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SACRAMENTO
DIV OF WATER RIGHTS
STATE WATER RESOURCES CONTROL BOARD

Dorothy Rice, Executive Director
State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812

By hand delivery

RE: Water Quality Certification for Spring Gap-Stanislaus Hydroelectric Project, FERC No. 2130.

Petition for Reconsideration
Request for Abeyance
Petition for Stay
(Cal. Code Regs., tit. 23, §§ 3867, 3869)

Dear Ms. Rice:

This office represents the Tuolumne Utilities District (TUD) and we have been asked to file a Petition for Reconsideration, a Request for Abeyance, and a Petition for a Stay of your decision to grant a water quality certification for the above referenced project. It is the intent of this Petition to comply with the requirements set forth in California Code of Regulations, Title 23, Sections 3867 and 3869.

I. Name and address of Petitioner:

Tuolumne Utilities District
c/o Jesse Barton
1112 I Street, Suite 240
Sacramento, CA 95814
(916) 444-2880

II. Specific Board action of which the Petitioner requests reconsideration:

TUD requests that the State Water Resources Control Board (SWRCB) reconsider its issuance of a water quality certification (the "Certification") for the Spring Gap-Stanislaus Project, FERC No. 2130. A copy of the Certification is attached as **Exhibit A.**

TUD requests reconsideration because the terms of the Certification impose an unjustified and arbitrary reservoir elevation that disrupts and curtails the long-standing domestic water supply that has been the principal source of water to TUD's Tuolumne

Water System from Pinecrest Reservoir. This principal source of water serves approximately 44,000 people in Tuolumne County for which there is no alternative supply.[1] A map of TUD's water system is attached as **Exhibit B**.

In order to correct this, TUD further requests (detailed further in Section VI, pages 26-27) that the SWRCB rescind the Certification approved on September 15, 2008 and reissue a Certification which contains the Stanislaus Planning Action Team (SPLAT) Consensus Measures, discussed and described in detail herein, which were developed through a five-year collaborative process and the effects of which were thoroughly analyzed in the FERC Environmental Impact Statement.

The Certification is flawed in several respects.

First, the SWRCB acted beyond its jurisdiction in issuing the Certification because:

- The Certification is not based on any specific studies or evidence showing the water quality or the beneficial uses that are in jeopardy.
- The Certification substantially impairs TUD's water supply contract with PG&E. The Certification essentially deletes a provision in that contract that allows TUD to request water deliveries.

Second, the SWRCB did not conduct a fair hearing in adopting the Certification because:

- The SWRCB never consulted TUD or asked for its input as the Certification was being drafted. Based upon a review of the SWRCB records, the SWRCB did consult PG&E and the Forest Service, but failed to consult TUD, the entity that will ultimately use that water for consumptive uses in the county.

Third, the SWRCB did not proceed in the manner required by law because:

- The SWRCB ignored evidence submitted by SPLAT that recommended a more flexible drawdown curve for Pinecrest Reservoir. The exclusion of this evidence threatens the future of all collaborative processes.
- The SWRCB has elevated recreational uses of water to be senior to the domestic use of water, which violates the California Water Code.
- The SWRCB Mitigated Negative Declaration failed to identify and mitigate for 13 significant environmental impacts.
- The SWRCB is allowing the recreational use of a reservoir for which recreation is not a legally authorized purpose of use.
- Due to the unidentified significant environmental impacts, and the disagreement of experts, the SWRCB should have prepared an EIR.
- The SWRCB failed to develop a drawdown curve based upon an actual dry

[1] The critical importance of TUD's water supplies from the South Fork Stanislaus under the 1983 PG&E Agreement cannot be overemphasized. While TUD at one time hoped to be able to obtain a supplemental water supply from the Bureau of Reclamation out of New Melones Reservoir, that possibility ended in 1996 when the Bureau notified TUD that reliable water from New Melones would not be available due to the Bureau's obligations under the Central Valley Project Improvement Act, the Endangered Species Act, the December 1994 Bay Delta accord, and other water quality and environmental requirements. Since that time, the SWRCB's adoption of D 1641 has cemented additional downstream priority demands onto the New Melones supply, making that supply even more inaccessible to TUD as an alternate supply in dry years.

year.

- The SWRCB failed to consider evidence of TUD's actual current and future water use. Instead, the SWRCB relies on water use numbers that are seven years old and do not reflect actual or anticipated future peak water demand factors.
- The SWRCB failed to recognize that Herring Creek is not a source of water in dry water years. Thus, the SWRCB overestimates the amount of water available to TUD.

Fourth, the Certification is not supported by the findings.

- The conditions in the Certification are inconsistent with the findings in the Mitigated Negative Declaration.

Fifth, the SWRCB findings are not supported by the evidence.

- The Certification is based upon the false assumption that SPLAT desired a fixed Pinecrest elevation.
- There is no evidence that supports the SWRCB conclusion that a fixed Pinecrest elevation will still be able to provide TUD with adequate water during the summer. TUD staff and its consultants found six significant errors and flaws with the SWRCB analysis.
- The CHEOPS model that the SWRCB used to draft the Certification is deeply flawed and incomplete. The model is difficult to operate, is prone to crash, and is not transparent in how it works. Furthermore, the model has never been tested for accuracy against actual data and does not account for natural water losses.
- The SWRCB failed to recognize TUD's contractual water rights.

III. The date on which the order was made by the Board:

September 15, 2008.

IV. The reasons why the action was inappropriate or improper:

1. The SWRCB has Acted Without, or in Excess of, its Jurisdiction.

a. The SWRCB Exceeded its Authority when it Issued the Certification not based on Water Quality Impairment.

As correctly noted in paragraphs 1 and 2 of the Findings of the Certification, the Federal Clean Water Act was enacted to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." "Section 401 of the Clean Water Act requires every applicant for a federal license or permit which may result in a discharge to navigable waters to provide the licensing or permitting federal agency with certification that the project will be in compliance with specified provisions of the Clean Water Act." In order to implement these provisions of the Clean Water Act, the Regional Water Quality Control Boards

have adopted water quality control plans (basin plans) for each watershed basin in the State.

The Regional Water Quality Control Board of the Central Valley Region has adopted the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (the "Basin Plan") and implements portions of it through the 401 certification process. Page i-1.00 of the Basin Plan provides: "[a]ccording to Section 13050 of the California Water Code, Basin Plans consist of a designation or establishment for the waters within a specified area of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives." Thus, basin plans designate the beneficial uses of waters within each watershed basin, and water quality objectives designed to protect those uses.

Although this is the legal background for the SWRCB's 401 certification program, the SWRCB does not have the authority to issue 401 certifications unsupported by water quality objectives, analyses, or standards. This is what has occurred within the Certification because the SWRCB imposes additional requirements other than those developed and agreed to in the Stanislaus Planning Action Team (SPLAT) planning process. However, these additional requirements are not supported by specific rationales or evidence as to how they relate to the beneficial uses of the waters in the project area, let alone any specific water quality standards or objectives. Further, the EIS that the SWRCB cites in its Initial Study/Mitigated Negative Declaration (IS/MND) concludes that even under existing conditions and operations (i.e. the No Action/Project Alternative), the Project maintains downstream beneficial uses. As such, the Recommended Resource Measures in the SPLAT Consensus Measures would be considered environmental enhancements to further ensure the adequate protection of designated beneficial uses and properly balance the needs of various flow-dependant resources. Instead, the SWRCB appears to impose its own requirements and claim that it can directly regulate a stream system under the Clean Water Act regardless of whether the regulation has anything to do with water quality or whether it is meeting its beneficial use designation. In this case, the SWRCB has exceeded its jurisdiction and provides no evidence or rationale for imposing additional requirements to meet specific water quality objectives or the beneficial uses <u>that are already being met under the SPLAT Measures</u>.

