

**Little Hoover Commission  
Hearing on Water Governance  
Sacramento, CA  
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**Modernizing the Water Rights System  
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This hearing is intended to evaluate the state's governance of water resources. You will examine the performance of the many federal, state, and local agencies which share in such governance. This testimony focuses on the State Water Resources Control Board, and specifically, its governance of water rights.

Governance of an individual diversion, or even a coordinated system like the State Water Project, starts and ends with a water right. Since statehood, any control of water must be pursuant to a right granted under statutory or common law. Since 1914, the Board has had exclusive authority to issue and amend rights to appropriate surface waters for use on non-riparian lands, including municipal water supply. It has the primary authority to assure that all waters are put to reasonable and beneficial use.

In the legislative session that just ended, the water policy package also focused on governance. Much of the debate assumed that the State Water Board, like other regulators, has failed to meet its obligation to protect water supply reliability and environmental quality in the Delta. A key element of the proposed solution was a new agency, which would be required to oversee the Water Board's performance of its existing obligation. Respectfully, if an agency is not meeting an existing obligation, the first question should be: why?

Governance of water rights was not designed to address the needs of our growing population, or the worsening shortages caused by climate change, or other modern challenges. Our system of water rights is approaching a century-old.

In 1911 the Legislature established a State Conservation Commission to recommend statutory reforms for protection of water and other natural resources. Acting on that commission's recommendations in 1913, it established our current system of water rights.<sup>1</sup> In that statute, it required regulatory approval and oversight of appropriative rights for non-riparian lands. It

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<sup>1</sup> See Professor Joe Sax, *Review of the Laws Establishing the SWRCB's Permitting Authority over Appropriations of Groundwater Classified as Subterranean Streams and the SWRCB's Implementation of Those Laws* (Jan. 2002), available at [http://www.swrcb.ca.gov/waterrights/water\\_issues/programs/hearings/groundwater\\_classification/](http://www.swrcb.ca.gov/waterrights/water_issues/programs/hearings/groundwater_classification/).

did not disturb riparian rights, which arose then as now under common law; and it declined its commission's recommendation to generally regulate groundwater. In 1928, in response to a court case which permitted riparian rights to dry up the San Joaquin River,<sup>2</sup> the Constitution was amended to require that all waters must be put to reasonable and beneficial use. In 1967, the Legislature established the Water Board to administer the water rights system.<sup>3</sup> While there has been a multitude of amendments, governance of water rights largely tracks the directions set several generations ago.

In the hearing announcement, you asked witnesses to address key elements of successful and effective water governance. As has always been true in water management, success means that sufficient water will be available in the right amount, and at the right place and time, for lawful beneficial uses. In 2009, looking ahead to the year 2050, success requires a focused reform of our water rights system to meet modern challenges, in a manner that also protects investment and other reliance interests of those entities who hold the rights.

Let me catalog several of the modern challenges to the sufficiency of our water rights system.<sup>4</sup>

- By 2050, our population will approach 50 million, up from 2.4 million in 1913 when the Water Code was enacted.
- The overdraft of our groundwater today averages 1 – 2 million acre-feet per year, or roughly 5% of our developed supply. This condition has probably existed for much of the past century. Overdraft by definition is not sustainable: it means that the quantity, quality, and usability of a given aquifer diminish over time. The cumulative overdraft of our State's aquifer since 1913 – the reduction in stored water available for present and future uses – probably exceeds tens of millions of acre-feet.
- In the next generation, climate change will reduce our effective storage by 25% or more, as a result of earlier snow-melt and more frequent spills of our reservoirs.
- The native species of salmon and anadromous fishes, as well as other public trust fishes in the Delta and its tributaries, continue to decline. Water rights – and the resulting diversions, entrainment, and blockage of passage – are a significant contributor. Some species are extinct, many are now listed under the

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<sup>2</sup> *Herminghaus v. Southern California Edison Company*, 200 Cal. 81 (1926).

<sup>3</sup> Water Code § 174.

