

# Duke Energy Low Inflow Protocol

LIP Stage	Duke Energy Storage Index <sup>1</sup>	Minimum Reservoir Elevation ft AMSL		Maximum Weekly Keowee Water Flow Release ac-ft (cfs)	Public Water Supplier Withdrawal Reductions
		Jocassee	Keowee		
0	85% <= Storage Index < 90%	1096	796	25,000 (1800)	na
	80% <= Storage Index < 85%			20,000 (1440)	
1	na	1092	795	18,750 (1350)	3-5% (goal)
2	na	1087	793	15,000 (1080)	5-10% (goal)
3	na	1083	792	10,000 (720)	10-20% (goal)
4	12% < Storage Index < 25%	1080	791.5	7,500 (540) <sup>2</sup>	20-30%
	Storage Index < 12%		790	Leakage	

Notes:

<sup>1</sup> Storage Index includes remaining usable storage in Keowee, Jocassee, and Bad Creek

<sup>2</sup> No releases that would cause Keowee to fall below 791.5 ft AMSL

## LIP Stage Triggers

Stage	Trigger		US Drought Monitor <sup>2</sup> (12-wk avg)	Streamflow (LTA versus previous 4 months) <sup>3</sup>
0	Duke Energy Storage Index <sup>1</sup> < 90% & USACE Storage Index <sup>4</sup> < 90%	and one of the following	>=0	< 85%
1	USACE in DP 1		1	< 75%
2	USACE in DP 2		2	< 65%
3	USACE in DP 3		3	< 55%
4	Duke Energy Storage Index < 25%		4	< 40%

Notes:

LTA - long-term average; DP - Drought Plan

<sup>1</sup> The Duke Energy Storage Index is based on the usable storage for Keowee, Jocassee, and Bad Creek as specified in the LIP

<sup>2</sup> The US Drought Monitor uses an area-weighted average

<sup>3</sup> Streamflow gages are composite averages of Twelvemile Creek near Liberty, SC; Chattooga River near Clayton, GA; French Broad River near Rosman, NC

<sup>4</sup> USACE Storage Index includes usable storage for Hartwell, Russell, and Thurmond