ARS Science for Sustainability

Investment into National Long-term Research Networks & Modeling

ARS Benchmark Watershed and Range Network
FS Experimental Forest Network

ARS Long-term Experimental Watersheds & Ranges

GCEWa	Goodwater Creek Experimental Watershed
GCEWb	Goodwin Creek Experimental Watershed
HERU	Hydraulic Engineering Research Unit
JER	Jornada Experimental Range
JPC	J. Phil Campbell Sr. Natural Resource Cons. Center
LRW	Little River Watershed
LW	Little Washita Experimental Watershed
MC	Mahantango Creek Experimental Watershed
NAEW	North Appalachian Experimental Watershed
OPE3	OPE3
REW	Riesel Experimental Watershed
Rey	Reynolds Creek Experimental Watershed
Trey	Treynor, IA Watershed, Deep Loess Res. Station
WG	Walnut Gulch Experimental Watershed
Wood	Woodward, OK Watershed, So. Plains Res. Station

ARS CEAP / MSEA Watersheds

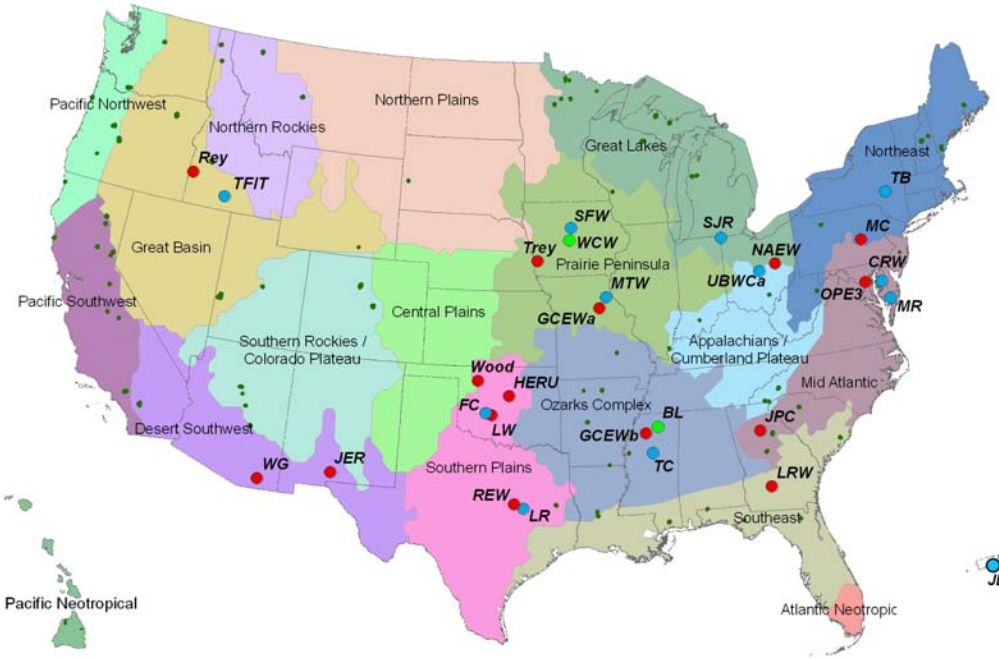
CRW	Choptank Watershed
FC	Fort Cobb Reservoir Experimental Watershed
JBPR	Jobos Bay, Puerto Rico
LR	Leon River
MR	Manokin River
MTW	Mark Twain Lake Watershed
SFW	South Fork of the Iowa River Watershed
SJR	St. Joseph River
TB	Town Brook
TC	Topashaw Canal
UBWCa	Upper Big Walnut Creek - A1
TFIT	Upper Snake Rock Creek
BL	Beasley Lake
WCW	Walnut Creek

