- RAM licensing & x-ray registration
- Radiation Safety training
- Radiation laboratory safety inspections and contamination surveys
- Radiation laboratory decommissioning
- X-ray machine inspections
- Sealed source leak testing
- Centralized RAM shipping / receiving
- Other miscellaneous functions and services.

Summaries of common EH&S radiation safety program services are in included in Figure 24.





2014 RADIATION SAFETY PROGRAM HIGHLIGHTS

- NMSU Radiation Safety Manual was revised, updated and published.
- Type AB Broad-Scope Radioactive Materials license that covers activities using radioactive materials at the Las Cruces main campus and most remote NMSU facilities was renewed for another 5 years.
- A reciprocity agreement between NMSU and the NRC was signed which allows university researchers to use a nuclear gauge at a federal facility in Alamogordo, NM.
- The NMRCB performed an unannounced inspection of the activities authorized under the Type AB Broad-Scope License. No deficiencies were noted in the final inspection report.
- The NMRCB performed an unannounced inspection of the activities authorized under the X-Ray CORs for the NMSU Health Center, DACC Dental Clinic and the Athletics Department were inspected. No deficiencies were noted in the final inspection reports.
- Approximately 2000 pounds of radioactive and mixed (radioactive + RCRA hazardous) waste generated at the CEMRC was disposed (**Table 3**).

| Description | Quantity (pounds) |
|--------------------------|----------------------|
| Bulk Dry Lab Wastes | 520 |
| Bulk Liquid Mixed Wastes | 1590 |

BIOSAFETY PROGRAM

In July of 2010, the Biosafety Manager position and program responsibilities were assumed by the Research Compliance Office and a full time Biosafety Manager was hired November 2010. The decision to reorganize the position was based on the source of funding and desire to expand the position for a wider breadth of research compliance issues. EH&S works closely with the Biosafety Manager and maintains a strong role in the biosafety mission by providing the following direct support and services (**Figure 25**):

- Training equipment and facilities.
- Administrative support for monthly biosafety training including scheduling classes, web based registration, and managing training records.
- Web based Bloodborne Pathogen (BBP) training module delivers required

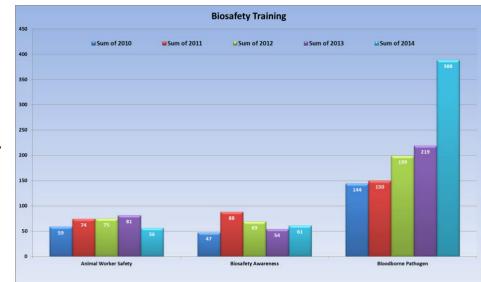
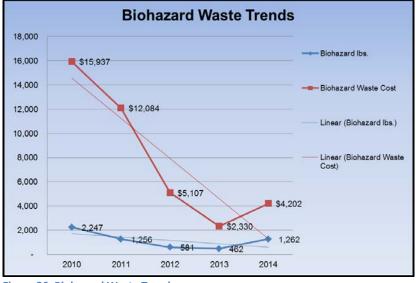


Figure 25. EH&S Biosafety Services

annual refresher training showing increased training (Figure 25).

- Acting as voting primary reviewer and voting member of the Institutional Biosafety Committee (IBC).
- Collaboration with Biosafety Manager on safety programs and emergency preparedness response.
- EH&S support of the Institutional Animal Care and Use Committee (IACUC) this was requested by the Chair to ensure continued involvement of EH&S. This is critical for success of the occupational health and safety program for animal workers.
- A full exposure hazard assessment for plumbers and waste water handlers was performed in 2013, the training and immunization was implemented in 2014.



• EH&S handles disposal for all biohazardous waste requiring incineration. To combat the escalating cost, in 2010 EH&S aggressively implemented education and inspection processes to successfully lower the amount of biohazardous waste generated on campus.

• In addition, EH&S negotiated waste cost reduction through stricter

Figure 26. Biohazard Waste Trends

segregation and switching treatment technologies from incineration to steam sterilization. *This dual approach results in huge cost savings that will continue forward for years to come* (*Figure 26*).

ENVIRONMENTAL COMPLIANCE PROGRAM

TITLE V AIR PERMIT AND NSR AIR PERMIT

NMSU maintains two EPA/NMED Air Quality Permits; a Title V Air Permit and New Source Review (NSR) Air Permit. These air permits ensure NMSU is monitoring campus emissions with the goal to keep them as low as possible. EH&S completed nine detailed air reports to ensure compliance for these permits: Annual air report, (2) semi-annual air reports, air emissions inventory, turbine test protocol, turbine air emissions test results, air fees, generator location/operational log, and the Federal Greenhouse Gas (GHG) Registration/Report. These reports ensure we are documenting compliance with all environmental laws, collecting appropriate data, and identifying positive trends to build on or negative trends for correction to better protect health and the environment.

Additional special air compliance issues addressed in 2014 were:

- 5 year review and update of the Title V Permit Reapplication Binder.
- Boiler #2 was fine-tuned and a formal emissions test was conducted.
- Gas Data Tracking was conducted with the City of Las Cruces.

- New Fire Department Generator Info/Operational Log was created.
- BR&R funding was obtained to install remote monitoring of generator run times for A-Mountain and the Aggie Stadium
- Training in NMED's new Excess Emission Reporting (EER) Internet System was completed.
- Cross Training of Backup EH&S Staff for Air Quality Issues

To best ensure a successful clean air program EH&S continues to visit the Central Plant at least monthly to meet with key staff on air issues and averages a monthly conference call with Consultants to stay current on complex, changing regulations.

STORM WATER MANAGEMENT PROGRAM (SWMP)

Environmental program activities for EH&S were related to regulatory compliance of the EPA-issued MS4 (municipal separate storm sewer system) permit; each year NMSU submits an annual report (to EPA) reporting progress over the previous year, as well as outlining best management practices (BMPs) to complete during the upcoming year. Accomplishments in 2014 include the following:

- Submitted the annual update report to EPA and NMED Surface Water Quality Bureau in September, 2014.
- Increased the 2013 69% achievement of measureable BMP goals to 86% for 2014.
- Conducted storm water awareness training as part of the NMSU Hazards Communication training.
- Conducted in-house training allowing EH&S inspectors to perform MS4 required inspections as part of their annual safety inspections. This streamlining has minimized impacts to the operation of the inspected shops/facilities.
- All critical documents are filed on a well-managed network location.

SOLID WASTE

Regulatory compliance of NMSU's solid waste falls into two distinct categories; closure activities associated with the former NMSU landfill, and compliance of our two solid waste facilities (Aggie Recycling, and the NMSU Green Waste Compost Facility). 2014 solid waste accomplishments include:

- Involved in the evaluation and hiring of a qualified engineering design firm to complete a closure design per requirements of the 2013 Closure Post-Closure report.
- Submitted the three NMED-required annual Solid Waste Management reports on time.
- Submitted all required quarterly methane monitoring reports on time.
- Submitted two required semi-annual ground water sampling monitoring reports on time.
- Acted as the NMSU lead on regulatory agency interactions related to a relocation of the NMSU green waste compost facility.

DRINKING WATER

Because of the potential adverse health effects, providing the NMSU community with high quality drinking water is one of the most critical environmental oversight activities. In 2014 drinking water accomplishments include:

- Continued close collaboration with Facilities and Services plumbing personnel to ensure all compliance testing is performed on schedule and reported appropriately.
- EPA-required Consumer Confidence Report; this report was submitted to the NMED in March and posted to the NMSU website, per the required deadlines.
- Initiation of the EPA-required UCMR3 (Unregulated Contaminant Monitoring Rule) sampling, analyses, and reporting.

