

Water Rights in the FERC Relicensing Context on the Yuba, Bear, and Middle Fork American Rivers

By Megan Anderson, Environmental Advocates

On behalf of the
Foothills Water Network

September 25, 2006

Table of Contents

TABLE OF CONTENTS	1
I. INTRODUCTION	2
II. WATER RIGHTS IN CALIFORNIA	2
A. Pre-1914 Water Rights	3
B. Post-1914 Permitted Water Rights	4
1. Water Rights Permitting and Licensing Process	4
2. Municipal Water Rights	7
3. Enforcement	8
III. WATER RIGHTS IN THE FERC RELICENSING PROCESS	8
A. The Federal Power Act and Water Rights	9
B. Interplay between State Certification Under Section 401 of the Clean Water Act and State Water Rights	11

IV. WATER RIGHTS IN THE YUBA-BEAR AND MIDDLE FORK AMERICAN RELICENSINGS	15
A. Water Rights	15
1. NID’s Water Rights—Yuba-Bear Project No. 2266	15
2. PG&E’s Water Rights—Drum-Spaulding Project No. 2310	16
3. PCWA’s Water Rights—Middle Fork American Project No. 2709	16
B. Relationship between Water Rights in the Middle Fork American Project and the Yuba-Bear Projects	17
2. Clean Water Act Section 401 Certification	17
3. FERC License Conditions	18

I. Introduction

Hydropower relicensing under the Federal Power Act (FPA) and water rights under state law intersect during the relicensing process. This memo seeks to clarify the interplay between these regulatory systems. First, as an introduction, it will provide a summary of water rights in California. Second, it will outline the relationship between relicensing and state water rights. Within that discussion, it will analyze how the Clean Water Act (CWA) and State section 401 certification under that statute can affect water rights in the relicensing process. Finally, this memo will consider the water rights involved in this relicensing and outline possible challenges to those rights.

II. Water Rights In California

California operates under a hybrid system of water rights, which includes riparian rights, rights under the prior appropriation doctrine, and pueblo rights. All of these rights confer only the right to use the water; ownership of water remains vested in the State for the benefit of its citizens. That basic principle underlies the entire water rights system and it is an important consideration when analyzing water rights. With few exceptions, the water rights in the relicensings at issue are appropriative rights and this memo will therefore focus exclusively on those rights.

The prior appropriation system in water law stems from the early western miners and settlers. “The history of western water law is first a history of mining and then of irrigation.” A. Dan Tarlock at al., Water Resource Management, 150 (4th ed. 1993). In California, miners created parallel systems for mining claims and the water needed to develop them. First, the claim, or water right, was based on a first-in-time, first-in-right principle. Priority of discovery or use determined rights. Second, the miners required that notice be given of the claim to the minerals or water; to satisfy this requirement, the miners required some physical posting of claim. Often this notice was satisfied by the diversion itself. Finally, the miners’ system did not

reward neglect: a claim or water right had to be worked or used or it would be deemed surrendered. *Id.* Although not perfect, this system of priority, diversion, and beneficial use, did recognize the arid limitations of the west. Unlike the wetter eastern states, where generally there was water adjacent to the activity for which it was needed, in the west, water often had to be transported from its source, and often from its watershed, for use. *Id.* at 153. This practice was in stark contrast to the traditional riparian system of the East where a water rights user could not divert water to the injury of a downstream user, regardless of priority of use. The question of whether such diversion was legal reached the California Supreme Court in 1855; the court stated that “however much the policy of the State, as indicated by her legislation, has conferred the privilege to work the mines, it has equally conferred the right to divert the streams from their natural channels.” *Irwin v. Phillips*, 5 Cal. 140 (1855).

The California legislature officially recognized this system in 1872 and until California enacted a system of permitting for water rights in 1914, the basic requirements of priority, diversion, and beneficial use governed water rights. Thus, a water right holder merely had to satisfy those requirements; no government stamp of approval was necessary. In 1914, the California Legislature created a system of permitting water rights. However, the system could not apply retroactively. As such, two types of appropriative water rights exist in California: pre-1914 rights memorialized only by use, and post-1914 permitted rights.

A. Pre-1914 Water Rights

Pre-1914 water rights are supported only by the basics of the appropriative system—priority is based on the date of their diversion and use, and they must have been used continuously since the date of their first appropriation to remain valid today. The State Water Resources Control Board (SWRCB), created in 1914, has no jurisdiction over these rights; consequently, pre-1914 rights are virtually free from regulation. (Conversation with Brian Coates, SWRCB Staff, Dec. 1, 2005). However, at least one attorney opines that the SWRCB is increasingly exercising jurisdiction over these rights upon any change to the right, such as a change of use or point of diversion.¹ (Presentation by Barry H. Epstein, Partner, Fitzgerald, Abbott and Beardsley LLP, at Sierra Nevada Alliance Conference, Aug. 11, 2006).

Under the California Water Code, a holder of a pre-1914 right who continues to divert water must file a Statement of Water Diversion and Use with the SWRCB so that the SWRCB can manage those rights when regulating the rest of the system. Cal. Water Code § 5101. The Statement should include the name and address of the person who diverted, name of stream or other source from which the water was diverted, and the name of the next major stream or other body of water to which the source is tributary, place of diversion, capacity of diversion works and storage reservoir, purpose of use, general description of area in which the water was used,

¹ Kevin Long indicated that the SWRCB does not gain jurisdiction because of a change to the original right. However, Barry Epstein stated both in his presentation and when I asked him again afterwards, that the SWRCB has an argument to exercise jurisdiction, and has so done in some cases, when a water right holder seeks to change the right. Depending on whether there is dispute over the pre-1914 rights, this question may merit further research.

and year in which diversion commenced as near as is known. Cal. Water Code § 5103. If a diverter does not file a Statement of Water Diversion and Use, the Board may investigate, at the expense of the diverter, to determine the facts required in the Statement. Cal. Water Code § 5105. Although required, the statements are for “informational purposes only, and neither the failure to file a statement nor any error in the information filed shall have any legal consequences whatsoever other than those specified in this part.” Cal. Water Code § 5108. Thus, a pre-1914 right survives even without giving notice of the right to the SWRCB.

Pre-1914 rights can be challenged as long as the rights have not already been subject to a stream-wide adjudication finally establishing the rights in a watershed. If a pre-1914 right is challenged, the water rights holder must prove that s/he has used the water continuously since the date of appropriation. The holder of the right must also show that the water has been used for the claimed use, whether that is consumptive or non-consumptive. If a holder of a pre-1914 right does not use the water for a period of five years, the holder forfeits the water right. Smith v. Hawkins, 110 Cal. 122, 127 (1895). A water right holder can also lose a pre-1914 right by abandonment; if s/he relinquishes the right and intends not to resume using the right, the holder loses the right at that moment of abandonment. Id. at 126. The state courts have jurisdiction over such disputes, but the SWRCB can assist in a determination of rights. SWRCB, State Water Resources Control Board Information Pertaining To Water Rights In California (1990) (available at: <http://www.waterrights.ca.gov/forms/app-geninfo.pdf>).

B. Post-1914 Permitted Water Rights

In California’s present day system of appropriative rights, water rights are governed by statute. The SWRCB “shall allow the appropriation for beneficial purposes of unappropriated water . . . as in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated.” Cal. Water Code §§ 1250, 1252, 1253 (2006). Although any person may apply for a water right, the SWRCB “shall be guided by the policy that domestic use is the highest use and irrigation is the next highest use of water.” Cal. Water Code §§ 1254, 106. Thus, applications for use for municipalities and irrigation are given higher priority despite the general policy of “first in time, first in right.”

This section will first consider the permitting and licensing process under the California Water Code. Next, it will consider municipal rights within this process. Finally, it will consider the SWRCB’s enforcement powers over permits and licenses.

1. Water Rights Permitting and Licensing Process

There are two stages to the water rights process in California. First, an applicant must apply for a permit to use water. Second, once the permittee has actually put the water to beneficial use, the permittee can license that right. These processes are outlined below.

a. Water Rights Permits

Any person may apply for the appropriation of unappropriated water. Upon the approval of an application, the SWRCB shall issue a permit for the use of the water, which preserves the applicant's priority of appropriation as of the date of application. The permit also delineates the terms and conditions applicable to the water right. Cal. Water Code § 1382.

