UNITED WATER CONSERVATION DISTRICT

"Conserving Water Since 1927"

Water Release and Ramping Rate Implementation Plan For Lower Piru Creek

Santa Felicia Project

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Revision 1

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1.0 INTRODUCTION

This plan has been prepared to comply with the reasonable and prudent alternative (RPA) 2(b) contained in article 401(a) of United Water Conservation District's (United) license issued by the Federal Energy Regulatory Commission (FERC) for United's Santa Felicia Project (FERC Project No. 2153) (Project) and the associated biological opinion (BiOp), dated May 5, 2008, issued by the National Marine Fisheries Service (NMFS), for the endangered southern California steelhead (*Oncorhynchus mykiss*).

RPA 2(b) requires that United prepare a plan that details implementation protocol for achieving water-release schedules and ramping rates defined in accordance with RPA 2(a). The required components of the plan are:

> (1) A description of the specific methods that operators of the Santa Felicia Dam (operators) will follow to ensure the water release schedules are maintained.
> (2) A description of the specific precautionary measures that operators will undertake to ensure that no water release lapse occurs.
> (3) A description of the contingency measures that operators and United will implement should an accidental lapse in water release occur.
> (4) A description of the specific triggers and procedures that will be used to transition from one type of water release to another (e.g., water releases for steelhead migration versus water releases for steelhead rearing).
> (5) A description of the specific ramping rates and procedures that operators will institute to minimize stranding and related effects on steelhead.

The "Water Release and Ramping Rate Implementation Plan for Lower Piru Creek" (Implementation Plan) will serve as part of United's internal Standard Operating Procedures (SOPs) for guiding operational activities related to implementation of the water release schedules and ramping rates established in the "Santa Felicia Water Release Plan" (Water Release Plan). The content of the Implementation Plan is based on current conditions. As the owner and operator of the facility, United has discretion to maintain and upgrade the facility as United deems appropriate. It is United's responsibility to maintain and operate the facility in a manner that complies with all requirements of the license, including the FERC-and NMFS-approved Water Release Plan. The monitoring plan will establish procedures that will verify United's compliance with the Water Release Plan. Given that the term of the license is 40 years, set to expire September 1, 2048, United cannot anticipate all future conditions and advancements in technologies that may affect operations for the Santa Felicia facility. This Implementation Plan

contains detailed descriptions of operational procedures for implementing the Water Release Plan. Due to the level of detail being provided in this Implementation Plan, installation and incorporation of new technologies and equipment are reasonably expected to result in changes to operational procedures outlined in this plan. For instance, United intends to install an automated system at the Santa Felicia outlet works to increase efficiency and accuracy of flow adjustments. With automation or other operational improvements, certain procedures in this Implementation Plan may no longer be applicable and would be revised as appropriate.

As long as United is successfully implementing the Water Release Plan, United retains discretion to modify operational procedures (e.g., physical mechanics of operations, protocol for internal communications or record keeping) to take advantage of improved technologies, tools, and procedures that will help United to more effectively and efficiently implement the water release schedules and ramping rates contained in the Water Release Plan. United will seek FERC and NMFS approval/agreement prior to implementing changes pertaining to required components of the Water Release Plan or changes to operational procedures that would negatively impact United's ability to successfully implement the Water Release Plan. United will update the implementation plan every 5 years as appropriate and provide those updates to FERC and NMFS for informational purposes.

The Project is located in eastern Ventura County on Piru Creek, approximately five miles north of Piru, California, and is owned and operated by United. Santa Felicia Dam is located on Piru Creek approximately six miles upstream of its confluence with the Santa Clara River.

2.0 IMPLEMENTATION OF HABITAT AND MIGRATION RELEASES

The Water Release Plan establishes criteria for when United would implement habitat and, migration releases for steelhead from Santa Felicia Dam. Habitat releases are dependent on local cumulative rainfall. Migration releases are dependent on rainfall induced surface water flow within the Santa Clara River at a location upstream of the confluence with Piru Creek. The criteria established in the Water Release Plan require that flows be adjusted when specific "triggers" are met. Procedures to implement the appropriate releases are discussed in this section.

The General Manager of United shall assign, to the appropriate United employees, responsibility for two primary functional roles: Santa Felicia Release Monitor (Release Monitor or RM) and Santa Felicia Release Operator (Release Operator or RO). The staff members assigned these functional roles are granted authority to act directly and to delegate authority to act in order to

maintain strict adherence to the Water Release Plan.

It is the responsibility of the Release Monitor to; 1) acquire the data associated with monitoring whether triggers described in the Water Release Plan have been met; 2) make determinations regarding the magnitude and timing of required changes of releases; 3) communicate said determinations to the Release Operator; 4) Maintain records documenting monitoring activities and trigger events; and, 5) coordinate communication regarding releases with outside agencies.

It is the responsibility of the Release Operator to; 1) acquire required field data and provide it to the Release Monitor; 2) record discharge values in United's daily log; 3) make physical adjustments to the release works to achieve the minimum discharges as determined by the Release Monitor; 4) verify and confirm release discharges and inform the Release Monitor of status and conditions; and, 5) coordinate communication regarding releases with downstream parties.

The daily, monthly, and annual tasks for the Release Monitor and Release Operator are summarized in a flowchart presented in Appendix A. If for any reason there is a break in the chain of communication between the Release Monitor and the Release Operator, the Release Operator will assume the responsibilities of the Release Monitor to acquire information and make determinations related to implementing the Water Release Plan.

2.1 REQUIREMENTS AND SPECIFIC IMPLEMENTATION METHODS FOR HABITAT RELEASES

2.1.1 CRITERIA FOR HABITAT WATER RELEASES

The following content was taken directly from the Water Release Plan and describes the requirements for habitat releases:

> *Beginning each October 1, the Licensee shall release a minimum flow of 7 cubic feet per second (cfs) into Piru Creek below Santa Felicia Dam. The Licensee shall record daily rainfall at Ventura County Watershed Protection District's rainfall station #160 and maintain a running daily cumulative water-year-to-date total of said rainfall.*
>
> *At the first day of each winter month (January through June), the cumulative rainfall shall be compared against the trigger values given in Table 1 (Column B). When the first-of-the-month rainfall exceeds the corresponding date's trigger value, the minimum release from Santa Felicia shall be raised to a value no less than the wet-normal flow (Table 1, Column C) and maintained over the ensuing month. If the cumulative rainfall*

at the first of any winter month (January through June) does not exceed the trigger value, the minimum discharge shall be reduced to, or maintained at, the minimum of 7 cfs until a subsequent trigger is met. Adjustments for flow increases will be initiated no later than 10:00 a.m., and flow reductions will not be implemented prior to 8:00 a.m. on the first day of each winter month (January through June).

Table 1- Habitat Water Release Schedule

A. When the cumulative annual rainfall at Ventura County Gage #160 measured at 8:00 a.m. on:	***B. Exceeds the following trigger values*:***	***C. Wet-normal year flow, Santa Felicia shall begin and continue releases for the ensuing period at a discharge no less than:***
January 1	*4.80 inches*	*15 cfs*
February 1	*8.10 inches*	*20 cfs*
March 1	*12.00 inches*	*20 cfs*
April 1	*14.90 inches*	*20 cfs*
May 1	*16.30 inches*	*10 cfs*
June 1	*17.50 inches*	*9 cfs which shall be continued through the following September 30 (October 1 begins a new water year.)*

**All years – cumulative median value, NMFS February 3, 2010 email*

2.1.2 IMPLEMENTATION OF HABITAT WATER RELEASE SCHEDULE

The criteria for determining if a habitat water release trigger has been achieved is based on Ventura County Watershed Protection District's rainfall data measured at the Piru-Temescal Guard Rain Station #160. Currently, United personnel maintain, monitor, and report rainfall measured at the Piru-Temescal Guard Rain Station #160. The rain station is monitored on a daily basis, and measured rainfall is entered into a "daily log" for United's operations. The "daily log" spreadsheet includes calculations for cumulative rainfall for the water year (a running total beginning October 1 of each year). Rainfall values are reported to the Ventura County Watershed Protection District on an annual basis and reported to United's Board of Directors in a monthly report which is available to the public (during the month reported) on United's website (http://www.unitedwater.org/). These activities will continue under this implementation plan.