Relevant to this Petition, on page 22 of the IS/MND, SWRCB staff states that it developed an alternative Pinecrest drawdown and stream flow regime which is intended to provide certainty that water quality standards will be met. This alternative purports to achieve the goals developed by SPLAT to meet TUD's consumptive demand without yearly consultation. However, the specific water quality standards to be met are not identified and the IS/MND contains no evidence or analysis of how reservoir levels below 5,610' before Labor Day or the additional stream flow requirements will affect water quality or be affected by continued consumptive uses below that level. It appears this elevation has been selected merely because it may maintain access to a boat dock (see SWRCB Response to Comments and our later discussion on the validity of this finding).

Furthermore, there is evidence that holding water back to maintain reservoir levels at 5610' through Labor Day has the potential to affect water quality downstream. Specifically, such requirements can cause Lyons Reservoir to drop below 1500 acre-feet in storage. This has been proven to cause water quality concerns such as higher water temperatures and releases, and algae blooms, which then result in treated water taste and odor concerns to downstream domestic customers. A letter from TUD discussing the water quality problems is attached as **Exhibit C.**

b. Impairs TUD's Water Supply Contract with PG&E by Not Allowing TUD to Call for Water.

Page 12 of the Certification provides:

> In years when Pinecrest Reservoir cannot be maintained above target elevation 5,610 feet, water releases during the period from the End of Spill through Labor Day shall only be made to meet the minimum streamflow schedule and Spring Gap Powerhouse Demand. (Emphasis added.)

However, TUD's 1983 contract with PG&E provides:

> The supplemental supply of water shall be that quantity of free water calculated pursuant to Exhibit H, plus water subject to the charges specified in Article 7(f) that is released at County's request in the South Fork Stanislaus River...(Emphasis added.)

Thus, an essential provision in TUD's contract with PG&E is the ability to make a call for additional supplemental water supplies. The Certification takes away TUD's ability to make this request and substantially impairs its contract and therefore its ability to provide water to its customers. Such a substantial impairment without adequate justification is a violation of both the federal and state constitutions.[2]

TUD, and its predecessors in interest, have reasonably relied on PG&E's 1928 adjudicated water rights for decades, and the SWRCB cannot step in and take that reliance away without substantial justification.[3] Since the SWRCB is impairing TUD's contract for the sake of beneficial uses that have not been adequately explained or justified through research and documentation, the SWRCB has exceeded its authority.

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[2] The US Constitution, art. I, § 10 prohibits the states from passing any "Law impairing the Obligation of Contracts"; the California Constitution, art. I, § 9, prohibits the state from passing a "law impairing the obligation of contracts." These identical clauses are interpreted interchangeably in the federal and state courts. *See Hermosa Beach Stop Oil Coalition v. City of Hermosa*, Beach 86 Cal. App. 4th 534.

[3] *U.S. v. State Water Resources Control* Board, 182 Cal. App. 3d 97, 146-47 (227 Cal. Rptr. 161). Although this case dealt with permits, as opposed to adjudicated water rights, it does provide a general discussion on the impairment of contracts.

2. The SWRCB Did Not Conduct a Fair Hearing.

a. Conditions 4, 5, and 6 of the Certification Were Developed Based upon Input from Everyone but TUD.

Throughout the formulation of Condition 4 of the Certification, which appears to have occurred between the years of 2003 and 2006, the SWRCB solicited comments from PG&E representatives and the Forest Service without once allowing TUD to review the draft condition and comment on it. We have attached copies of the correspondence between the SWRCB and these representatives as **Exhibit D**. This is despite the fact that TUD holds a contract with PG&E for the delivery of water released from Pinecrest into its water system and TUD is the beneficial user of a large portion of that water. Such a contract stands for the proposition that:

> the persons who use the water are an integral part of the appropriator's right to take that water from its natural course in the first place. Without their beneficial use of the water, the appropriator would have no right to take the water. If the permit holder seeks the Board's permission to change the purpose of use that provided the basis for the acquisition of its permit in the first place, there is no reason the persons who, through contracts with the permit holder, actually put the water to the beneficial use sought to be changed should be precluded from asserting to the Board that the change will operate to the injury of their rights, simply because those rights derive from contract. (*State Water Resources Control Bd. Cases* (2006) 136 Cal.App.4th 674, 804; 39 Cal.Rptr.3d 189, 293.)

Thus, as a legal user of that water, TUD has a right to be consulted so that it may consider any impacts the changes may have on its beneficial use of that water. The SWRCB denied TUD the right to participate in the ongoing consultations during the development of Condition 4.

3. The SWRCB Did Not Proceed in the Manner Required by Law.

a. SPLAT Evidence was Wrongly Excluded and Ignored. The Certification does not include or adequately address the formal recommendations made by the Stanislaus Planning Action Team (SPLAT). The SPLAT recommendations represent carefully crafted measures that balanced the competing interests in the Stanislaus Basin. Ignoring these recommendations undermines the purpose of collaborative stakeholder groups in general and all of SPLAT's efforts specifically. This sends the wrong message to the federal, state, and local agencies, as well as non-governmental organizations and the public that attempt to resolve conflict and competing interests in the state's resources in a non-confrontational and productive manner. By continuing to ignore SPLAT's recommendations, the SWRCB threatens the future of collaborative stakeholder groups.

SPLAT was a collaborative group composed of the stakeholders in the Stanislaus River system. It was composed of public and private entities to address a broad range of resource issues in FERC relicensing proceedings of various hydroelectric facilities. SPLAT was composed of the following groups:

- Pacific Gas and Electric
- Tri-Dam Project
- Central Sierra Environmental Resources Center
- Trout Unlimited
- Tuolumne Utilities District
- USDA-Forest Service
- National Park Service
- Friends of the River
- American Whitewater
- State Water Resources Control Board
- Department of Fish and Game

SPLAT met over 150 times over the course of five years to collaboratively discuss and address the competing interests of the Stanislaus River watershed. As a result of these meetings, on March 1, 2004, SPLAT submitted to FERC its Consensus on Protection, Mitigation, and Enhancement Measures for the Spring Gap-Stanislaus Project.[4] Included in SPLAT's submission was Measure 32, which established the objectives for determining the drawdown of Pinecrest Reservoir. In Measure 32, SPLAT set forth four overall operational objectives for Pinecrest Reservoir.

- Consumptive Water Supply Objectives
- Ecological Objectives
- Recreational Objectives
- Power Generation Objectives

Each one of these objectives is interrelated and recognized the need to address each objective collectively, rather than selectively. For example, consumptive water supply deliveries were to be "managed consistent with the specified ecological and recreational objectives to the greatest extent feasible"; stream flows needed to be steady "and still meet downstream consumptive water supply demands"; the water elevation of Pinecrest needed to be maintained as high as feasible, "consistent with achieving the specified ecological and consumptive water supply objectives"; and flows in excess of "that needed to meet ecological, consumptive and recreational objectives are diverted for power generation." (See Measure 32, page 25.)

According to SPLAT, "concurrence [on these measures] is conditional on the resource agencies with authority to condition the license adopting in their final conditioning documents these same measures to address the subject resources without materially altering the fundamental concepts or key requirements." In addition, on page 3 of the measures the following is added:

> The Spring Gap-Stanislaus Project SPLAT Recommended Resource Measures are the result of five years of work and negotiation by the SPLAT participants,

[4] The SWRCB and DFG did not join in the concurrence of the measures citing their need to remain independent.

> and is meant by SPLAT to be considered as a whole due to the fact that some SPLAT participants accepted certain measures based on the inclusion or exclusion of other measures.

