

Southwestern Division “Pacesetters”

2012 Texas Water Conservation Association Mid-Year Meeting

BG Thomas Kula

Southwestern Division Commander

15 June 2012



US Army Corps of Engineers
BUILDING STRONG®



Southwestern Division

Major Mission Areas

Civil Works



Military Programs



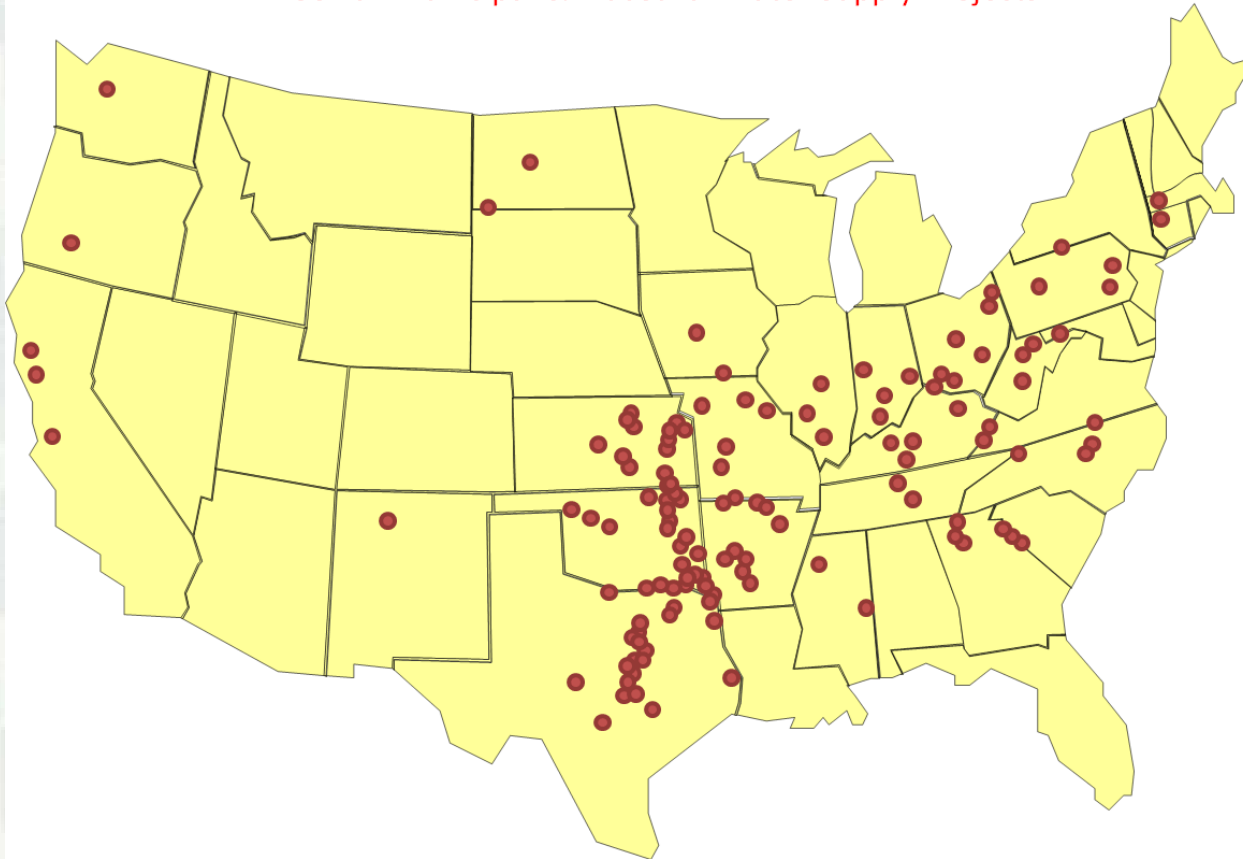
International &
Interagency Service





2011 M&I Water Supply Database

USACE Municipal & Industrial Water Supply Projects



**Municipal & Industrial
Water Supply**
134 Projects
335 Agreements
10.7 Million AF of
Storage Space
96% under contract
\$1.5 Billion Investment Cost



