Year 1

REACCH gets moving

First Annual Project-wide Meeting
Feb. 29-Mar. 2, 2012

REACCH
Regional Approaches to Climate Change – PACIFIC NORTHWEST AGRICULTURE

REACCH gets moving

This Morning

- ✓ Highlights of Year 1
- ✓ Thanks and Kudos
- ✓ Annual Meeting Overview
- ✓ The Opening Workshop – Assessment: thinking about integration
- ✓ Housekeeping

Highlights of Year 1

Highlights of Year 1

Highlights of Year 1

Outputs

- ✓ 17 presentations to professional and scientific meetings
- ✓ 47 presentations at producer meetings and field days
- ✓ 14 refereed scientific articles
- ✓ 9 extension reports or bulletins
- ✓ 2 webinars and extension
- ✓ 1 video

Highlights of Year 1

Media Coverage

12 articles and press releases including

- ✓ AP releases picked up nationally
- ✓ Article in Horizon Air Magazine
- ✓ Article in UI Alumni Magazine
- ✓ Local and Regional Press
- ✓ Radio spots

Highlights of Year 1

Achievements

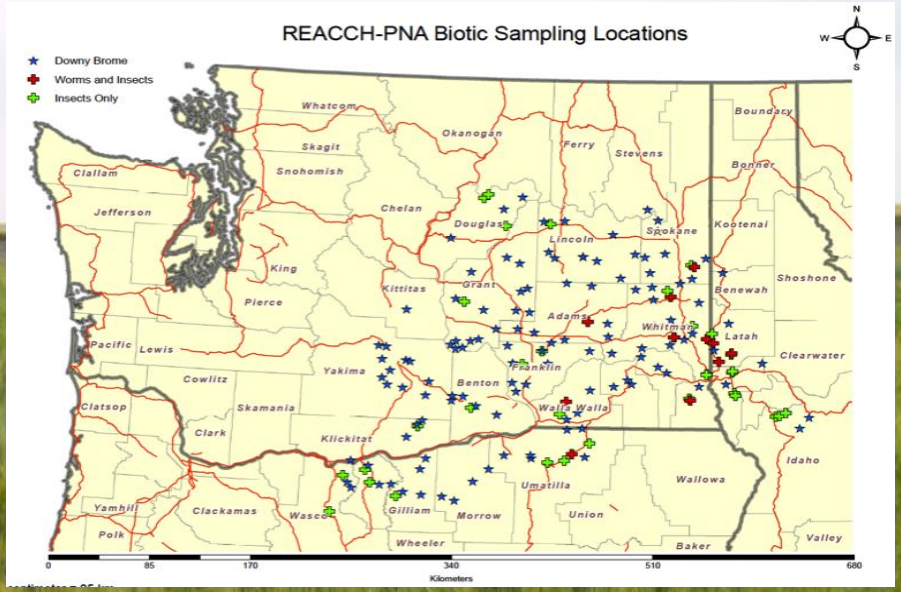
K-12 Teacher Surveys Analyzed and Workshops Planned

Graduate Students (8/14) and Postdocs (3) recruited

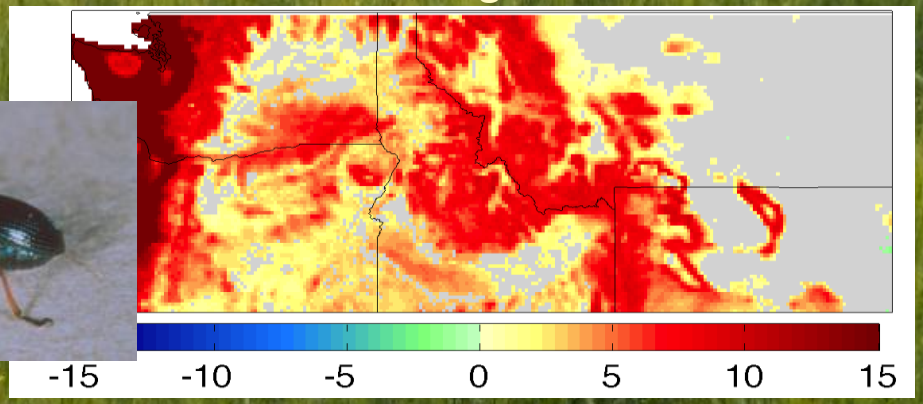
Johnson-Maynard, Wolf, Valez,,,,,

Highlights of Year 1

Achievements



Change



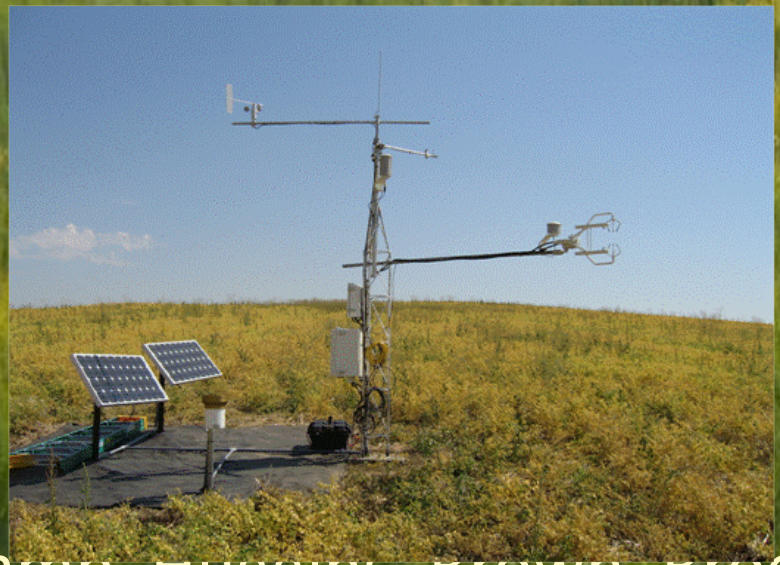
- Pest, Pathogen, Weed and Earthworm Monitoring and Modeling Initiated