Thus, the consensuses upon which the SPLAT measures are based are the result of years of negotiation and the typical give-and-take that commonly occurs during negotiation. The measures were explicitly not meant to be reviewed by an administrative body which would then unilaterally pick and choose which measures it agreed with and which it did not. Yet this is what the SWRCB has done by rejecting SPLAT Measure 32 and then substituting in its place Condition 4, which does not address, at all, consumptive water demand.

This sends a terribly destructive policy message to SPLAT and the public. If the SWRCB is going to hold veto power over any and all consensus building projects in the state, and reserve for itself the unilateral power to unravel thousands of hours of negotiated settlement, then there is little point in embarking on the frustration and expense associated with stakeholder consensus building groups in the first place. This could have devastating and long-lasting impacts throughout a state that has significant conflicts over water and frequently relies on stakeholder consensus groups to resolve the conflict in a manner that does not result in years of litigation. The Phase 8 Settlement and the Yuba River Accord are two examples where consensus building helped resolve what many considered to be an intractable problem.

b. <u>The SWRCB has Wrongly Elevated Recreation, Instream Flows, and Power Production Over Domestic Uses</u>

TUD has a contract with PG&E under which PG&E is obligated to deliver to TUD water that TUD then distributes to its customers. This contract and the water supplied under it provide TUD with 95% of its source of water, which comes solely from the South Fork Stanislaus River, and for which there is no alternative supply. This water is used for a variety of purposes including domestic and agricultural.

Condition 4 of the Certification provides in relevant part:

> In years when Pinecrest Reservoir cannot be maintained above target elevation 5,610 feet, water releases during the period from the End of Spill through Labor Day shall only be made to meet minimum streamflow schedule and Spring Gap Powerhouse Demand.

Thus, if Pinecrest cannot be maintained at 5,610', the water elevation arbitrarily selected by the SWRCB for recreation purposes, then water shall only be released for instream flow requirements and power production. This is an error in law because it ignores TUD's contractual rights and its consumptive water demand and attempts to elevate recreation, instream flow requirements, and power production over the domestic use of water. This is inconsistent with and in violation of California law:

Water Code Section 106 provides:

> It is hereby declared to be the established policy of this State that the use of water for domestic purposes is the highest use of water and the next highest use is for irrigation.

Water Code Section 1254 provides:

> In acting upon applications to appropriate water the board shall be guided by the policy that domestic use is the highest use and irrigation is the next highest use of water.

And Water Code Section 106.5 provides:

> It is hereby declared to be the established policy of this State that the right of a municipality to acquire and hold rights to the use of water should be protected to the fullest extent necessary for existing and future uses, but that no municipality shall acquire or hold any right to waste water, or to use water for other than municipal purposes, or to prevent the appropriation of water in excess of its reasonable and existing needs to useful purposes by others subject to the rights of the municipality to apply such water to municipal uses as and when necessity therefore exists.[5]

These three statutes individually, and cumulatively, stand for the proposition that water for domestic use takes precedence over all other uses. This is not to say that in the event of competing uses lower priority uses have to yield in total. To the contrary, what we are saying is that domestic use must be weighed with other competing uses and then given deference to ensure domestic needs are adequately met. Ignoring these rules of law and issuing a Certification that puts recreation, instream uses, and power production in front of domestic and municipal use is a legally reversible error.

c. <u>The SWRCB Mitigated Negative Declaration Improperly Concluded that the Proposed Project would not Result in Environmentally Significant Effects.</u>

   i. The Certification does not allow the transfer of water from Pinecrest Reservoir to Lyons Reservoir, TUD's primary downstream supply reservoir, from the end of spill at Pinecrest until Labor Day. This will jeopardize the water supply for 77% of the county's population during <u>and after</u> this period. This can be seen by performing a variety of calculations involving the flow conditions proposed in the Certification. Since at least three inflow conditions are possible, TUD performed three separate calculations. The first calculation starts on July 4th with Lyons Reservoir full, a flow of 10 cfs in the Philadelphia Reach (i.e. inflow into Lyons), and a fish release out of Lyons of 8 cfs in July and 5 cfs August through September.[6] The calculations reveal that even with the

[5] TUD's Tuolumne Water System is the sole provider of a domestic water supply to the communities in Tuolumne County, including Sonora, Jamestown, Columbia, and Twain Harte, and to several thousand residences within the service area of the water system.

[6] These are the new flow requirements out of Lyons Reservoir. See attached **Exhibit E**.

2001 TUD demand (which is too low and discussed elsewhere in this Petition) the water quality target of 1500 acre-feet in Lyons cannot be met, unless Pinecrest is dropped below 5610' before Labor Day. Under this optimistic operational scenario of having Lyons full as late as reasonable in the season and meeting the instream flow requirement above and below Lyons Reservoir, the District cannot meet its water quality objective of 1500 acre-feet in Lyons Reservoir. Instead, what would happen is that Lyons Reservoir would be down to 1259 acre-feet on Labor Day and would ultimately have to be drawn down to 670 acre-feet on September 20 before TUD's requests for water could reverse the ongoing reductions in storage volume. This is partly due to the required ramping rates. The spreadsheet used in the first calculation, and a graph depicting the results is attached as **Exhibit F**.

An additional calculation was performed using the actual 2001 data. In 2001, Lyons actually stopped spilling on June 8th, not July 4th, as was used for the first calculation. However, the Philadelphia Canal was diverting water for twelve additional days. Assuming that TUD had the foresight to request a water transfer during these twelve days, the second calculation starts on June 20th with Lyons Reservoir full, a flow of 15 cfs in the Philadelphia Reach (i.e. inflow into Lyons), and a fish release out of Lyons of 8 cfs in July and 5 cfs August through September.[7] These calculations reveal for the second time that with the actual 2001 TUD demand the water quality target of 1500 acre-feet in Lyons cannot be met, unless Pinecrest is dropped below 5610' before Labor Day. Under this scenario, the increased flows in the Philadelphia Reach are not enough to compensate for the inability to transfer water from Pinecrest to Lyons during this extended period. Instead, what would happen is that Lyons Reservoir would be drawn down to 1100 acre-feet on Labor Day and would ultimately be further drawn down to 671 acre-feet on September 18 before TUD's requests for water could reverse the ongoing reductions in storage volume. The spreadsheet used in the second calculation, and a graph depicting the results is attached as **Exhibit G**.

The final calculation used future demand estimates for year 2035. The calculation starts on July 4th with Lyons Reservoir full, a flow of 10 cfs in the Philadelphia Reach (i.e. inflow into Lyons), and a fish release out of Lyons of 8 cfs in July and 5 cfs August through September.[8] The calculations reveal that using the estimated 2035 TUD demand, the water quality target of 1500 acre-feet in Lyons cannot be met, unless Pinecrest is dropped below 5610' before Labor Day. Under this operational scenario of having Lyons full as late as reasonable in the season and meeting the instream flow requirement above and below Lyons Reservoir, the District cannot meet its water quality objective of 1500 acre-feet in Lyons Reservoir. Instead, what would happen is that

[7] See footnote 6.
[8] See footnote 6.