WASTEWATER

NMSU has wastewater discharge permit #82211 with the City of Las Cruces, as they receive/treat all NMSU wastewater. Complying with the discharge permit requirements comprises EH&S compliance activities in this area. 2014 accomplishments include:

- Completed four quarters of the required sampling and reporting to the City of Las Cruces on schedule. No violations were reported.
- System operations within the hydrogen sulfide limits (monitored monthly).
- City of Las Cruces conducted a formal annual inspection, as well as a joint EPA-City of Las Cruces audit of wastewater operations. There were no violations however, several issues required regular follow up with various NMSU entities and City of Las Cruces.

SPILL PREVENTION CONTROLS AND COUNTERMEASURES (SPCC)

EPA is the lead federal response agency for oil spills occurring in "inland waters" (which can include dry arroyos), and requires qualified facilities, such as NMSU, to prepare, certify, and implement an SPCC Plan. During 2014:

- EH&S completed an inventory of all fuel/oil tanks subject to the SPCC rule
- EH&S conducted required inspections in order to comply with SPCC regulatory requirements.

THIS COMPLETES ENVIRONMENTAL HEALTH & SAFETY ANNUAL REPORT 2014



2014 Annual Report

New Mexico State University Fire Department



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| Event Participation |
| Community Outreach |
| Training |
| 2015 Goals |

Message from the Associate Vice President of Facilities and Services

Welcome!



NMSU Facilities and Services is a professional service organization that supports New Mexico State University in its mission of instruction, research, public service and extension education by providing support and service to students, faculty, staff and the community. The NMSU Las Cruces campus is much like a small city, and through the efforts of 350 staff, Facilities and Services is responsible for the physical environment, the fire protection, and the environmental health and safety of the students, faculty, visitors and staff.

The senior leadership of Chief Carrillo, Deputy Chief Huber, and Captain Tarkington bring a wealth of experience and they have initiated many new programs and improved others. We approach the management of the NMSU buildings as an investment in our physical assets, and in addition to having the capability to extinguishing a fire should one occur, the Fire Department provides medical response, emergency planning, plan review, code interpretations, and building inspections.

There have been many exciting changes and accomplishments in the NMSU Fire Department this year, and we are proud to share them with you!

Glen Haubold Associate Vice President Facilities & Services



Message from the Fire Chief



2014 was an exceptional year for the New Mexico State University Fire Department (NMSU FD). We set out to "DISCOVER" how the Fire Department can make a difference within our community. We did this by listening to our constituents and taking action. We are extremely proud that our efforts were recognized.

The NMSU Office of Institutional Analysis 2014 Customer Satisfaction Survey reported a high satisfaction rating on our commitment to professionalism, courtesy, timeliness, quality of service and service expectation. We take "AGGIE" pride in delivering the service that each of you deserve.

In early 2014, NMSU FD restructured its staffing to better accomplish our mission. We hired our first Deputy Fire Chief and added two day time career firefighters, these modifications will have a significant impact on our response capability as well as improve our fire prevention program.

We also received our Insurance Service Office (ISO) Public Protection Classification Survey results in July of 2014. Our new ISO rating is now a 3/3X and is a great improvement as it recognizes our efforts in risk reduction and our continued efforts in making our community safer for our students, faculty, staff and visitors. Fewer than 10 fire departments in New Mexico have earned this rating.

The staff at the Fire Department continues to look for ways to make a positive impact at NMSU. It is imperative that we have a visual presence on campus. You will see them throughout the year conducting fire safety inspections, emergency medical standbys at our sporting events and concerts, training (CPR, fire safety) as well as being active throughout the year at all our events.

It is with great pleasure that I continue serving our NMSU community.

Johnny Carrillo Fire Chief



FIRE DEPARTMENT AT A GLANCE

ANNUAL REPORT 2014

Overview/Funding

NMSU FD funding had a total budget of \$611,661 in 2014, which included funding from NMSU general funds, NM State Fire Funds, and the Department of Health EMS Fund.

| NMSU | \$512,043 | Salaries, operating costs |
|-----------|-----------|---|
| Fire Fund | \$89,560 | Used to purchase firefighter equipment, fuel, vehicle maintenance, uniforms, training and personal protective gear. |
| EMS Fund | \$10,058 | EMS equipment and medical supplies |

Additional support in 2014:

- 2014 Fire Protection Grant Funded through the State of New Mexico. NMSU was awarded \$100,000 to purchase two sets of heavy rescue extrication tools, various forcible entry/ventilation saws and technical rescue gear.
- Dona Ana County/City of Las Cruces Office of Emergency Management In 2014, NMSU was awarded funding for several training and professional development events. The approximate value was about \$10,000.
- Dona Ana County Fire Tax –NMSU is Dona Ana County Fire District #3. Due to changes in National Fire Protection Association standards for Self-Contained Breathing Apparatus (SCBA), the County replaced every SCBAs in all 16 of its Fire Districts. NMSU received 24 SCBA harnesses valued at approximately \$100,000.





ANNUAL REPORT 2014

More than Numbers

6 PM Busiest Hour of the Day



3:45

Average response time within NMSU

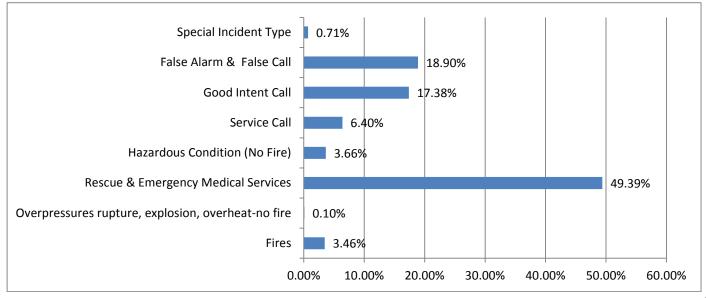
Friday Busiest Day of the Week

> September Busiest Month

10:42 Average response time for automatic aid given

984 Calls for Service

Major Incident Categories



ACHIEVEMENTS

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Above and Beyond

This year we instituted our Eyewash and Shower Prevention Annual Inspection and tested 448 stations throughout campus.



Improved ISO Rating for NMSU Fire Department We received notification from the Insurance Services Office (ISO) on the results of our Public Protection Classification (PPC) survey, which was completed in 2013. The results from this report are generally regarded as the report card for a Fire Department. As part of the report, ISO grades the Fire Department, Emergency Reporting (Dispatch) and our water supply. Our new rating is a 3/3X! Our previous rating was a 5/9. The "X" denotes a new revised classification that takes in account the differentiation in fire loss experience on the fire suppression capabilities of each community.

The new classification will improve the predictive value for insurers while benefiting both commercial and residential property owners. The PPC plays an important role in the underwriting process at insurance companies. In fact, most U.S. insurers use the PPC information as part of their decision making when deciding what business to write, coverage to offer or price to charge for personal or commercial property insurance. Ratings are based on 1-10 scale. A lower numerical rating, equates to a better score and possibly a lower rate on insurance cost.

The Fire Department and Facilities Operations teamed up to repaint approximately 180 fire hydrants on campus.

The Fire Chief and Executive Director agreed on a plan where the Paint shop would provide the materials while the student Fire Fighters performed the painting. Each fire hydrant is being painted red and the tops are being color coded to identify the flow rate of the fire hydrant. This exercise is providing familiarization training for the Fire Fighters and improving the appearance of the campus.



PREVENTION

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ANNUAL REPORT 2014

Sharing Safety

Fire Extinguisher training on the rise! The Fire Department has seen a significant increase in the numbers of students, faculty and staff that have signed up for our free fire extinguisher training.