A permittee's right is bounded to the extent and for the purpose provided for in the permit. A water right permit will specify: (1) the purpose of use; (2) the point of diversion and storage if applicable and place of use; (3) the quantity; (4) the priority; and (5) other conditions to protect prior water right holders, the public interest and the environment. (Presentation by Nick Wilcox, SWRCB Jan. 10, 2006). The purpose of use can be for consumptive or non-consumptive uses; a water right holder cannot use water held for non-consumptive uses for consumptive uses. Common uses include municipal, irrigation, industrial, power, and recreation. The point of diversion specifies the water body from which the water is taken and the point at which it is diverted. For a storage right, the point of diversion may also include the place of storage. The quantity of the right includes the season and amount of the right. The season can vary depending on whether it is a storage right or a right to direct diversion. Storage rights allow water to be stored during the storage season, generally from November 1 to June 1. Water under a direct diversion right should be used immediately, although in practice water can be stored as "regulatory storage" under a direct diversion right for up to thirty days. (Conversation with Laura Vasquez, SWRCB Employee, 12/7/05). If the water right holder does not use the water within thirty days, s/he must release it. Practically speaking, a water rights holder with rights both to storage and to direct diversion is using direct diversion rights if a reservoir is filling and storage rights if the holder is drawing down the reservoir. (Presentation by Nick Wilcox, SWRCB 1/10/06). The permit will also specify the amount of water to which the holder is entitled, which will either be listed in cubic feet per second (cfs) for a right to direct diversion or acre-feet (af) for a storage right. The priority of the right is the date the water was put to beneficial use for a pre-1914 right or the date of application for a water right permit for a post-1914 right. The SWRCB may also include conditions that it deems necessary to protect the public interest or environment.

The permit also specifies the time period during which the permittee must begin construction of the diversion works and to make full beneficial use of the water. Cal. Water Code §§ 1395-97. A permittee must exercise "due diligence" in completing the construction and in putting the water to beneficial use. Cal. Water Code § 1396. The SWRCB may extend the times specified in the permit for good cause shown; however, it may also revoke the permit if it finds cause to do so. Cal. Water Code §§ 1398, 1410. Thus, a permittee has the right to take and use the amount of water specified in the permit until it licenses its rights or until the permit is revoked. Cal. Water Code § 1455. The right to use water under a permit is lost if the permittee ceases to appropriate and use the water "for a useful and beneficial purpose." Cal. Water Code § 1390. As such, a permittee should keep records including the amount of water used, reservoir water surface elevation changes, and use of water. State Water Resources Control Board website http://www.waterrights.ca.gov/HTML/license_progam.html (updated 7/7/06).

b. Water Rights Licenses

Once the development schedule set forth in the water right permit to complete construction and beneficial use of water expires, a permit holder then must do one of three things:

- (1) request revocation of the permit if the project has been abandoned or cannot be diligently completed due to personal or financial reasons,
- (2) petition for an extension of time to extend the development schedule if the construction and use of water under the permit has been diligently pursued and additional time is necessary to complete full anticipated beneficial use of water, or
- (3) notify the State Water Board that the permitted project is complete and ready for licensing. (Note: A license can only be issued for the amount of water that has been placed to beneficial use during the authorized period and in compliance to all terms and conditions of the permit).

Id.; Cal. Water Code §§ 1600, 1605.

If the permittee notifies the SWRCB that the project is ready, the Board must complete a licensing inspection of the project works as soon as practicable. Cal. Water Code § 1605. The inspection will determine the establishment of beneficial use of water as well as compliance with the terms and conditions of the permit. State Water Resources Control Board website http://www.waterrights.ca.gov/HTML/license_progam.html (updated 7/7/06). The license shall issue only for the amount of water that the Board determines has actually been applied to beneficial use. Cal. Water Code § 1610. The SWRCB shall obtain the permittee consent to the lesser amount or afford the permittee the opportunity to show cause why the amount should not be reduced. Cal. Water Code § 1610.5. Alternatively, the permittee may request an extension of time to correct deficiencies or put the water to beneficial use. Id.

A license is the “final confirmation of the water right and remains effective as long as its conditions are fulfilled and beneficial use continues.” State Water Resources Control Board website: http://www.waterrights.ca.gov/HTML/license_progam.html (updated 7/7/06); Cal. Water Code §§ 1627, 1675.

c. Changes to a Water Rights Permit or License

Although a permit or license specifies the terms and conditions of a water right, including purpose of use, point of diversion, place of use and quantity, these terms can be changed if approved by the SWRCB. Cal. Water Code § 1701. To make such a change, a permittee or licensee must file a petition with the SWRCB. The petitioner must first show that the change will not injure any legal water user. Cal. Water Code § 1702. Second, the petitioner must include all reasonably available information that can be obtained from California Department of Fish and Game (DFG) concerning the extent to which fish and wildlife would be affected by the change. Cal. Water Code § 1701.2. If fish and wildlife will be affected, the petitioner must include a statement of measures proposed to be taken for the protection of fish and wildlife in connection with the change. Id.

Depending on the nature of the change, the petition may require California Environmental Quality Act (CEQA) review, including an Environmental Impact Report (EIR). See County of Amador v. El Dorado County Water Agency, 76 Cal. App. 4th 931 (1999). “With certain limited exceptions, a public agency must prepare an EIR whenever substantial evidence supports a fair argument that a proposed project ‘may have a significant effect on the environment’.” Laurel Heights Improvement Assn. v. Regents of University of California, 6 Cal. 4th 1112, 1123 (Cal. 1993) (internal citations omitted). “‘Significant effect on the environment’ means a substantial, or potentially substantial, adverse change in the environment.” Id.

Any interested person may file a protest to a change; the protest must state objections to the change and the bases for those objections. Cal. Water Code §§ 1703, 1703.2. The SWRCB Division of Water Rights shall conduct a field investigation of all minor protested petitions. DFG must also be given an opportunity to review the change and make recommendations. Cal. Water Code § 1735. In protested cases, the Board must hold a hearing before making its decision. The Board may then approve the change, or place conditions on the change, or deny the petition.

2. Municipal Water Rights

Municipal rights are treated differently than other water rights. “The application for a permit by a municipality for the use of water for the municipality or the inhabitants thereof for domestic purposes shall be considered first in right, irrespective of whether it is first in time.” Cal. Water Code § 1460. As such, special provision is given to municipalities in the acquisition of water rights and their rights to acquire and hold water rights “should be protected to the fullest extent necessary for existing and future uses.”² Cal. Water Code § 106.5.

Although a municipality has heightened protection in the application stage of gaining a water right, that protection ceases once a permit or license is issued. The SWRCB has interpreted section 1460 to mean that municipality’s application “...shall be considered first in right over other pending [unpermitted] applications in the same watershed(s). . . .” (Correspondence with SWRCB Staff, Sept. 21, 2006). “So if we’re talking about a permit or license that has already been issued, the question is moot: Its priority date is set in the permit or license regardless of the uses authorized therein. W.C. Section 1460 may as well not exist for an already-issued permit or license.” Id.

Furthermore, a municipality, like any other water user, does not possess a right to use water wastefully. Even if the municipality has claimed rights to a certain quantity of water, it cannot deny a beneficial user the right to use the waters claimed by the municipality in excess of what the municipality needs. Id. Such a user, however, cannot claim to gain a superior right to that of the municipality through prescription; the municipality’s rights are protected despite the municipality’s failure to use that water for a period of time—the city has the “paramount right”

² An irrigation district could qualify for the municipal privilege only in the “extremely rare cases, such as an irrigation district applying for a water right permit for strictly municipal, and domestic uses (which would be somewhat oxymoronic).” (Email from Kevin Long, Sept. 21, 2006).

to the use of that water. Id.; Cal. Water Code § 1203; Feliz v. City of Los Angeles, 58 Cal. 73, 80 (1881).

3. Enforcement

The SWRCB “should take vigorous action to enforce the terms and conditions or permits licenses, certifications, and registrations to appropriate water, to enforce state board orders and decisions, and to prevent the unlawful diversion of water.” Cal. Water Code § 1825. Thus, the Board can issue a cease and desist order to any person that diverts water without authorization, violates any term or condition of a permit, license, or certification, or any decision of the board. Cal. Water Code § 1831.

A person wishing to challenge another’s use of water may file a complaint with the SWRCB asking that the holder of the right prove his/her claim to the water. SWRCB, State Water Resources Control Board Information Pertaining To Water Rights In California (1990) (available at: <http://www.waterrights.ca.gov/forms/app-geninfo.pdf>). “The SWRCB will investigate and take appropriate action on a written complaint received alleging (1) a violation of the conditions of a permit or license issued by the SWRCB, (2) waste or unreasonable use of water, (3) illegal diversion or use, or (4) unreasonable effects on public trust or public interest uses of the water.” Id.