Burke, Eigenbrode, Johnson Maynard, Paulitz

Highlights of Year 1

Achievements

Monitoring Initiated

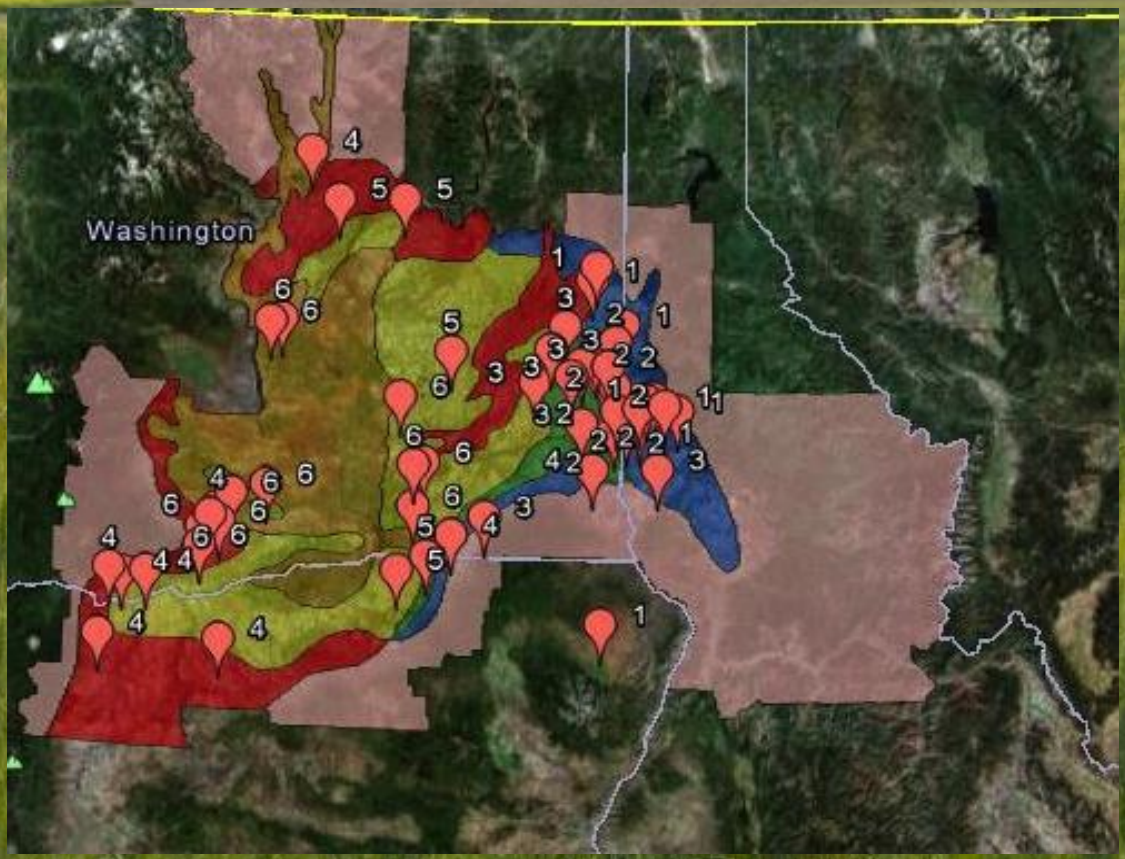


Lamb, Huggins, Brown, Brooks,,,,

Highlights of Year 1

Achievements

Surveys with
Grower Participants
Across AEZs initiated



Painter, Roe,,,,

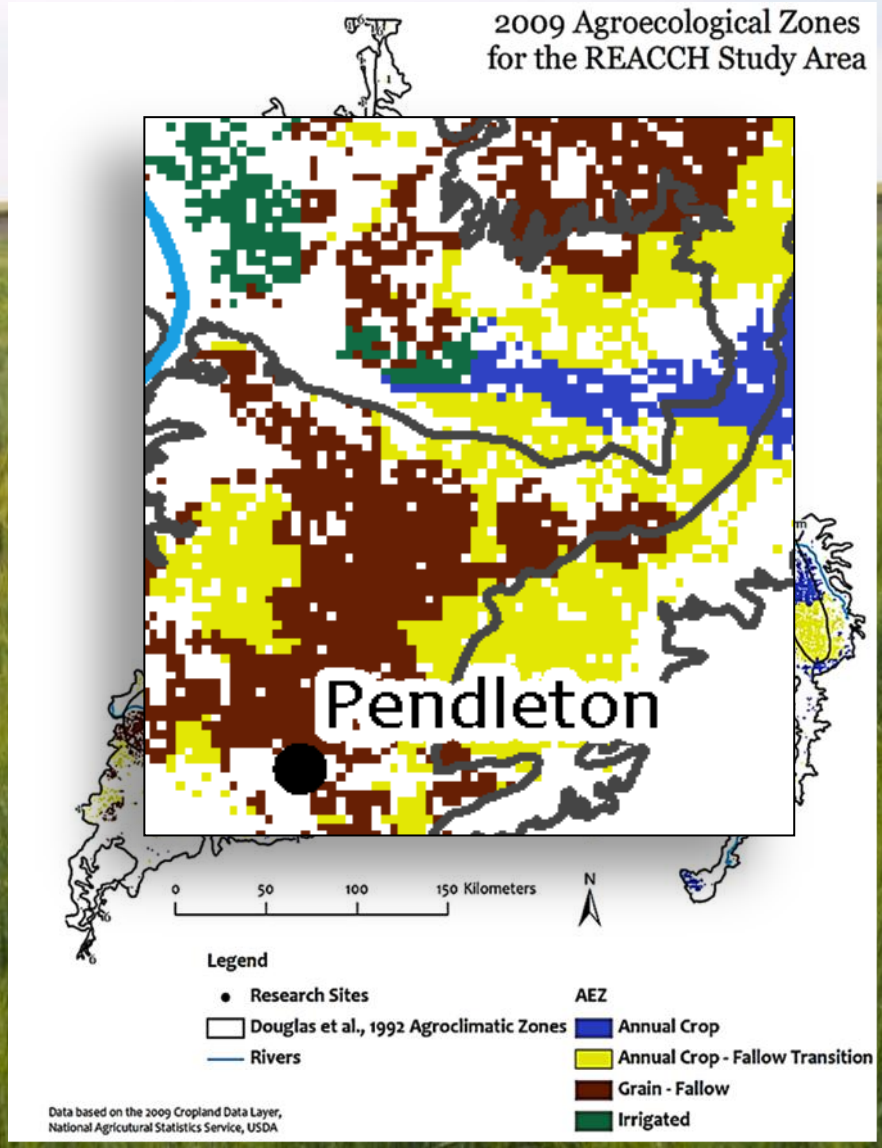
Highlights of Year 1

Achievements

Dynamic Agroecological Zones for the region

- ✓ Concept Developed
- ✓ First outputs

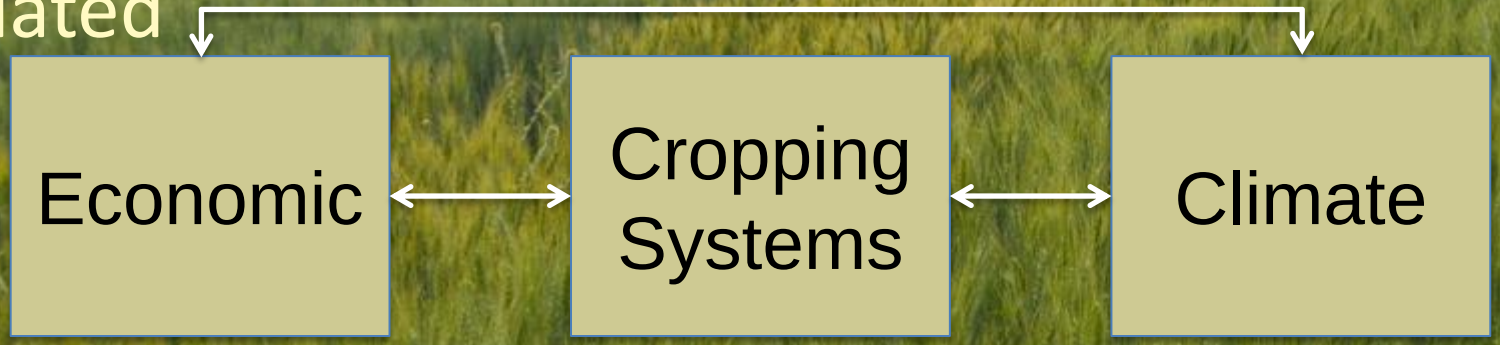
Huggins, Rupp,,,



Highlights of Year 1

Achievements

Conceptual and Modeling Framework Initiated



Antle, Abatzoglou, Capalbo, Painter, JD, Stockle, Huggins, Walden…

Highlights of Year 1

Achievements

And Many Other Activities

Highlights of Year 1

Challenges

Communication issues
Momentum
Central Desktop Woes

Thanks and Kudos

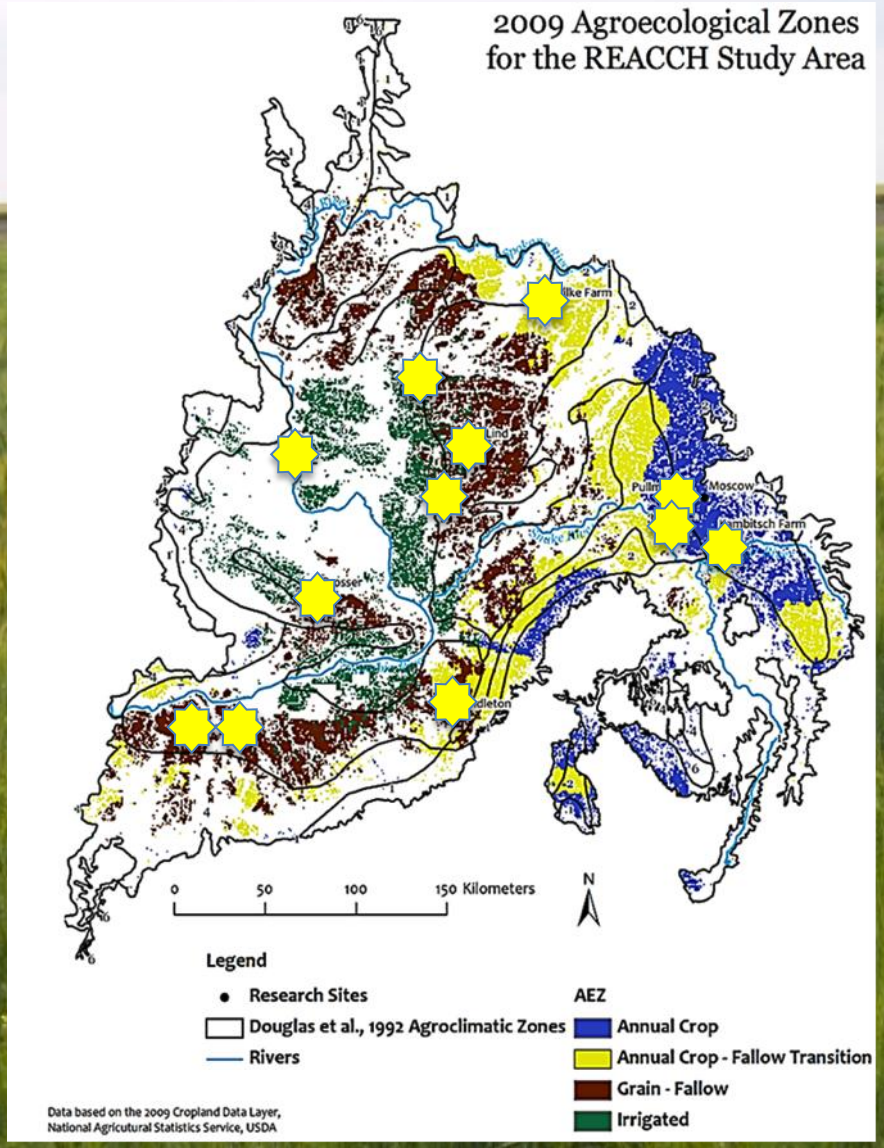
Dianne and Lenea
– for preparing the annual report
– for organizing this meeting

Chad and Dave H.
– for editing the report

Highlights of Year 1

Achievements

Experiments Planned or Initiated



Pan,

Thanks and Kudos

Meeting Planning Committee
Susan, Dave H., Chad, Jodi

Thanks and Kudos

Objective and Theme Leads
John Antle, Brian, Susan, Bill P., Dave H., Chad, Steve P., Jodi, Paul, Claudio

Photo, Dave Barton

Thanks and Kudos

Everyone

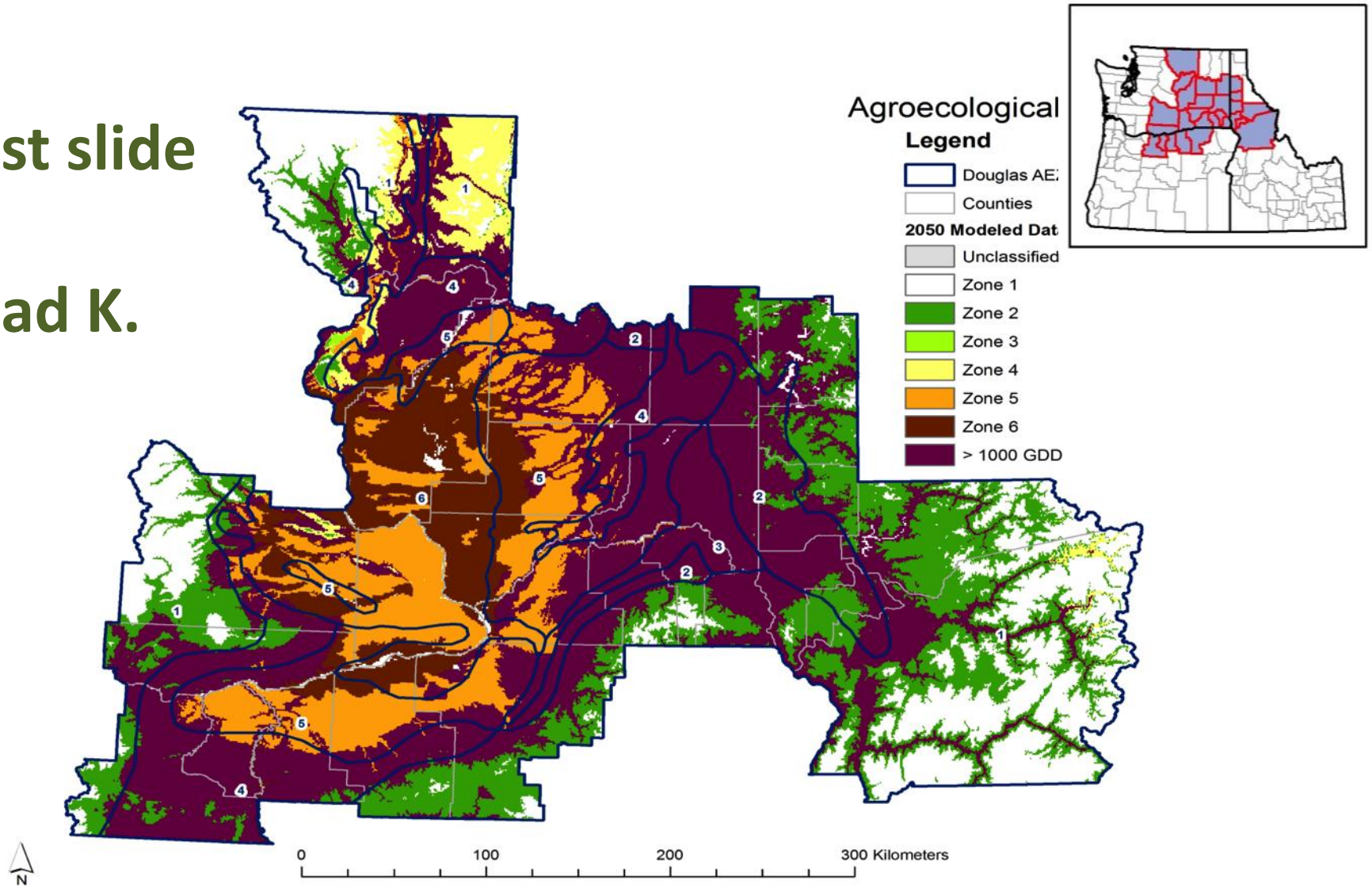
– for patience and productivity

Photo, Dave Barton

Kudos and Thanks

Best slide

Chad K.



