JBLM Environmental Awareness Training

Sustainability Program, Joint Base Lewis-McChord

20 Dec 2016

Trust and Transparency, Collaboration, & Collective Responsibility.

Introduction

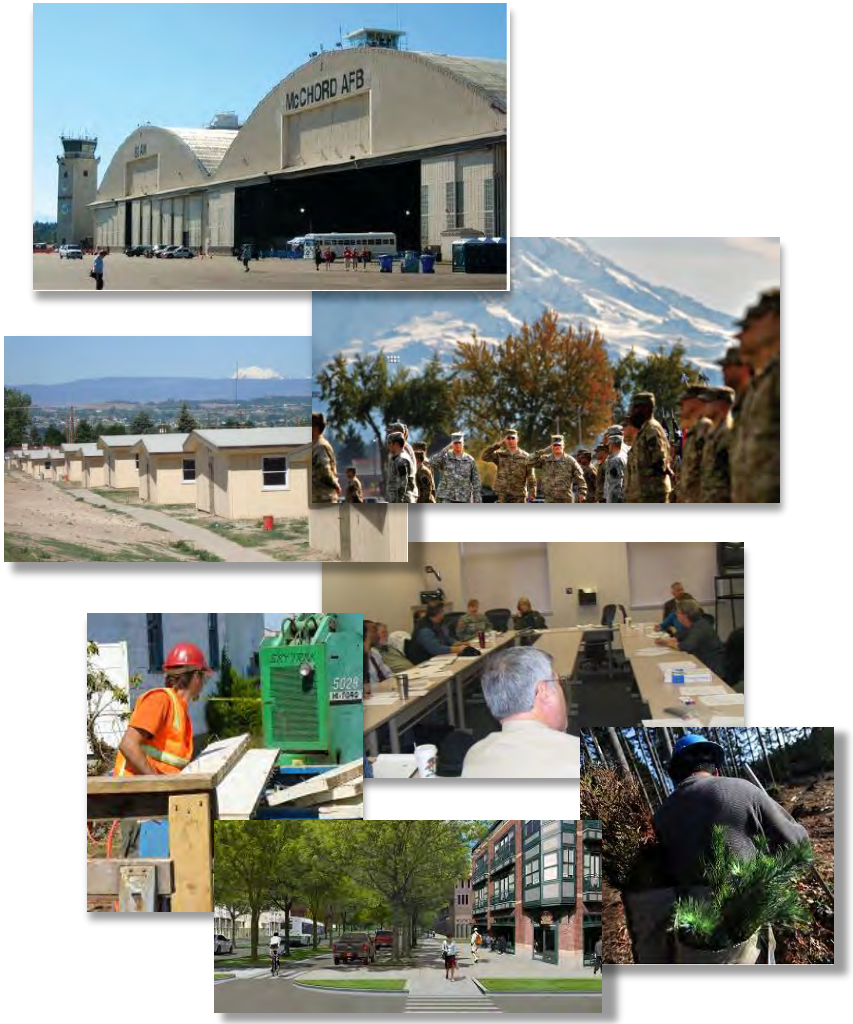
- All personnel on JBLM and surrounding communities are impacted by environmental quality, from clean air and water to resource availability and chemical exposure

- Environmental stewardship is the responsibility of all whose actions affect the environment. This includes the following on JBLM:
  - Service members and their families
  - Military organizations (Active, Reserve and National Guard)
  - JBLM Directorates and Support Activities
  - Other government, commercial and private organizations
  - Contractors in all categories
  - Vendors
  - Retirees and others using JBLM

Introduction

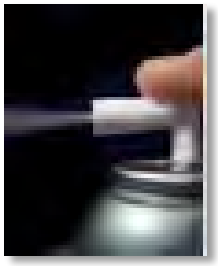
As a member of the JBLM community, you must:

