

# HAZUS-MH Program Update

SoCal Hug Meeting, January 15, 2008



# **HAZUS-MH MR3**



# MR3

- **Release date: September 2007**
- **Platforms: ArcGIS 9.2 SP4 and SQL 2005 Express SP2.**
- **No changes to Windows XP SP2 and 2000 SP4 platforms.**
- **Windows Vista (32 bit) is not usable.**



# **Data Modifications**

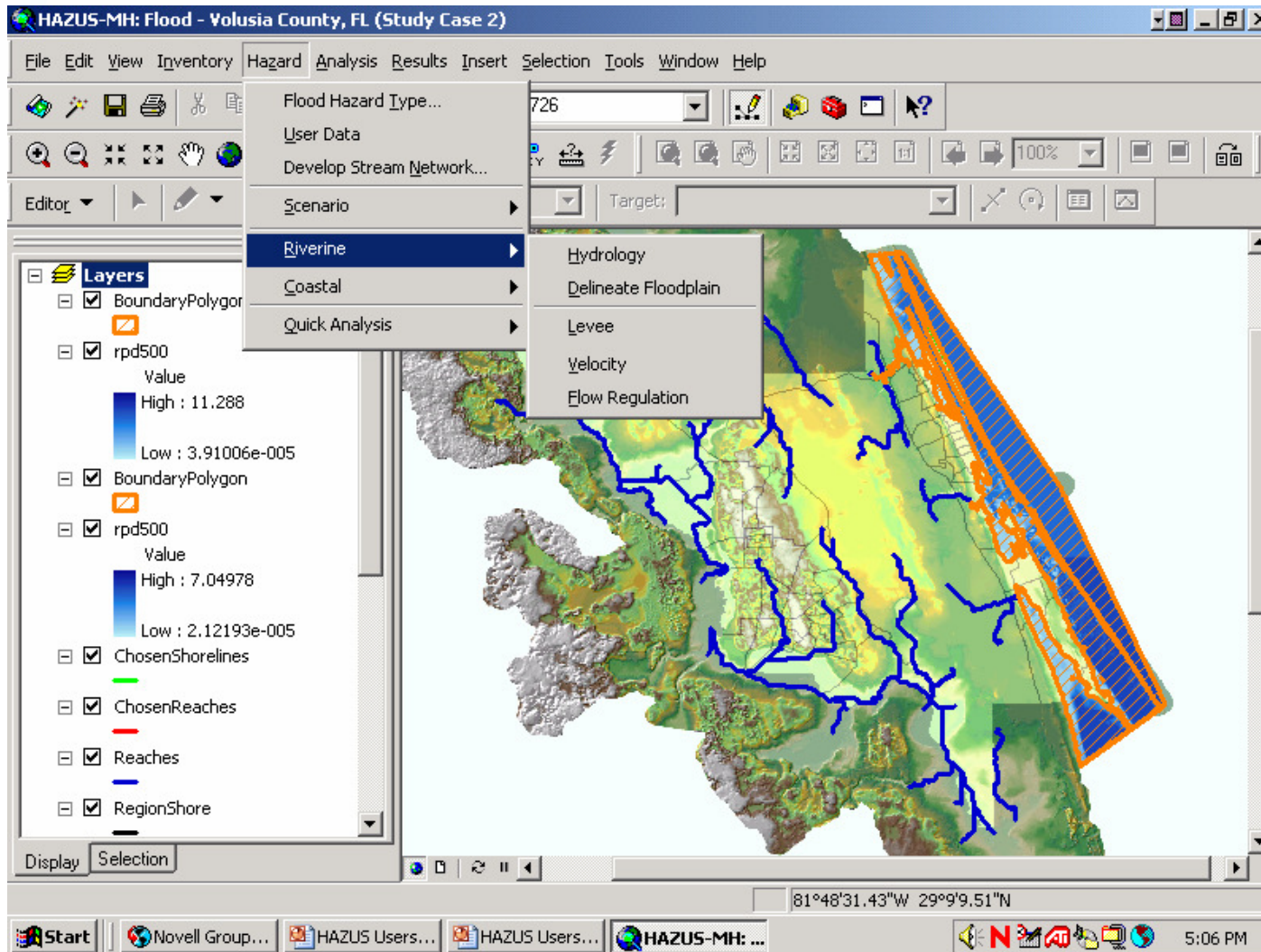
- **Commercial data updated to Dun & Bradstreet 2006.**
- **Building valuations updated to R.S. Means 2006.**
- **Census-based housing counts available for RES1 and RES2.**