Lyons Reservoir would be down to 860 acre-feet on Labor Day and would ultimately have to be drawn down to 136 acre-feet on September 25 before TUD's requests for water could reverse the ongoing reductions in storage volume. This is partly due to the required ramping rates. The spreadsheet used in the calculation, and a graph depicting the results is attached as **Exhibit H.**

The Certification conditions cannot be met under any reasonable scenario. Therefore, the SWRCB improperly concluded that the proposed project will not have a substantial adverse effect on human beings in the Mandatory Findings of Significance (page 60 of the IS/MND). It will surely adversely impact the public water supply of Tuolumne County.

ii. The SWRCB failed to consider water withdrawals in dry years and emergencies. In both 2007 and 2008, the water flow in Herring Creek diminished to the point where emergency water supply agreements, attached as **Exhibit I**, were needed to ensure water could be supplied to 250 connections in the Strawberry area. Condition 4 of the Certification precludes TUD from providing water supply to the Strawberry area even during emergency conditions. Without this water, these people would have been without water for approximately six months. This also shows that in dry years, no additional water supply will be provided from Herring Creek into the water supply available for use by TUD.

iii. The SWRCB failed to consider whether holding Pinecrest Reservoir at elevation 5610' until Labor Day will result in increased recreation visits to the reservoir. Therefore, the impacts of increased recreation on vegetation, traffic, sensitive species, other forms of recreation, water quality, and public facilities have not been examined at all.

iv. The SWRCB failed to evaluate the impact to facilities and operations at Pinecrest Reservoir should TUD request a waiver from the recreation requirement to drop the reservoir level from 5617' to 5615' immediately following the end of spill. Under the constraints created by the Certification, the reservoir would need to be operated in such a way as to release water to Lyons Reservoir slowly up to July 4 and would reduce the time Pinecrest Reservoir is lowered to 5615' relative to past years. The higher reservoir level would then last significantly longer than in the past, resulting in decreased recreational opportunities available for public use, which could then result in an increased use of other facilities in the area, as well as possible resources impacts caused by pulse flows in the reach between Pinecrest and Lyons Reservoirs.

v. The SWRCB improperly concluded that the proposed project will not have a significant impact on TUD's water source because the ability to reduce the water elevation from 5610' to 5608' will have little effect on TUD's ability to meet its water demands. The difference between 5610'

and 5608' is only 534 acre-feet, which is insignificant and will only meet TUD's daily summer water demand for six days. Based upon TUD records, the evidence shows that no less than 13 times over the past 26 years, Pinecrest had to be drawn down below 5610' to meet consumptive water needs.

Years Pinecrest was below 5610' elevation	Elevation of Pinecrest on 9/1
1984	5599
1985	5602
1986	5606
1987	5604
1988	5605
1989	5606
1990	5606
1994	5604
2001	5604
2002	5607
2004	5605
2005	5607
2007	5605

These results are graphically depicted in **Exhibit J**.

vi. The SWRCB failed to consider the cumulative effect of the Certification and the effects of climate change on TUD's water supply. Climate change is expected to result in reduced rainfall, and due to limited downstream water storage in Lyons Reservoir, combined with earlier snowmelt and end of spill, there is a higher probability that TUD will face a supply shortage during mid-summer.

vii. The SWRCB improperly concluded that the proposed project will not have a significant impact on the environment because maintaining the reservoir level at 5610' represents a departure from the existing project operations, which is the CEQA baseline. This departure is not adequately distinguished in the SWRCB IS/MND and the impacts associated with such a departure have not been examined.

SWRCB states that its 401 Certification includes "flow condition(s)... for the South Fork Stanislaus River (SFSR) [that maintain] lake levels at Pinecrest Lake for recreation, adequate and stable instream flows for fish and amphibians, TUD's consumptive water demands, and power generation through the Philadelphia Diversion" (page 3). And, while

SWRCB acknowledges that SPLAT has recommended annual development of a drawdown curve, it states that its staff have instead developed an "alternative measure" that will maintain Pinecrest Reservoir levels while meeting all other objectives and competing water demands. At a minimum, the CEQA environmental document should have evaluated and distinguished between the two alternatives to meet the requirements of CEQA. Nevertheless, the SWRCB then establishes the following requirements for Pinecrest Reservoir water elevation levels:

- Reservoir elevation is to be maintained at or above a target of 5,610' from end of spill through Labor Day (Condition 4, page 12)
- In years when Pinecrest Reservoir cannot be maintained above the target elevation of 5,610', water releases during the period from end of spill through Labor Day shall only be made to meet the minimum streamflow schedule and Spring Gap Powerhouse Demand (Condition 4, page 12)
- The target elevation of 5,610' after Labor Day may be modified and reduced to not lower than 5,608' if the Deputy Director determines that substantial evidence demonstrates that the recreational beneficial uses of the reservoir will be supported at the reduced elevation (Condition 4, page 14)

The 5,610' (USGS)[9] elevation is cited several times in FERC's FEIS. On page 258, the FEIS states that, "During normal water years, between Memorial Day and Labor Day, the elevation of the reservoir *typically fluctuates between elevation 5,610 and 5,615 feet.*" And, SPLAT has recommended maintaining an elevation of 5,610' for "*as many days as feasible* beginning Memorial Day weekend and extending through Labor Day weekend" as one of the Recreation Operational Objectives for Pinecrest Reservoir (FEIS, page A-25) (*emphases added*). However, the FEIS also states that Pinecrest Reservoir is drawn down below 5,603' (USGS)[10] between Memorial Day and Labor Day roughly 20% of the time during normal and dry water years (p. 258).

SWRCB's inflexible requirement to maintain Pinecrest Reservoir at an elevation of 5610' or greater from end of spill to Labor Day and of no less than 5608' at Labor Day is, therefore, a departure from the baseline condition. The SWRCB is therefore required to analyze the potential for that change to cause significant environmental impacts. However, the IS/MND does not specifically distinguish between the baseline condition and the proposed change (i.e. Project). SWRCB indicates that the baseline conditions of the current operations would be the same as its

[9] The FERC EIS uses the USGS datum to measure elevation. The USGS datum is about 2.5' higher than the PG&E datum, which is what is used by the SWRCB in the Certification. Thus, 5,610' (USGS) is equal to about 5607.5' (PGE).

[10] This is equal to about 5600.5' (PGE). See above note.

Proposed Project and therefore wrongly concludes, without disclosing any evidence or analysis, that there would not be any impacts as it is the existing condition. This is not true or accurate.

SWRCB further fails to satisfy the requirements of CEQA in its analysis of the effects of an inflexible reservoir elevation of 5610'.

- SWRCB states in the 401 Certification that, based on PG&E data, PG&E can implement the Pinecrest Reservoir 5,610' elevation requirement and still satisfy all of the SPLAT objectives and competing water demands in the Strawberry and Philadelphia reaches (page 3). However, SWRCB fails to disclose these data to support its claims in the corresponding CEQA document.
- SWRCB states in Section 10.9, Hydrology and Water Quality, that operation of the Project would have no impact on water quality, and offers no analysis and no data to support this conclusion.
- And in Section 10.18, Mandatory Findings of Significance, SWRCB states that the Project would have no effects that would cause "substantial adverse effects on human beings, either directly or indirectly" and, again, offers no analysis or data to support its conclusion.

Under CEQA, the lead agency is required to disclose its evidence or proof to support its findings. This is a mandatory foundational requirement of CEQA and the SWRCB has not adequately provided substantial evidence to support these findings.

viii. The SWRCB contradicts the FERC EIS and fails to examine downstream effects of the new stream flow requirements implemented in combination with the required Pinecrest Reservoir elevation of 5610'.

SWRCB's Certification includes the minimum streamflow schedules for the Pinecrest and Philadelphia reaches as proposed in the SPLAT Consensus Measures, Measure 32. However, under the Consensus Measures, implementation of the new minimum stream flow requirements was proposed in combination with development of a "best-fit" drawdown curve for Pinecrest Reservoir based on each year's forecasted hydrological conditions. This combination of operational objectives and minimum streamflows was negotiated by SPLAT to achieve a balance among four categories of beneficial use (consumptive water supply, ecological, recreation, and power generation).

