



Capability Planning for Today and Tomorrow

Army Installation Status Report

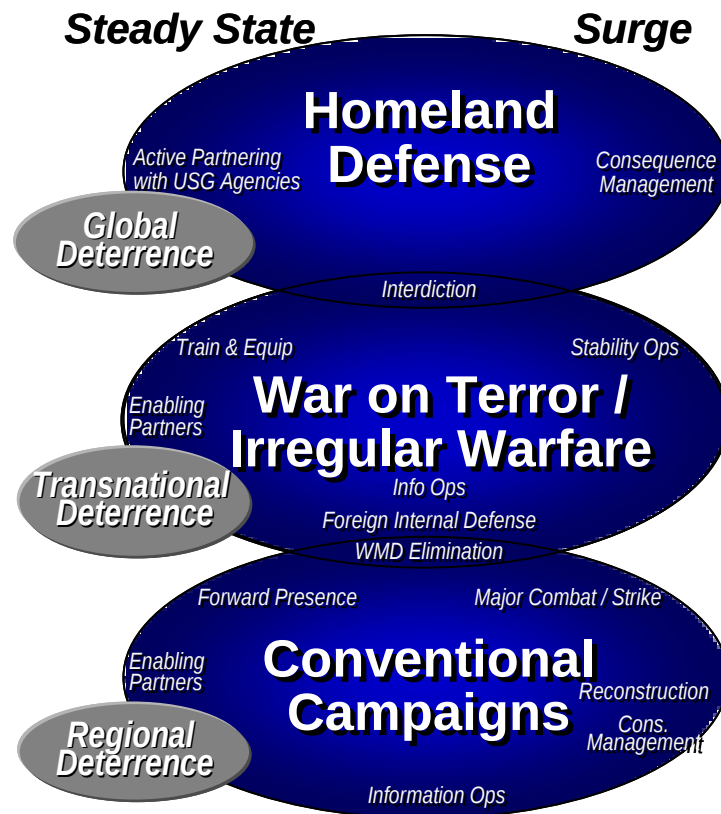


Installation Status Report

Report Documentation Page				Form Approved OMB No. 0704-0188	
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1. REPORT DATE MAY 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE Capability Planning for Today and Tomorrow Army Installation Status Report				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Office of the Assistant Chief of Staff for Installation Management, Operations Division, DAIM-ODO, 600 Army Pentagon, Washington, DC, 20310-0600				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Presented at the NDIA Environment, Energy Security & Sustainability (E2S2) Symposium & Exhibition held 21-24 May 2012 in New Orleans, LA.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 22	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Current Environment



Sizing Variables:

Frequency	Number	Scale / Intensity
Concurrency	Ops Risks	Duration
Policy	Environment	Partner Capabilities

