

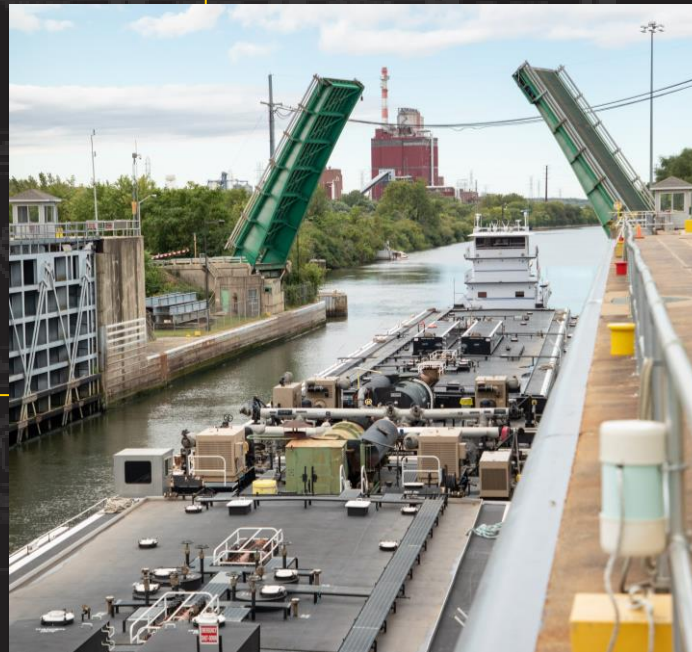
2025 USACE DCS USER REPORT

LySanias Broyles
Rock Island District
MVD WCDS Sub-CoP Lead
Mississippi Valley Division, USACE
Chair, STIWG/WG-ST

