RANGE MUNITIONS CARRYING CAPACITY MODEL

SUSTAINABLE ARMY LIVE-FIRE RANGE DESIGN AND MAINTENANCE (2.5.e)

Due to a significant growth in environmental regulations, Army ranges and training lands are increasingly being impacted by a diverse set of environmental compliance requirements that affect the use and capabilities of ranges. The Range Munitions Carrying Capacity model is being developed to address munitions impacts and model the cumulative effects of range operations.

Characterization of environmental risk associated with munitions use on ranges is required to sustain mission operations on ranges. Range managers and planners must understand the current environmental risks and be able to assess future environmental risks as a function of munitions use. The ability to project risk as a function of planned range use is critical because it impacts documentation, justification, budgeting, and scheduling of range projects.

The model is able to predict the munitions carrying capacity of a range, as a function of munitions type and quantity, and existing environmental conditions associated with the range. Range use is characterized using existing military data repositories, programs and computer methods such as the Munitions Items Disposition Action System (MIDAS) database and the Army Training and Testing Area Carrying Capacity (ATTACC) methodology. Munitions use is defined by Standards in Training Commission (STRAC) requirements. The environmental condition of ranges is based upon active and inactive range inventories and related environmental data sources. The potential effects of proposed range use activities would be predicted using existing munitions fate, effects, and transport models.

Assessment of environmental risk to ranges from ongoing and future training and testing activities can be met through this predictive tool.

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