Watersheds

- ARS Exp. WS & Ranges
- CEAP
- MSEA

NEON Domains

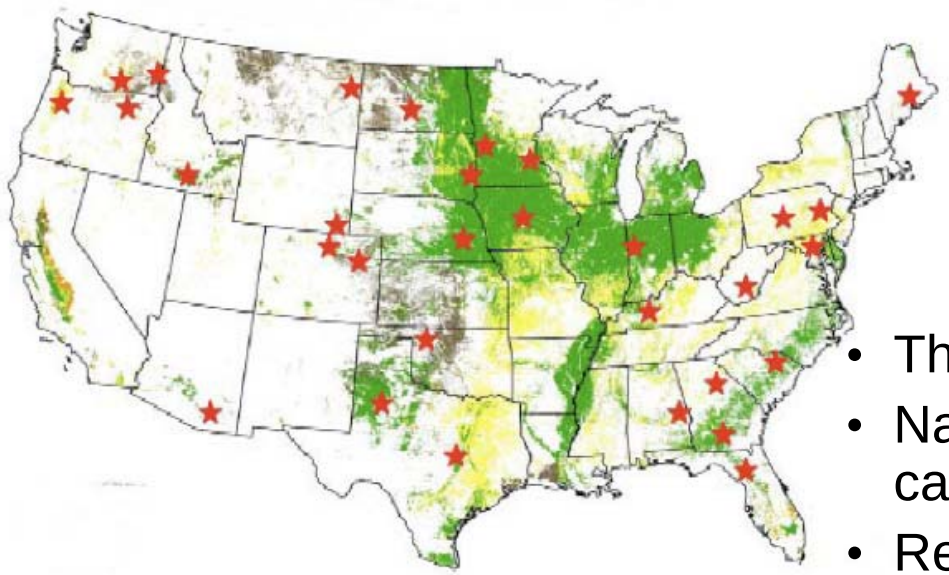
- Appalachians / Cumberland Plateau
- Atlantic Neotropical
- Central Plains
- Desert Southwest
- Great Basin
- Great Lakes
- Mid Atlantic
- Northeast
- Northern Plains
- Northern Rockies
- Ozarks Complex
- Pacific Neotropical
- Pacific Northwest
- Pacific Southwest
- Prairie Peninsula
- Southeast
- Southern Plains
- Southern Rockies / Colorado Plateau
- Taiga
- Tundra
- Experimental Forests



Watershed Research Products

- Fourteen long-term benchmark watershed infrastructure, plus others
- Real-world management simulations using different scaled hydrologic models
- Science-based documentation of conservation practice benefits
- STEWARDS Web-based data delivery systems

