September 18, 2007

John Kirlin, Executive Director
Delta Vision
California Resources Agency
1416 Ninth Street
Sacramento, California 95814

Re: How Much Flexibility Is There To Allocate Water Within the California Water Rights System?

Dear Mr. Kirlin:

You have asked us to analyze existing flexibility to allocate water within the California water rights system. After a brief introduction summarizing some features of the California water rights system, we will (1) take a look at the potential for new uses under existing types of water rights, and (2) explore in more detail the various mechanisms by which water may be reallocated from one use to another.

I. Introduction: Some Features of the California Water Rights System

Most of the surface water rights in California are appropriative water rights. Appropriative rights to surface water are based on reasonable and beneficial use of the water. (See Context Memorandum: Delta Water Management Governance Structure for a more detailed discussion of the types of water rights in California.) Appropriative water rights follow the rule of temporal priority—“first in time, first in right”—under which the earliest (senior) water rights have priority over later (junior) water rights.¹

¹ Major existing post-1914 appropriative water rights in the Central Valley (Sacramento Valley) and San Joaquin Valley are listed by priority group in the Final EIR for the Implementation of the 1995 Bay/Delta Water Quality Control Plan (November 1999), in Chapter 2, beginning at pages II-19 and II-27 (http://www.waterrights.ca.gov/baydelta/eir/FEIRVol1.pdf). These lists, which are attached to this memorandum, include only the larger water rights, but they make up 95% of the face value of post-1914 water rights in those areas. The lists from the Final EIR do not include pre-1914 water rights, which are important in the San Joaquin Valley. The major pre-1914 water rights are shown on a separate table, also attached.
Appropriate rights, once acquired, have no fixed ending date. They are essentially permanent, unless abandoned, lost by nonuse, revoked for failure to comply with the terms of the license or permit (post-1914 rights), found to involve waste, unreasonable use or unreasonable method of use or unreasonable method of diversion of water, or are adversely possessed or condemned for public use. Although they are unlimited in duration, they are subject to the ongoing limitations of Article X, section 2 of the California Constitution and the Public Trust Doctrine, and subject to regulation under statutes such as the Clean Water Act and federal and state Endangered Species Acts.

Many of the State’s streams are fully appropriated, which means that there is no water available for new water rights on those streams, either during certain seasons or during the entire year. (Wat. Code, §§ 1205-07; www.waterrights.ca.gov/WRINFO) Thus, if water is needed for new uses, it is likely that much of it will not come from new appropriative water rights, but from reallocation of water held under existing rights.

Riparian rights are rights which attach to land that abuts a stream or other watercourse. Riparian rights are considered “part and parcel” of the land, and have no ending date. A new riparian use may begin on riparian land at any time, and will have equal priority with all other riparians on the stream unless the stream has been adjudicated by the State Water Resources Control Board (SWRCB) and the right has been given a lower priority than rights on that stream that are already in use. Higher value uses do not have priority over lower value uses, although there is a preference for “domestic uses” when there is insufficient water for all riparian uses. Because it must be used on riparian land, a riparian right is not generally transferable to a non-riparian for use elsewhere. Nonetheless, a riparian owner may “forebear” to use his water, so that another water rights holder may capture it; and recent statutes permit a riparian owner, and holders of other types of water rights, to dedicate water to instream purposes. (Wat. Code, § 1707.) Riparian rights awarded by a court decree following a statutory stream adjudication after January 1, 1981 may be transferable. (Wat. Code, § 1740.)

There is no statewide system of groundwater management in California. The rules regarding groundwater are given in Context Memorandum: Delta Water Management Governance Structure. Basically, overlying landowners have equal priority to share the native groundwater in a groundwater basin. They may use up to the safe yield of the basin. If there is surplus water, it may be taken for uses on land not overlying the basin, known as appropriative uses. Appropriators are junior to the overlying owners, and among themselves appropriators follow the “first in time” rule of temporal priority. Municipal uses are considered appropriative uses because the municipal government does not own the land over the basin (except for municipally-owned property), and are thus disadvantaged with regard to overlying private landowners. If a condition of overdraft exists for five or more consecutive years, some parties may prescribe the water rights of others. The existence of overdraft in many California groundwater basins (see Department of Water Resources, Bulletin 118 Update 2003) demonstrates that in those basins, either overlayers are taking more than the safe yield, or appropriators are taking water when no surplus exists, or both.
Relatively few new water rights are likely to be granted in the coming years. It is thought by many that new uses and demands for water will be met largely by reallocating water that is already in use.

