NP212 ARS Scientist Research Planning Workshop

Forming A New National Program

Building Blocks

Identity

Strategy

National Program 212
Global Change, Air Quality, Soils

Scientist Research Planning Workshop

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NP212 (Soil & Air Resource Mgmt.)

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NP202 (Soils)

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NP203 (Air Quality)

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NP204 (Global Change)

"Boundary Layers Program"

Proposed NP212 Action Plan Structure

Component 1: Reducing Agricultural Emissions to the Atmosphere

Component 2: Adapting Agriculture to Global Changes

Component 3. Enhancing the Productivity and Functionality of Soils

Vision

- **Integration, Collaboration, Communication**
- **5-Year Process of Program Building**
  - "Remove program boxes" – *integrate!*
  - Foster new terminology & language
  - Build on strengths
  - Build professional reputations
  - Visibility
  - Relevance
  - Space & time

Space and time……

Developing a National Program Identity

"Soil & Air Resources Management" is a

Placeholder program name…..

Developing a National Program Identity

- **A Consistent Message: common slide set**
  - **Describes National Program goals, problems, structure, etc.**
  - **Illustrations of problems, solutions, research in progress, participants, etc.**
  - **Suitable for technical & non-technical audiences**
  - **Sharepoint**
  - **1-page and 2-slide description of projects**

Strategy

- ***Graphical* representations of contributions of SYs/labs addressing research needs**
  - SY/lab identifications
  - SY/lab contributions
  - Flow of information and products

Strategy

- **Explore options for a mid-course "Check-up" of progress towards Program Goals**
  - SY meeting within 2 years of OSQR certification of all projects
  - Easily accessible and "cheap" venue
  - Informal atmosphere to foster exchange of ideas, brainstorming
  - 1-page description of project with 2-slides of illustrations

NP 202 Soils Projects…their fate

- Existing CRIS projects continue until end of current NP202 five year timetable
- *UNLESS….*
  - Redirected or
  - RL, SYs see an opportunity to change or *modify*….. Current NP202 Action Plan integration into NP212 Project Plan

Soils Component for NP212 Action Plan

- Task: Integrate old Action Plan into NP 212 Action Plan
- Opportunity for input by all
- SYs will know where CRIS project fits into new Action Plan
- Draft underway: John Schmidt & Doug Karlen

Action Plan Development

- Goal
- Relationship to ARS Strategic Plan
- Research Components (1,2,…)
    - Problem statements (a,b,…)
        - Research needs
        - Anticipated products
        - Potential benefits
    - Listing of component resources*

- ***Make collaborations meaningful**
- **Only list what you will work on**

Organizing Ourselves: Collaborations

- Successful models
  - GRACEnet
  - REAP
  - CEAP
- New
  - Models?
  - C & N?
  - Air quality field campaigns

What can we do to foster collaborations?

Air Quality Field Campaigns

- Pick a system (crop, commodity, species, etc.)
- Describe states and processes in *space* and *time*
- Develop comprehensive measurement, modeling experiment plan
- Invite collaborators……

Organizing Ourselves: Integrative Science Teams

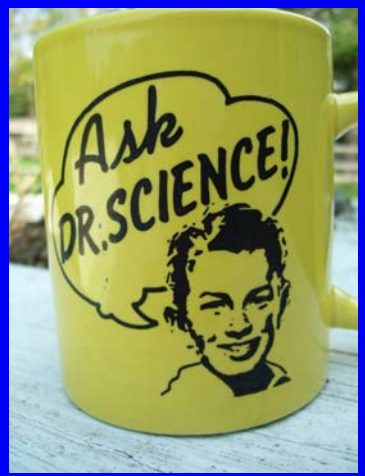
- Old Model:
  - Leaders “stuck” with action plan writing…
  - Then “see you in 5 years…..”
- What Works Well:
  - Subcomponent leaders are *active*
  - *Synthesis and Integration* of NP204

Integrative Science Teams

- Maintains an inventories of data needs, model needs, control needs
- Can provide a *synthesis* of where the state of the science is
- Can provide a periodic snapshot of *progress* towards the Problem level goal
- Provides leadership on cross-location projects and collaborations
- Fosters data base building
- Can conduct short-term studies of high impact
- Can serve as a POC for specific problem(s)

Terminology

- **Understand**
- **Predict**
- **Control**



“Quantify”

is a good summary term

Breakout Sessions

- What priority *problems* did we hear?
- What problems can we address and what are we going to address?
- What are the *research needs* of the problems?
- What solutions/products/deliverables are we going to produce?
- What metrics can we use to gauge progress and success?

What works well in ARS?
What can we learn from others?
What is it about ARS that makes us successful?