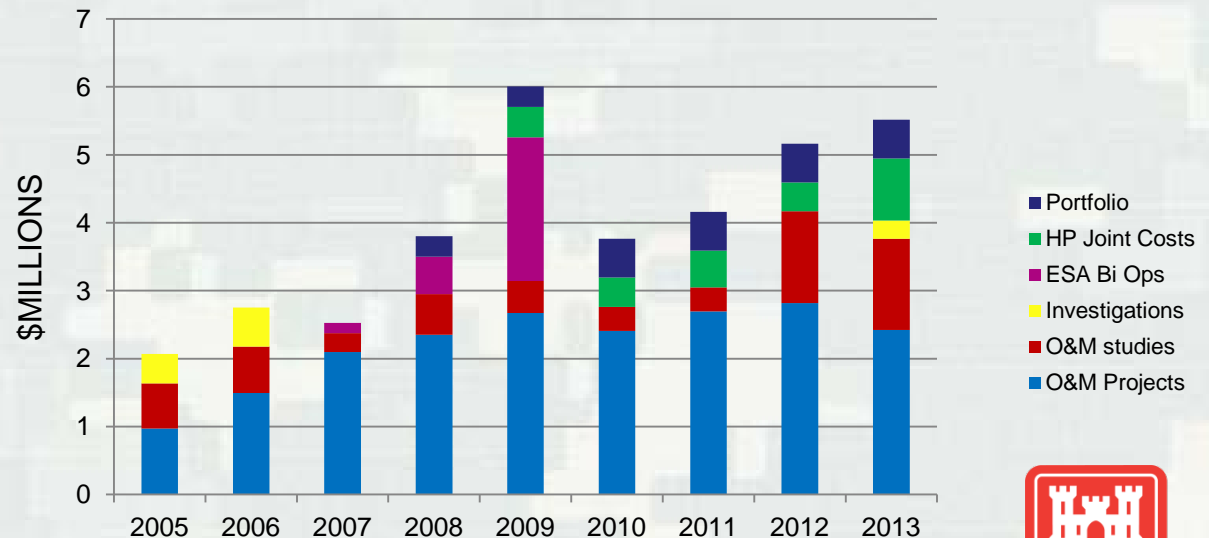
Water Supply in the Southwestern Division

- The Corps is the single largest water supplier in the region:
 - ▶ SWD reservoir projects currently contain **8.4 million** acre-feet of storage for municipal, industrial and agricultural use.
 - 36% of the potable water for Texas
 - 35% of the potable water for Oklahoma
 - 20% of the potable water for Kansas

“Water, not oil, is the lifeblood of Texas...” – James Michener in *Texas: A Novel*

Water Supply Business Line Challenges

- Limited Annual Funding Levels
- Limited Funding for Reallocation Studies
- Aging Infrastructure
- No Overarching Strategy

