



State Water Resources Control Board

April 23, 2024

Ms. Melissa Rondou Licensing and Compliance Manager STS Hydropower, LLC – Affiliates of Eagle Creek Renewable Energy 7315 Wisconsin Avenue, Suite 1100W Bethesda, MD 20814 Sent via Email: melissa.rondou@eaglecreekre.com

Kanaka Hydroelectric Project License Surrender Federal Energy Regulatory Commission Project No. 7242 Butte County Sucker Run Creek

DENIAL WITHOUT PREJUDICE OF REQUEST FOR WATER QUALITY CERTIFICATION FOR REMOVAL AND DECOMMISSIONING OF KANAKA POWERHOUSE FOR KANAKA HYDROELECTRIC PROJECT LICENSE SURRENDER

Dear Ms. Rondou:

On May 12, 2023, the State Water Resources Control Board (State Water Board) received a water quality certification (certification) application from STS Hydropower, LLC (STS) for the Removal and Decommissioning of the Kanaka Powerhouse for the Kanaka Hydroelectric Project (FERC Project No. 7242) License Surrender (License Surrender Project) pursuant to section 401 of the federal Clean Water Act (CWA) (33 U.S.C. § 1341). The Kanaka Hydroelectric Project is located on private property along Sucker Run Creek in Butte County, approximately 15 miles from Oroville, California. The State Water Board provided public notice of the request for certification pursuant to California Code of Regulations, title 23, section 3858 on May 26, 2023, by posting information describing the License Surrender Project to the State Water Board's website.

After review of the certification application and other relevant information, the State Water Board must either: (1) issue an appropriately conditioned certification; or (2) deny certification. (Cal. Code Regs., tit. 23, § 3859.) The State Water Board may issue certification if the State Water Board determines that an activity will comply with applicable water quality standards and other appropriate requirements of state law. The State Water Board may deny a certification application if compliance with water quality standards and other appropriate requirements, but the application suffers from some procedural inadequacy. (Cal. Code Regs., tit. 23, § 3837, subd. (b)(2).) The State Water Board may also deny a certification application if the

E. JOAQUIN ESQUIVEL, CHAIR | ERIC OPPENHEIMER, EXECUTIVE DIRECTOR

State Water Board has requested supplemental information and the federal period for certification will expire before the State Water Board has time to receive and properly review the supplemental information. (Cal. Code Regs., tit. 23, § 3836, subd. (b).)

Additionally, under federal regulations, the certifying authority may grant certification, grant certification with conditions, deny certification, or expressly waive certification. (40 C.F.R. § 121.7, subd. (a).) A denial of certification should include a statement explaining why the certifying authority cannot certify that the activity will comply with water quality requirements, including but not limited to a description of any missing water quality-related information if the denial is based on insufficient information. (40 C.F.R. § 121.7, subd. (e).)

STS has not provided sufficient information to inform a determination that the Project as proposed will comply with water quality objectives in the *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin* (SR/SJR Basin Plan), which are designated to protect beneficial uses. The federal review period, which concludes on May 12, 2024, does not provide adequate time to receive and review the supplemental information that is needed to inform Project water quality impacts. (Cal. Code Regs., tit. 23, § 3836, subd. (b).) Consistent with federal regulations, the certifying authority (State Water Board) cannot certify that the Project will comply with water quality requirements at this time. (40 C.F.R. § 121.7, subd. (e).)

Background

In 2017, the Ponderosa Fire severely damaged the Kanaka Hydroelectric Project's substation, interconnection transmission line and associated power poles, and powerhouse. As a result, on May 20, 2020, STS decided to surrender the Project's Federal Energy Regulatory Commission (FERC) license and to permanently remove the Project's hydroelectric generation.

The License Surrender Project, as proposed, includes: (1) removal of remaining Project infrastructure at the Kanaka powerhouse and substation (i.e., powerhouse structure and slab, generator and turbine, electrical equipment, substation slab, fencing, etc.); (2) abandonment of the Kanaka Diversion Dam intake, penstock, and tailrace; and (3) abandonment of the Kanaka Diversion Dam, including installation of a sand and gravel plug in the dam's wet well to prevent dam operations (i.e., diversions to the penstock) and allow creek flows to flow over the dam or drain through a water level regulation gate.

