

***Fort Carson
Sustainability
Guide***

2011-2012

**Knowing Your Piece of the
Sustainability Puzzle**



Introduction

Fort Carson has an obligation to Soldiers, Family members, staff and its neighbors in the Pikes Peak Region to operate sustainably. Having enough resources (water, energy, healthy environment, social services, jobs, etc.) is something everyone has a stake in taking care of – now and for the generations to come.

Sustainability is the Army's strategy for the environment and is accomplished by focusing on the bottom line of sustaining: "Mission - Community - Environment - Economy".

Additionally, in April of 2011, Fort Carson was designated as an Army "Net Zero" installation for energy, water and waste by the Assistant Secretary of the Army for Installations, Energy and Environment. The Net Zero designation will challenge Fort Carson's already robust energy, water and waste sustainability goals and to advance the resource-conscious posture of today's Army.

The Net Zero energy designation will require Fort Carson to produce as much energy on site as it uses through aggressive conservation and efficiency efforts, including finding ways to capture and use waste energy and pursue more renewable energy initiatives.

Operating as a Net Zero water installation means the Mountain Post will conserve and re-purpose water. One way to achieve this goal is to reuse gray water generated from showers and laundries for irrigation of lawns and trees.

Fort Carson will also ramp up efforts to reduce, reuse and recover waste. Converting appropriate waste materials into usable resources will ultimately reduce and eliminate much of the need for costly landfill disposal. At the front end of Net Zero waste efforts is sustainable procurement; the Installation will purchase more environmentally-preferable products with high post-consumer recycled content and less packaging.

The Sustainability Guide is a tool for commanders, Soldiers and civilian staff to learn how to perform their jobs in a manner so that Fort Carson achieves its sustainability goals and net zero objectives for energy, water and waste. (See sustainability goals listed on the inside back cover.) Individuals at every level are challenged to think about how their current actions impact Fort Carson's future ability to carry out its mission.

Information is also provided for individuals to carry sustainable practices into their own lives.

Readers are encouraged to use the information in the Sustainability Guide to change old habits and perhaps create new ideas on how to become more sustainable.

"Best Hometown in the Army - Home of America's Best!"



**SUSTAINABLE
FORT CARSON**
RIGHT ACTIONS. RIGHT NOW!

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Know your community

A community is defined by its citizens and its “health” is measured by how well its citizens are doing. Community health measurements, or “indicators,” are far ranging and include employment opportunities, health care availability, recreation, crime rates, the quality of schools, civic engagements and other factors important to a community.

Ensuring our community of Soldiers, Families, retirees and the workforce thrives, is inseparable from overall mission accomplishment – you can’t have one without the other.

Communication is essential to understanding if indicators are trending in the proper direction and to making sure the Installation and the community are working toward compatible goals. The Fort Carson Public Affairs Office (PAO) is the official communication entity for the Installation. The PAO manages communication through Fort Carson Mountaineer articles, news releases, educational classes on media awareness, guided tours, Fort Carson websites, social networking sites such as Facebook and other announcements.

The Directorate of Family and Morale, Welfare and Recreation (DFMWR) is charged with the well-being, fitness and recreational opportunities afforded to Soldiers and their Families. Alongside these opportunities is Army Community Services (ACS), which manages extensive Soldier and



Family-assistance programs, such as financial assistance, resiliency training and parenting classes.

Other agencies involved in the health and well-being of our Installation community include Evans Army Community Hospital and the Provost Marshal Office, who play roles in medical care and in keeping Fort Carson a safe place to live and work, respectively.

Additionally, the Warrior Family Community Partnership (WFCP) integrates existing systems of support and services to Fort Carson Soldiers and their Families to assure an optimal quality of life while they serve our nation.

The Colorado Springs and Fort Carson communities have historically had positive relationships with each other through proactive communication, partnership and interagency cooperation. Cultivating healthy communities will continue to be essential with both communities growing in the coming years.

On a personal level...

Look online to see how you can participate in groups and activities to get to know your community – become involved. Check out your city or county’s websites. Join a community garden. Consider becoming a patron of art and cultural events.

Become a volunteer with agencies such as the American Red Cross, ACS (ACS Volunteer Coordinator, 526-1082), WFCP (526-8749) or other community volunteer organizations.