- Know how you impact the environment both on and off the job
- Know and adhere to the environmental requirements of your job – including applicable laws, regulations and policies
- Adhere to proper procedures for training, operations, recordkeeping and corrective actions
- Know the potential environmental impacts of departing from these procedures
- Know your organization's appointed Environmental Officer



Environmental Impacts

- People may think "I don't do anything that has an environmental impact." However, even routine administrative actions can have a significant impact when multiplied across the installation. For example:



  - Keyboard Dusters: Just one can of aerosol keyboard duster can emit the same greenhouse pollution as driving a car from Seattle to New York City and back to Chicago. Personnel can therefore significantly reduce pollution by decreasing or ending the use of such products.

  - Printing: Excess printing puts pressure on current paper supplies, creating a market demand for cutting down remaining forest habitat. Although paper is recycled on JBLM, duplex (two-sided) printing reduces the amount of paper used, which allows the current paper supply to stretch farther. This preserves forest habitat and the species that depend upon it. Personnel can help by setting their printer defaults to duplex.

- Other daily actions on JBLM—ranging from training and construction to facility heating, water use, and vehicle operation—can impact air, water, and land quality as well as natural and cultural resource availability.

- Organizations on Department of Defense facilities are required to identify and track their significant environmental impacts and continually work to improve them.

Additional Impacts

- Noncompliance with environmental laws can result in individual and organizational fines and prosecution

- Efficient resource use reduces pollution AND <u>saves money</u>
  - For example, the average DAILY electric bill for JBLM is over $29,000, the average DAILY heating bill is over $35,000, and the MONTHLY trash bill is over $300,000. These costs can be lowered by changes in action, procurement, and design
  - Turning off unnecessary energy and water use and diverting materials from the landfill lowers operational costs, uses money more efficiently, and provides funding for key installation programs

JBLM Environmental Program

- JBLM's Environmental Program operates on both a long-term strategic level (sustainability) and a shorter-term operational level (environmental management)

Sustainability Program	Environmental Management System (EMS)
• Establishes 20 to 25 year goals • Integrated and interdisciplinary focus • Systems approach	• Establishes annual objectives and targets • Focused on environmental subject areas • Ground-level planning, implementation and verification

- JBLM also issues Environmental Operating Permits (EOPs), mostly to military units as a way to incorporate them into the EMS. EOPs capture unit processes and impacts, convey environmental requirements, and put forth goals that the unit can meet in support of sustainability and environmental enhancement. EOPs are typically issued at the battalion/squadron level

Sustainability

SUSTAINABLE JBLM
NET ZERO • ENERGY • WASTE • LAND • AIR • WATER

- JBLM's environmental planning and initiatives are given focus and direction through the concept of Sustainability
- JBLM's Sustainability Program establishes long-term strategic goals for environmental performance, community planning and quality of life
- These goals are available at http://www.lewis-mcchord.army.mil/publicworks/sustainability/Goals.aspx

What is Sustainability?

The ability to simultaneously meet current as well as future mission requirements worldwide, safeguard human health, improve quality of life and enhance the natural environment.

Key Points

- **Utilizes an integrated systems approach focused on mission, environment, community and economy**
- **Works to achieve long-term goals**
- **Solution oriented**

Sustainability Program Website
http://www.lewis-mcchord.army.mil/publicworks/sustainability/default.aspx

What is the Environmental Management System (EMS)?

- Programs implemented to achieve a Sustainable JBLM are managed using an Environmental Management System (EMS), following the International Standard ISO 14001

- The EMS
  - Implements the Sustainability Program's strategic goals through annual objectives and targets
  - Integrates environmental requirements into the organization's existing management system and planning process
  - Provides a "thought process" for identifying how your job impacts the environment and what is needed to support your organization's legal and regulatory compliance
  - Can take advantage of existing administrative requirements and procedures

Come Again?? What is EMS?