II. To What Extent will Future Demand be Met with New Water Rights?

Some new demands will be met with new water rights. In general, the potential to obtain new water rights is limited.

A. Appropriative Rights

Pre-1914 appropriative water rights depend on a use initiated prior to 1914, and exercised continuously since that time. No new pre-1914 rights can be created. Over time, some existing pre-1914 rights may be lost to non-use or abandonment. The amount of water diverted under claim of pre-1914 appropriative rights is uncertain, and some claims are likely exaggerated. Water Code section 5101 requires holders of pre-1914 water rights to file Statements of Diversion and Use, but because there are few, if any, legal consequences for the failure to file (Wat. Code, § 5108), many water rights claimants do not file the statements. Moreover, the exceptions in Water Code section 5101 reduce the effectiveness of this statutory provision.

Post-1914 appropriative water rights require a permit from the State Water Resources Control Board. The Board is granting few new appropriative water rights. Many of California’s streams are on the State Board’s list of fully appropriated streams, and the Board will not ordinarily accept new applications on those streams during the fully appropriated seasons. While there are more than 500 water rights applications pending on other streams, in fiscal year 2005-06, the Division of Water Rights granted only 13 new permits. Through April of 2006-07, only 13 new permits were granted. During the same 2006-07 time period, 15 applications were rejected and 36 applications cancelled. (Division of Water Rights, Monthly Progress Report, April, 2007.)

Proposed new storage projects will require permits from the SWRCB, which will require the Board to find that unappropriated water is available for the project. In some cases, the new storage project will not be able to divert water to storage in many years, because no water will be available after prior rights are protected and environmental requirements are met.

B. Riparian Rights

Some new riparian use is possible, if a riparian owner decides to make a new use, or more intensive use, on a riparian parcel. California is a “source of title” state, meaning that riparian rights attach to the smallest parcel in the chain of title that has always been riparian. When a riparian parcel is divided, unless the deed specifies otherwise, riparian rights are severed as to back parcels that no longer touch the stream. This leads to a loss of potentially riparian property over time, diminishing the potential number of future riparian rights.
When the Central Valley Project was first built in the 1930s, the Bureau of Reclamation either condemned riparian rights or entered into settlement or exchange agreements with riparian rights holders on large parts of the Sacramento and San Joaquin Rivers.

C. Groundwater

In the absence of a state-wide groundwater permitting system, an unknown, but seemingly large number of parties continue to drill new wells and pump groundwater. The number of overdrafted basins demonstrate that the law applying to groundwater extractions is not being followed in many cases. Further, given that the SWRCB lacks authority to regulate groundwater, currently the primary way to halt overdraft is a groundwater basin adjudication in court. These proceedings may be extraordinarily costly and may involve hundreds or even thousands of parties.

Many counties have passed groundwater ordinances. However, in many cases, these ordinances are aimed at preventing export of groundwater from the county, rather than preventing in-county overlyers from over-pumping for in-county use.

Increased groundwater pumping in the watersheds which feed the Delta may have effects, positive or negative, on the Delta, depending on how they are managed. For instance, some increased groundwater pumping is likely in the Sacramento Valley in the future, but much of it will be managed in accord with the Sacramento Valley Water Management Program (Phase 8).

D. Federal Reserved Rights

Federal reserved rights attach to federal reservations (Indian reservations, National Forests, National Parks, etc.) and provide a right to sufficient water to carry out the primary purposes of the reservation. They are based on implicit Congressional intent and are the only water rights in California which have their origin in federal law. Federal reserved rights on National Forest lands have not seriously interfered with the California water rights system. Indian water rights have generally not been quantified, however, and questions will arise as uses on Indian reservations expand.

