

Update on Integrated Management Planning Activities

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Overview

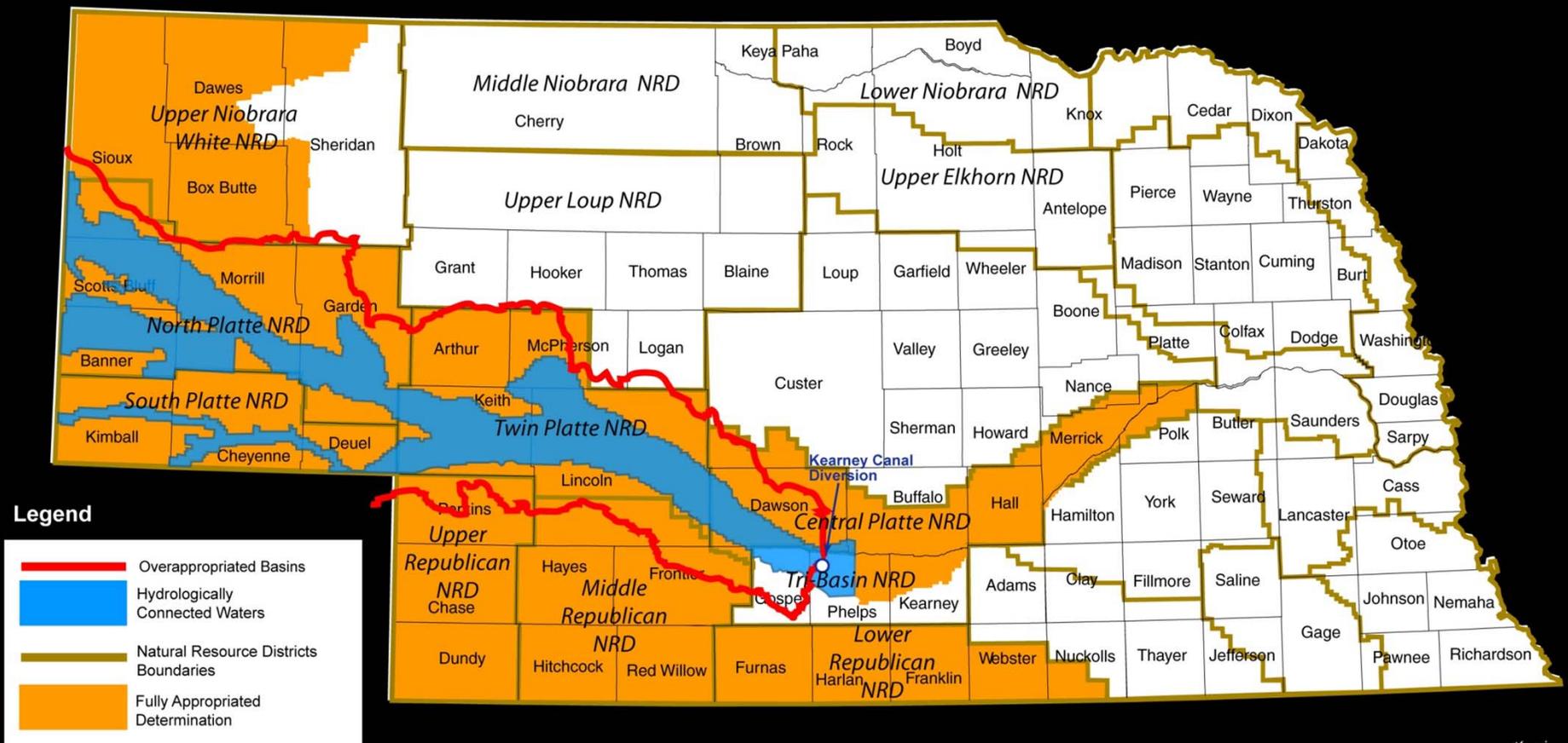
- Integrated Management Activities

- Upper Platte River
- Republican River
- Niobrara River
- Statewide (FAB report)



