
FORT CARSON 25-YEAR SUSTAINABILITY GOAL PLAN
GOAL: SUSTAINABLE TRAINING LANDS (TL)



Goal Statement:

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

25-Year Vision

The long-term goal is to ensure that training ranges; maneuver lands; and associated air space are capable of supporting current and future military training to standard while maintaining and sustaining training resources for current and future use. The desired end state is training to standard with no lost training capability due to environmental restrictions through proactive planning, monitoring, and sustaining of training resources through mitigation of archaeological sites, a stable or increasing land-condition trend rating, acceptable environmental and safety impacts, and minimal training restrictions due to physical and legal encroachment.

Ownership and Involvement (Resources, Roles and Authority)

Goal Proponent: Directors, DPTMS and DPW

Goal Lead & Fort Carson Partners:

DPTMS Range Division
DPTMS ITAM
DOL
DPW Environmental Division
DPW Master Planning
Fort Carson ACUB Program Coordinator/Manager
MSE G3
4ID G3

Off-post Partners: US Fish and Wildlife Service, The Nature Conservancy, El Paso County, State of Colorado, local and Southern Colorado landowners, regional conservation groups, US Army Environmental Command (USAEC), Readiness and Environmental Protection Initiative (REPI), RDECOM, IMCOM

Fort Carson SEMS – Significant Aspects and Impacts

1. Water quantity related to tactical training and food service during training
2. Water quality related to vehicle and equipment maintenance, tactical training and transportation and land use;
3. Air emissions related to vehicle and equipment maintenance; dust and vehicle emissions (mobile and non-road engines); POV commute; smoke and obscurants, dust (vehicle use), OB/OD; fire extinguishing systems (ODCs); pollution, fuel type (JP8, biodiesel, gasoline); and pollution, equipment (application and safety)
4. Transportation related non-tactical vehicle use; tactical training; transport of equipment; long-haul trucking; and hauling of waste and recycling
5. Land use related to erosion resulting in sediment transport; ammunition (lead); habitat use, land rehabilitation; new or existing infrastructure (roads and buildings); and POL use

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6. Cost/Budget salary expenditures to public and private entities; fuel cost for vehicles and aircrafts; and total cost
 7. Energy related to construction and renovation; facility energy use for computers, building operations (AC, lighting, heating); and storage (refrigeration and warehouse operation).
 8. Solid waste related to building debris - Concrete, wood; new materials; packaging; cleaning supplies, food, grease; water bottles/MREs - plastic and cardboard; and tire disposal
 9. Hazardous waste related to unused heating element (MREs); batteries (lithium); Decon kits; night-vision goggles (radiation); expended smoke pots (lead); UXO; munitions

Legal and Other Requirements EO 13514 "...The Executive Order builds on and expands the energy reduction and environmental requirements of Executive Order 13423...."

- National Defense Authorization Act
- Wildlife laws, treaties, and regulations under jurisdiction of USFWS (eg Endangered Species Act (ESA))
- Migratory Bird Treaty Act (MBTA), etc.
- National Historic Preservation Act (NHPA)
- National Environmental Policy Act (NEPA)
- Army Strategy for the Environment
- Colorado Legislative Bill 05-80—notification of land use changes around military bases.
- SEMS goal -- Energy & Water Resources
- SEMS goal – Sustainable Development
- SEMS goal – Zero Waste
- SEMS goal – Sustainable Transportation
- SEMS goal – Air Quality
- SEMS goal – Sustainable Procurement
- Sikes Act
- Sustainable Range Program
- Fort Carson Range regulations
- Fort Carson Environmental regulations and natural and cultural resource management plans
- ITAM Program plans
- County/Municipal land planning and zoning

Background -

The original long term goal was to ensure that training ranges are capable of supporting current and future military training to standard by 2027, and to buffer Fort Carson and Pinon Canyon Maneuver Site (PCMS) 100 percent from encroachment. This original goal was the result of the combination of two goals from the Sep 2002 sustainability conference:

1. Training ranges (firing ranges, air space, and maneuver lands) capable of supporting current and future military training to standard.
2. An installation (Fort Carson and Pinon Canyon Maneuver Site) buffered from external encroachment.

