

**From:** Evan Sawyer - NOAA Federal <evan.sawyer@noaa.gov>  
**Sent:** Friday, April 19, 2019 12:35 PM  
**To:** Garwin Yip - NOAA Federal  
**Subject:** difference in Reclamation materials  
**Attachments:** image.png; image.png

Hey Garwin,

I noticed a difference in some of the information Reclamation has provided in the past relative to what was in the Feb 5 2019 BA. Below are 2 tables the first I cut from Brycen's January 19 2017 Memo re: Shasta RPA, the second is from the February 5 2019 BA.

**Table 2. Shasta Temperature Control Device Gates with Elevation and Storage (Reclamation 2008)**

TCD Gates	Shasta Elevation with 35 feet of submergence	Shasta Storage
Upper Gates	1035	~3.65 MAF
Middle Gates	935	~2.50 MAF
Pressure Relief Gates	840	~0.67 MAF
Side Gates	720*	~0.01 MAF

\* Low Level intake bottom.

**Table 4-7. Shasta Temperature Control Device Gates with Elevation and Storage**

TCD Gates	Shasta Elevation with 35 feet of Submergence of the TCD Gates (feet)	Shasta Storage (MAF)
Upper Gates	1,035	~3.66
Middle Gates	935	~1.64
Pressure Relief Gates	840	~0.59
Side Gates	720 <sup>1</sup>	~0.08
<sup>1</sup> Low level intake bottom		

I don't know if it really amounts to anything but I do think the difference would change how conditions under the WOA are described. For one, Reclamation assumes that under the WOA water held above an "open" Shasta would stratify. It seems less likely that a thermocline would develop in 10,000 AF as opposed to 80,000 AF.

Do you know where the difference comes from? I guess it's from 2008 so maybe the BA is updated?

Evan

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