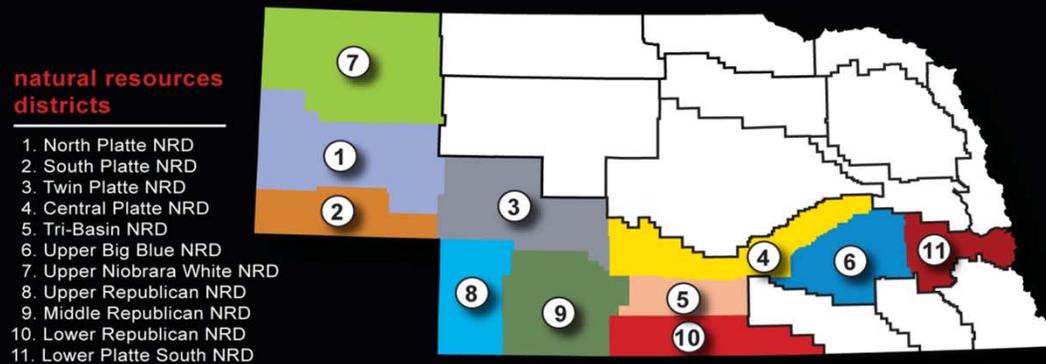
- INSIGHT – Integrated Network of Scientific Information and GeoHydrologic Tools

Fully and Overappropriated Areas



LB 962- Fully Appropriated and Overappropriated Areas as of September 21, 2011

Status of Integrated Management Plans



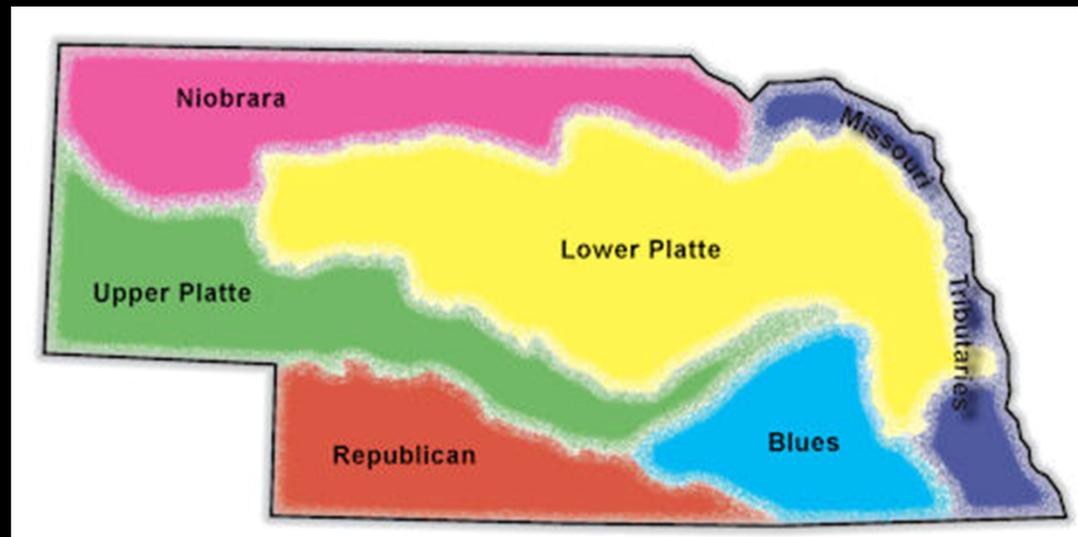
September 2011

11 Natural Resources Districts

- Ten natural resources districts have completed IMPs
- One natural resources district is in the process of developing a voluntary IMP

Integrated Management Activities

- Upper Platte River
- Republican River
- Niobrara River
- Statewide



Upper Platte River Basin

- Basin-Wide Group – POAC
- Western Water Use Modeling (WWUM)
- Cooperative Hydrology Study (COHYST)
- Recharge Projects
- PBHEP
- CPNRD IMP modifications



Republican River Basin

- Basin IMPs
- Republican River Compact Accounting
- Litigation
- Conjunctive Management Study