Participate in wellness and resiliency programs on Post.

Start or join an existing Neighborhood Watch program where you live.

Volunteer to become a speaker for PAO – your expertise is needed to communicate our story.

Use your \$ sustainably

A community the size of Fort Carson has a substantial impact on the types of goods and services provided locally. As the demand for buying “green” products continues to increase, so does the supply the market will provide, thereby driving down the cost and making the choice to purchase these items easier.

Buying environmentally-preferable products has a variety of meanings. It is most commonly thought of as consisting of recycled-content or being less harmful to people and the environment, as in the case of cleaning products, paints, adhesives, etc. Often, the products are manufactured in ways less-damaging to the environment.

It can, however, also mean goods and services produced locally instead of in another state or country. Purchasing locally-produced goods and services drastically reduces transportation costs added to the price tag, emissions from transport and benefits the local economy by keeping money in our community.

Government purchasing is becoming more sustainable through such purchasing avenues as the on-Post Envision supply store and Government Services Administration (GSA) catalogues that offer an increasing number of environmentally-preferable items. Additionally, many of the items are produced by people with special needs or economically-disadvantaged organizations stimulating unique employment opportunities.

To learn about sustainable products and services, the following government websites provide a good starting point: <http://www.gsa.gov/portal/category/26433> or <http://www.epa.gov/oppt/epp/>.

Fort Carson leadership continued its commitment green procurement when it re-signed the Sustainable Paper Use Policy in 2010. The policy raised the percentage of post-consumer recycled content from 30 to a minimum of 50 percent. As a result, the use of 50 percent recycled-content paper increased 1,236 percent in one fiscal year. The policy also mandates recycling, reuse, increases the employee-to-printer ratio, encourages double-sided printing and using digital distribution versus paper when possible.



Sustainable Fort Carson completed life cycle performance reviews of five products that have significant environmental impacts: batteries, mattresses, lighting, cleaning systems and laundry systems. In each area, different technologies and several products were examined for their sustainability impacts in the areas of energy and water use, transportation, materials management and social performance such as human health impacts.

To get a copy of the Fort Carson Sustainable Paper Use Policy and the Life Cycle Performance Reviews, contact the Sustainability Planner at 526-9777.

Even if you are not the purchasing agent for your unit or activity, you can make a difference by suggesting sustainable alternatives to your standard supplies.

On a personal level...

Buy non-toxic cleaning products, paints and carpeting for your home to keep indoor air quality healthy.

Purchase Energy Star-rated appliances to reduce utility use and costs.

Buy local to support local businesses and reduce transportation costs of goods and services.

Buy organic foods — they are healthier for your family and the environment.

Environment 101 & beyond

Fort Carson has extensive education and outreach programs to foster awareness of environmental and sustainability considerations before potential problems in these areas begin.

There are several courses required on Fort Carson to ensure people assigned here are knowledgeable about environmental sensitivities whether working in offices, unit motorpools or training down range. These individuals are then counted on to educate their unit/activity members and to be the point of contact for unit/activity environmental programs.

The following environmental and sustainability-related training courses are provided at Fort Carson:

Hazardous Waste Awareness Training is mandated by policy to all Fort Carson personnel (military, civilians and contractors) to ensure the safe and proper management of hazardous wastes. For more information, call 526-1686.

Building Energy Monitors (BEMs) and Energy Conservation Officers (ECOs) are selected and trained to ensure each unit follows the Garrison Commander's energy policy. The BEMS and ECOs establish and enforce energy programs for

facilities in their units. For more information, call 526-1739.