When the complaint is one alleging illegal diversion or use, the SWRCB can take action under section 1052 of the Cal. Water Code, which states that “The diversion or use of water subject to this division other than as authorized in this division is a trespass.” Cal. Water Code § 1052(a). A violator can be liable for fines of up to five hundred dollars per day that the trespass occurs. Cal. Water Code § 1052(d). However, the SWRCB’s policy is “to initiate court action only in a clear instance of unlawful use of water.” SWRCB, State Water Resources Control Board Information Pertaining To Water Rights In California (1990) (available at: <http://www.waterrights.ca.gov/forms/app-geninfo.pdf>). “Where there is a bona fide dispute as to the facts, or where circumstances indicate an adjudication is required, action by the SWRCB under section 1052 generally is not considered appropriate.” Id.

III. Water Rights in the FERC Relicensing Process

Federal Energy Regulatory Commission (FERC) relicensing provides a snapshot of our federalist system as a whole. Generally speaking, FERC has jurisdiction over hydroelectric licenses issued under the Federal Power Act and it does not involve itself in state water right law. However, FERC does expect a licensee to have the necessary water rights for the project. The state retains jurisdiction over the water rights and may modify them according to state law. In addition, the state has power pursuant to the Water Pollution Prevention and Control Act (Clean Water Act (CWA)) to issue a water quality certification for the project, without which the project cannot be licensed. Although the CWA deals with water quality, it necessarily implicates water rights because water quality and water quantity cannot be far removed. Moreover, common law

doctrines, such as the public trust doctrine, can impact water rights as well.³ The following sections explain the roles of FERC and the state in the relicensing process in greater detail.

A. The Federal Power Act and Water Rights

The Federal Power Act (FPA) confers jurisdiction over the entire relicensing process upon FERC. 16 U.S.C. § 797(e) (2006); First Iowa Hydro-Elec. Co-op. v. Federal Power Commission, 328 U.S. 152, 171-72 (1946). Within Congress’s broad delegation of power to FERC, however, Congress reserved jurisdiction over water rights to the States through a “savings clause” in the FPA. 16 U.S.C. § 821; see also First Iowa, 328 U.S. at 175 (“Section [821] expressly ‘saves’ certain state laws relating to property rights as to the use of water, so that these are not superseded by the terms of the Federal Power Act.”). However, the FPA does require each applicant to submit evidence of compliance with state law regarding water use. 16 U.S.C. § 802(a)(2). Thus, the FPA divides jurisdiction between the federal and state, but nonetheless provides for a check to insure that the licensee has in fact complied with state law.

Under the Federal Power Act (FPA), a “project” includes “all water rights . . . the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit.” 16 U.S.C. § 796(11). Section 802 of the Federal Power Act requires that each applicant for a license⁴ must submit to the commission: “satisfactory evidence that the applicant has complied with the requirements of the laws of the State . . . with respect . . . to the appropriation, diversion, and use of water for power purposes.” 16 U.S.C. § 802(a)(2); see also Federal Power Comm’n v. Niagara Mohawk, 347 U.S. 239, 252 fnt. 17 (1954); First Iowa, 328 U.S. 152 (1946). The new Integrated Licensing Process (ILP) spells out this mandate in more detail, and requires that the applicant submit: “A description of the water resources of the proposed project and surrounding area.” 18 C.F.R. § 5.6(d)(3)(iii) (2006). That description “must address the quantity and quality (chemical/physical parameters) of all waters affected by the project, including but not limited to the project reservoir(s) and tributaries thereto, bypassed reach, and tailrace.” Id.; (see sections (d)(3)(iii)(A-I) for more detailed requirements).

Although the FPA requires that an applicant provide evidence of compliance with the state laws, the FPA “does not itself require compliance with state laws.” First Iowa Hydro-Elec. Co-op., 328 U.S. at 177. It requires only that the applicant submit “satisfactory” evidence to FERC. Id. Thus, an applicant is not required by FERC to comply with state water law, but the FPA assumes that the applicant has done so and can present evidence to that effect. First Iowa Hydro-Elec. Co-op., 328 U.S. at 178.

³ See Public Trust Memo, 4/26/06.

⁴ Section 802 requires “each applicant for a license” to submit the information regarding water rights. Although there is perhaps an argument that this section does not apply to renewals, I believe the statutory scheme precludes such a conclusion. Section 802 references applicants under section 808, which concerns new licenses for existing licensees, and exempts them from certain requirements under section 802(b); it does not, however, exempt those applicants from the requirements under section 802(a), which includes the requirements concerning water rights.

Jurisdiction and responsibility for enforcement of state laws remains vested in the State: “Nothing contained in this chapter shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein.” 16 U.S.C. § 821 (2006). This savings clause “therefore has primary, if not exclusive, reference to such proprietary rights.” Sayles Hydro Ass'n v. Maughan, 985 F.2d 451, 454-55 (9th Cir. 1993). As such, anything that does not relate to “proprietary rights” may be superceded by FERC’s superior jurisdiction over relicensing. For example, the Supreme Court has held that a state’s power over proprietary water rights does not include state imposed instream flow requirements. California v. F.E.R.C., 495 U.S. 490, 506-07 (1990). The court held that a State cannot impose a stricter instream flow requirement than that required by FERC.⁵ Id. In contrast, an irrigation district’s change of the use of water from non-consumptive use to consumptive use was not preempted by FERC’s jurisdiction. County of Amador v. El Dorado County Water Agency, 76 Cal. App. 4th 931, 960 (1999). “It is difficult to imagine a more proprietary interest than the consumption of water and its removal from stream flow.” Id. “State law requiring environmental review for this new proprietary use of water by an irrigation district is clearly one ‘relating to the control, appropriation, use or distribution of water used . . . for municipal . . . uses . . .’ as set forth in section 821.” Id. In short, the state’s control over proprietary water rights is subject to some interpretation.

Although states retain jurisdiction over water rights, FERC may impose conditions in a license that affect a licensee’s use of its water rights. Indeed, one of FERC’s mandates is to give “equal consideration” to non-development values such as the natural environmental and recreational opportunities of the waters in which a project is located.

In deciding whether to issue any license under this subchapter for any project, the Commission, in addition to the power and development purposes for which licenses are issued, shall give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.

16 U.S.C. § 797(e). To protect these values, FERC may impose conditions such as minimum instream flows or certain ramping rates. 16 U.S.C. § 803(a)(1), (j); see also State of Cal. ex rel. State Water Resources Control Bd. v. F.E.R.C., 966 F.2d 1541, 1549-50 (9th Cir. 1992). Consistent with FERC’s superior jurisdiction in the relicensing process, these conditions may impair a licensee’s water rights under state law. State of Cal. v. Federal Power Commission, 345 F.2d 917, 924 (9th Cir. 1965) (“Commission had authority to incorporate in the tendered license a condition which could operate to impair the districts' full use of their irrigation water rights”). “By directing FERC to consider the recommendations of state wildlife and other regulatory agencies while providing FERC with final authority to establish license conditions (including those with terms inconsistent with the States' recommendations), Congress has amended the FPA

⁵ Importantly, this limitation on the State’s powers applies only to state water rights, and not to certification under the Clean Water Act section 401. Under that power, the State may impose more stringent conditions on the licensee. See Section II.B. for more detail.

to elaborate and reaffirm First Iowa's understanding that the FPA establishes a broad and paramount federal regulatory role." Id. at 500. Consequently, a licensee's water rights are bounded by conditions imposed by both FERC and the State, but FERC's "considered federal agency determination" overrides conflicting state conditions. Id. at 506.

B. Interplay between State Certification Under Section 401 of the Clean Water Act and State Water Rights

In addition to the State's power over water law, Congress has also granted the State jurisdiction over water quality under the Clean Water Act (CWA). Under section 401(a) of the Clean Water Act, any applicant for a federal license which may result in a discharge must provide the licensing agency with certification from the State in which the discharge originates that the discharge will comply with water quality standards. 33 U.S.C. § 1341(a) (2006).

Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate . . . that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, 1317 of this title.

CWA, 33 U.S.C. § 1341(a)(1) (2006). Thus, in regard to relicensing, the CWA requires that the State certify that all discharges, including discharges from dams, do not violate water quality standards below the discharge point.