Annually in the month of December, the Release Monitor will convene a meeting of critical members of United's staff including the Release Operator to prepare for implementing the habitat water release requirements that go into effect on January 1. These meetings will address the following:

1) Confirm tracking of cumulative rainfall measured at the Piru-Temescal Guard Rain Station #160.
2) Review expected adjustments to releases based on trigger values presented in Table 1.
3) Identify SOP requirements and individual responsibilities.

No later than 8:30 a.m. on the first day of each month, the Release Monitor shall determine the appropriate discharge for the ensuing month and will communicate the determination to the Release Operator. Typically, the determination will be made prior to this. Starting in December, the Release Monitor and Release Operator will communicate on the last working day of each month (unless a storm is forecasted; in that case they will communicate on the last day of each month) between December and May to discuss the expected adjustments needed for habitat flows on the first day of each month between January and June. The Release Operator will begin to adjust flows no later than 10:00 a.m. on the first day of each month. If the trigger values have been exceeded and flows are scheduled to increase, the adjustment may be made prior to the morning of the first day of the month. An example of when this may occur is when the first day of the month falls on a weekend or holiday. If flows are scheduled to decrease, the adjustment will be made no earlier than 8:00 a.m. on the morning of the first day of the month after cumulative rainfall value has been verified by the daily 8:00 a.m. rain gage reading. Once flows have been adjusted, the Release Operator will contact the Release Monitor to confirm that the release schedule has been implemented and report the magnitude of release. Both the monthly determination and release confirmation communications may be accomplished through phone calls, phone text messages, or radio calls, but shall always be documented in follow-up emails. The determination and confirmation emails will serve as United's official record documenting actions taken in compliance with the Water Release Schedule.

2.2 REQUIREMENTS AND SPECIFIC IMPLEMENTATION METHODS FOR MIGRATION RELEASES

2.2.1 CRITERIA FOR MIGRATION WATER RELEASES

The following content was taken directly from the Water Release Plan and describes the requirements for migration releases:

Between January 1 and May 31 each year, the Licensee shall release or bypass a minimum of 200 cfs during periods of time that fall between the below specified triggers.

1) Flow Initiation Trigger

If the instantaneous rainfall-induced discharge measured at USGS Station No. 11109000 (Santa Clara River near Piru, California) at 8:00 a.m. exceeds 200 cfs, AND the subsequent day's (midnight to midnight) mean daily discharge is predicted to exceed 200 cfs by the NOAA National Weather Service's "California – Nevada River Forecast Center" at River Guidance Point Piru SCPC1, then the Licensee shall begin increasing Santa Felicia discharges before 10:00 a.m., in accordance with the ramping criteria to a value of no less than 200 cfs. If the forecast website has not yet been updated at 8:00 a.m., the Licensee will check it on the hour, every hour, until it is updated, to determine if the trigger has been met. In this situation, if the trigger is met, the Licensee shall begin increasing Santa Felicia discharges within 2 hours of forecast issuance.

2) Flow Cessation Trigger

When the mean daily rainfall-induced discharge measured at USGS Station No. 11109000 falls below 200 cfs, the Licensee may begin decreasing Santa Felicia discharges, in accordance with the ramping criteria, to a flow no less than that dictated by the habitat water release schedule value.

2.2.2 Implementation of Migration Water Release Schedule

Beginning the last week of December and continuing through May 31 of each year, the Release Monitor will monitor local weather forecasts for storm events that could result in conditions being met for triggering the release of migration flows. When such storms are predicted, the Release Monitor will notify the Release Operator to prepare for the possibility of initiating migration releases. When storm events actually begin, the Release Monitor will monitor USGS Station #11109000 at 8:00 a.m. each morning at the following website address: http://waterdata.usgs.gov/ca/nwis/uv/?site_no=11109000&agency_cd=USGS&amp.

If flow measured at the USGS station at 8:00 a.m. exceeds 200 cfs, the Release Monitor will check the following website for the forecasted mean daily discharge for the station: http://www.cnrfc.noaa.gov/graphicalRVF.php?id=SCPC1. If the forecast website has not yet been updated at 8:00 a.m., the Release Monitor will check it on the hour, every hour, until it is updated, to determine if the trigger has been met.

Based on information contained on these websites, the Release Monitor will determine the trigger status. If trigger values are met, the Release Monitor will communicate said determination to the Release Operator. The Release Operator will begin to adjust flows no later than 10:00 a.m. In the event that the forecast is updated after 8:00 a.m., the Release Operator will begin to adjust flows within 2 hours of forecast issuance. Once flows have been adjusted, the Release Operator will contact the Release Monitor to confirm that the release schedule has been implemented.

Whenever migration releases are implemented, the Release Monitor shall continue daily monitoring of USGS Station #11109000. When the Release Monitor determines that the cessation trigger is met, the Release Monitor shall communicate said determination to the Release Operator. The Release Operator may begin ramping down migration releases at any time thereafter and shall confirm to the Release Monitor when the required habitat flows are reestablished.

Both the determination and release confirmation communications may be accomplished through phone call, phone text messages, or radio calls but shall always be documented in follow-up emails. The determination and confirmation emails will serve as United's official record documenting actions taken in compliance with the Water Release Schedule.

2.2.3 Implementation of Migration Water Releases during Spill Conditions

During large spill events at Santa Felicia, United has historically increased releases (e.g., 100 cfs) to allow for operation of the hydroelectric facilities. United would expect to continue to operate in this manner in concert with implementation of the Water Release Plan. Therefore, if migration releases are triggered during a large spill event, United would generally maintain the minimum release of 200 cfs through the outlet works, independent of how much water is spilling over the spillway. However, under certain conditions, United may have a need to reduce flow through the outlet works. Therefore if flow over the spillway is sufficient to satisfy water release requirements for migration flows, United has the option to reduce flows through the outlet works. In this event, discharge through the outlet works could be reduced to the minimum required habitat release. An example of a condition that may prompt a reduction of flow through the outlet works would be the presence of excessive debris on the lake. In this situation, United would reduce flow to prevent debris from being pulled into the intake tower and damaging infrastructure at the facility. One exception to maintaining habitat flows would occur if United elects to implement the water release schedule for alternative operations to allow for performance of dam safety activities (discussed in Section 3.0 – Implementation of Alternative

Operations Water Release Schedule). Spill conditions may provide opportunities for United to complete needed repair and maintenance activities at the outlet works during periods when flows over the spillway are adequate to maintain the required minimum flows in lower Piru Creek.

In the event that United decreases flow through the outlet works during a period when migration releases have been triggered, United will monitor flow over the spillway to ensure that the minimum required migration release is entering lower Piru Creek at all times. The Release Operator will measure the flow over the spillway each morning by 10:00 a.m. using staff gages and the spillway rating table presented in Appendix B. As soon as practical, following taking the measurement, the Release Operator will provide the result to the Release Monitor. If flow over the spillway has receded below 250 cfs and the migration cessation trigger has not been met, the Release Monitor will direct the Release Operator to initiate migration releases through the outlet works. The Release Operator will begin ramp-up procedures by noon of the same day to the required minimum 200 cfs. A flowchart outlining the implementation procedures for maintaining migration releases during a spill event is presented in Appendix C.

