

Salinity Demonstration Project

2002- 2011

***Interest in Tile Drainage
Affects on Salinity***

***Local Field Tiled in 2002
10 GPS sites established for
sampling***

2003 soybeans



2004 Corn



2005 Corn



2006 Sunflower



2007 Soybeans



2008 Corn

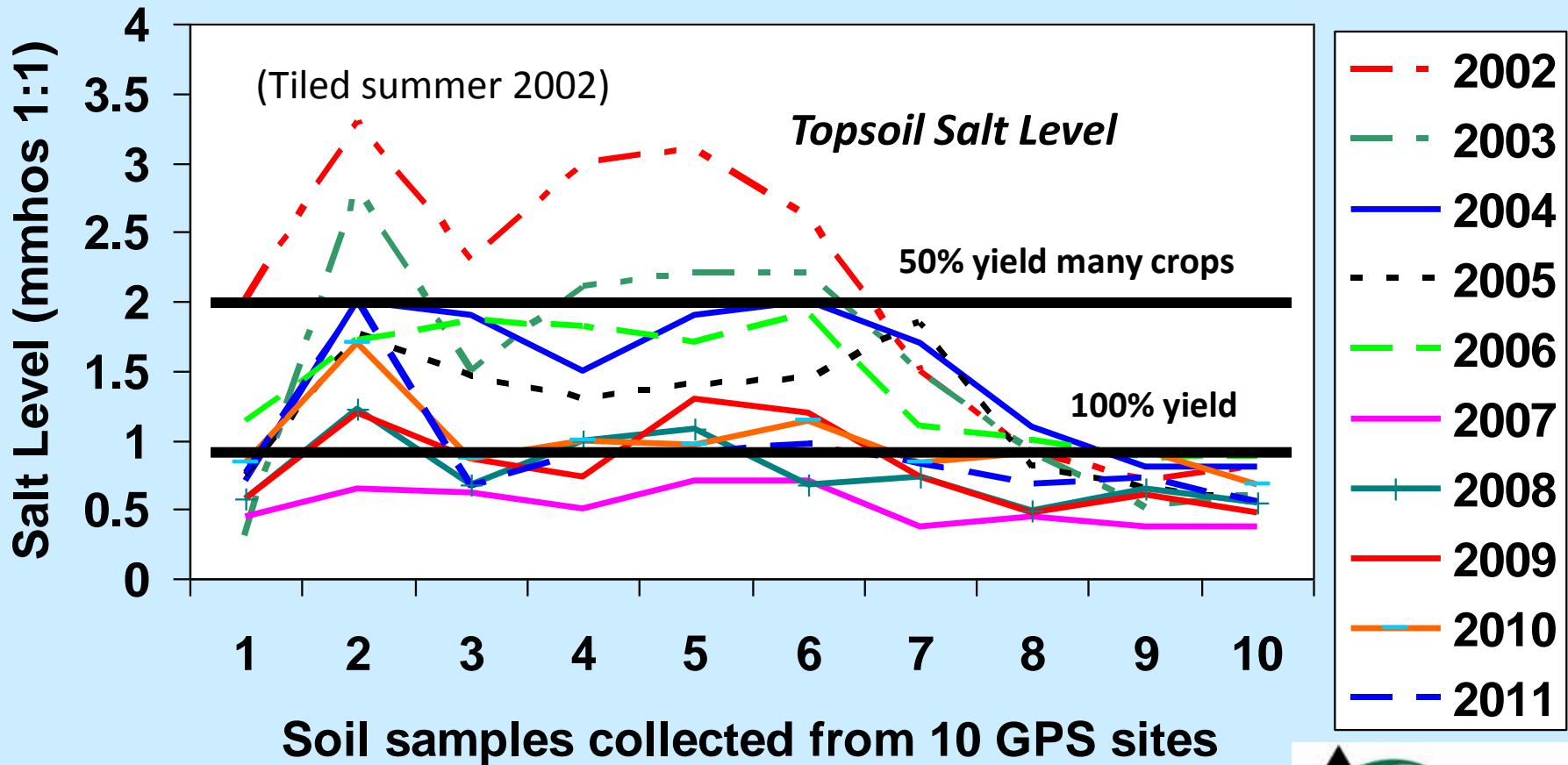


2008 – Very good yield - One of Grady's best fields!