In contrast to this, the Certification requires implementation of the new minimum stream flow requirements in combination with an inflexible reservoir elevation requirement of 5,610'. SWRCB justifies this requirement, in part, by stating in its response to comments on the Draft

Water Quality Certification that, under the baseline, fluctuating flows below Pinecrest Reservoir have resulted in impacts to aquatic species. "...TUD has called for blocks of water resulting in fluctuating flows that impacted aquatic species in the SFSR" (page 1). This contradicts FERC's environmental analysis which concluded that, based on a review of aquatic studies conducted by PG&E, there was "little evidence of adverse effects to aquatic resources" under the baseline and that, further, implementation of the SPLAT Measure 32 (i.e., new minimum stream flow requirements in combination with development of an annual drawdown curve) represented an opportunity to "better protect and enhance affected resources" (FEIS, page 144).

In addition, SWRCB fails to analyze the effects of the new minimum stream flows in combination with the 5,610' elevation requirement. For example, in Section 10.5, Biological Resources of the IS/MND, SWRCB states that "continued Project operation would not result in any significant impacts to...aquatic resources" (page 40). However, the SWRCB does not provide any justification or data to support this statement. A "bare conclusion that [an] impact was not significant did not satisfy the requirement to provide a statement of reasons for determining that an impact is not significant."[11] In addition, the IS/MND does not adequately analyze the impacts from implementation of Condition 4 on TUD's water supply and water quality, as described above.

Under CEQA, the lead agency is required to disclose its evidence or proof to support its findings. This is a mandatory foundational requirement of CEQA and the SWRCB has not adequately provided substantial evidence to support its findings.

ix. The SWRCB failed to consider the impacts the SWRCB might create when it exercises its unilateral authority to change the flow schedule as proposed in Conditions 4 and 5. The reservation of this authority in the Deputy Director creates the ability to create new "projects," as defined by CEQA, and new impacts without undergoing the required environmental analysis.

Any modifications to the streamflow that are allowed under Conditions 4 and 5 have not been adequately analyzed in the SWRCB's IS/MND. Under CEQA, the lead agency is required to disclose its evidence or proof to support its findings. This is a mandatory foundational requirement of CEQA and the SWRCB has not adequately provided substantial evidence to support its findings.

x. The SWRCB improperly concluded that the proposed project will not have a substantial adverse effect on human beings in the Mandatory

[11] *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1111-1112; 11 Cal.Rptr.3d 104.

Findings of Significance (page 60 of the IS/MND) because it did not adequately consider TUD's current and future water supply demands. The hydraulic model used by the SWRCB uses water consumption and river flow data from 2001, which is seven years old. Since 2001, TUD's diversions from Pinecrest have increased, and TUD has entered into agreements with project developers committing water supply to land development projects which have not yet been fully completed or commenced a demand on the water system. Attached as **Exhibit K** is a summary of TUD's actual and anticipated increases in water demand since 2001. These demands account for 2764 ac-ft per year that was not considered by the SWRCB in its analysis. Furthermore, although the SWRCB had access to TUD's expected future water demand, shown in Table 3.9 of the FERC EIS, the SWRCB chose to ignore that demand and rely on demand that is seven years old. A copy of Table 3.9 is attached as **Exhibit L**. Therefore, when the elevation of 5610' was established by the SWRCB, the impact on projects to which existing water commitments are in place, and future impacts, was not analyzed. If this analysis had been done, the SWRCB would have realized the project will have a significant impact on human beings because it will greatly impair a public water supply.

xi. The SWRCB improperly concluded that measures intended to protect the environment do not constitute impacts under CEQA. On page 1 of the Response to Comments, the SWRCB makes the following statement "[t]he WQC terms stabilize and protect aquatic life in the SFSR, which does not represent an impact under CEQA." This suggests the SWRCB believes any measure designed to protect one segment of the environment, cannot create its own significant impact on another part of the environment. This is inconsistent with Section 15382 of the CEQA Regulations: "'significant effect on the environment' means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna..." Although the CEQA regulations do provide exemptions for activities designed to enhance the environment or natural resources (Class 7 and 8), reliance on these exemptions "[w]here there is a reasonable possibility that a project or activity may have a significant effect on the environment, an exemption is improper."[12] And a "bare conclusion that [an] impact was not significant did not satisfy the requirement to provide a statement of reasons for determining that an impact is not significant."[13] Thus, even changes intended to enhance the environment that cause a change in the environment must be fully disclosed, discussed, and possibly mitigated for.

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[12] *International Longshoreman's and Warehouseman's Union v. Board of Supervisors* (1981) 116 Cal.App.3d 265, 276; 171 Cal.Rptr. 875, 882.

[13] *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1111-1112; 11 Cal.Rptr.3d 104.

xii. The SWRCB's IS/MND did not properly analyze the potential for environmental impacts. The SWRCB made conclusory statements throughout the document stating either No Impact, Less-than-Significant Impact, or Less-than-Significant Impact with the Incorporation of Mitigation Measures for each of the resource areas. However, the SWRCB did not include any discussion as to rationale or evidence to support the conclusions. A "bare conclusion that [an] impact was not significant did not satisfy the requirement to provide a statement of reasons for determining that an impact is not significant."[14]

The IS/MND document does cite the FERC EIS. However, the FERC EIS evaluated the SPLAT Consensus Measures and therefore did not address the proposed changes that the SWRCB has inserted into the Certification after the fact. Thus, the environmental analysis provided in the EIS is not a reliable resource for the SWRCB IS/MND. By departing from the FERC EIS, the SWRCB was required to perform new environmental studies and analysis. Furthermore, the SWRCB should have disclosed in the IS/MND its CHEOPS model runs, data, assumptions, and any and all other evidence it has to support its position that the proposed changes to the SPLAT Consensus Measures would not have any significant environmental impacts/effects. Therefore, the CEQA document is inadequate because it does not have independent studies to support its findings and does not fully and/or adequately address and disclose that information. Full disclosure and adequate public review of the data, evidence, and conclusions is a mandatory foundational requirement of CEQA. In this case, the SWRCB did not fully or adequately comply with CEQA.

xiii. The SWRCB did not comply with CEQA noticing procedures. CEQA Guidelines15072 and California Public Resource Code 21092 require lead agencies to provide notice to adopt a negative declaration or a mitigated negative declaration to the public, responsible agencies, trustee agencies, and the County Clerk of each county within which the project is located. According to the Tuolumne County Clerk and the Tuolumne County Community Development Department, the SWRCB has not filed a Notice of Availability with them for the announcement of the 30-day public review period of the IS/MND and they have also not received the Notice of Determination. The Notice of Determination (along with applicable fees) is required to be sent to the County Clerk within five days for which the Negative Declaration or Mitigated Negative Declaration has been prepared. This is in violation of CEQA procedures and is in and of itself legal grounds for challenging the adequacy of the CEQA environmental review process and the approval of the Certification.

[14] *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1111-1112; 11 Cal.Rptr.3d 104.

d. The SWRCB Wrongly Approved Recreational Use of Pinecrest Reservoir When Recreation is not one of the Purposes of Use of PG&E's Water Right.

The water stored behind Strawberry Dam is based on a 1911 water right adjudicated, originally, to the Sierra and San Francisco Power Company in the 1928 Stanislaus River Decree. Under the Decree, 16,710 acre-feet of water was adjudicated to PG&E's predecessor-in-interest Sierra and San Francisco Power Company for the generation of electrical energy and public service (i.e. water supply). "Recreation" is not an authorized purpose of use and if the SWRCB desires to allow the use of Pinecrest for recreation, it must first approve a petition to change PG&E's water right for the new use or PG&E must go back to the court and ask for a change in the adjudication.

e. There is a Fair Argument that the Project may have a Significant Effect on the Environment, which Requires the Preparation of an EIR.

On April 6, 2006, Steve Peirano of PG&E sent Mr. Russ Kanz of the SWRCB an email (attached as **Exhibit M**) that explained to Mr. Kanz that:

> the SFSR flow model results in an 'appearance' of providing higher levels of flow to the Philadelphia Reach available from Herring Creek during the summer period and thus 'appears' to achieve TUD's consumptive demands...Therefore, PG&E's comment in the 3/31 draft...that would allow consumptive water diversion [during the summer]...is needed as we suspected in our conference call.

