

WaterDefenders.org Update on Desired Future Conditions

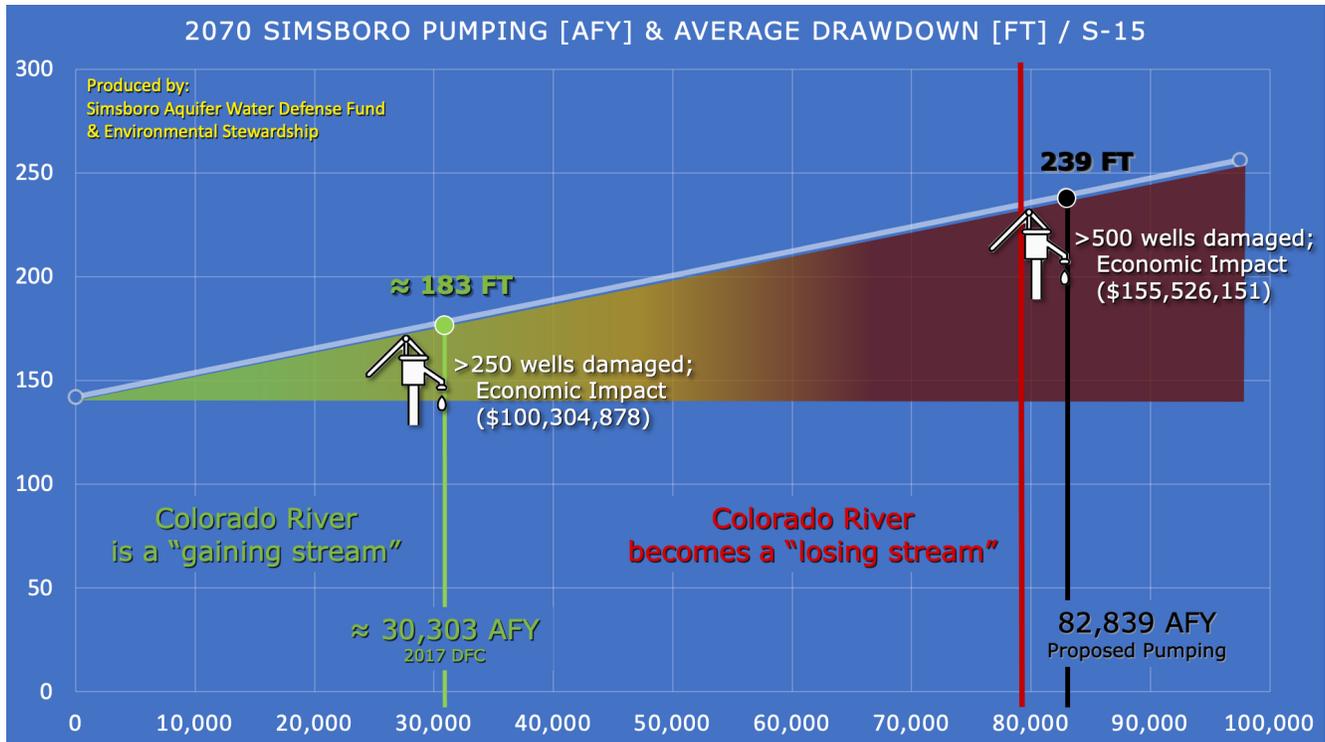


Figure 1

On November 8th, the board for the Lost Pines Groundwater Conservation District [LPGCD] has a difficult decision to make regarding Desired Future Conditions [DFC] for the Carrizo-Wilcox aquifer through 2070. They will be considering, both, the total amount of groundwater pumping they envision for the Simsboro formation and the average drawdown in water level that is predicted to result from that pumping.

For reasons detailed below, **WaterDefenders.org**, a coalition of Environmental Stewardship and Simsboro Aquifer Water Defense Fund [SAWDF], requests that the LPGCD board vote to approve no more than 30,303 acre-feet per year [AFY] of pumping in the Simsboro formation with a predicted average drawdown in water level of 183 feet. [see Figure 1]

At the September 2021 meeting, the LPGCD board agreed to proposed average drawdown in water levels for other formations of the Carrizo-Wilcox and in the Sparta and Queen City aquifers. At the same meeting, in response to research presented by **WaterDefenders.org**, the LPGCD board directed staff to research reductions in predicted average drawdown in the water level for the Simsboro formation.