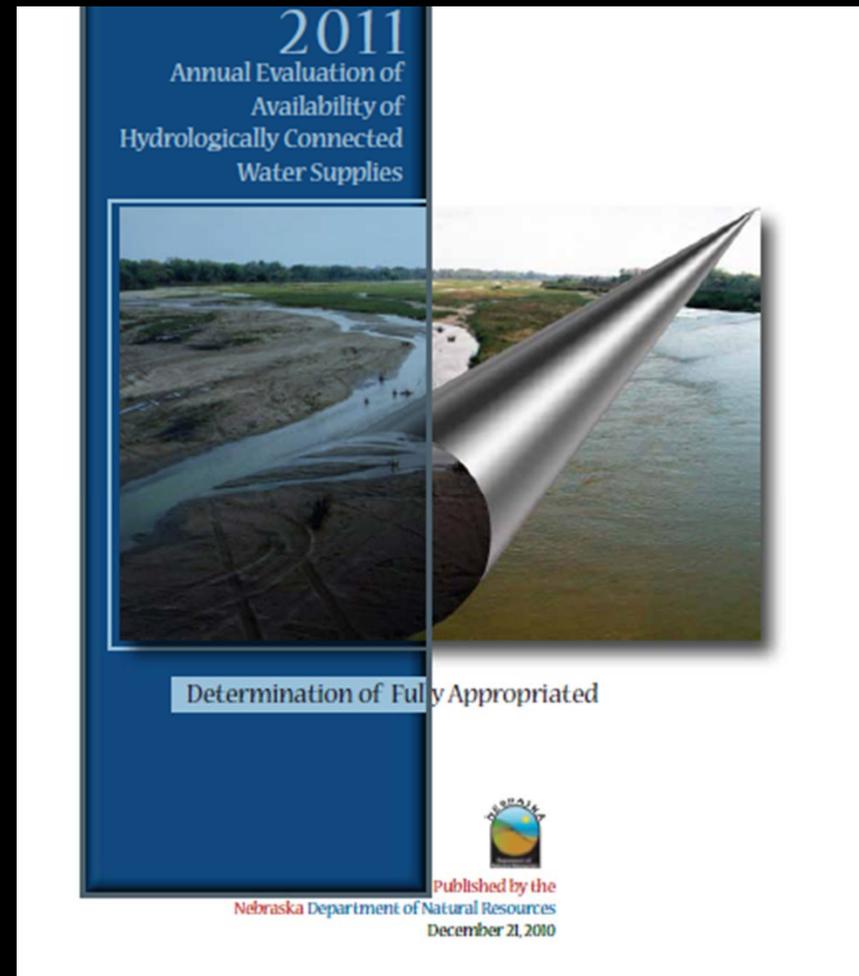
Niobrara River Basin

- Reversal of Fully Appropriated Designation – LB483 plans
- Modifications to UNWNRD IMP
- UNWNRD Conjunctive Management Study
- Niobrara Basin Study



Statewide Activities

- Voluntary IMPs
- Evaluation of Fully Appropriated Methods (joint effort with CPNRD)
- Statewide CROPSIM
- INSIGHT



INSIGHT



Integrated
Network of
Scientific
Information and
Geo**H**ydrologic
Tools

What is INSIGHT?

- Interactive, web-based maps.
- Evaluations of basins and their status as fully or over appropriated.
- Educational tool for water managers and the public.
- One-stop shop for water related data.
- Tools to help evaluate water management options.

Prototype

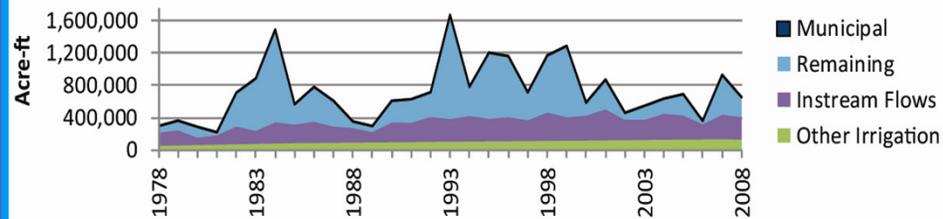
Integrated Network of Scientific Information and GeoHydrologic Tools