Additional Information Requests – Federal Energy Regulatory Commission

On February 14, 2024, FERC issued an Additional Information Request (AIR) to STS requesting STS: (1) clarify if and when the intake valve and flap gate to the penstock was closed following the 2017 Ponderosa Fire; (2) clarify the number of penstock leaks; (3) quantify the extent of erosion caused by penstock leaks as well as the environmental effect of associated erosion; (4) describe any plans STS may have to remediate erosion areas; (5) describe any measures taken to prevent petroleum-based products from

escaping the powerhouse following the Ponderosa Fire; and (6) provide a plan and schedule for removal of accumulated sediment from the intake wet well and assurance that the flap gate remains in the closed position.

With respect to water quality protections, State Water Board staff have overlaping information needs to those identified in FERC's February 14, 2024, AIR and are monitoring the Kanaka Hydroelectric Project's FERC docket for additional information submittals from STS.

Additional Information Requests – State Water Board

To inform the License Surrender Project's certification action as well as environmental analysis, on October 11, 2023, State Water Board staff attended a site visit and observed that Sucker Run Creek was being diverted into the penstock. The penstock had several breaks where staff observed water being discharged into the surrounding forested area. Staff noted a recent erosion event on a hill slope adjacent to one of the breaks in the penstock. Additionally, STS staff informed State Water Board staff that the access road was being changed from an unnamed road located off Utility Road 3 to an unnamed road located off Sucker Run Road.

Following the site visit, on January 31, 2024, State Water Board staff sent STS a letter requesting information about ongoing and potential future water quality impacts to inform the pending certification action. State Water Board staff's January 31, 2024, letter requested complete responses by March 1, 2024 (Attachment A: Information Request for Kanaka Hydroelectric Project License Surrender).

On February 29, 2024, STS provided responses to the State Water Board and FERC's requests for additional information. STS's responses did not provide adequate information to address the needs identified in State Water Board staff's January 31, 2024, letter. In particular, STS's responses did not provide: (1) information on the structural integrity of the penstock or potential water quality impacts associated with the penstock leaks; (2) new data or information related to the oil and grease observed in the Kanaka Powerhouse maintenance pit; (3) the location of any of the leaks in the penstock (State Water Board staff identified at least three leaks in the penstock and it is unclear whether STS has examined the entire exposed length of the penstock to determine if there are additional leaks); (4) any additional measures that STS has or will implement to ensure that erosion from the failed culvert system that is part of the existing access road does not negatively impact water guality: (5) any actions that STS has or will implement to mitigate slope instability or sediment transport into Sucker Run Creek; (6) a plan or measures to prevent wildlife and water from accessing the penstock following dam and penstock abandonment; and (7) quantification of the amount of sediment entrained in the penstock or any additional details on STS's proposed plan to excavate the sediment out of the wet well so that the penstock flap gate can be closed.

The License Surrender Project, as described in STS's certification application, would leave many aspects of the existing Kanka Hydroelectric Project in place. The information provided by STS in its certification application is that the penstock had been dewatered and the Project would result only in potential discharges from sealing the intake gate, removing the Kanaka Powerhouse, and any other associated activities required to accomplish those tasks. However, as described in an STS memo titled *Kanaka Site Work Memo – October 25-26, 2023, Memo* (Work Memo), approximately 30 inches of sediment was entrained in the wet well and an unknown amount of sediment has passed into the penstock as a result of ongoing¹ diversions following the 2017 Ponderosa Fire.

Questions remain about potential impacts from the unmanaged diversions and potential ongoing hillslope instability caused by the penstock leaks. Specifically, State Water Board staff are unable to determine the structural integrity of the penstock and if penstock leaks would continue following the License Surrender Project. During the October 11, 2023 site visit, State Water Board staff and representatives from STS identified three penstock leaks but were unable to access two of the leaks and did not walk the entire length of the penstock. In addition, the weight of sediment entrained in the penstock, which is currently proposed to be abandoned in place, could jeopardize the structural integrity of the penstock bridge crossing Sucker Run Creek. The penstock leaks appear to have resulted in erosion with associated water quality impacts and have the potential to contribute to hillslope instability that could result in ongoing discharges of sediment, settleable material, suspended material, and turbidity to Sucker Run Creek that could exceed water quality objectives in the SR/SJR Basin Plan. Increased sediment inputs from the Kanaka Hydroelectric Project's remaining unmanaged infrastructure following decommissioning and license surrender have the potential to impact aquatic resources and other beneficial uses of Sucker Run Creek. Additional information regarding existing and potential future discharges from the penstock and any repairs or other actions proposed to address such discharges are needed to inform a certification action for the License Surrender Project.

