US Army Geospatial Center

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Team Leader

Geospatial Information Library (GIL)

Warfighter Support Directorate

US Army Geospatial Center

Corps of Engineers

Appraisal & Selection of Geospatial Data

Library of Congress

17 November 2010

US Army Corps of Engineers

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Mission Statement

- The mission of the AGC is to “coordinate, integrate, and synchronize geospatial information requirements and standards across the Army, develop and field geospatial-enterprise enabled systems and capabilities to the Army and the DoD, and to provide direct geospatial support and products to Warfighters.”

Selection Process

a. Requirements are driven by MACOMs and COCOMs.

b. G-2 sends out an annual survey letter .

c. G-2 priorities requirements.

d. In-house production based on feedback resulting from the Survey.

Selection (cont.)

- The Army Geospatial Center (AGC) provides Water Resources information (land based) to the military community under the authority of DoD Directive 4705.1.

Water Resources Products

- **The Water Resources Data Base (WRDB)** is produced and maintained by the Army Geospatial Center's (AGC's) Hydrologic Analysis Team. The WRDB provides information on quality, quantity, and availability of water resources in areas of the world of interest to the Department Of Defense (DoD). AGC's water resource layers are the primary data set populating the WRDB Geographic Information System (GIS); these are keyed to 1:250,000-scale Joint Operations Graphics maps and depict Existing Water Facilities, Surface Water supplies, and Ground Water resources. Coverage is global in extent but focused on arid and semi-arid regions of CENTCOM, EUCOM, and AFRICOM .
- **Water Resource Assessments** includes two topics - Surface Water Resources and Ground Water Resources - with text, tables, and figures. These studies are unclassified, and are shared with the host countries. Requirements for similar studies have also been completed for CENTCOM, PACOM, and EUCOM countries and regions.
- **The Water Detection Response Team** is the Department of Defense's (DoD) prime organization for assisting military well drillers, whether for military or humanitarian, or nation-building activities. Its primary function is to assist and advise well-drilling teams on the location of the best well-drilling sites and depths, and to provide information on drilling conditions for logistical planners. A staff of ground water experts is available on-call to provide information.

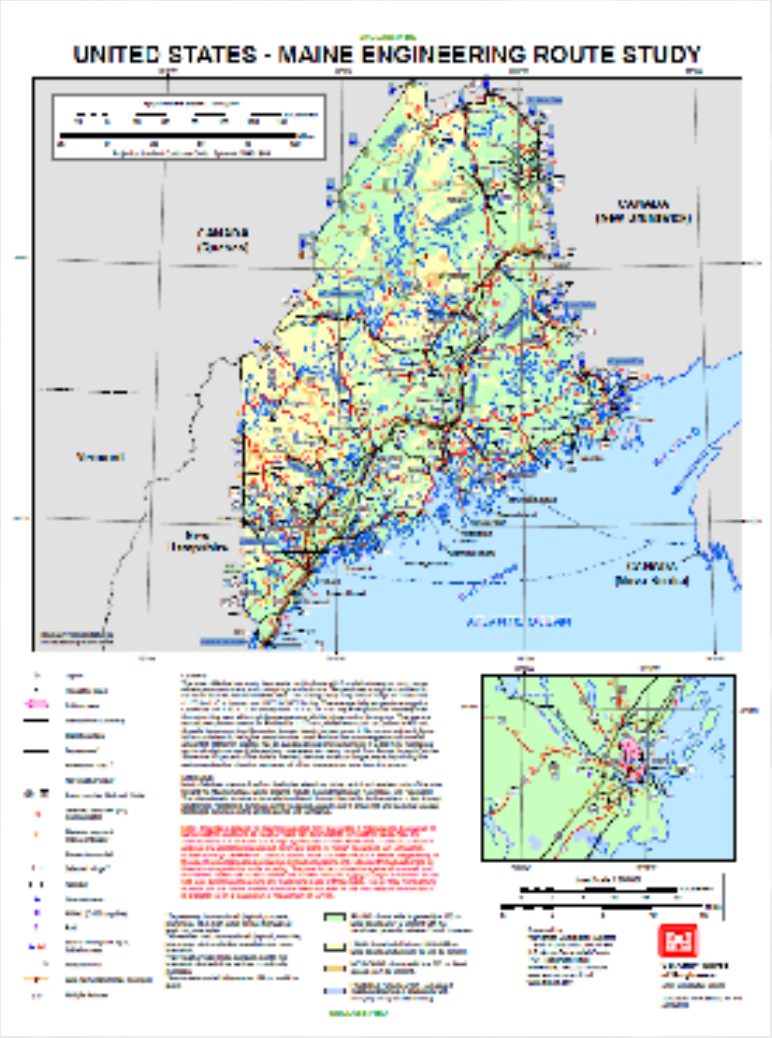
Army Geospatial Center

- Two types of digital data: ‘born digital’ and paper maps ‘converted’ to digital.
- The AGC produces both. All standard products and analyses are now ‘born digital; paper products only when requested.
- The GIL’s map collection is currently being scanned; >2,400 new ‘conversions’ last FY.