Water quality standards consist of three components: (1) designated uses, also called beneficial uses in California;⁶ (2) water quality criteria; and (3) an antidegradation policy. 33 U.S.C. § 1313(c)(2)(A), (d)(4)(B); National Wildlife Fed'n v. U.S. Army Corps of Engineers, 92 F.Supp.2d 1072, 1075 (D. Or. 2000). First, designated uses are the water quality standards for each water body. Typical designated uses includes such things as public water supplies, protection and propagation of fish, shellfish and wildlife, recreation, agriculture, and industry. In accordance with the CWA's goal that wherever attainable, waters should be fishable and swimmable, designated uses must include recreation and aquatic life. 33 U.S.C. § 1251(a); 40 C.F.R. § 131.10(a) (2005). Second, water quality criteria are the chemical, physical, and biological conditions necessary to achieve and protect the designated uses. "States must adopt those water quality criteria that protect the designated use." 40 C.F.R. § 131.11(a)(1) (2005). "For waters with multiple use designations, the criteria shall support the most sensitive use." Id. Water quality criteria include narrative and numeric criteria. 40 C.F.R. § 131.11(b). Narrative

⁶ This nomenclature is unfortunate as the term "beneficial use" under the CWA and a State's Basin Plan is distinct from "beneficial use" as that term is used in the prior appropriation doctrine.

criteria establish water quality goals, such as ‘waters shall be free from substances that may cause adverse effects to aquatic life or human health.’ Numeric criteria are measurable water quality benchmarks, generally expressed as maximum acceptable concentrations, acceptable level, or acceptable range. Finally, the antidegradation policy requires that a State protect existing uses, maintain “high quality” waters, and protect “outstanding” waters. 40 C.F.R. § 131.12(a) (2005).

These water quality standards are laid out in the State’s Basin Plan, which must be reviewed “at least once every three years.” 40 C.F.R. § 131.20(a) (2005). The Basin Plan can be changed although the removal of designated uses is discouraged. Designated uses cannot be removed if the river reach is currently being used for such uses, unless a more stringent criteria is added, or such uses will be attained by implementing effluent limitations and nonpoint controls. 40 C.F.R. § 131.10(h) (2005). The SWRCB must give notice and an opportunity for a public hearing before the Basin Plan is amended. 40 C.F.R. § 131.10(e). Thus, interested public can stay informed of any proposed changes to the Basin Plan.

When a State is deciding whether to certify a project the State must provide “reasonable assurance” that the discharge will not impact any of the components of water quality. 40 C.F.R. § 121.2 (3) (2005). The State can include any conditions that it deems necessary or desirable with respect to the discharge. 33 U.S.C. § 1341(d); *Id.* at § 121.2(4). “In 401(d), the Congress has given the States the authority to place any conditions on a water quality certification that are necessary to assure that the applicant will comply with effluent limitations, water quality standards, ... and with ‘any other appropriate requirement of State law.’” PUD No. 1 of Jefferson County v. Washington Dept. of Ecology. 511 U.S. 700, 711 (1994) (quoting EPA, Wetlands and 401 Certification 23 (Apr.1989)). Although the CWA specifically controls water quality, its mandates necessarily implicate water rights.⁷

In PUD No. 1, as a condition of certification, the State included a minimum instream flow requirement in its certification. The licensee challenged the instream flow, arguing that the State did not have authority to require the licensee “to operate their dam in a manner consistent with a designated ‘use’; instead, say petitioners, under § 303 the State may only require that the project comply with specific numerical ‘criteria.’” *Id.* at 714. The Supreme Court held that such an interpretation was inconsistent with the CWA, which explicitly included both numerical criteria as well as designated uses, and that the state could therefore require compliance with both components, as well as the state’s antidegradation policy. *Id.* at 715, 718. In response to

⁷ Despite the fact that the State derives its power over water rights and water quality from two different sources, it would make sense for the State to coordinate these two roles when possible. The California legislature has codified its “intention . . . to combine the water rights and the water pollution and water quality functions of state government to provide for consideration of water pollution and water quality, and availability of unappropriated water whenever applications for appropriation of water are granted or waste discharge or water quality objectives are established.” Cal. Water Code § 174. Furthermore, the SWRCB recognizes the odd intersection of water rights and water quality in the relicensing process. (Conversation with Matt Myers, SWRCB, Water Quality Certification Unit, July 18, 2006). The SWRCB, however, has not yet integrated licensee’s water rights and water quality certification under section 401.

the licensee's argument that the CWA regulated only water quality and not water quantity, the court noted that the separating the two is an "artificial distinction." Id. at 719. "In many cases, water quantity is closely related to water quality; a sufficient lowering of the water quantity in a body of water could destroy all of its designated uses, be it for drinking water, recreation, navigation or, as here, as a fishery." Furthermore, the court stated, the CWA itself recognizes that "reduced stream flow, *i.e.*, diminishment of water quantity, can constitute water pollution." Id.

First, the Act's definition of pollution as "the man-made or man induced alteration of the chemical, physical, biological, and radiological integrity of water" encompasses the effects of reduced water quantity. 33 U.S.C. § 1362(19). This broad conception of pollution—one which expressly evinces Congress' concern with the physical and biological integrity of water—refutes petitioners' assertion that the Act draws a sharp distinction between the regulation of water "quantity" and water "quality." Moreover, § 304 of the Act expressly recognizes that water "pollution" may result from "changes in the movement, flow, or circulation of any navigable waters ..., including changes caused by the construction of dams." 33 U.S.C. § 1314(f). This concern with the flowage effects of dams and other diversions is also embodied in the EPA regulations, which expressly require existing dams to be operated to attain designated uses. 40 CFR § 131.10(g)(4) (1992).

Id. at 719-20.

The court also found that the reservation of power to the states to determine "proprietary" rights to water did not override the state's authority to impose minimum instream flow conditions under section 401 certification because such conditions did not affect the proprietary right to use water. Id. at 720. "The certification merely determines the nature of the use to which that proprietary right may be put under the Clean Water Act, if and when it is obtained from the State." Id. at 721. This power stands in contrast to the FPA's preemption of state law to the extent that it conflicts with FERC's authority under the FPA. See California v. F.E.R.C., 495 U.S. 490 (1990) (California's attempt to impose more stringent instream flow requirements than those included in the FERC license was preempted; "A state measure is 'pre-empted to the extent it actually conflicts with federal law, that is, when it is impossible to comply with both state and federal law, or where the state law stands as an obstacle to the accomplishment of the full purposes and objectives of Congress.'). Therefore, although the SWRCB can impose minimum flows on a licensee under power granted to it under the CWA, it cannot impose minimum flows that are more stringent than FERC's under state law. PUD No. 1, 511 U.S. at 721. However, the SWRCB can impose additional requirements on a water right holder's rights using its powers under the CWA, even though it was the SWRCB who issued the water rights in the first instance. Id. at 723. A "State may include minimum stream flow requirements in a certification issued pursuant to § 401 of the Clean Water Act insofar as necessary to enforce a designated use contained in a state water quality standard." Id.

"FERC may not alter or reject conditions imposed by the states through section 401 certificates." U.S. Department of Interior v. F.E.R.C., 952 F.2d 538, 548 (D.C. Cir. 1992).

“[T]he license need not expressly adopt the terms and conditions of such certification; they become terms and conditions of the license as a matter of law.” *Id.* Moreover, “[n]o license or permit shall be granted until the certification required by [section 401(a)(1)] has been obtained or has been waived. . . . “ nor may “a license or permit [] be granted if certification has been denied by the State.” 33 U.S.C. § 1341(a)(1). Consequently, “[t]he CWA . . . has diminished [the FPA’s] preemptive reach by expressly requiring the Commission to incorporate into its licenses state-imposed water-quality conditions.” *American Rivers v. F.E.R.C.*, 129 F.3d 99, 111 (2nd Cir. 1997). As such, the CWA grants the State a powerful check on FERC’s jurisdiction over relicensing.⁸ *PUD No. 1*, 511 U.S. at 723.

Although the State possesses broad power under the CWA, the State’s authority is not without limits. First, an applicant may challenge conditions that it believes are outside of the state’s authority under section 401. *American Rivers v. FERC*, 129 F.3d 99, 112 (2nd Cir. 1997). Second, FERC may refuse to issue a license if it finds that the 401 conditions will cause the license to conflict with the FPA. *Id.* Finally, the State is limited by section 511(a)(1) of the CWA, which requires that the CWA “shall not be construed as . . . limiting the authority or functions of any officer or agency of the United States under any other law or regulation not inconsistent with this chapter” *Id.* Thus, 401 certification cannot completely stymie efforts to implement hydroelectric projects as provided for in the FPA. Despite these restraints, the State’s authority under section 401 provides it with a powerful check on FERC’s jurisdiction over the relicensing process.