Classes are generally conducted at the Fire Station on the second Tuesday of each month. This year we are able to expand our outreach programs by offering classes at DACC which is made possible by the addition of the daytime firefighting staff that was approved this year.



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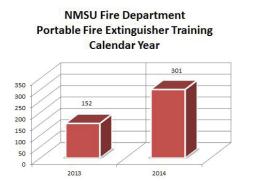
Some of our Key Performance Indicators:

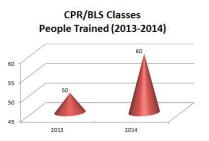
- In 2014, NMSU FD developed a fire protection compliance matrix for all NMSU facilities which includes development and implementation of new forms.
- Shift to paperless. Inspections and sprinkler testing forms are now stored electronically on the network.
- Established Hot Works permits process and procedures.
- Began impairment program notifications.

NMSU is a caring community

Its Fire Department works diligently to keep the community and campus safe. One way we do this is by ensuring that all construction complies to adopted fire and building code standards and that all buildings are inspected periodically. We follow the newest iteration of the International Building Code, the International Existing Building Code and the International Fire Code to accomplish this.







STUDENT FIREFIGHTERS

ANNUAL REPORT 2014

Beyond the Classroom

NMSU has a Very Unique Program

14 of our firefighters are full-time students at either NMSU main campus or Dona Ana Branch. That is approximately 70% of our team. As part of the program, student firefighters must maintain their GPA and meet the same qualifications and standards as professional firefighters. This includes obtaining their New Mexico Emergency Medical Technician Basic license within one year. Our firefighters walk out of here with a degree and experience that few jobs can offer.





Code Blue Drill

NMSU Fire and the Campus Health Center annually participate in a mock "Code Blue" drill which is a part of the Center's ongoing requirements for AAAHC national health care facility accreditation. Fire and CPR drills, and pandemic specific exercises are an integral part of each department's preparedness for emergencies and disasters. The collaborative exercise was interactive and designed to allow both departments to fulfill individual roles with specific assignments. We completed our CPR drill on March 28th.

2014 Firefighter of the Year

Lt. Bo Bostinto was selected as the 2014 Firefighter of the Year. Bo joined the fire department in May of 2010. He progressed through the ranks to achieve the Lieutenant level, which is the highest for a student firefighter here at NMSU. Bo is also the first student to obtain his National Registry Emergency Medical Paramedic license. Academically, Bo obtained his Associates of Fire Science in 2012 and is currently working on his Bachelor's in Government with a Focus on Public Administration. Bo has been an inspiration and a great leader amongst his peers.



SUPPORTING OUR NEIGHBORS

We Go!

NMSU Fire Department is one of 16 fire districts in Dona Ana County

We are also known as District 3, we responded to 301 calls for assistance outside of NMSU in 2014. This was an increase from 2013, when we were requested 224 times.

South Valley – 176 Las Alturas – 102 Mesilla – 9 La Mesa – 4 Mesquite – 4 Santa Teresa – 2 Organ – 2 Anthony –1 City of Las Cruces –1







EVENT PARTICIPATION

ANNUAL REPORT 2014

8

Fire Ambassadors

2014 was a busy year for us!

Here are some of the events we participated in throughout the year:

- New Employee and Faculty Orientation
- Student Orientation
- Aggie Fest
- Worked with Housing on events like the Great Scavenger Hunt
- Working with ASNMSU on events like the Adult Swim Funhouse and Homecoming Bon Fire
- Grand Opening of Spiritual Center
- Tortugas Annual Pilgramage
- Tough Enough to Wear Pink
- Cold Water Challenge
- Career Expo
- Faculty Orientation
- Move-in Fair
- Halloween Howl
- Student Employment Fair
- Aggie Memorial
- Facilities and Services Picnic
- Annual Community Wellness Fair







Fallen Peace Officer Memorial

NMSU Fire Department joined dozens of municipal, state and federal law enforcement officers from the region to be part of the Southern New Mexico Fallen Peace Officers Memorial on Tuesday, May 13, 2014. The local event is part of the National Police Week. This annual Las Cruces event honors the fallen officers and according to the Doña Ana County Sheriff's Office news release, nearly 40 officers were honored.



COMMUNITY OUTREACH

= ?

Extending Hands



Partners with Doña Ana Community College Fire Science Program

The NMSU Fire Department has partnered with the Doña Ana Community College Fire Science Program through participation in its Fire Science Advisory Board to provide direction to the college regarding candidate requirements and changes in the fire service. In addition, the NMSU FD participates with the fire science program students during training drills upon request.

Flag Etiquette

The Fire Department taught two flag etiquette classes to help standardize and train people that have flag responisiblities at NMSU.





Educational Tours and Future Firefighters

We welcomed tours and visitors to our Fire Stations! Our firefighters gave 11 tours throughout the year and taught 371 children and 86 adults about fire safety in 2014.

TRAINING

ANNUAL REPORT 2014

Hands-on Classroom

In-House Training

Training is a huge part of any fire departments success. For 2014, we logged 4,964 hours of in-house training. Categories include: building familiarization and pre-planning, company training, EMS education, hazardous materials, driver/operator training, recruit and firefighter training. We also helped train our partners at Facilities and Services on Hands-Only CPR at the Annual Safety Blitz in August.



2015 Goals

- Continue to increase NMSU Fire Department presence through fire protection services
- Discover new ways to strengthen NMSU awareness of fire safety
- Identify other opportunities to engage with our community
- Help support NMSU's mission to recruit students by marketing to the fire department's unique student firefighter program
- Provide NMSU's faculty, staff, student and visitors with the best service possible



For more information about NMSU Fire Department and other community outreach and public education programs, please call:

NMSU Fire Department 575.646.2519

facebook.com/NMSUFD

Or visit us on our website at:

fire.nmsu.edu

Facility Operations Annual Report for FY 14-15





Professional Development

• KPI 6-2: Engage all mid-management level employees and above in leadership training.

| Leadership Training | FTE's | Total Sessions | Avg / FTE |
|--------------------------------|-------|-----------------------|-----------|
| Operations Leadership Team | 5 | 38 | 7.6 |
| Custodial and Recycling | 5 | 6 | 1.2 |
| Facilities Maintenance | 5 | 19 | 3.8 |
| Grounds Services | 6 | 6 | 1.0 |
| Plant Operations and Utilities | 2 | 13 | 6.5 |
| Total Training | 23 | 82 | 3.6 |

• KPI 6-3: Every employee to participate in at least one training/development opportunity in FY15.

| Training/Development | FTE's | Total | Avg/ FTE |
|--------------------------------|-------|----------|----------|
| Opportunities | | Sessions | |
| Operations Leadership Team | 5 | 21 | 4.2 |
| Custodial and Recycling | 104 | 416 | 4.0 |
| Facilities Maintenance | 65 | 650 | 10.0 |
| Grounds Services | 30 | 244 | 8.1 |
| Plant Operations and Utilities | 26 | 112 | 4.3 |
| Total Training | 230 | 1443 | 6.3 |



Customer Satisfaction

| Customer Satisfaction | 2013 | 2014 | Improvement |
|------------------------|-------|-------|-------------|
| Custodial | 75.3% | 78.8% | 3.5% |
| Recycling | 62.8% | 67.1% | 4.3% |
| Building & Environment | 61.7% | 70.2% | 8.4% |
| Overall Grounds | 73.4% | 77.7% | 4.3% |
| Water Efficiency | 63.0% | 67.3% | 4.3% |
| Overall Rating | 67.2% | 72.2% | 5.0% |

Overall Customer Satisfaction Survey Comparison

- Measures that were implemented to facilitate this increase are:
 - Redirecting shop efforts to maintain the buildings by creating the Facilities Maintenance crew.
 - Increasing the review of open work after the reorganization to ensure the work was assigned to the proper crews.
 - Increasing the communication between the technicians and the customers.
 - Director of Facilities Maintenance established weekly meetings with his management team and fostered a team approach to building maintenance.
 - Reduced turf areas and increased Xeriscaping on campus.
 - Implementing new efficient cleaning processes for the Custodians.