- EMS is a series of steps—a thought process—for identifying and meeting requirements called for by laws and regulations
- Getting answers to the following will help guide you in the process:

1. What do we do? (*mission or task*)
2. Are their any **potential** environmental impacts to what we do? (*spills/leaks/ emissions, chemical use, terrain destruction, water depletion, waste generation, etc. These may not only be from direct actions, but also from indirect lifecycle actions such as energy generation or product manufacture*)
3. What are the rules? (*legal, regulatory, plans, permits or other requirements*)
4. What do we need to do our job? (*people, skills and equipment*)
5. What are we trying to achieve? (*goals, objectives and targets*)
6. What training do we need? (*competence training to maintain proficiency, certification, current in meeting job requirements*)
7. How do we keep people informed of changes? (*meetings, briefings, email, etc.)*
8. What documents do we need to communicate requirements? (*policies, plans, other documents describing your operations, etc*)

EMS (Cont'd)

9. Are the procedures being used current? (*have the governing rules or procedures changed since the last update?*)
10. What local instructions are needed to meet requirements? (*SOPs, checklists, manuals, orders, etc.*)
11. Is there a need for emergency procedures? (*emergency response plan*)
12. Are procedures in place to monitor compliance and achievement of standards? (*internal audits/inspections/assessments*)
13. Is the equipment used maintained and, if necessary, calibrated? (*maintenance and calibration records*)
14. Is a procedure in place to identify and resolve issues? (*preventative, corrective action request –PCAR*)
15. Are records maintained that demonstrate and verify required activities/actions have occurred? (*files*)
16. Is leadership involved in the system? (*briefings on issues, provide guidance, etc.*)

Why Maintain an EMS?

- Executive Orders, DoD and DA Regulations require us to establish and maintain an Environmental Management System (EMS) for identifying, meeting and enforcing environmental laws and regulations
- We are tasked to implement programs that will assist in reducing operational costs, minimize the need for new resources and minimize our impact on the environment
- We need to maintain JBLM as a safe, healthy and quality installation to live, work and train

What are JBLM's goals?

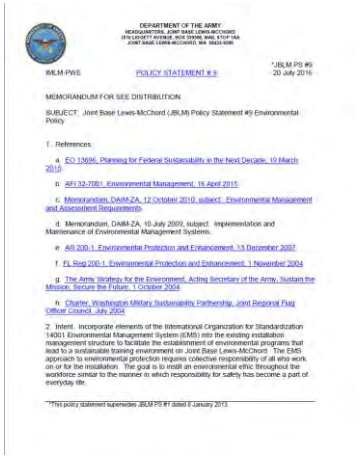
JBLM Sustainability Goals

- Reduce installation stationary source and non-tactical motor vehicle air emissions 85% by 2025
- Achieve a secured renewable sourced energy installation by 2040
- Create sustainable neighborhoods for a livable JBLM community that enhances the Puget Sound Region
- Achieve a net-zero waste installation by 2020
- Maintain the ability of JBLM to meet it's current and future military missions without compromising the integrity of natural and cultural resources, on the installation and regionally
  Assist in the recovery of all listed and candidate federal species in South Puget Sound Region
- Achieve a secured net-zero water installation by 2020

JBLM Environmental Policy

- **JBLM Policy Statement #9**
- **Applies to all personnel operating on or for JBLM. All such personnel must read and conform to the Policy and its goals**
- **Commits to:**
  - **Legal, regulatory and policy compliance**
  - **Management of planning and operations through the JBLM Environmental Management System (EMS)**
  - **Continual improvement**
  - **Preventing pollution**
  - **Fully integrating environmental requirements into standard work practices and procedures**
- **Available at:**

http://www.lewis-mcchord.army.mil/publicworks/sustainability/EMS/environ_policy.aspx



DEPARTMENT OF THE ARMY
HEADQUARTERS, JOINT BASE LEWIS-MCCHORD
3010 LIBBETT AVENUE, BLDG 2049B, MAIL STOP 16A
JOINT BASE LEWIS-MCCHORD, WA 98433-9500