The authority of the States to certify hydroelectric projects under the CWA was recently reaffirmed in a case before the United States Supreme Court, *S.D. Warren Co. v. Maine Bd. of Environmental Protection*, 126 S.Ct. 1843 (2006). In that case, a hydroelectric dam operator asserted that a dam does not produce a “discharge” as defined in the CWA. Noting that the CWA was passed to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” and that the goal of the act was to achieve “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water,” the court stated: “State certifications under § 401 are essential in the scheme to preserve state authority to address the broad range of pollution.” *Id.* at 1853.

No polluter will be able to hide behind a Federal license or permit as an excuse for a violation of water quality standard[s]. No polluter will be able to make major investments in facilities under a Federal license or permit without providing assurance that the facility will comply with water quality standards. No State water pollution control agency will be confronted with a fait accompli by an industry that has built a plant without consideration of water quality requirements.

Id. (quoting Senator Muskie on the floor when what is now section 401 was first proposed, 116 Cong. Rec. 8984 (1970)). The court also recognized the CWA’s scope in covering not just the addition of pollutants, but “the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.” *Id.* at 1852-53 (quoting 33 U.S.C. § 1362(19)). “The alteration of water quality as thus defined is a risk inherent in limiting

⁸ A State may waive section 401 certification. 33 U.S.C. § 1341(a)(1). However, such a situation is highly unlikely in this case.

river flow and releasing water through turbines.” The court therefore held that “[r]eading section 401 to give ‘discharge’ its common and ordinary meaning preserves the state authority apparently intended.” *Id.* at 1853. Thus, the court reaffirmed the importance of the State’s role in relicensing.

IV. Water Rights In the Yuba-Bear and Middle Fork American Relicensings

Nevada Irrigation District (NID), Pacific Gas and Electric (PG&E), Placer County Water Agency (PCWA) all possess extensive water rights in the Yuba, Bear, and American watersheds for the Yuba-Bear, Drum Spaulding, and the Middle Fork American projects. This section will first consider the water rights of the projects separately. Then it will outline some of the connections between the systems and how possible changes in contractual obligations may affect the operation, and therefore the licensing, of both projects.

A. Water Rights⁹

This memo will provide only a brief overview of the specifics of the water rights as that research has been conducted with much more thoroughness by others.¹⁰

1. NID’s Water Rights—Yuba-Bear Project No. 2266

Under its present post-1914 permits and licenses, NID has rights to a total of 450,000 acre feet (af) of water per year. (Kleinschmidt Associates, Raw Water Master Plan Update – Phase I Technical Analysis Draft Report, 4-14 (Sept. 2005). Of that water, on average 356,725 af is available to NID due to dead storage and minimum pool requirements. *Id.* NID also has pre-1914 rights to 3,339 cfs and 203,905 af per year. In addition, NID can purchase up to 100,000 af from PG&E, although it rarely exercises this right. (Kevin Goishi, Personal Communication on facilities tour, 2005). NID’s total reservoir capacity is 349,500 af. Simply adding all of these rights together would reveal a much larger right than NID actually holds. For several of its rights, NID holds “sister” rights—two rights that are essentially rights to the same water, but for consumptive and non-consumptive purposes. Nevertheless, adding all of NID’s claims together reveals that NID is asserting rights to a significant amount of water.

NID is presently in the process of licensing several of its permits, and the SWRCB is therefore inspecting the extent to which NID has put water to beneficial use. Because generally more water is claimed than can actually be used, it is likely that the SWRCB will decrease NID’s rights in its final licenses.

⁹ These water rights are also outlined in tables at the end of this memo. All figures in the narrative part of this memo are based on those tables and are estimates based on my understanding of those figures.

¹⁰ See extensive research conducted by Bob Center.

2. PG&E's Water Rights—Drum-Spauling Project No. 2310

PG&E holds 110,646 af in storage rights each year and 1,836.85 cfs in pre-1914 rights. In addition, PG&E holds licenses to 98,234 af storage rights and 1,445 cfs direct diversion. Although only 26,662 af of its licensed water rights are for consumptive purposes, PG&E's pre-1914 rights are almost all for consumptive as well as non-consumptive purposes. Thus, PG&E is able to sell a great deal of water to both NID and PCWA as outlined in more detail below.

First, PG&E is unique in that it has obtained licenses for all of its post-1914 rights. Furthermore, the majority of PG&E's consumptive water rights are pre-1914 rights, which could be well supported by its long history of water use in this area. Furthermore, PG&E's rights are still subject to requirements to protect the environment.

3. PCWA's Water Rights—Middle Fork American Project No. 2709

PCWA has rights for both consumptive and non-consumptive use of 315,000 af per year as well rights to direct diversion of 4,910 cfs for power and incidental recreation, and 2,025 cfs consumptive direct diversion rights, which overlap with the non-consumptive rights. PCWA does not hold any pre-1914 rights, and it has licensed only one of its rights, a small direct diversion power right. PCWA reports that two of its rights, permit no. 20,754, and license no. 12,644, “were issued to the PCWA by the SWRCB to authorize power use of water released from Hell Hole Reservoir for stream maintenance and fishery purposes.” *Id.* at 6.3-6. PCWA's permits specify that PCWA must place all the water claimed under its permits to beneficial use by December 1, 2007, unless it can show “good cause” for the extension and obtain approval from the SWRCB. Cal. Water Code § 1398 (Correspondence with SWRCB Staff). PCWA will apply for an extension, however, if it does not obtain an extension, PCWA will have to commence the water rights licensing process. Cal. Water Code §§ 1600, 1605 (Conversation with Einar Maisch, PCWA Director of Strategic Affairs, Aug. 18, 2006).

PCWA states that it “holds sufficient water rights to fully utilize all MFP facilities, including reservoir storage and diversion through tunnels and powerhouses. PCWA's water rights are sufficient to meet all current and reasonably foreseeable consumptive delivery obligations.” *Id.* at 6.3-7. However, “an agreement with the United States limits PCWA's consumptive use of water under Permits 13856 and 13858 allow up to a maximum of 120,000 acre-feet of water annually.” Draft Existing Resource Information Reports First Series 6.3-7 (Aug. 2006) (available at: <http://relicensing.pcwa.net/existingresource.php>).

PCWA purchases water from PG&E's Drum-Spauling Project PCWA has been able to capitalize fully on its American pumps to meet its required water deliveries. Furthermore, negotiations under the Water Forum Agreement have limited PCWA's options. (Conversation with Einar Maisch, PCWA Director of Strategic Affairs, Aug. 18, 2006). “PCWA's specific Water Forum commitment includes limiting total usage to amounts commensurate with PCWA's

water rights and water usage contracts, and an obligation to attempt to release additional water to the Middle Fork American and Rubicon rivers in the driest years.” *Id.* at 6.3-9. “PCWA has committed, under certain conditions, to release up to 27,000 af of water, over and above the amount diverted to use, in years when the total unimpaired inflow into Folsom Reservoir is expected to be below 950,000 af.” *Id.*

B. Relationship between Water Rights in the Middle Fork American Project and the Yuba-Bear Projects

NID, PG&E, and PCWA have intertwined their projects through various, power purchase, water supply, and water purchase contracts.¹¹ These contracts have allowed for the operation and funding of the projects. Generally, these contracts provide for the sale of power to PG&E and the ability of the irrigation districts to purchase some of PG&E’s consumptive water. In addition, PG&E and NID provide space to one another in their diversion structures, so that they both may take full advantage of their water rights.

The majority of these contracts with PG&E were entered into when NID and PCWA were constructing their projects; the strength of the contracts allowed them to sell revenue bonds to finance the projects. All of these contracts will expire upon the expiration of the FERC licenses in 2013. As such, these contracts will be subject to renegotiation and may not be renewed.

The renegotiation of these contracts will be influenced by the beneficial and sometimes necessary relationships between the parties. For instance, current contracting conditions, allow NID to share PG&E water supply space in its diversion structures without which they could not maintain current operations without significant new construction. If PCWA could not continue to purchase consumptive water from PG&E, it would also have to construct additional pumping facilities from the American River or satisfy its water delivery obligations in other ways.

In short, although NID and PCWA have historically been tied to PG&E, the relicensing and expiration of water contracts will essentially open a window of opportunity for change.

2. Clean Water Act Section 401 Certification

The Basin Plan for the Central Valley Region provides the water quality standards for the Yuba, Bear, and American Rivers and includes both designated and beneficial uses for water as well as numeric criteria. California Regional Water Quality Control Board Central Valley Region, The Water Quality Control Plan (Basin Plan) For The California Regional Water Quality

¹¹ For more detail on the contractual and physical connections between these systems, see Memo re: Contractual relationships between PG&E and NID and PG&E and PCWA- DRAFT (Dec. 7 2005).

