Challenging the Adequacy of A Water Supply

by Alan Cohen

Introduction

In California, where water is a precious and finite resource, state law requires that a public water system provide a "reliable and adequate supply of pure, wholesome, healthful and potable water." [1] As a corollary, water systems are prohibited from adding new service connections unless they can draw on a water supply sufficient to meet the new demand. This restriction stems from the California Safe Drinking Water Act, [2] which establishes a broad regulatory scheme over the distribution of the state's drinking water supply. The Act gives the Department of Health Services enforcement and oversight authority over the state's public water systems and vests the Department with the power to adopt and enforce water quality standards. [3] These standards have recently been held to be binding on the water systems and enforceable by a citizen's suit. This report will discuss the case allowing such suits and the regulatory structure imposed by the Act. In particular, three questions will be addressed: 1) what constitutes an adequate water supply? 2) what remedies are available to persons challenging the adequacy of the water supply? and 3) who bears the burden of proof regarding the adequacy of the water supply?

The California Safe Drinking Water Act

Beginning with the proposition that "Every citizen of California has the right to pure and safe drinking water," [4] the California Safe Drinking Water Act (the "Act") gives the Department of Health Services (the "Department") the power to oversee the delivery of safe drinking water by the state's public water systems. [5] Among other duties arising under the Act, the Department is charged with setting standards for water quality and ensuring that the water systems have access to a supply of water capable of meeting those standards. [6]

Compliance with these regulations is maintained primarily through a permit process. All water systems must receive a permit from the Department to operate. [7] In addition, they must apply for an amended permit when making any changes to the supply or distribution system unless the changes comply with all the Department's standards. [8] The Department may renew, reissue, revise or amend any permit whenever the Department deems it necessary for the protection of the public health. [9] In brief, the permit procedure involves the following: the water system must submit a complex technical report; [10] it then conducts a "thorough" investigation; [11] may, at its discretion, conduct a public hearing; [12] finally, it issues or denies the permit. [13] The permit may impose conditions and require improvements to assure a "reliable and adequate supply of water at all times." [14]
As detailed below, the Act gives the Department a variety of measures to enforce its regulations beyond the permit process. But in Residents For Adequate Water v. Redwood Valley County Water District [15] the Court of Appeal allowed private citizens to bring suit against a water system that was not in compliance with the Act. This appears to be the first reported [16] case to allow citizens to enforce the regulations of the Safe Drinking Water Act directly.

In 1988, a group of Mendocino County residents asked the Superior Court to impose a moratorium on new service connections to the Redwood Valley County Water District. The court did so, finding that the water district did not possess a sufficient water supply to adequately supply the needs of its users. [17] A number of appeals followed, but in April, 1995 the Court of Appeal, First District, affirmed the moratorium. The Court held that the Act imposed a duty on the district to provide an adequate water supply; that the regulations promulgated under the Act's authority set forth formulae defining the adequacy of a water supply; and that the Superior Court had jurisdiction to hear the plaintiffs’ suit and to force the district to abide by the regulations. [18]

What constitutes an "adequate" water supply?

At one time, a question existed as to whether the Act called for regulation over the quantity of water supplied. The predecessor to the Act (repealed in 1976) referred to a "continuous" rather than an "adequate" water supply. [19] A 1974 Attorney General opinion construed this language as referring only to the quality rather than the quantity of the water supply. [20] This view was rejected in Gilbert v. California. Noting that the Attorney General opinion was not binding on it, the court there concluded that the quantity of the water supply was so inextricably linked to its quality that it necessarily fell within the bounds of the Department's authority under the Act. [21]

The Act now states that "[a]ny person who operates a public water system shall . . . [p]rovide a reliable and adequate supply of pure, wholesome, healthful and potable water." [22] This broad language is given practical effect in the California Waterworks Standards, the regulations adopted by the Department to implement this part of the Act. [23] The Waterworks Standards prohibit adding new service connections to a water system unless it can "supply adequately, dependably and safely the total requirements of all users under maximum demand conditions" [24] and "adding the new service connection will not cause [water] pressure at an existing service connection to be reduced" below certain levels. [25] To these ends, the Waterworks Standards contain formulae to determine whether an adequate water supply exists by comparing the total capacity and storage volume of existing sources and reservoirs with those that would be required by any planned addition to the system. [26] The court in Residents held that the Act and Waterworks Standards taken together require a water system to determine whether an adequate water supply exists to meet existing and proposed needs before adding any new service connections. [27]

Whether a water supply is "adequate" in the sense of the Safe Water Drinking Act is therefore a question of fact. It can, however, be a complicated question of fact. In Residents, the lower court opinion spent 10 pages analyzing the question, which involved multiple relationships among no less than six agencies. [28] The court concluded that while the Redwood Valley Water District had thus far been able to draw on sufficient water, it did not have a legal right to a supply adequate to meet its obligations in the event of a water shortage. [29] As the Waterworks Standards required the District to have such
a supply, the Court ordered the District to stop making connections until it could acquire a greater guaranteed water source. [30]

Once the facts of the water supply are determined, there is little room for discretion on the part of either the water system or the Department. The Department may, for example, grant a permit on the condition that the water system not add any further connections [31] but it cannot lawfully grant a permit to a water system that does not meet the test for an adequate water supply. This lack of discretion becomes important when we consider the legal remedies available to those seeking to enforce the regulations. Section 4036.5 of the Act requires that the Department take action against any water system in violation of the Act for 90 days within the previous year. [32] What happens if it does not?

