

MEMO

To: 97-7395 Toly

From: Sandy Hemenway

Date: 1/20/2011

REF: License Review Memo

The Permit to Appropriate for Howard Toly was approved 1/24/2000, with the proof of beneficial use due on or before 2/1/2005. On 1/27/2005, the Proof of Beneficial Use was received for Domestic (7-households), and Irrigation of 3.0 acres, for 0.03 cfs or 3.0 af.

Ownership information is as follows:

(1) The "current owner" on the water right is shown as Howard Toly E 1202 Front Ave. Spokane, WA 99202 (509) 535-1636, but the phone number is disconnected; DEX has no listing for Howard Toly, and a reverse search shows Freedom Marine Engineering at that same address, and with the same disconnected phone number.

(2) The Tax Lot Information shown on ArcMap, which was updated on 1/12/2009, shows the following individuals as owners of lots that are included within The Landings Subdivision: Lot 1 Wuerch (0.4 acres) physical address 36 Gosling Pl. Coeur d Alene ID 83815. Lot 2 Wuerch (0.5 acres) no physical address. Lot 3 Ackerman (0.4 acres) physical address 38 Cattail. Lot 4 Ackerman (0.4 acres) no physical address. Lot 5 Eberth Trust (0.3 acres) no physical address. Lot 6 Wuerch (0.4 acres) no physical address. Lot 7 Ziegenhagel (0.9 acres) physical address 100 Cattail. A total of 3.3 acres without homes, garages, and driveways being subtracted out make up the entire 7 lots. The 6/18/2006 field exam mentioned that one lot owner actually owns 2 adjoining lots, but does not use the second lot, so this would not include any irrigation on that lot. The Tax Lot information confirmed that 2-owners own more than one lot.

(3) **Due to no response from the 12/29/2010 letter mailed to the lot owners, the License will be mailed to "current owner" Howard Toly.**

Additional information was requested from the current owners of the above 7 lots, due to not being able to contact Howard Toly directly since his phone number is disconnected, and there are no other listings for him in a DEX search. A letter was sent on 12/29/2010 to each of the property owners of the Landings Subdivision, asking for additional information on the system: (1) to draw the actual location of their lot on the map, since the tax lot lines are shifted on ArcMap, (2) questions about their individual irrigation system, (3) if they have supplemental water, (4) number of days per year they reside at these residences, (5) the actual location of the well, (6) location of the 2" main, and location and size of pipe running to their individual homes, (7) when was their house built, (8) how many acres do they irrigate, (9) do they have any individual storage, or community storage tanks, (10) at what pressure does their system run at, (11) do they know if the 2" main is used as a means of storage or not, etc. **As of 1/19/2011, there had been no response from any of the lot owners, other than a mail return without any forwarding address for Ziegenhagel. For licensing purposes, the POD was kept in lot 4, as shown in the 6/18/2006 field exam. The 2.0 acres irrigation POU was determined by zooming in on ArcMap, and drawing a shapefile around irrigated land.**

The **field exam** (FE) conducted on 6/18/2006 shows a well, with a 1 Hp Franklin submersible pump, 2-inch discharge to a 2-inch mainline (500 ft) going to 7 stubbed

lots. Only 3-homes were completed at the time of the field exam. Looking on ArcMap, at tax lot information that had been updated on 1/12/2009, only 4-houses are showing as being completed. Three of the 7-lots are owned by James Wuerch (Lot 1, 2, 6), 2-lots are owned by Ackerman (Lot 3, 4), plus two other individual lot owners. The mainline runs in 2 directions from the well, with dead end lines. In the FE, it stated that "one person (unnamed) owned 2 lots, and does not use the second lot." **The domestic POU is the same as the irrigation POU, with the following lots having houses, per the taxlot information: 1, 3, 5, and 7.** There are **no POU/POD Overlaps.**

There is **no Fee, due to Domestic Exemption.** Water use complying with the definition of Domestic purposes are exempt from exam fee requirement. See Rule 1, 4, 4. Idaho Code 42-111 Domestic Purposes Defined. (A) The use of water for homes, organizations camps, public campgrounds, livestock and any other purpose in connection therewith, including irrigation of up to one-half acre of land, if the total use is not in excess of thirteen thousand (13,000) gallons per day. (B) Any other uses, if the total use does not exceed a diversion rate of four one-hundredths (0.04) cubic feet per second and a diversion volume of twenty-five hundred (2,500) gallons per day. For purposes of these sections, domestic purposes or domestic uses shall not include water for multiple ownership subdivisions, mobile home parks, commercial or business establishments, unless the use meets the diversion rate and volume limitations set forth in subsection B of this section.

