

## 2014 Annual Meeting Speed Science



## Impacts of increased over-winter precipitation on cropping systems in the REACCH Region Erin Brooks, University of Idaho



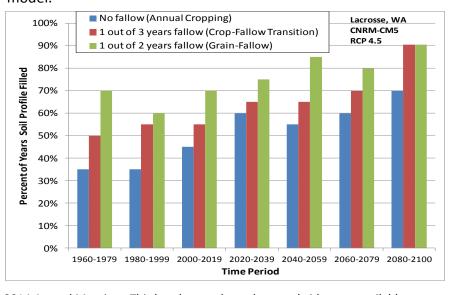




Pictures shown, from top to bottom, are:

- Monitoring in Paradise ck. watershed
   Excessive water in the Annual Cropping
- Red areas indicate fields not planted in 2011 due to excessive moisture near Moscow in the Paradise creek watershed

Climate models suggest that the future climate may not only be warmer but will likely be wetter with up to 75 cm (3 inches) of water in the latter half of the 21<sup>st</sup> century. A simple hydrologic model indicates, based on the CNRM-CN5 future climate projection for 2006-2100, that the increase in over-winter precipitation by the mid to late 21 century may allow growers in the Crop-Fallow Transition region to convert over to annual cropping increasing crop revenues. This increased over-winter precipitation in the Annual Cropping region will likely lead to increased runoff, erosion and leaching losses. Growers may adapt to these wetter conditions by relying more on fall-seeded crops to avoid delayed planting. In the coming year we will be further assessing the implications of all the climate scenarios, rather than the single scenario used here, using the CropSyst model.



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Region