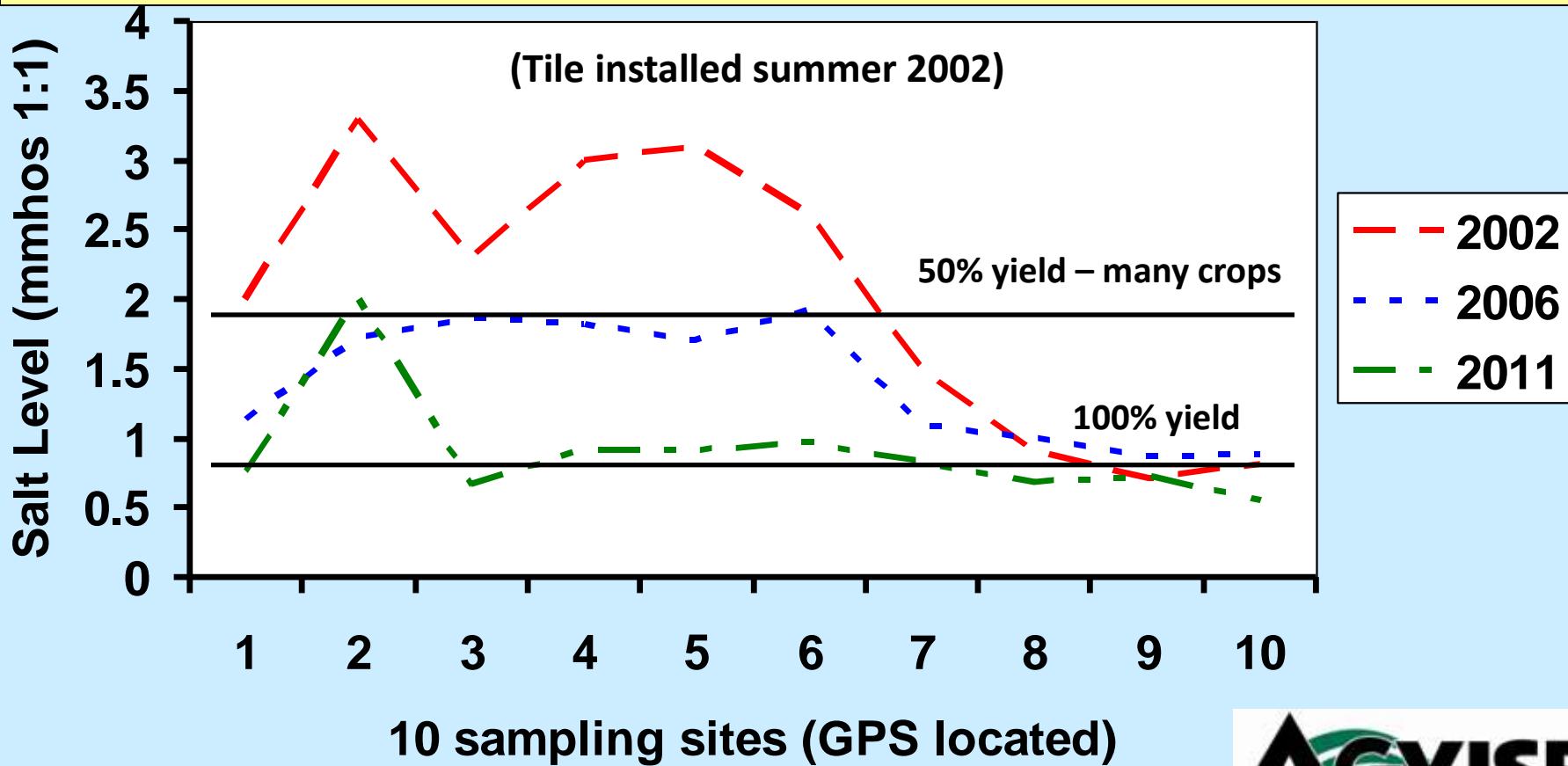
Tile Drainage - Soluble Salts

Demonstration Project

Topsoil Salinity (2002-2010)