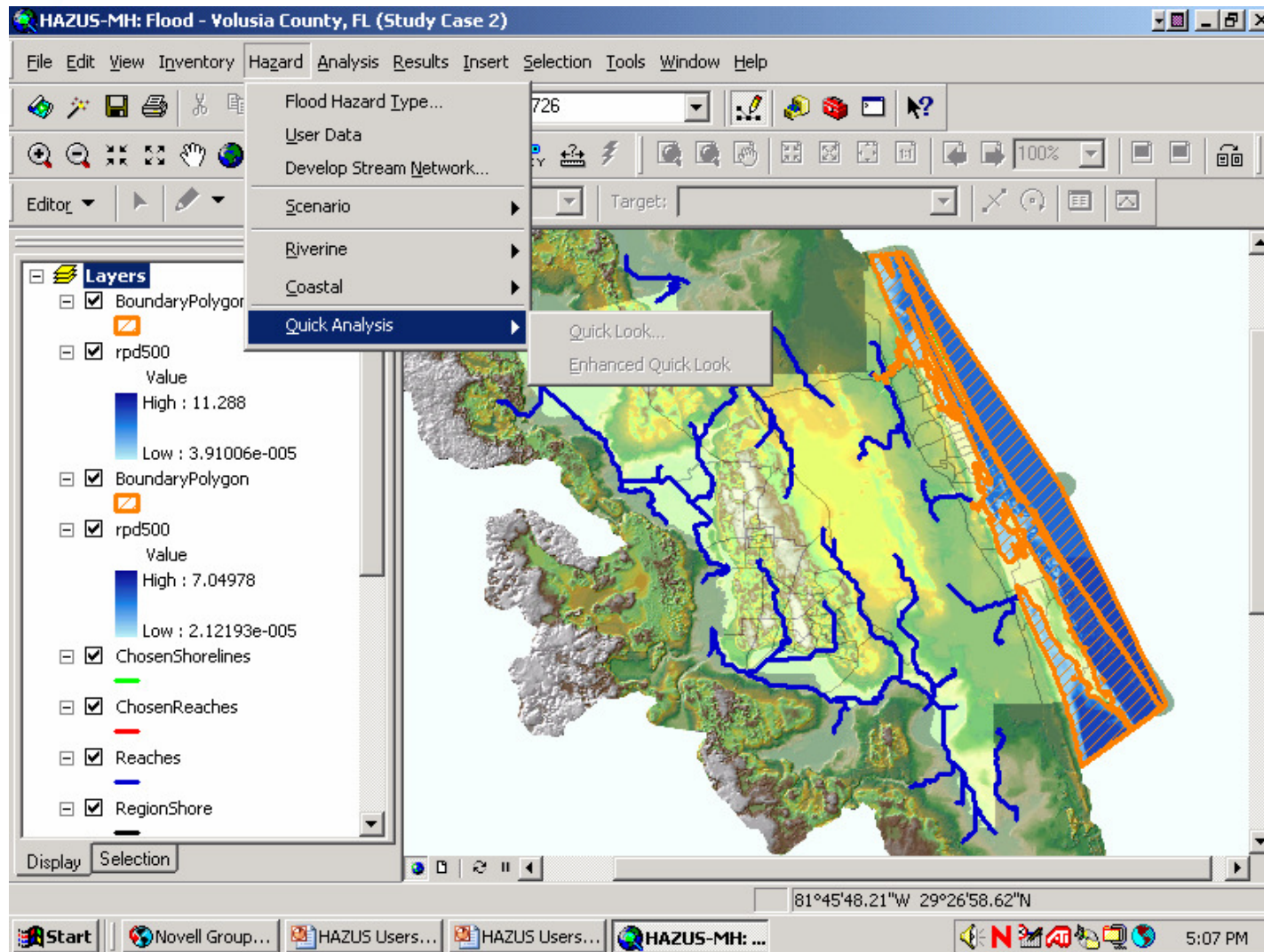
# **Flood Enhancements**

- **New hazard menu interface.**
- **Import user-supplied flood boundaries and depth grids through Enhanced Quick Look.**
- **Optimized General Building Stock analysis.**

# Hazard Menu Interface



# Quick Look Interface



# Hurricane Enhancements

- Updated windfield model.
- 2004 and 2005 historic storms added.
- Use of HURREVAC data restored with an adjustment feature for damage and loss calculation.
- Tree blowdown losses for manufactured housing.





# **Earthquake Enhancements**

- **Population parameters in the Casualty Module adjustable in SQL Express.**
- **Partial ignitions eliminated in the Fire Following Module.**



# **HAZUS-MH MR3**

## **Patch 1**

# Patch 1 Enhancements

- **Release Date: December 2007**
- **Allows restarting the hydraulic analysis from the point the computer runs out of memory.**
- **Riverine and coastal hydraulic analyses can be run with non-matching return periods.**

# Patch 1 Enhancements

- Coastal analysis is fully operable with the QuickLook feature.
- Coastal building economic loss is available in full replacement and depreciated values.
- Landslide probabilities and peak ground deformations are now generated for site-specific facilities.



# **HAZUS-MH MR3**

## **Patch 2**

# Patch 2 Enhancements

- **Projected Release Date: February 2008**
- **An unlimited number of Flood Model reaches can be analyzed in hydraulics without memory failures.**
- **AAL results in the Flood Model for a return period correspond with the depth grid and damage and loss results for that return period run individually.**



**CDMS**



# CDMS

- **Projected Release Date: March 2008**
- **Update and manage the statewide datasets that support a HAZUS analysis.**
- **Process site-specific information at both the census block and tract levels.**
- **Query, sort, export, and print capabilities.**





# **HAZUS-MH MR4**



# MR4

- **Projected release date – Summer/Fall 2008**
- **Platforms: ArcGIS 9.3, Windows Vista - 32 bit**

# MR4 Enhancements

- **Dam/levee analysis (FL)**
- **Updated Fire-Following Module (EQ)**
- **Alternative damage functions (EQ)**
- **Updated transportation, schools, agricultural and vehicle valuation databases**



# **Other Studies**



# **Flood Model Validation Study**

- **Conducted by ASFPM.**
- **Completed a damage analysis for the Mole Creek watershed in Ozaukee County.**
- **Completed a Level 2 study for Darlington, Wisconsin.**
- **Conducting validation studies in CA, PA, MD, FL and TX.**



# **Annualized Loss Studies**

- **Update of the 1999 national average annualized loss (AAL) study for earthquakes nearly complete.**
- **First nationwide AAL study for hurricanes in the Atlantic and Gulf Coast states and Hawaii complete.**
- **Nationwide AAL study for floods underway.**



**Questions?**