RiverWare Integration with CWMS

Presenters: David Neumann

2016 RiverWare User Group Meeting August 23-24, 2016

U.S. Army Corp of Engineers Acronym Soup

- CWMS: **C**orp **W**ater **M**anagement **S**ystem
- CAVI: **C**ontrol **A**nd **V**isualization **I**nterface
- NMI: Native Model Interface
- DSS: **D**ata **S**torage **S**ystem
- HEC: **H**ydrologic **E**ngineering **C**enter

CWMS CAVI

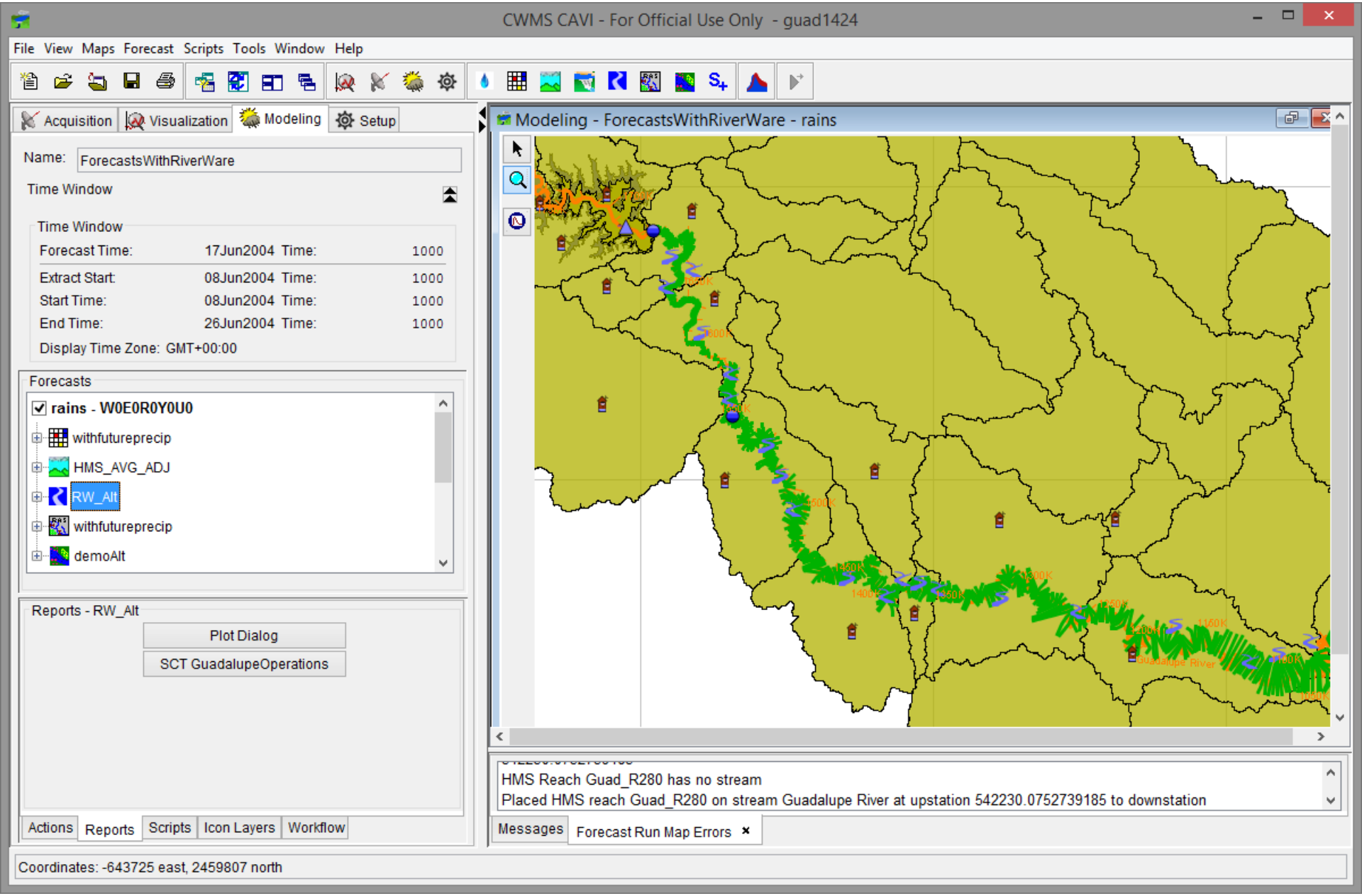
- Modeling Framework that integrates USACE models together
- Operate the system across modeling applications
- Integration uses HEC-DSS to move data

Supported Models

- HEC MFP – Precipitation forecast
- HEC HMS – Rainfall Runoff
- HEC Res Sim – Reservoir Modeling
- RiverWare – River and Reservoir Modeling
- HEC RAS – Flood Inundation Analysis
- HEC FIA – Flood Impacts Analysis

RiverWare Functionality

- Include RiverWare models in the CWMS framework
- Display objects in the maps and interface
- Open SCT, RPL Sets, Plots and Objects
- Open Workspace and Diagnostics
- Make runs and interact with RiverWare
- Demo!


CWMS CAVI - For Official Use Only - guad1424
File View Maps Forecast Scripts Tools Window Help
Acquisition
Visualization
Modeling
Setup
Name: ForecastsWithRiverWare
Time Window
Time Window
Forecast Time: 17Jun2004 Time: 1000
Extract Start: 08Jun2004 Time: 1000
Start Time: 08Jun2004 Time: 1000
End Time: 26Jun2004 Time: 1000
Display Time Zone: GMT+00:00
Forecasts
rains - W0E0R0Y0U0
withfutureprecip
HMS_AVG_ADJ
RW_Alt
withfutureprecip
demoAlt
Reports - RW_Alt
Plot Dialog
SCT GuadalupeOperations
Actions
Reports
Scripts
Icon Layers
Workflow
Modeling - ForecastsWithRiverWare - rains
HMS Reach Guad_R280 has no stream
Placed HMS reach Guad_R280 on stream Guadalupe River at upstation 542230.0752739185 to downstation
Messages
Forecast Run Map Errors
Coordinates: -643725 east, 2459807 north