When combined, the goal was stated as "Training Ranges (land and associated air space used for live fire ranges, maneuver, testing and that urban development designated for Military Operations in Urban Terrain [MOUT] training) capable of supporting current and future military training to standard. The restated goal is:

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

The intent of this goal is to:

- Coordinate better between Army and non-governmental organizations.
- Increase the intrinsic value of the Installation to the community.
- Prevent the degradation of training resources.
- Prevent urban encroachment as much as possible through coordination with surrounding communities.
- Ease the burden of threatened and endangered species protection on the Installation.
- Address conflicting issues of population growth and training.
- Ease limitations on mountain training sites.
- Provide the training area to suit the mission requirements.
- Address projected requirements at Fort Carson and PCMS.
- Address future weapon systems and ammunition capabilities.
- Limit “workarounds” caused by environmental restrictions.
- Enable training of Mission Essential Task List (METL), Directed-METL and Core-METL tasks to Army standard.
- Minimize maneuver damage by training units.
- Apply land management (Best Management Practices (BMPs)) that supports tactical use/need of training land.
- Establish buffer zones to reduce training restrictions.

Assumptions:

- In order for the goal to be achieved, approved annual funding cannot be diverted.
- The term “Training Ranges” translates into land and associated air space used for live fire ranges, maneuver, testing and the urban development designated for Military Operations in Urban Terrain (MOUT) training.
- The DPTMS and the DPW Environmental will work closely together in order to achieve successful execution of the Sustainable Range Program. Combined quarterly reviews will be used to assess goal progress and address goal plan changes where needed.
- The term “buffer” translates into partner acquisition of legal property rights (purchase, easements and/or lease) of sufficient land adjacent to Fort Carson to preclude encroachment (this includes the Endangered Species Act (ESA) and National Historic Preservation Act (NHPA)/National Environmental Policy Act (NEPA) mandates).
- Current federal statutory requirements do not offer relief from ESA, NHPA or NEPA requirements within conservation lease/easement opportunities.

As the Army transforms over the next 25 years, the systems and missions of Fort Carson are more than likely to change. Training range requirements for the Future Forces may far surpass that of the current force. For example, more lethal future weapons systems and advanced ammunition will most likely function at greater distances than today’s systems. Future maneuver doctrine will most likely call for coverage over far greater distances. All this points to the need for further evaluation of current and future land use requirements and potential rearrangement of current range capabilities.

Land conditions directly affect the ability of Fort Carson’s units to conduct and sustain realistic readiness training over time and to conserve and enhance ecosystem health. Environmental concerns include erosion control, vegetation management, sediment movement, runoff, water

quality and wildlife management. Sustaining Fort Carson's land in a high-quality condition is of paramount importance, and may require land to be placed in a temporary rest condition in order to provide long-term training service. Programs for these conditions will need to be funded and executed annually in order to provide for viable training ranges.

An expanding Colorado Springs and Pueblo surround Fort Carson. Close proximity of civilian lands generates community challenges. Resolution requires collaboration and partnership between Fort Carson/PCMS and surrounding communities. Strategically communicating the importance of Army training and the role of Fort Carson units in the Army's strategic plans is key. In addition, implementation of common sense training plans will help to alleviate some civilian nuisance concerns.

Fort Carson must continue to work with local communities to influence local land use management in order to minimize both impacts of adjacent community growth on readiness training and training land sustainment and impacts that Army activities may have on adjacent communities. The lease and/or purchase of conservation easements on adjacent lands can expand species habitats, reduce restrictions on training, and create buffers between Army activities and the desirable growth of surrounding communities. In addition, realistic municipal zoning and real estate transactions should reflect and minimize the impacts of Fort Carson's training mission.

Fort Carson must manage, repair and sustain training ranges in order to minimize adverse training impacts on surface water and ground water quality. This includes reducing sediment movement and removing munitions and metal contaminants from water sources; this within the parameters of safety considerations.

Fort Carson must manage, repair and sustain training lands in order to minimize adverse training impacts on cultural resources by balancing preservation and conservation with training requirements. The main restriction to training is ground disturbance in or around protected archaeological sites. Cultural resource and training staff must work closely to continually identify, evaluate, and protect sites, while supporting training requirements and priority work projects.