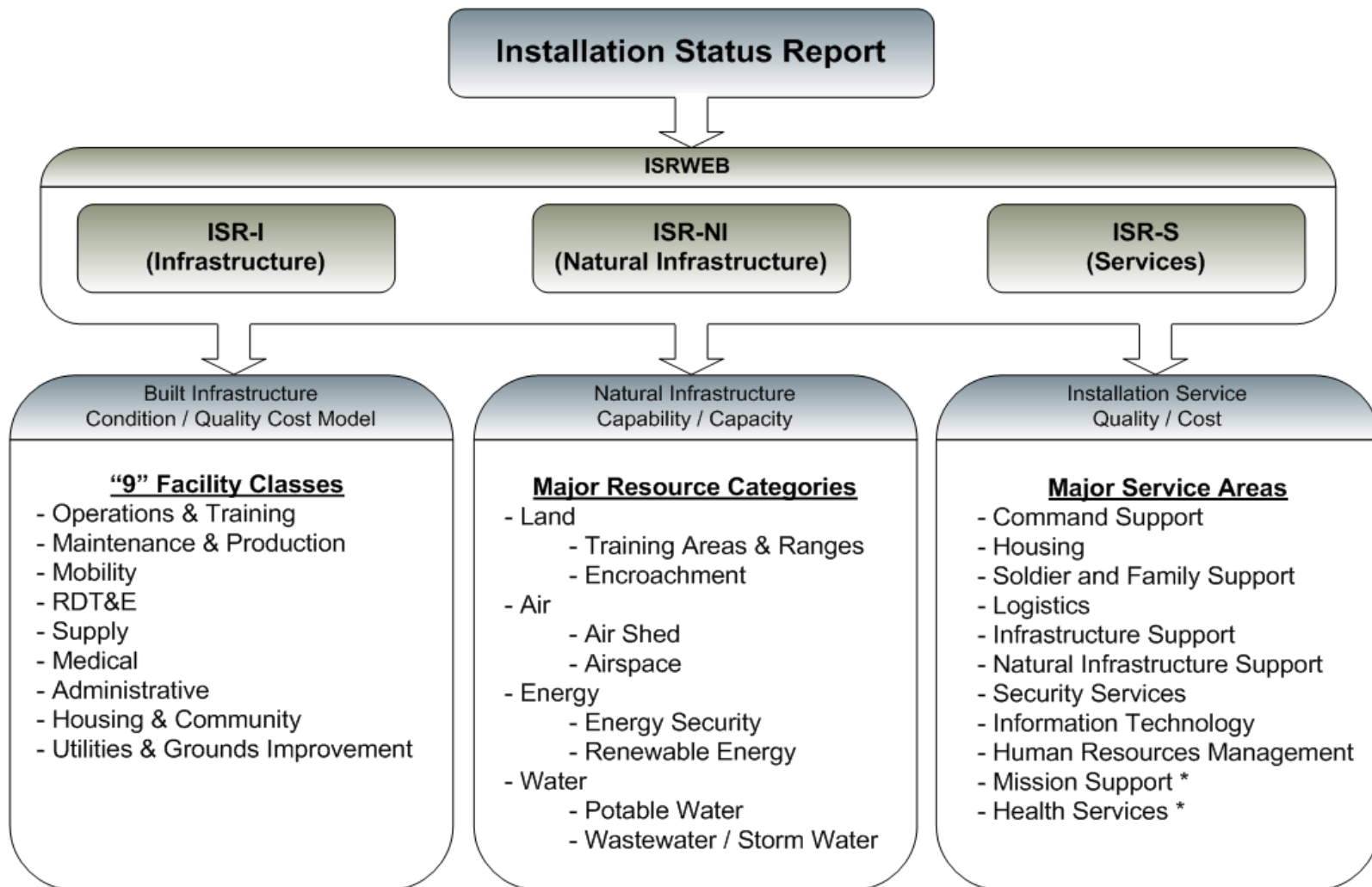


Current Environment

- Which installations can accept more mission?
- What are installation constraints today and in the future?
- Are our installations effectively utilizing resources and maximizing efficiencies (land, airspace, energy, water)?