The Simsboro formation, part of the Carrizo-Wilcox aquifer, is important for many reasons; the Simsboro has high water quality; it is the focus of several large permits by water marketing companies hoping to sell water to other parts of Texas; and it has a major impact on the Colorado River and adjoining formations, the Calvert Bluff and the Hooper.

Currently, the Carrizo-Wilcox aquifer contributes approximately 21,000 AFY of water to the Colorado River. [Note: Lake Bastrop's capacity is 15,000 acre-feet. The Carrizo-Wilcox aquifer contributes more than the equivalent of Lake Bastrop to the Colorado River each year!] Research by **Environmental Stewardship** shows that when you increase groundwater pumping in the Carrizo-Wilcox, approximately 63% of the water collected is redirected away from the Colorado River, and other surface waters, toward the water pumps.

The current Desired Future Conditions, set in 2017, envision an increase in pumping up to approximately 30,303 AFY from the Simsboro formation by 2070. This amount of pumping will reduce the inflows to the Colorado river, down from 21,000 AFY to approximately 8,500 AFY. **Environmental Stewardship** believes this is the bare minimum needed for the Colorado River to survive another drought-of-record like we saw in 2011.

An *Economic Impact Study* by **SAWDF** estimates that 30,303 AFY of pumping will damage more than 250 domestic/livestock wells in Lee and Bastrop counties, including wells in the Calvert Bluff or Hooper formations. The economic impact for landowners with domestic/livestock wells, including mitigation costs, lost property value and lost income is conservatively estimated at \$100,304,878. [see Figure 2]

In October 2021, LPGCD staff introduced a new pumping file [S-15] for the Groundwater Availability Model [GAM] with proposed pumping of 82,839 AFY in the Simsboro formation. This pumping results in a predicted average drawdown of 239 feet by 2070. This is an increase of 2.7 times the pumping envisioned in the 2017 Desired Future Conditions.

Environmental Stewardship estimates that the Colorado River will become a “losing stream” when pumping in the Simsboro formation exceeds approximately 78,000 AFY; a conservation red-line. The pumping proposed by staff exceeds this threshold and robs the river of another 1,000 AFY. In a future severe drought, there would be little or no groundwater flowing to the river to retain its ecological resilience in support of fish, wildlife, irrigation, or recreation.

SAWDF reviewed the proposed pumping and updated the *Economic Impact Study*. **SAWDF** estimates the increased pumping will damage more than 500 domestic/livestock wells in Lee and Bastrop counties. The economic impact for landowners with domestic/livestock wells, including mitigation costs, lost property value and lost income is conservatively estimated at \$155,526,151. [see Figure 2]

Due to the unreasonable impacts on surface waters, especially the Colorado River, property rights in groundwater, and damage to domestic/livestock wells, **WaterDefenders.org** requests that the **LPGCD board vote to approve no more than 30,303 AFY of pumping in the Simsboro formation with a predicted average drawdown in water level of 183 feet.**

LPGCD	Domestic / Stock Wells	S-15 w/ 183 FT DD			S-15 w/ 239 FT DD		
		# w/ DD >= 50'	%	Economic Impact	# w/ DD >= 50'	%	Economic Impact
Sparta	149	-	0%	-	-	0%	-
Queen City	310	29	9%	(5,364,557)	48	15%	(8,424,108)
Carrizo	139	73	53%	(30,546,784)	90	65%	(33,435,857)
Clavert Bluff	486	104	21%	(32,840,794)	223	46%	(57,732,162)
Simsboro	164	51	31%	(30,221,966)	103	63%	(44,351,079)
Hooper	257	4	2%	(1,330,777)	58	23%	(11,582,944)
TOTAL	1,505	263	17%	\$ (100,304,878)	509	34%	\$ (155,526,151)

Figure 2 Excerpt from SAWDF Economic Impact Study