GRACEnet - Greenhouse Gas Reduction & Carbon Enhancement Network

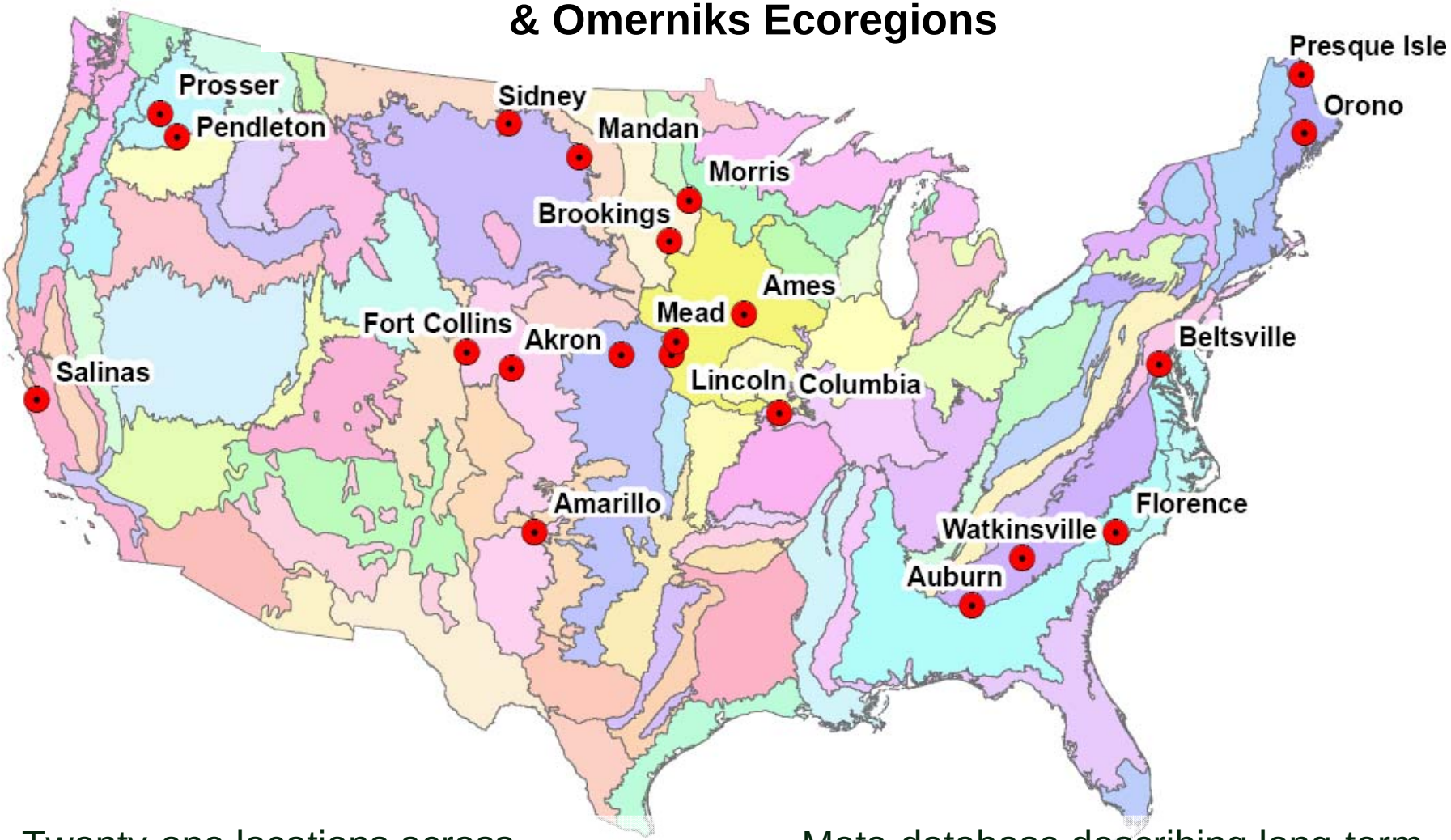


GRACEnet Products:

- Thirty-two location infrastructure.
- National database of GHG flux and carbon storage.
- Regional and national management guidelines for agricultural practices.
- Development and evaluation of mechanistic models.
- Research summaries for action agencies and policy maker use.

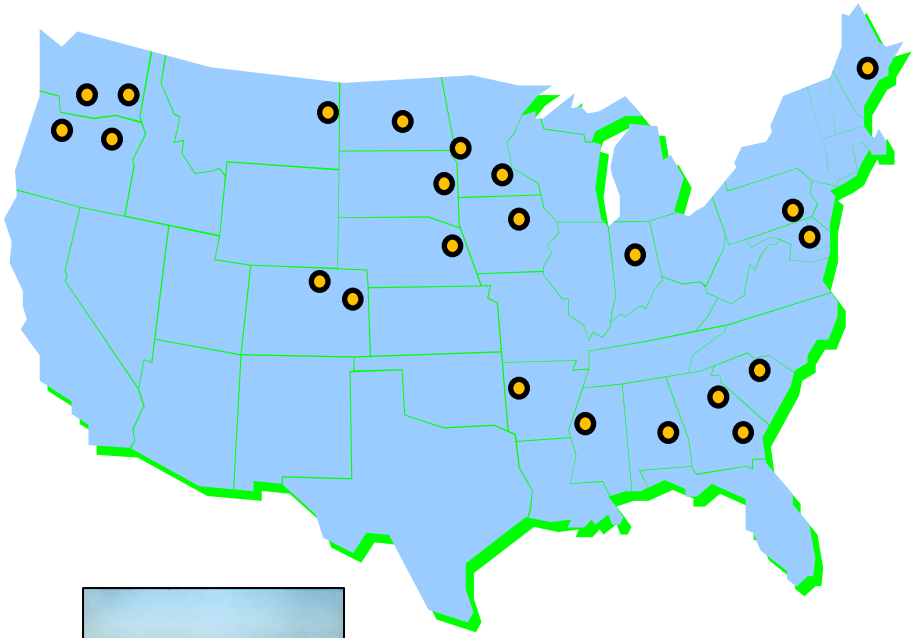
ARS LTAR Network

& Omerniks Ecoregions



- Twenty-one locations across ecoregions and production systems.
- Sustainable management planning framework for integrating bioenergy into existing agricultural systems.
- Meta-database describing long-term experiments.
- Established partnerships with federal and state agencies, universities, and industry.

