

# Hydrogeologic framework, Treasure Valley, Idaho: update



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Intake, Boise City Dixie Drain  
Phosphorous Removal Facility  
14Jun18

## Framework progress

- ❖ More than 1800 wells in RockWorks—  
construction for  
(almost) all wells with  
WI data
- ❖ Incorporated the Wood  
(1997) mudstone facies  
map
- ❖ Started framework  
report
- ❖ Stephen worked on  
paired wells

## Other progress

- ❖ Field trip with Rex Barrie  
(WD63) 14Jun18
- ❖ Field trip with Virginia  
Gillerman (IGS) 20Jun18
- ❖ Stephen and Alex  
worked on water budget
- ❖ Taylor Dudunake started  
work on the Lake Lowell  
water budget
- ❖ Data compilation
- ❖ E Hartley and W Hartley  
drains gages were  
moved

# Data compiled

- ❖ BPBC diversion data
  - Tim Page, Jerri Floyd, Brian Carter
- ❖ Suez Idaho water level and pumpage
  - Roger Dittus
- ❖ Pumpage (partial)
  - Eagle (2009-14), Garden City (2006-07)
  - Nampa (2011-17 annual)
- ❖ Next:
  - Production data for other municipalities
  - Aquifer test data
  - Etc...
- ❖ Thanks to others who've provided data

# Water-level measurements

- ❖ 30 multi-level wells
- ❖ 101 TV network wells
- ❖ 17 City of Meridian monitoring wells
- ❖ 81 Suez Water Idaho production wells
- ❖ About 1400 wells with 1 or more WL msmts 1986-2015
- ❖ About 44,000 wells in IDWR database, about 26,000 1986-2015.
  - Most have a driller-measured water level.

# Mudstone facies (Wood, 1977)

- ❖ “Structure contour map of top of the mudstone facies, WSRP”
- ❖ “contact of the deltaic fluvial system overlying a thick section of prodelta and deep-lake mud facies”
- ❖ Mudstone: dominant clay and silt, minor sand fraction
- ❖ Defined by petrophysics and seismic
- ❖ It has more sand East of Ada Co line
- ❖ “unlikely that such broadly distributed units of low permeability exist in the section. Some mudstone (including clay and silt) layers can be traced within the fluvial-deltaic section for several miles, but not *regionally*.”
- ❖ Full copy?