Components of ISR



*Non-BOS Major Service Areas

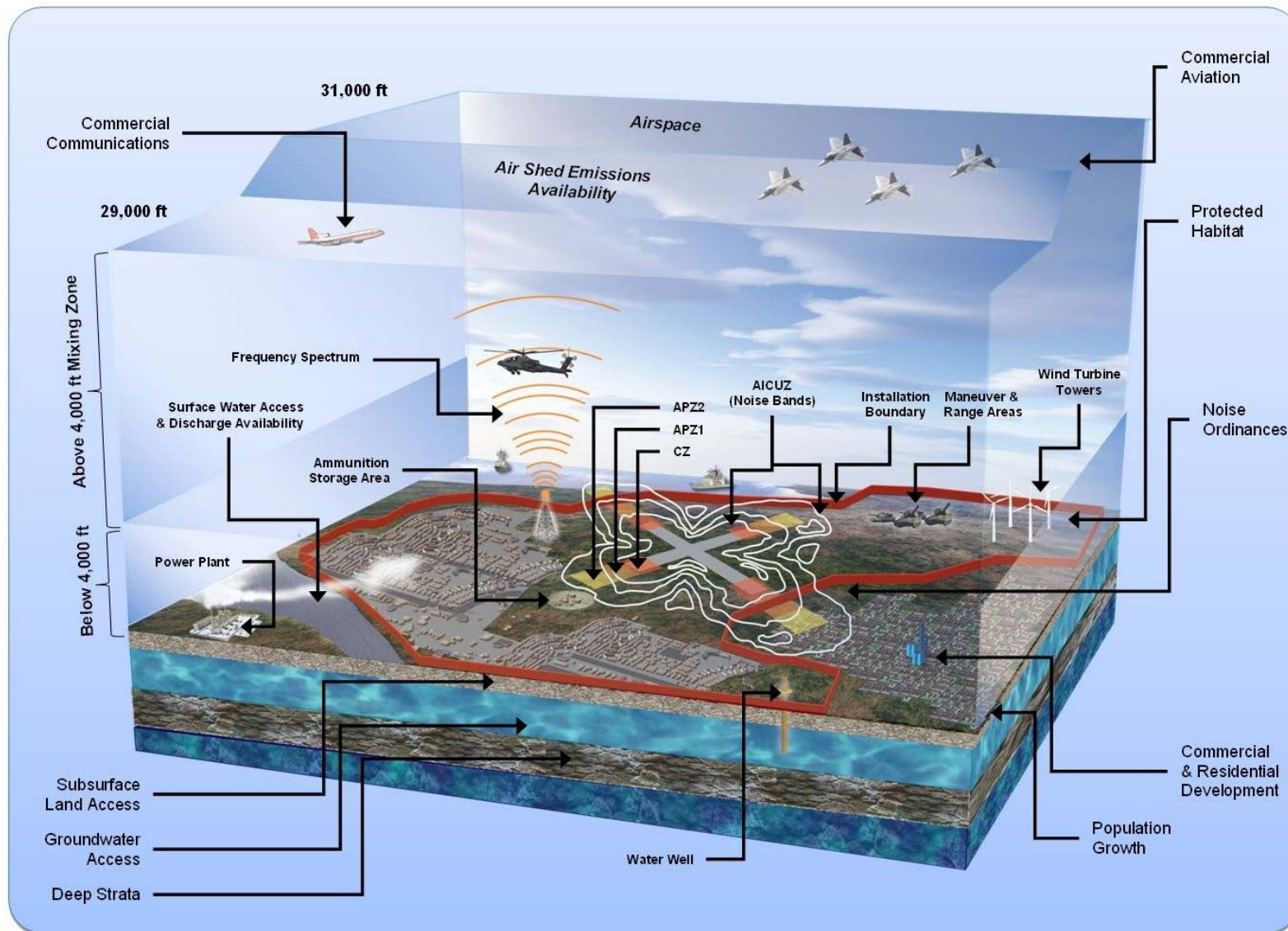


What is ISR-NI?

- **ISR Natural Infrastructure (ISR-NI)** measures current and future installation capability
- Provides quantitative AND spatial analysis through an interactive GIS Viewer
- Ability to perform ‘what-if’ scenarios to provide visibility of mission impacts before they occur
- Consolidation of existing capability/ capacity data (e.g., training areas, energy, water, airspace) into an ‘early warning system



ISR-NI Focus





What is ISR-NI?





How are ISR-NI Data Utilized?

- **At the Installation Level:**
 - Data can be used to support prioritization of investments for critical projects
 - Capacity data can be used to support current/future missions
 - Provide coordinated response from across multiple garrison activities
- **At the Headquarters Level:**
 - Identify Army-wide installation capacities for realignment
 - Tracks progress made for sustainability initiatives
 - Identify areas for improvement
 - Provide ratings as part of the range evaluation in the G3 Sustainable Range Report
 - Provide data for IMCP metrics



What can ISR-NI tell you?

- Mission Impact to Training (Land, Airspace, Frequency)
 - Restrictions due to T&E species, CERCLA, wetlands, noise, air quality
 - External Encroachment due to sprawl, frequency
 - Camp Bullis, Ft. Belvoir
- Crash Zone / Accident Potential Zone Encroachment that go off post (Oceana)