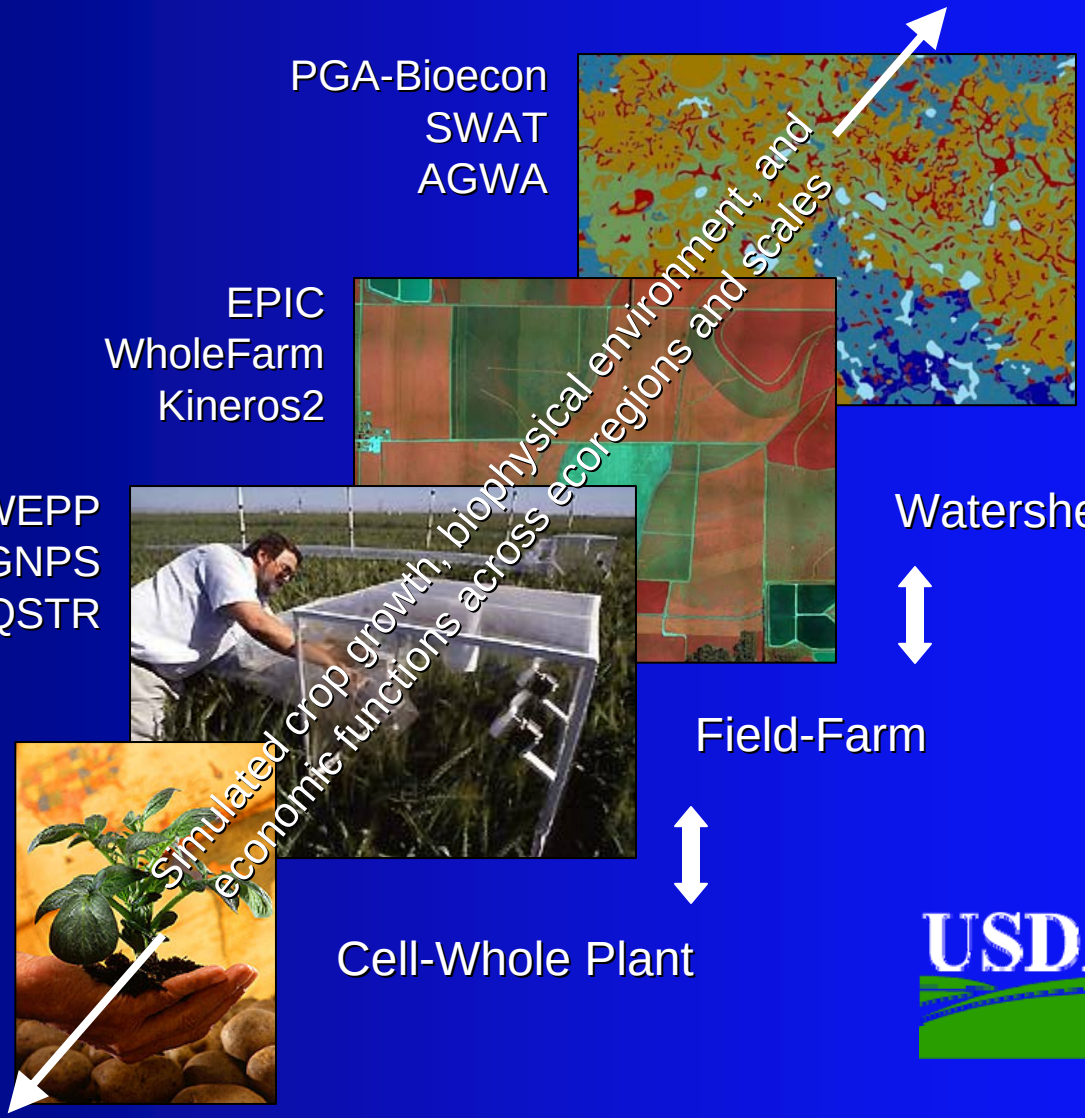
ARS National Feedstock Production Network: Renewable Energy Assessment Project (REAP)



REAP Products:

- Twenty-three locations across a range of U.S. ecoregions and agricultural production systems.
- Biophysical and economic models to determine the impacts of dedicated energy crop production and residue harvest.
- Sustainable management planning framework for integrating bioenergy into existing agricultural systems.
- Meta-database describing long-term experiments.
- Established partnerships with federal and state agencies, universities, and industry.

Biophysical-Economic Models that Predict Real-world Responses



USDA

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