WATER-DATA

- DAMS
- DIGITAL ELEVATION MODELS
- HYDROLOGIC UNITS
- LAND USE
- WETLANDS INVENTORY
- POLITICAL BOUNDARIES
- REGISTERED WELLS
- SOILS DATA
- TIGER FILES
- NHD DATASET

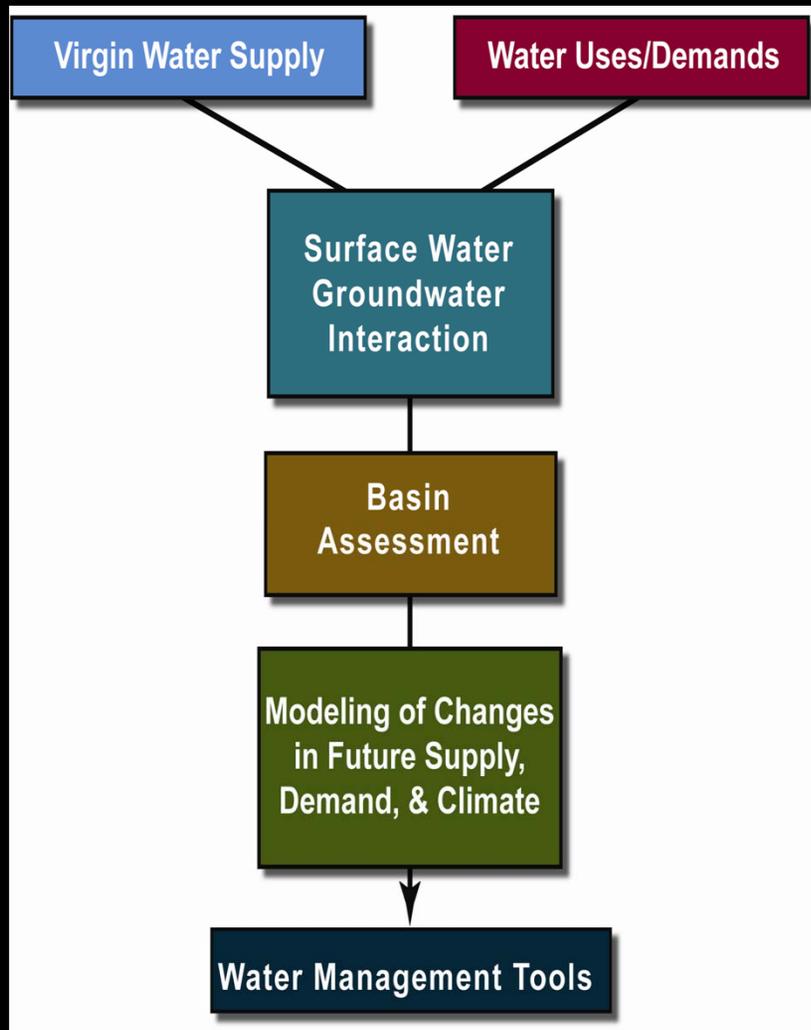
Water Uses and Remaining Water Supply (Elkhorn Basin, Irrigation Season)



Why INSIGHT?

- Basin assessments
- Source of scientific information
- Comprehensive record keeping
- Information to support management options
- Public education

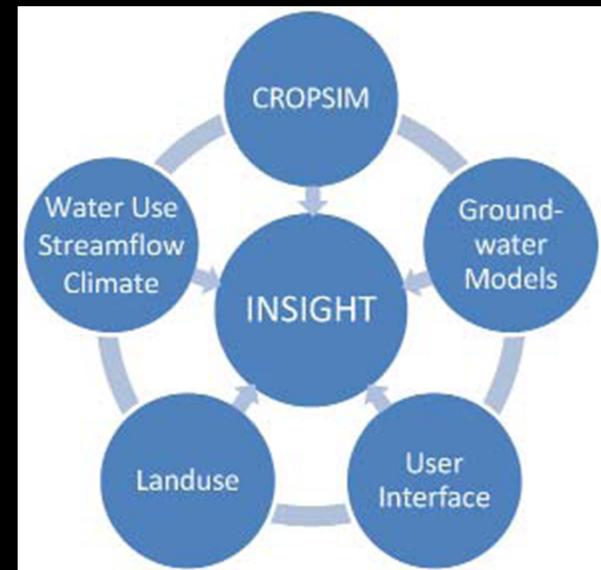
What types of information?