Challenges & Barriers

- Fort Carson cannot control public land planning
- El Paso County is one of the fastest growing counties in the U.S.
- Pueblo West is quickly expanding toward southeast perimeter of Installation
- Some legal requirements impede sustainability goals
- Ever changing Army requirements
- Ever changing Army operational concepts
- Additional units assigned to Fort Carson
- Army training doctrine relative to land availability and cost

Training

SEMS Awareness; EPO Training Course; SRP Conferences; outside trainings/seminars

Communication

External: Annual Sustainability Report; Southern Colorado Sustainable Communities Conference; local newspaper articles and publications; local televised news media; tours and open houses

Internal: Garrison Commander's Breakfasts; Fort Carson Continuity Book; Fort Carson Book of Knowledge; Mountaineer newspaper articles and other publications; military training and environmental regulations and SOPs, range planning conferences, EQCC

Document Control

2003 National Defense Authorization Act; 2003 Fort Carson MOU; 2003 Fort Carson ACUB Proposal; 2003 Cooperative Agreement with TNC/USAMRAA; 2005 Cooperative Agreement with TNC/RDECOM

Operational Controls

Criteria required by Annual REPI Funding Request

Monitoring & Measurement

Mapping information is kept in-house with Fort Carson's GIS database administrator; USFWS Information verified and coordinated when appropriate with TNC, El Paso County, and Pueblo County.

Evaluation of Compliance

Program evaluation and compliance is monitored by United States Army Environmental Command; Adherence to terms of conservation easements as prescribed by the Contract Agreement is administered by The Nature Conservancy; Compliance and management is overseen by Fort Carson DPW-ED; Fort Carson Sustainability Goal adherence is monitored by the internal ISRO.

Control of Records



All documents are controlled and maintained by DPW-ED and the Fort Carson ACUB Program Coordinator in either hard copy or electronic form; Documents are also shared when appropriate with ACUB partners such as USFWS, TNC, and El Paso County.

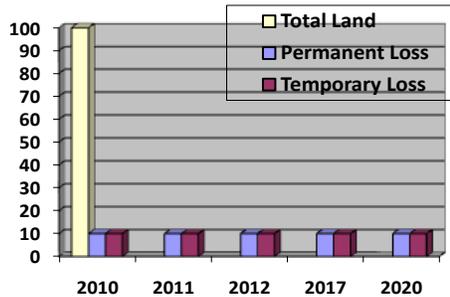
Annual Review

Garrison Commander Breakfasts; HQDA
SEMS Management Review

Objective TL1: Prevent the permanent loss of any training resource due to internal encroachment, biological, natural resource or other issue.

Target by FY12: No permanent loss compared to FY2010 baseline

Target by FY17: No permanent loss compared to FY2010 baseline based on range



Details on Objective Target Graph TL1

Measure: % of training resource base taken out of use permanently compared to baseline

Scope: The baseline includes all training resources except the cantonment, impact areas, Butts Army Airfield and build out on Wilderness Road at Fort Carson and PCMS. Also landfills and other lands considered off-limits to training.

Source: GIS

Baseline: Of 339,000 acres total, 306,000 are available in FY2010

Limitations: None

Verification & Validation: DPTMS and DPW validate GIS data.

Comment: Permanent is defined as any training resource removed from training AND not able to be returned to training in the foreseeable future. Other factors may include encroachment from land use leases and easements with outside parties such as permanent utility easements/pump stations. Some training activities may take place even in areas determined to be off-limits to training, e.g. inside buildings, temporary medical hospital tentage set up in the cantonment, dismantled on a closed landfill and so forth.

Initiatives in support of Obj. TL1 FY10/11

Initiative TL1.1 Conduct and participate in planning and design charettes concerning proposals with potential adverse impact on training resource availability FY10/FY11/FY12.

Participants involved: DPW, DPTMS, MSE G3, 4ID G3, DGC/DGC-T

Initiative TL1.2 Plan, use and manage biological and natural resources in a manner to prevent permanent damage from training-related or natural causes FY10/FY11/FY12.

Participants involved: DPW, DPTMS, external partners

Initiative TL1.3 Evaluate training resource impacts in decision making concerning permanent leases and easements with outside parties, e.g. Colorado Springs Utilities, Colorado Department of Transportation, etc FY10/FY11/FY12.