E. Use of Diffused Surface Water

Diffused surface water consists of surface drainage from rain or melting snow that flows over land before the water is gathered into a definite body of water such as a stream or natural watercourse. Because the Water Code requires potential diverters to obtain an appropriative water rights permit for “all water flowing in any natural channel” (Wat. Code, § 1201), the permit requirement does not seem to apply to the use of diffuse surface water. Wells Hutchins, an eminent authority on California water rights, stated that there is very little authority in California water law with respect to rights to use of diffused surface waters. (Hutchins, *The California Law of Water Rights* (1956), p. 382.) In areas where it is difficult to obtain new water rights permits, some landowners may attempt to capture rainfall before it reaches a surface
stream, by means of trenching or other methods. Such future uses would reduce the water reaching surface water streams or groundwater in the area. The amount of such uses is likely small, however, in comparison to existing appropriative and riparian rights to surface water.

F. Desalination

Desalination could provide “new” water. Neither desalination of ocean water nor brackish groundwater would require a permit from the SWRCB, although other permits may be required: for instance, a Coastal Commission permit for plants located in the Coastal Zone. The potential environmental consequences of desalination must be carefully analyzed, including entrainment of ocean organisms and disposal of brine. The Department of Water Resources has posted desalination materials on its website, including its report, *Water Desalination-Findings and Recommendations* (October, 2003). ([www.owwe.water.ca.gov/recycle/desalination.cfm](http://www.owwe.water.ca.gov/recycle/desalination.cfm)). The California Water Plan Update 2005 includes desalination in its portfolio of water management strategies. (2005 Water Plan, Volume 2, pp. 6-1 to 6-5.) Table 6-1 shows plants assumed to be operational by 2030 with a combined capacity of up to 587,200 acre feet per year. Figure 1-1 in the Water Plan gives low and high estimates of additional annual water from desalination as approximately 300,000 acre feet per year and 500,000 acre feet, respectively. Desalination could meet some current export water uses, which might lessen the need for conveying water through the Delta.

II. Methods for Adjusting or Reallocating Existing or Claimed Water Rights.

In light of the limitations on acquisition of new water rights, it is likely that much of the water needed for new uses will come not from new appropriative water rights, but from reallocation of water held under existing rights. The common wisdom has been that reallocation of water may be accomplished in one of two general ways: voluntary (primarily by means of voluntary transfers of water or water rights from one water user to another or by more efficient use of water) or involuntary (e.g., through regulatory activities or condemnation). Most of the following approaches fall into one category or the other.

A. Voluntary Transfers of Water or Water Rights

It is the established policy of the State of California to facilitate the voluntary transfer of water and water rights where consistent with the public welfare of the place of export and the place of use. (Wat. Code, § 109.) The most complete legal discussion of voluntary water transfers is the State Water Resources Control Board’s *A Guide to Water Transfers* (Draft, 1999). The draft Guide was developed by the SWRCB staff. It lists the various types of transfers of water and water rights, and the conditions that govern each type. The Guide is available on the SWRCB web site ([www.waterrights.ca.gov/watertransfer](http://www.waterrights.ca.gov/watertransfer)). It contains a very useful water transfer decision tree, reflecting the different rules that apply to transfers of water, depending on the source. No final version of the Guide was ever issued, but the draft is a very useful document. SWRCB also established a Water Transfer Workgroup of practitioners in the field, and the Workgroup issued a final report to the SWRCB entitled *Water Transfer Issues in California* (June, 2002).
A number of key factors regarding voluntary water transfers are listed below:

- Post-1914 appropriative rights may be transferred. Such transfers require approval of a change petition by the SWRCB. (Wat. Code, §§ 1701, 1725.) The change must not injure any legal user of water, must not unreasonably affect fish, wildlife, or other instream beneficial uses and must comply with any applicable requirements of the state Fish and Game Code and the federal and state Endangered Species Acts. (Wat. Code, §§ 1701.3, 1702, 1736.) Table 1 from the Guide to Water Transfers sets out the Water Code requirements for water rights changes and transfers. In many cases, a document must be prepared under the California Environmental Quality Act, analyzing the environmental impacts of the proposed transfer.

