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DEPARTMENT OF
WATER RESOURCES

Idaho Water Engineering
2571 S Reynolds RD
Coeur d'Alene ID 83814
August 5, 2017

Jeff Peppersack
Idaho Department of Water Resources
P O Box 83720
Boise ID 83720-0098

Re: RAFN Application Rules

Dear Jeff:

This letter is written as a continuation of our conversation regarding municipal water providers that are contained within the foot print of the future service area of a municipal provider filing a RAFN application. IDWR's "RAFN Municipal Right Handbook" provides that "... if the RAFN applicant presents a sound argument and supporting evidence for the inclusion of competing service areas within its own service area, the department staff may include them in the final service area delineation".

Since I'm not sure of your knowledge of the evolution of the Idaho Water Resources Research Institutes's (IWRRI) Rathdrum Prairie Aquifer Future Demand study, some preliminary observations may be in order. As I understand the process that IWRRI followed, all of the Public Water Supply (PWS) providers were contacted about the study and given the opportunity to participate. One of the big tasks for IWRRI was to gain agreement among the providers about how lines for their future service areas would be drawn to avoid competition between providers. Many of the small providers indicated they were not interested in growing and did not take part in the study.

Consolidation of smaller providers into larger systems has been going on in Kootenai county for quite some time. North Kootenai Water District has been the most active in this area. North Kootenai Water District began operations in 1998. Since that time approximately 15 separate PWS systems have been incorporated into their operations.

In the case of the Remington Water District there are eleven PWS providers within the foot print of the Remington future service. In one form or another some level of interest has been shown for inclusion in the Remington Water District by at least three of these providers.

A number of factors have contributed to this interest:

1. Some of these providers do not have backup wells and/or on-site backup power generators should grid power go down. That happened a couple years ago and power was out in some cases for more than a week.
2. In contrast to the Remington Water District most, if not all, of these PWS providers lack adequate fire suppression systems.

3. In some cases the providers simply do not have enough water to meet the existing demands of their patrons. In other cases the provider may have enough water for the development that currently exists but will be short as build out occurs.
4. Some economies of size can be realized for a small system by being part of a larger and hopefully better managed system.

Generally speaking these PWS systems view themselves as stand alone, hence the lack of interest in future expansion.

The Remington Water District has taken a different approach. The district board recognizes there is pressure to provide water for acres that can be subdivided and developed and has adopted a policy, upon request of the land owner, of systematically annexing adjacent acres into the district and providing water to those properties where that expansion makes sense for the district. This includes installation of fire hydrants spaced at intervals required by the fire marshal.

The water demand numbers in the IWRRRI study were driven by population projection, and the projected population density was different for each provider participating in the study. The total anticipated water demand in 2045 for the Remington future service is 31.56 cfs Peak Hourly Demand spread over 34.9 mi². This yields a need of 0.9043 cfs per square mile. This unit seems to be the easiest way to compare water available to the various PWS providers with what their need might be in 2045. I've attached a table showing existing water rights available and service area size for those PWS providers. An inspection of these numbers reveals that most of the providers are likely to be short of the water that will be needed as build out occurs.

For the reasons listed, we believe it is appropriate to include these existing PWS areas in the Remington Future Service area. We realize the water rights held by those entities would need to be subtracted from the total required by the district in 2045. I would appreciate some guidance on whether what I have outlined meets the criteria cited in the "RAFN Municipal Right Handbook."

Thank you for your consideration.

Sincerely,



Robert G Haynes, P.E.

CC: Northern Region

Attachment: Purveyor Comparison Table

Purveyor	Area in mi ²	Existing Water Rights in CFS	CFS per mi ²
REMINGTON RAFN APPL.	34.9000	31.56	0.9043
Bitterroot Water	1.6700	0.75	0.4491
Brunner Water Assn	0.1270	0.06	0.4724
Eight Mile Prairie	0.2500	0.31	1.2400
Elkhorn Ranch	0.8576	1.00	1.1660
Holiday Acres	1.1250	0.40	0.3556
Morgan Estates	0.4300	0.12	0.2791
Scenic Mobile Home Park	0.0226	0.10	4.4248
Season Road	0.1250	0.09	0.7200
Sienna Ridge	0.2500	0.11	0.4400
Spirit Bend Water	1.0840	0.49	0.4520
Spirit Lake East	6.2880	1.08	0.1718
TOTAL for existing PWS	12.2292	4.51	0.3688

Red denotes a flow rate per mi² that is lower than that calculated for the Remington RAFN Application