

# NATURAL EMERGENCE OF CREEKS AND WATERCOURSES IN THE RIO QUINTO BASIN, ARGENTINA

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## THE PROBLEM

The Rio Quinto Basin is one of the most important agricultural basins of central Argentina. In recent years, several streams appeared on the surface. Waterlogging, soil collapse, and damage to infrastructure have caused severe economic losses



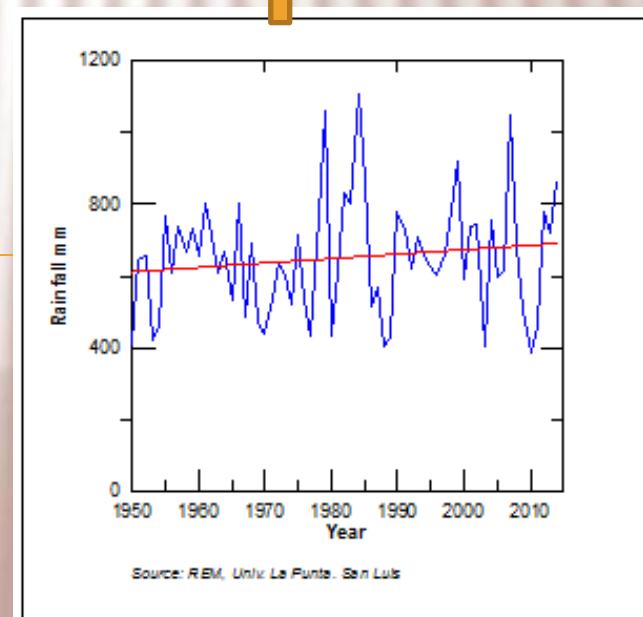
## HYPOTHESIS

- Climate Change
- Land use and consequent erosion
- Geology
- Changes in groundwater flow regime

## NEXT OBJECTIVES

- To investigate the dynamics of the groundwater flow in the basin;
- To identify land and water use impacts by an statistical approach

- Land use review
- CDFM (HARTT) analysis
- Geological mapping
- Flow observations & numerical modeling (Visual Modflow)



This example shows how rainfall amounts in the region have been steadily increasing for more than 50 years. Extreme events have been registered at Villa Mercedes, San Luis province, since the end of the 70's probably due to the introduction of intensive agriculture.