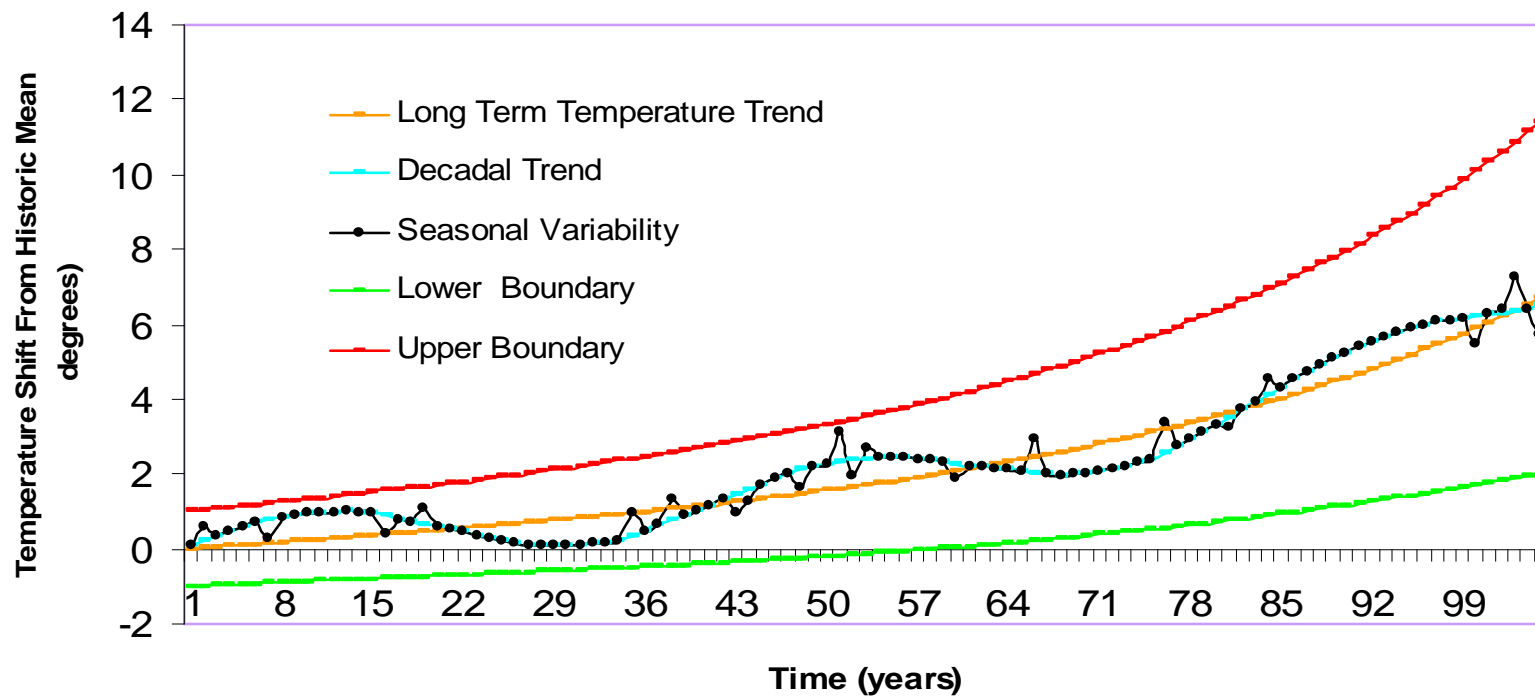


National Agro-Climate Information Service Presentation

DRI Annual Meeting
Harvey Hill,
National Agro-Climate Information Service, PFRA-AAFC
January 11, 2007

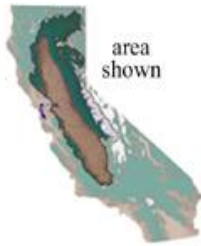
Potential Climate Change and Variability



Snowpack Changes:



Climate Research Division



Evolution of Average Annual Snow Water Equivalent as a Percentage of Average 1995-2005 Values

(effect of temperature changes only: historical P, baseline T from WY 1965-1987)