- Pre-1914 appropriative rights may be transferred so long as others are not injured. (Wat. Code, § 1706.)

- Water transfers do not undermine the underlying water rights. By putting water to use pursuant to a transfer, water right holders may protect themselves against forfeiture for non-use. Water Code sections 1010, 1011, 1011.5, 1244, 1440, 1731, and 1737 were specifically added to provide protection to water rights holders who transfer water.

- In contrast to appropriative rights, riparian rights must be used on riparian land. However, a riparian may enter an agreement by which he or she will “forebear” using his or her water, leaving it in the stream to be captured by another (usually the Central Valley Project or State Water Project).

- Any person entitled to use water, whether based upon an appropriative, riparian or other right, may petition the SWRCB for a change to dedicate water for purposes of preserving or enhancing wetlands, habitat, fish and wildlife resources, or recreation in, or on, the water. (Wat. Code, § 1707.) This would be a voluntary reallocation of water to a different use.

- Some streams have been adjudicated. Older decrees may require court approval to change points of diversion or use. Water rights determined by a decree entered after January 1, 1981, as part of a statutory adjudication pursuant to Water Code section 2500 are transferable. (Wat. Code, § 1740.)

- In overdrafted groundwater basins, there is no surplus water to transfer outside the basin.

- At least twenty-seven counties have groundwater ordinances regulating the export of groundwater. Over 200 local agencies have groundwater management plans.
Some surface water rights holders transfer their surface water and pump groundwater in its place. These are called “groundwater substitution transfers.” The Department of Water Resources has drafted groundwater transfer guidelines to assure that such transfers do not adversely affect stream flows. (See www.watertransfers.water.ca.gov under general water transfer information.)

The Sacramento Valley Water Management Program involves transfers within and from the Sacramento Valley. The Sacramento Valley Short-Term Agreement of 2002 describes two blocks of water: 92,500 acre-feet for local use within the Sacramento Valley unless it is not needed, and 92,500 acre-feet for the SWP and the CVP to help meet requirements of D-1641. Thus, in some years, the Program could produce up to 185,000 acre-feet, but there exist obstacles which may prevent the full amount from being available. The Draft EIR on the Program is expected in spring, 2008.

The Yuba River Accord include transfers from the Yuba County Water Agency of 60,000 acre-feet per year for the Environmental Water Account and a supplemental supply of up to 140,000 acre-feet in dry years for the SWP and the CVP, including fish and wildlife and other purposes. Some of this water would have flowed down the Yuba River in any case, but some is a result of conjunctive use of groundwater by Yuba County Water Agency farmers. The Draft EIR on the Yuba River Accord was released in June, 2007.

The State Water Project contracts have provisions governing transfers by contractors. Contractors wishing to sell or buy project water do so through an annual entitlement water pool established by the State.

The Central Valley Project Improvement Act has provisions governing transfers by CVP contractors. These provisions permit CVP users to transfer all or a portion of their CVP contract water to water users outside the CVP, subject to certain conditions. For example, if agricultural lands within the Westlands Water District are retired for water quality purposes, and if Westlands retains the water rights, it could transfer water outside the CVP.

In addition to legal constraints, there are also practical considerations that may restrict water transfers. As an example, transfers of water from Northern California to the San Joaquin Valley and Southern California are constrained by the existing capacity of the Delta pumps. The need to use the state and federal facilities makes the Department of Water Resources and the U.S. Bureau of Reclamation key players in any north-to-south transfers.

Transfers based on fallowing agricultural land raise issues of third-party impacts. When agricultural land is fallowed, farm workers, farm supply businesses and other local businesses may be adversely affected.
Memo to John Kirlin:
Re: Flexibility to Allocate Water within the California Water Rights System

CA Water Plan Update 2005 shows that transfers between water districts have increased from 80,000 acre-feet in 1985 to more than 1,250,000 acre-feet in 2001, and these figures do not include transfers between farmers within the same water district. (Update, Volume 2, Figure 23-1, p. 23-2.) Additional transfers of hundreds of thousands of acre-feet are associated with the Colorado River Quantification Settlement Agreement. (Update, Vol. 2, Table 23-1.) These affect the Delta indirectly, by reducing demand by the Metropolitan Water District of Southern California for water from the Delta.