Control Board Central Valley Region- The Sacramento River Basin And The San Joaquin River Basin (4th Ed. Aug. 2006) (available at: http://www.waterboards.ca.gov/centralvalley/available_documents/basin_plans/SacSJR.pdf)

Beneficial uses of water for the Yuba River, from Sources to Englebright Reservoir, include municipal and domestic water supply, irrigation, stock watering, power, contact recreation, canoeing and rafting, other non-contact recreation, cold freshwater habitat, cold spawning habitat, and wildlife habitat. *Id.* at II-6.00. The Bear River has similar beneficial uses, but also includes warm freshwater habitat and potential uses of warm and cold migration and spawning habitat. *Id.* The Middle Fork American has the same beneficial uses to the Yuba as well as the potential for warm freshwater habitat. In addition to the beneficial uses, the Basin Plan sets numeric criteria, which include limits for bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, methylmercury, oil and grease, pH, pesticides, radioactivity, salinity, sediment, settleable material, suspended material, tastes and odors, temperature, toxicity, and turbidity. *Id.* at III-2.00 - III-8.01.

The SWRCB must ensure that discharges from the project facilities will not affect the ability of the receiving water to support the beneficial uses and that the discharges meet the numeric criteria enacted to achieve those beneficial uses. “For waters with multiple use designations, the criteria shall support the most sensitive use.” 40 C.F.R. § 131.11(a) (2005). For example, the beneficial uses for the Yuba include different forms of recreation: contact, “where ingestion of water is reasonably possible,” such as swimming or whitewater activities; and non-contact recreation, such as boating or hiking near the water. *Id.* at II-1.00. To ensure that the water body can support contact recreation, the protection of the water will need to be higher than if only non-contact was listed as a designated use. Thus, for the Yuba, Bear and Middle Fork American, the SWRCB will need to ensure that the certification will protect the most sensitive use for each parameter. However, the SWRCB may establish sub-categories of a use “if the State can demonstrate that attaining the designated use is not feasible because: . . . Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use.” 40 C.F.R. § 131.10(g)(4). Thus, the public should work to ensure that the SWRCB is protecting the most sensitive designated uses and that the SWRCB is not allowing a licensee to claim infeasibility in changing the dam to protect beneficial uses.

3. FERC License Conditions

FERC also may set conditions in the license that require the licensee to protect fish and wildlife or other environmental considerations. The FPA states that FERC “shall give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.” 16 U.S.C. § 797(e). FERC therefore has the power and duty to require conditions to protect those values, including requiring a licensee to release certain minimum flow, limit the

time and severity of ramping rates or to minimize bypass reaches. State of Cal., 345 F.2d at 923-34. “The issuance of a license can be justified only on the theory of a resulting benefit to the public.” State of Cal. v. Federal Power Commission, 345 F.2d 917, 923 (9th Cir. 1965).

This requirement, however, does not give FERC the power to give greater consideration to environmental values. “[W]hile full and genuine consideration of fish and wildlife is required, equal treatment is not. Instead, the reconciliation of power and other development needs with fish and wildlife needs in cases of conflict is ultimately left to the public interest judgment of the Federal Energy Regulatory Commission.” State of Cal. ex rel. State Water Resources Control Bd. v. F.E.R.C., 966 F.2d 1541, 1550 (9th Cir. 1992) (quoting 132 *Cong.Rec.* S. 15107). Given the emphasis in the FPA on power, FERC should be seen as the last resort for imposition of conditions to protect the environment.

NID PRE-1914 AND RIPARIAN STATEMENTS¹²

STATEMENT NO.	WR TYPE	PRIORITY DATE	SOURCE	AMOUNT CFS	AF	PLACE OF STORAGE/DIVERSION	SEASON DIVERSION	STORAGE	PURPOSE	POU
S010591	RIPARIAN	N/A	DAMFINE SPRING	0.22	0	JACKSON MEADOWS CAMPGROUND	6/1 - 10/31	-	D	
S010592	RIPARIAN	N/A	UNNAMED TRIB TO PASS CRK	0.22	0	JACKSON MEADOWS CAMPGROUND	6/1 - 10/31	-	D	
S004716	PRE-1914	1873	CANYON CRK	50	3,030	SAWMILL LAKE	YEAR-ROUND	?	D, I, P	
S004717	PRE-1914	1859	CANYON CRK	150	13,840	FRENCH LAKE	YEAR-ROUND	?	D, I, P	DISTRICT
S010794	PRE-1914	1880	ORR CRK COON CRK	15 35	10 0	GOLD HILL CANAL CAMP FAR WEST CANAL	YEAR-ROUND YEAR-ROUND	? -	D, I, S	30,066 ACRES
S012949	PRE-1914	1851	DEER CRK	2	0	KEYSTONE CANAL	3/1 - 10/31	-	I, S	45 ACRES
S012950	PRE-1914	1851	DEER CRK	30	0	TUNNEL CANAL	YEAR-ROUND	-	D, I, S, R, F	2,400 ACRES
S012951	PRE-1914	1851	DEER CRK	21	0	NEWTOWN CANAL	YEAR-ROUND	-	D, I, S, R, F	715 ACRES
S012952	PRE-1914	1850	DEER CRK	90	0	D/S CANAL	YEAR-ROUND	-	D, I, S, R, M, F, Mun, Ind	3,600 ACRES/ 30,000 PEOPLE
S012953	PRE-1914	1857	SF DEER CRK	65	0	CASCADE CANAL	YEAR-ROUND	-	D, I, S, R, F, Ind	1,500 ACRES/ 18,800 PEOPLE
S013330	PRE-1914	1854	MIDDLE YUBA	500	0	MILTON RESERVOIR	YEAR-ROUND	-	D, I, P, R, S, J, F	DISTRICT
S013790	PRE-1014	1853	AUBURN RAVINE	40	0	HEMPHILL CANAL	4/1 - 10/31	-	I, S, F, J	DISTRICT
S013791	PRE-1914	1853	AUBURN RAVINE	75	0	AUBURN RAVINE I CANAL	4/15 - 10/15 YEAR-ROUND	- -	I D, S, F, J	DISTRICT
S013800	PRE-1914	1872	CANYON CRK	0	68,510	BOWMAN LAKE	-	YEAR-ROUND	I, D, P, S, R, J,	DISTRICT

¹² From SWRCB Staff, (email 8/15/2006).

									Mun, Ind, F	
S013801	PRE-1914	1872	CANYON CRK	0	3,980	FAUCHERIE LAKE	-	YEAR-ROUND	D, I, M, Ind, S, P, R, J, F	DISTRICT
S013809	PRE-1914	1853	BEAR RIVER	200	0	COMBIE PHASE I CANAL	4/15 - 10/15	-	I, D, P, J, S	DISTRICT
S013926	PRE-1914	1859	WOLF CREEK	65	0	TARR CANAL	YEAR-ROUND	-	I, S, J	2,025 ACRES
S013927	PRE-1914	1874	S. YUBA	165	0	S. YUBA CANAL	YEAR-ROUND	-	I, D, M, P, R, S, J, Ind, F	9,200 ACRES 40,291 PEOPLE
S013928	PRE-1914	1874	S. YUBA	860	0	DRUM CANAL	YEAR-ROUND	-	I, D, P, R, S, J, Ind, F	18,710 ACRES
S014353	PRE-1914	1851	DEER CRK	96	48,547	SCOTTS FLAT	YEAR-ROUND	?	I, D, S, R, P, F	6,400 ACRES/ 12,300 PEOPLE
S014354	PRE-1914	1853	BEAR RIVER	880	65,988	ROLLINS PH	YEAR-ROUND	?	P	