All communications during spill events may be accomplished through phone call, phone text messages, or radio calls but shall always be documented in follow-up emails. The determination and confirmation emails will serve as United's official record documenting actions taken in compliance with the Water Release Schedule.

3.0 IMPLEMENTATION OF ALTERNATIVE OPERATIONS WATER RELEASE SCHEDULE

All releases through the Santa Felicia Dam outlet works are controlled through the use of mechanical systems that need periodic inspection, maintenance, and repair to remain in adequate operational condition. Inspection, maintenance, and repair are each required components of dam safety protocol. Inspections and many repair and maintenance activities require that United close the penstock for certain periods of time during which United would be unable to release water from it. During these periods, United will follow the water release schedule for alternative operations as described in the Water Release Plan.

When this occurs, United will use an alternate conveyance system to maintain continuous flow to Piru Creek until the penstock is returned to service. Specifically, discharge through the Santa Felicia outlet works will be reduced to a minimum release of 5 cfs.

The following content was taken directly from the Water Release Plan and describes the requirements for alternative operations.

In order to conduct dam safety activities (e.g., inspections, maintenance and repairs) that require closure of the penstock, discharge through the Santa Felicia outlet works will be reduced to a minimum of 5 cfs. Ramping will be conducted in the manner described in Section 4.0 (Ramping Rates for Water Releases) for habitat flow scenarios. Dam safety activities requiring closure of the penstock will be scheduled to occur under the following conditions:

- *During any period when the reservoir spillway discharge exceeds the prescribed minimum flow.*
- *Under habitat flow release periods when the minimum required flow is no greater than 9 cfs and no rain events that may result in initiation of migration flows are forecasted to occur.*

Periods of reduced flow will be limited as follows:

- *Reductions for scheduled inspections shall be limited to no more than 12 hours.*
- *Reductions for scheduled maintenance or repair shall be limited to no more than 10 days per water year.*
- *Periods of reduction will be minimized by expediting all scheduled activities to the fullest extent practicable and minimum habitat releases will be restored at the earliest possible time. Such expedition will include lighting and around-the-clock activity should such effort shorten the expected duration of the flow reduction.*

Licensee will notify FERC and NMFS a minimum of 15 days prior to any such reduction of flow expected to exceed 12 hours and shall also notify FERC and NMFS within 24 hours should an intended 12 hour reduction period unexpectedly exceed 12 hours.

When possible, the Release Operator will notify the Release Monitor at least 45 days prior to initiating dam safety activities that involve the closure of the penstock. The Release Monitor will review the schedule and operation plan for the closure event to ensure that they meet the requirements contained in the Water Release Plan. The Release Monitor will work with the Release Operator to make modifications as necessary. The final operations plan and schedule will be confirmed in an email exchange between the Release Monitor and Release Operator which will serve as United's official record documenting actions taken in compliance with the Water Release Schedule.

The Release Monitor will notify FERC and NMFS a minimum of 15 days prior to any scheduled reduction of flow expected to exceed 12 hours, and shall also notify FERC and NMFS within 24 hours should an intended 12 hour reduction period unexpectedly exceed 12 hours. Notifications to FERC will be filed electronically on the FERC website. Notifications to NMFS will be sent

by email to the staff person assigned to the Santa Felicia Project. The alternate conveyance system will be opened prior to closure of the penstock. Flow through the alternate conveyance system will not be discontinued until after flows are restored through the penstock. Flows will be increased and decreased following procedures outlined for habitat flows in Section 4.0 (Ramping Rates and Procedures to Minimize Stranding and Related Effects on Steelhead).

4.0 RAMPING RATES AND PROCEDURES TO MINIMIZE STRANDING AND RELATED EFFECTS ON STEELHEAD

The Water Release Plan contains ramping rates intended to meet specific requirements established in the BiOp and license. United must ramp down releases at a rate that ensures that the water surface elevation (WSEL) decreases by no more than 2-inches per hour. The primary objective of this water release ramping criteria is to ensure United is minimizing the adverse effects of its operations on steelhead, particularly stranding of eggs, fry, juveniles, or adults in Piru Creek or the Santa Clara River. Ramping rate criteria specific to habitat flows, migration flows, and water conservation flows are presented in Appendix D and outlined below:

Habitat Flows

- Increasing Flows: Between January 1 and June 1 when increases in habitat flows are triggered, the Licensee will increase discharge such that flow no more than doubles in any two hour period;
- Decreasing Flows: Between January 1 and June 1 when decreases in habitat flows are triggered, the Licensee will ramp discharge down at the rate that does not exceed 2.0 cfs every 30 minutes until the new target habitat flow is reached.

Migration and Water Conservation Flows

- Increasing flows: United will increase discharge such that flows no more than double in any two hour period;
- Decreasing flows: United will reduce discharge at a rate no greater than 50 percent in any 24-hour period. The downward ramping shall stop, and discharges stabilized, at flows no less than the appropriate habitat flow.

The Release Monitor will supply the Release Operator with a specific ramping schedule prior to required adjustments. The effectiveness monitoring and adaptive management plans address how United will determine if the ramping rates and associated biological goals are being successfully met and what will be done if they are not.

5.0 PROTOCOL FOR TRANSITIONING BETWEEN RELEASE TYPES

Between January 1 and June 30, United will implement releases according to the habitat water release schedule. Between January 1 and May 31, when triggers for migration releases are met, migration flows will take precedent, and United will ramp up releases to the required minimum of 200 cfs. Once triggers for ceasing migration flows are met, United will ramp releases down to a level no less than that prescribed by the habitat water release schedule. All transitions will be achieved following the ramping schedules presented in Section 4.0 (Ramping Rates and Procedures to Minimize Stranding and Related Effects on Steelhead).

6.0 PRECAUTIONARY MEASURES

The following precautionary measures address potential sources of interference to implementation procedures for the prescribed water release schedule and ramping rates contained in the Water Release Plan. Procedural flowcharts for many of the precautionary measures discussed in this section are included in Appendix C. In the event that unforeseen scenarios arise, the Release Monitor will work with the Release Operator and other appropriate United personnel to develop a response to eliminate or minimize the interference as soon as possible.

6.1 ACHIEVING AND MAINTAINING TARGET RELEASES AND RAMPING RATES

United is developing plans to automate flow adjustments at the Santa Felicia facility. The upgrade will enhance efficiency at the facility by incorporating a measuring system that will provide real-time, full-scale feedback to facilitate flow adjustments in a smooth and accurate manner. The following procedures to implement and maintain release schedules and ramping rates will not be appropriate once the automated system is installed. Given that the term of the license is 40 years, technology for operating the Santa Felicia facility is expected to continue to improve. As the facility is upgraded, United will develop new operational procedures as appropriate to ensure successful implementation of the Water Release Plan.

Under current conditions, releases are adjusted by manually opening and closing valves. Adjustments are monitored by checking measured flow at the USGS gaging station #11109800 located approximately 750 feet downstream of the outlet works. The process is iterative and lacks precision. Once target flows are obtained, it is possible for unintentional variations to occur. To ensure that release requirements are met, the Release Operator shall verify minimum streamflow measured at USGS Gaging station #11109800 by 8:00 a.m. daily. The Release Operator will make adjustments as necessary. Required adjustments will be made prior to

10:00a.m.