REACCH Anticipated Impacts

- Develop cropping systems with resilience to changing conditions
- Improve nitrogen use efficiency
- Improve conservation of soil, soil organic matter and carbon, tilth
- Anticipate changes and challenges for pest, weed and pathogen management
- Contribute to improved pest forecasting, improved biological control, improved pest management during transitions to alternative systems

Photo: Bill Loftus

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Annual Meeting Goals

- Exchange of ideas and learn more about project-wide activities
- Provide a forum for SAC to see the current extent of the project and to obtain improved feedback from SAC
- Learn about data management approaches
- Meet the SAP members, allow them to understand project activities and to provide us feedback
- Host and orient our first graduate students
- Identify ways to improve REACCH and set a course for year 2

Annual Meeting Overview

Daily Themes

Day 1

– Integration, Communication

Day 2

– Students, Stakeholders, Advisors, Partners

Day 3

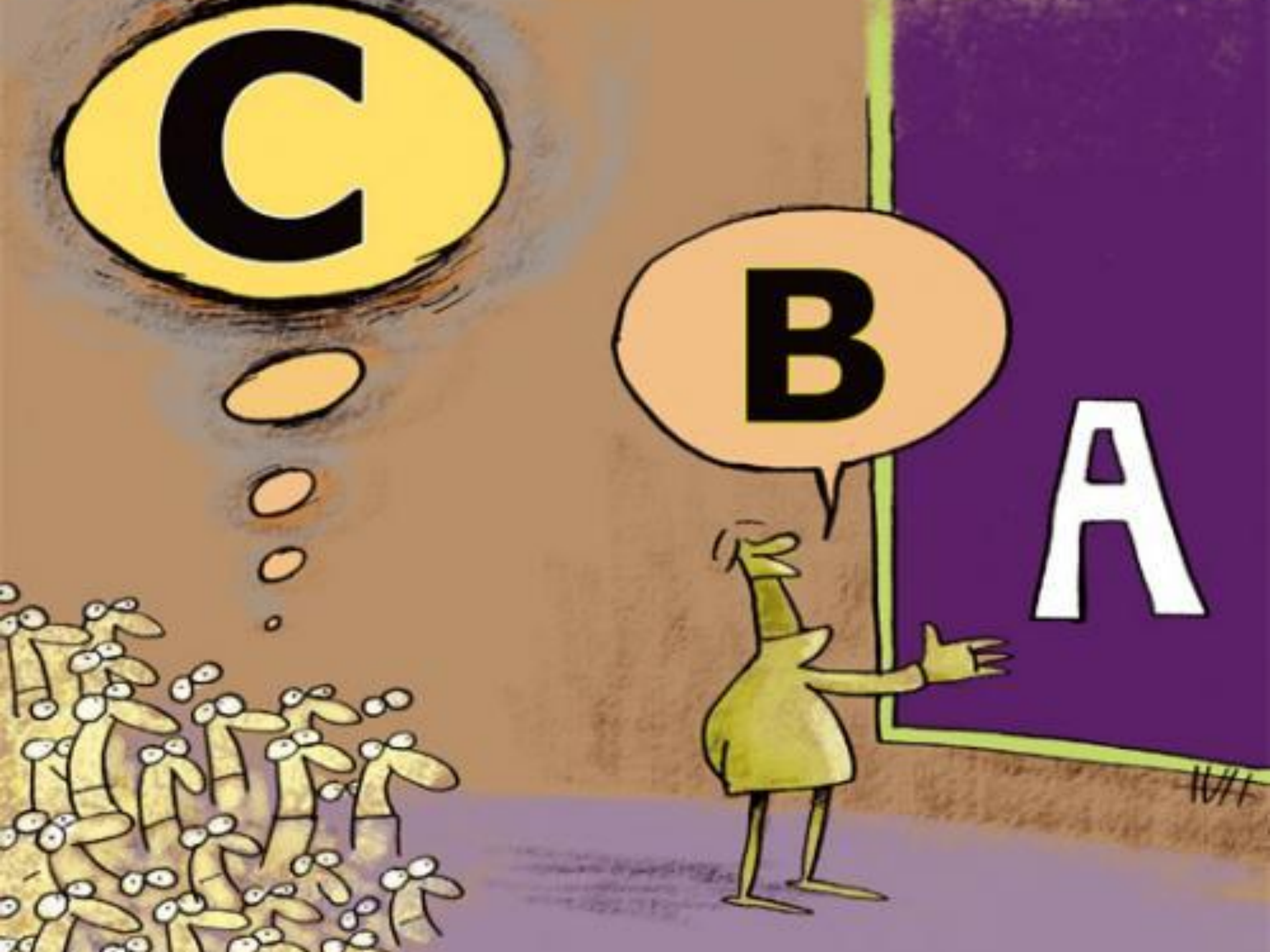
– Lessons Learned, Action Plans

Highlights of Year 1

Achievements

Project Evaluation and Assessment

Meyer, others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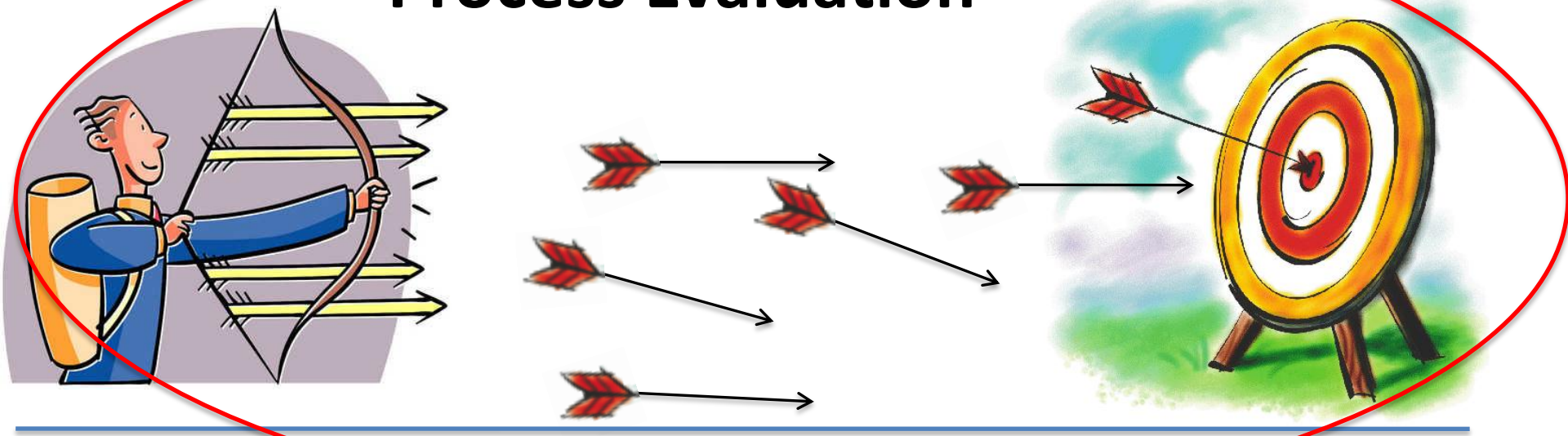
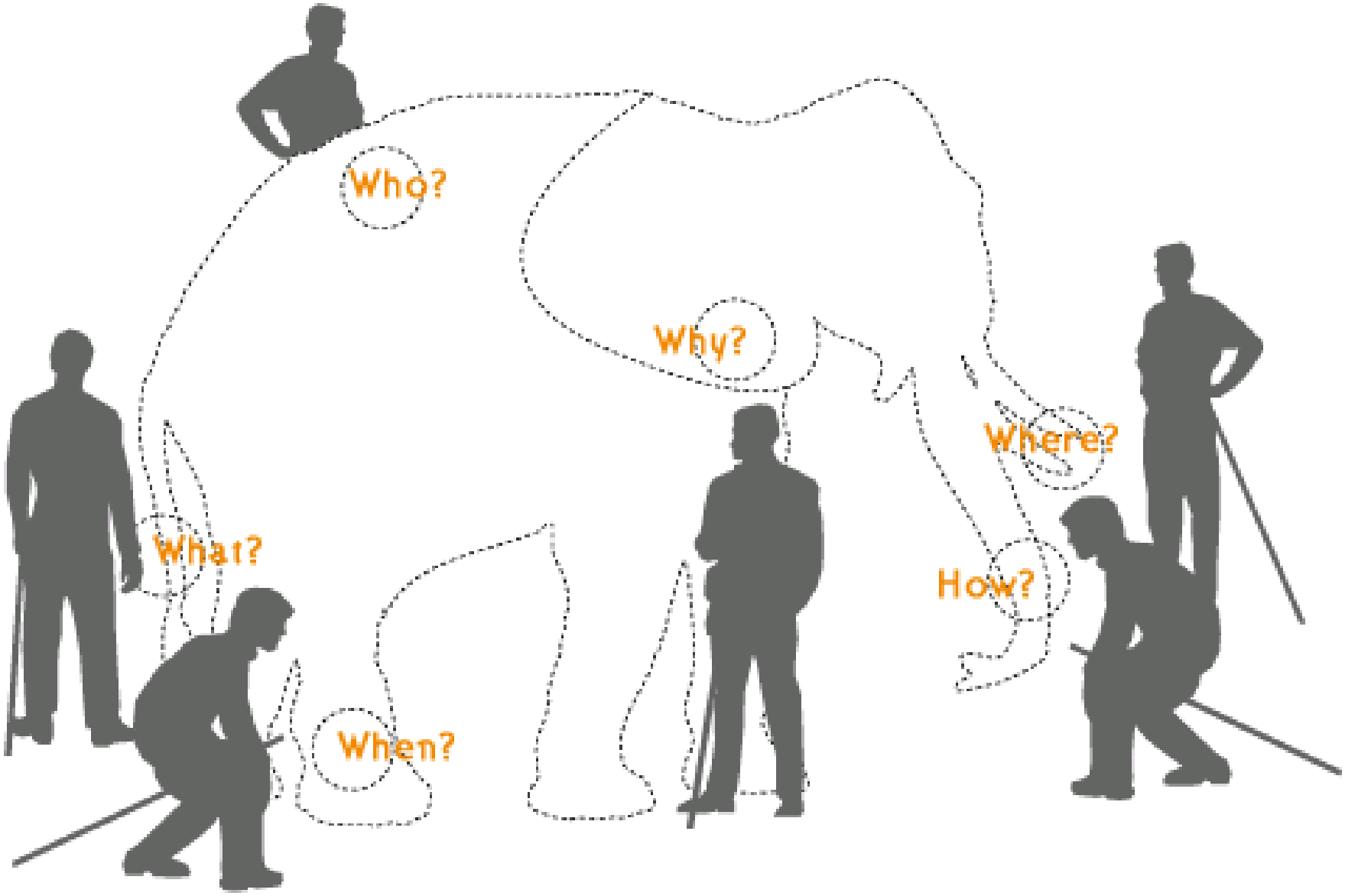
Types of Evaluation

Outcome Evaluation

Process Evaluation




Who?
Why?
Where?
What?
How?
When?