JBLM-PWE

POLICY STATEMENT # 9

*JBLM PS #9
20 July 2016

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Joint Base Lewis-McChord (JBLM) Policy Statement #9 Environmental Policy

1. References:

a. EO 13696, Planning for Federal Sustainability in the Next Decade, 19 March 2015.

b. AFI 32-7001, Environmental Management, 16 April 2015.

c. Memorandum, DAIM-ZA, 12 October 2010, subject: Environmental Management and Assessment Requirements.

d. Memorandum, DAIM-ZA, 10 July 2009, subject: Implementation and Maintenance of Environmental Management Systems.

e. AR 200-1, Environmental Protection and Enhancement, 13 December 2007.

f. FL Reg 200-1, Environmental Protection and Enhancement, 1 November 2004.

g. The Army Strategy for the Environment, Acting Secretary of the Army, Sustain the Mission, Secure the Future, 1 October 2004.

h. Charter, Washington Military Sustainability Partnership, Joint Regional Flag Officer Council, July 2004.

2. Intent. Incorporate elements of the International Organization for Standardization 14001 Environmental Management System (EMS) into the existing installation management structure to facilitate the establishment of environmental programs that lead to a sustainable training environment on Joint Base Lewis-McChord. The EMS approach to environmental protection requires collective responsibility of all who work on or for the installation. The goal is to instill an environmental ethic throughout the workforce similar to the manner in which responsibility for safety has become a part of everyday life.

*This policy statement supersedes JBLM PS #1 dated 8 January 2013.

What needs to be done?

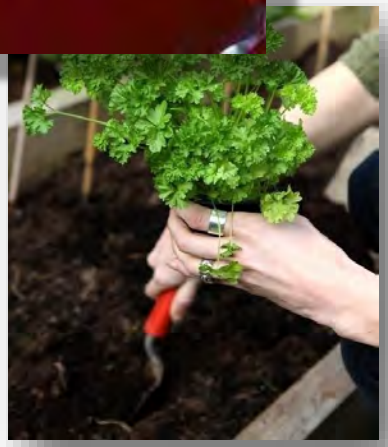
Some Key Actions

- Promote energy awareness, practice energy efficiency and use renewable energy
- Purchase environmentally preferable products
- Practice water efficiency and conservation
- Participate in the recycling program and otherwise divert materials from the landfill
- Participate in the Commute Trip Reduction (CTR) program
- Protect natural and cultural resources
- Prevent pollution
- Participate in and promote sustainable planning and communities
- Meet legal requirements

What can individuals do?

What You Can Do At Home

- Conserve Water and Energy
- Choose sustainably produced products
- Drive less (vanpool/carpool/bike/walk)
- Purchase products with little or no packaging
- Avoid disposables, donate unwanted items
- Create a compost garden
- Volunteer



What You Can Do At Work

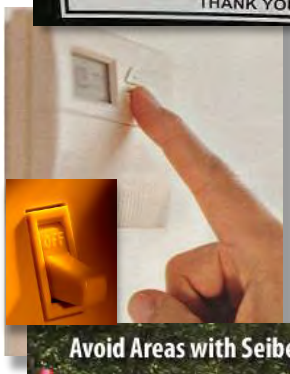
Understand your role in the JBLM EMS

Know how your duties interact with and negatively impact the environment

Take steps to reduce that impact

Treat work like home (see items on previous slide)

And help JBLM achieve its sustainability goals



What can an organization do?