NID PERMITS AND LICENSES¹³

APP ID	PERMIT	LICENSE	PRIORITY DATE	SOURCE	AMOUNT CFS	AF	PLACE OF STORAGE/DIVERSION	SEASON DIVERSION	STORAGE	PURPOSE	REMARKS
1270	2082	12795	5/7/19	JACKSON CRK CANYON CRK CANYON CRK CANYON CRK CANYON CRK TEXAS CRK FALL CRK TRAP CRK		970 3,980 1,221 58,829 146 30 15 5	JACKSON LAKE FAUCHERIE LAKE SAWMILL LAKE BOWMAN LAKE B-S CONDUIT B-S CONDUIT B-S CONDUIT B-S CONDUIT		YEAR-ROUND YEAR-ROUND YEAR-ROUND YEAR-ROUND 4/15 - 9/30 4/15 - 9/30 4/15 - 9/30 4/15 - 9/30	MINING DOMESTIC IRRIGATION MUNICIPAL	LICENSED 7/10/91
1614	1481		1/8/20	DEER CK		60,000	SCOTTS FLAT RES.		YEAR-ROUND	MINING DOMESTIC IRRIGATION	LICENSING IN PROGRESS
1615	5801	8808	1/8/20	S. FK DEER CK DEER CK	100		CASCADE CANAL SNOW MTN CANAL D-S CANAL ROUGH & READY CANAL NEWTOWN CANAL TUNNEL CANAL CHINA CANAL	4/1 - 10/1		IRRIGATION DOMESTIC	LICENSED 1/22/64
2275	2084	12796	3/25/21	MIDDLE YUBA		60,000	JACKSON MEADOWS BOWMAN LAKE		1/1 - 12/31	POWER	LICENSED 7/10/91
2276	2085	12797	3/25/21	MIDDLE YUBA		60,000	JACKSON MEADOWS BOWMAN LAKE		12/1 - 7/15	IRRIGATION DOMESTIC MUNICIPAL MINING	LICENSED 7/10/91
2372	2087	12798	6/3/21	JACKSON CRK CANYON CRK		970 2,993	JACKSON LAKE FAUCHERIE LAKE		12/1 - 7/15 12/1 - 7/15	POWER	LICENSED 7/10/91

¹³ From SWRCB Staff, (email 8/15/2006).

				CANYON CRK		3,030	SAWMILL LAKE		12/1 - 7/15		
				CANYON CRK		47,530	BOWMAN LAKE		12/1 - 7/15		
				CANYON CRK	152		B/S CONDUIT	YEAR-ROUND			
				TEXAS CRK	30		B/S CONDUIT	YEAR-ROUND			
				FALL CRK	15		B/S CONDUIT	YEAR-ROUND			
				TRAP CRK	5		B/S CONDUIT	YEAR-ROUND			
2652A	5803	10350	11/22/21	BEAR RIVER		5,555	COMBIE RESERVOIR		11/30 - 6/1	IRRIGATION	LICENSED 11/26/68
						6,945	ROLLINS RESERVOIR		11/30 - 6/1	DOMESTIC POWER RECREATION	POWER ADDED AS A PURPOSE 2/14/84
2652B	11626		11/22/1921	BEAR RIVER		65,000	ROLLINS RESERVOIR		11/30 - 6/1	IRRIGATION DOMESTIC RECREATION	LICENSING IN PROGRESS
4309	2935	4544	11/7/1934	MIDDLE YUBA CANYON CRK ETC. NOT LISTED	135		DRUM CANAL	YEAR-ROUND		POWER	LICENSED 2/11/57
4310	2936	1707	11/7/1924	MIDDLE YUBA CANYON CRK ETC. NOT LISTED	126		S. YUBA CANAL	YEAR-ROUND		POWER	LICENSED 12/15/36
5193	13770		9/8/1926	MIDDLE YUBA		50,000	JACKSON MEADOWS MILTON RESERVOIR BOWMAN LAKE SCOTTS FLAT RES. ROLLINS RESERVOIR COMBIE RESERVOIR		1/1 - 6/30 10/1 - 12/1	DOMESTIC IRRIGATION RECREATION	LICENSING IN PROGRESS
6229	5804	8809	3/26/1929	BEAR RIVER	120		BEAR RIVER CANAL	4/1 - 10/31		IRRIGATION DOMESTIC	LICENSED 1/20/64
6529	5805	4403	1/9/1930	AUBURN RAVINE	8		HEMPHILL CANAL	4/1 - 11/1		IRRIGATION	LICENSED 7/22/55
6701	5806	12799	6/16/1930	CLEAR CRK	5		B/S CONDUIT	10/1 - 9/30		POWER	LICENSED 7/10/91
				FALL CRK	10		B/S CONDUIT	12/1 - 7/31			
				TRAP CRK	5		B/S CONDUIT	1/1 - 7/31			

6702	5807	12800	6/16/1930	CLEAR CRK FALL CRK TRAP CRK	5 10 5		B/S CONDUIT B/S CONDUIT B/S CONDUIT	4/15 - 9/30 4/15 - 7/31 4/15 - 7/31		IRRIGATION	LICENSED 7/10/91
8177	5812	12801	11/27/1934	WILSON CRK	2.7	680	MILTON/BOWMAN CON. BOWMAN LAKE	YEAR-ROUND	11/1 - 6/30	IRRIGATION DOMESTIC MUNICIPAL	LICENSED 7/10/91
8178	5813	12802	11/27/1934	TEXAS CRK CLEAR CRK FALL CRK TRAP CRK RUCKER CRK	68 13.6 75.7 8.6 25		B/S CONDUIT B/S CONDUIT B/S CONDUIT B/S CONDUIT B/S CONDUIT	1/1 - 6/30 1/1 - 7/31 12/1 - 7/31 4/15 - 6/30 YEAR-ROUND		POWER	LICENSED 7/10/91
8179	5814	12803	11/27/1934	WILSON CRK	3.5	680	MILTON/BOWMAN CON. BOWMAN LAKE	YEAR-ROUND	11/1 - 6/30	POWER	LICENSED 7/10/91
8180	5815		11/27/1934	CLEAR CRK TEXAS CRK FALL CRK TRAP CRK RUCKER CRK	30 70 85 15 25	6,000 14,000 17,000 3,000 5,000	B/S CONDUIT B/S CONDUIT B/S CONDUIT B/S CONDUIT B/S CONDUIT SCOTT'S FLAT RES. ANTHONY HOUSE PARKER	YEAR-ROUND YEAR-ROUND YEAR-ROUND YEAR-ROUND YEAR-ROUND	11/1 - 6/30 11/1 - 6/30 11/1 - 6/30 11/1 - 6/30 11/1 - 6/30	IRRIGATION DOMESTIC	LICENSING IN PROGRESS
15525	13771	10016	9/3/1953	S. YUBA	200		SPAULDING LAKE	9/1 - 6/30		POWER	LICENSED 3/5/73
20017	13772		3/6/1961	S. YUBA	200	18,000	ROLLINS RESERVOIR SCOTT'S FLAT RES.	9/1 - 6/30	11/1 - 6/30	DOMESTIC IRRIGATION	LICENSING IN PROGRESS
20072	13773		4/6/1961	MIDDLE YUBA		50,000	JACKSON MEADOWS BOWMAN LAKE		10/1 - 6/30	POWER	LICENSING IN PROGRESS
21151	14799	9903	2/5/1963	BEAR RIVER	1,056		BEAR RIVER (CHICAGO PARK PH)	YEAR-ROUND		POWER	LICENSED 4/19/72
21152	14800	9902	2/5/1963	BEAR RIVER	550		BEAR RIVER (DUTCH FLAT PH)	YEAR-ROUND		POWER	LICENSED 4/19/72

24983	16953		1/9/1976	BEAR RIVER	700	62,080	ROLLINS RESERVOIR	YEAR-ROUND	11/30 - 6/1	POWER	LICENSING IN PROGRESS
26866	18757		6/3/1981	BEAR RIVER	1,000		COMBIE RESERVOIR	YEAR-ROUND		POWER	LICENSING IN PROGRESS
27132	18608		12/3/1981	DEER CRK	85	60,000	SCOTTS FLAT RES.	YEAR-ROUND	YEAR-ROUND	POWER	LICENSING IN PROGRESS
27559	19158		10/14/1982	CANYON CRK	322	65,000	BOWMAN LAKE	YEAR-ROUND	1/1 - 7/31	POWER	LICENSING IN PROGRESS