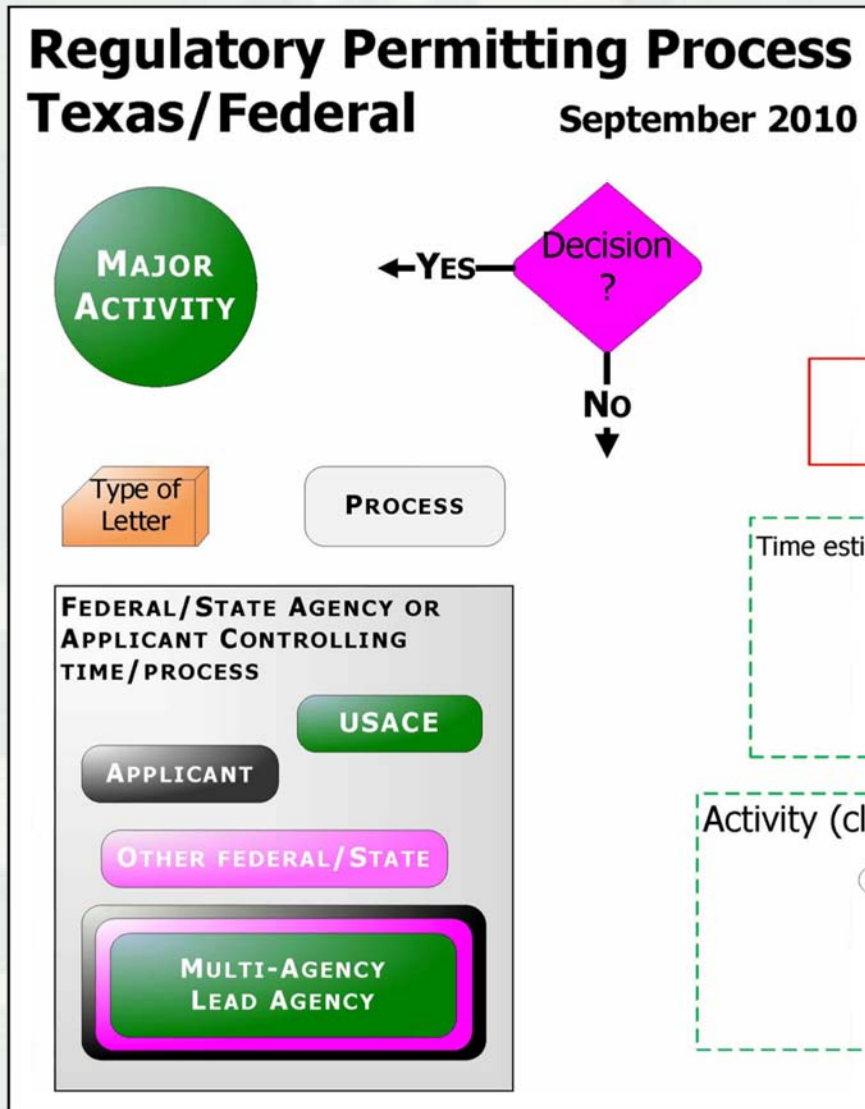


2011 & 2012 Regional Water Planning Summit

- Initiated with states to re-energize collaborative efforts
- Messages and needs from the states:
 - ▶ Water supply needs to be a higher priority for Corps
 - ▶ Streamlining Corps funding processes
 - ▶ Involve the States in establishing the Corps future strategies for infrastructure investment
 - ▶ Streamline the Corps' 404 permitting process



