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## **AGENDA MEMO**

Needs Legal Review: No  
Council Meeting Date: December 5, 2018  
Agenda Item: City of White Salmon Aquifer Storage and Recovery (ASR) Program  
Presented By: Aspect Consulting

### **ACTION REQUIRED:**

No action required.

### **PROPOSED MOTION:**

No motion necessary.

### **Why is it a legislative issue:**

Aspect Consulting will update the city council on the city's aquifer storage and recovery program.

### **Explanation of issue:**

Aspect Consulting will update the city on its aquifer storage and recovery program (see attached summary).

### **Budget:**

None at this time.

### **Staff recommendation:**

None.

## **City of White Salmon ASR Program**

Study and planning for the City's Aquifer Storage and Recovery (ASR) Program began in 2009 under a Department of Ecology (Ecology) grant as part of an effort to improve the resiliency and capacity of the City's water supply. At that time the City relied on water supply from two production wells and, due to insufficient annual water rights and decreased well production capacity, was under a Department of Health mandated moratorium to providing new water service connections. In 2009 the City developed additional source capacity by reactivating the Buck Creek surface water diversion and permitting additional water rights allowing removal of the moratorium, while continuing to develop the ASR program to help meet long-term needs.

The purposes of the ASR program are to:

- Improve water supply resiliency by offsetting declining groundwater levels and well yield;
- Augment water supplies to help meet peak seasonal (i.e. summer) demands and projected long-term growth in demands; and
- Reduce demand on the Buck Creek source during critical flow periods while improving overall capacity for municipal water supply.

Under the ASR program, water not needed to meet City demands would be diverted from Buck Creek during winter months (November through April) under a new seasonal water right dedicated to ASR program use. Source water would be treated to drinking water standards (filtered and chlorinated using existing Buck Creek water treatment facilities) and conveyed to Well No. 2 through the City's drinking water distribution system, where it would be injected into the groundwater reservoir (aquifer) for storage. Stored water would later be recovered from Well No. 2 for municipal use during high demand periods.

Under the existing water system configuration, about 110 acre-feet (35 million gallons) could be stored each year for later recovery and use. This quantity equates to about 25 percent of recent typical summertime demands. Storage is partially limited by the backpressure that occurs during injection; greater storage volumes could be achieved through addition of a booster pump to increase injection pressures.

Permitting through Ecology to authorize ASR operations is nearly complete, with water quality program approval secured and water right permits expected to be issued in time to allow operations in the first quarter of 2019.