In summary, as described in Attachment A (Board's January 31, 2024 Information Request), State Water Board staff requested supplemental information related to potential ongoing discharges from penstock leaks, access road culvert, and the oil and grease identified in the Kanaka Powerhouse maintenance pit. This information request also conveys concerns with sediment remaining in the penstock following decommissioning that could lead to penstock breaks along the penstock bridge that could lead to additional discharges. This additional information is needed to inform a certification action for the License Surrender Project. With consideration of the outstanding information and review of the information provided in STS's February 29, 2024 submittal there remains insufficient information and time remaining

¹ In its February 29, 2024 response to a State Water Board information request, STS states that the consulting firm Northbrook Power Management confirmed that the wet well intake valve was closed as of September 13, 2017. This was while the Ponderosa Fire was still active. STS has provided no explanation for how State Water Board staff found the wet well intake locked in the open position on October 11, 2023.

for an informed certification action in the federal review period, which ends on May 11, 2024. (Cal. Code Regs., tit. 23, § 3836, subd. (b).) Consistent with federal regulations, the certifying authority (State Water Board) cannot certify that the discharge from the proposed Project will comply with water quality requirements. (40 C.F.R. § 121.7, subd. (a).)

Water Quality Certification Action

Based on available information and the ongoing need for additional information to inform License Surrender Project related impacts to water quality, STS is hereby notified that STS's May 12, 2023 request for certification for the License Surrender Project is denied without prejudice, effective the date of this letter. The State Water Board encourages STS to submit a new request for certification once STS has adequately addressed the Project's potential to exceed SR/SJR Basin Plan water quality objectives, which may be accomplished through additional information and/or a revised project description.

State Water Board staff look forward to working with STS to resolve the State Water Board's water quality concerns. Staff will continue to review materials and work with STS on addressing potential discharges of sediment and other chemical constituents associated with the Project towards the goal of acting on a future certification request for the License Surrender Project once the additional information noted in this letter and its attachment (Attachment A: Information Request for Kanaka Hydroelectric Project License Surrender) are provided.

If you have questions regarding this letter, please contact Glenn Hoffmann, Kanaka Hydroelectric Project Manager, by email to: <u>Glenn.Hoffmann@waterboards.ca.gov</u> or phone call to: (916) 319-9943. Written correspondence should be directed to: State Water Resources Control Board; Division of Water Rights - Water Quality Certification Program; Attn: Glenn Hoffmann; P.O. Box 2000; Sacramento, CA 95812-2000.

Sincerely,

Eric Oppenheimer Executive Director

Enclosure: Attachment A: Information Request for Kanaka Hydroelectric Project License Surrender (January 31, 2024)

Attachment B: Certificate of Service

ec: Debbie-Anne Reese, Acting Secretary Federal Energy Regulatory Commission **Via efile to FERC Docket**

> U.S. Environmental Protection Agency Region 9, Water Division Email: <u>R9cwa401@EPA.gov</u>

Ms. Taylor Powell, Project Manager United States Army Corps of Engineers Email: Taylor.M.Powell@usace.army.mil

Patrick Pulupa, Executive Officer Central Valley Regional Water Quality Control Board Email: <u>Patrick.Pulupa@waterboards.ca.gov</u>

Stephanie Tadlock, Senior Environmental Scientist Central Valley Regional Water Quality Control Board Email: <u>Stephanie.Tadlock@waterboards.ca.gov</u>

Beth Lawson, Senior Hydraulic Engineer California Department of Fish and Wildlife Email: <u>Beth.Lawson@wildlife.ca.gov</u>

Michael Maher, Senior Environmental Scientist California Department of Fish and Wildlife Email: <u>Michael.Maher@wildlife.ca.gov</u>

Ms. Emily Moghaddas, Deputy Supervisor United States Forest Service Email: <u>Emily.Moghaddas@usda.gov</u>

Mr. Richard Kuyper, Branch Chief Southern Sierra United States Fish and Wildlife Service Email: <u>Richard.Kuyper@fws.gov</u>

Mr. Sean Noonan, Program Manager Psomas Email: sean.noonan@psomas.com

Ms. Shannon Luoma, Licensing and Regulatory Section Manager Kleinschmidt Associates **Email:** <u>shannon.luoma@kleinschmidtgroup.com</u>

ebc: Interested Parties List

ATTACHMENT A: INFORMATION REQUEST FOR KANAKA HYDROELECTRIC PROJECT LICENSE SURRENDER

ENCLOSURES:

ATTACHMENT A-1: ADDITIONAL INFORMATION REQUESTS FOR KANAKA HYDROELECTRIC PROJECT LICENSE SURRENDER WATER QUALITY CERTIFICATION APPLICATION

ATTACHMENT A-2: SITE VISIT PHOTOS





State Water Resources Control Board

January 31, 2024

Ms. Melissa Rondou Licensing and Compliance Manager STS Hydropower, LLC Affiliates of Eagle Creek Renewable Energy 7315 Wisconsin Avenue, Suite 1100W Bethesda, MD 20814 Sent via Email: melissa.rondou@eaglecreekre.com

Kanaka Hydroelectric Project License Surrender Federal Energy Regulatory Commission Project No. 7242 Butte County Sucker Run Creek

INFORMATION REQUEST FOR KANAKA HYDROELECTRIC PROJECT LICENSE SURRENDER

Dear Ms. Rondou:

On October 11, 2023, State Water Resources Control Board (State Water Board) staff, representatives from STS Hydropower, LLC (STS), and Psomas¹ attended a site visit of the Kanaka Hydroelectric Project License Surrender (Project). The purpose of the site visit was to assess the Project's existing environmental conditions as part of the State Water Board's California Environmental Quality Act (CEQA) process. During the site visit, State Water Board staff were informed of access road changes and identified ongoing water diversions and associated leaks in the Project's penstock along with an eroded hillslope. Field observations raised potential water quality concerns that must be addressed as part of the federal Clean Water Act water quality certification (certification) process.

The current deadline for the Project's certification action is May 11, 2024. As such, State Water Board staff request STS provide responses to State Water Board staff's information request (see *Attachments A: Additional Information Requests for Kanaka Hydroelectric Project License Surrender Water Quality Certification Application*) by March 1, 2024 Late responses may result in the State Water Board not having adequate time to evaluate STS's responses and assess potential water quality impacts associated with the Project. Additionally, please see Attachment B: Site Visit Photos for photos taken by State Water Board staff during the October 11, 2023 site visit or provided by STS of conditions during other site visits.

¹ Psomas is the State Water Board's California Environmental Quality Act consultant. E. JOAQUIN ESQUIVEL, CHAIR | ERIC OPPENHEIMER, EXECUTIVE DIRECTOR

If you have questions regarding this letter, please contact Glenn Hoffmann, Project Manager, by email to: <u>Glenn.Hoffmann@waterboards.ca.gov</u>. Written correspondence should be directed to:

State Water Resources Control Board Division of Water Rights – Water Quality Certification Program Attn: Glenn Hoffmann P.O. Box 2000 Sacramento, CA 95812-2000

Sincerely,

Glenn Talley Hoffmann

Glenn Hoffmann Engineering Geologist Division of Water Rights

Enclosures: Attachment A: Additional Information Requests for Kanaka Hydroelectric Project License Surrender Water Quality Certification Application

Attachment B: Site Visit Photos

ec (with enclosures): Ms. Debbie-Anne Reese, Acting Secretary Federal Energy Regulatory Commission Via e-filing to Docket for Project No. 7242

> Mr. Michael Maher, Senior Environmental Scientist Specialist California Department of Fish and Wildlife Email: <u>Michael.Maher@wildlife.ca.gov</u>

Ms. Emily Moghaddas, Deputy Supervisor United States Forest Service Email: Emily.Moghaddas@usda.gov

Mr. Richard Kuyper, Branch Chief Southern Sierra United States Fish and Wildlife Service Email: <u>Richard.Kuyper@fws.gov</u>

Mr. Sean Noonan, Program Manager Psomas Email: <u>sean.noonan@psomas.com</u> Ms. Shannon Luoma, Licensing and Regulatory Section Manager Kleinschmidt Associates Email: <u>shannon.luoma@kleinschmidtgroup.com</u>

ATTACHMENT A: ADDITIONAL INFORMATION REQUESTS FOR KANAKA HYDROELECTRIC PROJECT LICENSE SURRENDER WATER QUALITY CERTIFICATION APPLICATION

Pursuant to section 401 of the Federal Clean Water Act (33 U.S.C. § 1341), STS Hydropower, LLC (STS) submitted a water quality certification (certification) application to the State Water Resources Control Board (State Water Board) on May 12, 2023. STS is requesting to surrender its Federal Energy Regulatory Commission (FERC) license for the Kanaka Hydroelectric Project. Actions associated with the surrender include a proposal to demolish the Kanaka Powerhouse and Substation, and permanently decommission the penstock by installing a cement plug in the intake pipe at Kanaka Diversion Dam. The Project does not include removal of the Kanaka Diversion Dam².