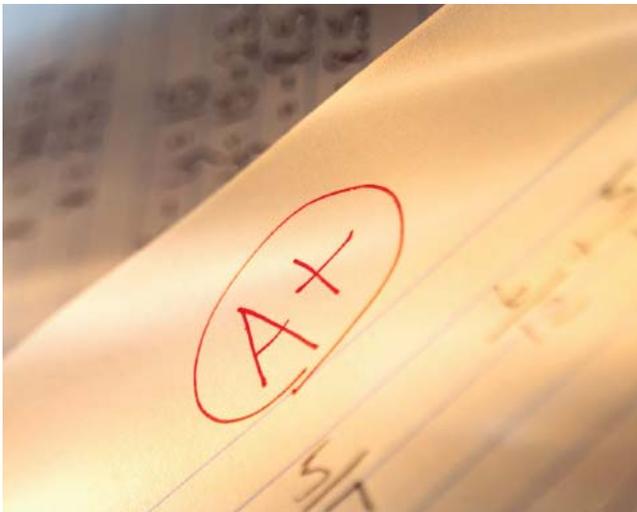
Environmental Protection Officers (EPOs) are selected and placed on additional duty orders by commanders or directors and are trained in environmental requirements specific to Fort Carson. The EPOs then act as liaisons within units and activities to ensure they are in compliance with environmental regulations. Certification for EPOs is offered in a one-week, hands-on class approximately every six weeks in building 2410. For more information, call 526-4446.

Maneuver Damage Control Training classes provide information on how to perform military training with the least amount of impact to the land, waterways and wetlands. Classes are offered the third Wednesday of each month from 1300-1400 in building 9550 (Range Control). Additional classes are available upon request. Each unit should have at least one Soldier (E-6 or above) certified in Maneuver Damage Control Training. For more information, call 526-6374.

Environmental Management System (EMS) Awareness Training is mandatory for each military unit/activity, civilian directorate, contractors and tenants. The goals of the EMS Awareness Training are to:

1. Gain an understanding of Fort Carson's Environmental Policy, which includes:

- ✓ taking individual responsibility
- ✓ integrating mission, community and environment
- ✓ practicing environmental stewardship
- ✓ involving community, near and far
- ✓ reviewing sustainability performance
- ✓ rewarding improvement



✓ complying with laws and regulations

✓ communicating with all stakeholders

2. Learn about the Army and Fort Carson's environmental goals and strategies.

3. Review sustainability accomplishments at Fort Carson and throughout the Department of the Army.

4. Become aware of what your role is in achieving the long-range goals of EMS.

5. Gain an awareness of the importance of global sustainability and individual actions that promote it.

For more information, call 526-1684

EMS Competence Training is provided to those individuals performing tasks for, or on behalf of, Fort Carson that have the potential to cause a significant environmental impact. The purpose of the training is two-fold:

✓ To provide a greater in-depth awareness of environmental aspects and impacts resulting from the work done at each organization on Fort Carson.

✓ To develop an action plan for the organization to manage impacts.

For more information, call 526-1684.

Sustainability awareness and education is a continuous learning process. A sustainable Army simultaneously meets current as well as future

mission requirements worldwide, safeguards human health, improves quality of life and enhances the natural environment.

In keeping with this definition, Sustainable Fort Carson continues to pursue goals established in 2002 to improve energy efficiency and use renewable energy sources; significantly reduce drinking water use; eliminate waste to landfills; purchase sustainable products and services; provide fuel and transportation alternatives to the single occupant vehicle; significantly reduce air emissions including greenhouse gases; create spaces and places in a manner that enhances living and working on the Installation; and, maintain ranges and practice good stewardship of training lands – for current and future generations.

Individuals are encouraged to learn more about sustainability and its meaning in their life by researching the many opportunities on the web and by contacting the Sustainable Fort Carson Team and 526-9777.

On a personal level...

The Internet can be used as a classroom for sustainability and environmental education – type in a search word and find out more.

Attend the community events geared toward environmental and sustainability education, including Pikes Peak Earth Day held each April.

Become a sustainability champion — pass along information learned to coworkers and family members.

Training today & tomorrow

Sustaining training lands is critical to ensuring the land provides quality, realistic training opportunities for our Soldiers. The following pages outline environmental and sustainability issues unique to training lands down range and at Pinon Canyon Maneuver Site (PCMS).

Keep history intact

Fort Carson and PCMS lands have a historical context spanning the full range of human occupation of North America. The history of the area dates from 12,000 years ago to the acquisition of Fort Carson as an Army training site during World War II and through the Cold War era.

All major prehistoric and historic cultural periods are represented on our training lands. Proper management of cultural resources is required to comply with historic preservation laws, mandates and regulations.

Proactive stewardship of cultural resources also promotes positive relations among the military, educational, scientific and public communities.

