Project 184
Streamflow and Lake Level Information Plan

February 2013

Version 5.0

REVISION HISTORY

Pages	Description	Date
1	Updated language to describe discontinuation of real time streamflow and lake level reporting via toll-free telephone number	04/12/12
2-3	Updated language to describe services available for calls placed to the toll-free telephone number	04/12/12
2	Updated language to clarify that callers to the toll-free number will be automatically transferred to EID's primary customer service number; numbered components of Appendix A	02/08/13

Table of Contents

Introduction

This plan is the result of a collaborative effort between the El Dorado Irrigation District (EID), Project 184 Ecological Resources Committee (ERC), USDA Forest Service (Forest Service), and the State Water Resources Control Board (SWRCB). It has been developed in accordance with the Federal Energy Regulatory Commission (FERC) Order Issuing New License (License) October 18, 2006, Appendix A – Section 4(e) Condition No. 53.1 (Condition 53.1) and Appendix B – Condition No. 19 and the Project 184 Settlement Agreement (EID 2003).

Condition 53.1 states:

"Condition No. 53.1 – Public Information Services

> *1. <u>Streamflow and Lake Level Information</u>*
> *The licensee shall make recreation streamflow and lake level information available to the public via toll-free telephone and internet. The licensee shall, within 1 year of license issuance, submit a plan to FERC that addresses, at a minimum, information on lake levels, real-time streamflows, simple staff gages, forecasting, and operations projections. The plan shall be reviewed by the ERC and approved by the FS and SWRCB prior to filing with FERC. Following approval, the minimum streamflow schedules from Condition No. 31 and current water year type information shall be published on the licensee's website.*
>
> *At a minimum, the licensee shall provide hourly averages of streamflows for gages on the SFAR below Kyburz Diversion Dam and Silver Fork American River, and shall, within 4 hours, post the information on the licensee's website for the current and prior 7 days for the entire year. All streamflow values shall be in cfs rounded to the nearest whole number, and plots or tables showing these data will be labeled as follows: "These provisional data have not been reviewed or edited and may be subject to significant change."*

Background

After the Settlement Agreement was signed in 2003, EID designed a website to inform the public about Project 184, including lake levels and streamflow information. The website has been operational since 2004. EID also established a toll-free telephone number providing real-time information about lake level and streamflow data. The automated service that reported real-time streamflow and lake level information via a toll-free telephone number was discontinued in 2012 due to minimal usage of the system.

The following plan describes existing public information services maintained by EID and future modifications to the services. As required by the FERC license, EID will operate the toll-free telephone line, website or a similar electronic public information service for the term of the FERC license. In the event of a planned construction project (such as dam repairs), when EID has prior knowledge that a drop in lake levels or stream levels will occur, EID will make an effort to post relevant information to the Project 184 website in advance under the "What's New" link.

Website and Toll-free Telephone Services for Lake Level and Streamflow Data

PROJECT 184 WEBSITE

Public information on lake levels, streamflow, forecasting, operations projections, water year, and minimum streamflow schedules can be accessed via the *EID Project 184 Home Page* at http://www.project184.org/. Appendix A provides examples of relevant WebPages including 1) *Project 184 Home Page*/*Current Water Data* with links to *Lake Level* information page, *2) Streamflow* information page, and 3) *Water Year Types/Minimum Streamflow Charts*. In accordance with Condition 53.1, lake level and streamflow values are posted for the current and prior seven days (or more) for the entire year and are labeled as follows, "These provisional data have not been reviewed or edited and may be subject to significant change". Appendix B provides examples of a *Streamflow and Water Storage Forecast* (October 2006) and *Project 184 Operating Plan* (April 2007).

TOLL-FREE TELEPHONE LINE

The District maintains a toll-free telephone number at 1-866-776-5184, which is posted on the Project No. 184 website at http://www.project184.org/. Calls placed to this toll-free telephone line are transferred to EID's primary customer service number at 530-642-4000. EID customer service agents will respond to calls placed to the toll-free telephone line during normal hours of operation by either directing callers to the Project No. 184 website or by accessing the information and relaying it to the caller as required. For after-hours calls to the toll-free number, EID's after-hours message will provide the Project No. 184 website address for those callers interested in obtaining streamflow and lake level information.