Accuracy of measurements at the USGS gaging station fluctuates depending upon conditions in the stream. On occasion, changes in the stream channel can result in errors in flow measurements. If this is suspected, the Release Operator will verify flows with staff gages and flow meters. The Release Operator will document the inaccuracy and inform USGS that the station requires calibration. The Release Operator will supply documentation of the incident by email to the Release Monitor. The documentation email will serve as United's official record documenting actions taken in compliance with the Water Release Schedule.

6.2 GAGING STATION MALFUNCTION

Extreme weather conditions have the potential to cause outages at the gaging station used for measuring the migration flow trigger. In the event an outage is identified, the Release Monitor will notify USGS of the outage (if appropriate) and undertake an inspection of the stream transect where the gage is located. Because the gaging station is located on private property, United must obtain a property access agreement from the property owner to undertake this activity. United will pursue a property access agreement within 60 days of FERC's approval of this Implementation Plan. Once the property access agreement is obtained, if the outage is recognized before noon, the inspection will occur prior to midnight on the same day. If the outage is recognized after noon, the inspection will occur prior to noon on the following day. The purpose of the inspection is to assess flows as follows.

1) If flows appear to be less than 200 cfs, a qualified individual (this may or may not be a United staff member) with experience in stream gaging will use a flow meter to measure the total flow. If the measured flow is less than 200 cfs, the stream transect shall be re-inspected prior to 8:00 a.m. the following day.

2) If flows cannot be safely measured, flows will be assumed to be greater than 200 cfs.

Depending on the results of the inspection, the next steps are as follows.

1) If the measured flow is below 200 cfs, the Release Monitor will follow normal procedures for when migration flows are not triggered.

2) If the measured or assumed flow is greater than 200 cfs, the Release Monitor will use temporal changes in flow at USGS station #11113000 (Sespe Creek) as a surrogate for the malfunctioning gaging station. The Release Monitor will obtain the instantaneous discharge recorded at 8:00 a.m. at the surrogate station (#11113000) and compare it with the predicted mean daily discharge for the subsequent day (midnight to midnight). If the

mean-daily discharge at the surrogate station is predicted (by NOAA National Weather Service's "California – Nevada River Forecast Center" at River Guidance Point Sespe Creek near Fillmore SESC1) to exceed the instantaneous discharge, then the Release Monitor will make the determination that migration flow has been triggered and shall follow normal procedures for such events.

If United is unable to obtain a property access agreement or if the land owner revokes access in the future, United will establish an alternative method for addressing gage malfunction that does not require accessing private property.

6.3 COMMUNICATION DEVICE OUTAGES

In the event that email or telephone services are unavailable, United staff will employ a two-way radio system or satellite telephone for communication. Emails documenting determinations and confirmations will be sent as soon as practical following communications.

6.4 INTERNET SERVER OUTAGES

Internet services will be used to access flow information and communicate between departments. There are various potential scenarios related to internet outages. In the event that internet service is unavailable at United facilities, the Release Monitor will attempt to access the internet from a remote location. If services or websites are not accessible, the Release Monitor will undertake an inspection of the stream transect where the gage is located and follow protocol outlined in Section 6.2 for gaging station malfunction and use alternate communication devices (if required) outlined in Section 6.3.

7.0 CONTENGENCY MEASURES TO BE IMPLEMENTED IN CASE OF AN ACCIDENTAL LAPSE IN WATER RELEASE

In the event of an accidental lapse in water release, the Release Monitor will work with the Release Operator and other United personnel to determine steps necessary to restore the required flows and begin implementation as soon as possible following detection of the lapse.

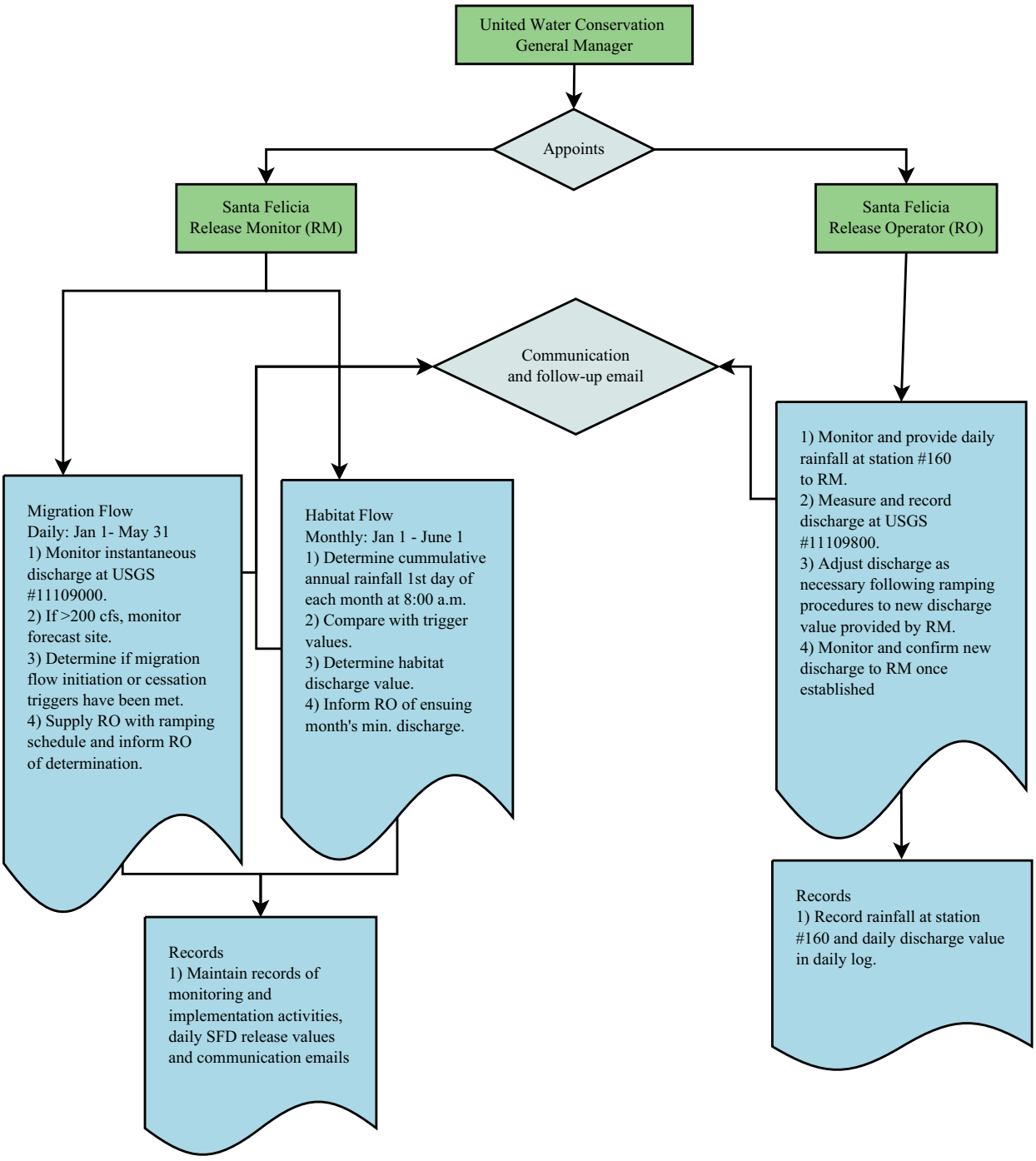
United will notify FERC and NMFS of accidental lapses and steps taken to correct the situation within 24 hours from the time the lapse was recognized. Notifications will include date and time that the lapse was identified, the name of the individual who identified the lapse, the reason for the lapse, steps taken or proposed to remedy the lapse, and a description of the known and expected effects of the lapse on the amount and extent of surface flow and on steelhead in lower Piru Creek. The Release Monitor will be responsible for making the notifications. Notifications

to FERC will be filed electronically on the FERC website. Notifications to NMFS will be sent by email to the staff person assigned to the Santa Felicia project.

