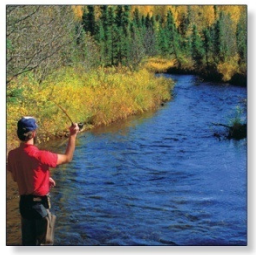
Irrigation Wells

Presented by Allan Wylie IDWR

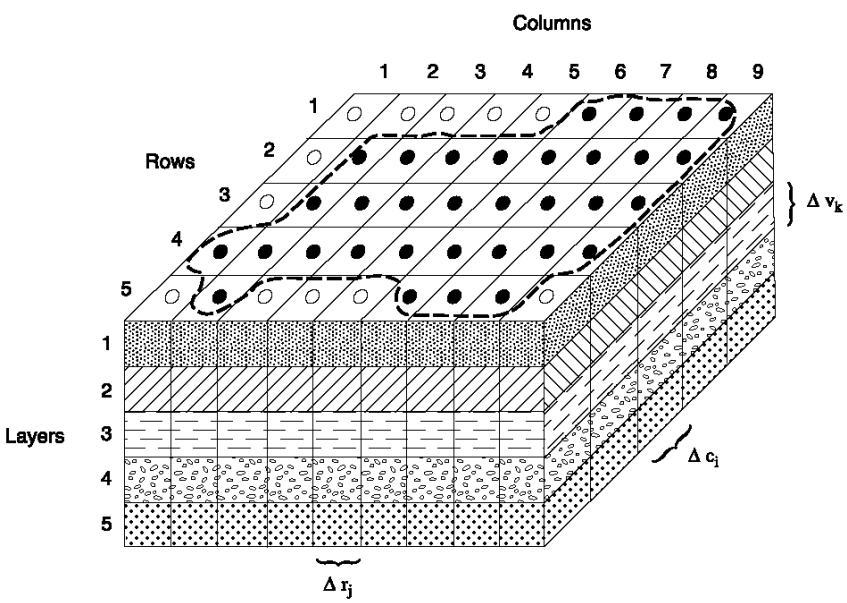
6 June 2013

Correlate Driller Reports with Water Rights



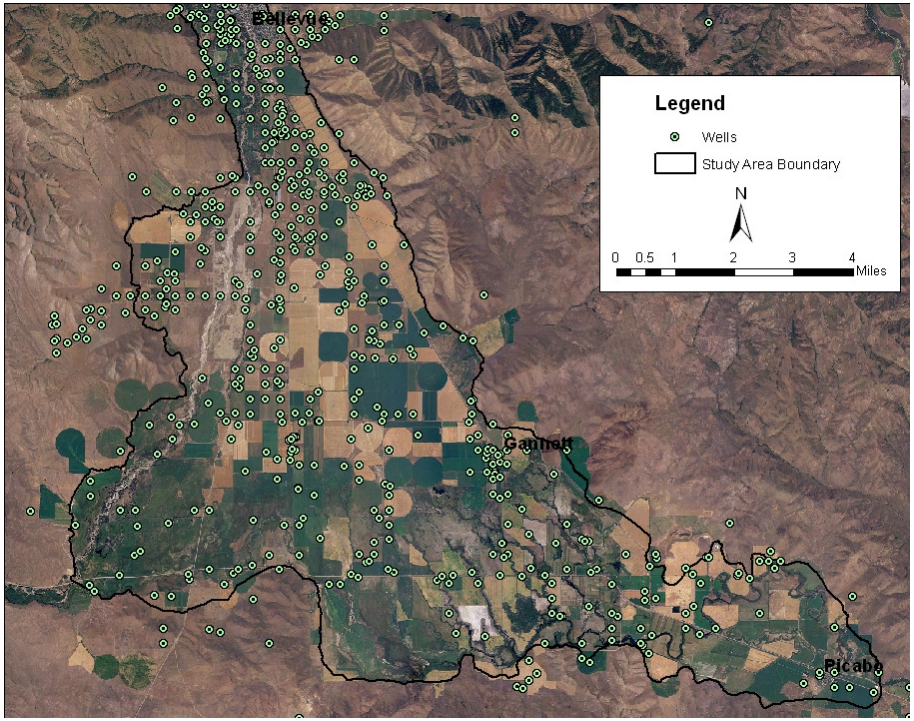
- Why we need to correlate wells with water rights
- Select wells drilled for Irrigation
- Select ‘Active Water Rights’ with a source of ‘Ground Water’ and use of ‘Irrigation’
  - Recommendations
- Correlate wells to Water Rights