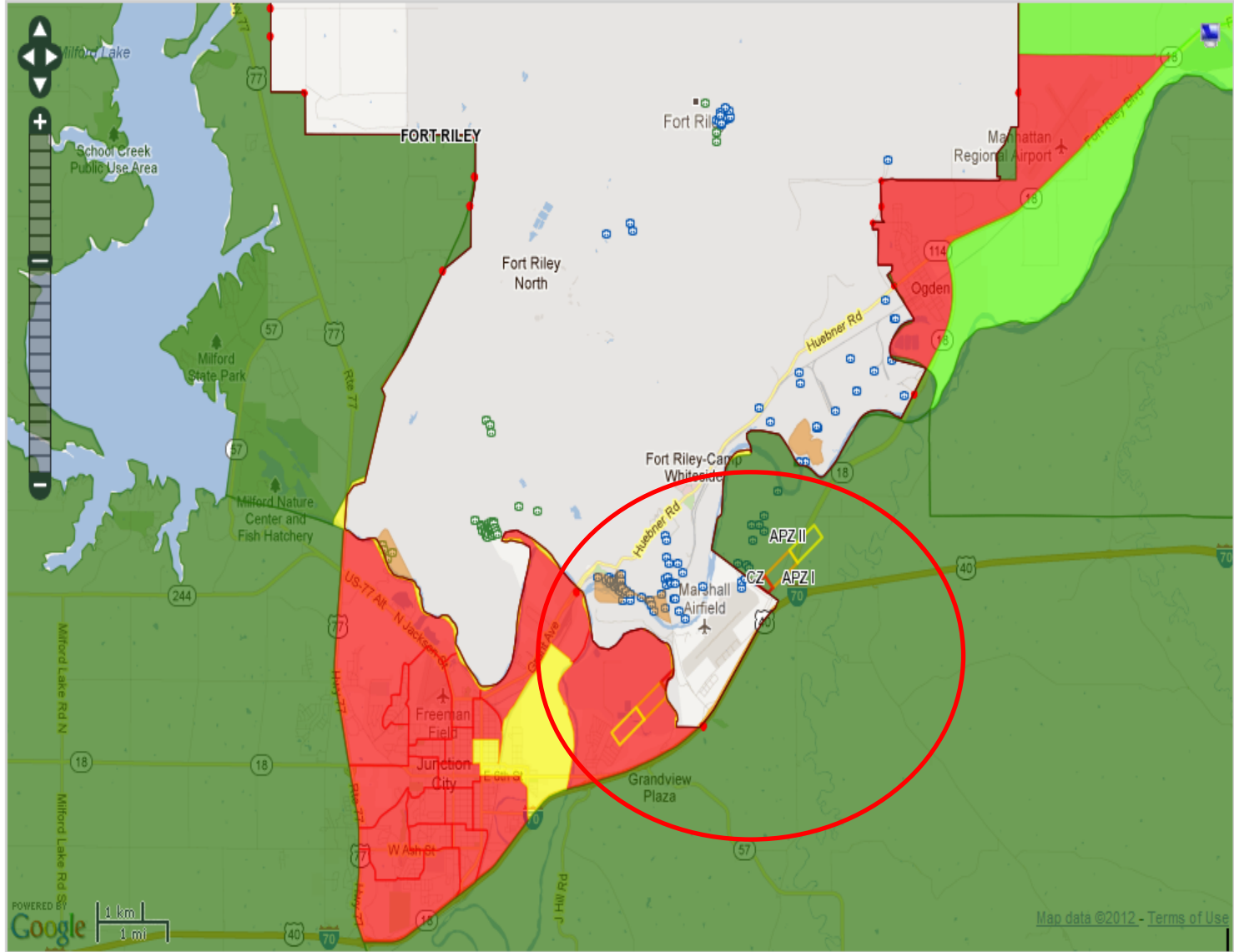
FORT RILEY

Home Query Markup ISR-NI

Viewer Toolbox

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- ☐ Land - Current Range Encroachment 2
- ☐ Land - Current Range Encroachment 5
- ☒ Land - Off-Post Military Contours (MS1)
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 - ☒ Accident Potential Zone - APZ II
 - ☒ Accident Potential Zone - CZ
 - ☒ ESQD Arc Area
 - ☒ Noise Zone Area
 - ☒ Gate Point (w/ATFP)
 - ☒ Safety Danger Zone
- ☒ Land - Current Fence Line Encroachment
 - ☒ Population Density (Previous FY) > 3
 - ☒ Population Density (Previous FY) 3
 - ☒ Population Density (Previous FY) 1
 - ☒ Population Density (Previous FY) < 1
- ☐ Land - Maneuver Encroachments (MS1)
- ☐ Land - Maneuver Encroachments (MS1)
- ☐ Land - Maneuver Land (MS101-1)
- ☐ Land - Potential Developmental Constraints
- ☐ Land - Potential Land for Development
- ☐ Source - ECM: Maneuver Standards
- ☐ NOAA Watches Warnings and Advisories
- ☐ NOAA Real Time Observations [\(Info\)](#)
- ☐ Precipitation [\(Info\)](#)
- ☒ Army Service [\(Info\)](#)
 - ☐ Training & Range (SRP)
 - ☐ Aerial Obstruction
 - ☐ Ammunition Supply (Point)
 - ☐ Ammunition Supply (Polygon)
 - ☐ Drop Zone
 - ☐ Forward Arming and Refueling Point
 - ☐ Forward Arming and Refueling Point
 - ☐ Impact Area