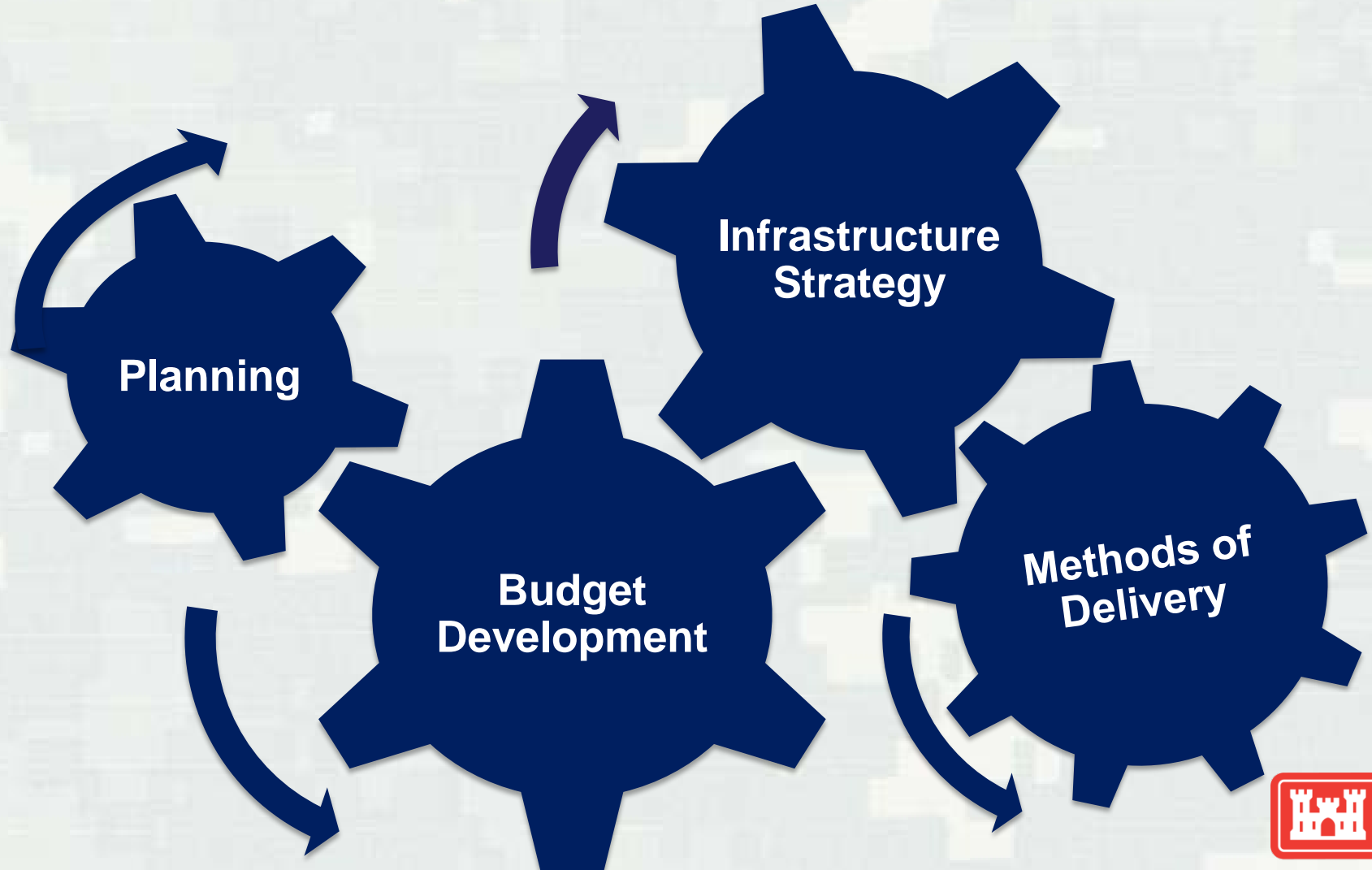
TWDB / Corps Permitting Flowchart



- Goal: educate water resource providers on permitting process and identify ways to reduce the time needed for review/approval of water resource development projects
- Developed a multi-agency permit process flow chart – currently being reviewed by state and Federal Resource Agencies
- Next steps: Post the flow chart on TWDB hosted web site, develop and execute interagency training workshops

