

## Director's Update May 2013

## Counting What Counts - Surveys and Baseline Data in REACCH

Survey: def. *To examine or look at comprehensively; to inspect carefully.* We are conducting several kinds of surveys and collecting related data to understand the diverse elements of the cereal production systems in which REACCH is working. More so than most of our legacy projects, REACCH aims to incorporate multiple factors interacting across the entirety of wheat production systems of central Washington, Northern Idaho and Northeastern Oregon. Survey data allow us to understand the system in new ways. Baselines are needed to measure changes through time, guide our research and provide information useful to stakeholders.

This issue of *The OutREACCH* contains six short reports to provide samples of survey activities what we are learning. Katt Wolf, Troy White and Jodi Johnson-Maynard have surveyed over 1,400 K-12 teachers to learn their views on climate change and agriculture and whether these topics are included in classrooms instruction in the region. J.D. Wulfhorst and Leigh Bernacchi provide a snapshot of their survey of the general public (1,300 participants) to assess views on climate and agriculture. Kate Painter, Hilary Donlan and Dennis Roe through their ongoing surveys of producers have been assessing production costs and returns for wheat across the region; in their report they provide an example of the comparisons they are making among our production zones. We are even doing surveys of ourselves as a project. David Meyer, as part of his assessment of the project, is using surveys of REACCH participants to learn how they are collaborating and how they view collaboration. John Antle, Laurie Houston and Jianhong Mu have used surveys of participants to help them as they guide our project in developing representative agricultural pathways (RAPs) for possible future scenarios of wheat production systems in the region. Our surveys aren't just limited to human populations. For example, Brian Lamb and his team are measuring greenhouse gas emissions at different locations to allow us to understand current state of these emissions under different types of production systems and climate.

Other survey activities we don't have space for in this issue are examining insect pests like wireworms and aphids, beneficial insects and earthworms, pathogens, and weeds in wheat production systems. These other studies are making discoveries. For example, our biotic surveys have found an aphid species new to North America that is established in our wheat system, and wireworm surveys are delineating the distributions of different wireworm species, more than were known to be prevalent here. As another example, grower surveys are revealing increasing interest in newer fertilizer application technologies. Since all or most of our survey data are geospatial, we can create new syntheses of how factors differ and interact in different parts of the REACCH system.

In other words, surveys provide essential foundations for much of what we are doing in REACCH and allow us to be relevant to all of our producers.

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