In recent years, purchases for the Environmental Water Account, administered by the California Department of Fish and Game, the Department of Water Resources, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the Bureau of Reclamation, have varied from a low of 62,000 acre-feet (contracted for in 2006 but not delivered until 2007) and a high of 336,000 acre-feet in 2001 (which may already be reflected in the 2001 figures in Figure 23-1). However, the future of the EWA is uncertain. The Biological Assessment for the planned operations of the CVP and the SWP (Operations Criteria and Plan), dated June 30, 2004, anticipated transfers of 200,000 acre-feet to 600,000 acre-feet in 80% of the years, based on unused capacity at Banks Pumping Plant (and assuming 8,500 cfs Clifton Court Forebay intake capacity, which is currently on hold). In the other 20% of years, critical and some dry years, water transfers may range as high as 800 thousand acre-feet to 1 million acre-feet. (See, http://www.usbr.gov/mp/cvo/ocapBA.html, pages 2-78 to 2-82.) These transfers are inclusive of all transfers from upstream of the Delta, and would thus include EWA transfers, Yuba Accord transfers, and all dry year programs.

Chapter 23 of the Water Plan Update gives useful background information on water transfers, including a brief discussion of major issues and recommendations for implementing water transfers. Another valuable resource is Hanak, Who Should Be Allowed to Sell Water in California? Third-Party Issues and the Water Market (Public Policy Institute of California) (www.ppic.org).

In short, while water transfers must comply with many legal requirements, those requirements have not prevented significant transfers from occurring in the past, and significant transfers can be expected in the future.

B. Voluntary Transfer of Land With Water Rights

Public agencies with proper authority may acquire land that has water rights attached, through purchase or gift. Of course, private parties may also acquire land with water rights.

C. Acquisition of Water Rights by Eminent Domain

Public agencies with adequate authority and the power of eminent domain may acquire water rights from private parties. (Wat. Code, § 1007.) Condemnation may be used to acquire land with water rights or water rights alone.
Water Code sections 1392 and 1629 provide that any water rights permittee or licensee, if he accepts the permit or license, does so on the condition that no value in excess of the amount paid to the State therefore shall be assigned to the license "in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county . . . of the rights and property of any licensee . . . ." We are not aware of any case in which these sections have been used to value water rights in a condemnation proceeding.

D. Enforcement of the Requirement that a Diverter Have a Valid Water Right

Water Code section 1052 provides that the diversion or use of surface water without a valid right is a trespass. An unknown amount of water is being diverted without a proper water right. In case of such unauthorized use, the SWRCB may administratively impose civil liability in an amount not to exceed $500 per day, or it may request the Attorney General to institute an action in superior court to seek injunctive relief to halt the diversion. (See People v. Shirokow (1980) 26 Cal.3d 301.) Water Code section 1825 states: "It is the intent of the Legislature that the state should take vigorous action to enforce the terms and conditions of permits, licenses, certifications, and registrations to appropriate water, to enforce state board orders and decisions, and to prevent the unlawful diversion of water."

On June 19, 2007, the SWRCB held a workshop to receive information regarding policy direction on water right enforcement. The Strategic Plan for the SWRCB identifies improvement in enforcement programs as a priority. However, the SWRCB enforcement unit has limited staffing and funding. In addition to 6 members of the enforcement group, there are 4 staff members in the complaints unit.

Recent SWRCB enforcement efforts on the Navarro, Pescadero and Russian River watersheds have focused on unpermitted reservoirs. All of these have been small and the total amount of water involved is not large. The Board does take some individual enforcement actions as well; and in recent years sought penalties from some diverters from the Delta who pumped water after being informed by the Board that no water was available during certain periods under their water rights.