29 April 2025
133rd TWG Meeting
NOAA NSOF
Suitland, MD



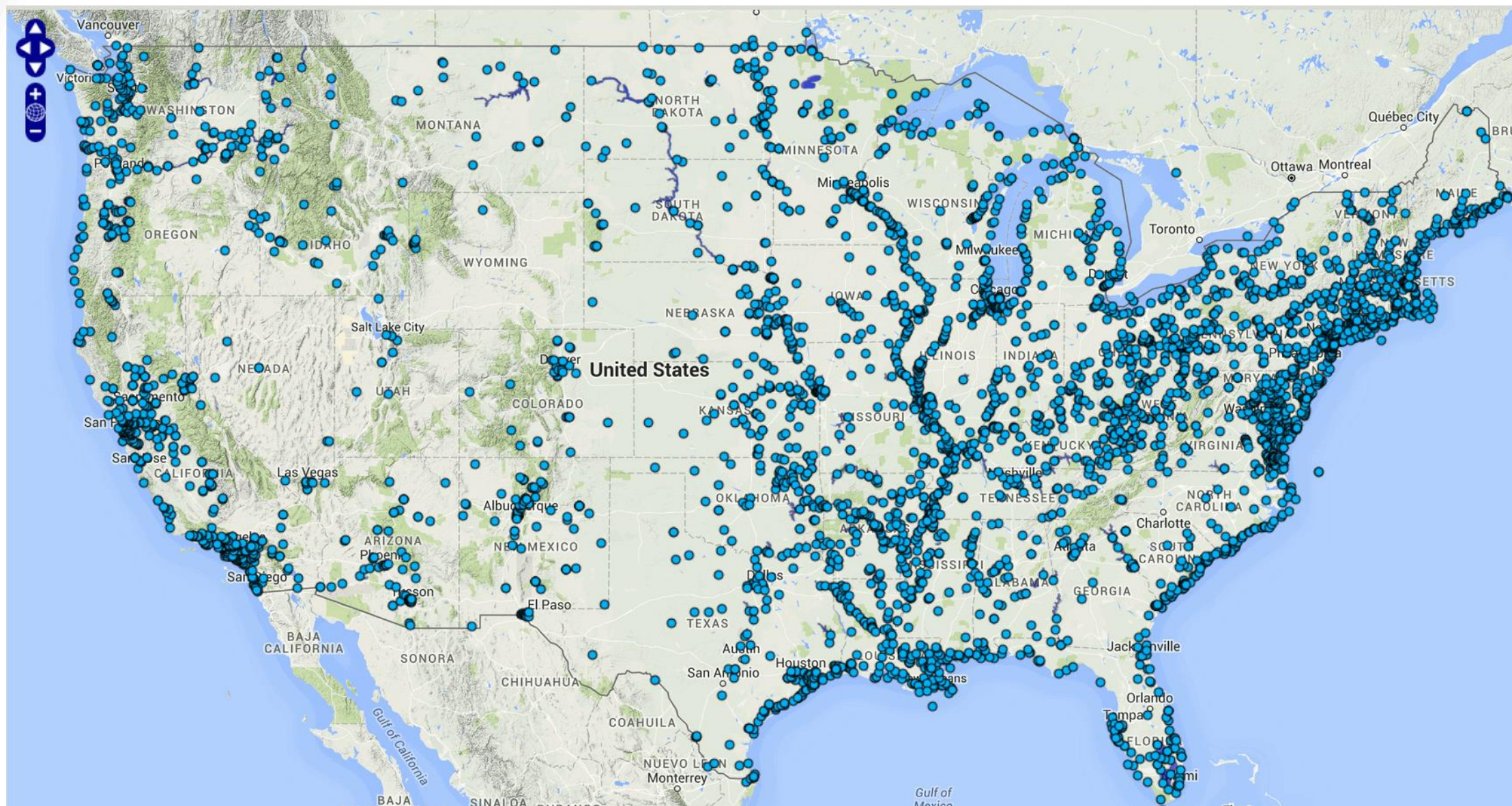
US Army Corps
of Engineers®





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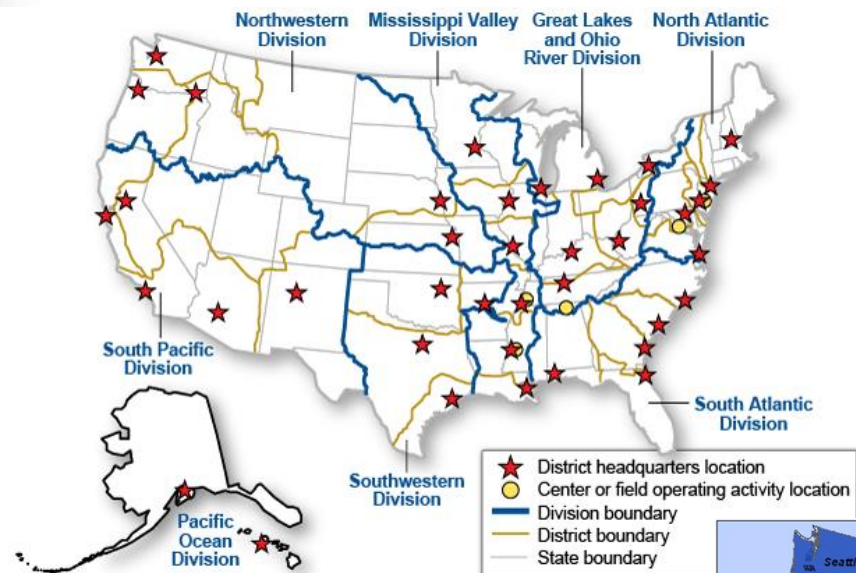
USACE CONUS GOES DCS PLATFORMS





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Sources: GAO analysis of U.S. Army Corps of Engineers data; Map Resources (map). | GAO-22-104054

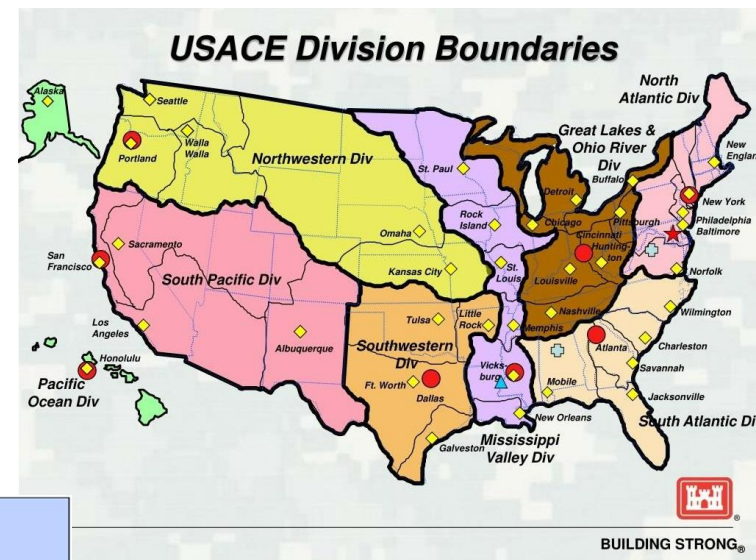
257 USACE Navigation Projects

\$250B/yr Benefit

12,000 miles navigable channel

50% oil imports

67% of US consumer goods



400 USACE Reservoir Projects

132 multi-use water resource projects

Avg. \$162B/yr flood damage reduction

75 hydro-electric plants

24% of US hydro-power generation

9M ac/ft of water storage

Recreation, water supply, fish, etc.