Participants involved: DPW, DPTMS, MSE G3, 4ID G3, external stakeholders

Initiative TL1.4 Maximize current available training lands for training use. New project locations will be cleared of Unexploded Ordnance (UXO). Munitions capable of producing UXO will not be used on cleared range projects areas. UXO in non-project areas will be marked and recorded until advancing technologies permit permanent mitigation of UXO.

Participants involved: DPTMS, DPW, US Army Corps of Engineers, and local EOD units

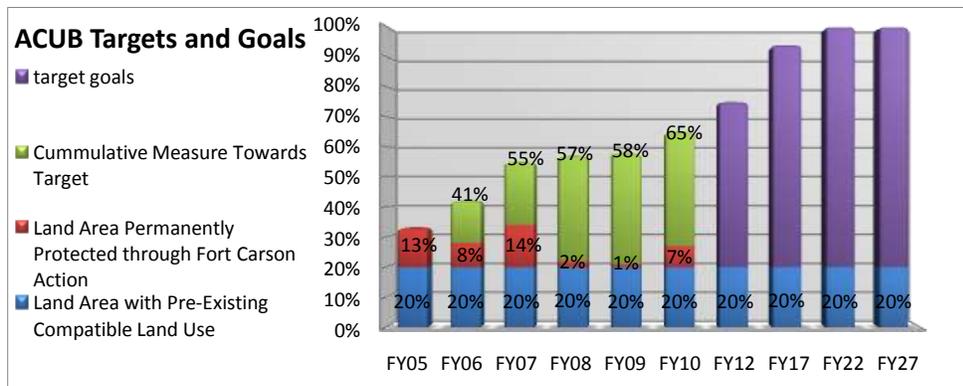
Initiative TL1.5 Utilize developing technology to reduce amount of land restricted based on UXO.

Participants involved: DPTMS, Fort Carson EOD

Objective TL2: Protect Fort Carson ranges and training lands from external encroachment by creating a contiguous 1½ to 2-mile wide proposed buffer around a significant portion of the Installation's southern and eastern perimeter.

Target by FY12: 75% of proposed buffer area permanently protected by open space or compatible land uses.

Target by FY17: 95% of proposed buffer area permanently protected by open space or compatible land uses.



Details on Objective Target Graph TL2

Assumptions: Current measure of goal accountability assumes the proposed buffer remains consistent through 2027, and that the parcels identified as containing a pre-existing compatible land use remain consistent through 2027.

Measure: Total percentage of land within the approximated 39,000-acre (1 ½ to 2 miles) proposed buffer around Fort Carson that is protected in perpetuity from incompatible land use which would otherwise be deemed as detrimental to training. [640 acres = 1 square mile]

Scope: Proposed buffer of approximated 1½ to 2-mile wide swath around sensitive portions of Fort Carson's southern and eastern outside perimeter.

Source: September 2003 final Proposal – Army Compatible Use Buffer for “Sustaining Colorado’s Great Outdoors” 7th Infantry Division and Fort Carson, Fort Carson CO. Prepared by: Directorate of Environmental Compliance and Management, Fort Carson, Colorado with support from the U.S. Army Environmental Command.

Baseline: The baseline has been established as the 2003 proposed buffer which extends along the outside perimeter of Fort Carson from the southwest corner of the Installation east, and then north along the outside eastern boundary of Fort Carson to the southern edge of the City of

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Fountain. Included within this buffer are parcels of land already considered to have compatible uses into the foreseeable future, but without permanent guarantee of long-term compatible use.

Limitations: Knowledge of the land ownership at the time of the original plan was estimated based on best known information. Land ownership has changed substantially and continues to change frequently from conditions described in the original plan.

Verification & Validation: The measure is updated using GIS data as land transactions occur, as well as being coordinated with documentation from The Nature Conservancy, U.S. Fish & Wildlife Service, El Paso County, Pueblo County, and other municipal partner agencies. This data is located and controlled through Fort Carson DPW-ED.

Comment: All easements are recorded as public records in El Paso County and/or Pueblo County.

Initiatives in Support of Objective TL2

Initiative TL2.1: Complete the establishment of permanent Conservation Easements on the remaining Walker ranch lands. The Nature Conservancy on behalf of Fort Carson currently encumbers these ~7,175 acres through Annual Purchase Options Agreements. Funding required for this action is being heavily petitioned by Fort Carson, with acknowledgement from IMCOM and HQDA that this action should be completed within the next two years subject to availability of funds.