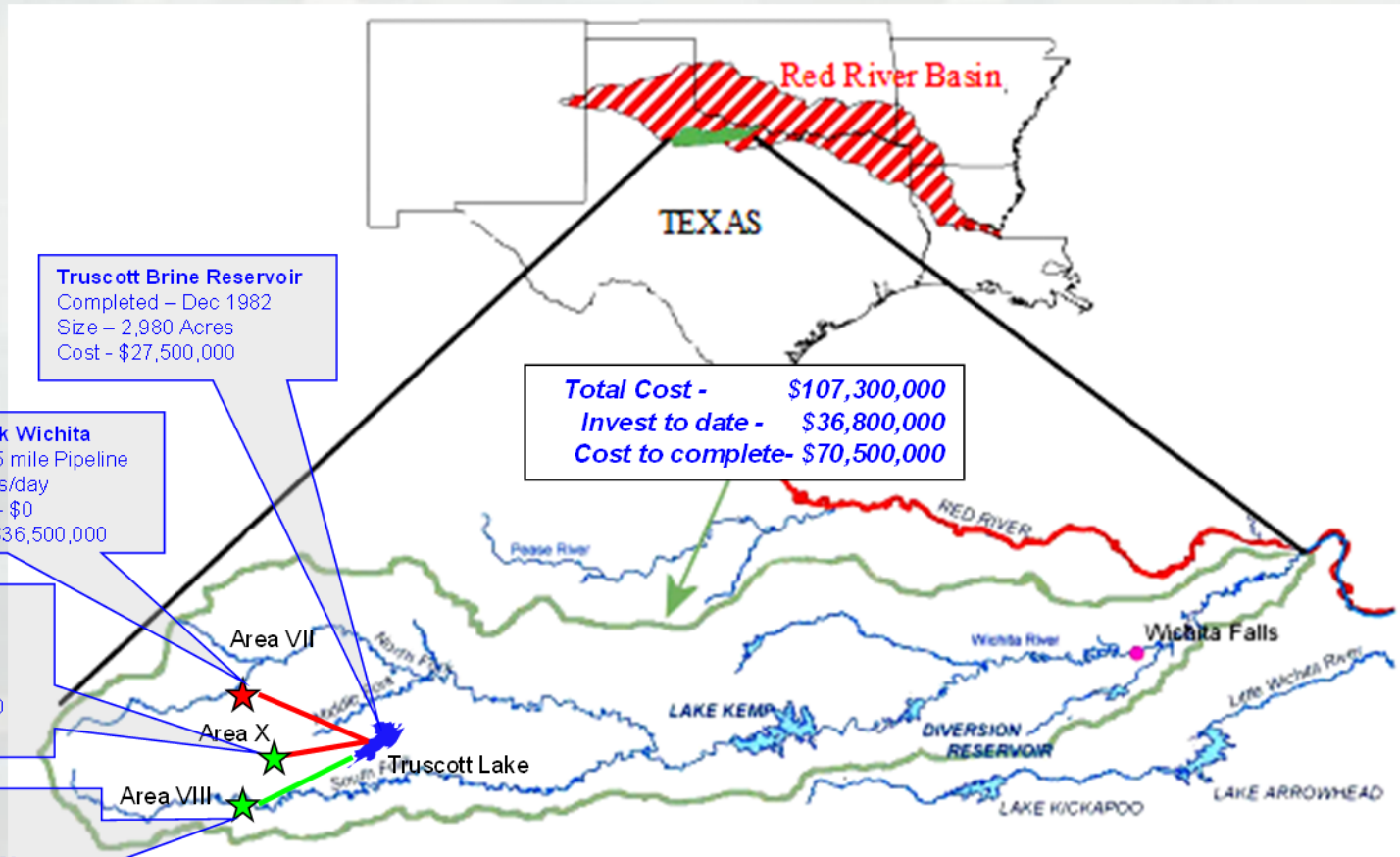


Corps of Engineers Transformation Initiatives



Wichita Basin

Red River Chloride Control



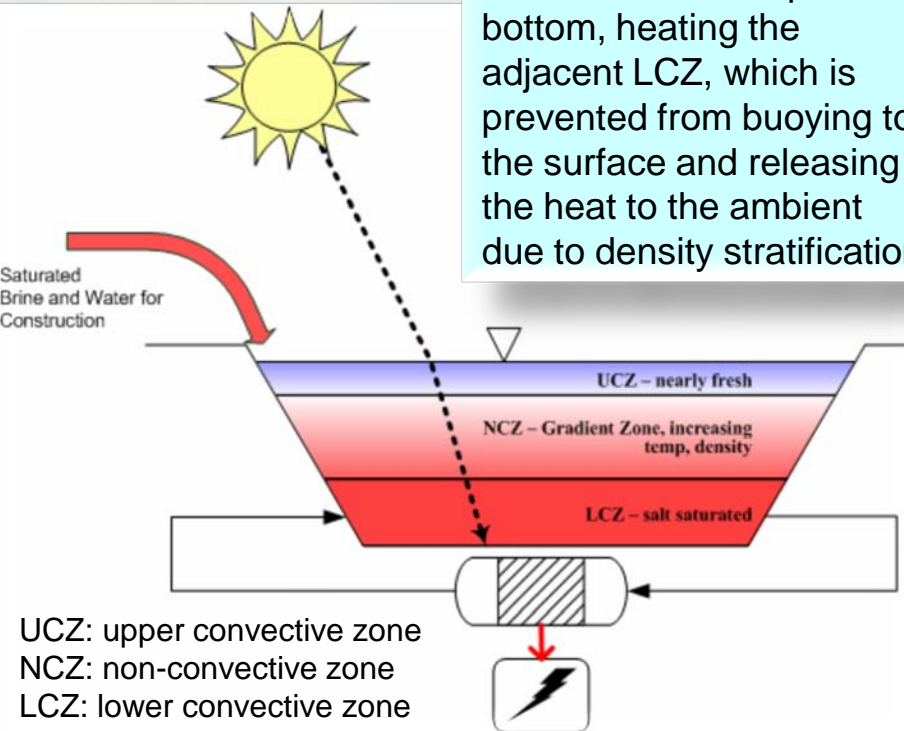
Work Initiated

Remaining to Complete



Salinity Gradient Solar Pond (SGSP)

~25% of the solar energy is absorbed at the pond bottom, heating the adjacent LCZ, which is prevented from buoying to the surface and releasing the heat to the ambient due to density stratification