Military and Civilian Organizations

- Comply with the JBLM Environmental Policy and all requirements applicable to your operations. A list of legal and policy requirements from an installation management standpoint is available at http://www.lewis-mcchord.army.mil/publicworks/sustainability/EMS/legal_requirements.aspx
- Operate in accordance with the JBLM Environmental Management System (EMS) or the organization Environmental Operating Permit (EOP)
- Establish and support organizational environmental objectives
- Participate in applicable environmental initiatives/programs
- Conduct training, job and mission requirements IAW JBLM regulations and policies (Note: ALL activities impact the environment; only the severity of impact is different)
- Identify non-environmental regulations and requirements that have environmental components (emergency response, safety, training, administrative, etc) and address/coordinate those components within the EMS

Contractors

- Comply with the JBLM Environmental Policy and all requirements applicable to your operations. A list of legal and policy requirements from an installation management standpoint is available at http://www.lewis-mcchord.army.mil/publicworks/sustainability/EMS/legal_requirements.aspx
- Coordinate with the JBLM Environmental Division via your project manager or Contracting Officer's Representative (COR)
- Develop and implement procedures to comply with applicable laws, regulations and policies
- Review and implement environmental requirements specified in the contract
- Develop required environmental plans
- Submit required environmental plans and other documentation to your project manager or COR
- As required, appoint and have trained environmental personnel

Contractors

- Only use hazardous materials authorized by JBLM Pollution Prevention
- Report all hazardous material inventories using HJB Form 953
- Follow the JBLM Master Plan (design and construction)
- Maximize recycling/diversion
- When working on historic buildings, ensure historic/cultural integrity is left intact
- Protect natural and cultural resources
- Report spills in accordance with installation regulations
- Be aware that requirements established by non-environmental regulations impact the environment

What are some examples of supporting actions?

Purchase Sustainable Products

- Comply with sustainable acquisition laws and policies
- Minimize use of toxic and hazardous materials
- Reuse materials when feasible and permitted
- Develop strategies to reduce energy, water and material requirements
- Purchase durable products with extended life-spans and warranties

Maximize Recycling on JBLM

NET ZERO WASTE SUSTAINABLE
JOINT BASE LEWIS-McCHORD

INFORMATION

- **Recycling Info:** http://www.lewis-mcchord.army.mil/publicworks/sites/services/dumpsters.aspx
- **JBLM Recycling Outreach Coordinator** (253)966-6444

RECYCLE CENTER LOCATIONS

- **JBLM Main** Building 5290 (12th and Nevada, across from the JBLM Main Commissary)
- **JBLM McChord Field** Building 516 (South Gate Road, behind the BX & McChord Field Commissary)

RECYCLE CENTER HOURS

- **JBLM Main**
  TUE - SAT 0730-1600
- **JBLM-McChord Field**
  24/7
  Electronic drop off
  MON - SAT 0730-1600
- **Closed all federal holidays**

What Can I Recycle?

Tires, Metal, Plastics, Toys, Pots & Pans, Electric appliances, Used cooking oil, Food waste, Yard waste, Electronics, Hard drives, Clean wood, Glass, Cardboard.....

Manage Household Hazardous and Other Waste

Household Hazardous Waste (HHW) is any hazardous material used, stored or discarded by occupants of on-post family housing. They are commercial products not produced through military channels.

JBLM HHW Program

- Accepts hazardous materials/waste from JBLM residents only
- Collection Center is at Environmental Operations, Bldg 1210, (253) 967-4786
- Government Work Days: 1300-1500

HHW includes light bulbs, batteries, cleaning products, used motor oil, paint, and more.

Pierce Co Residents: https://www.co.pierce.wa.us/index.aspx?NID=1544
Thurston Co Residents: http://www.co.thurston.wa.us/solidwaste/hazardous/haz-home.htm

Manage all wastes in accordance with installation Regulation 200-1

Report Illegal Dumping

Includes garbage, recyclables, hazardous materials, furniture, etc dumped in the training areas . . . .