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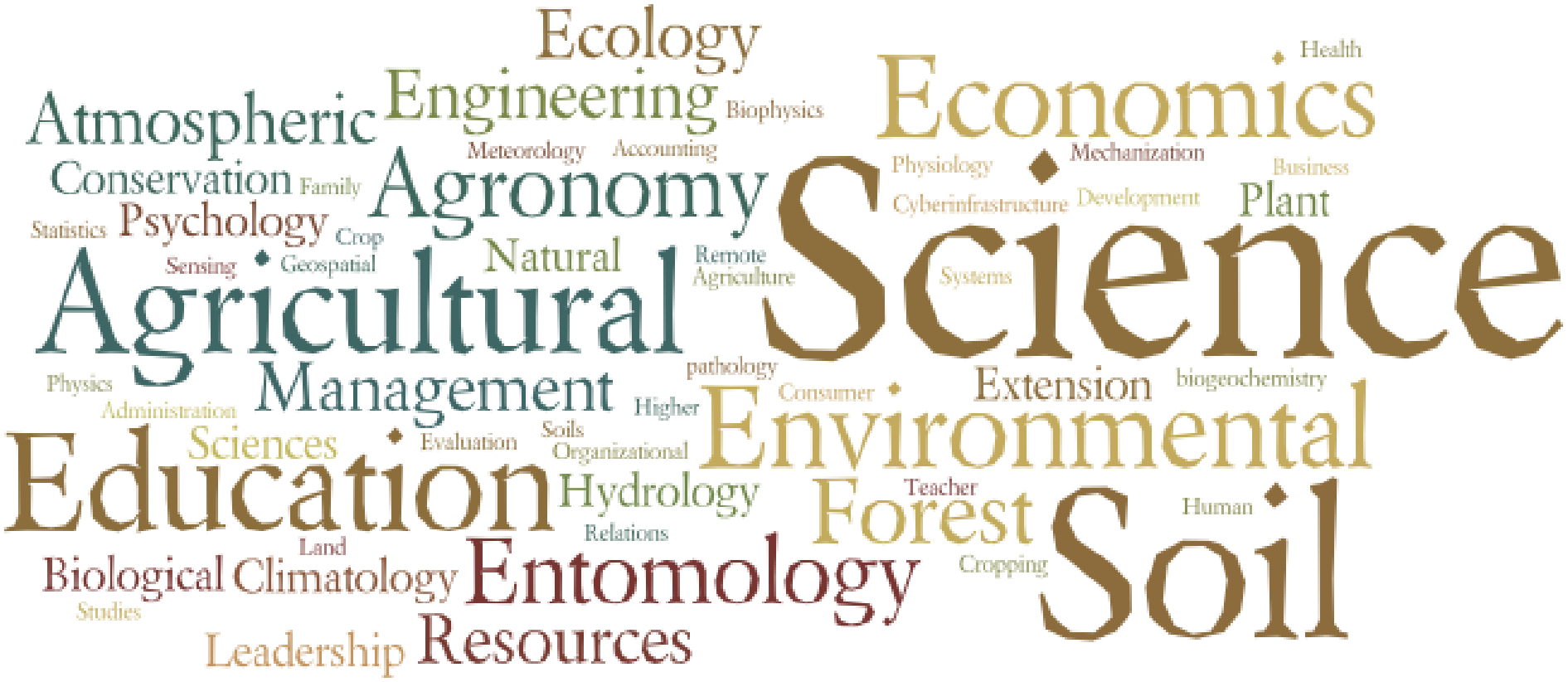
REACCH by the Numbers

Number of different academic



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Trust, Collaboration, and Productivity

2011 Benchmarks

Scale Name (Number of survey items in scale) *"Sample Item"*	2011 Score*
Team Trust (6) *"I feel that I can trust the REACCH team."*	4.4
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*All scales standardized on a 5-point bipolar response scales: 1 = Strongly Disagree/Inadequate TO 5 = Strongly Agree/Excellent. N = 36 (80% of invited PI's, Investigators, Prof. & Tech Staff)

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Major Themes From Year 1 REACCH Qualitative Survey

Communication and Meetings

"…many importation topics not adequately addressed… . These projects tend to require more frequent 'sit down and lock the doors' single purpose-agenda meetings"

"I like the 'task list' approach…keeps things moving to turn an idea into a 'to do list'"

"I think that the mini reports by each objective lead will help"

Issues of efficiency and time burdens ⟵ ⟶ **Forum to learn & collaborate**

"… look at changing the frequency and/or content of PL calls to make them shorter- use other communication mechanisms

"Prefer a team-based approach rather than 75% of PIs being part of leadership team"

"We need to spend some more time together in different settings that promote creativity, serendipity, synergy"

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Major Themes From Year 1 REACCH Qualitative Survey

Central Desktop

"(improve) CD transparency. It's sufficiently confusing and bothersome to use as to make it annoying. "

"More guidance on how it is supposed to be used might improve this issue (and I don't mean technical training--I understand how the software works, I don't understand how the users are supposed to interface with it and communicate with it)"

"CD should provide good organizational framework for project"

Challenges of learning and using Central Desktop

Organizational potential of Central Desktop

"CD is completely dysfunctional. If you paid attention to it all the time, you wouldn't get any actual work done."

"We need to continue to improve the utilization of CD which will mean training, training, training."

"Improve our use of Central Desktop, since this is our primary means of communication"

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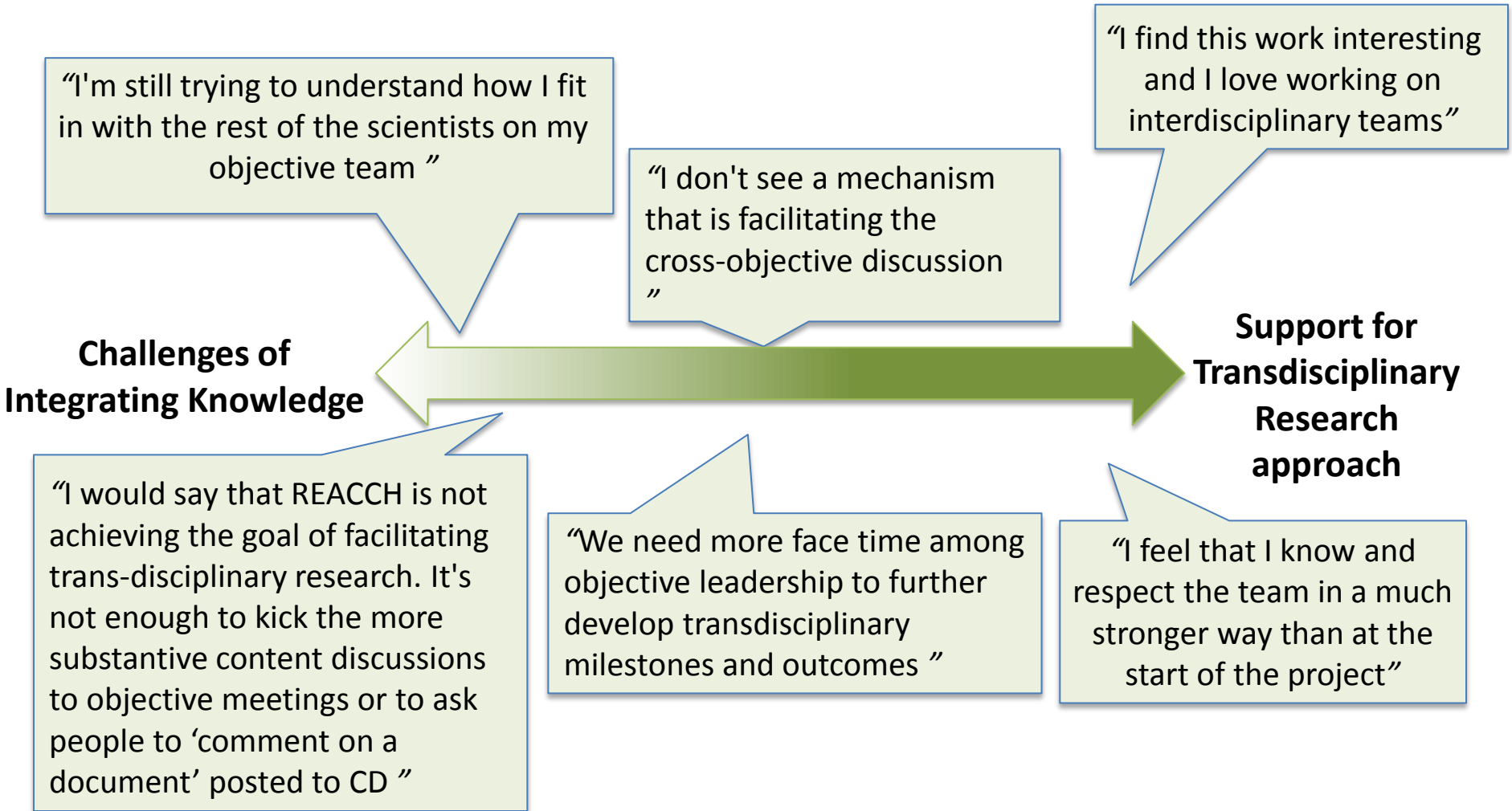
Transdisciplinary Integration & Research Productivity