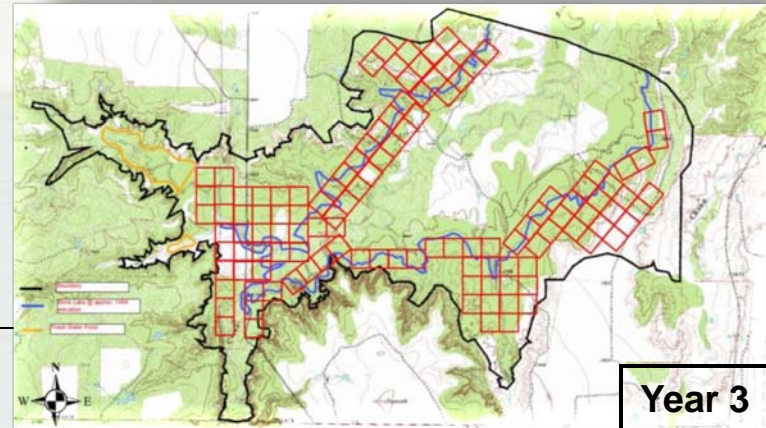
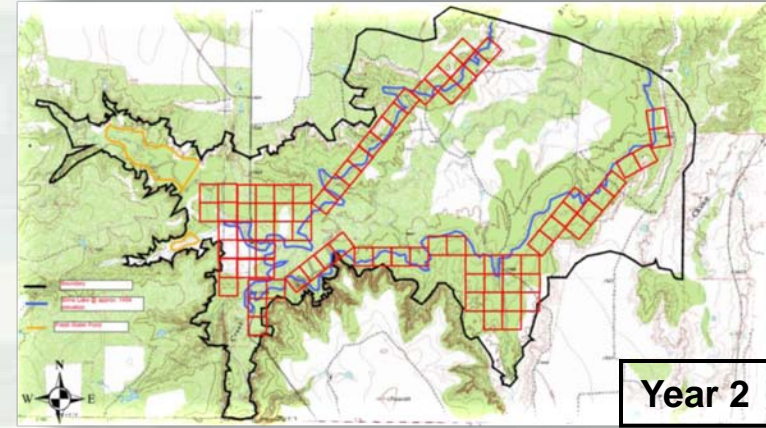
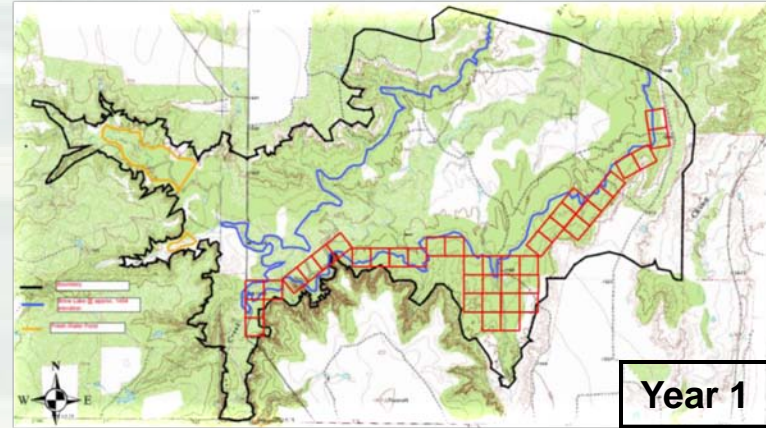


- Shallow, stratified body of water (9-12 ft deep) used to collect/store/recover solar energy
- Easily constructed over large area with low cost per unit collector area and low cost of operation
- Installed modularly, flexibly adaptable to a specific project's size and power requirements



Truscott Solar Ponds

- An array of 5-7 acre ponds
- Phase I executed over 3 years for 15MW production
 - ▶ All within design pool area
 - ▶ Uses all of the salt from Area VIII
- Phase II
 - ▶ Built within current pool area as water is drawn down for Phase I
 - ▶ Would need additional chloride source (Area X or VII)
- Phase III
 - ▶ Would require additional lands (probably from non-Federal land owners)
 - ▶ Would need additional chloride source (potentially mining/wells)



Riding the Brand



Chloride Control/Truscott Team



Other Potential Infrastructure Strategy Initiatives

- Customer Funding of Hydropower
- Public / Private Partnership for Recreation
- Maintenance of Shallow Draft Ports



How Can TWCA Continue Help?

- Leverage Efforts, preach Value to Nation
- Find consensus for Major Initiatives
 - Funding to Reach Outcomes
 - Time for WRDA?
 - Engage in Transformation
- Be mutually supportive
- Shared Messages
- Involve & Engage End-Users
- Seek to Influence Decision-Makers





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Questions?

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