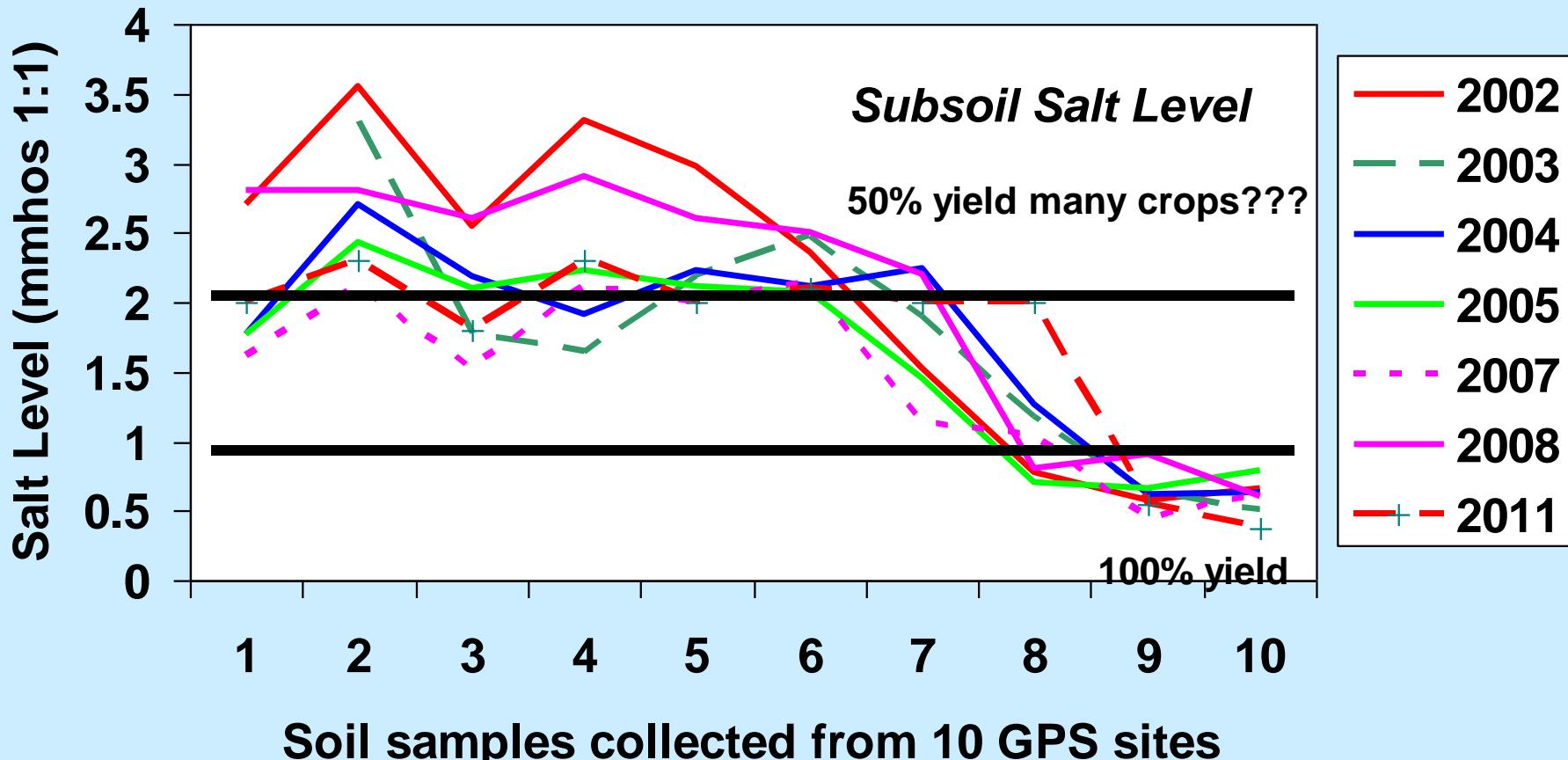


Tile Drainage - Soluble Salts Demonstration Project Topsoil Salinity (02, 06, 2011)