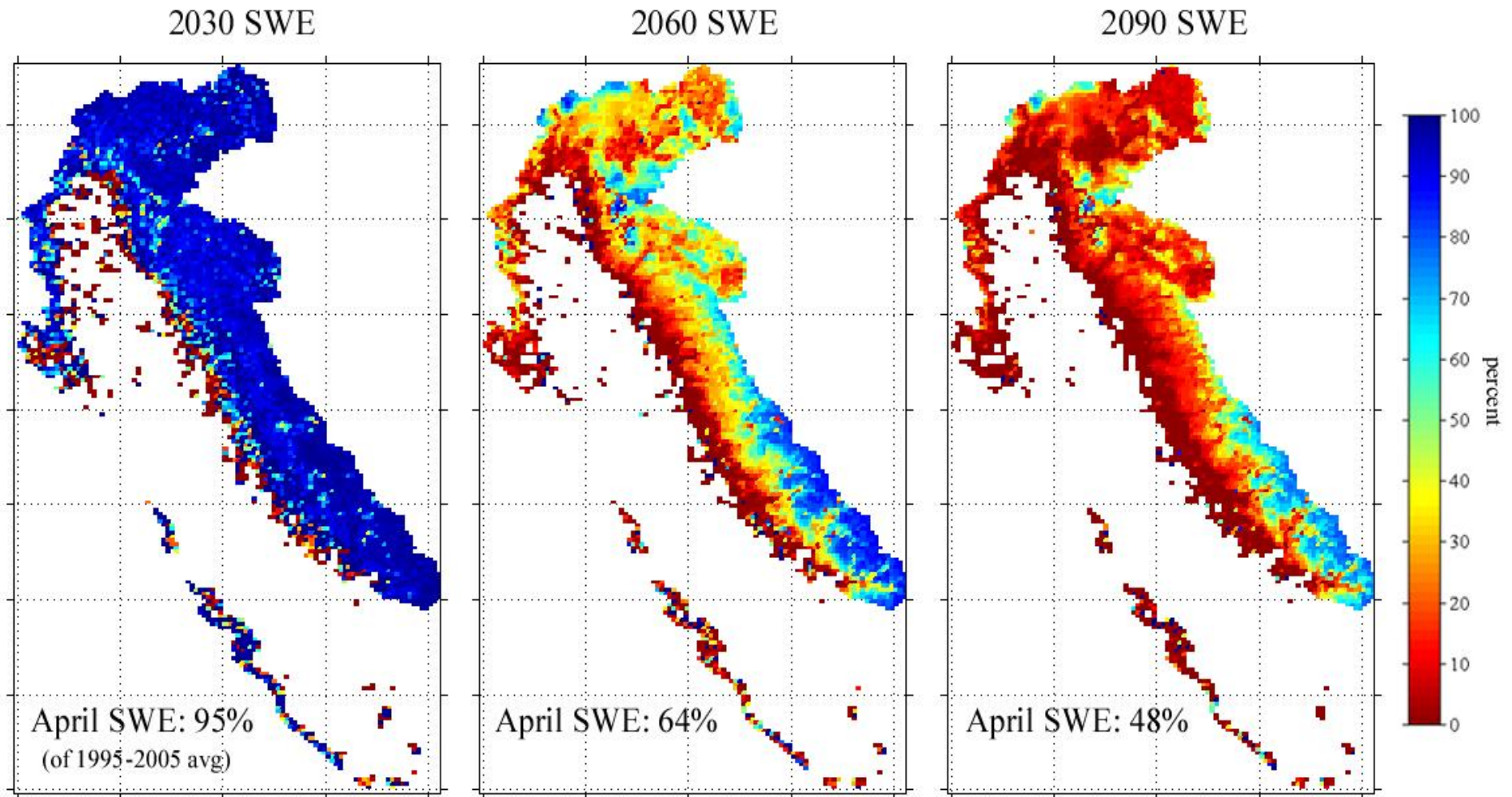


figure by N. Knowles

(20-year centered avg monthly T anoms rel to 1995-2005 monthly avgs from PCM B06.44 run, used to force BDWM with WY65-87 conditions. 6/18/01)



Multiple demands for water can lead to competition or collaboration for sustainable development