Standard ‘born digital’ products

- The ERS graphic provides current information on transportation systems, terrain, and environmental data.
- Highway system information includes road classification such as expressway, all-weather or fair-weather, surface type such as hard or loose surface, and distance in kilometers.
- This strategic graphic includes steep grades, sharp curves, ferry locations, key bridges and tunnels, border stations, and other man-made or environmental hazards affecting the major transportation routes.

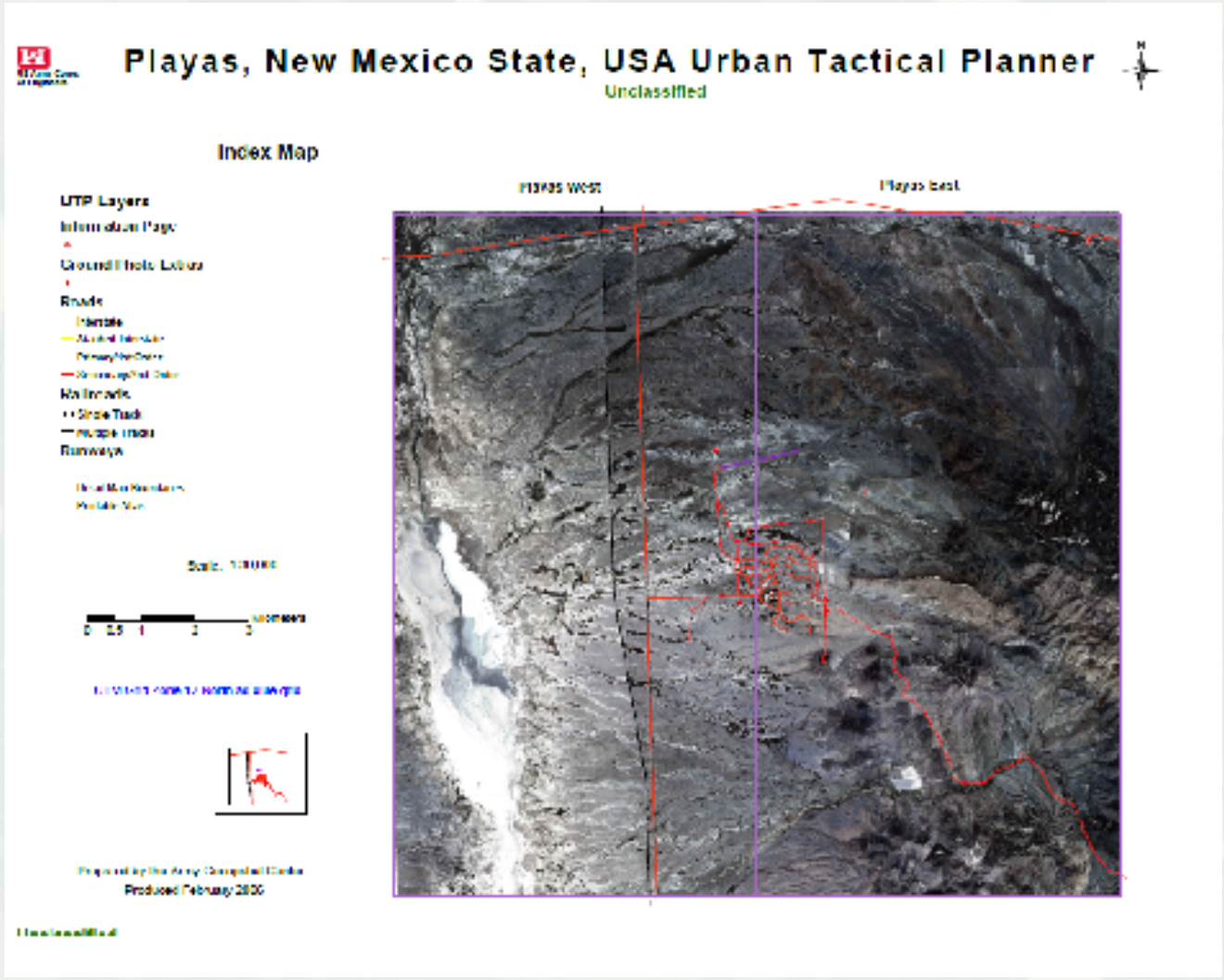
- Unclassified examples: ERS



Urban Tactical Planner

- The U.S. Army Geospatial Center (AGC) investigated the urban mapping problem and developed an expeditious process to analyze, map and display layers of urban area information-the Urban Tactical Planner (UTP).
- This terrain and cultural information is presented and easily manipulated with the use of ArcGIS software, which can be adjusted to meet specific customer needs.