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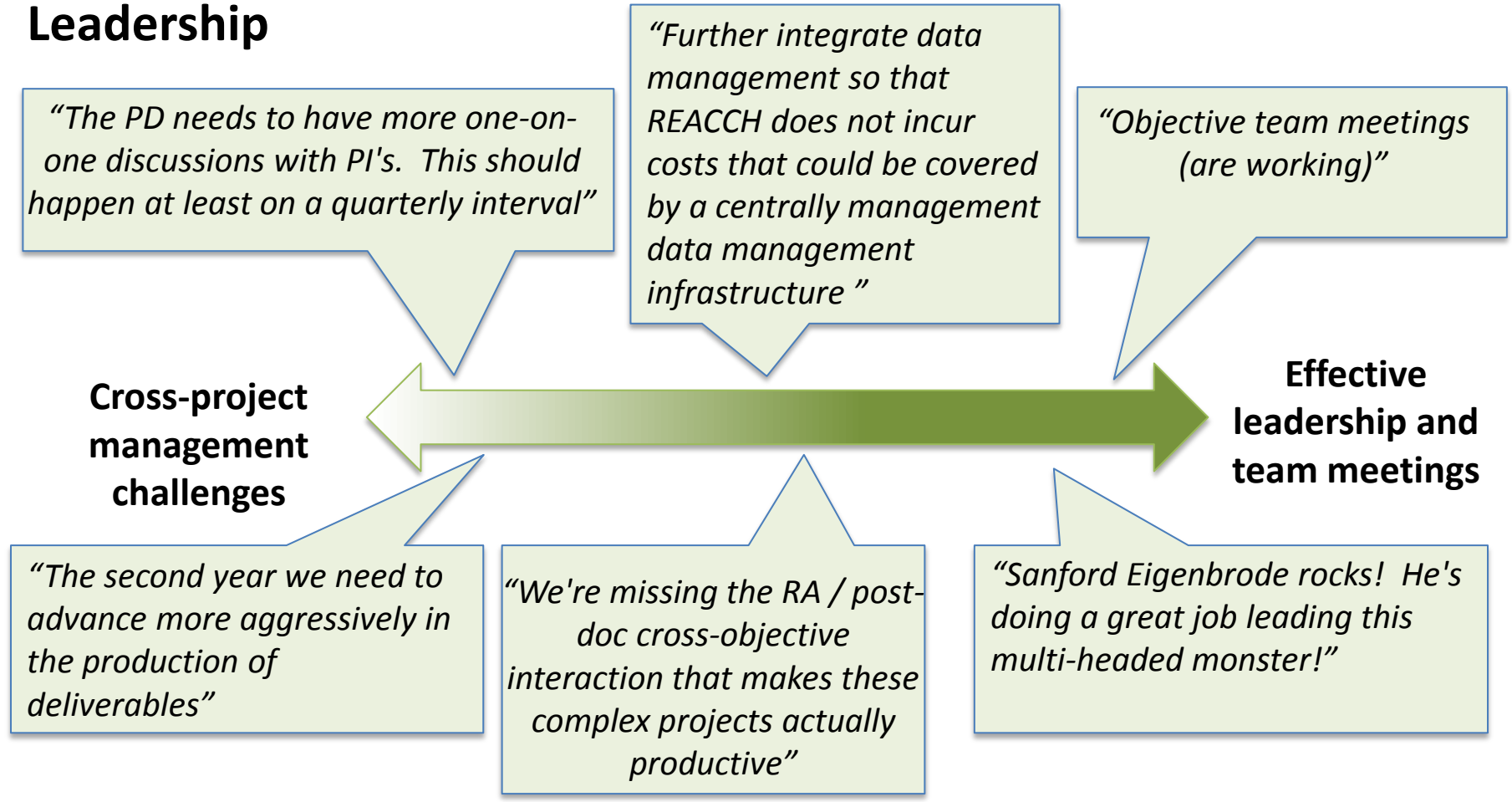
Project Management & Leadership



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Outreach

"Better plans for: media outreach, stakeholder involvement, political briefings, visibility at conferences, student involvement"

Suggestions on increasing Stakeholder involvement

Comments on Current Efforts

"Concerned that SAC is not involved enough--don't we need their support to get recommended changes implemented? "

"Meeting on an annual basis with stakeholders (working)"

Improving Integration

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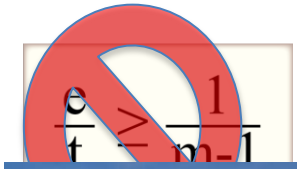
What is Integration?

Klein's 4 Principles of Interdisciplinary and Transdisciplinary Integration

1. Variance: Integration has no "universal formula"



2. Platforming: Integration must have a common foundation for cognitive and social integration (question, structure, or object) throughout the life cycle of project.

3. Iteration: integration requires movement between research breadth, depth, and synthesis. Need to review throughout the research processes and modify objectives and goals in light of new insights.

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Integration skills are old and familiar

- Variance: No universal formula
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Transdiscipinary approaches have systematic theoretical frameworks for defining and analyzing social, economic, political, environmental, and institutional factors in human health and well-being.

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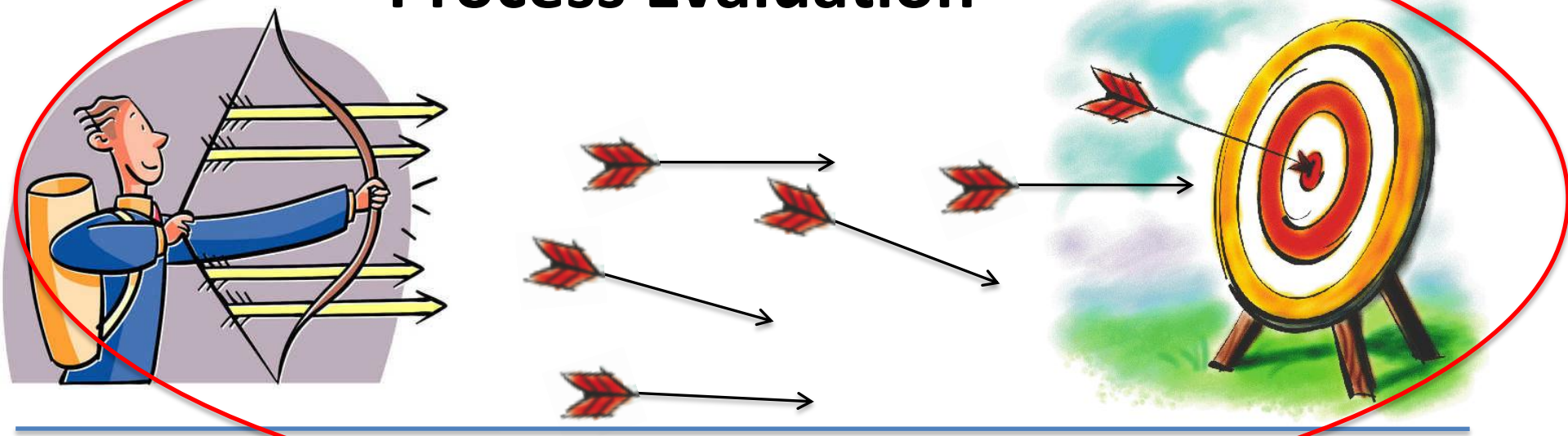

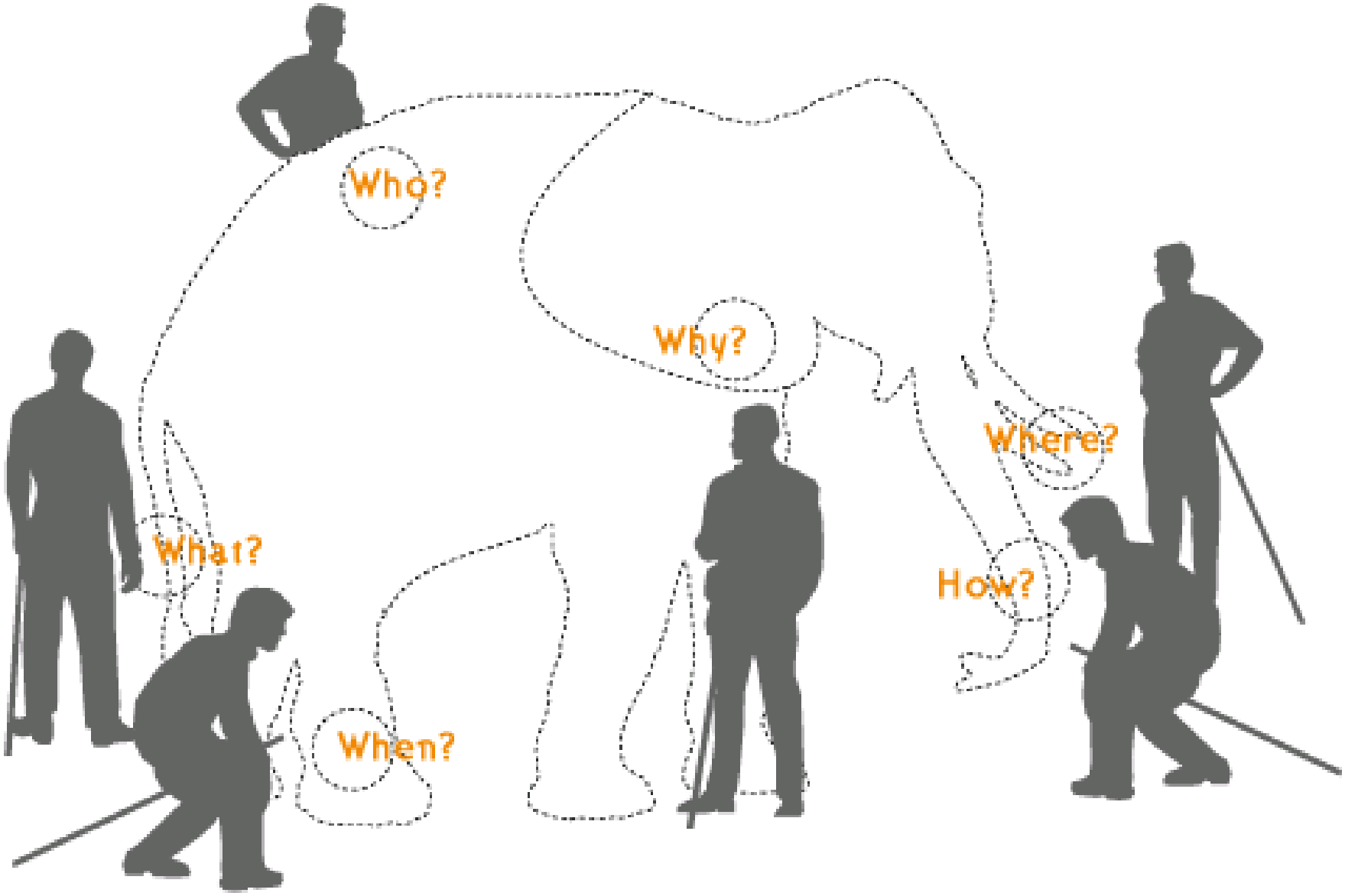
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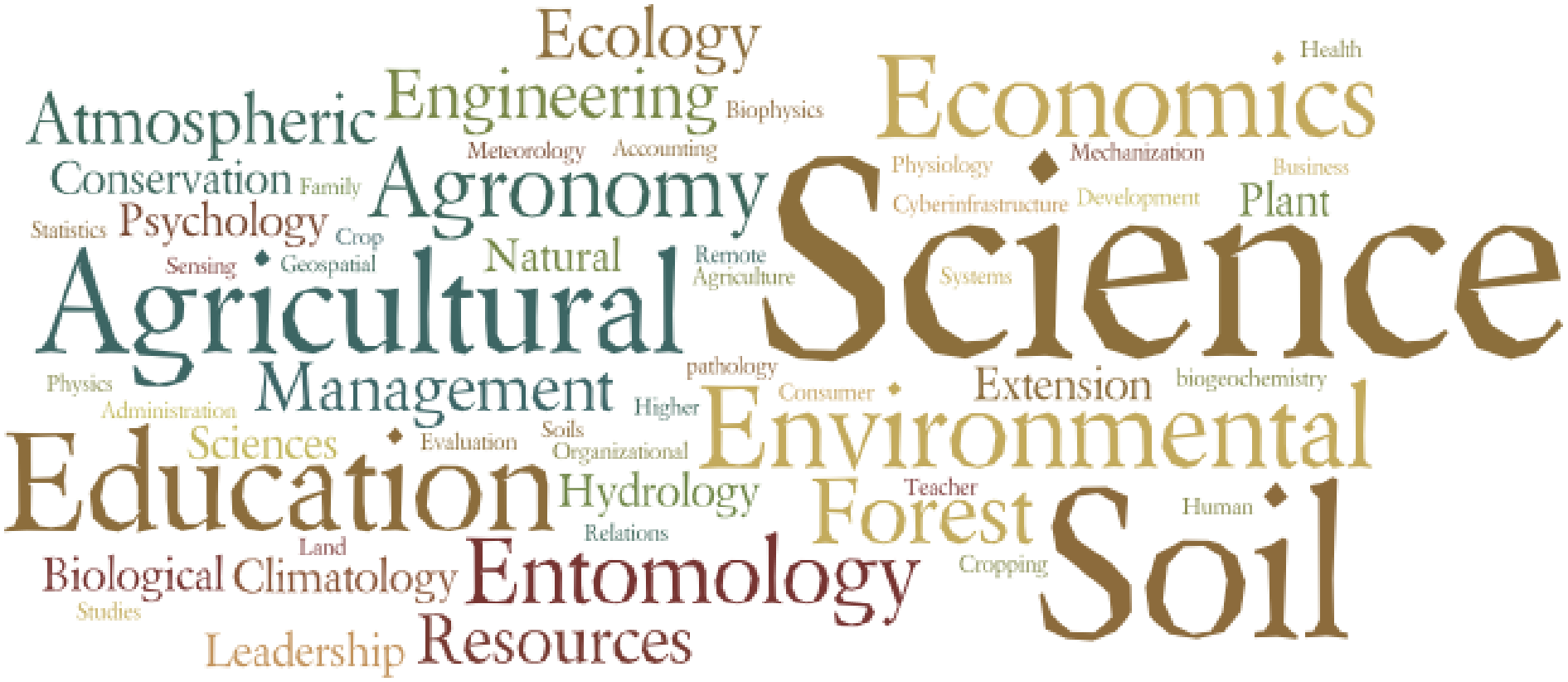