PG&E PRE-1914 AND RIPARIAN STATEMENTS¹⁴

STATEMENT NO.	WR TYPE	PRIORITY DATE	SOURCE	AMOUNT CFS	AF	PLACE OF STORAGE/DIVERSION	SEASON DIVERSION	STORAGE	PURPOSE	POU
S000934	PRE-1914	1855	ROCK CRK	0	207		1/1-12/31		POWER	
S000935	PRE-1914	1855	LOWER ROCK LAKE	0	48		1/1-12/31		DOMESTIC	
S000936	PRE-1914	1852	TEXAS CRK	0	953		1/1-12/31		IRRIGATION	
S000937	PRE-1914	1870	LINDSEY CRK	0	18		1/1-12/31		DOMESTIC	
S000938	PRE-1914	1870	LINDSEY CRK	0	110		1/1-12/31		DOMESTIC	
S000939	PRE-1914	1870	TEXAS CRK	0	293		1/1-12/31		DOMESTIC	
S000940	PRE-1914	1875	LAKE CRK	0	739		1/1-12/31		DOMESTIC	
S000941	PRE-1914	1875	LAKE CRK	0	150		1/1-12/31		DOMESTIC	
S000942	PRE-1914	1870	RUCKER CRK	0	1163		1/1-12/31		DOMESTIC	
S000943	PRE-1914	1870	RUCKER CRK	0	648		1/1-12/31		IRRIGATION	
S000944	PRE-1914	1892	SOUTH YUBA RIVER	0	74773		1/1-12/31		IRRIGATION	
S000945	PRE-1914	1864	UNST	0	4935		1/1-12/31		DOMESTIC	
S000946	PRE-1914	1850	WHITE ROCK CRK	0	570		1/1-12/31		DOMESTIC	
S000948	PRE-1914	1855	UNST	0	1505		1/1-12/31		DOMESTIC	
S000949	PRE-1914	1855	UNST	0	1736		1/1-12/31		IRRIGATION	
S000950	PRE-1914	1860	UNST	0	484		1/1-12/31		IRRIGATION	
S000951	PRE-1914	1877	STERLING CRK	0	1764		1/1-12/31		DOMESTIC	
S009033	PRE-1914	1873	FORDYCE CRK	0	20000			1/1-12/31	IRRIGATION	
S009982	PRE-1914	1870	RUCKER CRK	30	0		1/1-12/31		IRRIGATION MUNICIPAL INDUSTRIAL POWER	
S009979	PRE-1914	1870	LINDSEY CRK	20	0		1/1-12/31		IRRIGATION MUNICIPAL INDUSTRIAL POWER	

¹⁴ From Nick Wilcox and SWRCB Water Rights Information Management System (WRIMS) database. Available at: <http://165.235.31.51/login.html>.

S009980	PRE-1914	1870	CLEAR CRK	20	0	1/1-12/31	IRRIGATION MUNICIPAL INDUSTRIAL POWER
S009032	PRE-1914	1870	JORDAN CRK	70	0	1/1-12/31	DOMESTIC IRRIGATION POWER
S009978	PRE-1914	1870	TEXAS CRK	20	0	1/1-12/31	IRRIGATION MUNICIPAL INDUSTRIAL POWER
S000965	PRE-1914	1853	UNSP	10	0	1/1-12/31	DOMESTIC IRRIGATION POWER
S000954	PRE-1914	1853	SOUTH YUBA RIVER	165	0	1/1-12/31	DOMESTIC IRRIGATION POWER
S009981	PRE-1914	1870	FALL CRK	30	0	1/1-12/31	IRRIGATION MUNICIPAL INDUSTRIAL POWER
S000961	PRE-1914	1864	LITTLE BEAR RIVER	60	0	1/1-12/31	DOMESTIC IRRIGATION
S000956	PRE-1914	1864	BEAR RIVER	60	0	1/1-12/31	DOMESTIC IRRIGATION POWER
S000957	PRE-1914	1852	BEAR RIVER	475	0	1/1-12/31	DOMESTIC IRRIGATION POWER
S000968		1917	ROCK CRK	19.98	550	1/1-12/31	DOMESTIC IRRIGATION POWER
S000969		1917	DRY CRK	6.87	0	1/1-12/31	DOMESTIC IRRIGATION POWER
S000953		1865	SOUTH YUBA RIVER	800	0	1/1-12/31	POWER
S000964		1865	UNCR	10	0	1/1-12/31	POWER
S000970		1853	UNCR	10	0	1/1-12/31	POWER
S010396		1870	TRAP CRK	30	0	1/1-12/31	POWER

PG&E PERMITS AND LICENSES¹⁵

APP ID	PERMIT	LICENSE	PRIORITY DATE	SOURCE	AMOUNT CFS	AF	PLACE OF STORAGE/DIVERSION	SEASON DIVERSION	STORAGE	PURPOSE	REMARKS
A003550	001684	010867	7/26/1923	FORDYCE CRK	0	26,662			11/1-6/30	IRRIGATION MUNICIPAL INDUSTRIAL	consumptive
A002750	001682	000986	2/9/1922	FORDYCE CRK	0	26,572			11/1-6/30	POWER	
A008794	005775	006388	9/21/1936	YUBA RIVER	700	45,000		1/1-12/31	10/1-3/1	POWER	
A006332	003349	001375	6/19/1929	BEAR RIVER	120			1/1-12/31		POWER	
A002753	001683	000987	2/9/1922	BEAR RIVER	100			6/30-11/1		POWER	
A005970	005725	008888	7/5/1928	BEAR RIVER	525			1/1-12/31		POWER	

¹⁵ From Nick Wilcox and SWRCB Water Rights Information Management System (WRIMS) database. Available at: <http://165.235.31.51/login.html>.

PCWA PRE-1914 AND RIPARIAN STATEMENTS¹⁶

PCWA has no pre-1914 rights. PCWA has some riparian rights, but they are not listed in conjunction with the project.

PCWA PERMITS AND LICENSES¹⁷

APP ID	PERMIT	LICENSE	PERMIT DATE	SOURCE	AMOUNT CFS	AF	PLACE OF STORAGE/DIVERSION	SEASON DIVERSION	STORAGE	PURPOSE	REMARKS
A018084	13855	N/A	1/10/1963	DUNCAN CRK	150	25,000		1/1- 12/1	11/1-7/1	POWER INCIDENTAL RECREATION	Maximum Application Direct Diversion (all 5): 3840 cfs
				MIDDLE FORK AMERICAN	2515	95,000		1/1- 12/1	11/1-7/1		Maximum Storage (all 5): 249,000 AF
				RUBICON RIVER	675	129,000		1/1-12/1	11/1-7/1		Maximum Annual Use (all 5): 3101471.35 AF
				SOUTH FORK LONG CANYON	400	0		1/1-12/1			
				NORTH FORK LONG CANYON	100	0		1/1-12/1			
A018085	013856	N/A	1/10/1963	NORTH FORK AMERICAN	1225	0		11/1-7/1		DOMESTIC IRRIGATION MUNICIPAL RECREATION INDUSTRIAL	Maximum Application Direct Diversion (all 4): 1225 cfs

¹⁶ From SWRCB Water Rights Information Management System (WRIMS) database. Available at: <http://165.235.31.51/login.html>.

¹⁷ From SWRCB Water Rights Information Management System (WRIMS) database. Available at: <http://165.235.31.51/login.html>.

				DUNCAN CANYON	0	25,000		11/1-7/1		Maximum Storage (all 4): 249,000 AF
				MIDDLE FORK AMERICAN	0	95,000		11/1-7/1		Maximum Annual Use (all 4): 839438.36 AF
				RUBICON RIVER	0	129,000		11/1-7/1		
A018086	13857	N/A	1/10/1963	DUNCAN CRK	50	0		1/1-12/1	POWER INCIDENTAL RECREATION	Maximum Application Direct Diversion (all 5): 1020 cfs
				MIDDLE FORK AMERICAN	815	10,000		1/1-12/1	11/1-7/1	Maximum Storage (all 5): 66,000 AF
				RUBICON RIVER	155	36,000		1/1-12/1	11/1-7/1	Maximum Annual Use (all 5): 804457.05 AF
				SOUTH FORK LONG CANYON	0	13,000			11/1-7/1	
				NORTH FORK LONG CANYON	0	7,000			11/1-7/1	
A018087	13858	N/A	1/10/1963	NORTH FORK AMERICAN	800	0		11/1-7/1	DOMESTIC IRRIGATION MUNICIPAL RECREATION INDUSTRIAL	Maximum Application Direct Diversion (all 5): 800 cfs

				MIDDLE FORK AMERICAN	0	10,000		11/1-7/1		Maximum Storage (all 5): 66,000 AF
				RUBICON RIVER	0	36,000		11/1-7/1		Maximum Annual Use (all 5): 451592.4 AF
				SOUTH FORK LONG CANYON	0	13,000		11/1-7/1		
				NORTH FORK LONG CANYON	0	7,000		11/1-7/1		
A029721	20754 aka 20750	N/A	8/10/1994	RUBICON RIVER	30	0		12/15-5/15	POWER	Maximum Application Direct Diversion: 30 cfs Maximum Use: 17494.47 AF
A026637	18380	12644	5/17/1990	MIDDLE FORK AMERICAN	20 10	0		5/16-12/14 12/15-5/15	POWER	Maximum Annual Use: 11464.63 AF