Urban Tactical Planner (U)



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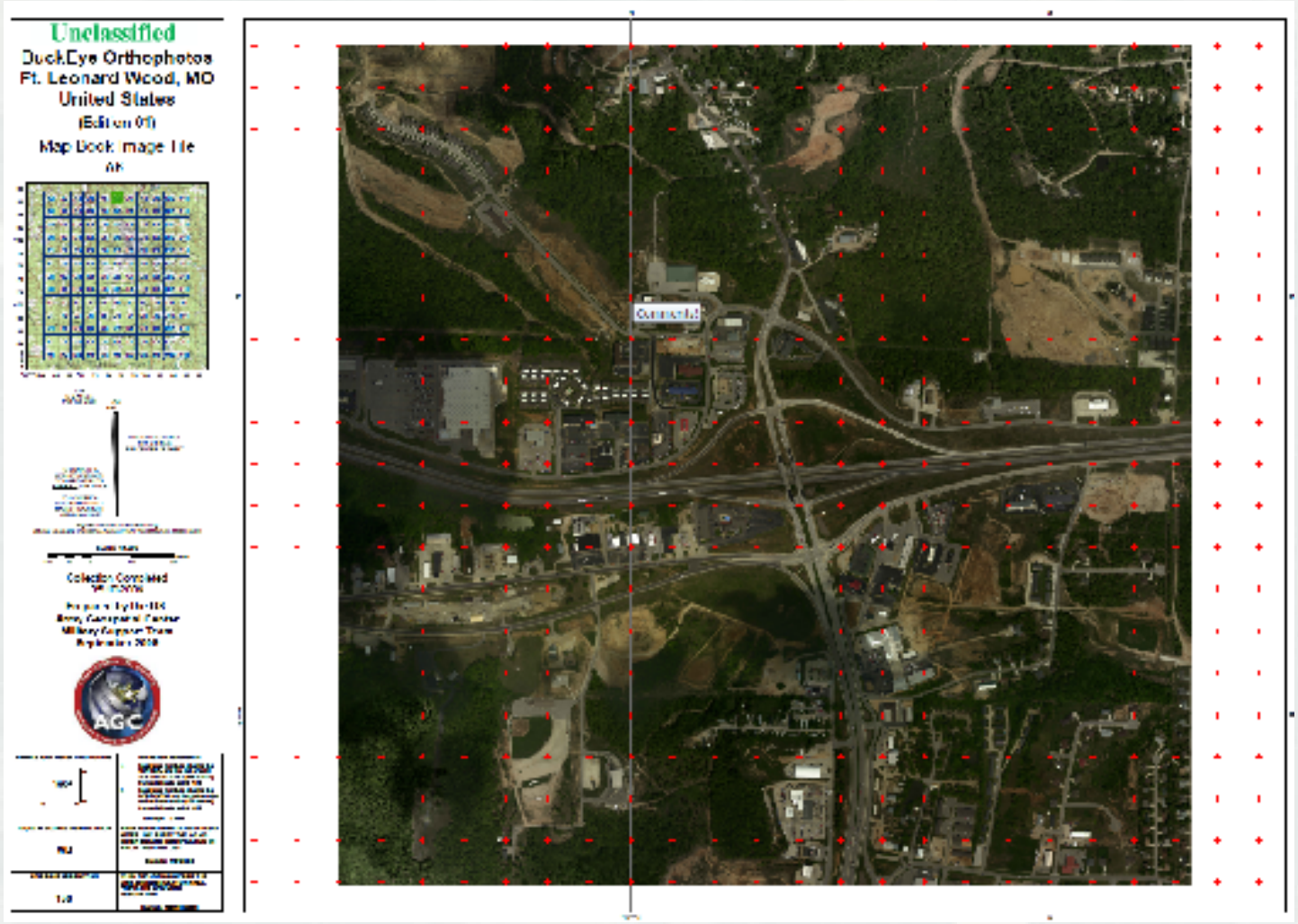
Buckeye

- The BuckEye Program was born in 2004 out of the need for unclassified high-resolution geospatial data for tactical missions.
- BuckEye began with a helicopter-mounted digital color camera that produced high-resolution imagery for intelligence, surveillance and reconnaissance (ISR) and change detection missions.
- In November 2005, BuckEye deployed to Iraq on a fixed-wing aircraft to concentrate on the urban mapping mission. In addition to a digital color camera, a Light Detection and Ranging (LIDAR) sensor was added to collect high-resolution.
- Current deployment in Afghanistan.