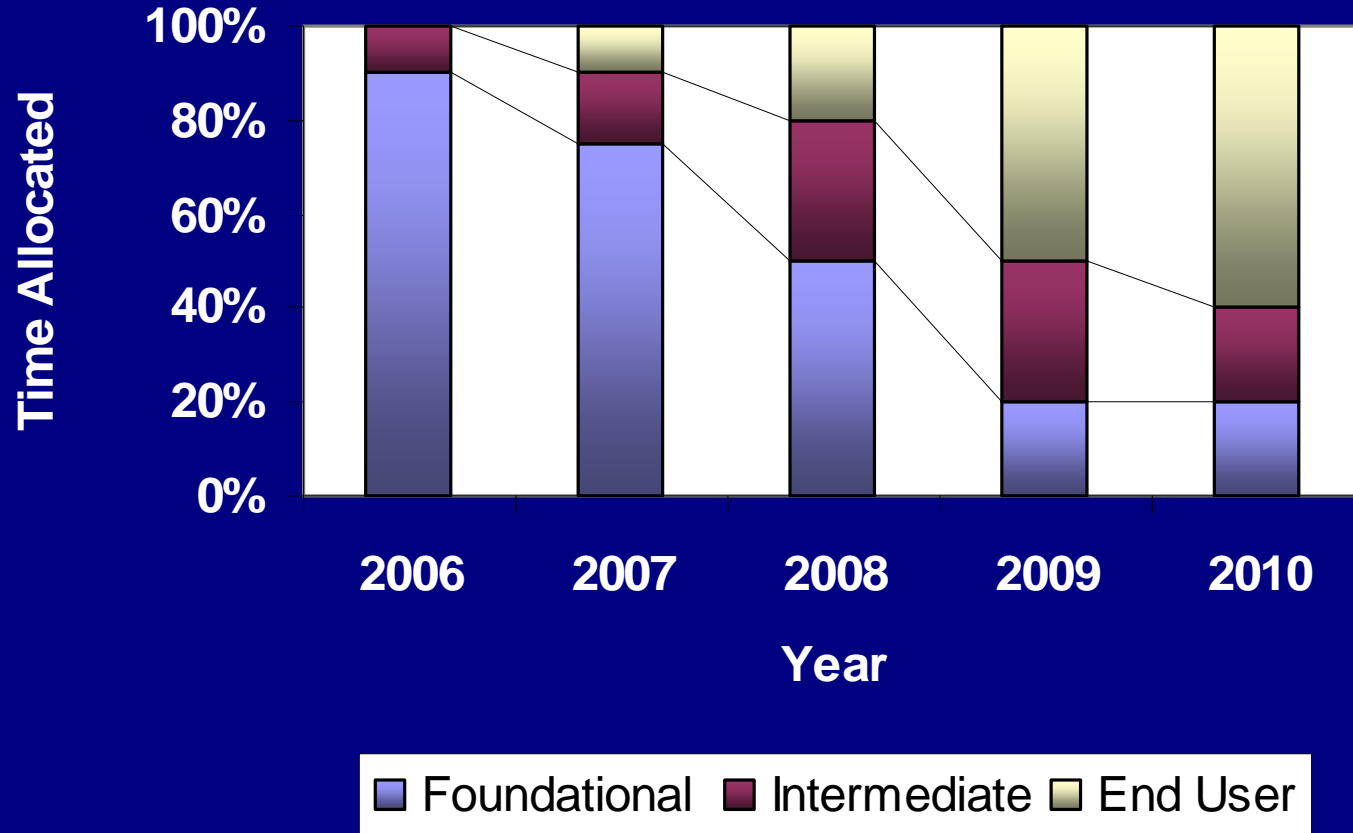
M. Clark, Univ. of Col.

Drivers

- n Improved reporting and prediction
- n Economic Competitive Advantage
 - n Producer level
 - n Interprovincial
 - n International
- n Environmental Sustainability
 - n Best management Practices
 - n Watershed planning
- n Adaptation and Resiliency
 - n Climate Variability and Change

Going Forward

Planned Focus of NAIS Adaptation Activities



Foundational

- n Climate products
 - n Gridded data set development
 - n Improved understanding of variance of key variables by region (if at all possible)
 - n Soil Moisture
 - n Remote sensing
- n Information Gathering
 - n Better links with regions to identify end user needs
 - n Better links with rest of public sector to capture complementarities and synergies
- n Institution Building
 - n Catalyze drought and extreme events Provincial Plans
 - n Support on going provincial and National Drought and Extreme events Task Forces

Intermediate

- n Linking foundational products to hydrologic and GIS based DSST
- n Formulating development of DSST and institutional support based on needs identification
- n Developing useful interfaces to provide information to a wide range of users in an understandable format
- n Link climate foundation tools to crop and pasture models for management DSST, regional supply curve estimation
- n Link foundational products to hydrology for extreme events analysis, infrastructure planning and resiliency enhancement

Enduser

- n Provide DSSTs to aid producers better assess the probabilities of successfully making a profit
 - n Inspiration Whopper Cropper
 - n South East Climate Consortium
- n IWRM: support the development of improved integrated watershed resource Management planning and implementation

Enduser (continued)

- n Infrastructure planning
 - n 30 year planning horizon
 - n Support adaptation to climate change and variability
 - n Increase resiliency of existing systems
- n Support adoption of new crops, agronomic practices, and processing
- n Enhance capacity of public and private sector to withstand drought and extreme events via:
 - n Institution building,
 - n DSST
 - n Planning processes

Existing and Potential Clients

- n Federal and Provincial Departments and agencies
- n Agricultural Producers
- n Crop Insurance
- n Private sector
 - n Commodity buyers
 - n Hedgers
 - n Processors
- n Rural Municipalities
- n Water Managers
- n Academic and federal research communities
- n International agencies (Desertification)

How Can DRI Support NAIS Efforts?

- n Deeper understanding of the Prairie Water Cycle
 - n Evapotranspiration
 - n Landuse interaction with wetlands
 - n Improved parameterization of hydrology models
- n Support Training of relevant parties
- n Provide richer understanding of causes of drought and impacts.