

Introduction:

The scope of this example is intended to familiarize the attendee with terms and concepts common to water rights changes and demonstrate those terms and concepts within the context of a water right change scenario. The following materials are intended as an outline of the hypothetical scenario, the terms and concepts applied to that scenario and finally a collection of related reference materials.

“Farmer Abe” example (all facts asserted here are completely fictional):

1. Abe initiates homestead on a quarter section of land in Chelan County Washington in 1897 and planted 3 apple trees in that year next to his house, adjacent to the confluence of a creek, a river and a spring.
2. Over the next 20 years he develops a 40 acre orchard on the same parcel.
3. Due to infrastructure costs the orchard is originally irrigated with rill irrigation from the spring which was conveniently located near the top of the arable 40 acres at the base of a small gully leading to an alluvial fan that provides the relatively flat tillable soil for the orchard.
4. 1917 is a terrible drought year and the spring all but dries up so he develops a 1500 foot 4 cubic feet per second canal from the creek to augment the flow from the spring to meet the needs of the orchard and, to help repay the cost of the canal, he plants another 40 acres over the next 15 years.
5. In 1946 he digs a well to support the development of 15 cabins for farm worker housing, three beds each and gets 20 gallons per minute from the well.

6. In 1946 he also applies for a river diversion to irrigate the 80 acres and is granted a certificate for 480 acre feet for 80 acres at 3.2 cubic feet per second.
7. 1972 he files four claims on the spring, creek, well and river, respectively, generally alleging as set forth above.
8. 1973 he short plats the ¼ section that he owns and sells two small parcels by the river to third parties.
9. Instream flow minimums are set on the river in 1990 and the basin is closed to new appropriations.
10. 2008 and, at 129 years of age, Abe wants a more restful lifestyle and desires to turn the orchard into 250 condos and golf course which will include irrigating 60 acres.

Can He Do It? He will encounter the following issues that are common to many applications for change. A common theme to all of these issues is preventing “Impairment” to other rights as the result of the change:

Extent & Validity of a Water Right = Paper or Exemption + Actual Beneficial Use

Paper comes in Three Flavors:

Claims-

pre 1917 surface rights perfected by 1932

pre 1945 ground water rights

Common Law

Riparian- water right by owning adjacent property

Prior Appropriation- first come first serve

Statutes = prior appropriation + application procedure

Permit- Nascent form of Certificate

Certificate- appropriation and priority date certified at issuance.

Exemption: 5000 gallons per day, but domestic irrigation ½ acre, unlimited stock water

See RCW 90.44.050

Beneficial Use: Paper or Exemption must also have Beneficial Use.

Abe has 80 acres of orchard with a current installed capacity of 1.6 cfs pumping capacity from the river in case the creek canal blows out. The canal can divert 4 cfs but usually diverts an average of 2.5 cfs over the irrigation season of 210 days which is approximately 1040 acre feet per year.

The Washington Irrigator's Guide (WIG) prescribes a crop duty of approximately 36 or so inches for apples with cover crop. If the river irrigation system is approximately 75% efficient this means he will have to pump 48 inches to deliver the crop duty to the crop. 48 inches equals 4 feet per acre or 4 acre feet of water per acre of orchard or 320 acre feet per year.

The well serves 15 residences. At .29 acre feet each (250 gallons per day average) the exempt well right would be estimated at 4.35 acre feet at 20 gpm.

ACQ vs Enlargement:

ACQ= Annual Consumptive Quantity Test= The average of the highest two of the last five years of continuous use. This test is triggered when a use is being added or acres of

irrigation are being added. Change the whole right or do an administrative segregation to avoid the test.

Enlargement = no increase in “annual” or “instant” demand rates (“Qa” and “Qi”, respectively) or water availability. This sounds easier than ACQ but in either case there is not suppose to be a reduction of return flow. (i.e. “ACQ light”)

Abe’s crop will consume 36 inches per acre and another 10% can be assumed to evaporate in the irrigation process such that 85% of the river water will be consumptive in nature and not return to the river. Abe’s 80 acres would thus consume 264 acre feet and some portion of the 4.35 acre feet of domestic quantities would be added to this as the total amount of water consumed prior to the change. Frost protection efforts or other miscellaneous uses may contribute some more to the consumptive quantities but much of the remaining water use will be non-consumptive in character

Abe’s future project can be expected to use .28 acre feet for the interior residential use (250 gallons per day per ERU is the average interior use in Wenatchee) and as much as 3.3 acre feet for each acre of ground that will be planted in pasture or turf (again relying on the Wenatchee WIG amounts). The condos will thus be projected to use 72.5 acre feet and the remaining irrigation of 60 acres will approximate 198 acre feet of use. The 72.5 acre feet, however, will be largely unconsumed, perhaps as much as 90%, but the 198 will likely have the same 85% consumption rate as the previous irrigation. Total future demand is projected to be 270.5 acre feet with 175.55 acre feet consumed. This

leaves 769.5 acre feet excess water of which 66 acre feet have been historically consumed.

Hydraulic Continuity

Impairment analysis and statutory language requires that any water right change continue to use the “same body of water”. Licensed hydro geologic opinion is required to certify groundwater continuity for transfers to or from ground water sources and between groundwater sources.

Movement of water rights typically must occur downstream or down gradient in an aquifer to prevent impairing other rights.

Abe will need to transfer some of the rights into his well or end up treating surface water for the potable water system he will need for the condos.