Water Code section 5101 requires riparians and holders of pre-1914 water rights, with some exceptions, to file with the SWRCB each year a statement of water diversion and use. Such statements would inform the Board of the amounts of such water used, by stream, each year. The statute recites, however, that the statement is required for informational purposes only, and, perhaps for this reason, compliance has been low. Moreover, the exceptions in Section 5101 excluded riparian and pre-1914 water rights claimants in the Delta from responsibility for filing statements of diversion and use, with the result that the SWRCB has a large gap in its knowledge of water use in the Delta itself. An enforceable requirement that all water diversions be reported and that the diverter identify the type of water right on which he is depending would
enable the SWRCB to examine the claims and more effectively act against those who divert water without a valid water right.

An effective enforcement program might eliminate some unauthorized uses, freeing up water for other purposes.

F. Loss of Water Right for Non-Use; Revocation of Permit or License

A water right may be lost through five years of non-use and the unused water may revert to the public as unappropriated water. (Wat. Code, § 1241.) Such reversion requires notice to the permittee, and a public hearing if requested by the party whose right might be lost.

The SWRCB may revoke a water rights permit or license for failure to comply with the law or the terms of the permit or license. (Wat. Code, §§ 1611, 1675.) Notice to the permittee or licensee is required prior to revocation. Through April of fiscal year 2006-07, the Division of Water Rights revoked 97 permits and licenses. In 2005-06, 170 permit and license revocations were issued. (Division of Water Rights, Monthly Progress Reports, April 2007 and June 2006.) A large number of the recent revocations are voluntary, resulting from small water right holders surrendering their permits rather than paying the SWRCB’s relatively recent fees on all water rights permits and licenses.

G. Application of California Constitution, Article X, section 2 to Eliminate Unreasonable Use

Article X, section 2 of the California Constitution requires that all uses of water in California be reasonable and beneficial and that waste of water be avoided. The SWRCB or the courts may limit a water rights holder who is wasting water, using water unreasonably, or using an unreasonable method of use or an unreasonable method of diversion. (People ex rel. State Water Resources Control Bd. v. Forni (1976) 54 Cal.App.3d 743, 753; Imperial Irrigation District v. State Water Resources Control Board (1990) 225 Cal.App.3d 548, 557-561.) What is a reasonable use is a question of fact to be decided in each case. (Joslin v. Marin Mun. Water Dist. (1967) 67 Cal.2d 132, 140.) What is reasonable at one time may be unreasonable at another time; what is a reasonable use in times of plenty may not be a reasonable use at times of scarcity and great need. “What is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time.” (Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist. (1935) 3 Cal.2d 489, 567.)

Some presently-exercised uses of water may be unreasonable now, or become unreasonable in the future. For example, in the 1980s, the SWRCB found some of the Imperial Irrigation District’s irrigation practices to be unreasonable and wasteful, and directed Imperial to increase water conservation. At some point in the future, water use not in compliance with defined urban or agricultural water use efficiency measures/best management practices may be determined to be unreasonable. If some existing uses were found unreasonable, and terminated or limited to a reasonable amount of water, this would make water available for other purposes.
H. Conservation and Recycling

Conservation and recycling can make water used under existing water rights accomplish more. The water rights holder can use the conserved water to meet new demand of its own, or can transfer the water consistent with the requirements discussed above to others for new uses. The California Water Plan Update estimates that agricultural water use efficiency may result in between 200,000 and 800,000 acre-feet of additional annual water per year, and urban water use efficiency may have the potential to yield between approximately 1.2 million acre-feet and 3.1 million acre-feet. Recycled municipal water is estimated to have the potential to yield up to 1.4 million acre-feet annually. (Update, Volume 2, Figure 1-1.)

I. Application of the Public Trust Doctrine to Protect Public Trust Resources/Uses

The SWRCB or the courts may amend water rights licenses to protect public trust resources. The Public Trust Doctrine embodies the principle that the state owns all of its navigable waters and the lands lying beneath them in trust for the benefit of the public. *(National Audubon Society v. Superior Court* (1983) 33 Cal.3d. 419, 434.) Traditional public trust uses included navigation, commerce and fishing. California law has expanded the traditional public trust uses to include recreation, protection of fish and wildlife, preserving trust lands in their natural condition for scientific study and scenic enjoyment, and related open-space uses. No one has a vested right to take water in violation of the public trust. *(Id. at p. 437.)* In theory, application of the Public Trust Doctrine could involve limitations on diversions, reduction in pumping rates, increased releases from dams or other measures. The Board or the court will decide the level of protection that is feasible. There are several possible approaches to applying the public trust doctrine.

