



Supplemental Irrigation Well Program Update

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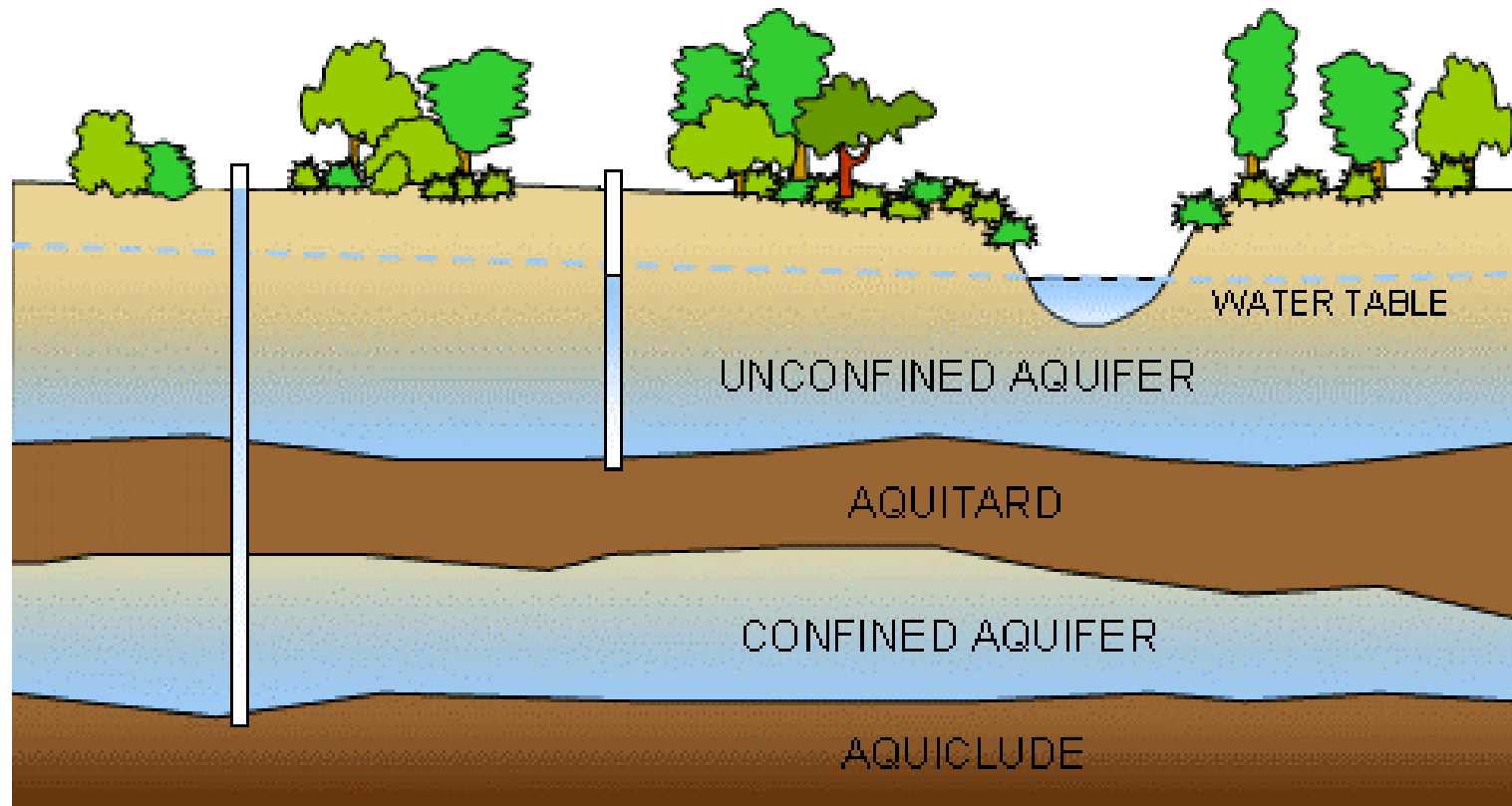
Terminology

- **Supplemental Irrigation Well** (SIW): “a non-potable water well used at a dwelling for ***residential watering and/or other outdoor purposes, where a separate water supply exists*** for drinking, culinary and sanitation purposes.”
- **Abandoned Well**: “a water or monitoring well ***no longer used to supply water***, or in such a ***state of disrepair*** the well or boring has the potential for transmitting contaminants into an aquifer or otherwise threatens public health or safety.
- **Aquifer**: “an underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand, or silt) from which groundwater can be extracted using a water well.”

Why Are We Concerned About SIWs?

- SIWs have a great potential to become abandoned because they are not the primary source of water for the home (though in most cases they originally *were* the primary source)
 - Pumps can burn out or malfunction if not regularly used
 - Well caps or casings can be damaged
- Because a primary source exists, there is not an immediate need to repair the water well and the well can become abandoned
- Abandoned water wells are a direct opening to the aquifer and can easily transmit contaminants to it

Why Are We Concerned About SIWs?



Source: http://connectedwaters.unsw.edu.au/sites/all/files/img_aquifer.gif

SIW Status in 2015

- In 2015 we had a list of approximately 1000 known SIWs in the County
 - Most had been inspected at the time of connection to the community water system
- Approximately 80% of these wells were in Beach Park
- Data from a prior spot survey of 119 existing SIWs demonstrated that **28%** of the wells were either unable to provide water or had significant structural deficiencies (i.e., were “abandoned”)
- Without ordinance provisions in place, we did not have authority to enact a County-wide inspection program

What Did We Do To Address the Issue?

- In the Fall of 2015, we proposed amendments to Lake County Code of Ordinances Chapter 170, Well and Water Regulations, to regulate SIWs in the County
- The amendments were approved by the Board of Health and the County Board, and were enacted on December 8, 2015
- Environmental Health staff kicked off the program in the Spring of 2016, with a goal of completing all 1000 initial inspections by December 31, 2017

SIWs: Ordinance Requirements

- All SIWs shall be inspected to determine they are in sound structural condition, are not located in an area subject to flooding or vehicular damage, and are able to provide water
- Owners of code compliant SIWs shall be provided with a certificate of registration
- The certificate of registration must be recorded with the property with the Lake County Recorder of Deeds Office to memorialize the presence of the well and to alert future owners of its existence (and registration)

SIWs: Ordinance Requirements

- For non-compliant SIWs, where voluntary compliance cannot be achieved, correction of deficiencies shall be addressed through the normal enforcement provisions in Chapter 170, including Administrative Adjudication
- Future spot-check inspections shall be conducted to determine the state of compliance
- No fees were assessed for this program, other than the fee for recording a document with the Lake County Recorder of Deeds Office

Summary of Activities (by the numbers*)

986 SIWs were on record in 2015 – all were inspected in 2016-2017

1123 inspections were completed (some SIWs had re-inspections)

145 of the original **986** SIWs were found to have been sealed before the inspection, or never had an SIW present

98 abandoned water wells were found and sealed as a result of the initiation of the SIW program

743 Active SIWs remain on record

453 of these SIWs have been registered

57% of these registered SIWs have been recorded

271 of SIWs are in violation and corrections are being pursued

SIW Program: Future Actions



01

Continue to pursue correction of violations

02

Assure the recording of current SIW registrations

03

Begin spot check inspections in 2019

04

Evaluate potential need for routine inspection program



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