The Well Drillers Report shows the driller as Wood Well Drilling #389, completed on 5/4/1998, IDWR Tag No. D3791, and Drilling Permit 97-98-N-6. A well upgrade fee was paid. This well has a 6 inch casing, 172 ft deep, 11-ft static, and a yield of 10 gpm ($10 \text{ gpm} \times 0.00223 = 0.0223 = 0.02 \text{ cfs}$). It shows the location of the well as being in Gov Lot 7, Lot 5 of the Subdivision The Landings (the Field Exam conducted on 6/18/2006 confirmed the well in Lot 4, which is the location where the POD is for Licensing).

RECOMMENDATION:

Domestic/4-households (3 houses completed at time of field exam, and confirmed 4 houses completed using ArcMap Tax Lot information updated on 1/12/2009, Ziegenhagel, Eberth, Ackerman, Wuerch).

Irrigation = $\frac{1}{2}$ acre per household X 4 homes = 2.0 acres.

CFS:

No physical measurement was collected at the time of the 6/18/2006 Field Exam. There were 4 homes completed out of the 7 stubbed lots.

(1) Exhibit 12 shows the Maximum Instantaneous Water Requirement for Domestic Use for 4 homes (0.10 cfs), and for 7 stubbed lots/homes (0.12 cfs)----except 3 lots are owned by Wuerch; 2-lots are owned by Ackerman, 1-lot is owned by Eberth, and 1-lot is owned by Ziegenhagel to total Domestic/4.

(2) Well Drillers Report shows yield of $10 \text{ gpm} \times 0.00223 = 0.02 \text{ cfs}$

(3) Theoretical for well: $(8.8 \times 1\text{Hp} \times 0.7 \text{ eff})/162 + (2.31 \times 30 \text{ psi}) = 0.03 \text{ cfs}$

(4) Pipe Conversion for 2 inch discharge and 2 inch main (possible for storage): $5 \times 3.1416 \times 0.083 \text{ squared} = 0.11 \text{ cfs}$ (copy of pipe conversion charge is in file). They may be using this 2 inch main for some storage, but that could not be confirmed.

Recommend: 0.03 cfs

Volume:

Capacity of System: $0.03 \text{ cfs} \times 365 \text{ days} \times 1.9835 = 21.7 \text{ af}$

Domestic Volume: Per Administrative Memo 22 Application Processing, use 0.6 af per household for internal use. $0.6 \text{ af} \times 4 \text{ completed houses} = 2.4 \text{ af}$

Irrigation Volume:

Vir: $2.0 \text{ acres} (4 \text{ households}) \times 3.0 = 6.0$

Vdr: $0.03 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 12.7$

$V = 6.0 \text{ af}$

Recommend a Total Volume = 8.4 af

Conditions:

R66 when combined w/all other rights shall provide no more than 0.03 cfs/acre nor more than 3.0 afa/acre

132 Domestic use is for 4 homes and does not include lawn, garden landscape, or other types of irrigation

X59 Point of diversion is located within Govt Lot 7, Lot 4 of The Landings Subdivision.



NWNE

56N04W

SWSW

SWNE

= homes built on Lots

Info. updated 1/12/2009

Lot #	Owner	Physical Add./Mailing Add.
#7	Wanneita Ziegenhagel	0.4 acre 100 Cattail Court, Alene 83856
#6	Wuerch	0.4 acre
#5	Eberth Trust/Cheryl Eberth	0.3 acres 2001 Riverside Rd. Priest River Id 83856
#4	Ackerman	0.4 acres
#3	Clifford Ackerman	0.4 acres Box 1841 38 Cattail Priest River, ID 83856
#2	Wuerch	0.5 acres
#1	James Wuerch	0.4 acres 36 Goshing Pl. 1713 E Leona Dr Spokane WA 99208



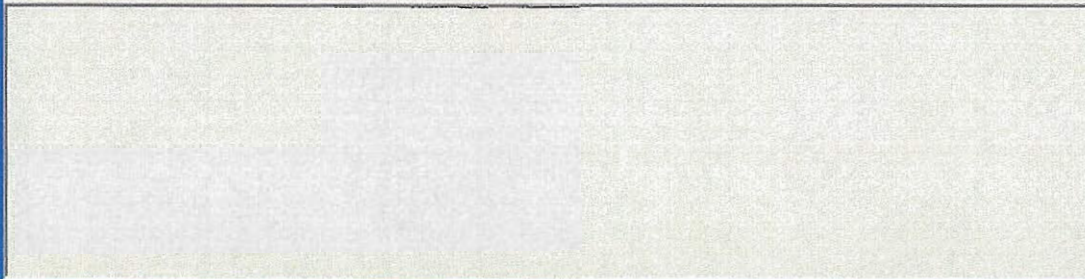


Check Administrative Area Results



Click On Item For More Information

Season Of Use 4/1 - 10/31
Headgate Requirement 3
Consumptive Use 2
msf_upstream Priest River (97-07380)
msf_upstream
Source Water Plumes PRIEST RIVER CITY OF
Source Water Plumes LACLEDE WATER DIST
Administrative Basin 96
Administrative Basin 97



