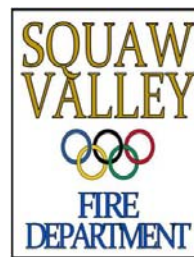




## SQUAW VALLEY PUBLIC SERVICE DISTRICT



### OLYMPIC VALLEY CREEK / AQUIFER INTERACTION STUDY - FINAL

**DATE:** November 21, 2014

**TO:** District Board Members

**FROM:** Mike Geary, General Manager

**SUBJECT:** Olympic Valley Creek / Aquifer Interaction Study – Final

**BACKGROUND:** The Squaw Creek / Aquifer Interaction Study was commissioned to gain a better understanding of the impacts of domestic water well pumping on shallow groundwater adjacent to Squaw Creek so current pumping can be managed and well field improvements planned with the best available information to minimize impacts on Squaw Creek. The project's specific goals are to:

- Improve and quantify our understanding of interactions between Squaw Creek and the valley's aquifer;
- Diminish groundwater pumping impacts on Squaw Creek and the Truckee River; and to
- Increase groundwater storage in Olympic Valley.

The completion of the Study satisfies several of the District goals and objectives:

- The Study is specifically identified as an *Element* to satisfy several Basin Management Goals and Objectives (BMO's) recognized in the District's Olympic Valley Groundwater Management Plan (May, 2007).
- Task 1.2.0 of the Work Plan that the District Board approved to implement its Five-Year Strategic Plan in May, 2012.

The District's completion of the Study also satisfies a requirement from the California State Water Resources Control Board in its Resolution 2007-0008 to the Lahontan Regional Water Quality Control Board, which directed the Lahontan Board to support the efforts of entities pumping groundwater as well as other stakeholders in Squaw Valley to conduct a study of potential interaction between groundwater pumping and flows in Squaw Creek.

**DISCUSSION:** The PSD's work on the Interaction Study started in 2007 and was prepared in two phases, both completed by HydroMetrics Water Resources, Inc., with offices located in Oakland, CA:

- Phase I was completed in March, 2011 with grant funds in the amount of almost \$223,520, provided by the CA Dept. of Water Resources.
- Phase II of the Study was completed earlier this month with funds provided by Squaw Valley Real Estate in the amount of approximately \$187,729.

Staff and HydroMetrics presented the results of the DRAFT version of the *Creek / Aquifer Interaction Study* last November in 2013. Improvements to the DRAFT version to create this FINAL version are summarized here:

1. The inclusion of an *Executive Summary*,
2. Section 1: *Background*
3. Section 3.2.2: *Streamflow Depletion from Pumping*
4. Section 4.1.1: *Winter Through Early Summer Creek/Aquifer Interactions*
5. Section 4.1.3: *Late Summer Through Fall Creek / Aquifer Interactions*
6. Section 5: *Recommendations*

**ALTERNATIVES:** This is an informational item only; no action is requested by the Board.

**FISCAL/RESOURCE IMPACTS:** A breakdown of cost to prepare Phases I & II of the *Olympic Valley Creek / Aquifer Interaction Study* by funding source and by expenses and phase is here:

Funding Sources	DWR / Prop 84 & 50	SVPSD	SVRE	Total
Phase I	\$ 220,629	\$ 2,891	\$ -	\$ 223,520
Phase II	\$ -	\$ 8,462	\$ 179,267	\$ 187,729
<b>TOTAL</b>	\$ 220,629	\$ 11,353	\$ 179,267	<b>\$ 411,249</b>

Expenses	Phase I	Phase II	Total
Hydrometrics	\$ 203,745	\$ 187,709	\$ 391,454
Other	\$ 16,036	\$ 20	\$ 16,056
SVPSD	\$ 3,739	\$ -	\$ 3,739
<b>TOTAL</b>	\$ 223,520	\$ 187,729	<b>\$ 411,249</b>

**RECOMMENDATION:** This is an informational item only; no action is requested by the Board.

**ATTACHMENTS:** Copies of the FINAL version of the Olympic Valley Creek / Aquifer Interaction Study were provided to the Board and is available on the District's website: [www.svpsd.org](http://www.svpsd.org)

**DATE PREPARED:** November 14, 2014