TUMALO IRRIGATION DISTRICT

This is a very hi-level overview of our supply and volumes of detail are left out.

TID's obtains most of its water supply from just a few natural sources. Our primary supply comes from Tumalo Creek. When Tumalo Creek runs low, a supplemental supply comes from Crescent Lake, ~80 miles south of Bend. Every year when Tumalo Creek snow melt runs out sometime between Memorial Day and the end of July, we switch from Tumalo Creek water to storage water from Crescent Lake.

Tumalo Creek is fully dependent on the past year's snowpack. There is some spring fed base flow, but most of the water comes from freshly melting snow. There are no controls allowed on the creek. When the snow is melting, it flows. When the snow melt runs out, the flows drop to a small base flow. Not only is there a seasonal flow pattern, there is a diurnal fluctuation that can happen very rapidly, so Tumalo Creek earns its flashy reputation. In addition to the irrigation right, we have the right to capture water in Tumalo Reservoir when the flows in Tumalo Creek are high enough. Tumalo Reservoir leaks — a lot, therefore the water must be used within a few weeks or it will all seep into the ground.

Crescent Lake is a large natural lake with a relatively small drainage area. Crescent Lake Dam increased the level of the lake and TID can store water in that increased area. We have no rights to the natural lake under the increased level from the dam. Because of the relatively small drainage area around Crescent Lake, the lake is slow to fill and is mostly filled with spring runoff from the snowpack. Crescent Lake leaks a relatively small amount so for the most part, what we do not use will still be in the lake for use the following year.

Deschutes River TID also has a small portion of live flow from the Deschutes River of ~9.5 cubic foot per second. Although this source is small, we very much count on this flow as it is a year-round flow.