- Water Supplies
 - Virgin water supplies
 - GW depletions
 - SW depletions
 - Streamflow
- Water Uses/Demands
 - Meter data
 - Diversion records
 - Climate data
 - CROPSIM outputs
 - Water administration data
 - Landuse data
 - And more...

How will information be integrated?

- CROPSIM - Integration of land use/water use
- Streamflow data
- Groundwater depletion data
- Surface water depletion data
- Web Interface



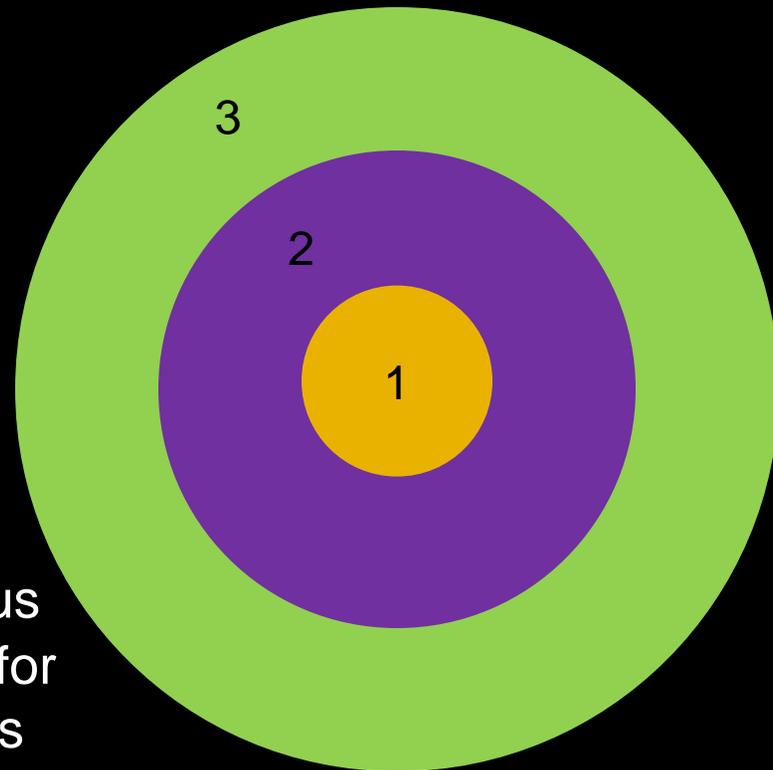
What tools are planned for development?

- Groundwater models
 - Lower Niobrara River
 - Loup River
 - Elkhorn River
 - Blue River Basins
- Assessments of data and model potential
 - Lower Platte Basin (includes lower portion of Elkhorn River)
 - Missouri Tributary Basins
- External peer review of models

INSIGHT

(NRD Participation in Hydrologic Tools)