Keep the following in mind while training on Fort Carson and PCMS lands to help protect cultural resources:

- ✓ Collecting artifacts is prohibited by federal laws and regulations, as well as Army and Fort Carson regulations.
- ✓ Heed posted signs such as “Off Limits,” “Limited Use,” “Restricted Area” and other markers, such as Seibert Stakes, which are there to protect significant cultural sites from training damage.
- ✓ If you discover what might be human remains or cultural archaeological/materials, do not disturb the area and immediately contact the Fort Carson Cultural Resources Program Manager at 526-3806 or the PCMS Cultural Resource Manager at 524-0532.
- ✓ Ensure that all training, construction and digging activities have been coordinated with Cultural Resources Program staff before your start date.

Waterway and wetland dos and don'ts

Special legal protections are in place to ensure the water quality of waterways and the preservation of wetland habitats. The following measures help protect our water resources:

- ✓ Do not dispose of hazardous or toxic materials down storm drains, which are part of waterway systems that may provide a drinking water source downstream.
- ✓ Plan and conduct training to avoid damage to streams, springs, ponds and wetlands. Damaging vegetation in these areas increases soil entering waterways, which impacts water quality and wildlife habitat.
- ✓ Follow field sanitization guidelines related to liquid and solid waste disposal when training.

Stop spills

The main causes of spills are: loading and unloading vehicles and equipment, transferring materials or waste from one container to another, accidents and improper storage of products.

In order to prevent spills:

- ✓ Service and fuel vehicles in authorized areas only.
- ✓ Always store materials in secondary containment to prevent draining products into the environment.



✓ Have spill response materials ready nearby.

✓ Use the proper equipment for chemical transfers.

Petroleum, oil or lubricant (POL) spills are dealt with according to the amount of the spill – whether it is less than or greater than five gallons.

A POL spill of less than five gallons, or covering less than 100 square feet, must be cleaned up by the unit and does not require reporting.

A POL spill greater than five gallons or covering more than 100 square feet, must first be reported to the Range Control if down range or called in to the Fire Department if in the cantonment area of Fort Carson or PCMS.

Soil or dry sweep used for spill cleanup has to be taken to the Hazardous Waste Storage Facility (HWSF), building 9246, for disposal.

All spills, regardless of size, which enter a water source, such as a storm drain or stream, must be reported to the Fort Carson Stormwater Program Manager at 526-1693.

Leave trees standing tall

Trees grow slowly in Colorado due to the poor, thin layer of soil and the arid climate. It can take up to 140 years for a tree to mature to the point that it can provide some tactical concealment for military vehicles.

Forest ecosystems also provide habitat for numerous wildlife species and other essential services such as the uptake of pollutants and soil protection. Use the following considerations to help Fort Carson maintain a healthy forest ecosystem when training:

✓ Be careful not to damage trees during training.

✓ Do not cut trees down for concealment or other purposes.

✓ Avoid sharp turns whenever possible to minimize damage to tree roots.

Training and sustaining

Damaged land can't effectively sustain our training

mission. Several land management efforts are in place to keep the land in training ready shape.

A "Limited Use Area" Program is in effect on Fort Carson and PCMS to allow land to stabilize and vegetation to regenerate in highly disturbed areas. Map overlays delineating the "Limited Use Areas" are provided to units by the Range Control.

Informational signs are placed in training areas, and various classroom briefings are provided to make people aware of how to minimize damage from training. Commanders are asked to avoid maneuvering through these areas, except on established roads and trails.

While performing maneuvers, a few adjustments can spare the land considerable vegetation and soil damage:

✓ Maneuvering in wet soil can cause damage to the land. Use alternate routes when possible.

✓ Use only established roads for all vehicle administrative movements.

✓ Do not maneuver when soils are saturated with water, which causes significant damage to the land.

✓ Use of ditches and shoulders for tank trails is prohibited.

✓ Avoid neutral steers and sharp turns by tracked vehicles when possible.

✓ Always backfill fighting positions when finished training.

✓ Use hardened crossings or existing roads for stream crossings.

✓ Beware of fragile wetland areas. If you need to cross the area, find an existing road, designated crossing or drive around it.

Units should have at least one person per company certified in Maneuver Damage Control Training. The program ensures Soldiers understand such useful things as requiring approval to dig anything larger than a foxhole and to always use drip pans with vehicles in the field.