Outreach Events

- During this period we were represented at:
 - CAPPA Annual Conference Attendance and campus tours
 - RMA Annual Conference
 - Campus Move-In Day multiple shops
 - Sustainability Council changed shop representatives each month.
 - New Faculty Orientation
 - Tough Enough to Wear Pink Activities includes the Fashion show, football game, lighting the A in pink lights.
 - National Autism Month Supporting the Alpha Chi Delta, AXiD, Sorority by lighting the A in blue lights.
 - TRIO Day
 - Greek Week
 - Actively participated in Recyclemania
 - Participated in 3 sustainability tabling events.
 - Conducted 2 student tours of the Central and Satellite Utility plants as part of a Mechanical Engineering class lab.
 - Employee Appreciation Picnic Multiple shops
 - Homecoming Activities multiple shops



Overtime

| Overtime Hours by Type | FY 13-14 | FY 14-15 | Hours Reduced | Percent Reduction |
|-------------------------------|----------|----------|---------------|--------------------------|
| I&G Funded | 8890.70 | 4150.25 | 4740.45 | 53.32% |
| Reimbursable | 6192.25 | 5929.90 | 262.35 | 4.24% |
| Total Hours | 15082.95 | 10080.15 | 5002.80 | 33.17% |

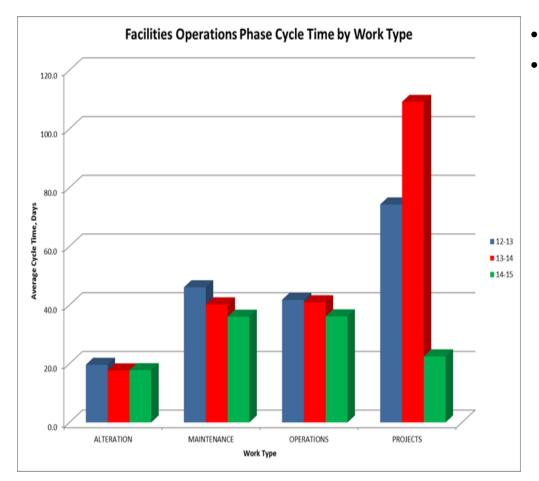
• Fiscal Year Reduction Comparison

• Strategies implemented to reduce overtime:

- Monthly review of the Overtime metrics by the Leadership team.
- Installation of the new Astroturf in the football stadium
- Creative scheduling to maximize the activities performed during overtime periods.
- Creating new custodial shifts to eliminate overtime while providing coverage to campus.
- Evaluating after hours responses, performing minor system configurations, and deferring repairs to the next business day.
- Planning and scheduling of tasks for regular time.



Cycle Time



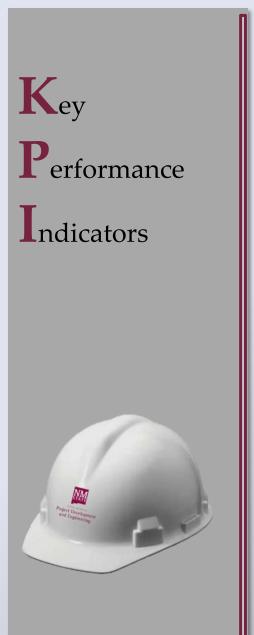
- **Overall Reduction of 10%**
- Strategies implemented to reduce cycle time:
 - Increased reviews of the Phase Aging report.
 - Improved work flow processes within the shops.
 - Improved processes for obtaining materials to perform work.
 - Electronic assignment of phases to the technicians which promotes accountability



Campus Beautification and Enhancements

- Grounds shop performed 28 planter/landscaping upgrades on campus during tis reporting period.
- Sign shop personnel installed 12 new Wayfinding signs for campus buildings and facilities.
- Grounds shop personnel installed 2 new trash receptacles at Alumni Pond and 3 new Millennium 2000 self-compacting trash receptacles on campus. As a side note the Millennium 2000 receptacle installed at Preciado Park replaced 5 poly carts.
- Grounds shop personnel installed 4 benches at lot 34, a picnic table at the Music building, and a picnic table at Zuhl library.
- The Electric shop replaced 122 pull Honeywell BG10 Fire System pull stations in 12 building on the main campus and DACC campus.
- Facilities Maintenance has completed the work scheduled for Project Entryway for 10 buildings and at the time of this report have 2 more in progress. The buildings completed include Biology Annex, Business Complex, Computer Center, Fire Station, Hernandez Hall, Kent Hall, Knox Hall, Young Hall, Biochemistry, and the Natatorium. Currently in work are Campus Police/ Ag Institute, and the Small Animal Research Lab.
- The performance contract with AMERESCO has installed 90 new light poles with 149 LED light fixtures and upgraded the exterior lights on 35 buildings with LED light fixtures.
- The Electric shop has installed LED light fixtures on 74 poles in Parking Lots, 30, 48, 78, and 95. Included in the 74 poles are the street lights along Jordan, Locust, Stewart, Wells, ad Williams streets.
- The Electric shop has upgraded 32 exterior light fixtures on the Fire Station, Coca Cola Weight Training Facility, Stadium Field House, Animal Metabolism Building, Sheep Barn, Beef Barn, Swine Barn and the Bull Barn.





Fiscal Year 2014/2015 (FY-15)



Facilities and Services Project Development and Engineering

SPIRITUAL CENTER iii.

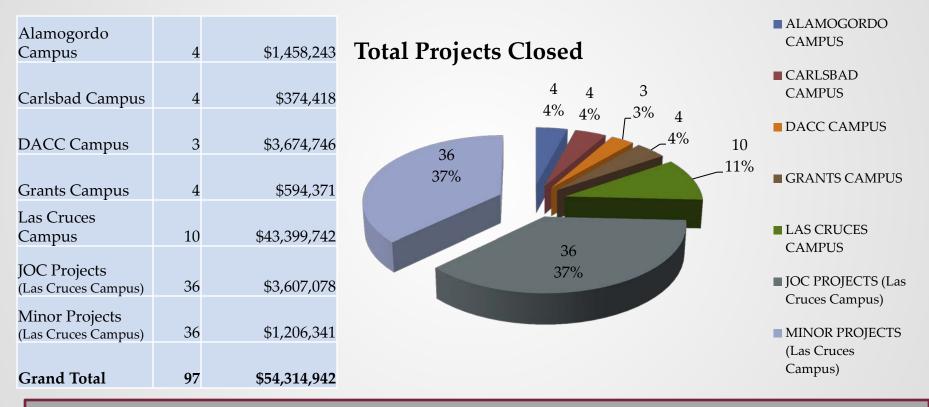
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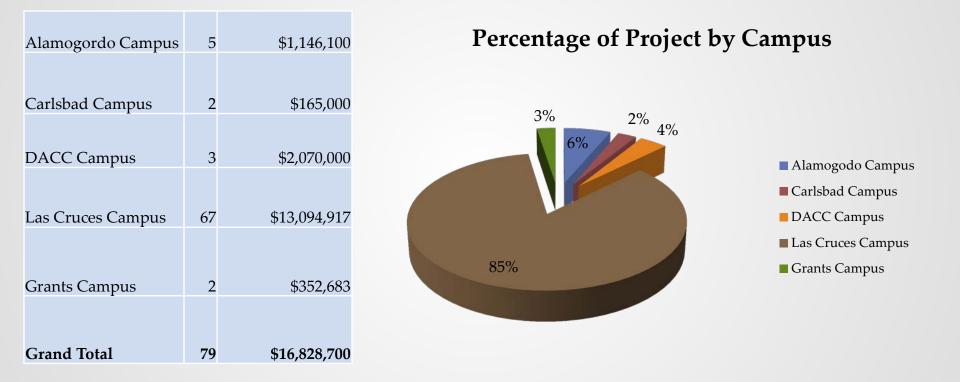
Total Number of Projects Closed in FY-15