4B gal/day used from USACE projects



USACE USER REPORT



Water Management and Water Quality

- 12k miles of commercial inland waterways
- 257 navigation dams
 - 98% overseas trade by weight
 - \$1.47 trillion pass through USACE projects annually
- 926 coastal, 400+ water supply, flood control, and levee safety projects
 - 25% of nations hydro-power capacity, 326.9 million acre-feet of lake water supply storage
 - \$162B/yr flood damages prevented; 13:1 return on investment
- Great Lakes and Harbors water quality monitoring
- Daily operational decision support, emergency response, modeling, and flood control
- \$2 trillion annual economic impact



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WHAT IS THE WATER CONTROL DATA SYSTEM?



“The data acquisition, management, modeling and decision support system that serves the Corps water control missions.” - HEC: Water Control Data System (WCDS) Past, Present and Future; 1995

Data Collection (DCP and instrumentation)

Data Acquisition and Distribution (DRGS, HRIT, LRGS)

Decoding, Validation and Transformation (OpenDCS Computation Processor – CCP)

Dissemination

Corps Water Management System (CWMS)/COOP/Cloud Migration

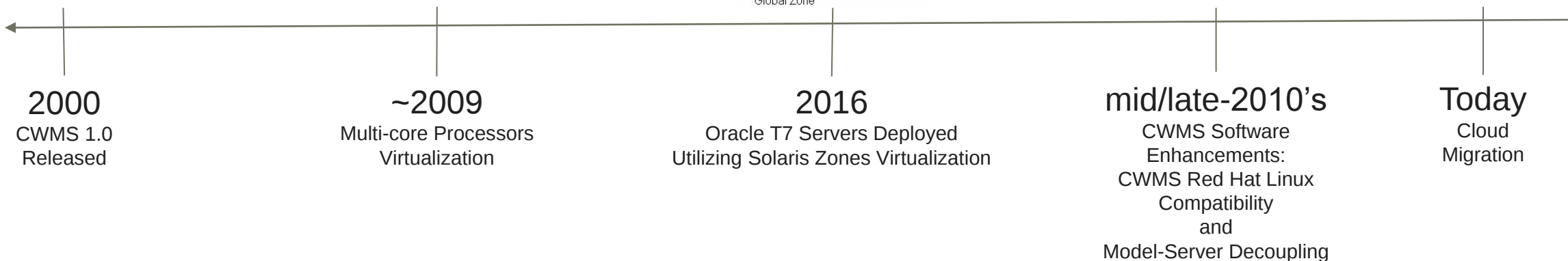
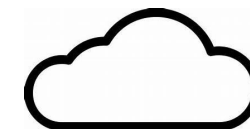
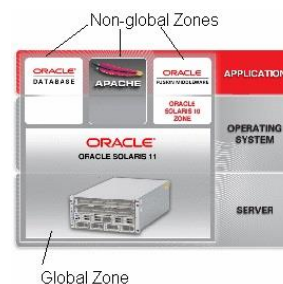
Software development