Legend

Map Ready

No Query Layer

-96.95778, 39.14391

Google Web Mercator

Map data ©2012 - Terms of Use

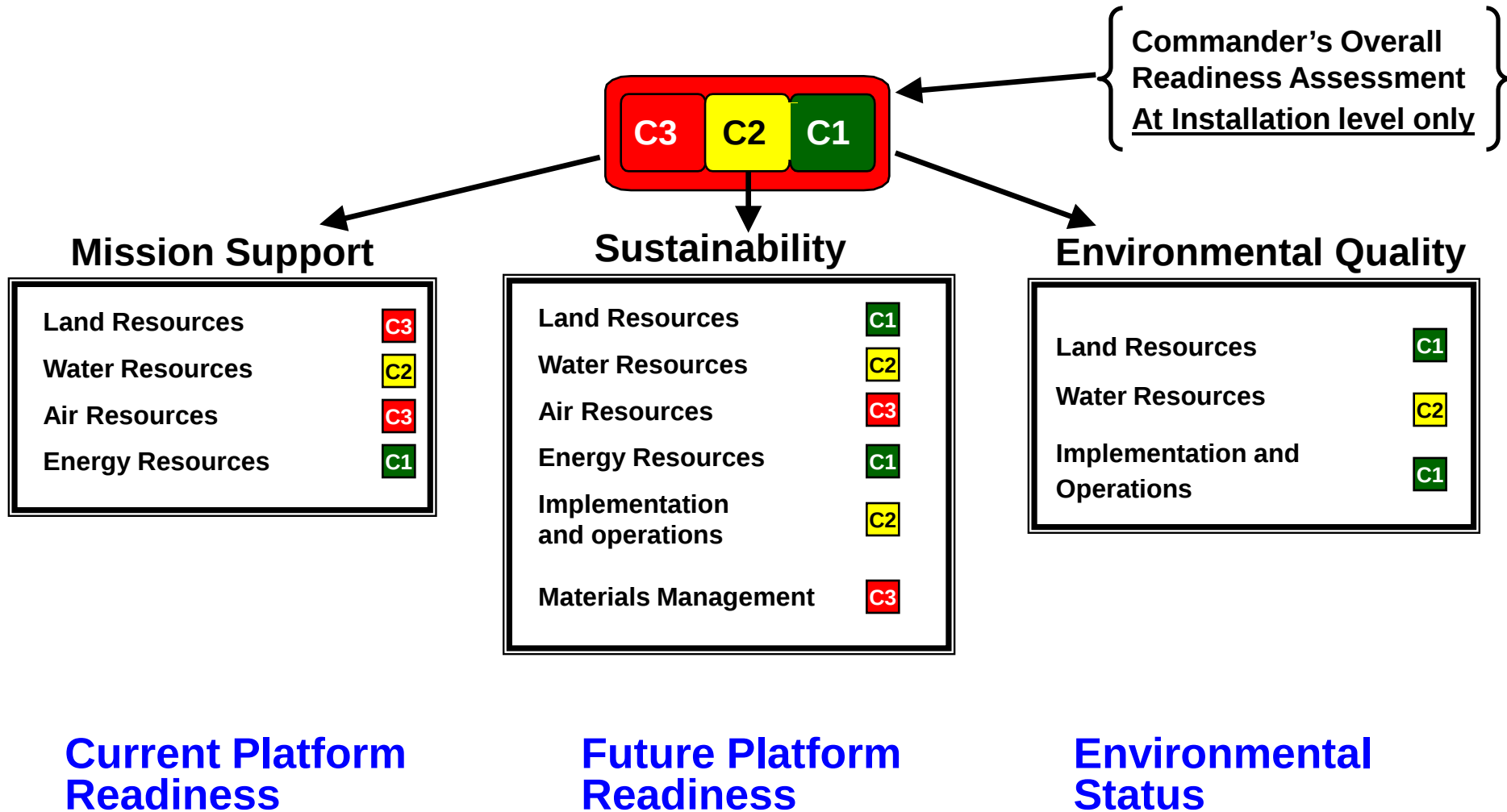


What can ISR-NI tell you?

- Macro level look at Over utilized / Underutilized Capacities
 - Utility (electrical, natural gas, and water)
- Status of actionable sustainability initiatives and milestones