- The Public Trust Doctrine can be applied to individual rights, for example, the City of Los Angeles' water rights in the Mono Lake matter.

- In Draft Water Rights Decision 1630, the SWRCB suggested that it could reduce all water rights by a small percentage, or impose fees, on the theory that all diversions reduce water into the Delta and contribute to harm to public trust resources. This theory has not been tested, however, because the draft decision was withdrawn and not adopted by the Board.

- Reductions in diversions to protect trust resources could be based on the best available science. This would require an attempt to determine which diverters are causing the harm.

- Reductions in diversions might be imposed based on the water rights priority system, junior water rights first, on the theory that trust resources were not harmed by the most senior uses, and that harm occurred when recent increments were added.
J. Regulation pursuant to Statute

A water rights holder’s exercise of his water rights is subject to regulation by relevant statutes, including the federal and state Endangered Species Acts, and the federal Clean Water Act and state Porter-Cologne Water Quality Control Act. The extent to which such regulation should be analyzed under a physical or a regulatory taking framework has been a hotly contested issue. Recent cases have held that such regulations are neither a physical nor a regulatory taking per se. (See Casitas Municipal Water District v. United States (2007) 76 Fed.Cl. 100, declining to follow a contrary ruling in Tulare Lake Basin Water Storage District v. United States (2001) 49 Fed.Cl. 313. See also, Allegritti & Co. v. County of Imperial (2006) 138 Cal.App. 4th 1261 and Klamath Irrig. Dist. v. United States (2005) 67 Fed.Cl. 504.) Depending upon the outcome of the appeals of the Casitas and Klamath cases, potential future “ takings” claims are likely to turn on standard “ takings” analysis based on the factors in Penn Central Transportation Co. v. New York City (1978) 438 U.S. 104.

K. Area of Origin Water Rights

The allocation of water may be affected by application of “Area of Origin” provisions of the Water Code. These statutes were intended to offer some level of protection to the areas where water originates. For example:

**County of Origin**, Water Code section 10500 et seq. Allowed the state to file water rights applications necessary for a coordinated plan for the development of water resources. These applications have early priority dates. They may not be assigned, or their priority released, for projects that will, in the judgment of the SWRCB, deprive the county in which the water originates of water necessary for the development in the county. The SWRCB makes its decision at the time the application is assigned or released, and does not revisit it later. Thus, assignments made to the Bureau of Reclamation or others for major storage projects will not be reopened if upstream county needs exceed what was foreseen at the time the assignments were made. In order to take advantage of this act, a county of origin would have to propose a project of its own, and seek assignment of a state-filed application with an early priority date.

**Watershed of Origin Act**, Water Code section 11460. This Act applies to the State Water Project and Central Valley Project (through Water Code section 11128). The construction and operation of the projects is not to deprive a watershed or area wherein water originates, or an area immediately adjacent thereto, of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein. This act does not give water users in a watershed of origin the right to use water stored by the projects without payment. They must obtain their own water rights or contract with the projects. DWR has traditionally been willing to enter contracts with parties in a watershed of origin. There is a current controversy among the existing State Water Contractors inasmuch as some Northern California contractors have alleged that they are entitled to their full contract amounts even when deliveries to export contractors are reduced.
Delta Protection Act, Water Code section 12200 et seq. Section 12202 provides that among the functions to be provided by the State Water Resources Development System in coordination with the salinity control operations of the CVP are the provision of salinity control and provision of an adequate water supply for the users of water in the Delta. In the recently-decided State Water Resources Control Board Cases (2006) 136 Cal.App.4th 674, the court determined that it is for the SWRCB in the first place to balance in-Delta needs and export needs and to determine whether in-Delta needs receive an adequate supply. (Id. at pp. 770-71.) The court rejected an argument by the Central Delta Water Agency and others that the Delta Protection Act gives Delta riparians and appropriators a right to water stored upstream by others.