Why do we need to tie wells to water rights



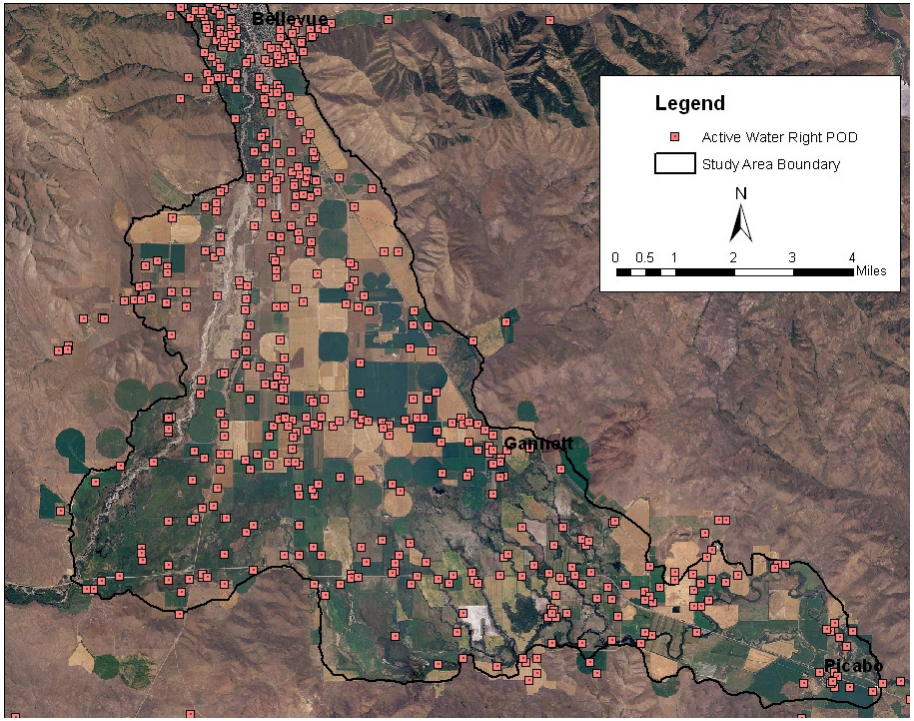
- Non-irrigated recharge, Incidental recharge from irrigation and seepage from the Wood River all occur in top layer
- We need to know if the pumping is from the unconfined, confined, or unconfined and confined aquifer(s).

Drillers Log Database



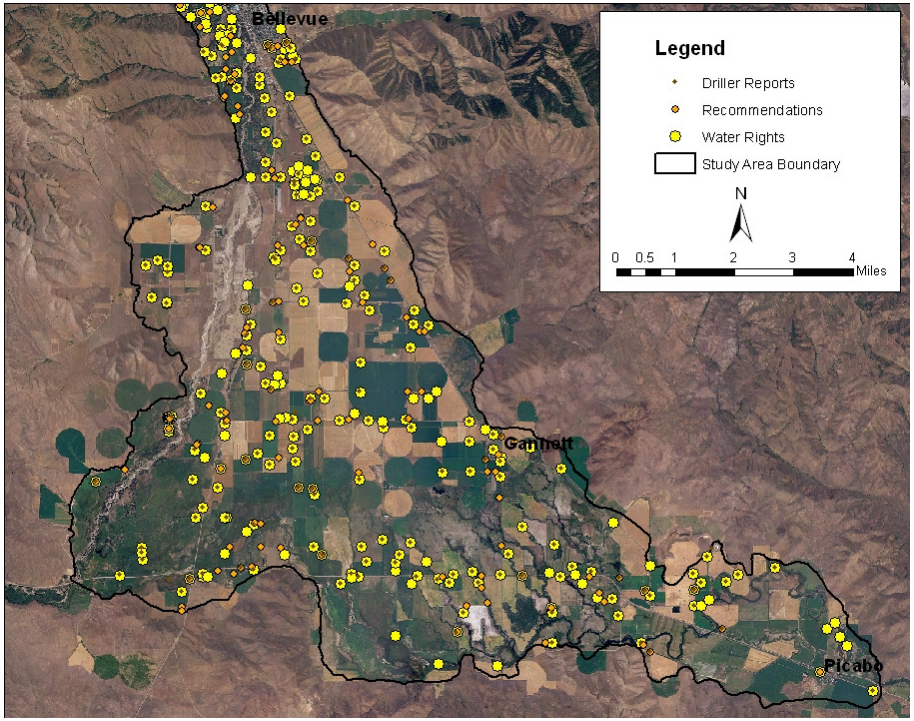
- IDWR maintains a database of drillers logs
- Database is more complete after about 1987
- Well locations are less accurate prior to GPS
- Clip to Study Area Boundary

Water Rights



- Select ‘Irrigation’ water rights
  - Use might be ‘Irrigation’, ‘Stock water and Irrigation’, ‘Domestic and Irrigation’ etc
- Clip to Study Boundary

Correlate Wells and Water Rights



- Well and water right contain same name and similar date
  - Don't move well more than ½ mile.
- Well and water right in same quarter/quarter
- Move wells to water right POD
  - Assume POD was more accurately mapped during adjudacation

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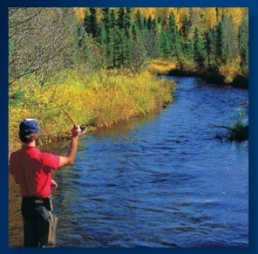

Final Statistics

- 204 well logs
- 502 water rights
- 119 recommendations
  - Can have more than one water right or recommendation tied to a well
- 334 water rights tied to 198 wells
- 56 recommendations tied to 38 wells
- 621 water rights + recommendations, 390 tied to wells
  - 63% of irrigation water rights tied to wells

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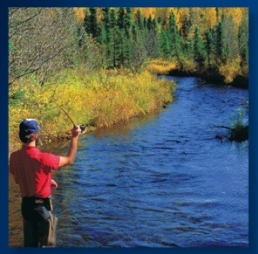

Recommendation

- Drillers options are limited
  - Complete well above confining layer
  - Complete well below confining layer
  - Complete well both above and below confining layer
- Where we don't have a well log, assume well construction is similar to the neighboring well