PIPE FLOWS -- PUMPING SYSTEMS

[properly designed @ 5 ft. / sec.]

$$Q = 5 \pi r^2 \text{ (r in ft.)} \quad Q = 5 \pi R^2 \text{ (R in ft.)}$$
$$R = (\text{diameter}/12) / 2 \quad \left(\frac{\text{dia}}{12} \right) \div 2$$
$$\pi = 3.1416$$

<u>PIPE DIAMETER(")</u>	<u>CFS (1/100)</u>	^(1/10) <u>MINER INCH</u>	^(1/10) <u>GALLONS/ MINUTE</u>
1	.03	1.5	13.5
2	.11	5.5	49.4
3	.25	12.5	112.2
4	.44	22.0	197.5
6	.98	49.0	439.8
8	1.74	87.0	780.9
10	2.73	136.5	1225.2
12	3.93	196.5	1763.8
14	5.34	267.0	2396.6
16	6.98	349.0	3132.6
18	8.83	441.5	3962.9
20	10.90	545.0	4891.9
22	13.19	659.5	5919.7
24	15.70	785.0	7046.2

THEORETICAL PSI's

Internal domestic	- 20 psi
Internal/external domestic	- 30 psi
Domestic w/ 5-10 acres	- 40 psi
Medium systems (up to 50 acres)	- 40 psi
Large pivots	- 60 psi

DOMESTIC

The 1990 legislature passed House Bill No. 461a amending sections 42-111, 42-211, 42-230, 42-242, 42-243, and 42-1401A, to provide uniform definitions of domestic purposes.

Section 42-111 now reads as follows:

42-111. DOMESTIC PURPOSES DEFINED. For purposes of sections 42-211, 42-227, 42-230, 42-235, 42-237A, 42-242, 42-243, and 42-1401A, the phrase "domestic purposes" or "domestic uses" means:

A. The use of water for homes, organization camps, public campgrounds, livestock and any other purpose in connection therewith, including irrigation of up to one-half acre of land, if the total use is not in excess of thirteen thousand (13,000) gallons per day, or

B. Any other uses, if the total use does not exceed a diversion rate of four one-hundredths (0.04) cubic feet per second and a diversion volume of twenty-five hundred (2,500) gallons per day.

For purposes of these sections, "domestic purposes" or "domestic uses" shall not include water for multiple ownership subdivisions, mobile home parks, commercial or business establishments, unless the use meets the diversion rate and volume limitations set forth in subsection B. of this section.

This section of Idaho Code applies to groundwater and surface water, however, "domestic exemption" for a water right requirement only applies to groundwater.

The new definition is to be applied retroactively to protect existing uses that were not developed in conformance with the prior statute as well as to new uses being developed.

The new definition, paragraph A. has broadened the previously used definition by specifically including organizational camps, public campgrounds, and identified homes as plural. The maximum daily water use has not changed. Paragraph B, while providing for

other unspecified uses, limits these uses to 2,500 gallons per day. The last paragraph identifies specific uses that cannot be included under the definition unless the water used by these entities does not exceed 0.04 cfs or 2,500 gallons per day.

One of the major impacts of this new definition is on water right filings listing commercial and industrial uses. These uses can now be identified as "domestic use" as long as the limits identified in paragraph B. are not exceeded.

Exhibits 11 and 12 can be used to determine water requirements for public buildings and multiple domestic units.