. . . . and non-containerized items, personal items (non-housing areas), property book items, etc dumped in the cantonment

- Between 0800 and 1630 weekdays, report illegal dumping on JBLM by calling (253) 377-4749 or e-mail usarmy.jblm.imcom.list.dpw-trash-cop@mail.mil
- At other hours and on weekends, call the Military Police (967-3107)
- At JBLM YTC, contact the Department of Army Police at (509) 577-3911

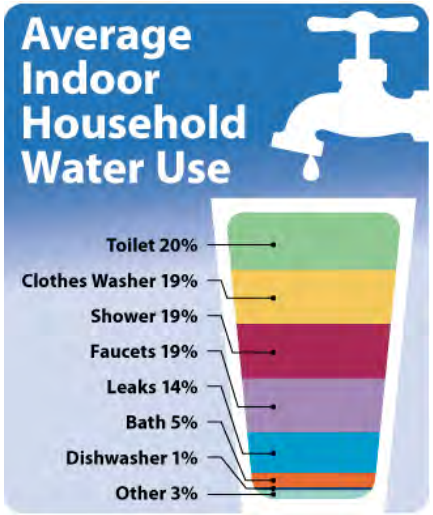
Practice Energy Conservation

- Establish an energy monitoring program
- Appoint an Energy Conservation Officer
- Appoint a Building Energy Monitor (BEM) for each building that your organization controls on JBLM
- Consolidate appliances used for personal use

  (e.g. coffee pots, refrigerators and microwaves)
- Turn off monitors, speakers and other peripherals

  at the end of the day or when not in use
- Turn off lights, radios, paper shredders and other electric appliances/equipment when not in use
- Close windows when heat or air conditioning is running
- Adjust thermostats, when possible, to accommodate all. Do not exceed Army set points for thermostats
- Conduct and record periodic checks

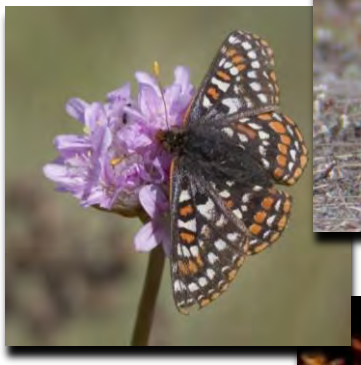
Practice Water Conservation



- Minimize water use where possible
- Report water leaks
- Increase awareness of water conservation measures
- Install signs that encourage water conservation in restrooms or work areas where water is used
- Seek suggestions of water conservation ideas
- Prevent contamination to groundwater
- No dumping into the stormwater drain
- Use Best Management Practices – clean up trash, use car wash facilities
- Report spills immediately
- Maintain personal and official vehicles to eliminate oil and gas leaks to prevent them from entering the storm or sewer drain

Protect Natural and Cultural Resources

- Endangered Species Act (ESA)
  - Species listed under this Act, as well as their habitat, must meet additional management protections established by U.S. Fish & Wildlife Service and/or National Marine Fisheries Service
  - Military training, construction, and other activities must adhere to these requirements
- Clean Water Act (CWA)
  - Establishes quality requirements for water bodies (oceans/rivers/lakes/wetlands). JBLM regulations must be followed to ensure these requirements are met



Protect Natural and Cultural Resources

JBLM prairie habitat

- Unique, fragile and rare ecosystem
- Protections include: no digging, no off-road vehicles and no bivouacking unless permitted
- Home to three ESA species
  - *Streaked horned lark* (THREATENED)
  - *Mazama pocket gopher* (THREATENED)
  - *Taylor's checkerspot butterfly* (ENDANGERED)

JBLM wetland and stream habitats

- Salmon migration corridors and spawning grounds
- Protections include: no unauthorized crossings and no off-road driving within 50 meters
- Home to three ESA species
  - *Water howellia* (THREATENED)
  - *Puget Sound Steelhead* (THREATENED)
  - *Chinook Salmon* (THREATENED)