APPENDIX A

Implementation Plan Flowchart

Appendix A
Implementation Plan Flowchart



APPENDIX B

Santa Felicia Spillway Rating Table

UNITED WATER CONSERVATION DISTRICT **SPILLWAY RATING TABLE** **SANTA FELICIA DAM**

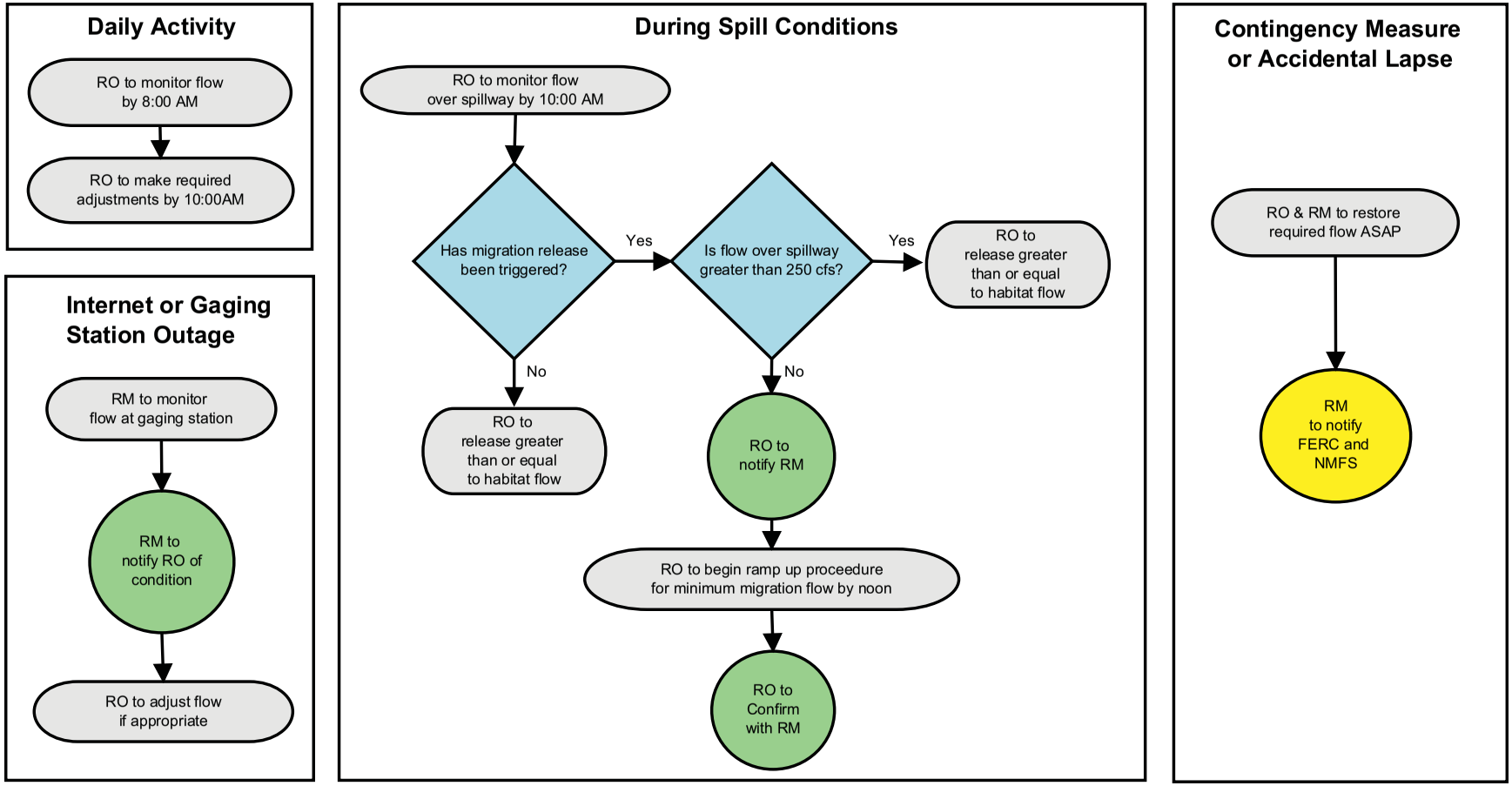
Elevation (ft)	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070
Head (ft)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0.00	0	2,000	5,199	8,885	13,680	19,118	25,132	31,670	38,048	45,401	53,174	61,346	72,663	81,933	91,566	103,205
0.01	1	2,030	5,238	8,930	13,731	19,176	25,195	31,738	38,119	45,476	53,253	61,430	72,754	82,027	91,664	103,309
0.02	2	2,060	5,278	8,974	13,783	19,233	25,258	31,805	38,191	45,552	53,333	61,513	72,845	82,122	91,762	103,412
0.03	3	2,090	5,317	9,019	13,834	19,291	25,320	31,873	38,262	45,628	53,413	61,597	72,936	82,216	91,860	103,515
0.04	4	2,121	5,356	9,064	13,886	19,348	25,384	31,941	38,334	45,704	53,493	61,681	73,027	82,311	91,959	103,618
0.05	22	2,143	5,377	9,108	13,937	19,406	25,447	31,983	38,405	45,779	53,573	61,887	73,118	82,406	92,132	103,722
0.06	29	2,174	5,416	9,153	13,989	19,464	25,510	32,051	38,477	45,855	53,653	61,971	73,209	82,500	92,230	103,825
0.07	37	2,204	5,456	9,198	14,041	19,521	25,573	32,119	38,548	45,931	53,733	62,055	73,300	82,595	92,329	103,929
0.08	45	2,235	5,495	9,243	14,092	19,579	25,636	32,187	38,620	46,007	53,813	62,139	73,391	82,690	92,427	104,032
0.09	54	2,267	5,535	9,288	14,144	19,637	25,699	32,255	38,692	46,083	53,893	62,223	73,482	82,785	92,526	104,136
0.10	63	2,288	5,555	9,333	14,196	19,695	25,763	32,297	38,764	46,159	53,973	62,430	73,573	82,880	92,700	104,239
0.11	73	2,320	5,595	9,379	14,248	19,753	25,826	32,365	38,835	46,235	54,053	62,515	73,664	82,975	92,798	104,343
0.12	83	2,351	5,635	9,424	14,300	19,811	25,889	32,433	38,907	46,312	54,134	62,599	73,756	83,070	92,897	104,446
0.13	94	2,383	5,675	9,469	14,352	19,869	25,953	32,502	38,979	46,388	54,214	62,684	73,847	83,165	92,996	104,550
0.14	105	2,414	5,715	9,515	14,404	19,927	26,016	32,570	39,051	46,464	54,294	62,768	73,938	83,260	93,094	104,654
0.15	116	2,436	5,734	9,560	14,457	19,985	26,080	32,611	39,123	46,540	54,375	62,976	74,030	83,355	93,269	104,757
0.16	128	2,468	5,775	9,606	14,509	20,043	26,144	32,680	39,195	46,617	54,455	63,061	74,121	83,450	93,368	104,861
0.17	140	2,500	5,815	9,651	14,561	20,102	26,207	32,748	39,267	46,693	54,535	63,146	74,213	83,545	93,467	104,965
0.18	153	2,532	5,855	9,697	14,614	20,160	26,271	32,817	39,339	46,769	54,616	63,231	74,304	83,640	93,566	105,069
0.19	166	2,565	5,895	9,743	14,666	20,218	26,335	32,885	39,411	46,846	54,696	63,316	74,396	83,735	93,665	105,172
0.20	179	2,586	5,915	9,789	14,719	20,277	26,399	32,926	39,484	46,922	54,777	63,525	74,487	83,831	93,840	105,276
0.21	192	2,619	5,955	9,835	14,771	20,335	26,463	32,995	39,556	46,999	54,857	63,610	74,579	83,926	93,939	105,380
0.22	206	2,651	5,996	9,881	14,824	20,394	26,527	33,064	39,628	47,075	54,938	63,695	74,670	84,021	94,038	105,484
0.23	221	2,684	6,036	9,927	14,877	20,453	26,591	33,132	39,701	47,152	55,019	63,781	74,762	84,117	94,137	105,588
0.24	235	2,717	6,077	9,973	14,929	20,511	26,655	33,201	39,773	47,229	55,099	63,866	74,854	84,212	94,237	105,692
0.25	250	2,738	6,096	10,019	14,982	20,570	26,719	33,242	39,845	47,305	55,180	64,076	74,946	84,307	94,413	105,796
0.26	265	2,771	6,137	10,065	15,035	20,629	26,783	33,311	39,918	47,382	55,261	64,162	75,037	84,403	94,512	105,900
0.27	281	2,804	6,177	10,112	15,088	20,688	26,847	33,380	39,990	47,459	55,342	64,247	75,129	84,498	94,612	106,004
0.28	296	2,837	6,218	10,158	15,141	20,747	26,911	33,449	40,063	47,536	55,423	64,333	75,221	84,594	94,711	106,109
0.29	312	2,871	6,259	10,204	15,194	20,806	26,976	33,518	40,135	47,612	55,503	64,418	75,313	84,689	94,810	106,213
0.30	329	2,892	6,278	10,251	15,248	20,865	27,040	33,559	40,208	47,689	55,584	64,630	75,405	84,785	94,987	106,317
0.31	345	2,926	6,319	10,298	15,301	20,924	27,104	33,628	40,281	47,766	55,665	64,716	75,497	84,881	95,087	106,421