Thus, as early as 2006 Mr. Kanz knew that PG&E had concerns with the CHEOPS flow model in that it overestimates the amount of water available to TUD during the summer months. As a result, PG&E requested that Condition 4 be modified to allow TUD to call for water during the summer and prior to Labor Day to ensure TUD's water demands could be met. The SWRCB staff has apparently decided to ignore that advice and remove any reference to TUD's consumptive water supply demands, which violates CEQA.

> If a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect. (14 CCR § 15064(f)(1)).

The email from PG&E criticizing the CHEOPS model's assumption is a fair argument from a credible expert. "If there is disagreement among expert opinion supported by facts over the significance of an effect on the environment, [then] the Lead Agency shall treat the effect as significant and prepare an EIR."[15] "[A] public agency should not file a negative declaration for a project if it can be fairly argued that the project may have a significant environmental impact."[16] Based upon the SWRCB's own records, it can be fairly argued that Condition 4 in its current state could impair the water supply for approximately 44,000 people in

[15] Cal. Code Regs., tit. 14, § 15064(g).
[16] *Leonoff v. Monterey County Board of Supervisors* (1990) 225 Cal.App.3d 1337, 1348; 272 Cal.Rptr. 372.

Tuolumne County, which would constitute a significant environmental impact under CEQA. In addition, according to **Exhibits N** and **O**, TUD's own expert disagrees with the reliability and conclusions of the CHEOPS model. Thus, the SWRCB has abused its discretion and should have prepared an EIR for the Certification.

This is especially true due to the controversy surrounding the Spring Gap-Stanislaus Project. The Spring Gap-Stanislaus Project proved to be so controversial that it took a collaborative team (SPLAT) composed of eleven members five years to work out the conflict and contention. Resolution of the conflict was made on March 1, 2004, when SPLAT submitted its Measures to FERC. The Measures resolved the conflicts among recreation, biology, hydrology, water supply, and power generation in one document. Included in the Measures were the rationales behind the decision-making to show the work that went into the Measures. Now, in one step, the SWRCB has erased the efforts made by all involved, and reconstituted all the conflict by ignoring the recommendations made by SPLAT and substituting its own judgment in the place of SPLAT's. However, the SWRCB does not disclose its rationale, any evidence, or its decision making process to make these changes/determinations.

f. <u>The SWRCB Wrongly Concluded that a Drawdown Curve cannot be used to evaluate the Impacts on Water Quality and Beneficial Uses</u>.

Page 2 of the SWRCB's Response to Comments provides:

> Board staff were actively involved with the development of the conditions in [Measure 32], but continue to be concerned about the lack of certainty in the measure. Because [Measure 32] requires annual consultation over the development of a drawdown curve, *it is impossible to evaluate* the true impacts on reservoir elevation (reservoir recreation), stream flows (aquatic resources), power production, and consumptive uses.

Thus, the SWRCB claims that because the drawdown curve is unknown for future years, the SWRCB cannot evaluate its impacts on other uses and resources. This is incorrect. TUD and PG&E made available to SPLAT during its deliberations TUD's future water demands as shown in Table 3.9 on page 53 of the FERC EIS, attached as **Exhibit L**. TUD uses this data to calculate the maximum amount of water supply available for future water supply demands during 30 consecutively critically dry water years, using the 1976-1977 drought flows as a baseline. Had the 2035 water demand, or a combination of the years, contained in Table 3.9 been modeled and analyzed for a critically dry year, rather than solely 2001 data as the SWRCB used, the result would have provided a more realistic and reasonably foreseeable scenario for evaluation under CEQA. This known future condition of the reservoir, representing a reasonable scenario drawdown curve during future critically dry years, should have served as the baseline for evaluation of the impacts to recreation, aquatic resources, power production and consumptive uses.

g. The SWRCB Wrongly Excluded Evidence on TUD's Future Consumptive Water Demands

The license renewal application submitted by PG&E to FERC requests a 50-year extension of PG&E's license. Based upon the 50-year request, TUD was only able to submit a 33-year water demand projection. This water demand projection is shown in Table 3.9 on page 53 of the FERC EIS, attached as **Exhibit L.** Thus, SWRCB had available to it TUD's future water demands, but instead chose to rely on a single year of demand, which was 2001 (See page 5 of 19, **Exhibit P**). This greatly underestimates the amount of water that will be required by TUD in future years. It also ignores TUD's right under its contract with PG&E to call for water from Pinecrest in quantities necessary to meet its consumptive water demands, which includes future demands throughout the period of the renewed license. Thus, the modeling and the CEQA analysis on various beneficial uses are inadequate in that only past water demand was considered, and not the 33-year future demand that was included in the FERC EIS.

h. Evidence that Herring Creek goes dry during Dry Years was wrongly Excluded and Ignored.

Although there is no gauging station on Herring Creek, it is well known to TUD that Herring Creek is typically dry for a portion of the summer during dry years. **Exhibit I** shows that in dry years the water company located on Herring Creek, the Del Oro Water Company, is unable to meet its water supply demands and frequently requires an emergency source of water from TUD. However, it appears as though the SWRCB has failed to exclude water from Herring Creek as a source of water during dry years (see e.g. **Exhibit M**). Thus, the SWRCB is overestimating the water available to TUD during the summer.

4. The SWRCB's Certification is not Supported by the Findings.

a. Condition 5 of the Certification is inconsistent with the Findings in the IS/MND. Condition 5 provides:

> In Critically Dry water-years, the Licensee may propose modifications to the flow requirements specified above. Licensee shall consult with the Deputy Director and provide justification for modifications to the flow requirements. The licensee shall maintain the specified flows until modifications are approved by the Deputy Director.

However, page 25 of the IS/MND provides for an entirely different arrangement. The IS/MND contained the following significant substantive differences as underlined below:

> In Dry and Critically Dry water years, or in other years when Strawberry Dam is forecast not to spill, the Licensee may propose modifications to the requirements of this condition. If such modifications are proposed, the Licensee shall consult with the USFS, Deputy Director, DFG, TUD, and others who request such consultation as to the justification for the proposed modifications.

Condition 5 in the Certification removes the important provisions underlined above, and reserves all the authority to the Deputy Director while the findings in the IS/MND were based upon a consultation with all the affected parties, which includes TUD. In addition, the opportunity for consultation is much broader in the IS/MND than in the Certification by allowing it to occur in dry years and any years Pinecrest is not forecasted to spill. The removal of the requirement for party consultation and the ability to modify the stream flows are not based on any written findings in the record and are significant differences between the two that were not examined in the IS/MND for possible impacts.

Not only is Condition 5 inconsistent with the Findings in the IS/MND, its utility is unknown. While Condition 5 apparently allows the modification of the stream flow requirements, it is silent as to whether the modification to the stream flow can also result in a modification of reservoir levels. Without the ability to modify reservoir levels, it is unclear how stream flows can be modified. For these reasons, Condition 5 is fatally ambiguous and requires significant revision to be enforceable.

5. The SWRCB's Findings are not Supported by the Evidence.

a. <u>The SWRCB Wrongly Concludes SPLAT Recommended a Fixed Pinecrest Elevation</u>:

The SWRCB wrongly justifies the arbitrary selection of 5610' elevation based upon an alleged conversation it had with less than the full SPLAT committee. In Response to Comments the SWRCB states that the 5610' elevation "was based on data collected by STF staff and from discussion by the Stanislaus Planning Action Team (SPLAT) during the relicensing process. There was a desire by SPLAT to maintain access to the boat dock…." Yet this elevation was never mandated by SPLAT in its formal recommendations to FERC, and as such was never agreed upon by SPLAT. What the SWRCB is referring to is simply a "desire" by some members of the SPLAT committee, not SPLAT as a whole, because the only measures that were agreed upon by <u>all</u> the members of SPLAT are contained in the formal measures submitted to FERC, which at the insistence of several members did not include a mandatory elevation at Pinecrest. Thus, the implication that SPLAT approved a fixed and mandatory elevation is simply wrong as SPLAT never made such a declaration and wrongly excludes the actual SPLAT recommendations made in Measure 32.

b. <u>Finding that TUD will have Adequate Water is not Supported by the Evidence</u>.