Maneuver Damage Control Training also provides information about how environmental constraints down range can be integrated into training scenarios. "Limited Use Areas," for example, can be included in scenarios, such as mock minefields. For more information, call 526-6374.

When using smoke during training at Fort Carson and PCMS, be aware of wind conditions to ensure smoke stays inside the boundaries. Smoke leaving the Fort Carson and PCMS, depending where training is conducted, can pose a serious risk to drivers in the surrounding communities.

During high fire danger periods, commanders need to check with Range Control or the Fire Department before using tracers or pyrotechnics during training.

Prescribed burns tame wildland fires

Fort Carson and the PCMS experience numerous wildland fire events annually. While most are started by lightning, military training also accounts for several fires. All wildland fires are required to be reported immediately to both Range Control and the Fire Department.

The Fire Department and the Fort Carson Wildland Fire Team conduct prescribed fires (burns) on Fort Carson and PCMS annually. These controlled burns are designed to reduce the potential significance of wildland fire containment, the associated disruption to the military training mission and improve overall rangeland conditions, including wildlife habitat.

Watch out for wildlife

Diverse wildlife inhabit Fort Carson and PCMS. Units and wildlife have shared training lands successfully for many years through land and wildlife management practices that benefit both. Often vast training lands draw wildlife whose habitats have been displaced by development outside military installation boundaries such as at Fort Carson.

Roughly 300 species depend upon our habitats including: migrant and resident bird species; big game and small mammals; reptiles and amphibians; numerous fish species; and insects, spiders and other invertebrates.

Additionally, Fort Carson and the PCMS are



home to 43 animal species classified as sensitive (species that can only survive within a narrow range of environmental conditions and whose disappearance from an area is an index of pollution or other environmental change).

While training practice the following wildlife precautions:

- ✓ Do not feed wildlife. Feeding wildlife increases your chances of an unpleasant encounter with a wild animal. Wild animals can carry plague, mange, distemper, rabies and hantavirus. In Colorado, feeding big game animals (including deer), coyotes and foxes is illegal.
- ✓ Do not harass wildlife. State and federal laws protect all Installation wildlife.
- ✓ Avoid prairie dog colonies. Fleas from prairie dogs can carry bubonic plague and other diseases.
- ✓ Avoid old buildings, caves and enclosed structures small rodents may inhabit. Hantavirus, a deadly viral disease prevalent in the Southwest, is contracted through contact with disturbed, airborne feces or urine from infected rodents.
- ✓ Avoid bird nests. Several species of large birds of prey nest in early spring when snowstorms are still frequent. Avoid approaching, training or setting up camp near their nests especially during periods of winter weather in early spring or during the heat of the day in summer. Eggs and hatchlings can quickly die of exposure if the adult birds cannot return to their nest because of your presence.

✓ Birds, bats and other wildlife are sometimes trapped inside a building, or sometimes nest inside buildings, aircraft hangars and parked vehicles. Do not interfere with wildlife, contact the Fort Carson Wildlife Office for assistance at 524-5394 and when training at PCMS, call 524-0529.

✓ The rattlesnake is the only native venomous snake found on PCMS. If you encounter a rattlesnake in a building, yard or in a foxhole, back away slowly. Call the Fort Carson Wildlife Office at 524-5394 and leave the snake alone. If a rattlesnake is encountered at PCMS, call 524-0529.

All nongame species in Colorado, to include snakes, are protected and their harassment, taking or possession is prohibited except under limited circumstances.

✓ Small colored surveyor flags posted in the ground signal a wildlife study area; do not pull them out. Engineer's posts and a number of other devices and signs are also used to keep vehicles and people away from animals, their nests or study sites.

✓ Secure garbage, to include food items to minimize human-wildlife encounters.

✓ Be aware of mosquito-borne West Nile virus. Wear clothing that covers exposed areas of your body and/or use an insect repellent with DEET when you are outside during mosquito season. Avoid standing pools of water, which provide breeding sites for mosquitoes.

✓ The black bear is the largest surviving carnivore in Colorado. Black bears are omnivorous and their diet is largely dictated by availability, which means they will eat just about anything. Most of the encounters with bears on Fort Carson are in late summer and fall when the bears are putting on fat to tide them over the long winter hibernation. Bears are easily habituated to people, especially if food is involved.