- In FY-15, 97 projects were closed in various campuses
- Total funding of these projects is \$54,314,942
- The pie chart groups the closed projects by campus and distribution percentage.
- Data Source: Major Projects Summary Report



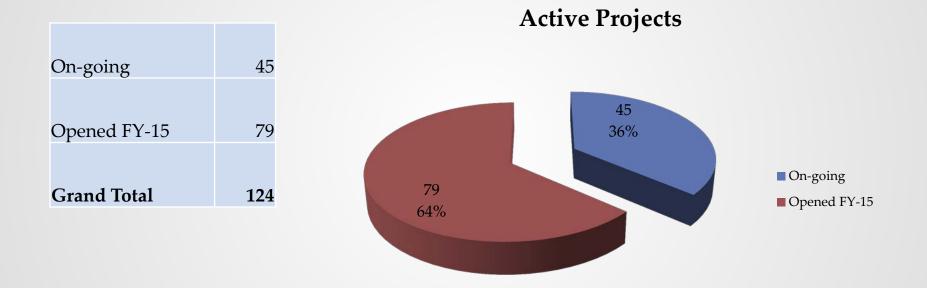
Total Number of Projects Opened in FY-15



- In FY-15, a total of 79 projects were opened in five campuses
- The total funding of these projects totals \$16,828,700
- The pie chart groups the projects by campus and distribution percentage
- Data source: Projects Status Report



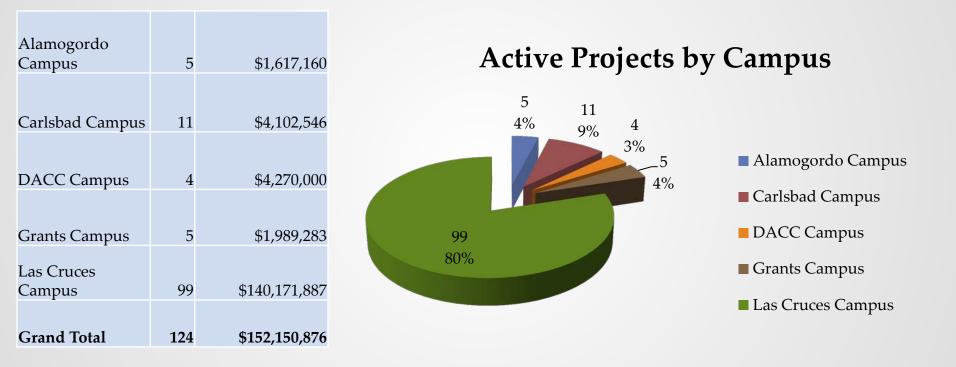
Total Active Projects Through FY-15



- Project Development & Engineering currently has 124 total projects in various phases
- 79 projects were started in FY-15 and 47 projects are carried over from previous years
- The pie chart illustrates the count of projects by category and distribution percentage
- Data source: Projects Status Report



Number of Active Projects by Campus



- There is a total of 124 active projects distributed among five campuses
- Total Banner budget is \$152,150,876
- The pie chart illustrates count of projects by campus and distribution percentage.
- Data source: Major Projects Summary Report



Active Projects Assigned as of 6-30-15

| Alejandro Flores | 11 |
|--------------------|-----|
| Alton Looney | 3 |
| Daniel Fernandez | 4 |
| Heather Watenpaugh | 4 |
| Heidi Frohnapfel | 12 |
| Heidi Hubble | 4 |
| Henry Espalin | 4 |
| Jon Padilla | 10 |
| Jose Loera | 5 |
| Leo Lucero | 10 |
| Lucio Garcia | 11 |
| Matt Ochoa | 2 |
| Nivia Franco | 8 |
| Orasa Vaught | 13 |
| Robert Herrera | 10 |
| Ron Tarazoff | 13 |
| Grand Total | 124 |

Projects Per Staff Member Alejandro Flores Alton Looney Daniel Fernandez 13 Heather Watenpaugh 10 Heidi Frohnapfel Heidi Hubble 13 Henry Espalin Ion Padilla 8 Jose Loera 10 4 11 Leo Lucero 10 Lucio Garcia 2 Matt Ochoa Nivia Franco Orasa Vaught Robert Herrera Ron Tarazoff

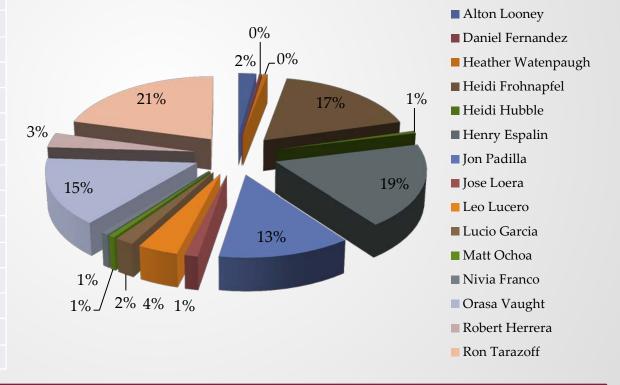
- The 124 active projects are assigned to 16 staff with varying roles in the department
- The pie chart illustrates the count of projects assigned by staff member
- Data source: Major Projects Summary Report and AiM



Total Dollar Value of Active Projects as of 6-30-15

| Alejandro Flores | \$ 17,984,774 |
|--------------------|-------------------|
| Alton Looney | \$ 2,876,566 |
| Daniel Fernandez | \$ 451,606 |
| Heather Watenpaugh | \$ 747,000 |
| Heidi Frohnapfel | \$ 23,498,580 |
| Heidi Hubble | \$ 774,719 |
| Henry Espalin | \$ 25,079,885 |
| Jon Padilla | \$ 17,243,780 |
| Jose Loera | \$ 1,754,877 |
| Leo Lucero | \$ 5,254,464 |
| Lucio Garcia | \$ 2,443,022 |
| Matt Ochoa | \$ 831,979 |
| Nivia Franco | \$ 1,035,136 |
| Orasa Vaught | \$ 19,964,498 |
| Robert Herrera | \$ 4,411,794 |
| Ron Tarazoff | \$ 27,798,197 |
| Grand Total | \$ 152,150,876 |

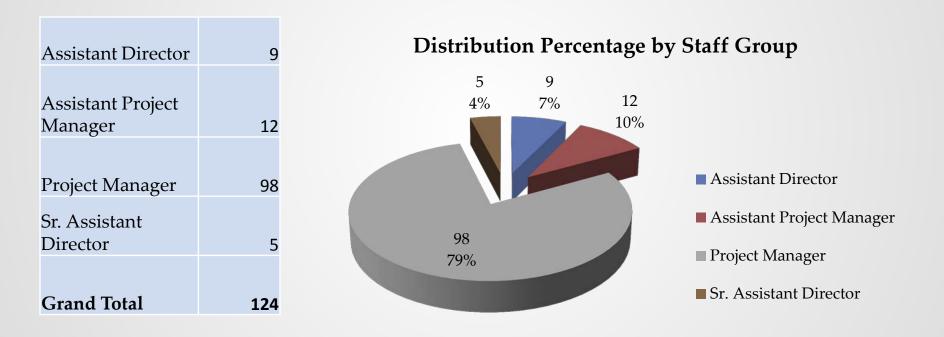
Distribution Percentage of Projects



- The pie chart illustrates the percentage of dollar value assigned by staff member
- Data source: Major Projects Summary Report and AiM