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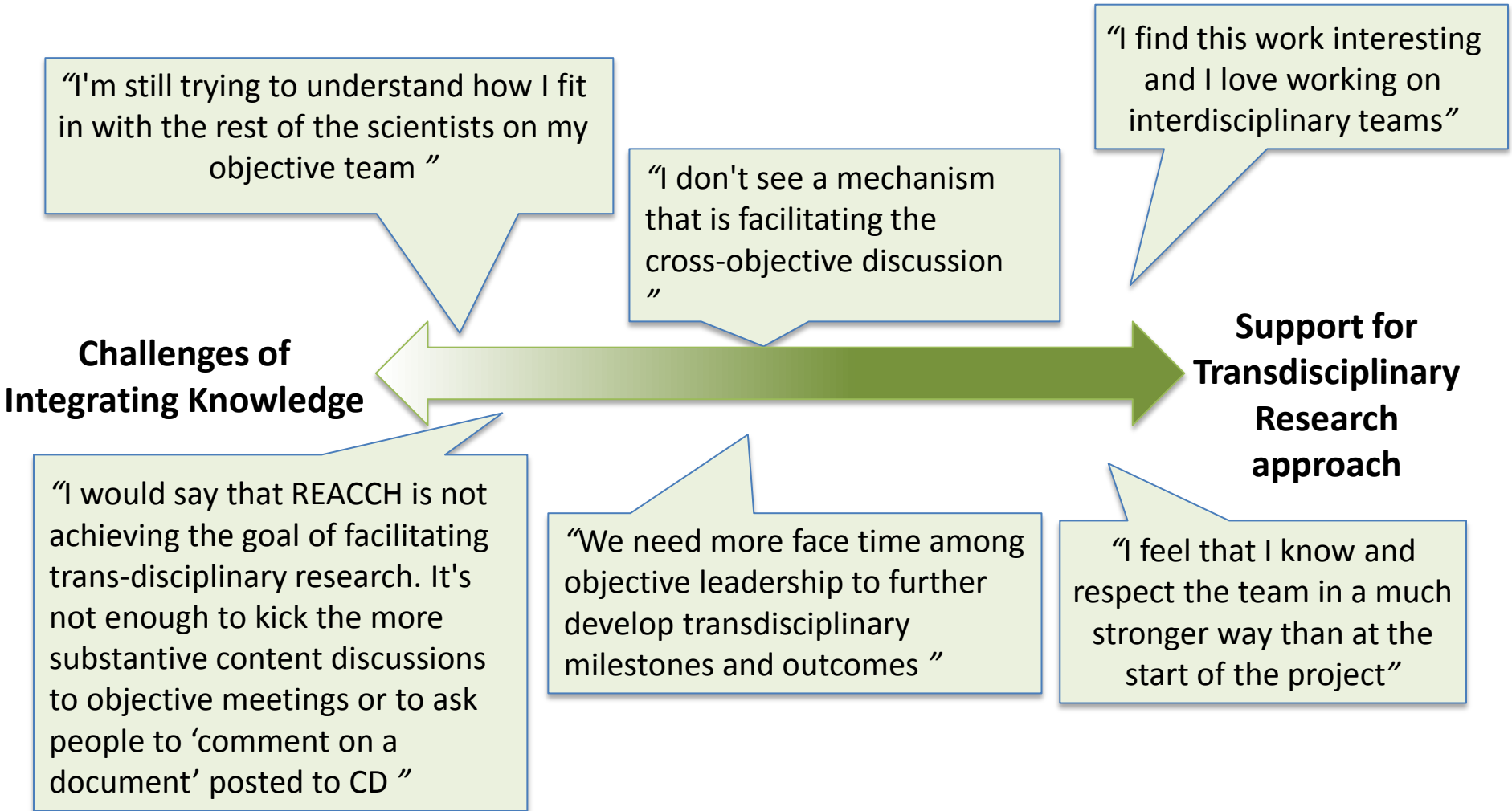
Transdisciplinary Integration & Research Productivity



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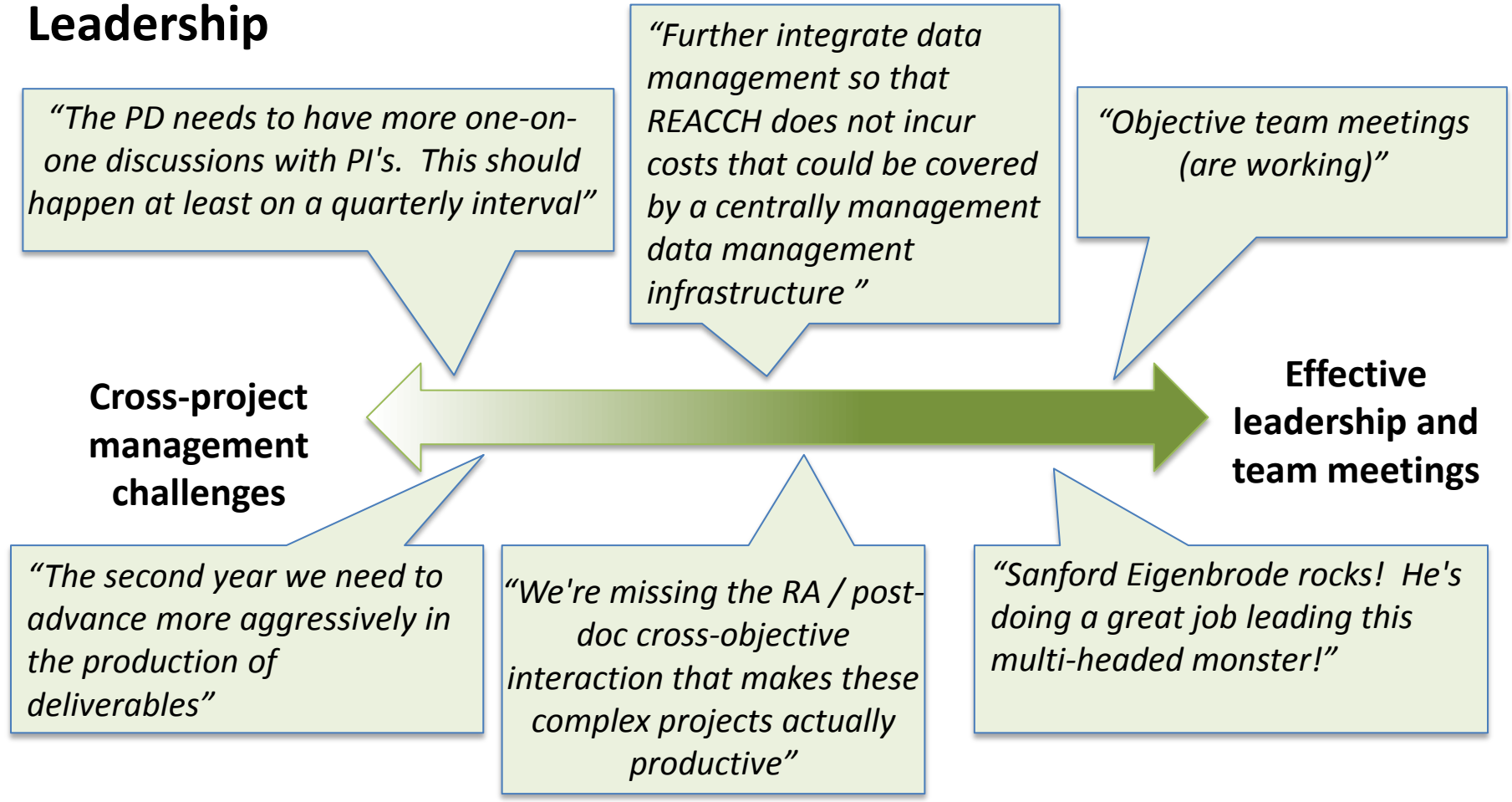

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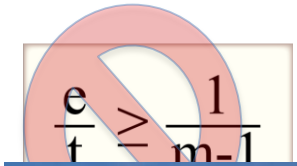

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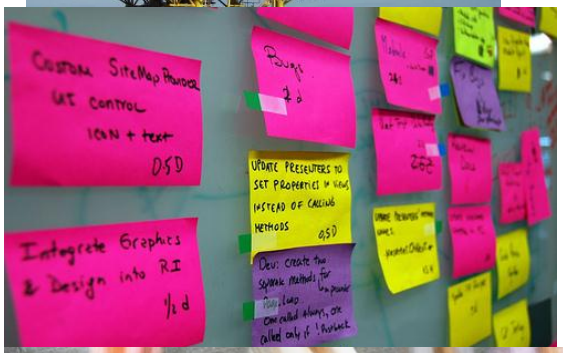