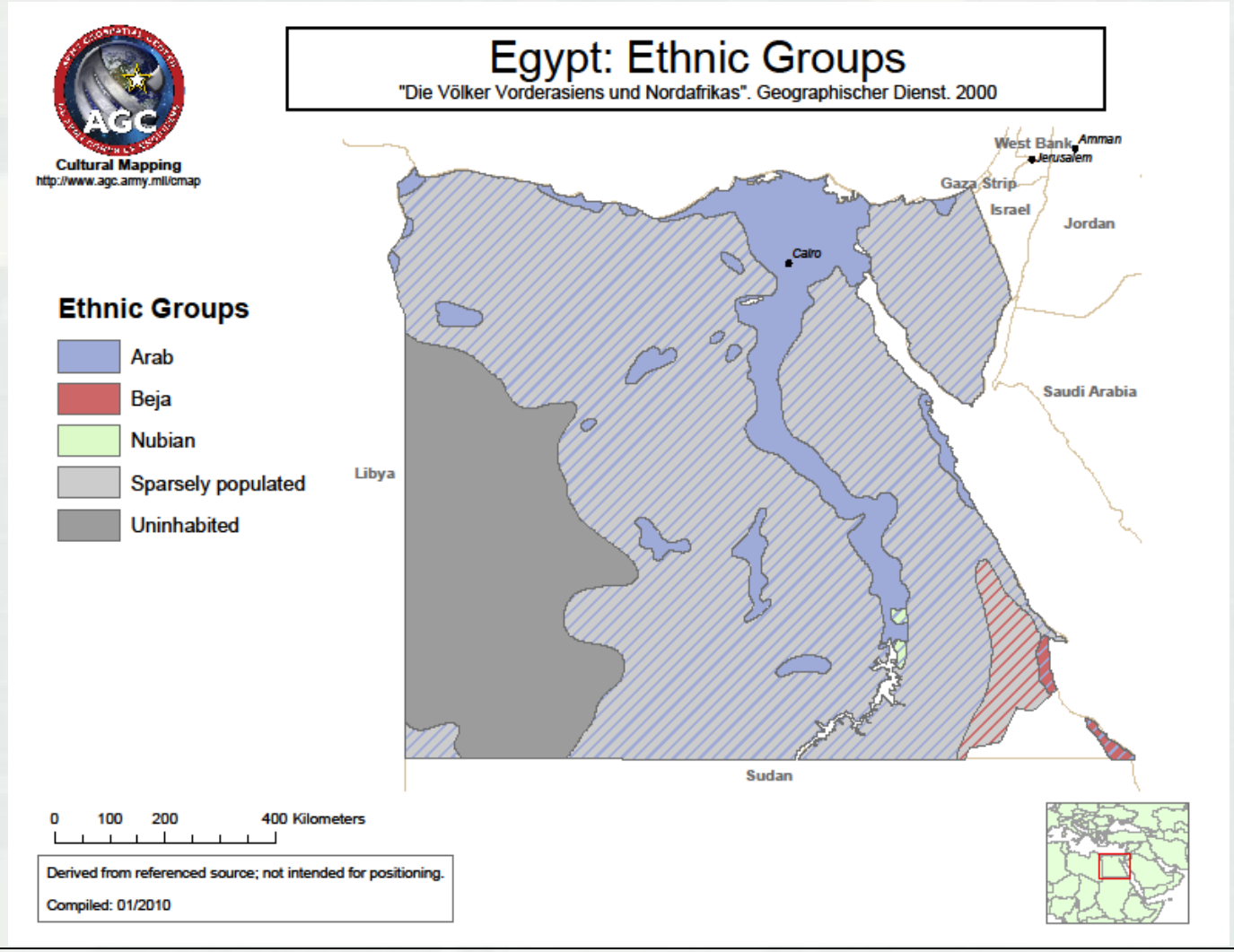
Buckeye (U)


Unclassified
DuckEye Orthophotos
Ft. Leonard Wood, MO
United States
(Edition 01)
Map Book Image File
AGC