Tile Drainage - Subsoil Salt Changes

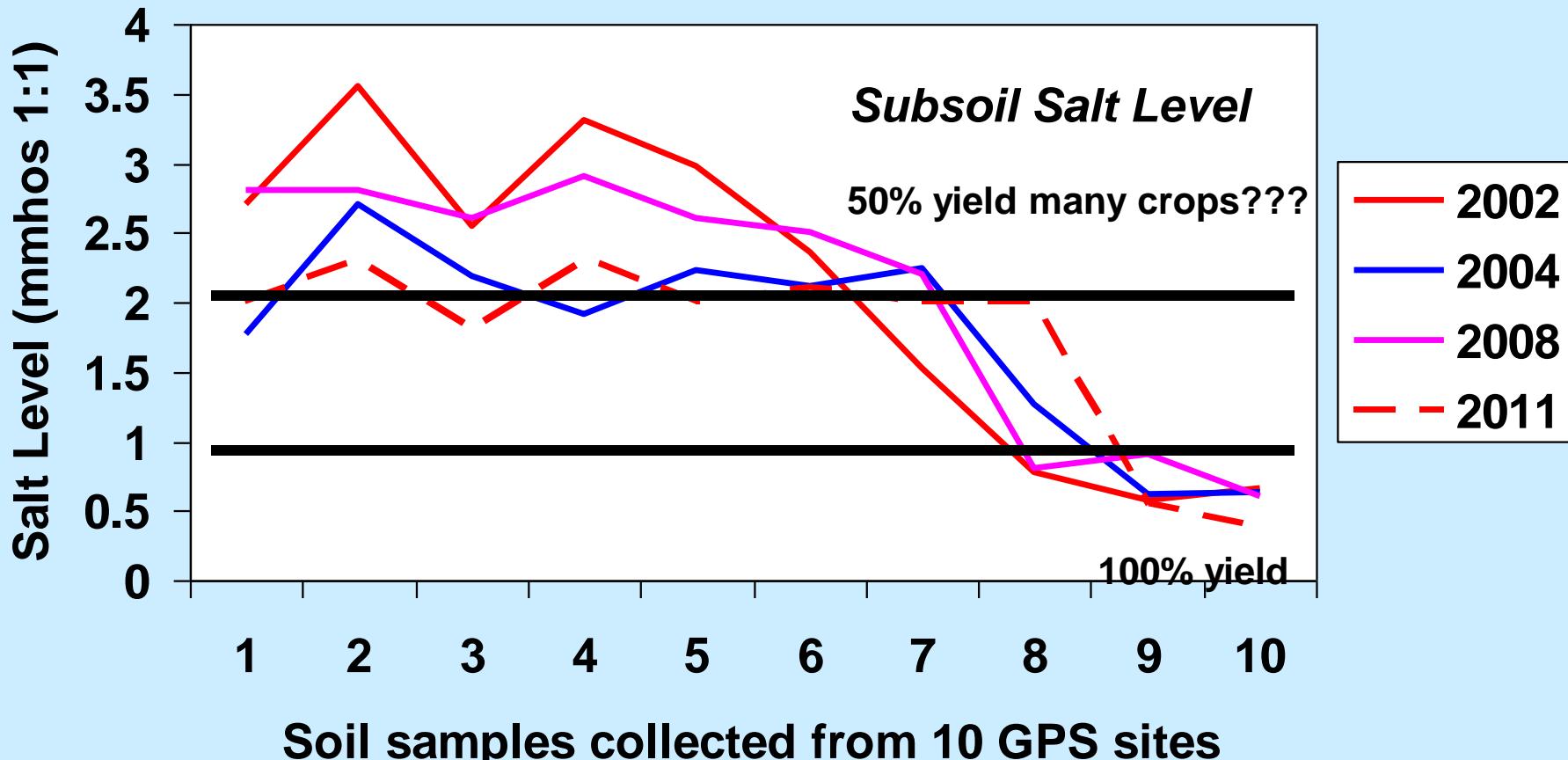
(02,03,04,05,06,07,08, 2011)



Subsoil Salt levels will remain high until the salt is leached from the topsoil

Tile Drainage - Subsoil Salt Changes

(2002, 2004, 2008, 2011)



Subsoil Salt levels will remain high until the salt is leached from the topsoil

Tile Drainage Results

- *Topsoil salt levels have decreased a lot!*
- *Several crops now produce good yields*
 - Corn, soybeans, sunflowers
 - Iron chlorosis severity in soybeans is much less
- *Subsoil salt levels take longer to be decreased*
- *High subsoil salt levels do not affect yield as much as high subsoil salt levels*
 - Seedling salt sensitivity vs. general salt sensitivity

Questions