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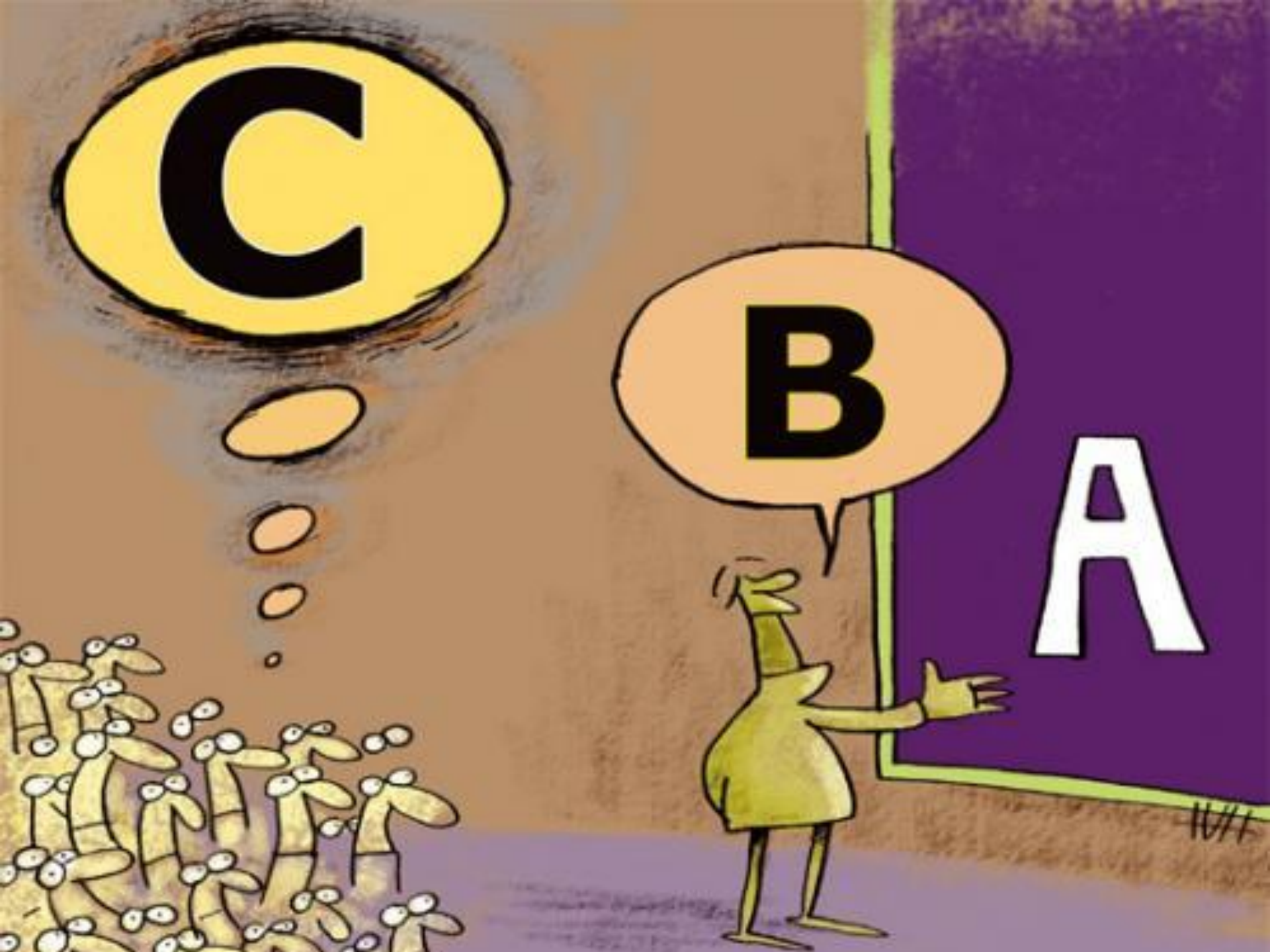
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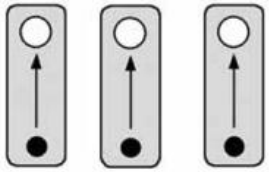
Transdiscipinary approaches have systematic theoretical frameworks for defining and analyzing social, economic, political, environmental, and institutional factors in human health and well-being.

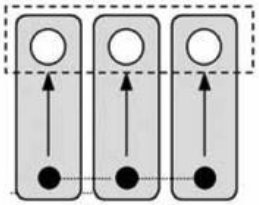
disciplinary

- Within one academic discipline
- Disciplinary goal setting
- No cooperation with other disciplines
- Development of new disciplinary knowledge and theory



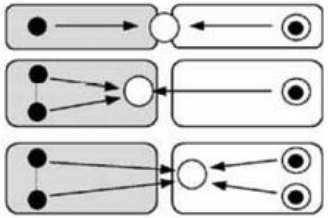
multidisciplinary

- Multiple disciplines
- Multiple disciplinary goal setting under one thematic umbrella
- Loose cooperation of disciplines for exchange of knowledge
- Disciplinary theory development



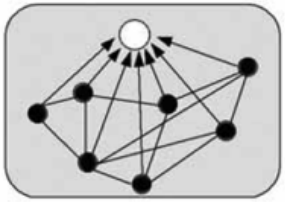
participatory

- Involves academic researchers and non-academic participants
- Exchange of knowledge, knowledge bodies not integrated
- May be disciplinary or multidisciplinary
- Not necessarily research, goal may be academic or not



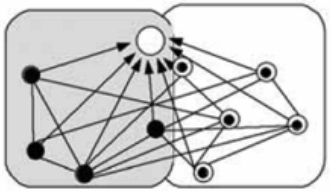
interdisciplinary

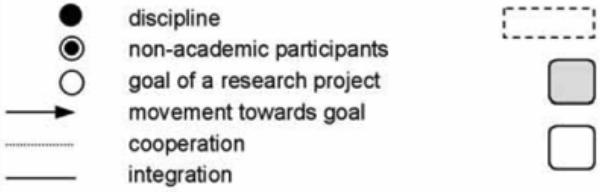
- Crosses disciplinary boundaries
- Common goal setting
- Integration of disciplines
- Development of integrated knowledge and theory



transdisciplinary

- Crosses disciplinary and scientific/academic boundaries
- Common goal-setting
- Integration of disciplines and non-academic participants
- Development of integrated knowledge and theory among science and society





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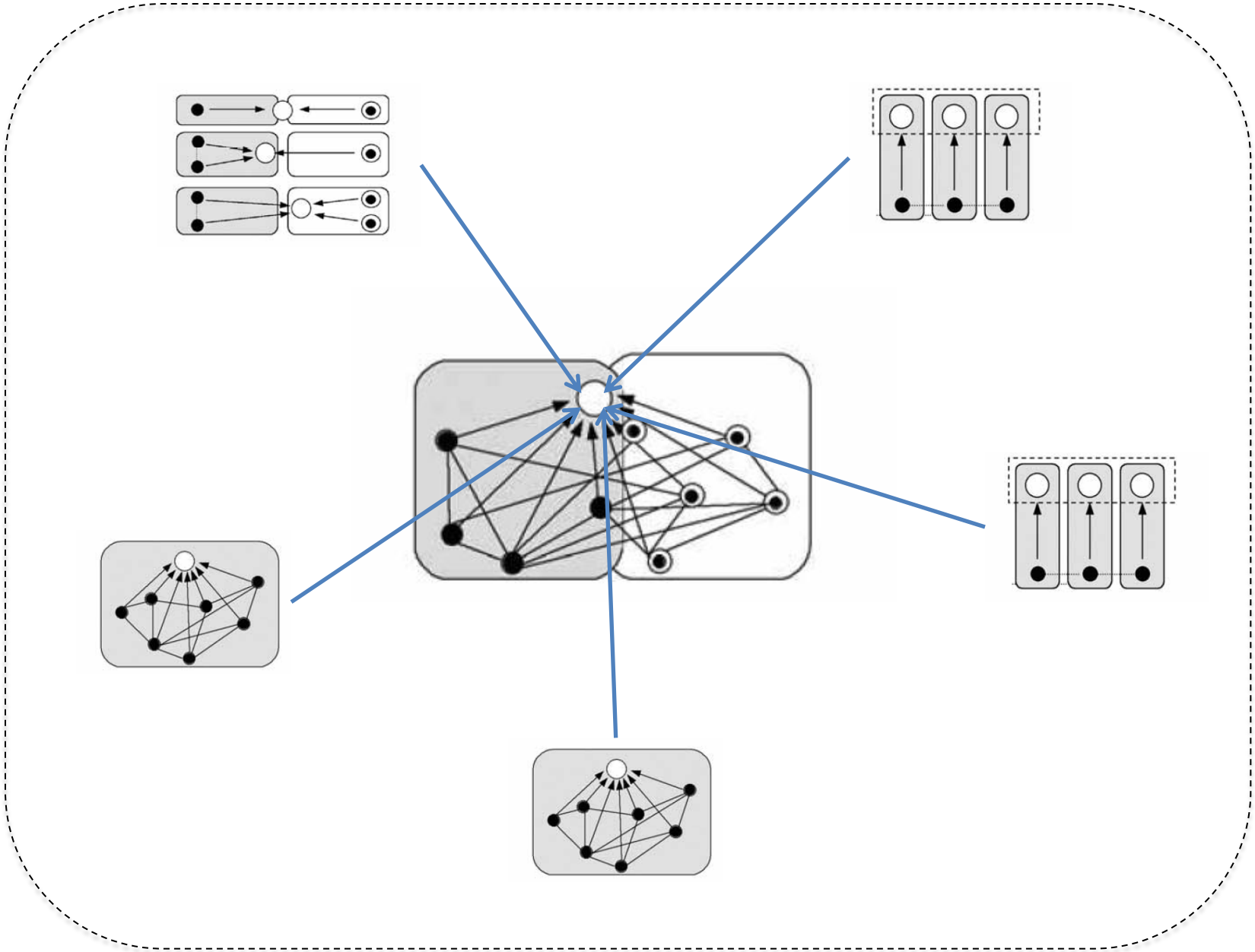

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Year 2 Next Steps Table Talk (35 mins)

GOAL

Identify the next steps we need to take this year to better integrate our knowledge and efforts.

Tasks

1. Review open-ended comments on Qualitative Report (5 mins)
2. Discuss with table mates (20 mins)
   --> What integration activities really helped the project?
   --> What integration activities should be improved (how) or added?
3. Identify a presenter and key presentation ideas. (Presentations will be 5 to 6 minutes for each table.)

Best Practices

Give everyone a chance to speak

Disagreement okay—don't need to reach consensus right now

Recommend specific next steps

Capture your ideas and save to thumb drive (will be organized and used Friday)

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Challenges of Committees and the Delphi Technique

Delphi T[illegible]ique helps:

- Ensure [illegible] all possible option[illegible]ve been put on the table fo[illegible]nsideration
- To esti[illegible] the impact and consequ[illegible]ces of any particu[illegible]option
- To exam[illegible] and estimate the accepta[illegible]y of any particular option

1. The don[illegible] individu[illegible]
2. The unw[illegible] on an is[illegible] is know[illegible]
3. The diff[illegible] in highe[illegible]
4. The unw[illegible] is public[illegible]
5. The fear[illegible] might h[illegible] face.
6. The exp[illegible] a result

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Year 2 Next Steps Table Talk (60 minutes)

GOAL

Identify the next steps we need to take this year to better integrate our knowledge and efforts. These may include: Communication, Leadership, Research Integration, Project Management, Outreach, Others!

Tasks

1. Read open-ended comments in Qualitative Report (5 mins)
2. Write as individual then discuss with table mates:
   What integration activities really helped the project?
   A. Each member writes an ordered list of their top 3 activities.
   B. Take turns going around group, each person makes their case for HOW each activity on their list helped the project (**Timer**: limit to 2 minutes per person please).
   LISTEN, RINSE, REPEAT steps A and B. (15 minutes per round X 2 rounds)
   Secretary: please track highest scoring items for **each** round AND capture the key ideas and insights generated by the group
3. Complete steps **A** and **B** with this question:
   What integration activities should be improved or added this year? (15 minutes per round X 2 rounds)

ROLES IN EACH GROUP

Secretary: Records ideas (save to thumbdrive)

Timer: Tells people to shut up after two minutes

Presenter: Gives 6 minute presentation to entire group after table talk session

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Year 2 Next Steps
Table Talk (60 minutes)

Presentations (6 minutes each)

What integration activities really helped the project?