The following paragraphs describe each of these public information services in further detail.

Lake Level Information

Lake level data at Caples Lake, Echo Lake, Forebay Lake and Silver Lake is updated every hour with staff gage readings and corresponding useable storage volume displayed to the nearest hundredth of a foot and by total lake volume in acre-feet, respectively. Similarly, lake level data at Lake Aloha is updated every three hours (see Appendix A).

Real –Time Streamflows

Streamflow data at Caples Lake outlet, Echo Lake release, Pyramid Creek, South Fork American River (SFA) at Kyburz, and Silver Lake outlet is updated and posted every hour rounded to the nearest hundredth of a foot on stream gage and corresponding flow shown to the nearest tenth of a cubic foot per second (cfs). Streamflow data at Oyster Creek (Gage A-24) and Alder Creek (Gage A-14) will be posted to the website and available by toll-free telephone number (as described above) as soon as the gages are calibrated in accordance with the schedule outlined in the Gaging Plan.

Due to limited accessibility along the lower Silver Fork American River (Silver Fork), a gaging station has not been installed. As an alternative, EID will calculate streamflows for the Silver Fork by first adding flows at gaging stations A-11 (El Dorado Canal Diversion, USGS 11439000) and A-12 (South Fork American River below Kyburz, USGS 11439500), both located downstream of the confluence of Silver and South Fork American Rivers (see Figure 1). Flows from gaging station A-10 (South Fork above Silver Fork), located upstream of the confluence of Silver and South Fork American Rivers, will then be subtracted from the combined downstream flows to calculate the streamflows for the Silver Fork. The data for the South Fork American River above Silver Fork (gage A-10) will also be posted to the Project 184 Website in order to provide streamflow information along the upper South Fork.

After electronic recording devices have been installed at the gaging station A-10, the gage will need to be re-calibrated and the SCADA system will be updated to display real-time streamflow data for the Silver Fork. The flows for the Silver Fork American River and the upper South Fork will be posted to the Project 184 Website and available by toll-free telephone number (as described above) within two months of gage calibration in accordance with the Gaging Plan.

Staff Gages

Staff gages are used for a quick visual indication of the surface level in reservoirs, rivers and streams. Staff gages are located at all gaging sites identified in the Gaging Plan. Information on reading staff gages and the gage conversion tables can be accessed on the Project 184 Website under the link to Minimum Streamflow. The gage conversion tables posted to the website can be used to convert staff gage readings to cfs.

Staff gages at Caples Wing Dam Spill (EID Station I.D. A-7); No Name Creek below diversion (A-50); Bull Creek diversion (A-52); Ogilby Creek below diversion (A-53); and, Esmeralda Creek below diversion (A-54) are scheduled to be replaced with electronic recording and transmitting devices. Gaging information at these locations will be posted to the Project 184 Website within two months of calibration in accordance with the Gaging Plan.

Water Year Type and Minimum Instream Flow Charts

The *Minimum Streamflow Charts* (see Appendix A) show minimum streamflows by Water Year Type for the following locations:

Alder Creek Below Alder Creek Diversion Dam
Bull Creek Below Bull Creek Diversion Dam

Caples Creek Below Caples Lake Dam
Carpenter Creek Below Carpenter Creek Diversion Dam
Echo Creek Below Echo Lakes Dam
Esmeralda Creek Below Esmeralda Creek Diversion Dam
Mill Creek Below Mill Creek Diversion Dam
No Name Creek Below No Name Creek Diversion Dam
Ogilby Creek Below Ogilby Creek Diversion Dam
Pyramid Creek Below Lake Aloha Dam
Silver Fork American River Below Oyster Creek
Silver Fork American River Below Silver Lake Dam
South Fork American River Below Kyburz Diversion Dam

Water Year Forecasting and Operations Projections

The Water Forecast and Operations Plans are typically updated and posted on the website every two to three weeks during the diversion season from late spring to late fall (see Appendix B).