State Water Board staff attended a site visit on October 11, 2023, and observed that Sucker Run Creek was being diverted into the Project's penstock³. The penstock had several breaks where staff observed water being discharged into the surrounding forested area (*Attachment B: October 11, 2023, State Water Board Staff Site Visit Photos 1&2.* Additionally, staff noted a recent erosion event (see Photos 1-3 in Attachment B) on a hillslope adjacent to one of the breaks in the penstock.

On October 23, 2023, State Water Board staff met with STS staff to discuss the ongoing water diversion at Kanaka Diversion Dam. STS confirmed that the intake valve at the Kanaka Diversion Dam was locked in the open position and that STS had learned that the valve was open and diverting water a few weeks prior. On October 27, 2023 and October 31, 2023, STS confirmed that Kanka Diversion Dam diversions had ceased. The October 31, 2023 correspondence stated that STS was able to partially drain the penstock and divert water away from the wet well intake to reveal the bottom of the wet well. STS found that the wet well was filled with approximately 30 inches of sediment that prevented the penstock flap gate from fully closing. On December 28, 2023, STS filed a supplement to the Kanaka Hydroelectric Project Surrender Application briefly describing these inadvertent diversions. STS also stated that the exact date when water began entering the penstock is unknown.

While State Water Board staff appreciate that diversions have now ceased, questions remain about the potential impacts from the unmanaged diversions and any potential hillslope instability caused by the leaks from the Project's penstock. The penstock leaks have and may continue to contribute to hillslope instability and discharges of sediment, settleable material, suspended material, and turbidity to Sucker Run Creek that could exceed water quality objectives in the *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin* (SR/SJR Basin Plan). State Water Board

² Per email on July 6, 2023, STS states that the Kanka Diversion Dam is owned by the landowner (currently Texcell Inc.) and will remain in place following license surrender. ³ STS's FERC License Surrender Application (LSA page 1-9, 2-1, 4-3, and 4-13) and certification application (page 1) state that there have been no diversions at the Kanaka Diversion Dam into the penstock since the Ponderosa Fire in 2017.

ATTACHMENT A: ADDITIONAL INFORMATION REQUESTS FOR KANAKA HYDROELECTRIC PROJECT LICENSE SURRENDER WATER QUALITY CERTIFICATION APPLICATION

staff request additional opportunities to confirm diversions have ceased and further assess the impacts of penstock leaks.

Based on field observations and information from STS staff about Project design changes associated with Diversion Dam road access, State Water Board staff has the following questions:

- 1. Please clarify when STS first closed the intake valve to the wet well following the 2017 Ponderosa Fire. If STS collected information to confirm that diversions ceased or checked the integrity of the penstock at the time of closure or in subsequent years, please provide that information.
- 2. On October 27, 2023, STS provided a summary of a site visit that EcoKai Environmental, Inc conducted in mid-September 2023 that included a water sample taken from one of the maintenance pits within the burned remnants of the Kanaka Powerhouse. The sample results did not find any numeric exceedances within the maintenance pit. However, oil and grease were observed in the maintenance pit during the October 27, 2023 site visit⁴. Was any upstream data collected to provide the background condition of Sucker Run Creek or downstream of the Kanaka Powerhouse to determine if the powerhouse remnants impacted heavy metals or oil and grease in Sucker Run Creek? See Attachment B, Figures 5 to 7.
- 3. During the October 27, 2023 site visit, State Water Board staff identified at least three penstock leaks from the access road. Please clarify the total number of penstock leaks and their locations.
- 4. During the site visit, State Water Board staff identified failed culverts on the existing access road. Is STS proposing any additional measures to ensure the Kanaka Hydroelectric Project-related facilities left in place following the FERC license surrender are not contributing sediment to Sucker Run Creek?
- 5. During the field investigation, hillslope instability was observed at one of the penstock leaks (see Attachment B, Photos 2 and 3). Given that slope instability has been observed in close proximity to leaks from the penstock, will STS propose any slope stability or restoration actions at these locations to prevent sediment discharges to surface waters? Additionally, will STS propose any actions to seal or secure penstock leaks to prevent wildlife entrainment and/or ongoing water infiltration?
- 6. How much sediment does STS estimate has been entrained in the penstock? Additionally, does sediment entrainment affect the Project's proposal to cut and plug the penstock at the powerhouse? Based on STS's December 28, 2023, letter to FERC, STS is working to develop a plan to remove sediment from inside

⁴ The SR/SJR basin plan states that "Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses."