In the Certification, the SWRCB established a target elevation at Pinecrest Reservoir on Labor Day of 5610', and a fixed time period that the elevation must be maintained that will interfere with, and in some years prohibit, TUD's ability to provide water to its existing and future customers. The decision to establish this elevation and time period is not supported by the evidence in the record.

i. In the CHEOPS model run dated January 12, 2006, Brian Krolak of Devine Tarbell & Associates ran a scenario requested by the SWRCB.

This model run is attached as **Exhibit P**. Although the results of the model run clearly show that the 5610' elevation could not be met and still meet TUD's 2001 water demand, the SWRCB decided against evidence presented by the model run, without any evidentiary basis or explanation in the record, and instead established a mandatory elevation of 5610'.

ii. In an email from Steve Peirano (PG&E) dated 4/6/2006, Mr. Peirano warns SWRCB staff that the CHEOPS model only gives the "appearance" of meeting TUD water demand. A copy of this email is attached as **Exhibit M**. This appearance is created due to the availability of Herring Creek water for use by TUD, but PG&E points out that in reality, Herring Creek water would be diverted by PG&E for power generation, and would not allow this water to be delivered into Lyons Reservoir. Thus, the CHEOPS model is overestimating the amount of water available for use by TUD.

iii. In the SWRCB Response to Comments, the SWRCB states that the 5610' elevation "was based on data collected by STF staff and from discussion by the Stanislaus Planning Action Team (SPLAT) during the relicensing process. There was a desire by SPLAT to maintain access to the boat dock...." However, in an email dated 1/24/2006, from James Frazier (USFS) to SWRCB staff, Mr. Frazier told the SWRCB that the board dock was still useable below 5600'. In addition, in a separate email, dated 5/16/2006, Mr. Frazier stated that 5610' would only be needed until August 15, not Labor Day. Copies of these emails are attached as **Exhibit Q.** Thus, the claim that 5610' is necessary to preserve access to the dock is without evidentiary support in the record.

iv. Not only does the mandatory elevation of 5610' conflict with TUD's consumptive water supply, it conflicts with the SWRCB's own instream flow requirements below Strawberry Dam. Based upon the results of a study that TUD had its consultants perform, water from Pinecrest Reservoir would be inadequate to supply the required instream flows six out of the 26 years of data available. A copy of the report is attached as **Exhibit N**. This shows that there is insufficient evidence to support the fixed elevation of 5610' for both TUD's water demand and the SWRCB's instream flow requirements.

v. In an email from Gary Egger on 11/2/2005, Mr. Egger transmitted TUD's historic water use from 2000 to 2005 to SWRCB staff. A copy of this email is attached as **Exhibit R**. Based upon a review of the January 12, 2006, CHEOPS model run, **Exhibit P**, it appears that the SWRCB only used TUD's 2001 water demand, rather than the more recent data or future demand. To compound this error, the SWRCB miscalculated TUD's 2001 demand. To elaborate on this point, in 2001 TUD demand at S17, the gauge for the PG&E main canal which supplies TUD with all of its water from the SFSR, was 19,465 ac-ft. Footnote 2 on **Exhibit R** states that diversions include TUD consumption and PG&E Phoenix power diversions. The CHEOPS model used by the SWRCB then misinterpreted this footnote and reduced the S17 diversion amounts to 15,868 ac-ft and then applied a percentage of demand to each month.

The problem with this is that it fails to recognize that all of the water that is diverted into the main canal after the end of spill is TUD consumptive water—there is no justification to reduce this amount of water based upon power diversions. The percentage conversion factors used by the SWRCB do not take this into account. The table below shows the flow data used in the CHEOPS model:

Total demand used in model: 15,868 af
Percentage of total flow and monthly calculated flow:
Jan - 6.6% of total = 1047.3 af
Feb - 5.7% of total = 904.5 af
Mar - 6% of total = 952.1 af
Apr - 6.4% of total = 1015.6 af
May - 7.3% of total = 1158.4 af
Jun - 8.8% of total = 1396.4 af
Jul - 11% of total = 1745.5 af
Aug - 12% of total = 1904.2 af
Sep - 11.1% of total = 1761.4 af
Oct - 9.9% of total = 1507.9 af
Nov - 8.1% of total = 1285.3 af
Dec - 7.1% of total = 1126.6 af

The end of spill in 2001 was June 8th. The actual 2001 monthly TUD demand flows during this time period were:

June – 2038.41 af
July – 2287.49 af
August – 2378.97 af
September – 2149.88 af

Therefore, the SWRCB underestimated the amount of water needed by TUD between 388 to over 642 ac-ft per month which is between 18 to 31.5 percent of the monthly flow.

June -	2038.41 - 1396.4 = 642.01
July -	2287.49 - 1745.5 = 541.99
August -	2378.97 - 1904.2 = 474.77
September -	2149.88 - 1761.4 = 388.48
	2047.25

This miscalculation led the SWRCB to the erroneous belief that TUD demands could be met. The 2,047.25 ac-ft of TUD demand that was underestimated by the SWRCB is more the minimum pool volume that is set aside in Lyons Reservoir to maintain water quality. This miscalculation is an indication of the incompleteness of the SWRCB review, a lack of understanding of the operation of the system and the inadequacy of the CHEOPS model.

vi. On January 20, 2004, Cheri Tansey of Devine Tarbell sent SWRCB staff

an email that had attached to it CHEOPS model runs performed for SPLAT. A copy of this email is attached as **Exhibit S**. In conclusions 5a through 5e on page 7, it states that:

> The reason TUD demand is sometimes not met is because the general sequence of priorities in the model is 1) minimum streamflow requirements (specified streamflow or inflow), 2) maintain reservoir drawdown curves, 3) meet TUD demand (in dry years switch the immediately preceding priorities 2 & 3), and 4) divert at Philadelphia Diversion Dam for power generation. Revision or violation of the reservoir drawdown curves may enable TUD demand to be met.

These model runs show that SWRCB staff knew there was evidence showing that TUD water demands could not be met in some years. These runs also showed that in dry years the priority of reservoir elevation over TUD demand would need to be changed and that a revised reservoir curve would be needed to meet TUD 2001 demand.

c. <u>The CHEOPS model is Fundamentally Flawed and Cannot be Relied upon to produce Accurate Data</u>.

The model runs described in **Exhibit P** also show that the CHEOPS model is not an accurate choice for SFSR modeling. The model is not transparent in its documentation, data use or its logic.

In an attempt to understand the CHEOPS model and the conclusions that the SWRCB apparently reached from its use, TUD staff and its consultants contacted representatives of PG&E on September 29, 2008, to have them explain the model and its data. PG&E provided a copy of the model they had of the system, but indicated that they could not modify or explain the model data in detail. TUD quickly exhausted PG&E staff knowledge and understanding of the model. PG&E staff including Mr. Peirano and Mr. Moore suggested that we needed to have assistance from Devine Tarbell Associates (DTA) to gain the answers to our questions.

TUD began attempting to contact DTA through Mr. Lynch and ultimately Mr. Krolak from DTA to understand the model. TUD's consultant had to develop a contract with DTA before they would go into any detail in regard to the information and the model findings. That contract was signed by TUD's consultant's representatives on October 6, 2008, and sent to DTA. Over the next week, TUD asked questions concerning the model and added some additional review of the model. This includes questions and responses by email as late as October 10, 2008.