Water Code section 1215 et seq. This section applies to listed “protected areas,” which include the Sacramento River System, the San Joaquin River System, the Mokelumne River System, the Calaveras River System and other listed areas. The protected areas are not to be deprived of the priority right to all the water reasonably required to adequately supply the beneficial needs of the area, by a water supplier exporting water pursuant to water rights applications filed, or groundwater appropriations initiated, after January 1, 1985, where the supplier is not covered by Section 11460 above (that is, not the CVP or the SWP). No groundwater is to be pumped for export from the combined Sacramento and Delta-Central Sierra Basins, unless the pumping is in compliance with a groundwater management plan adopted by the county board of supervisors in the county overlying the groundwater basin and subsequently approved by a vote. (Wat. Code, § 1220.) The SWRCB has taken the position that this section applies only to groundwater pumped directly for transfer, and not to groundwater substitution transfers in which it is surface water that is formally transferred.

L. Non-Renewal or Adjustment of Contracts.

The Central Valley Project supplies water to more than 250 long-term water contractors. Collectively, the contracts call for a maximum annual delivery of 9.3 million acre-feet of water: 4.8 million acre-feet is classified as project water and 4.5 million is classified as water right settlement water. (California Water Plan Update 2005, Vol. 1, p. 3-43.) Congressman George Miller has been quoted as suggesting that the U.S. Bureau of Reclamation should not renew all of the contracts with CVP water users, because diversion of the full contract amounts from the Delta has had adverse environmental consequences. If Reclamation did not renew some contracts, or cut back on contract amounts, it would in effect be reallocating water from the existing uses, largely agriculture, to other uses. The contractors, however, take the position that contract renewal is not discretionary, but required.

DWR has contracts for water service from the SWP for about 4.2 million acre-feet annually, but it cannot reliably deliver the full amount. The State Water Project Contractors agreed to some reallocation of State Water Project water among themselves in the Monterey Amendments. The Amendments were successfully challenged in court based on the California Environmental Quality Act (Planning and Conservation League v. Dep’t of Water Res. (2000) 83 Cal.App.4th 892) and DWR is currently preparing a new EIR on the Monterey Amendments.
The interim remedies recently selected by the Court in *NRDC v. Kempthorne*, a federal case challenging the Biological Opinion for delta smelt on the Operating Criteria and Plan for the state and federal water projects, will likely result in reductions in the amount of water delivered by the projects to their contractors in order to provide greater protection to delta smelt. The interim remedies are intended to apply only until the U.S. Fish and Wildlife Service completes a new Biological Opinion for delta smelt for the operation of the state and federal water projects.

### III. Conclusion

While desalination offers some potential for "new" water, and there may exist some opportunities for new surface or groundwater storage (recognizing that water may not be available for such projects in all years), much of the new demand for water in the future will be met by making existing supplies work harder (conservation and recycling) or by reallocating water from existing uses to other uses, or some combination of the two. Voluntary transfers offer a primary mechanism for such reallocation. The number of transfers has increased in the past decade, and parties have become creative in crafting them. Large transfers have included the Imperial Irrigation District-San Diego transfer, the proposed Yuba River Agreement, the proposed Sacramento Valley Water Management Plan, purchases for the Environmental Water Account, various DWR programs, and others. Transfers from Northern California to Southern California through the Delta are limited, however, by the capacity of the CVP and SWP pumps.

In addition to voluntary transfers, enforcement efforts to eliminate unauthorized and unreasonable uses of water could free up some water for other uses. Application of the Public Trust Doctrine might limit uses that are causing harm to trust resources. Compliance with environmental statutes may limit diversions under some existing water rights in certain circumstances.

In summary, there is some flexibility in the California water rights system to accommodate changing needs for water.

Sincerely,

[Signature]

VIRGINIA A. CAHILL
Deputy Attorney General

For

EDMUND G. BROWN JR.
Attorney General

cc: Matt Rodriguez