To avoid unpleasant encounters with bears, Soldiers training downrange need to keep a clean camp.

If you encounter any wildlife that seems out of place, call the Fort Carson Wildlife Office at 524-5394 and when training at PCMS, call 524-0529.

On a personal level...

When recreating, hunting or fishing, take out what you brought in – wildlife doesn't need human trash. Things such as plastic from soda can six-packs can snare and end up killing birds.

Do not feed wildlife, it can draw larger predators to your area.

Dispose of cigarettes properly – in Colorado's arid climate poorly extinguished cigarettes pose a serious risk for wildland fires.

Whittling down waste

Growing population + increase in trash = a big, expensive disposal dilemma. To offset this dilemma, Fort Carson has a proactive recycling program to reduce landfill waste disposal and increase the stream of recyclable goods to be reused again.

Two recycle drop-off locations are open for office and household recyclables:

- ✓ The Recycle Center, building 155, located off of Wickersham Boulevard near Gate 3 is open 24 hours a day, seven days a week.
- ✓ The Post Exchange drop-off location at the southeast corner of the PX on Sheridan Avenue is open Monday through Friday from 7:30 a.m. to 3:00 p.m. and Saturday and Sunday from 8 a.m. to 4 p.m.

The Recycle Center and PX drop-off locations accept cardboard, mixed paper (white paper, newspaper, magazines, shredded paper, junk mail, etc.) aluminum, tin, plastic and glass as well as non-accountable/expendable metals. The Recycle Center now also accepts ink cartridges, laser cartridges and blue pallets that have "CHEP" painted on pallet.

The Recycle drop-off locations can not be used to dispose of household trash, furniture, electronic equipment or hazardous materials from either on or off the Installation. Efforts are underway to initiate collection of electronics in the future.

In addition to the two recycle centers, there are recycle clusters for the collection of cardboard, mixed paper, glass, plastic and aluminum located near facilities generating a high quantity of recyclable commodities.

Every maintenance facility on Post is provided with scrap metal, wood and cardboard collection containers.

In order to recycle wood products including pallets, packing and crating, tree trimmings and clean construction lumber, call the Fort Carson Recycle Program Manager at 526-5898.

Another valuable service offered by the Fort Carson Recycle Center includes the establishment of collection points within unit and

activity administrative areas across the Installation for the collection of mixed office paper, aluminum, plastic and small amounts of cardboard. These containers are serviced by recycle staff on a reoccurring basis. Personal office recycle bins are also available upon request.

The Recycle Center also maintains a brass-deforming machine used to crush expended .50 caliber ammunition turned in to the Installation Residue Point so the casings can't be reused or reloaded. The deformed brass is then sold as scrap metal.

A Recycle Incentive Program was launched to increase diversion of recyclable waste from going to the landfill while providing some significant rewards for participating battalions who turn recyclable materials in to the Fort Carson Recycle Center, building 155. For information, call 526-5898.

Installation housing residents can call the Fort Carson Family Housing contractor at 579-1605, ext. 211, for disposal assistance or if interested in requesting recycling bins for home use.

On a personal level...

Check with your waste management carrier about getting recycling bins for your home.

To find out how to properly dispose of household hazardous waste (used paints, cleaners, solvents, etc.) and electronics, visit <http://adm.elpasoco.com/Environmental%20Division/Household%20Hazardous%20Waste/Pages/default.aspx>.

Carry reusable, cloth bags for shopping to reduce the use of plastic or paper bags.

Purchase products with less packaging and reuse products when possible, including paper, plastic bags, gift bags, etc.



Water wise ways

Like energy, Fort Carson purchases its drinking water from the City of Colorado Springs. Water is a scarce resource in the region and due to cyclic drought conditions should always be used wisely and not wastefully.

Fort Carson and housing used approximately 850 million gallons of water in FY10. Even with all the growth on Fort Carson, water use since 2001 has been reduced by more than 20 percent through proactive Garrison and housing watering policies and initiatives such as rain sensors on irrigation systems.

There are two major areas where military units can conserve water:

Units are encouraged to use the Central Vehicle Wash Facility (CVWF) for washing military tactical vehicles. Using the CVWF saves Fort Carson 60 to 70 million gallons of water annually because the water is recycled for reuse at the same facility, with minimal water added to the system to offset evaporation.