Even with the assistance of the modeler, the model does not demonstrate transparent logic and tracking the data is not something that can be routinely followed even by engineers familiar with hydraulic modeling.

There is no manual for the model that was used by the SWRCB as part of the Certification. There is a generic manual for a generic model but because each CHEOPS model is custom built for the project, and has to be changed for the SWRCB runs, there is not a clear documentation trail for anyone to review or follow. When the modeler was interviewed by TUD and its consultants about the CHEOPS ability to reflect historic data, he stated the model was not tested that way. Although a calibration was performed, it did not include an accurate reflection of historic data. The checking of any model against real life historic information is a fundamental method of verifying the accuracy of a model and should have been performed. The failure to test the CHEOPS model against actual historic data to verify its accuracy and reliability proves the CHEOPS model is untested and therefore unreliable.

The accuracy of the system inflow hydrology is questionable. It appears that the several elements of the inflow data are forced. For example, there are calculations that give an indication what the inflow into Pinecrest is but the gauge that is above Pinecrest was not used. In addition, there is not a gauge on Herring Creek so the gauge at Strawberry is used with some type of undisclosed math calculation to back out Pinecrest flows.

The model does not compensate for seepage losses, evaporation, or evapotranspiration. Therefore, the results of water availability are always over-estimated.

Lastly, the information within the CHEOPS model changes over time. The percentage allocation of TUD demand used to answer the SWRCB modeling questions is different than what was found in the model made available to TUD for 2004 and 2035. The reason for the change is unknown. There are no documentation, no notes, and no trail to follow.

These flaws, and others, are examined and discussed further in **Exhibit O**.

Therefore, the inability to examine the logic behind the model, the failure to verify the model against actual historic water records, the assumption of hydrology inflow, the failure to consider natural system losses, and the inconsistencies with various CHEOPS model types prove that this model is unreliable and should not have formed the basis for the SWRCB's Certification.

d. <u>The SWRCB Wrongly States that TUD does not have a Water Right</u>. On page 4 of the Responses to Comments, the SWRCB states:

> TUD does not hold or claim any rights to water in the SFSR and receives its water under a contract from PG&E under pre-1914 claims. WQC condition #17 states that "Nothing in this certification shall be construed as State Water Board approval of the validity of any consumptive water rights, including pre-1914 claims, referenced in the Coordinated Operations Agreement or elsewhere.

While it may be true that TUD does not hold a water right in the traditional sense, this does not mean that TUD's contract with PG&E does not create a legally

protectable interest. In a slightly different context, the courts have held:

> the persons who use the water are an integral part of the appropriator's right to take that water from its natural course in the first place. Without their beneficial use of the water, the appropriator would have no right to take the water. If the permit holder seeks the Board's permission to change the purpose of use that provided the basis for the acquisition of its permit in the first place, there is no reason the persons who, through contracts with the permit holder, actually put the water to the beneficial use sought to be changed should be precluded from asserting to the Board that the change will operate to the injury of their rights, simply because those rights derive from contract. (*State Water Resources Control Bd. Cases* (2006) 136 Cal.App.4th 674, 804; 39 Cal.Rptr.3d 189, 293.)

Thus, the contract that TUD holds with PG&E is an integral part of that right because the contract provides PG&E with a large part of the beneficial use of that water, which is an essential element of any water right.

In addition, the traditional form of water right held by PG&E was a part of court adjudication in 1928 that specifically provides for the domestic use of water. While paragraph 44 of the adjudication recognizes PG&E's water right to 16,710 acre-feet of water from the South Fork Stanislaus River for the generation of electrical energy at Strawberry Dam, paragraph 2 provides:

> Water hereinafter adjudged and decreed to the several claimants, for other than domestic use, may be applied to domestic use, either in whole or in part.

Thus, all of the water provided for in the adjudication has the potential to be used for not just the originally decreed purposes, but also domestic uses. Since the 1940s, the water from Pinecrest has been used and dedicated for public utility use in the Tuolumne Water System, and PG&E further confirmed that dedication when it agreed to supply the water needed by Tuolumne County in the 1983 Agreement. This Agreement dedicated the use of such water stored in Pinecrest Reservoir as was needed for the Tuolumne Water System, both existing and as those needs increased.

To suggest then that TUD does not hold a right to the water held behind Strawberry Dam is contradicted by both case law and the Stanislaus Decree.

V. **The manner in which the District is aggrieved**:

The District will be unable to provide domestic water to approximately 44,000 people during some years.

VI. **The specific action the District requests**:

TUD requests the following actions:

1. The SWRCB hold this Petition in abeyance for 45 days to allow TUD to acquire, develop and run a reservoir model developed by the Army Corps of Engineers (the "ResSim" model), as Matt Bullock and I discussed on October 7, 2008. TUD has reviewed the CHEOPS model in an attempt to fully understand it. TUD has

hired the CHEOPS developer that prepared the model analysis for the SWRCB to try to expand TUD's understanding, with limited results. Thus, the next course of action is to run a different model that is more transparent and more readily accepted and understandable to TUD from a technical perspective. Pursuant to Section 3869(c) of Title 23, we have discussed obtaining a 45-day abeyance with PG&E's (Applicant's) representatives Matthew Fogelson and Steve Peirano, and have confirmed that while PG&E does not take a position on the substance of TUD's request, as a procedural matter, it does not oppose TUD's request for a 45-day abeyance. We request that the abeyance begin to run the day that the SWRCB notifies us of the granting of the abeyance. In other words, TUD will not attempt to acquire the ResSim model until after TUD is notified by the SWRCB of the SWRCB's decision on the abeyance. TUD would rather not go through the expense of acquiring the model if the SWRCB will not grant the abeyance.

2. The SWRCB stay the effect of the Certification until after the SWRCB considers this Petition for Reconsideration. Pursuant to Section 3869(d) of Title 23, we have attached as **Exhibit T** an affidavit from Mr. Pete Kampa, TUD's General Manager, affirming the requirements of that Section. We further request that the SWRCB send a letter to FERC explaining that the Certification has been stayed pending final decision on the Petition. It is essential that the Certification be stayed until the Petition is considered because it is our understanding that FERC plans to issue a license to PG&E based on the Certification. If this were to occur, prior to the Certification being corrected, TUD would then have no choice but to file an appeal with FERC or seek immediate injunctive relief from both FERC and the SWRCB.
3. The Certification must be rescinded and Conditions 4, 5, and 6 should be rewritten to be consistent with SPLAT Measure 32, as shown in **Exhibit U**, OR this matter should be heard at a hearing pursuant to the SWRCB's hearing regulations (Title 23, Sections 648-648.8), OR the project should be re-reviewed for environmental impacts in a full environmental impact report.

VII. Other persons known to have an interest in the subject matter of this Petition.

PG&E, SPLAT participants, FERC service list.

VIII. This Petition has been hand delivered to the executive officer and sent to the applicant, PG&E, via first class mail.

IX. We hereby request the SWRCB to prepare the State Water Board staff record on this decision.

X. The District has participated in this process by:

a. Attending and participating in five years of SPLAT meetings.
b. Reviewing the draft Certification issued on August 1, 2007, and submitting comments on the draft on September 4, 2007.
c. Attending, addressing comments and questions at a meeting conducted on August 24,

2007, by the SWRCB at the Forest Service office in Sonora.

d. Telephone conversation with Mr. Russ Kanz on or about September 19, 2007.
e. Email to Mr. Russ Kanz on May 2, 2008, advising Mr. Kanz that Pinecrest elevation is predicted to drop below 5610' for the second year in a row prior to Labor Day.

Very truly yours,

Jesse W. Barton

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