A.2. Tide Gauge

Data from the Clover Island water gauge in Kenniwick, Washington (12514500) was used to provide water level data for the Columbia River Hydrographic Survey; however soundings were not actually corrected by water level since the data were treated as an ellipsoidally referenced survey (ERS). ERS methodology was used because this stretch of the river is highly dynamic and influenced by several dams, including upstream controlled release from Priest Rapids Dam and downstream release at McNary Dam (Figure 4). The Snake River also joins the Columbia River within the survey area, further complicating control of water level due to additional flood release from Ice Harbor Dam. Regardless, the maximum water level fluctuation during the survey was 0.67 meters, as recorded by the water level gauge at Clover Island. To reiterate, water level records were downloaded and reviewed from the USGS National Water Info system website at: http://waterdata.usgs.gov/wa/nwis/uv/?site_no=12514500, but were only used in preliminary processing as a sanity check to the ERS methodology described hereafter.