0.32	362	2,959	6,360	10,344	15,354	20,983	27,169	33,697	40,354	47,843	55,746	64,802	75,589	84,976	95,186	106,525
0.33	379	2,993	6,401	10,391	15,407	21,042	27,233	33,766	40,426	47,920	55,827	64,888	75,681	85,072	95,286	106,630
0.34	396	3,027	6,442	10,438	15,461	21,101	27,298	33,835	40,499	47,997	55,908	64,974	75,773	85,168	95,386	106,734
0.35	414	3,048	6,461	10,485	15,514	21,161	27,363	33,876	40,572	48,074	55,990	65,187	75,865	85,264	95,563	106,838
0.36	432	3,082	6,502	10,532	15,568	21,220	27,427	33,945	40,645	48,152	56,071	65,273	75,957	85,359	95,663	106,943
0.37	450	3,116	6,543	10,579	15,621	21,279	27,492	34,014	40,718	48,229	56,152	65,359	76,049	85,455	95,763	107,047
0.38	468	3,150	6,585	10,626	15,675	21,339	27,557	34,083	40,791	48,306	56,233	65,446	76,142	85,551	95,863	107,152
0.39	487	3,185	6,626	10,673	15,729	21,398	27,622	34,152	40,864	48,383	56,314	65,532	76,234	85,647	95,963	107,256
0.40	506	3,206	6,644	10,720	15,782	21,458	27,686	34,193	40,937	48,461	56,396	65,746	76,326	85,743	96,141	107,361
0.41	525	3,240	6,686	10,768	15,836	21,518	27,751	34,262	41,010	48,538	56,477	65,833	76,419	85,839	96,241	107,466
0.42	544	3,275	6,727	10,815	15,890	21,577	27,816	34,332	41,083	48,615	56,559	65,919	76,511	85,935	96,341	107,570
0.43	564	3,309	6,769	10,863	15,944	21,637	27,881	34,401	41,156	48,693	56,640	66,006	76,603	86,031	96,442	107,675
0.44	584	3,344	6,811	10,910	15,998	21,697	27,946	34,471	41,230	48,770	56,721	66,093	76,696	86,127	96,542	107,779
0.45	604	3,365	6,828	10,958	16,052	21,757	28,011	34,511	41,303	48,848	56,803	66,308	76,788	86,223	96,720	107,884
0.46	624	3,400	6,870	11,006	16,106	21,816	28,077	34,581	41,376	48,925	56,885	66,395	76,881	86,320	96,821	107,989
0.47	644	3,435	6,912	11,053	16,161	21,876	28,142	34,650	41,450	49,003	56,966	66,482	76,973	86,416	96,921	108,094
0.48	665	3,470	6,954	11,101	16,215	21,936	28,207	34,720	41,523	49,081	57,048	66,569	77,066	86,512	97,022	108,199
0.49	686	3,505	6,996	11,149	16,269	21,997	28,272	34,790	41,597	49,158	57,129	66,656	77,159	86,608	97,122	108,303
0.50	707	3,525	7,013	11,197	16,324	22,057	28,338	34,830	41,670	49,236	57,211	66,873	77,251	86,705	97,301	108,408
0.51	728	3,561	7,055	11,245	16,378	22,117	28,403	34,900	41,744	49,314	57,293	66,960	77,344	86,801	97,402	108,513
0.52	750	3,596	7,097	11,293	16,433	22,177	28,469	34,969	41,817	49,392	57,375	67,047	77,437	86,897	97,503	108,618
0.53	772	3,632	7,139	11,341	16,487	22,237	28,534	35,039	41,891	49,469	57,457	67,134	77,530	86,994	97,604	108,723
0.54	794	3,667	7,182	11,389	16,542	22,298	28,600	35,109	41,965	49,547	57,538	67,222	77,623	87,090	97,704	108,828
0.55	816	3,688	7,198	11,438	16,596	22,358	28,665	35,149	42,038	49,625	57,620	67,440	77,715	87,187	97,884	108,933
0.56	838	3,723	7,241	11,486	16,651	22,419	28,731	35,219	42,112	49,703	57,702	67,527	77,808	87,283	97,985	109,038
0.57	861	3,759	7,283	11,534	16,706	22,479	28,797	35,289	42,186	49,781	57,784	67,615	77,901	87,380	98,086	109,144
0.58	883	3,795	7,326	11,583	16,761	22,540	28,863	35,359	42,260	49,859	57,866	67,703	77,994	87,476	98,187	109,249
0.59	906	3,831	7,368	11,632	16,816	22,600	28,928	35,429	42,334	49,937	57,948	67,790	78,087	87,573	98,288	109,354
0.60	929	3,851	7,384	11,680	16,871	22,661	28,994	35,469	42,408	50,015	58,030	68,009	78,180	87,670	98,469	109,459
0.61	953	3,887	7,427	11,729	16,926	22,722	29,060	35,539	42,482	50,094	58,113	68,097	78,273	87,766	98,570	109,564
0.62	976	3,924	7,469	11,778	16,981	22,782	29,126	35,609	42,556	50,172	58,195	68,185	78,367	87,863	98,671	109,670
0.63	1,000	3,960	7,512	11,826	17,036	22,843	29,192	35,679	42,630	50,250	58,277	68,273	78,460	87,960	98,772	109,775
0.64	1,024	3,996	7,555	11,875	17,091	22,904	29,258	35,750	42,704	50,328	58,359	68,361	78,553	88,057	98,874	109,880
0.65	1,048	4,033	7,598	11,924	17,147	22,965	29,324	35,820	42,778	50,407	58,441	68,582	78,646	88,154	99,055	109,986