ATTACHMENT A: ADDITIONAL INFORMATION REQUESTS FOR KANAKA HYDROELECTRIC PROJECT LICENSE SURRENDER WATER QUALITY CERTIFICATION APPLICATION

the wet well to allow the penstock flap gate to fully close. Will this plan be circulated to the State Water Board and does STS plan to supplement its water quality certification application with this information?

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)



Photo 1 Failed pressure release system and erosion on downhill side of the Diversion Dam access road. Water discharges are associated with ongoing penstock diversions.

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)



Photo 2 Failed pressure release system and erosion on downhill side of the Diversion Dam access road. Hillslope instability shown in the background.

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)



Photo 3 Hillslope instability near penstock leak on downhill side of the road.

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)



Photo 4 Penstock intake valve locked in the open position.

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)

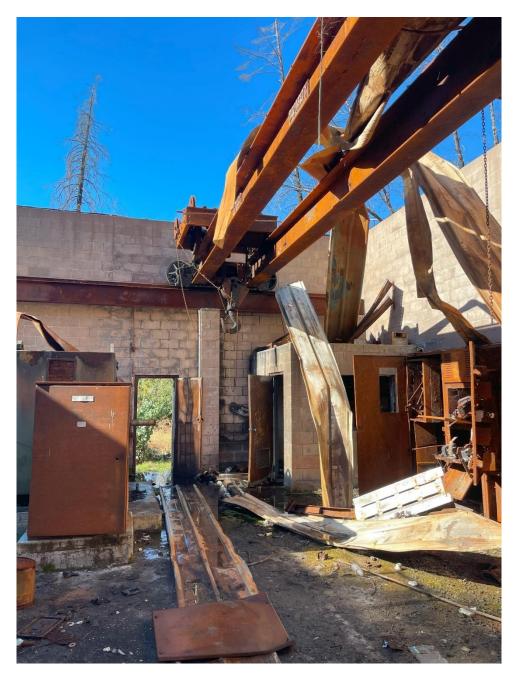


Photo 5 Powerhouse operational material left in place since the 2017 Ponderosa Fire.

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)



Photo 6 Maintenance pit full of water and penstock actively leaking.

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)



Photo 7 Water actively leaking from power generation equipment.

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)

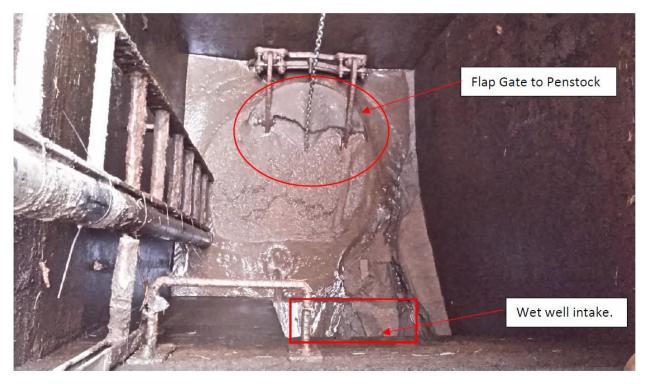


Photo 8 Sediment buildup in the wet well. (Photo taken from STS Hydropower, LLC memo summarizing field work provided to State Water Board staff on October 11, 2023)

(unless otherwise noted, photos taken by State Water Board staff during October 11, 2023 site visit)



Photo 9 Aerial of hillslope instability near penstock leak. (Photo taken from Google Earth dated May 11, 2021)

ATTACHMENT B: Certificate of Service

Certificate of Service

I hereby certify that I have this day filed electronically with the Federal Energy Regulatory Commission and served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated this 23rd day of April 2024.

Glenn Talley Hoffmann

Glenn Hoffmann Engineering Geologist Division of Water Rights State Water Resources Control Board Glenn.Hoffmann@waterboards.ca.gov