Projects Assigned by Staff Group

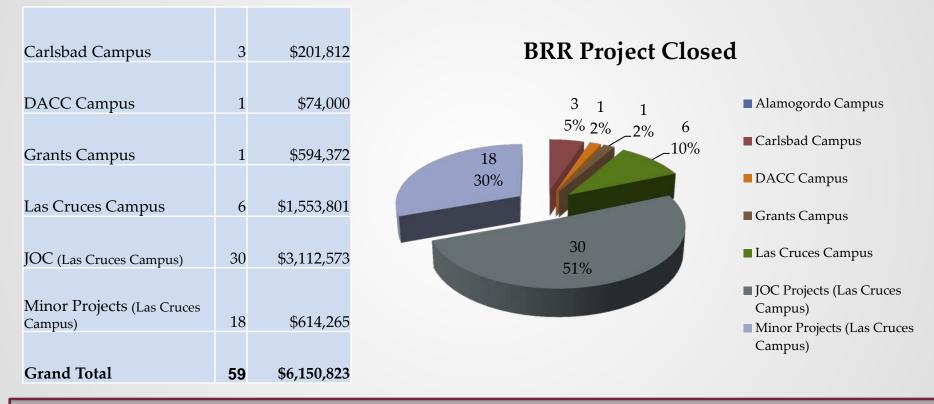


• The pie chart illustrates the count and distribution percentage of projects by staff group

• Data source: Projects Status Report



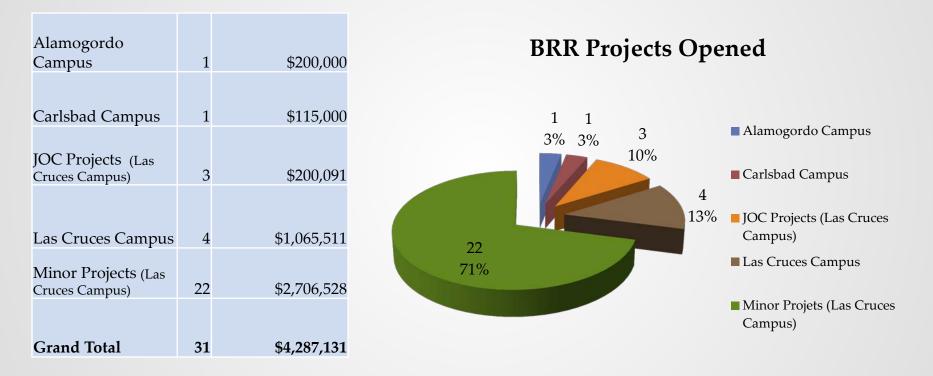
Number of BRR Funded Projects Closed in FY-15



- In FY-15, 59 projects were BRR funded from FY-12 FY-15 allocations
- The total dollar amount of the BRR funded projects closed is \$6,150,823
- The pie chart groups the closed projects by campus and category
- Data source: Major Projects Summary Report



Number of BRR Funded Projects Opened in FY-15



- In FY-15, 31 projects were BRR funded from FY-12 FY-15 allocations
- The total dollar amount of BRR funded projects comes to \$4,287,131
- The pie chart groups the opened projects by count and distribution percentage
- Data source: Major Projects Summary Report



FY-15 -V- FY-14



Total Number of Projects Closed in FY-14 & FY-15

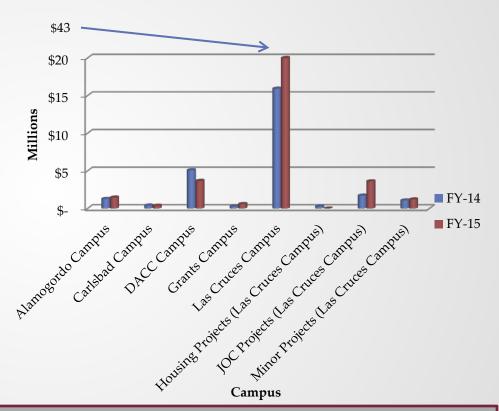
| | FY-14 | FY-15 | 40 35 |
|---|-------|-------|--|
| Alamogordo Campus | 4 | 4 | 30 30 30 |
| Carlsbad Campus | 3 | 4 | 30 30 25 15 10 |
| DACC Campus | 3 | 3 | |
| Grants Campus | 4 | 4 | |
| Las Cruces Campus | 9 | 10 | Campus campus campus campus campus campus campus |
| Housing Projects (Las Cruces Campus) | 2 | 0 | Those and Callaba DAC Grants Cruces Cruces Cruces Cruces |
| JOC Projects (Las Cruces Campus) | 25 | 36 | Ala Transferts La rojects La rojects |
| Minor Projects (Las Cruces Campus) | 23 | 36 | Hamosondo Canqués Canq |
| Grand Total | 73 | 97 | Campus |

- The Major Projects Summary Report revealed that 97 projects were closed in FY-15
- The Major Projects Summary Report revealed that 73 projects were closed in FY-14
- The Bar graph groups the closed projects by FY, count, and campus



Total Funding of Projects Closed in FY-14 & FY-15

| | FY-14 | FY-15 |
|---|--------------|--------------|
| Alamogordo | | |
| Campus | \$1,272,057 | \$1,458,243 |
| Carlsbad Campus | \$399,117 | \$374,418 |
| DACC Campus | \$5,089,467 | \$3,674,746 |
| Grants Campus | \$286,111 | \$594,371 |
| Las Cruces Campus | \$15,922,603 | \$43,399,742 |
| Housing Projects (Las Cruces Campus) | \$278,525 | \$0 |
| JOC (Las Cruces Campus) | \$1,710,001 | \$3,607,078 |
| Minor Projects (Las Cruces Campus) | \$1,067,133 | \$1,206,341 |
| Grand Total | \$26,025,019 | \$54,314,942 |

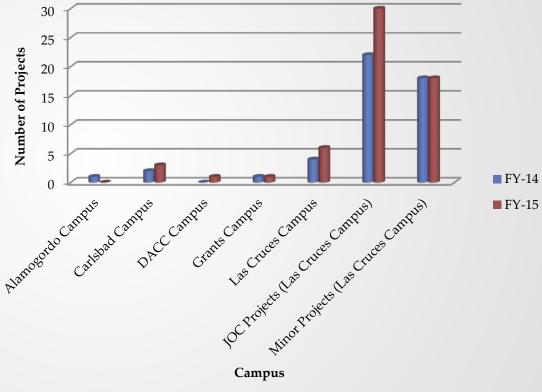


- The Funding for the 97 projects closed in FY-15 is \$54,314,942
- The Funding for the 73 projects closed in FY-14 is \$26,025,019
- The Bar graph groups the closed projects by FY, dollar amount, and campus
- Data Source: Major Projects Summary Report



Total Number BRR of Projects Closed in FY-14 & FY-15

| | FY-14 | FY-15 |
|---------------------------------------|-------|-------|
| Alamogordo Campus | 1 | 0 |
| Carlsbad Campus | 2 | 3 |
| DACC Campus | 0 | 1 |
| Grants Campus | 1 | 1 |
| Las Cruces Campus | 4 | 6 |
| JOC Projects (Las Cruces Campus) | 22 | 30 |
| Minor Projects (Las Cruces Campus) | 18 | 18 |
| Grand Total | 48 | 59 |



- In FY-15, 59 BRR projects were closed; in FY-14, 48 BRR projects were closed
- The Bar graph groups the closed projects by FY, count, and campus
- Data Source: Major Projects Summary Report