0.66	1,072	4,070	7,641	11,973	17,202	23,026	29,391	35,890	42,852	50,485	58,524	68,670	78,739	88,251	99,156	110,091
0.67	1,097	4,107	7,684	12,023	17,257	23,087	29,457	35,960	42,927	50,563	58,606	68,758	78,833	88,347	99,258	110,197
0.68	1,121	4,144	7,727	12,072	17,313	23,148	29,523	36,031	43,001	50,642	58,689	68,847	78,926	88,444	99,359	110,302
0.69	1,146	4,181	7,771	12,121	17,368	23,209	29,589	36,101	43,075	50,720	58,771	68,935	79,019	88,541	99,461	110,408
0.70	1,171	4,127	7,757	12,170	17,424	23,271	29,656	36,111	43,149	50,799	58,854	69,157	79,113	88,638	99,643	110,513
0.71	1,196	4,164	7,800	12,220	17,479	23,332	29,722	36,181	43,224	50,877	58,936	69,246	79,206	88,736	99,745	110,619
0.72	1,222	4,200	7,844	12,269	17,535	23,393	29,789	36,251	43,298	50,956	59,019	69,334	79,300	88,833	99,846	110,725
0.73	1,247	4,237	7,887	12,319	17,591	23,455	29,855	36,322	43,373	51,035	59,101	69,423	79,393	88,930	99,948	110,830
0.74	1,273	4,274	7,930	12,368	17,647	23,516	29,922	36,392	43,447	51,113	59,184	69,512	79,487	89,027	100,050	110,936
0.75	1,299	4,349	7,944	12,418	17,703	23,578	29,988	36,432	43,522	51,192	59,267	69,735	79,581	89,124	100,232	111,042
0.76	1,325	4,386	7,988	12,467	17,759	23,639	30,055	36,503	43,597	51,271	59,349	69,824	79,674	89,221	100,334	111,147
0.77	1,351	4,424	8,031	12,517	17,815	23,701	30,122	36,573	43,671	51,350	59,432	69,913	79,768	89,319	100,436	111,253
0.78	1,378	4,461	8,075	12,567	17,871	23,762	30,188	36,644	43,746	51,429	59,515	70,002	79,862	89,416	100,538	111,359
0.79	1,404	4,499	8,118	12,617	17,927	23,824	30,255	36,715	43,821	51,508	59,598	70,091	79,955	89,513	100,640	111,465
0.80	1,431	4,517	8,132	12,667	17,983	23,886	30,322	36,754	43,896	51,586	59,681	70,315	80,049	89,611	100,824	111,571
0.81	1,458	4,555	8,176	12,717	18,039	23,948	30,389	36,825	43,970	51,665	59,763	70,404	80,143	89,708	100,926	111,677
0.82	1,485	4,593	8,219	12,767	18,095	24,009	30,456	36,896	44,045	51,744	59,846	70,494	80,237	89,806	101,028	111,783
0.83	1,512	4,631	8,263	12,817	18,152	24,071	30,523	36,967	44,120	51,824	59,929	70,583	80,331	89,903	101,130	111,889
0.84	1,540	4,669	8,307	12,867	18,208	24,133	30,590	37,037	44,195	51,903	60,012	70,673	80,425	90,001	101,233	111,995
0.85	1,567	4,686	8,320	12,918	18,265	24,195	30,657	37,077	44,270	51,982	60,095	70,898	80,519	90,098	101,416	112,101
0.86	1,595	4,725	8,364	12,968	18,321	24,257	30,724	37,148	44,345	52,061	60,179	70,988	80,613	90,196	101,519	112,207
0.87	1,623	4,763	8,408	13,019	18,378	24,319	30,792	37,219	44,420	52,140	60,262	71,077	80,707	90,293	101,621	112,313
0.88	1,651	4,801	8,452	13,069	18,434	24,382	30,859	37,290	44,496	52,219	60,345	71,167	80,801	90,391	101,724	112,419
0.89	1,679	4,839	8,496	13,120	18,491	24,444	30,926	37,361	44,571	52,299	60,428	71,257	80,895	90,489	101,827	112,526
0.90	1,707	4,857	8,508	13,170	18,548	24,506	30,993	37,400	44,646	52,378	60,511	71,484	80,989	90,587	102,011	112,632
0.91	1,736	4,895	8,552	13,221	18,605	24,568	31,061	37,471	44,721	52,457	60,595	71,574	81,083	90,684	102,114	112,738
0.92	1,765	4,934	8,596	13,272	18,661	24,631	31,128	37,542	44,797	52,537	60,678	71,664	81,177	90,782	102,217	112,844
0.93	1,793	4,972	8,641	13,322	18,718	24,693	31,196	37,613	44,872	52,616	60,761	71,754	81,272	90,880	102,319	112,951
0.94	1,822	5,011	8,685	13,373	18,775	24,756	31,263	37,685	44,947	52,696	60,845	71,844	81,366	90,978	102,422	113,057
0.95	1,852	5,006	8,697	13,424	18,832	24,818	31,331	37,724	45,023	52,775	60,928	72,072	81,460	91,076	102,607	113,163
0.96	1,881	5,044	8,741	13,475	18,889	24,881	31,399	37,795	45,098	52,855	61,012	72,162	81,555	91,174	102,710	113,270
0.97	1,910	5,083	8,785	13,526	18,947	24,944	31,466	37,866	45,174	52,935	61,095	72,253	81,649	91,272	102,813	113,376
0.98	1,940	5,122	8,830	13,578	19,004	25,006	31,534	37,938	45,249	53,014	61,179	72,344	81,744	91,370	102,916	113,483
0.99	1,970	5,160	8,874	13,629	19,061	25,069	31,602	38,009	45,325	53,094	61,262	72,434	81,838	91,468	103,019	113,589