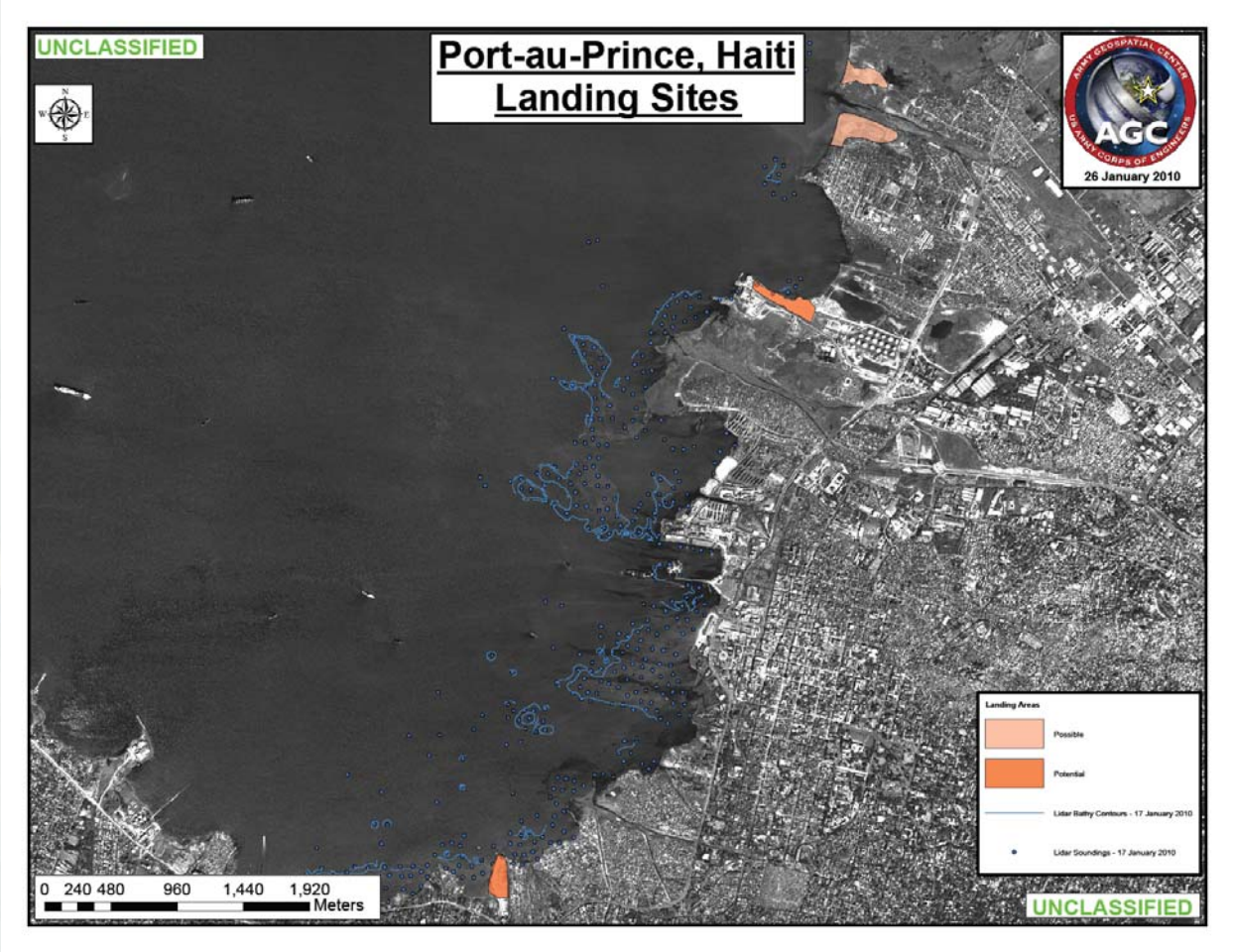
Cultural Mapping

- The goal of the Cultural Mapping (CMAP) geodatabase is to improve cultural awareness, intelligence analysis, and training, by serving geospatially referenced overlays that depict ethnic, tribal, religious, and linguistic traits in a given location.
- The CMAP is intended for use by the United States Military and intelligence communities.

Cultural Mapping (U)



Ad hoc Requests



Water Resources Assessment (U)

