

# Nitrogen balance and use efficiency in the Calapooia River Watershed, Oregon, United States

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## INTRODUCTION

### The Calapooia River Watershed (CRW)

#### Purpose of the study

- Examine the impacts of natural processes and land uses on the N use efficiency at the local scale
- Impact on decision-making
- Application on future studies/different scale

#### Input vs output (use efficiency, N retention)

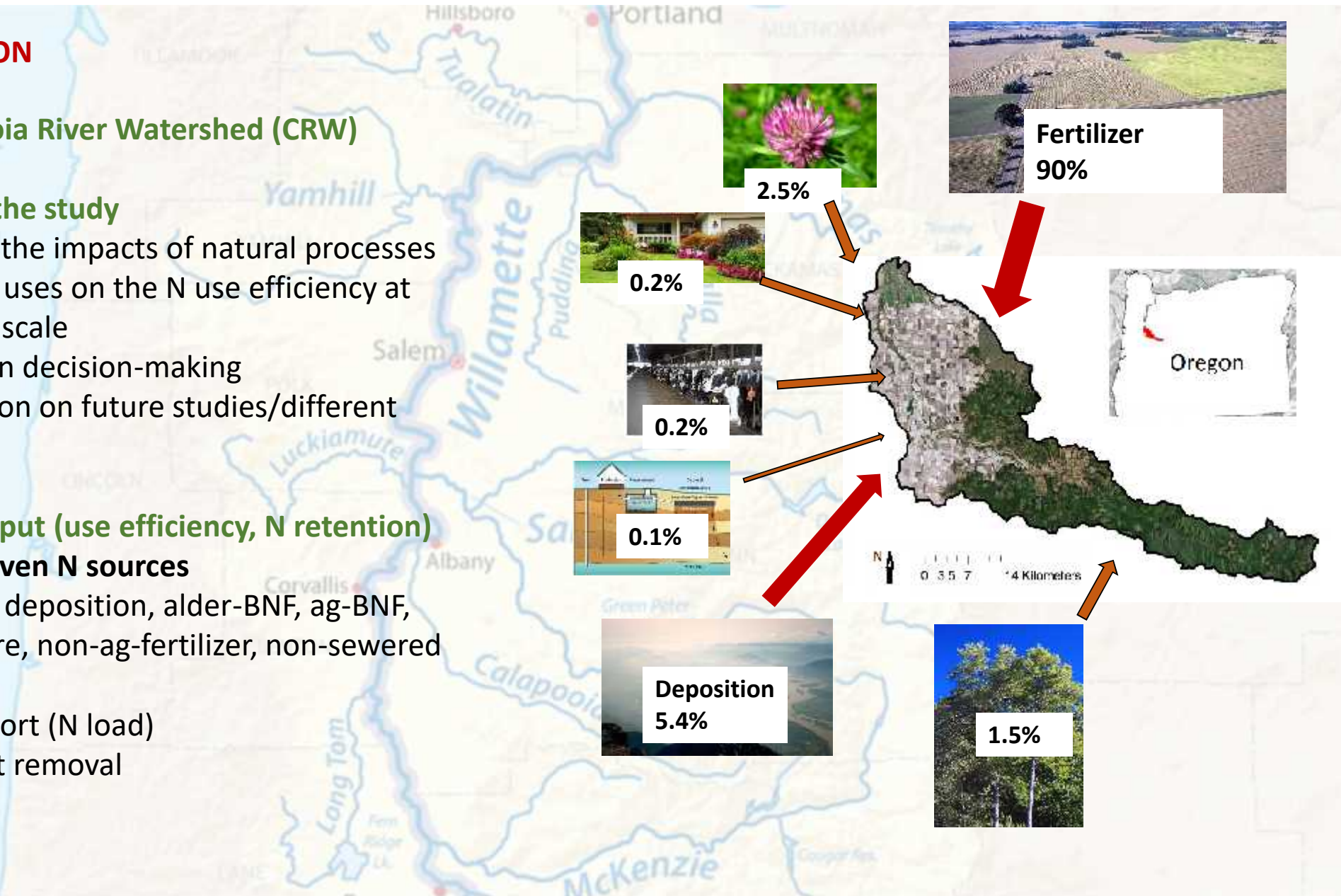
- **Input: seven N sources**

Ag-fertilizer, deposition, alder-BNF, ag-BNF, CAFO manure, non-ag-fertilizer, non-sewered