How did they help? Any particular aspects/practices/insights that we can apply next year?

What integration activities should be improved or added this year?

Potential benefits and barriers to implementation

Extra Credit:

Weirdest, most idiotic idea generated by group

Best idea that may never be implemented

What is Integration?

REACCH is Actionable Science

"Scholarship with the potential to

- inform decisions (government, business, and household),
- improve the design or implementation of public policies,
- influence public or private sector strategies, planning and behaviors that affect the environment."

SESYNC
National Socio-Environmental Synthesis Center

What is Integration?

REACCH is More than Actionable Science

- Education, Extension, Outreach make REACCH into

Science in Action

UW
Climate Impacts
Group (CIG)

IGERT
Projects
WSU- NSPIRE
UI - Ecological Resilience

toolbox Project

BioEarth

Idaho EPSCoR

Pacific
NW Regional
Climate Science
Center

LTER

Kellogg
Biological
Station

Oregon Climate Change
Research institute
(OCCRI)

Climate Impacts
Research Consortium
(CIRC)

UI –
Northwest
Knowledge
Network

Site Specific
Climate Friendly
Farming
WSU

- PINEMAP
- SustainableCorn.org
- Wheat Phenomics (UC Davis)

ARS GRACEnet

Integration

Extension

- Stakeholder Committee
- Diverse Delivery Platforms
- Cross-Project Specialist
- Stakeholder Data Collection

Education

- K-12 Teacher Engagement
- Team-Based Graduate Ed.
- Minority Involvement

Research

Integrated Conceptual Framework

Economic ↔ Cropping Systems ↔ Climate

Monitoring and Experiments

- Baselines and Monitoring
- Alternative Cropping Systems
- Social and Economic
- Pests, Weeds, Diseases

OSU Oregon State University

Washington State University

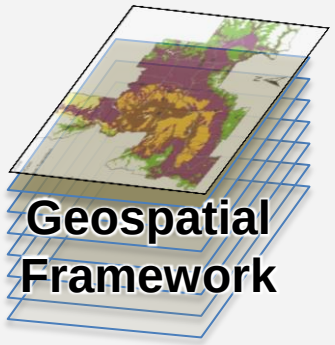
University of Idaho

USDA

Integration

Extension

- Stakeholder Committee
- Diverse Delivery Platforms
- Cross-Project Specialist
- Stakeholder Data Collection



Education

- K-12 Teacher Engagement
- Team-Based Graduate Ed.
- Minority Involvement

Integrated Conceptual Framework

Economic ↔ Cropping Systems ↔ Climate

Monitoring and Experiments

- Baselines and Monitoring
- Alternative Cropping Systems
- Social and Economic
- Pests, Weeds, Diseases

OSU Oregon State University

University of Idaho

Washington State University

USDA

Highlights of Year 1

Launch Meeting

University of Idaho, May 9-11

- > 60 posters
- Workshops on improving communication in collaboration and communicating with the press
- NIFA representation
- Stakeholder participation

REACCH PNA Launch Meeting
May 9-11, 2011
University of Idaho Commons

Monday, May 9, 2011		
11:00am	PIs Pre-meeting, Registration	
12:00pm-1:30pm	**LUNCH** *Greeting from Dean Hammel, UI*	*Wellspring Room*
1:00pm-1:30pm	**Sanford Eigenbrode, UI** - Welcome, Overview, Housekeeping	*Clearwater/Whitewater*
1:30pm-1:45pm	**David Meyer, BSU** – Introducti	
1:45pm-3:00pm		

Highlights of Year 1

Achievements

Environmental Data Manager Hired
Data Protocols Developed

Project Manager and Assistant Hired

….

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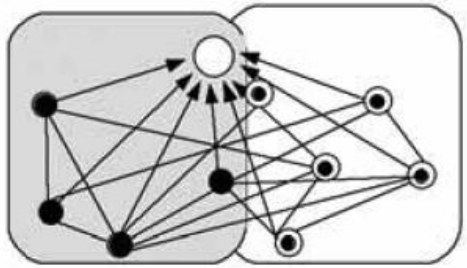
transdisciplinary

- Crosses disciplinary and scientific/academic boundaries
- Common goal-setting
- Integration of disciplines and non-academic participants
- Development of integrated knowledge and theory among science and society

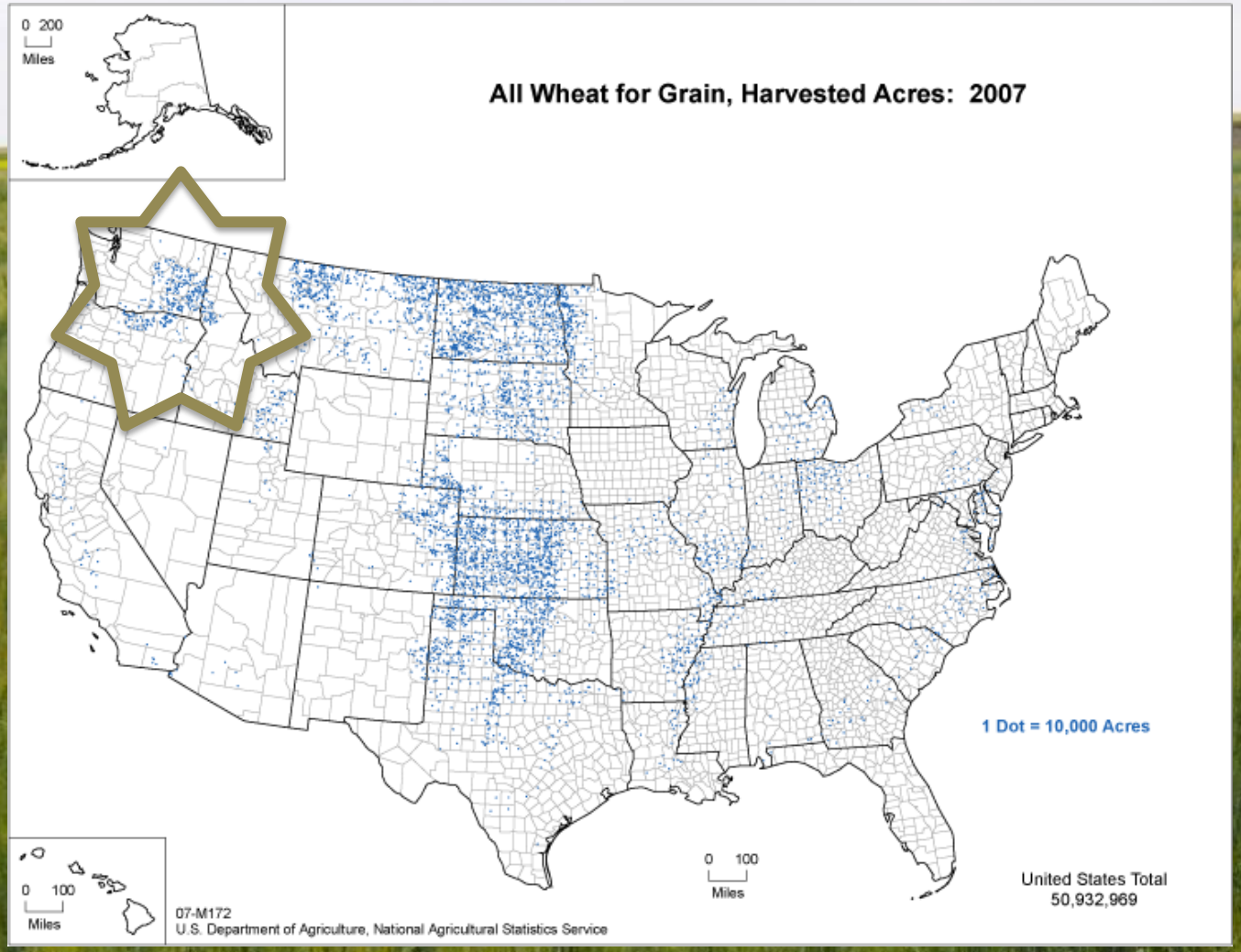


discipline
non-academic participants
goal of a research project
movement towards goal
cooperation
integration

thematic umbrella
academic knowledge body
non-academic knowledge body

© Tress 2005

Highlights of Year 1



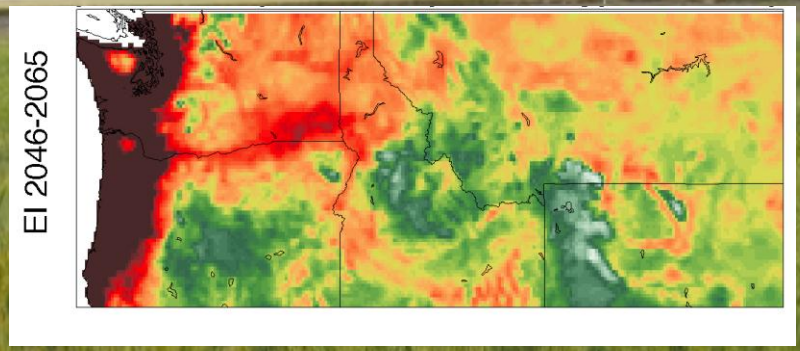
Highlights of Year 1

Achievements

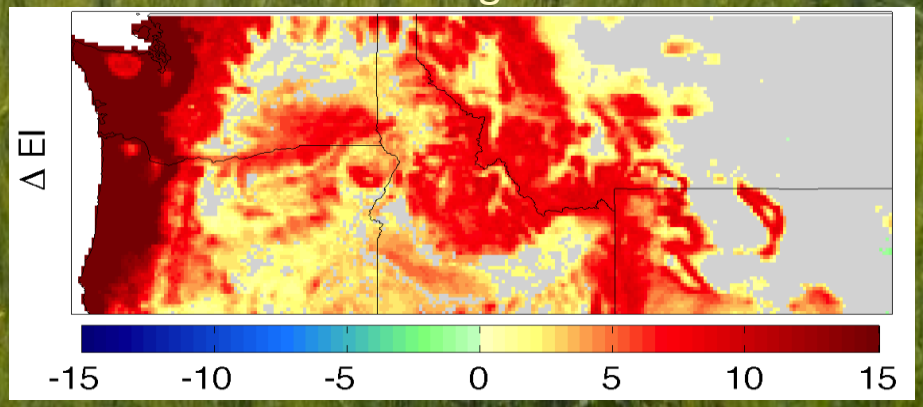
Pest Projection Modeling Framework Developed

Eigenbrode, Abatzoglou,,,,

Future



Change



REACCH Anticipated Impacts

- Create more sustainable, resilient agroecosystems and rural communities for the region
- Contribute to climate change mitigation
- Build regional capacity for coordinated research, outreach and education
- Increase knowledge of agriculture and its sustainability throughout the region
- Prepare a generation of scientists for success in transdisciplinary research, education and outreach

Photo: Bill Loftus

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