Total Funding of BRR of Projects Closed in FY-14 & FY-15

| | FY-14 | FY-15 |
|---------------------------------------|---------------------------|-------------|
| Alamogordo | | |
| Campus | \$76,899 | \$ 0 |
| Carlsbad Campus | \$324,117 | \$201,812 |
| DACC Campus | \$ 0 | \$74,000 |
| Grants Campus | \$74,118 | \$594,372 |
| Las Cruces Campus | \$64,204 | \$1,553,801 |
| JOC Projects (Las Cruces Campus) | \$1,458,518 | \$3,112,573 |
| Minor Projects (Las Cruces Campus) | \$900 <i>,</i> 563 | \$614,265 |
| | #2 000 12 1 | ¢(450 000 |
| Grand Total | \$900,303 \$2,898,421 | \$6,150,823 |

FY-14

- The Funding for the 48 projects closed in FY-14 totals \$2,898,421
- The Funding for the 59 projects closed in FY-15 totals \$6,150,823
- The Bar graph groups the closed projects by FY, dollar amount, and campus
- Data Source: Major Projects Summary Report

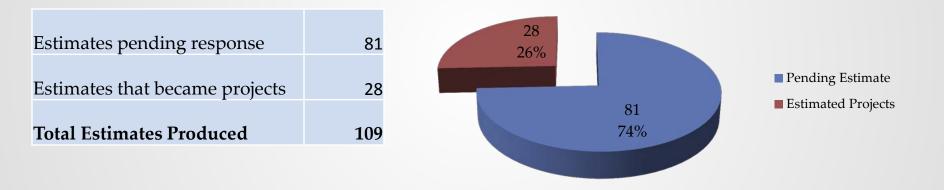


Other Measures



Total Budgetary Estimates in FY-15

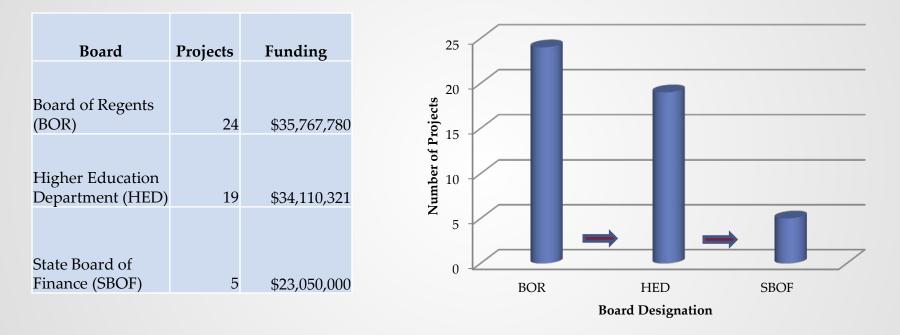
Percentage of Estimates



- 109 Budgetary Estimates were drafted for various potential projects in FY-15
- A total of 28 estimates became active projects
- The Pie chart illustrates the percentage and count of Budgetary Estimates by category
- Data source: AiM & ProEst



Board Approvals FY-15



- A total of 24 projects required Board approval in FY-15
- All 24 projects were presented to the Board of Regents
- 19 projects were presented to the Higher Education Department
- 5 projects required State Board of Finance approval
- Data Source: BOR, HED, SBOF agendas



Project Duration FY-13, FY-14, & FY-15

| Category | FY-13 | FY-14 | FY-15 |
|-----------------------------|-------------|------------|------------|
| Projects Tallied | 83 | 44 | 60 |
| Total Days | 41,203 | 19,479 | 27,054 |
| Average Days Per Project | 496 | 443 | 450 |
| Total Funds | \$9,114,166 | | |
| Average Funds Per | | | |
| Project | \$ 109,809 | \$ 136,243 | \$ 109,978 |

- Total and Average Days are equal to calendar days within the respective year
- Total and Average Funds are equal to the total funding allocated in the respective year
- The project "Start Date" is equal to the date it was requested to be opened in AiM
- The project "End Date" is equal to the date it was closed or requested to be closed in AiM
- Data Source: Major Projects Summary Report & AiM



Staff Achievements In FY-15

- Internal promotions: Two in FY-15
 Assistant Project Manager to Project Manager, Ron Tarazoff
 Assistant Project Manager to Project Manager, Robert Herrera
- New hires: One in FY-15
 - Heather Watenpaugh, Project Manager
- Retirements: Two in FY-15
 - Robert Segreto, 20 years of service
 - Michael Paul, 18 years of service



Meeting & Training in FY-15

- In FY-15 PD&E staff attended a series of internal trainings and staff meeting focused on:
 - > 13 project management subjects
 - ➢ 3 technical subjects
 - ➤ 3 specialty subjects
- In FY-15, PD&E staff facilitated 15 Project Kick-off meetings, on projects varying in size.
- Management continues to administered a series of internal weekly Round Table meeting to discuss current processes, procedures, and industry topics, to facilitate efficiency and continuity within the department

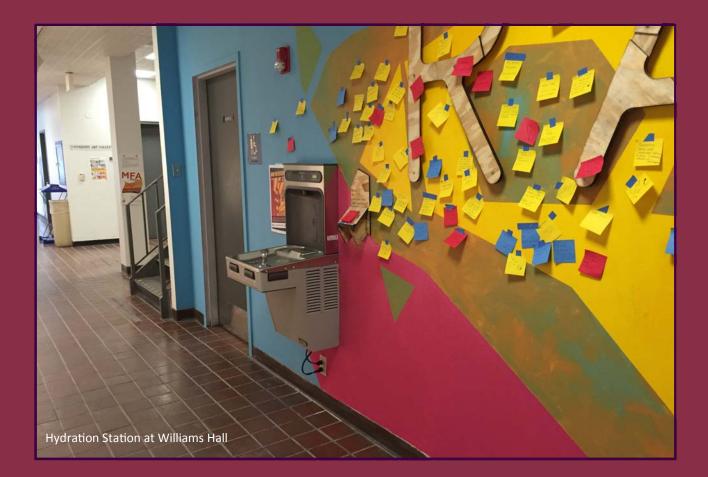


Questions?



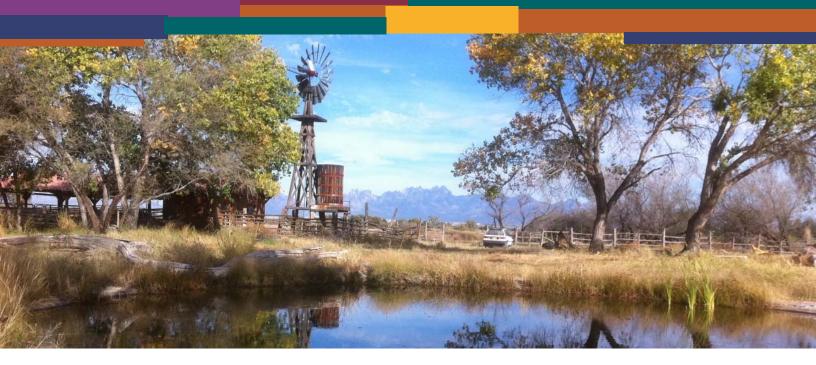


Facilities and Services Office of Sustainability 2014 Annual Report



Be a Green Aggie at NMSU!