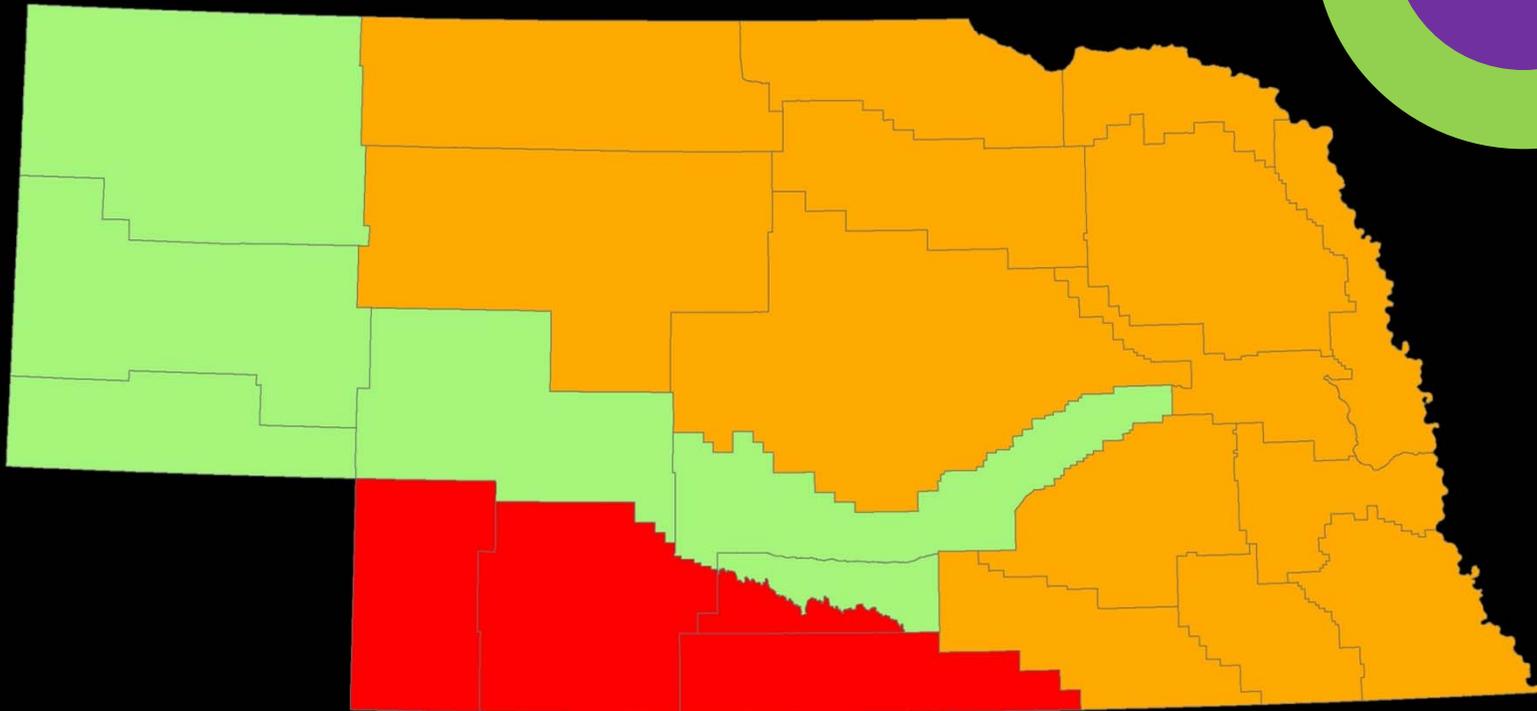
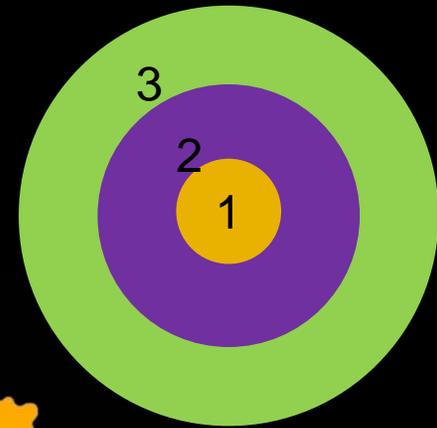
- 1 – Updates on projects will be provided through the website and mailings
- 2 – Participation in technical workshops as tool development progresses
- 3 – A fully collaborative and consensus based approach to develop tools for integrated management objectives (for areas participating in IMPs)



INSIGHT

(NRD Participation in Hydrologic Tools)

Red color denotes NRDs for which RRCA Compact model will be utilized



Schedule

- Consultant selection (Jan 2012)
- Statewide CROPSIM (July 2012)
- GW Model completions for : Niobrara, Loup – Elkhorn, Blue Basins (Sept 2012)
- Assessments for Lower Platte and Missouri Tributaries (Nov 2012)
- Initial testing of INSIGHT (March 2013)
- Final completion of INSIGHT (July 2013)



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