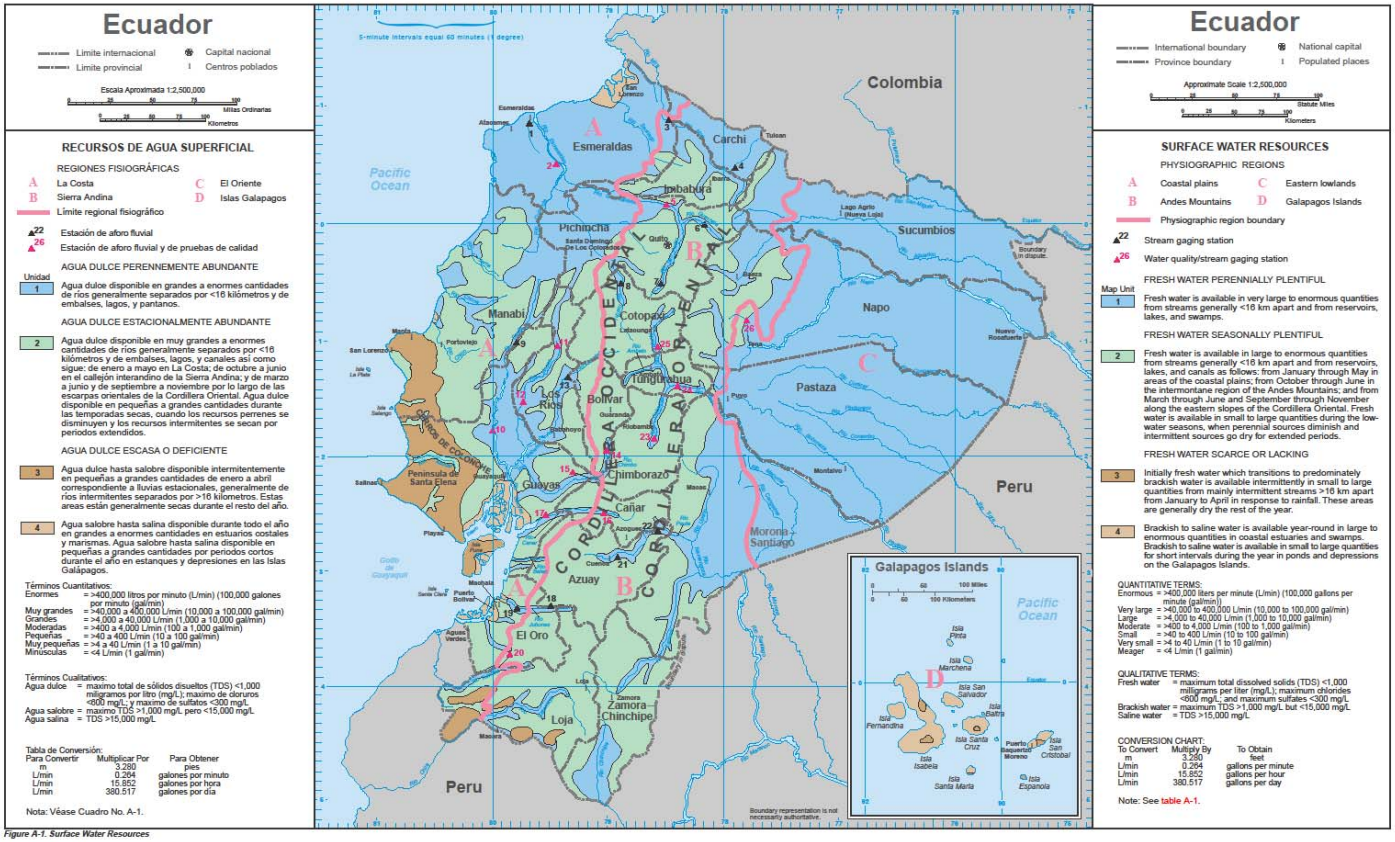


Figure A-1. Surface Water Resources

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Geospatial Information Library

- Not ‘born digital’.
- Scanning all relevant maps in the map collection and converting to geopdf
- Priority is based on mission of the AGC and the annual priorities list.
- Maps are scanned, georegistered, cataloged and kept as digital files (geopdf)
- FY 2010 >2400 maps