<sup>4</sup> See, generally, California Department of Water Resources, *California Water Plan Update 2005*, Vol. 1 Chapter 3 (2005), available at <http://www.waterplan.water.ca.gov/previous/cwpu2005/index.cfm>.

Endangered Species Act, and the commercial and private uses of these fishes are similarly threatened.

All of these challenges converge in a single reality for water governance. Future water shortages will be more frequent, more severe, and more intractable, than today, unless we modernize our water rights system.

Today, governance of water rights is not adequate to meet these modern challenges. Why? In large part, because the legal nature of water rights in California has not evolved substantially since established in 1913 and 1928. In my view, what we need is not a new agency, or even wholesale reorganization of the Water Board, but instead modernization of our water rights system to assure: (1) coordinated management of all water rights in a basin, (2) monitoring and reporting of all diversions, (3) flow standards, basin-by-basin, for protection of public trust resources, and (4) accountability of all rights to achieve environmental compliance.

This testimony does not directly address whether these recommendations require new legislation. In my view, they are largely achievable under existing authority. For example, the State Water Board has broad authority to assure reasonable and beneficial use of all waters,<sup>5</sup> and that authority is a basis to require groundwater pumpers to cease overdraft of an aquifer. However, such technical debate on authority should wait until you have reached a conclusion whether these recommendations will materially improve governance of water rights in California.

***1. All diversions from surface and ground waters should be managed in a coordinated manner, by hydrologic basin.***

All diversions from surface and groundwaters – regardless of legal basis – should be managed in a coordinated manner in a hydrologic basin, or sub-basin, as appropriate for effective management. When shortage occurs, the holders of those rights would adjust their respective operations, subject to oversight by the Water Board if necessary to address the shortage.<sup>6</sup>

This would be a significant new direction for the system of water rights as established in 1913. A water right is, by definition, individual to the entity who controls a diversion. The Water Board does not have an effective procedure in place, for most hydrologic basins, to coordinate the exercise of the existing rights. Basin adjudication under the Water Code<sup>7</sup> is very expensive

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<sup>5</sup> Water Code §§ 100, 275.

<sup>6</sup> Today, for example, the face value of appropriative water rights in the Delta watershed exceeds average unimpaired flow by a factor of 8.4. Delta Vision Task Force, *Delta Vision Strategic Plan*, p. 1-8. Shortages will worsen as diverters increase their average diversions consistent with the face values of these existing rights.

<sup>7</sup> Water Code §§ 2500 *et seq.*

and is rarely used for surface waters, although a similar procedure has been widely used for groundwater in Southern California. Because adjudication is legalistic and final (what is the exact order of priority of all rights, and thus who will get how much water when?), holders of water rights are motivated to litigate to protect their individual interests.

For example, there are many thousands of water rights in the Delta watershed. Since 1967, the Water Board has administered salinity standards in the Delta itself that function as a limitation on upstream diversions. It has enforced these standards against the rights held by the U.S. Bureau of Reclamation's (USBR) Central Valley Project and the California Department of Water Resources' (DWR) State Water Project, the two largest diverters.<sup>8</sup> The Water Board has tried, but has never completed, an adjudicatory proceeding to require the thousands of other rights, which cumulatively account for two-thirds of the diversions, to comply with the salinity standards.

This recommendation favors local and collaborative management of all diversions in a given basin, subject to State oversight. By a deadline of 2015, the holders of surface and groundwater rights in that basin would establish a formal governance arrangement, such as a corporation or watermaster, to facilitate coordinated management to address shortages and achieve environmental objectives. The arrangement would be subject to the Water Board's approval (as sufficient to comply with the Water Code and other applicable law) and continuing oversight. The landowners of Dry Creek, tributary of the Russian River, in Sonoma County are experimenting with this approach.<sup>9</sup> Trout Unlimited and agricultural interests have proposed a broader application (including early test cases) throughout the North Coast.