Table of Contents



10 Table of 2014 Summary Office of Energy Conservation and Green RecycleMania Letter from Mgr. Sustainability Contents Management Modernization Aggies Project 15 16 11 12 13 Waste **Sustainability** Green 2014 in Pictures Outreach Acknowledgements **Buildings** Reduction Council **"THE FIRST RULE OF SUSTAINABILITY IS TO** Wait! Wait! ALIGN WITH NATURAL FORCES, OR AT LEAST NOT TRY TO DEFY THEM." Don't print me! PAUL HAWKEN BLifeback Bunten

2014 Summary

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
 Installed a total of 32 hydration stations total count to eight on Las Cruces campus and • Continued to educate the campus and Las 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

- 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.

jani



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

Office of Sustainability (OoS)

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



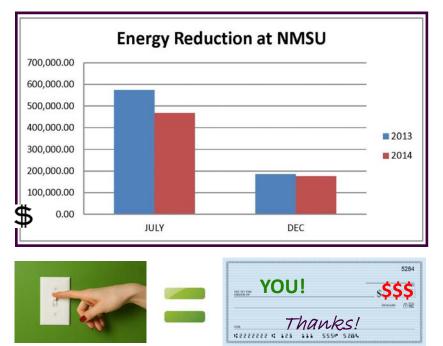
Jett Hall Dean's Office – doing their part to reduce waste on campus by providing ceramic coffee cups instead of paper or Styrofoam cups that end up in the landfill

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.

Energy Management





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.

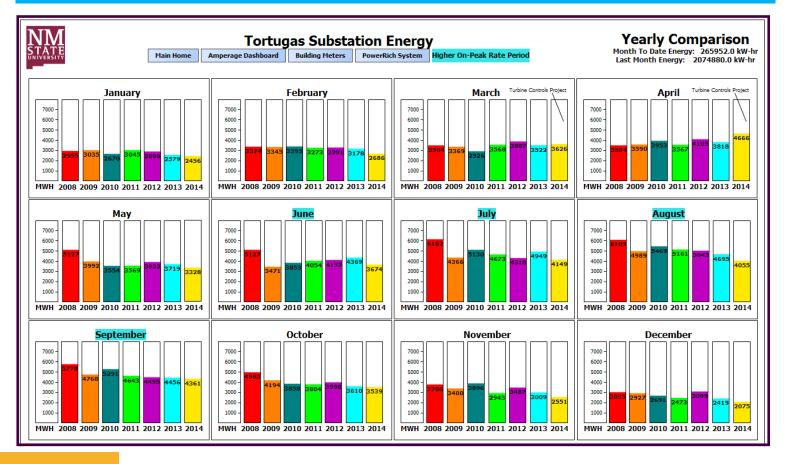
This is equivalent to **eliminating the annual greenhouse gas emissions** of:

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



Conservation and Modernization Project

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!**



Williams Hall building monitor "Just-in-Time" site walk-through

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

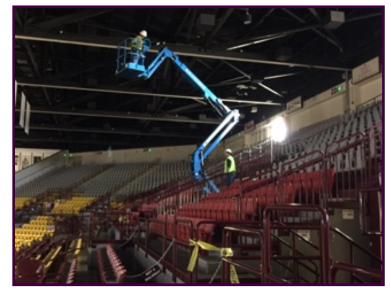
Streetlight statistics

- 90 poles
- 149 new LED heads



Energy Conservation Measures

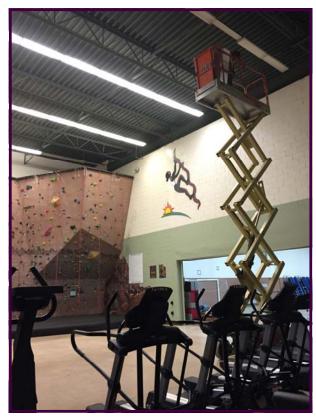
- ECM 1 Interior lighting
- ECM 2 Exterior lighting
- ECM 3 Ext. Pole-mounted lighting
- ECM 6 Retro-commissioning
- ECM 7 VAV retrofit
- ECM 10 Economizer upgrade
- ECM 12 Chilled water pump bypass



Using a lift in Pan Am stadium to retrofit interior lighting

Conservation and Modernization Project

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



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



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





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.



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 <u>here</u>

Green Aggies



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



Sustainably-oriented tees advertising the OoS and EEC

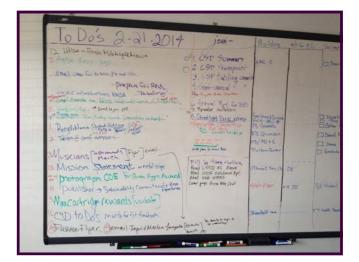


OASIS student organization leadership team





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



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)



<u>Statistics for 2014</u> Colleges and Universities: 461 Students and Staff: 6.3 million Total Recycling and Composting: 85.6 million lbs





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

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





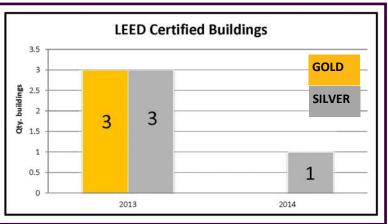
Green Buildings

| 2014 LEED Certified Buildings | | | | | |
|-------------------------------|---------------|----------------------------|-----------------|--|--|
| Building | Pts. Achieved | Certification Level | Architect | | |
| DACC | 52 | Silver | Williams Design | | |
| Sunland Park Phase III | | | 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.

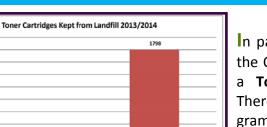
We continue to build to LEED standards in our new Undergraduate Learning Center as well as the new Domenici Building (completed in 2014, but not yet certified). The Corbett Center remodel under construction in 2014 will not be LEED certified due to the difficulty of the remodel.





Sunland Park Phase III

Waste Reduction



2014

2000

1800

1600 1400

1200

800

200

270

8 600 400 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.

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.



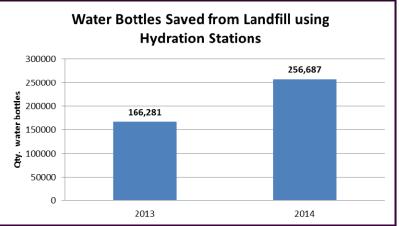


Skeen Hall toner recycling box in 2nd floor break room

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.





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



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Outreach

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

Sustainability Council

Join the Fun! Learn about Sustainability at NMSU!









Suzanne Michaels speaking to Council in July

Council Xmas party

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 <u>stemself@nmsu.edu</u>.

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 <u>newcomer@nmsu.edu</u>

| 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 | | |

Special thanks to the following people:

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

Individuals

Sharon Andersen Jocelyn Apodaca **Greg Block** Mike Boyer Pat Chavez Ada Ciuca Jean Conway Sativa Cruz 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

Mother Nature Matt Niedzwiecki Luis Rios David Shearer Dario Silva Mark Uchanski Greg Walke David White

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.



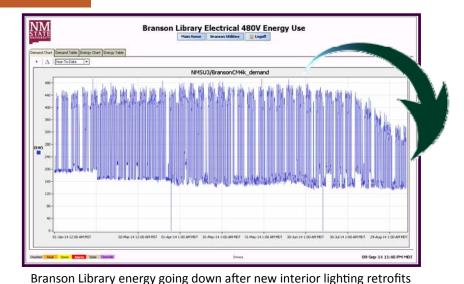
Newly elected President Carruthers "discovering sustainability" with the Sustainability Council

"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

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2014 in Pictures

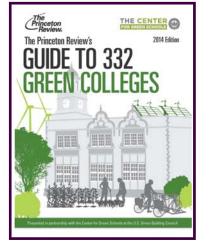




Chancellor Carruthers learning about bamboo as a rapidly renewable material at Freshman Move-In Day



Earth Day tabling



NMSU in the "Guide to 332 Green Colleges"

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

<image>

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 | <u>sustain@nmsu.edu</u> | <u>www.sustainability.nmsu.edu</u>