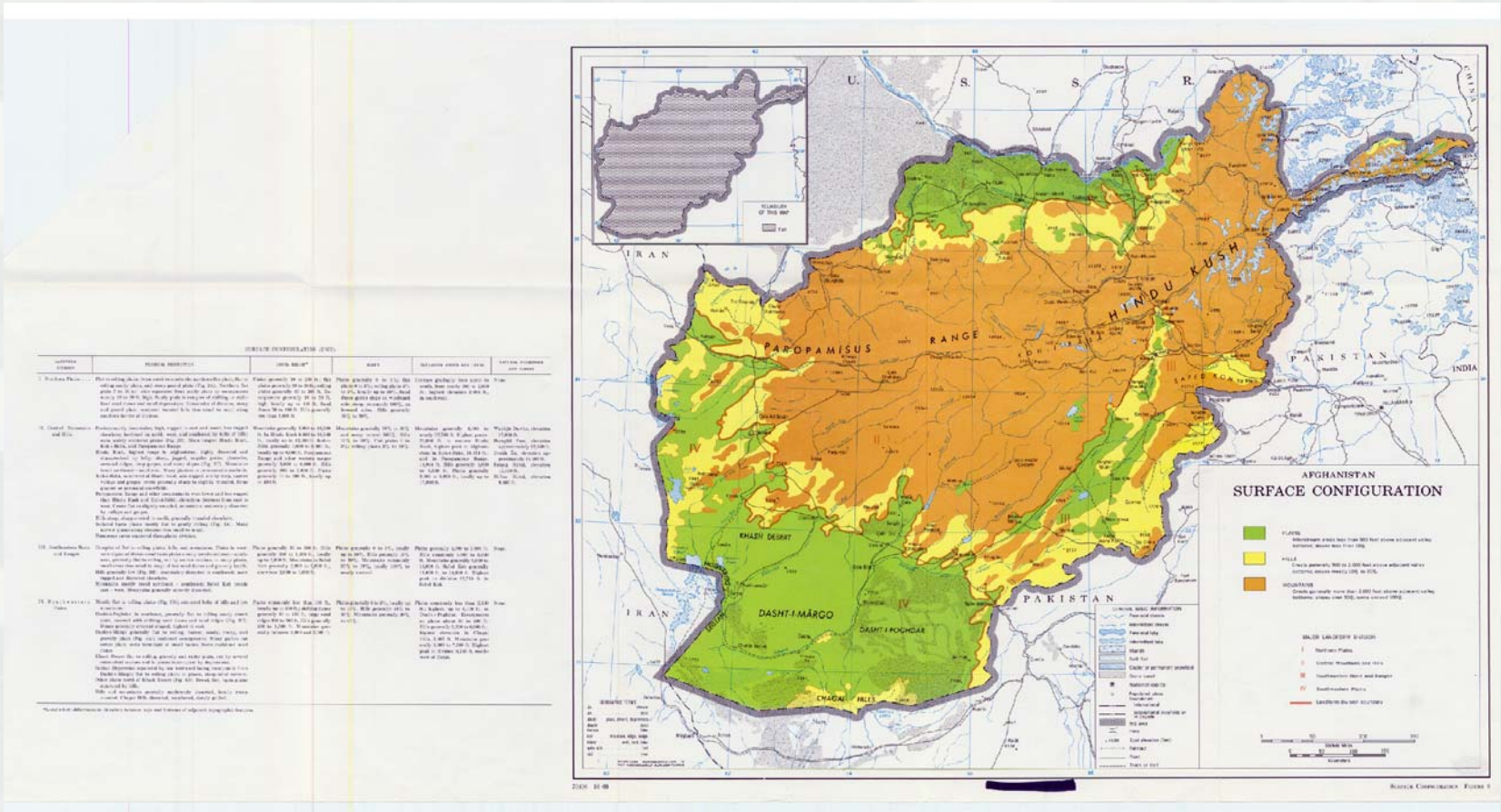
Geospatial Information Library

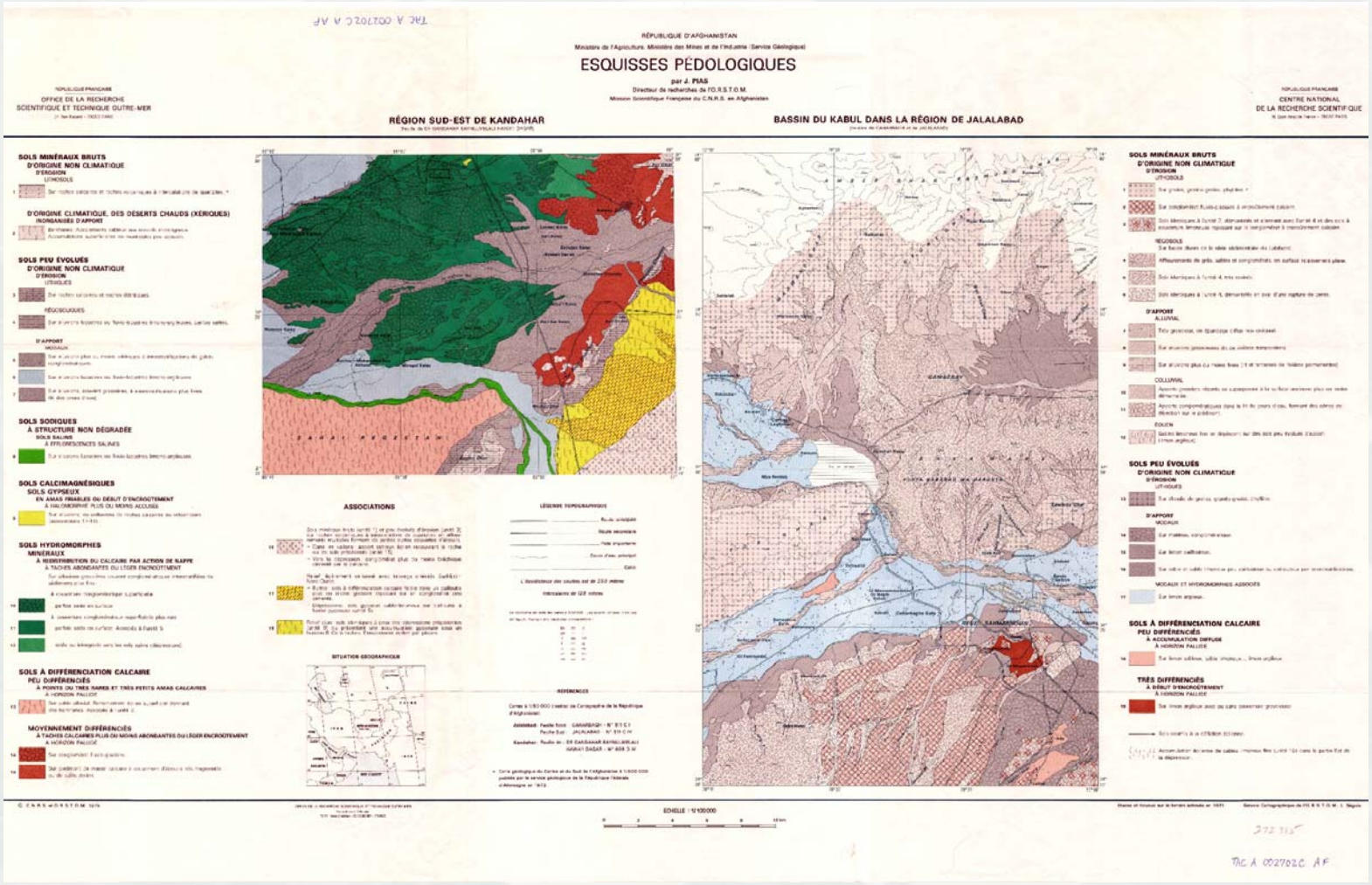
PURPOSE: To collect, manage and disseminate terrain analysis, water resources and geospatial data to analysts within the AGC, Corps of Engineers, US Army and other Dept. of Defense components. To provide research support in the aforementioned areas.