***2. All diversions from surface and ground waters should be monitored and reported, accurately and timely, to the Water Board.***

All rights should be monitored and reported to the Water Board. These include riparian, pre-1914, and post-1914 appropriative rights in surface waters, and correlative rights in groundwater. Monitoring should be done by measurement or estimation in a manner which is accurate as to the volume, time, and other conditions of a diversion. Reporting should be timely. Data should be available when needed for management decisions in the affected basin. Thus, reporting should be real-time in a basin where the exact flow at any given location and time may significantly affect another beneficial use, such as the ability of adult salmon to reach critical spawning habitat, or compliance with a salinity standard necessary for a downstream water supply. While the exact method of measurement and reporting would vary widely by

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<sup>8</sup> *U.S. v. State Water Resources Control Board*, 182 Cal.App.3d 82 (1986) (*Racanelli Decision*).

<sup>9</sup> This experiment tests the element of collaborative management by the landowners riparian to the creek. It does not include other recommended elements, such as verification of rights or coordinated management of surface and ground waters.

region and other circumstances, the feasibility of real-time diversion data is advancing rapidly, and the cost is decreasing, as standard equipment is computerized, miniaturized, and designed for remote (off-grid) use.

Under the Water Code and Constitution, all water belongs to the people.<sup>10</sup> A water right is nothing more than the right to use that public property. The patchwork of reporting requirements, limitations, and exemptions<sup>11</sup> under current law has directly contributed to our failure to manage waters effectively on a basin scale.

- Today, some licensees and permittees report diversions annually as required in their rights, while older rights granted by the Water Board do not have any such requirement.
- Entities holding riparian and pre-1914 rights are required by statute to report annually.<sup>12</sup> There is no penalty for non-compliance. A minority file such reports, which are often inaccurate. A majority of these rights may not even be documented in the Water Board's records, since their legal basis arose outside of the Water Code which the Water Board administers.
- Groundwater pumping, which is generally outside of the Water Board's permitting jurisdiction,<sup>13</sup> is not reported to the Water Board.

The Water Board today cannot answer the question: who diverted how much water from a given basin in a given month? At best, it could use the U.S. Geologic Survey's gage data to back-calculate the cumulative total of diversions upstream. Effective management of our waters requires more.

Under this recommendation, the Water Board -- in cooperation with the DWR, Department of Fish and Game (DFG), and other state agencies -- would compile the reported diversion data, along with gage data, to permit real-time management of waters at any time or location. It would expand its electronic water rights database, eWRIMS, to include all rights (regardless of

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<sup>10</sup> Water Code § 102.

<sup>11</sup> See Victoria A. Whitney, Deputy Director of Water Rights, SWRCB, "Talking Points," Little Hoover Commission, Water Rights Subcommittee (June 30, 2009).

<sup>12</sup> Water Code §§ 5100 *et seq.* This report will be required monthly as of January 1, 2012. Water Code § 5103(d).

<sup>13</sup> Under Water Code § 1200, the permitting jurisdiction is limited to "...subterranean streams flowing through known and definite channels."

legal basis) and all documents known to the Water Board to be relevant to the exercise of those rights.<sup>14</sup>

**3. Under its water quality authority, the State Water Board should establish flow standards for protection of public trust resources in each hydrologic basin, subject to adaptive management.**

By a deadline of 2015, the Water Board should establish flow standards in each hydrologic basin sufficient to attain water quality standards and otherwise protect public trust resources. It should adopt them as an element of the Water Control Plans required by the Clean Water Act and Porter-Cologne Act. Such standards should include metrics for success (how will we know if a fishery has recovered in a given stream to good condition?) and procedures for adaptive management. The Water Board should adopt these standards in coordination with DFG. Basin governance, as described in Recommendation 1, would have responsibility for allocating compliance with such standards among all diverters, subject to the Water Board's oversight.

In 1983, the Mono Lake Cases affirmed that all water rights – including existing ones – must avoid unnecessary harm to public trust uses of our waters, including fishing, navigation and other commerce, and recreation.<sup>15</sup> In 1986, the *Racanelli Decision* affirmed that the Water Board may use its water quality authority to set flow standards applicable to water rights.<sup>16</sup> As a result of these cases, Los Angeles limits its diversions as necessary to restore Mono Lake and its tributaries, and USBR and DWR today comply with salinity and other water quality standards in the Delta. Yet, more than 20 years after these cases, very few of the water rights in California have been so modified. Why? The expense and time demands of complaints against individual rights, much less basin adjudication, have discouraged such modernization.