Protect Natural and Cultural Resources

- Stay outside Seibert staked areas

- Obtain approved Dig Permit before digging or disturbing soil
  - For JBLM procedures, see http://www.lewis-mcchord.army.mil/publicworks/sites/services/digPermit.aspx
  - YTC Cantonment: Dig permits for digging or intrusion (such as insertion of grounding rods or tent stakes) are obtained by contacting DPW (509-577-3407; DSN 638-3407)
  - YTC Training Areas: Dig permits for digging and any soil disturbance downrange are obtained by contacting YTC Range Operations (509-225-8199; DSN 638-8199)

Protect Natural and Cultural Resources

- Utilize Environmental Coordination Map (JBLM) and Training Unit SOP and Species Protection Measures (YTC)

  http://www.lewis-mcchord.army.mil/DPTMS/training/range/range.htm (JBLM)

  https://army.deps.mil/army/cmds/imcom_usag6/JBLM-w/YTC/DPW/SitePages/Home.aspx (YTC, requires CAC)

- Obtain an approved Work Order from PW before altering historic buildings or landscapes
  - Do not paint curbs, steps, windows, or doors
  - Do not install antennae or drill holes for cables or wires
  - Do not prune, add, or remove vegetation

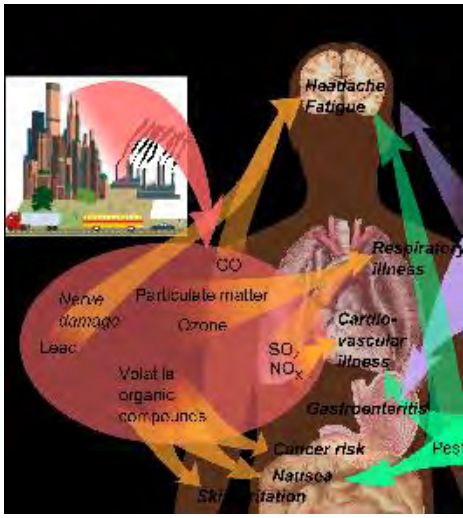
Protect Natural and Cultural Resources

- It is illegal to damage, excavate, or collect archaeological resources without a permit
  - Includes Indian artifacts, bottles, cans, coins, etc
  - Penalties can include imprisonment up to 5 years and fines up to $100,000
- Metal detecting is prohibited on JBLM and YTC unless authorized in writing by the applicable Cultural Resources Program
- Report suspicious activities to Military Police

- Report artifact discoveries to the Cultural Resources Program at JBLM or YTC, as applicable

Use Clean Air Practices

- Develop a Commute Trip Reduction Program that promotes alternative commute methods instead of driving a single occupied vehicle (SOV)
- Use some form of alternative transportation (i.e., biking, bus, train, vanpool, carpool)
- Minimize vehicle idling
- Request alternate fuel vehicles from GSA
- Use alternative fuel in non-tactical vehicles equipped for those fuels (required by law) http://www.afdc.energy.gov
- Consolidate administrative trips across the installation
- Refuel vehicles in the cool part of the day
- Open burning is largely prohibited, except as permitted by installation Regulation 200-1



Get Involved

Reduce
Reuse
Recycle

Get Outside

Conserve Energy

Drive less and save money!

Visit http://www.lewis-mcchord.army.mil/publicworks/sustainability/default.aspx

Facebook.com/SustainableJBLM

QUESTIONS? 253-966-1734

Points of Contact

JBLM Environmental Division Points of Contact

- http://www.lewis-mcchord.army.mil/publicworks/sustainability/docs/ED%20POCs.pdf

JBLM YTC Environmental Division Points of Contact

- http://www.lewis-mcchord.army.mil/yakima/directorates.htm

Questions?

SUSTAINABLE JBLM

NET ZERO • ENERGY • WASTE • LAND • AIR • WATER

Environmental Management System

ISO 14001

Improve

Joint Base Lewis-McChord

Sustainability Outreach Coordinator ~ 966-1734

Installation EMS Coordinator ~ 966-6470

http://www.lewis-mcchord.army.mil/publicworks/sustainability/default.aspx

www.facebook.com/SustainableJBLM