WHAT WE DO:

- Ongoing data collection and research activities.
- Collection focus: topography, hydrology, geology, terrain analysis, and military geography.
- Liaisons with NGA, USGS, Library of Congress, Dept. of State, and intelligence community libraries that employ geospatial data.
- On-line catalog on secure NIPRnet and SIPRnet systems.
- On-line data dissemination across SIPRnet and NIPRnet.

Examples


U. S. S. R.
IRAN
HINDU KUSH
PARAPAMISUS RANGE
PAKISTAN
INDIA
AFGHANISTAN
SURFACE CONFIGURATION
KHASH DESERT
DASHT-I-MARGO
DASHT-I-NOGHDAR
CHAGAI HILLS
PAKISTAN
IRAN



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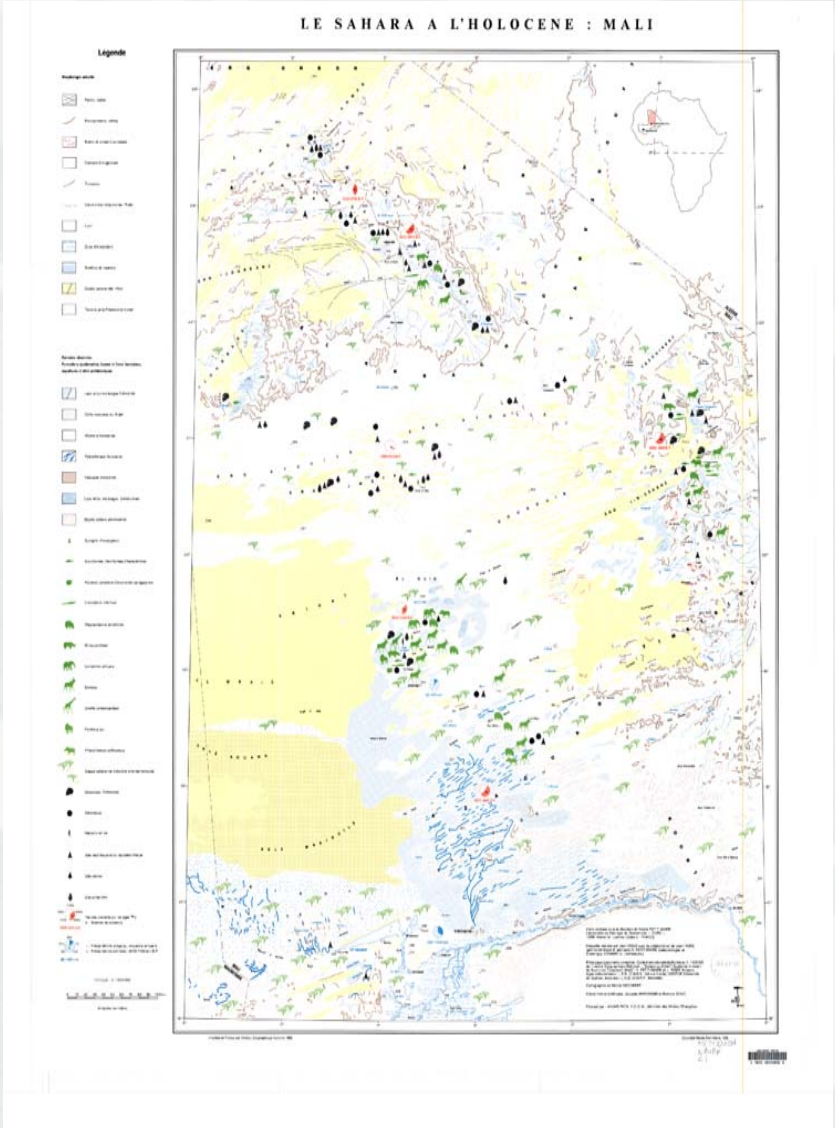

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Archiving Policy

- Currently the AGC has unlimited storage capacity, all products are archived and retrievable. Additional storage is purchased when necessary!
- In the future, priorities will need to be addressed; and policies will need to be established.
- ‘It has not yet been tackled.’

Comments or Questions!

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