Modeling



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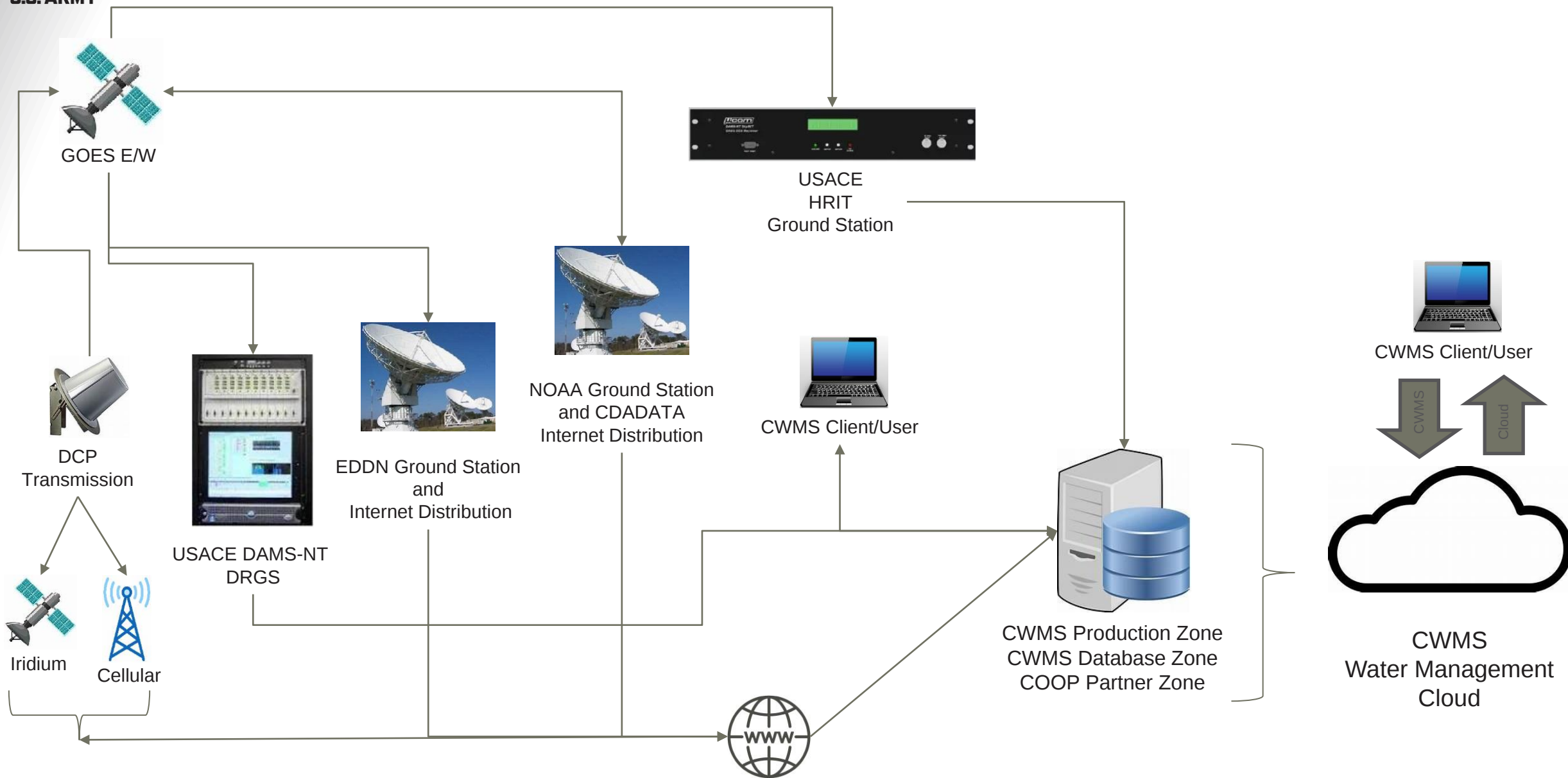
CWMS PATH TO CLOUD MIGRATION





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WCDS DATA PATH OVERVIEW





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USACE GOES DCS PLATFORMS



Northwest Division – 409/466

South Pacific Division – 216/238

Southwest Division – 325/387

Mississippi Valley Division – 748/826

Lakes and Rivers Division – 658/740

North Atlantic Division – 103/107

South Atlantic Division – 325/387

Total: ~2784 active platforms (using standard group nomenclature): increase of 58 from 2024



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USACE USER REPORT



- Water Control Data System Cloud Migration
 - Consolidating 30+ distributed servers
 - Data Acquisition Plan Formulation
 - 20+ HRIT's
 - 8 DRGS Installations
- DCP POTS (Plain Old Telephone Service) Migration: DoD security req./telecoms abandoning underused lines
- DRGS Sites
 - All sites active
 - Running Microcom DAMS-NT as a background service
 - No disruptive RFI detected: AWS-3 transmitters (above 1695 MHz) coming online soon (e.g., DISH)
 - MVR DAMS-NT Channel Expansion and Automatic Fail-Over
- CS2 Platform Deployment
 - Working to complete upgrade by Spring 2026
- Significant Flood Event April 2025 – Ohio and Lower Mississippi Rivers – Entered Phase 2 (levee inspections)
- Looking forward to DCP Commanding, more frequent transmissions, and decoding repository



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End