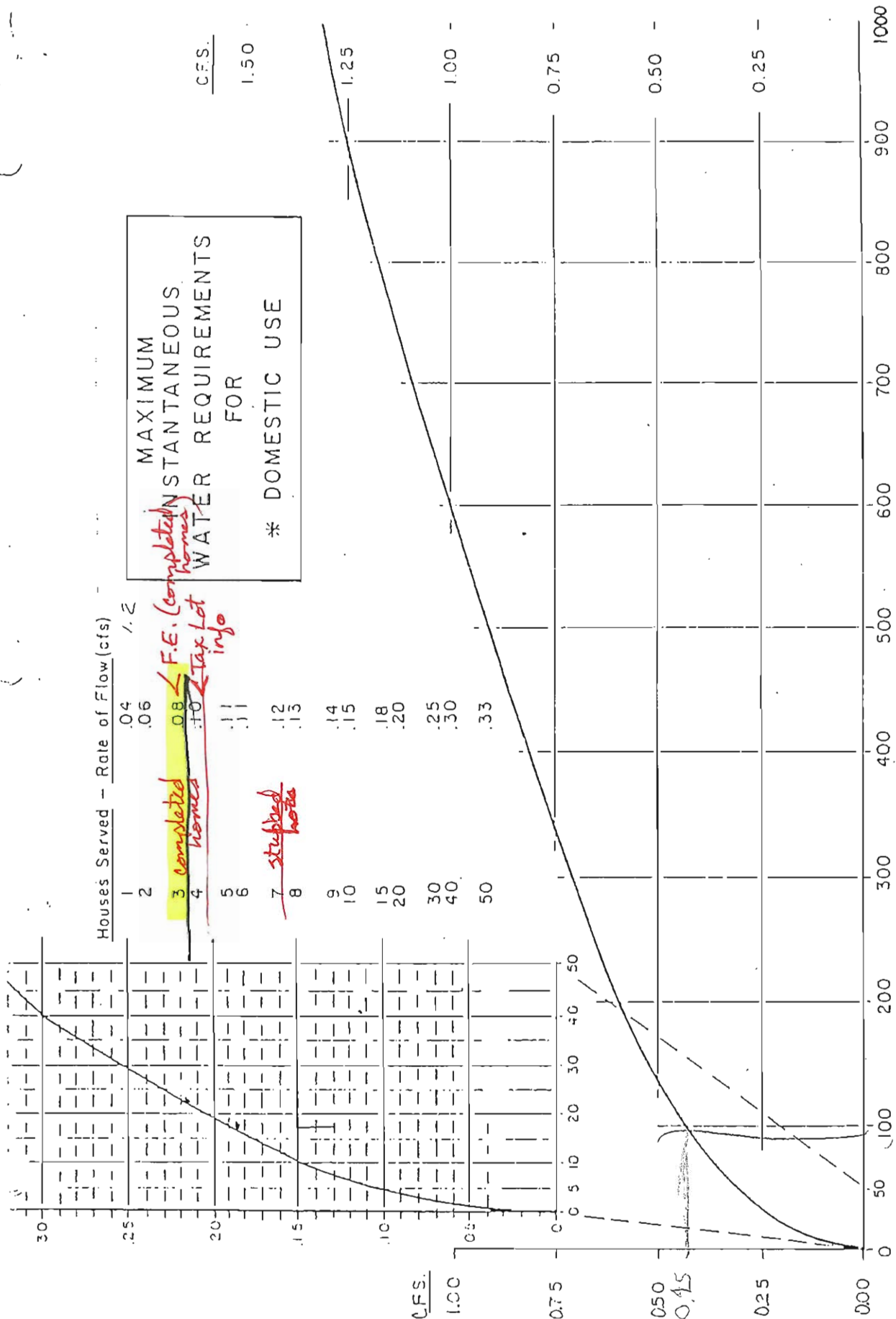
Water use complying with the definition of "Domestic purposes" are exempt from exam fee requirement. See Rule 1,4,4.

Review License Processing Administrative Memorandum #4 for calculating volume for Forest Service Campgrounds.

Subdivisions

Water used in multiple ownership subdivisions do not comply with water used under "Domestic Purposes", unless the diversion rate is less than four one-hundredths (0.04) cubic feet per second and a diversion volume is less than twenty-five hundred (2,500) gallons per day. Therefore, large subdivisions must separately identify each water use, i.e. irrigation (lawn watering) and in-house use.

Many subdivisions are not fully developed at the time of the examination. When in this situation, you should confirm that a water delivery system has been installed to provide water to each lot listed in the subdivision. Then you should confirm that the installed pumping plant capacity will supply the expected demand when the subdivision is fully occupied. If the water delivery system serves each lot and if the pumping plant is capable of supplying the full demand, then recommend all of the lots identified on the permit or subdivision. If the pumping plant is not capable of supplying the full demand, then estimate the maximum number of units that could receive full supply or recommend water use for the units developed at the time of the inspection. See Exhibit 12 for instantaneous water requirements.



From: Community Water Systems Source Book
 J. Amey, 1977, Technical Proceedings, North Carolina