- **Output**

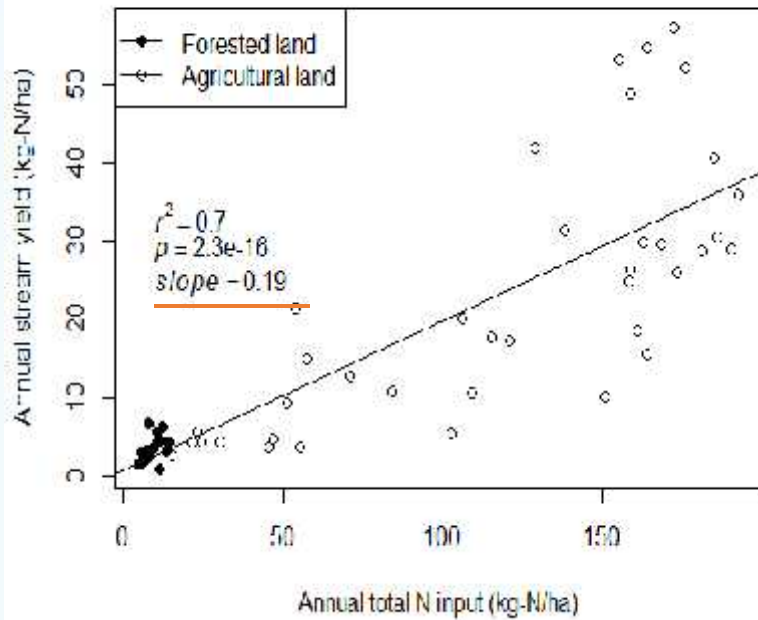
Riverine export (N load)

Crop harvest removal

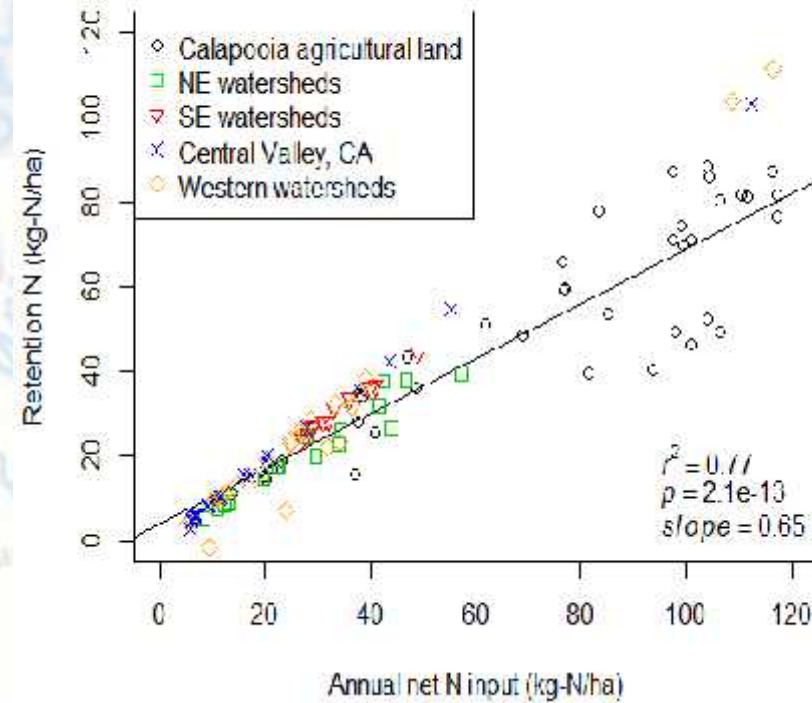


## RESULTS

### Stream Export/yield of N



### N Retention



Net-input = Total N  
input - crop N  
removal

### MORE RESULTS (poster #3)

- Seasonal pattern of input and export
- Influence of runoff, and management on N export

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