Other water wasters are leaky Murdock valves at unit wash racks, which contribute up to 88 percent of water leaks. Wash racks should be inspected daily to ensure there are no Murdock valve leaks and that wash hoses have not been left running. To report a leaky Murdock Valve, call in a service order to the DPW base operations and contractor at 526-5345.

The Fort Carson Cheyenne Shadows Golf Course began irrigating with treated wastewater from the Installation sewage treatment plant in the 1970s – a real water saver.



On a personal level...

Consider xeriscaping landscapes with native plants (which require less water to sustain), rock and bark to reduce water use.

Install low-flow shower heads. This can save 50 to 75 percent of the water used for showering, which is typically heated water, so energy is also saved. Turn the water off while soaping up.

Control tap water use. Running water while brushing teeth, shaving or washing dishes wastes water.

Don't water on rainy or windy days to prevent unnecessary water use. Irrigation and outside water use account for almost half of a typical household's water consumption. Water early in the morning or evening to reduce evaporation of irrigation water and do not over water (two-to-three times per week for 30 minutes is adequate).

Check toilets for leaks. A few drops of food dye in the toilet tank will show if there is a leak. If the water in the bowl shows the dye, there is a leak. Also check faucets for leaks.

Did you know?

For an average family, the majority of indoor water is used in these areas.

- 27% flushing toilets
- 22% washing clothes
- 17% showering
- 15% using faucets
- 14% on leaks
- 2% taking baths
- 1% washing dishes
- 2% other uses

(Source Colorado Springs Utilities)

Dialing down energy use

Fort Carson's utility bill is that of a small city that continues to grow. In FY10, \$19.5 million was spent in utility costs, which included electricity, natural gas and water.

Small energy use adjustments on the job and at home can make a significant difference to energy consumed and costs to the Army.

✓ Turn off lights when not needed and use natural lighting as much as possible. Use task lighting and reduce overall room lighting.

✓ Replace incandescent light bulbs with energy efficient compact fluorescent light bulbs (CFLs). Light-emitting diode (LED) task lighting is also very energy efficient.

✓ Purchase only Energy Star-rated appliances and equipment.

✓ Turn off computer monitors when idle for more than five minutes.

✓ Reduce your electricity use from 11:00 a.m. to 6 p.m., which are peak electricity hours on Fort Carson.

✓ Set office thermostats to 65 degrees for heating in the winter and 78 degrees for cooling in the summer.

✓ Turn off heat when motorpool doors are open.

✓ Inspect facilities for energy leaks such as missing door sweeps and cracked windows. Call in services orders to the DPW base operations contractor at 526-5345 for repairs.

✓ Learn about the energy systems in your buildings. Newer buildings are designed to provide comfort using less electricity and fossil fuel. Tampering with energy systems can reduce efficiency and increase worker complaints.

On a personal level...

Energy savings measures taken at work easily translate to home habits that yield significant utility savings.

Buy CFLs or LEDs for your home. The CFLs use only 25 percent of the electricity that regular bulbs consume. CFLs may cost more than incandescent bulbs, but last 10 times as long and use so much less electricity, they have a lifetime cost that is much lower.

Remember to shut off power strips or unplug electrical devices and appliances when not in use – they still draw electricity even when not turned on.

Slow it down a little. Traveling at 55 mph provides better gas mileage when compared to higher speeds. Keeping tires properly inflated, performing regular oil changes and changing dirty air filters can increase fuel efficiency.

Do not let your vehicle idle – it burns more fuel than turning your vehicle off and on and increases wear and tear on the engine.

Ride a bike or walk to your destination. It is good for your health, physical well being and saves energy.



Getting there from here

Traffic here, traffic there, traffic, traffic everywhere.

Traffic congestion affects a number of issues including air quality, safety, security and just the frustration of getting to where you need to go.

Fort Carson is developing and implementing different options to improve traffic flow on the Installation and to encourage the use of alternate modes of transportation.

The Installation has added 8.5 miles of new running trails since 2008, created 8.5 miles of bicycle lanes on paved roads where there were previously none and constructed 2.8 miles of sidewalk improvements in an effort to encourage people to get out more and leave their cars behind especially in high density areas on Post.

