

Known and Anticipated Water Demands	Approximate Need (acre-feet)
<p>NEW WATER RIGHTS ON FILE -- 454 water right applications are on file with Ecology (56% associated with requested irrigation and 23% is for municipal/domestic purposes, totaling 383,000 acre-feet). The irrigation "demand" represented by these applications is at odds with the WSU study projecting "flat" irrigation growth. The municipal demand represented in the applications is 3 times greater than the OFM Median population growth projections for the state. The range shown here represents no irrigation growth / OFM municipal growth at the low end, versus requested applications at the high end. Source: 2006 Legislative Report.</p>	<p>30,000 acre-feet to 383,000 acre-feet</p>
<p>ODESSA WATER -- Conversion of irrigated lands in the Odessa Subarea from ground water to surface water could total up to a maximum of 140,000 acres. Source: Bureau of Reclamation.</p>	<p>Up to 515,000 acre-feet</p>
<p>LAKE ROOSEVELT -- Ecology's negotiations to secure the Lake Roosevelt Drawdown commits the State to look for long-term replacement water for this storage modification.</p>	<p>82,500 acre-feet to 132,500 acre-feet</p>
<p>CLIMATE CHANGE AND CROP DUTY -- Climate change has the potential to change existing crop demands. In Eastern Washington, the USGS reports approx. 1.7 million acres of irrigated crops. If 20 years from now climate change results in a need for an added inch of water per acre due to hotter weather and decreasing summer rain, then additional crop water could be needed to maintain current production. Source: 2007 Legislative Report.</p>	<p>approximately 140,000 acre-feet?</p>
<p>DROUGHT DEMAND -- Ecology is developing a Columbia River Drought Insurance Program to protect existing interruptible water rights from curtailment. There is theoretically a maximum of 275,000 ac-ft of interruptible demand if all rights were curtailed for the entire summer. In 2001, Ecology ran a drought program with 40,000 ac-ft that attempted to address drought needs in 2001 (providing 5 extra weeks of water). In addition, the use of an OCPI determination in 2001 by Ecology provided an additional 86,000 acre-feet. Source: 2006 Legislative Report.</p>	<p>126,000 acre-feet plus</p>
<p>TRIBUTARY NEEDS -- Reduced water availability in tributaries and increasing supply variability due to climate change will engage the state to pursue solutions that address both the needs of the tributary and protect the mainstem of the Columbia River.</p>	<p>? acre-feet</p>
<p>POWER GENERATION OR COOLING -- Hydropower generation from pump storage or other facilities may be necessary in order "firm up" renewable energy sources such as wind and meet growing loads. Thermal generating plants may require cooling water supplies. Source: 2007 Legislative Report.</p>	<p>? acre-feet</p>
<p>DEMAND IN OREGON, IDAHO, MONTANA, AND BRITISH COLUMBIA -- There are 551 water rights and applications on file in Oregon within 1 mile of the Columbia River total approximately 936,000 acre-feet. However, the breakdown of new applications is not yet delineated. Demands from other jurisdictions are not known. Source: 2006 Legislative Report.</p>	<p>250,000 acre-feet ?</p>
<p>CROP CHANGES -- Changes in crop production such as the emerging wine industry (lower water duty crop) and renewable fuel crops (potentially high water duty crops such as corn) may result in increasing or decreasing demand. Source: 2006 Legislative Report.</p>	<p>? acre-feet</p>