Implementing Low Impact Development

Bill E. Sproul, P.E.  Construction Division, Office of the Assistant Chief of Staff for Installation Management
Implementing Low Impact Development

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Office of the Assistant Chief of Staff for Installation Management

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• Ms Jackie Anthony, Construction Division
• Mr Bob Sperberg, Facilities Policy Division

On Board Strength

Civilians 391
Military 54
Current fill 86%

Operations

CSM Neil Ciotola
703-602-6735

Congressional Affairs Contact Office
Mr. Roland Biser

Director, Operations
BG Jim Boozer

Deputy, COL Michael Dillard

• COL Dinello, Army Reserve Installations Division
• COL Turner, BRAC Division
• Mr Bill Kidd, Plans Division
• Mr Tom Liedke, Operations Division

• Ms Jackie Anthony, Construction Division
• Mr Bob Sperberg, Facilities Policy Division

Bill E. Sproul william.sproul1@us.army.mil 703-604-1454
Annual Loadings to the Chesapeake Bay:

- 291 million pounds of nitrogen (59% emissions, runoff)
- 13.8 million pounds of phosphorus (30% runoff, non AG)
- 6.6 billion pounds of sediment

*Source: Chesapeake Bay Program, 2008 data*
Army Low Impact Development Initiative

Army LID Policy to Meet or Exceed:

• Energy Independence and Security Act (EISA), Sec. 438, December 2007

• Environmental Protection Agency (EPA), Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act, December 4, 2009

• OSD Policy Memo, DoD Implementation of Storm Water Requirements under Section 438 of the Energy Independence and Security Act (EISA), 19 Jan 2010

• Executive Order (EO) 13508 Chesapeake Bay Protection and Restoration

• Under the Chesapeake Bay TMDL, EPA will establish waste load allocations for “point sources” subject to NPDES permits

• LEED Silver Construction
Proposed Army LID Policy

• Develop new ASA(I&E) storm water policy mandating use of Low Impact Development
  • All projects (not just > 5,000 sq-ft)
  • Limitations on Site Clearing & Grubbing
  • Mandatory in FY11 SRM and FY13/14 MILCON
  • No Non-recreational Retention Ponds (storage under parking lots)
  • Mandatory Modeling (LID features attempt to restore to pre-development hydrology)

• Foster Cultural Change w/Guidance and Training: (2010 spend plan)

• Project Development
  • Master Planner/LA/Architect/Engineer involvement
  • In Line w/Installation Design Standards
  • Coordination w/USACE (incorporate in Army Standards & Standard Designs)
Way to Full Implementation

• ASA(I&E) Low Impact Development Policy
• Mandatory Timelines: FY11 SRM and FY13/14 MCA
• Get the construction community engaged; Provide Guidance and Training for the DPW: Master Planner/Landscape Architect/Architect/Engineer and USACE
• Integrate and Update: FDG/FDT- Army Standard, ARs, IDGs, Unified Facility Criteria (UFC) 3-210-10, LID Manual, COS’s (Army Standard Designs), etc.
• Demonstrate success: Fort Belvoir Medical Center (GC/DPW/BRAC Project Manager/Design Build A&E); DEMVAL projects
Eagle’s Wings
Fort Belvoir Community Hospital
Wing Construction
Structural and Non-Structural LID Controls
Eagle’s Wings as of 8 Jun 10

QuickTime™ and a TIF (Uncompressed) decompressor are needed to see this picture.
OACSIM LID Projects

• APG
  – ARL Compound Parking Lot
  – ARL UAV Runway, Pad, Rainwater Harvesting and Parking Lot

• Fort AP Hill
  – Beaverdam Pond Parking Lot
  – Game Check/Visitor Center Parking Lot

• Fort Meade
  – Clinic Parking Lot & Drainage Channel
  – Stream Daylighting w/Wetlands
Stream Day-Lighting
QUESTIONS?
What is Low Impact Development

Low Impact Development incorporates “proven” storm water management principles and technologies into project planning and design in order to manage storm water as close to where the precipitation lands as possible. This is done to maintain or restore the pre-development hydrology of the site, reduce runoff volume and peak runoff rates, and reduce the potential transport of pollutants to receiving waters.

- Cisterns/rain barrels
- Rain gardens
- Bio-retention cells
- Soil amendments
- Reforestation
- Permeable pavement (asphalt, concrete, pavers, or blocks)
- Grass swales and bio-swales
- Green roofs
Operations Directorate, OACSIM

- Manage Army BRAC 05 Program
- Administer all BRAC financial management activities including BRAC budget justification books
- Manage Legacy BRAC Programs
- Dispose of non-BRAC properties (former AMC sites)

- Manage Military Construction, Army Reserve (MCAR) Program
- Manage AR Real Estate Programs
- Manage AR Municipal Services
- Manage Engineer BASOPS Support System (ENBOSS)
- Manage AR Environmental Programs
- Manage AR Installation POMs and Budget
- Manage AR OACSIM/IMCOM PPBE and serve as authority for Administrative Control of Army Reserve funds.

- Manage Army Reserve (AR) Facility Programs
- Coordinate AR facilities requirements and policies
- Manage Military Construction, Army Reserve (MCAR) Program
- Manage AR Real Estate Programs
- Manage AR Municipal Services
- Manage Engineer BASOPS Support System (ENBOSS)
- Manage AR Environmental Programs
- Manage AR Installation POMs and Budget
- Manage AR OACSIM/IMCOM PPBE and serve as authority for Administrative Control of Army Reserve funds.

- Manage Military Construction, Army Reserve (MCAR) Program
- Manage Minor Military Construction (UMMCA)
- Manage Programming Administration System (PAX), CAPCES to support the MCA Program
- Coordinate BRAC Construction Program
- Coordinate Contingency Construction requirements
- Manage Facility Demolition Program
- Coordinate NAF Construction Program

- Oversee Army Policy for Buildings/Dams/Roads/Airfields/Railroads/Utility Systems
- Manage Army DPW Business Programs
- Manage Facility Standardization Program
- Army Representative on Federal Facilities Council

- OACSIM link to Army G3
- Execute strategic and master planning for Army Installations and synchronization of Army planning
- Manage installation force structure analysis, planning, integration, and requirements determination
- Execute strategic planning for Joint Basing & worldwide Expeditionary base operations support
- Coordinate QDR, The Army Plan, ACP and SSRG

- Coordinate BOS rqmt Generation (FOM)
- Coordinate SRM rqmt generation (FSM)
- Coordinate recap. requirement (FMM)
- Coordinate installation facility mgt systems (ASIP, RPLANS, IFS, GFEBS)
- Support to OSD's Installation Capabilities Council
- Coordinate installation related issues, studies and reviews
- Focal point for COOP operations