Participants involved: DPW-ED, TNC, USFWS, AEC, Walker family

Initiative TL2.2: Continue facilitating El Paso County's fee-simple acquisition of undeveloped lots from willing sellers within the residential development of El Rancho, Colorado. Current unacquired acres of El Rancho Subdivision remaining within the buffer is ~3,800 acres; however, Fort Carson is only interested at this time in the lots that remain undeveloped. This is an ongoing initiative, as El Paso County continues to solicit landowners within the buffer. Progress on this initiative remains dependent upon willing sellers who show interest in divesting themselves of their land interests.

Participants involved: DPW-ED, El Paso County, AEC

Initiative TL2.3: Begin facilitating Pueblo County's fee-simple acquisition of undeveloped lots from willing sellers within the residential development of Midway Ranches, Colorado. Total land area of Midway Ranches Subdivision within buffer is ~2,000 acres; however, Fort Carson is only interested at this time in the lots that remain undeveloped. Currently, Fort Carson has not begun formal negotiations with Pueblo County to acquire interest in Midway Ranches. The Installation recognizes the need to begin this process within the next two years.

Participants involved: DPW-ED, Pueblo County, AEC

Initiative TL2.4: Establish a written agreement with Schmidt Construction, City of Fountain, Colorado Springs Utilities, and School of Mines to secure a guarantee of compatible use for their properties into the long-term future. Current land area within buffer that constitutes pre-existing compatible land use with no foreseeable change is ~7,700 acres; however, Fort Carson

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may need to acquire interest in some of these additional lands if circumstances change without a contract. Fort Carson recognizes the need to begin this process within the next two years.

Participants involved: DPW-ED, Schmidt Construction, Colorado Springs Utilities, School of Mines, Walker family, TNC, USFWS, AEC, and City of Fountain

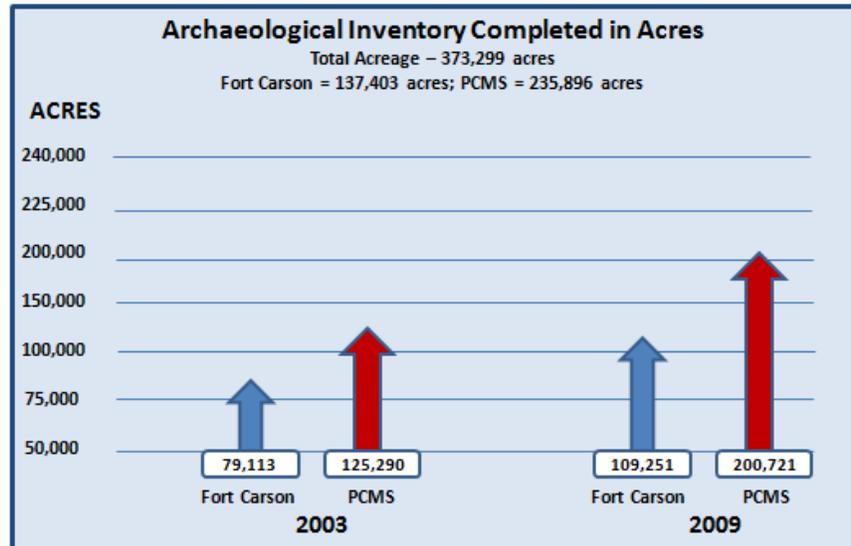
Initiative TL2.5: Re-evaluate after FY2017 Fort Carson's need to pursue permanent compatible use actions on remaining parcels of land within the buffer. Land area within the buffer not currently sighted for protection is ~2,500 acres; however, Fort Carson may deem these parcels either unnecessary or unobtainable. Fort Carson recognizes the need to conduct an evaluation and formalize a decision regarding these areas within the next two years.

Participants involved: DPW-ED, City of Fountain, El Paso County, Unincorporated Pueblo West, Pueblo County, Fremont County, TNC, USFWS, AEC

Objective TL3: Meet or surpass environmental management goals by identifying and evaluating cultural resources on training lands in support of current and future training.