UNITED WATER CONSERVATION DISTRICT **SPILLWAY RATING TABLE** **SANTA FELICIA DAM**

Elevation (ft)	1071	1072	1073	1074	1075	1076	1077	1078
Head (ft)	16	17	18	19	20	21	22	23
0.00	113,696	124,520	135,667	147,128	158,895	170,960	183,316	195,955
0.01	113,803	124,630	135,780	147,244	159,014	171,082	183,441	196,083
0.02	113,909	124,740	135,893	147,360	159,133	171,204	183,566	196,211
0.03	114,016	124,850	136,006	147,477	159,253	171,326	183,691	196,339
0.04	114,123	124,960	136,119	147,593	159,372	171,449	183,816	196,467
0.05	114,229	125,070	136,233	147,709	159,491	171,571	183,941	196,595
0.06	114,336	125,180	136,346	147,826	159,611	171,693	184,066	196,723
0.07	114,443	125,290	136,459	147,942	159,730	171,815	184,191	196,851
0.08	114,550	125,400	136,572	148,058	159,849	171,938	184,316	196,979
0.09	114,657	125,510	136,686	148,175	159,969	172,060	184,442	197,107
0.10	114,764	125,620	136,799	148,291	160,088	172,182	184,567	197,235
0.11	114,871	125,730	136,912	148,408	160,208	172,305	184,692	197,363
0.12	114,977	125,841	137,026	148,524	160,327	172,427	184,817	197,491
0.13	115,084	125,951	137,139	148,641	160,447	172,550	184,943	197,619
0.14	115,192	126,061	137,253	148,757	160,566	172,672	185,068	197,747
0.15	115,299	126,172	137,366	148,874	160,686	172,795	185,194	197,875
0.16	115,406	126,282	137,480	148,990	160,806	172,917	185,319	198,004
0.17	115,513	126,392	137,593	149,107	160,925	173,040	185,444	198,132
0.18	115,620	126,503	137,707	149,224	161,045	173,163	185,570	198,260
0.19	115,727	126,613	137,821	149,341	161,165	173,285	185,695	198,388
0.20	115,834	126,724	137,934	149,457	161,284	173,408	185,821	198,517
0.21	115,942	126,834	138,048	149,574	161,404	173,531	185,947	198,645
0.22	116,049	126,945	138,162	149,691	161,524	173,653	186,072	198,774
0.23	116,156	127,055	138,275	149,808	161,644	173,776	186,198	198,902
0.24	116,264	127,166	138,389	149,925	161,764	173,899	186,323	199,030
0.25	116,371	127,277	138,503	150,041	161,884	174,022	186,449	199,159
0.26	116,479	127,387	138,617	150,158	162,003	174,145	186,575	199,287
0.27	116,586	127,498	138,731	150,275	162,123	174,268	186,701	199,416
0.28	116,694	127,609	138,845	150,392	162,243	174,390	186,826	199,544
0.29	116,801	127,720	138,959	150,509	162,363	174,513	186,952	199,673
0.30	116,909	127,830	139,073	150,626	162,484	174,636	187,078	199,802
0.31	117,016	127,941	139,187	150,744	162,604	174,759	187,204	199,930
0.32	117,124	128,052	139,301	150,861	162,724	174,882	187,330	200,059
0.33	117,232	128,163	139,415	150,978	162,844	175,005	187,456	200,188
0.34	117,339	128,274	139,529	151,095	162,964	175,129	187,581	200,316
0.35	117,447	128,385	139,643	151,212	163,084	175,252	187,707	
0.36	117,555	128,496	139,757	151,329	163,204	175,375	187,833	
0.37	117,663	128,607	139,871	151,447	163,325	175,498	187,959	
0.38	117,770	128,718	139,986	151,564	163,445	175,621	188,086	
0.39	117,878	128,829	140,100	151,681	163,565	175,744	188,212	
0.40	117,986	128,940	140,214	151,799	163,686	175,868	188,338	
0.41	118,094	129,052	140,329	151,916	163,806	175,991	188,464	
0.42	118,202	129,163	140,443	152,033	163,926	176,114	188,590	
0.43	118,310	129,274	140,557	152,151	164,047	176,238	188,716	
0.44	118,418	129,385	140,672	152,268	164,167	176,361	188,842	
0.45	118,526	129,497	140,786	152,386	164,288	176,484	188,969	
0.46	118,634	129,608	140,901	152,503	164,408	176,608	189,095	
0.47	118,742	129,719	141,015	152,621	164,529	176,731	189,221	
0.48	118,851	129,831	141,130	152,739	164,649	176,855	189,348	
0.49	118,959	129,942	141,244	152,856	164,770	176,978	189,474	
0.50	119,067	130,054	141,359	152,974	164,891	177,102	189,600	
0.51	119,175	130,165	141,473	153,092	165,011	177,225	189,727	
0.52	119,283	130,277	141,588	153,209	165,132	177,349	189,853	
0.53	119,392	130,388	141,703	153,327	165,253	177,473	189,980	
0.54	119,500	130,500	141,817	153,445	165,373	177,596	190,106	
0.55	119,609	130,611	141,932	153,563	165,494	177,720	190,233	
0.56	119,717	130,723	142,047	153,680	165,615	177,844	190,359	
0.57	119,825	130,835	142,162	153,798	165,736	177,967	190,486	
0.58	119,934	130,946	142,277	153,916	165,857	178,091	190,612	
0.59	120,042	131,058	142,392	154,034	165,978	178,215	190,739	
0.60	120,151	131,170	142,506	154,152	166,099	178,339	190,866	
0.61	120,260	131,282	142,621	154,270	166,220	178,463	190,992	
0.62	120,368	131,394	142,736	154,388	166,341	178,587	191,119	
0.63	120,477	131,505	142,851	154,506	166,462	178,710	191,246	
0.64	120,586	131,617	142,966	154,624	166,583	178,834	191,373	
0.65	120,694	131,729	143,081	154,742	166,704	178,958	191,499	
0.66	120,803	131,841	143,197	154,860	166,825	179,082	191,626	
0.67	120,912	131,953	143,312	154,979	166,946	179,206	191,753	
0.68	121,021	132,065	143,427	155,097	167,067	179,330	191,880	
0.69	121,129	132,177	143,542	155,215	167,188	179,455	192,007	
0.70	121,238	132,289	143,657	155,333	167,310	179,579	192,134	
0.71	121,347	132,402	143,773	155,452	167,431	179,703	192,261	
0.72	121,456	132,514	143,888	155,570	167,552	179,827	192,388	
0.73	121,565	132,626	144,003	155,688	167,673	179,951	192,515	
0.74	121,674	132,738	144,118	155,807	167,795	180,075	192,642	
0.75	121,783	132,850	144,234	155,925	167,916	180,200	192,769	
0.76	121,892	132,963	144,349	156,043	168,038	180,324	192,896	
0.77	122,001	133,075	144,465	156,162	168,159	180,448	193,023	
0.78	122,111	133,187	144,580	156,280	168,280	180,573	193,150	
0.79	122,220	133,300	144,696	156,399	168,402	180,697	193,278	
0.80	122,329	133,412	144,811	156,518	168,523	180,821	193,405	
0.81	122,438	133,525	144,927	156,636	168,645	180,946	193,532	
0.82	122,547	133,637	145,042	156,755	168,767	181,070	193,659	
0.83	122,657	133,750	145,158	156,873	168,888	181,195	193,787	
0.84	122,766	133,862	145,274	156,992	169,010	181,319	193,914	
0.85	122,875	133,975	145,389	157,111	169,131	181,444	194,041	
0.86	122,985	134,087	145,505	157,230	169,253	181,568	194,169	
0.87	123,094	134,200	145,621	157,348	169,375	181,693	194,296	
0.88	123,204	134,313	145,736	157,467	169,497	181,818	194,424	
0.89	123,313	134,425	145,852	157,586	169,618	181,942	194,551	
0.90	123,423	134,538	145,968	157,705	169,740	182,067	194,679	
0.91	123,532	134,651	146,084	157,824	169,862	182,192	194,806	
0.92	123,642	134,763	146,200	157,943	169,984	182,317	194,934	
0.93	123,752	134,876	146,316	158,062	170,106	182,441	195,061	
0.94	123,861	134,989	146,432	158,180	170,228	182,566	195,189	
0.95	123,971	135,102	146,548	158,300	170,350	182,691	195,317	
0.96	124,081	135,215	146,664	158,419	170,472	182,816	195,444	
0.97	124,190	135,328	146,780	158,538	170,594	182,941	195,572	
0.98	124,300	135,441	146,896	158,657	170,716	183,066	195,700	
0.99	124,410	135,554	147,012	158,776	170,838	183,191	195,827	

APPENDIX C

Additional Procedural Flowcharts


Daily Activity
RO to monitor flow by 8:00 AM
RO to make required adjustments by 10:00AM
Internet or Gaging Station Outage
RM to monitor flow at gaging station
RM to notify RO of condition
RO to adjust flow if appropriate
During Spill Conditions
RO to monitor flow over spillway by 10:00 AM
Has migration release been triggered?
Yes
Is flow over spillway greater than 250 cfs?
Yes
RO to release greater than or equal to habitat flow
No
RO to release greater than or equal to habitat flow
No
RO to notify RM
RO to begin ramp up proceedure for minimum migration flow by noon
RO to Confirm with RM
Contingency Measure or Accidental Lapse
RO & RM to restore required flow ASAP
RM to notify FERC and NMFS

APPENDIX D

Santa Felicia Release Ramping Procedure Flowchart

Santa Felicia Ramping Procedure Flowchart