Public Notice

The notice requirements are tightly prescribed by WAC 173-153-080. The threshold for error is “substantive” not “substantial” like it used to be. Overly broad is good, but not so much as to defeat the purpose of the notice.

NOTICE OF APPLICATION FOR CHANGES TO A WATER RIGHT

CHELAN COUNTY WATER CONSERVANCY BOARD

TAKE NOTICE: That on 6/19/2008 Farmer Abe of Chelan County, Washington filed an application with the Chelan County Water Conservancy Board which was accepted and assigned identifier No. CHEL-08-05. You are encouraged to inquire further as directed below, but be advised of the following details:

Water Right Claim number 1234CL filed under the name of Abe asserts a priority date of 1897 for the diversion of 4 cubic feet per second and 1666 acre feet per year from The Creek at a point 2000 feet South and 300 feet East of the NW corner of Section 1, T22N, R21 E.W.M. in Chelan County, Washington for the irrigation of 80 acres from April 1 to October 31 within the SW1/4 of Section 1, T22N, R21 E.W.M. in Chelan County, Washington.

Proposed changes to the right include adding a point of withdrawal at a well located within the SW1/4 of Section 1, T22N, R21 E.W.M. in Chelan County, Washington and changing the season of use to continuous and the type of use to municipal.

Any protests or objections to the approval of this application may be filed with the Department of Ecology and must include a detailed statement of the basis for objections; protests must be accompanied by a fifty dollar (\$50) recording fee and filed with the Department of Ecology Cashiering Unit, P.O. Box 47611, Olympia, WA 98504-7611 within thirty (30) days from *(last date of publication)*.

Any interested party may submit written comments, objections, and other information to the board regarding this application to its offices located at 316 Washington Street, Suite 401, Wenatchee, Washington, 98801. The comments and information may also be submitted in writing or verbally at any public meeting of the board until the board renders a decision on the application. This application will be on the board agenda during its regular meetings to be held at 316 Washington Street, Suite 401 Wenatchee, Washington, 98801, commencing _____ at 9:00 A.M. and on the second Thursday of each month thereafter at 9:00 A.M until the board renders a decision on the application.

Note to publisher: Please fill in the blanks and publish 2 times, once each week, for two weeks

Ownership

Water Rights are Real Property once put to beneficial use (“perfected”) and should be assigned by deed. Permits are personal property and need to be assigned by filing a Department of Ecology form with the Department of Ecology.

A change application requires the signatures of the applicant, water right holder and the owner(s) of the land of the existing place of use. The idea is to avoid divesting someone of a water right without their knowledge or consent and to avoid ownership issues from arising later on.

If Abe subdivided two small parcels down by the river and sold them to two different persons after he filed his claims that described all of the original parcel then these two parcels might have some interest in the water rights since, once perfected, the water right attaches to and runs with the land unless the deed says otherwise.

Relinquishment

Since 1967 all or a portion of a right might be relinquished back to the State if it is not used for 5 years. There are many exceptions, but they are narrow and often problematic. You should consider any beneficial use of the water even if it is not specifically referenced in the water right document.

Abandonment is different from relinquishment in that it can happen the moment a water right holder decides to no longer use the water for an indefinite period of time and takes a substantial step to effect that decision.

If Abe had stopped using the canal for 5 years after 1967 his right to the canal claim would have relinquished unless he could qualify for an exception. His right could be found to be abandoned the moment he made that decision and disassembled some portion of the canal.

Interruptibility

Water right demand quantities authorized may be suspended for a periods of time under certain circumstances (generally low instream flows or availability at original source) as a condition imposed in the water right document at the time of issuance or transfer to address impairment of existing rights. Interruptibility issues most commonly arise at the time of water system plan approval for potable water providers. Orchards or other developments that would be harmed by an interrupted supply can also give rise to this issue if it appears they would have to rely on a right conditioned in this manner. Analyze the portfolio of available water rights to see if the interruption will create a problem.

Many times potable water systems have lower instant demand rates than the certificates that authorize them allowing for Instant demand rates to be attributed to uninterrupted rights during times when some of the rights are interrupted. Engineers may have a solution through system configuration. Particularly if the period of interruption is infrequent or expected to be short in duration, it is possible that the interruption could be treated as any other system reliability issue and additional storage capacity may suffice.

If conditions fail then you may also consider mitigation efforts. Mitigations are efforts undertaken to offset impairments. The most successful mitigation proposals are ones that provide offsetting effects that are most similar to the impairments anticipated.

Finally, when all else fails there is the possibility of obtaining a determination that the change should be granted in spite of the potential impairment based on an “Overriding Concern of Public Interest” (OCPI). Existing potable water systems are particularly well suited to exercise this option because they fulfill critical health, safety and welfare roles. However, this approach is relatively untested and likely to be politically challenging.

Exempt Well citation:

RCW 90.44.050

...“EXCEPT, HOWEVER, That any withdrawal of public ground waters for stock-watering purposes, or for the watering of a lawn or of a noncommercial garden not exceeding one-half acre in area, or for single or group domestic uses in an amount not exceeding five thousand gallons a day, or as provided in RCW [90.44.052](#), (Whitman County Pilot Program) or for an industrial purpose in an amount not exceeding five thousand gallons a day, is and shall be exempt from the provisions of this section, but, to the extent that it is regularly used beneficially, shall be entitled to a right equal to that established by a permit issued under the provisions of this chapter”...