Target by FY12:
Complete 100% Phase I Archaeological Inventory of all areas identified for potential training, to include the canyons on the PCMS, by year end FY12 (based on FY04 baseline).

Target by FY17:
Continue to maintain goal percentage annually with any added land acquisition



Target by FY12: Complete Phase I Archaeological Inventory for the PCMS “training box” (Training Areas 7 and 10); continue Inventory of all areas identified for potential training on Fort Carson and the PCMS, to including the PCMS canyon areas; complete Memorandum of Agreement for adaptive re-use of 5 PCMS historic ranching complexes for limited military training use.

Target by FY17: Complete Phase I Archaeological Inventory and Sites Evaluation for all trainable land at the PCMS.

Scope: In FY10, approximately 26,593 acres remain to be surveyed on the PCMS, 4,000 acres of which will complete the training box. At Fort Carson, approximately 15,000 acres remain to be surveyed.

Source: Fort Carson DPW-ED, Cultural Resources Program database and GIS records.

Baseline: The baseline for un-surveyed acreage was established 2003 for both Fort Carson and the PCMS.

Limitations: Archaeological fieldwork for inventory and evaluation is currently limited by access to downrange areas on Fort Carson due to training, and adequate work hours/schedule at the PCMS.

Verification & Validation: The measure is updated using GIS data as land inventories occur. This data is located and controlled through Fort Carson DPW-ED, Cultural Resources Program.

Comment: From 2003 through 2009, approximately 105,600 acres have been surveyed between Fort Carson and the PCMS. This equates to a 47% increase in lands opened for less- or un-restricted training activities in a 6 year period.

Initiatives in Support of Objective TL3 (FY10//FY11)

Initiative TL3.1: Execute Integrated Cultural Resources Management Plan (ICRMP)) and implement a Programmatic Agreement for compliance with Section 106 of the National Historic Preservation Act.

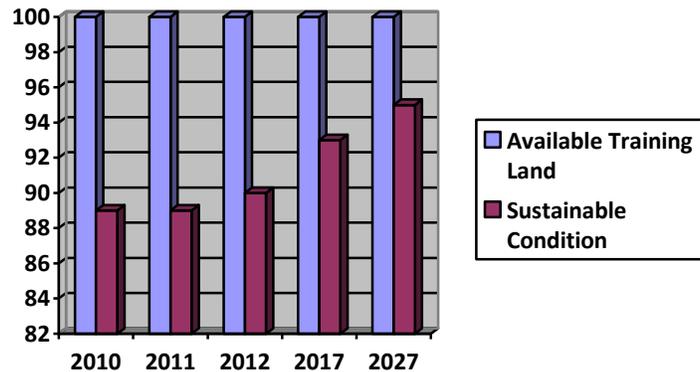
Initiative TL3.2: Complete and implement the Memorandum of Agreement for adaptive re-use of 5 ranching complexes on the PCMS for limited training use.

Participants involved: DPW-ED Cultural Resources Program; Range Division.

Objective TL4: Maintain biological and natural resources in sustainable condition to support military training.

Target by FY12: 90% of available training lands maintained in a sustainable condition for military training.

Target by FY17: 93% of available training lands maintained in a sustainable condition for military training.



Details on Objective Target Graph TL4

Measure: /Good to excellent trend as defined by the Range Trend Land Assessment (RTLA) model, Land Condition Trend Analysis (LCTA), and rangeland monitoring assessments.

Scope: All Fort Carson administered or managed lands available for training.

Source: RTLA, LCTA, Monitoring.

Baseline: FY2009 RTLA Data 89%

Limitations: Information accuracy, Weather, Funding, Doctrinal Guidance, monitoring on every vegetative plot is not conducted annually; intensity/frequency of training use varies with deployment which likely affects condition (less training = better training land condition).

Verification & Validation: DPTMS and DPW validate condition through data collection, monitoring and assessment.

Initiatives in support of Obj. TL4 FY10/11

Initiative TL4.1 Implement the Integrated Training Area Management (ITAM) Program FY10-FY12 subject to funding availability.

Participants involved: DPTMS/Sustainable Range Program

Initiative TL4.2 Implement the Integrated Natural Resource Management Program (INRMP) FY10 – FY12 subject to funding availability.

Participants involved: DPW Natural Resources, DPTMS ITAM