Carpooling to work is a long-standing option for people living in the same area who work on Fort Carson. To register with other people commuting to Fort Carson, visit the City of Colorado Springs Metro Rides Ridesharing website at <https://rp.springsgov.com/rp/>. For more information about ridesharing initiatives at Fort Carson, call 526-9777.

Fort Carson implemented a “Give a Buddy a Ride” program on-Post. Soldiers, civilians, Family members or whomever may need a ride indicate so by standing at one of the designated stops marked with signs provided by the DPW. In this way, drivers in the area who are willing and able to give someone a ride to their destination can make arrangements on the spot. The program is entirely voluntary and people participate at their own risk.

A contracted shuttle bus system, or other method, is in discussion to provide service to riders living in Fort Carson housing and for those commuting to and from work on Post.

Master planning and engineering efforts are looking to maximize the ability of residents and staff to



get to where they need to without having to drive.

To reduce fossil fuel energy reliance:

- ✓ Use alternatively-fueled vehicles available at the Transportation Motor Pool (TMP), building 301, for administrative duties. Approximately 49 percent of Fort Carson’s administrative vehicles use alternative fuels.

- ✓ Consider implementing a telecommuting program for employees.

On a personal level...

Carpool, vanpool, bike or ride a bus to work – you save on fuel expenses, reduce traffic congestion and reduce air pollution. Federal vanpool participants can take advantage of up to \$230 per rider a month under the Army Mass Transportation Benefit Program. For more information, visit <http://asafm.army.mil/offices/asa/masstrans.aspx>.

Leave your car at home and walk to errands close by. It is great exercise.

Teleconference instead of requiring employees driving to a meeting location.



Who to call for more info.

Points of Contact

Sustainable Fort Carson Team Lead – 526-4648

Sustainability Planners – 526-4682/ 526-9777

Air Program – 526-6601/ 526-8001

Above Ground Storage Tanks/ Underground Storage Tanks Program – 526-1687

Asbestos, Lead and Toxics Programs – 526-1725

Cultural Resources Program – At Fort Carson: 526-3806/ At PCMS: 524-0532

Education and Outreach Program – 524-4925

Energy Conservation Program – 526-1739

Environmental Compliance Assessment Team – 526-0979/ 526-4340 (Team Lead)

Environmental Training Program – 526-4446

Hazardous Waste Program/Hazardous Waste Storage Facility – 526-8003

Maneuver Damage Control Training – 526-6374

Pest Control Management Program – 524-2124/ 526-5141

DPW Public Relations – 526-4320

Recycle Program – 526-5898

Restoration Program – 526-8001/ 526-8004

Stormwater Program – 526-1693

Wastewater and Drinking Water Program – 526-1730

Wildlife Program – At Fort Carson: 524-5393/ 524-5395/ At PCMS: 524-0529

Wildlife Law Enforcement - 524-5356/ 524-5394 (Directorate of Emergency Services)

Wildland Fire and Forestry Programs – 526-1329

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SUSTAINABLE FORT CARSON



Energy & Water Resources

Sustain all facility and mobility systems from renewable sources and reduce total water purchased from outside sources by 75% by 2027



Sustainable Transportation

Reduce automobile dependency and provide balanced land use and transportation systems



Air Quality

Reduce installation greenhouse gases (scope 1, 2 and 3) and other air pollutants to the lowest achievable emission rates



Sustainable Development

Create a community that encourages social, civic and physical activity while protecting the environment



Sustainable Procurement

All DOD and Fort Carson procurement actions support sustainability



Zero Waste

Total weight of solid and hazardous waste disposed of is reduced to zero by 2027, and every year thereafter



Sustainable Training Lands

Training ranges; maneuver lands; and associated air space capable of supporting current and future military training to standard while maintaining and sustaining training resources

To streamline efforts and communication, the original 12 goals were reviewed and updated.

The objectives of Community of One, Partnership, Sustainability Training and SEMS were integrated into the present goals.

The Air Quality goal was broadened to encompass greenhouse gas emissions. The High Performance Buildings and Master Planning goals were combined to form Sustainable Development.

Disclaimers: Fort Carson in no way implies federal endorsement of the organizations or companies mentioned in the Fort Carson Sustainability Guide.

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