ISR-NI Framework



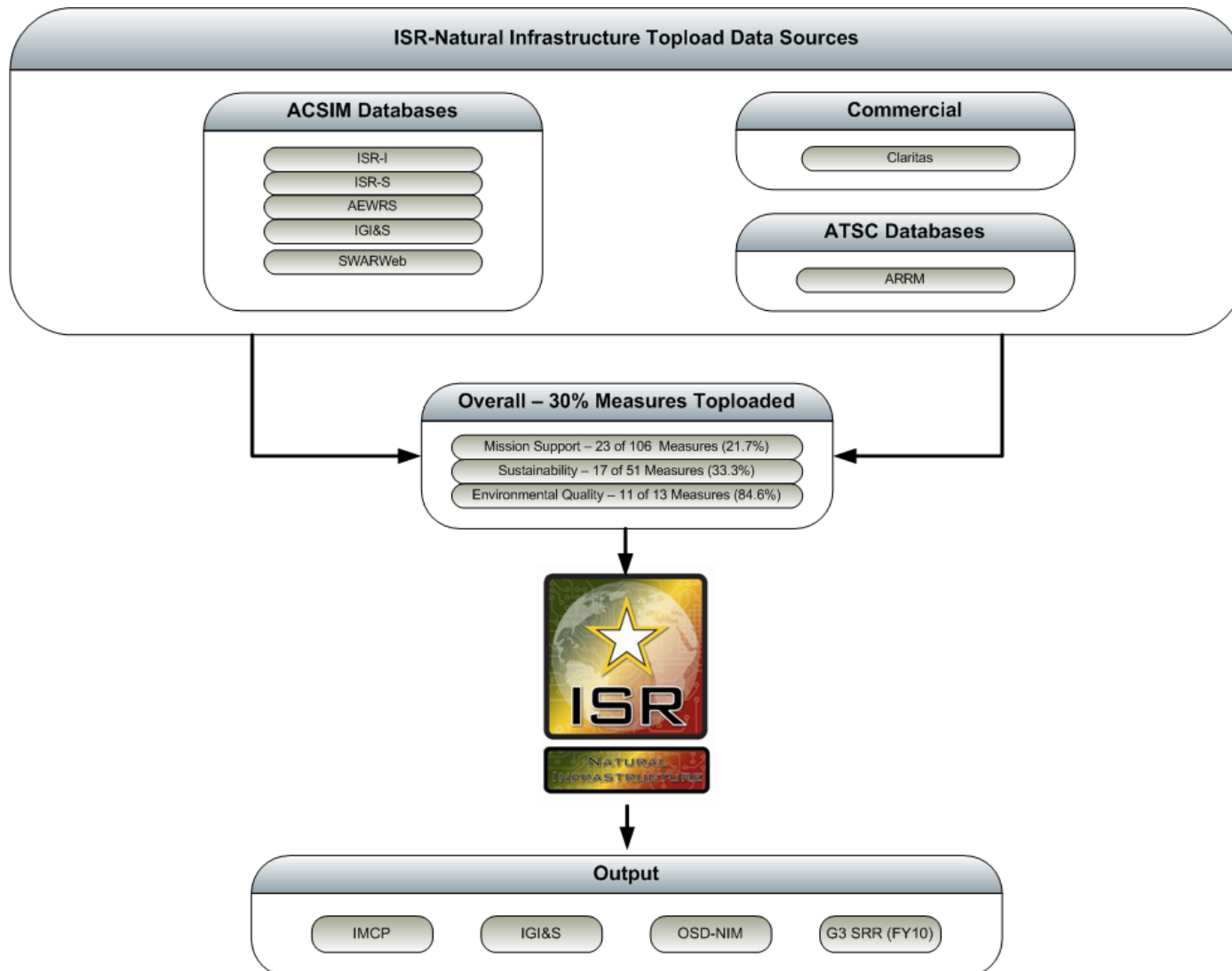


ISR-NI Data Requirements

- ISR-NI determines natural asset capability via Performance Measures
 - ISR-NI Measures
 - 170 performance measures for NonVirtual Organizations
 - 86 performance measures for Virtual Organizations
- Auto-populate from existing feeder systems (data consistency)
- Installation data within system persists from year to year, validate and update each cycle
- Rating criteria aligns with Army standards



ISR-NI Connection to Army Databases





FY11 Training Areas and Ranges (MS101)

- Shortfall of maneuver training land on majority of installations due to increase in doctrinal requirements
- 25% of installations have issues that can significantly impact training in the next 5 years. Examples include:
 - Training Land Shortage
 - Threatened and Endangered Species
 - Environmental Issues
 - Water Shortage



ISR-NI Data Input Module

ISRWEB NavigationSelect OrgLogout? Help

Resource SubCategory: Training Areas & Ranges (01)NAReadinessC1C2C3C4MS SU EQ

StandardsAdd/Edit ResourcesGeneral Comments

Fort Example

Mission Support (MS)

Land (1)

Encroachment (02)

Training Areas & Ranges (01)

Land Use & Planning (03)

Air (2)

Airshed (06)

Airspace (07)

Radio Frequency (08)

Water (3)

Potable Water (10)

Wastewater / Storm Water (11)

Energy (4)

Energy Security (13)

Validate Data

Transfer Data to Command Viewer

Reports

Metric Conversions

Map It

Map It - Instructions

2. Maneuver Lands - Available Maneuver Land Assets What is the total area available for maneuver training, after training restriction factors are subtracted from the total maneuver land area calculated in Standard #1?