Let me add a note on the current practice for adjudicatory hearings. The Water Board today relies on its actual members as Hearing Officers to conduct such hearings; it does not have Administrative Law Judges. Hearings to reopen existing water rights for environmental compliance tend to last for years or longer. That is due to several common causes: time constraints on the Hearing Officers, budgetary constraints on the availability of technical and legal staff from the Division of Water Rights, and the obligation to prepare an environmental document under the California Environmental Quality Act (CEQA) as the basis for a hearing decision. In my view, the Water Board should reform its current practices so that a hearing reaches a conclusion within months, not years. Possible mechanisms include:

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<sup>14</sup> Today, eWRIMS is largely limited to permits and licenses (post-1914 appropriative rights) and associated notices and orders. It does not include many other types of documentation relevant to the exercise of such rights, such as reports of diversions, complaints, and so forth.

<sup>15</sup> *National Audubon Society v. Superior Court of Alpine County*, 33 Cal.3d 419 (1983).

<sup>16</sup> *Racanelli Decision*, *supra* n. 7.

- adoption of flow standards under water quality authority, thus reducing its CEQA burden in individual hearings;<sup>17</sup>
- appointment of Administrative Law Judges to handle routine matters subject to the oversight of the Water Board or a designated member;
- reformed hearing procedures consistent with the principle that “time is of the essence”; and
- a greater emphasis on settlement as the basis for such decision.

Under the alternative approach recommended here, the Water Board would establish flow standards in the same manner that has been used since 1967 for other water quality standards. Basin governance would then allocate the compliance burden among all rights within their jurisdictions. The Water Board would oversee that allocation. In the event that a collaborative allocation failed, the Water Board would conduct a timely adjudicatory hearing.

***4. All diverters should periodically show compliance with all applicable environmental requirements.***

Diverters should report not only the volume of diversions, but also compliance with all environmental requirements applicable to their rights. This report specifically should demonstrate compliance with the terms and conditions of the water right, obligations under basin management as described in Recommendations 2 – 3, requirements of the Fish and Game Code for fish passage and screening, and other applicable requirements for exercise of the water right.

Today, diverters who report at all to the Water Board limit such documentation to terms and conditions of the water rights. They do not report on compliance with the Fish and Game Code. DFG does not itself require such reporting. Indeed, many diversions do not comply with that code’s longstanding requirements for protection of public trust resources, as first enacted in the period 1870 – 1900.<sup>18</sup> Complaints against individual water rights are an inferior procedure to correct such non-compliance. The complainant bears the cost, as well as the burden of proof, thus limiting the procedure to special circumstances, such as the Mono Lake Cases.

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<sup>17</sup> Richard Roos-Collins, “A Plan to Restore the Public Trust Uses of Rivers and Creeks,” *Texas Law Review*, Vol. 83 no. 7, pp. 1929-1939 (2005).

<sup>18</sup> The Legislature consolidated these requirements from other codes (such as the Criminal Code) into the modern Fish and Game Code in 1933. See Richard Roos-Collins, Julie Gantenbein, and Brian Johnson, memorandum to DFG Director Koch, “Administrative Orders under the Fish and Game Code sections 5900 – 6100” (July 21, 2009), available from rrcollins@n-h-i.org.

Under this recommendation, each diverter would periodically report compliance with all applicable environmental requirements. The report form would be framed to request factual (rather than judgmental) information. For example, “Do you have an unexpired Streambed Alteration Agreement under Fish and Game Code section 1603? If so, please attach.”

## CONCLUSION

In your systematic review of water governance, the Little Hoover Commission is functioning as successor to the commission that designed the current system in 1913. I recommend that you reconsider certain choices made a century ago – whereby diversions are managed individually, most are unreported, and public trust is not a required element. The measure of your report will not be good intentions, or philosophy of good government, but instead pragmatism. Looking ahead through 2050, will the reforms work effectively to meet the modern challenges of population growth, climate change, and ecosystem sustainability?