Lead Proponent: DPTMS
Assistant Proponent: Range Manager, Environmental
Data Source: Toploaded from ARRM / ECM (Aug - Oct 2008)

Standard Help

Enter/View Comments

Training Type Name	Total Maneuver Area (acres)	Total Number of Training Days Available	Total Acre Days	Total Acre Days Restricted	Available Acre Days Remaining	Percent Acre Days Available
Heavy Maneuver	83,656.7	365	30,534,695.5	4,028,140	26,506,555.5	86.8
Light Maneuver	108,727.7	365	39,685,610.5	5,069,959.5	34,615,651	87.2

Standard Calculation:

Encroachment Factors - Microsoft Internet Explorer

Resource Subcategory: Training Areas & Ranges (01)

Standard #: 2

Training Type Name: Heavy Maneuver

Encroachment Factor	Area Impacted (acres)	Days Encroached	Acre Days Encroached
Cultural Resource Sites	715.7	365	261,230.5
Fauna Critical Habitat	4,682.6	365	1,709,149
Fauna Threatened and Endangered Species	0	365	0
Flora Threatened and Endangered Species	64.8	365	23,652
Wetlands	5,766.8	365	2,104,882

Total Acre Days Restricted: 4,028,140

Close

Done

Local intranet

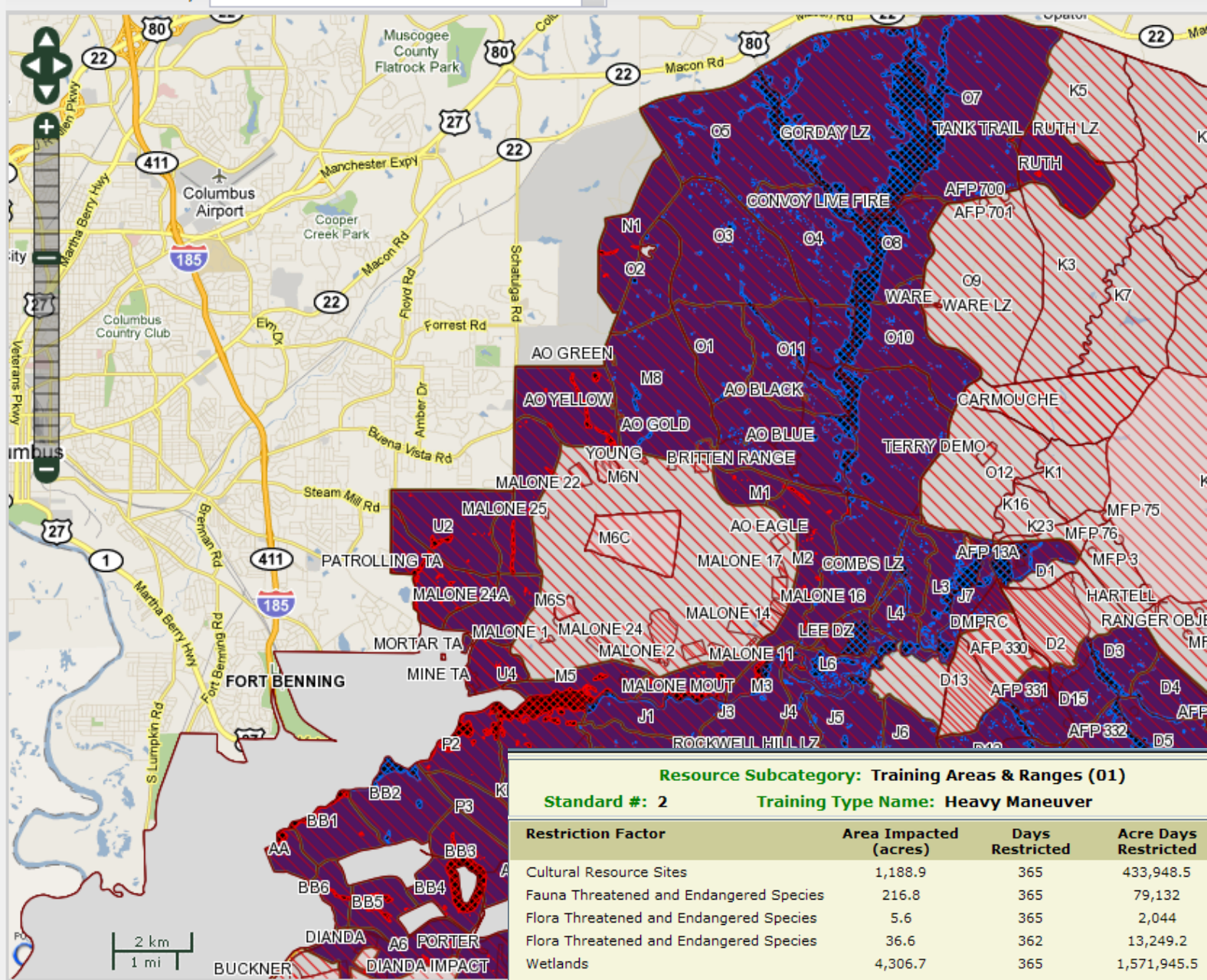
“Map It” Functionality allows the user to validate the Auto-Populated Mission Support Land Measures.

Viewer Toolbox

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- ☐ Environmental
- ☐ Renewable Energy
- ☒ Base Data
 - ☒ Installation
 - ☒ Non-Operational
 - ☒ Live Fire Range
 - ☒ Dudded Imp
- ☐ Land - Future F
- ☐ Land - Future R
- ☐ Land - Future R
- ☐ Land - Current
- ☐ Land - Off-Post
- ☐ Land - Current
- ☒ Land - Maneuver
 - ☒ HM 001
 - ☒ HM 029
 - ☒ HM 039
 - ☒ HM 090
 - ☒ HM 092
 - ☒ HM 100
 - ☒ HM 107
 - ☒ HM 134
 - ☒ HM 138
 - ☒ HM 152
 - ☒ HM 165
 - ☒ HM 167
 - ☒ HM 183
 - ☒ HM 240
 - ☒ HM 273
 - ☒ HM 303
 - ☒ HM 362
 - ☒ HM 365
- ☐ Land - Maneuver
- ☐ Land - Maneuver
- ☐ Land - Potential

Select one or more overlays:



Resource Subcategory: Training Areas & Ranges (01)

Standard #: 2

Training Type Name: Heavy Maneuver

Restriction Factor	Area Impacted (acres)	Days Restricted	Acre Days Restricted
Cultural Resource Sites	1,188.9	365	433,948.5
Fauna Threatened and Endangered Species	216.8	365	79,132
Flora Threatened and Endangered Species	5.6	365	2,044
Flora Threatened and Endangered Species	36.6	362	13,249.2
Wetlands	4,306.7	365	1,571,945.5
Safety/Other	433.8	365	158,337



FY11 Fenceline Encroachment (MS102)

- 41% of installations have contours that go off-post
- 62 installations have approximately 2 million acres under administrative control for training if mitigation measures occurred
- Future Encroachment – 45% of installations estimated to have significant population growth outside the base boundary in the next five years



Installation Status Report



Way Ahead

• Facility Energy Profile

Number	Common or Specific	Component Name	Selection	Element Name	Inspection Conducted by a Asset User or	Green	Amber	Red	WEIGHT	Score	Grade	
2	Common	Building Exterior-General	Amber	Building Exterior	U	Light colored exterior of stone or masonry or reflective color if metal. Well sealed with no obvious places for air leaks.	0	Any construction material with evidence of condensation damage on the exterior of the building indicating air leaks.	10	0	10	E
3	Common	Building Exterior-Roof	Red	Roof Energy	U	White or light colored roof or known to have a solar reflective index number. Vegetated roof.	0	Rack covered roof.	0	10	10	E
4	Common	Building Exterior-Walls	Red	Building Envelope	U	The primary building is over 50% shaded, no evidence of mold, moisture damage, or mildew.	0	The primary building is less than 50% shaded. Same evidence of at least one of the following, mold, moisture damage, and mildew.	0	10	10	E
5	Common	Building Exterior-Window	Green		U	Double pane windows with reflective coating or glass. No drafts or wind leaks around windows. No evidence of moisture damage. No obvious evidence of run damage inside on carpet, draper, floor by fading or discoloring.	10	Windows are double pane but feel cold or drafts exist. Slight moisture damage is evident. No solar reflective coating, just clear glass.	0	0	10	E
6	Common	Building Exterior-Doors	Green	Exterior doors	U	No drafts or wind leaks around doors. Door feels warm in winter and cool in summer to the touch.	5	Small drafts and wind leaks that are not bad enough to warrant a red rating.	0	0	5	E
			Amber	Water Efficiency	U	Low flow fixtures		No Amber condition.		5	5	E
			Red	Cooling	U	High efficiency (SEER 16 or above), geothermal, solar, non traditional.	0	Conventional cooling but less than SEER 16 or marked on the unit. If SEER is not available, then no geothermal, solar, or non traditional cooling is used.	0	10	10	E
			Green	Heating	U	Geothermal, solar, non traditional, or Energy Star, combined with backup electrical, gas, or oil.	10	High efficiency (marked on unit)	0	0	10	E
			Red	Water Heating	U	Solar w/ backup, heat pump, geothermal or tankless	0	High efficiency (marked on unit) storage tank. May be oil, gas, or electric	0	10	10	E
15	Common	HVAC	Green	Controls	U	Green if any of the following are present: Automatic changeover and programmable in the heating and cooling system controlled by a Building Automation System (BAS) or an Energy Management System (EMS); Is the Energy Star Logo or wording found on any part of the system?	5	Programmable thermostat	0	0	5	E
						Heavily insulated by observation. Difficult to		Medium insulation by observation. I can				
								Not observed or lightly insulated. I can feel				

Questions?



Installation Status Report