What remedies are available?

The permit process described above is the usual forum for deciding the issue of the adequacy of a water system's supply. Based on the information submitted by the water system and the results of its own investigations, the Department decides whether the supply is adequate before granting a permit. Should a water system make new connections without seeking a permit or otherwise fall short of its duties under the Act there are a range of measures available to the Department to force compliance. These include revocation of permit, injunctive relief to force the water system to comply, fines, and even criminal penalties. [33]

These remedies are not exclusive, however; other legal remedies may be brought to bear on a violator of the Act. [34] The Residents case makes it clear that there are instances where the procedures listed in the Act are inadequate to its enforcement. Whether due to the size and complexity of the state's water systems, lack of resources or mistake of facts, there are times when the Department does not rein in a water system that is in violation of the Act. Residents shows that private citizens have recourse to the courts to force both the Department and a water system to comply with the Act.

In Residents the plaintiffs sought and were granted enforcement through a writ of mandamus (also called a writ of mandate). Mandamus is used to compel the performance of certain non-discretionary duties where they are required by law. [35] This procedure is appropriate where, as here, the law requires a government agency to act in a prescribed manner and it refuses to do so. However, an agency cannot be controlled within the bounds of its discretionary powers. [36] The court in Residents held that the Act and attendant regulations created non-discretionary obligations on the part of both the water district and the Department. [37]

Accordingly, the court issued a peremptory writ of mandamus against both defendants. The water district was ordered not to make any net increase in service connections. The Department, in turn, was ordered to prohibit the water district from making any such connections. [38] The court retained jurisdiction to modify the writ if the conditions of the water supply changed. The water district appealed on this and several other grounds, but the court found no basis for appeal. Ultimately that court's decisions were upheld by the Court of Appeal.

Who bears the burden of proof?

In the permit proceedings before the Department, the burden is on the water system to
prove that it possesses an adequate water supply. It must submit, at a minimum, "detailed plans and specifications, water quality information, and physical descriptions of the existing or proposed system." [39] The Department studies these documents and conducts its own investigation before rendering its decision. That decision may be appealed to a court, [40] but the Department's judgment will be given substantial weight and will not be overturned unless the court finds the Department abused its discretion. [41] Should the Department grant the permit the burden would be on the party challenging its decision to prove its error.

Once a permit is granted the burden shifts. Where a party seeks mandamus it bears the burden of proving that the water system is violating the law. The party (the petitioner) must show that two conditions exist: first, that the respondent has a clear, present and usually ministerial [42] duty and second, that the petitioner has a clear, present and beneficial right to the performance of that duty. [43] Once these conditions are satisfied, however, the grant of mandamus is almost automatic. [44]

As noted above, the Act creates a clear and non-discretionary duty on the part of a water system. Mandamus also requires that the duty be a present one. [45] Where a water system seeks to add new service connections the regulations clearly impose a present duty to provide an adequate supply of water. However, a court will not act to remedy an anticipated refusal to perform a possible future duty. [46] Thus, it would not be appropriate to attempt to bring suit when, for example, a water system is in the preliminary stages of planning an expansion. The availability of the remedy at a later time, however, is likely to have a cautionary effect on any proposed development.

The counterpart to the respondent's duty is the right in the petitioner to bring suit. Generally, the petitioner must have a clear and present right to benefit from the act she seeks to compel. [47] In the Residents case the petitioners clearly had such a right as residents of the water district. However, this requirement may be greatly lessened in matters of public interest. [48] Given that issues of water and development are of great public interest in California, courts may be open to suits to enforce the strictures of the Act from people with less immediate interest. For example, it may be enough to be an occasional visitor or one who enjoys the "unique scenic attributes" of an area enjoyed by the general public. [49]

One other element must be proved in a suit for mandamus. Because mandamus is what is known as an "extraordinary" writ, petitioner must demonstrate that no other remedy exists "at law". This refers to the inadequacy of money damages recovered in a contract or tort action to remedy the grievance. Because of the nature of the problem here, there should be no difficulty in satisfying this condition. In granting the writ, the Residents court recited that "it appears to this Court that Petitioners have no other plain, speedy and adequate remedy in the ordinary course of law." [50]

Some Caveats

It is important to keep in mind the limits of the holding in Residents. The law on this issue is as yet fairly undeveloped. That no other case appears to have reached an appellate court yields several observations. First, its precedential value is limited. As a decision of the Court of Appeal, it is only binding within the First district. Courts outside that District are free to rule otherwise, although since the court's reasoning is persuasive other courts may be inclined to follow it. Second, another court might have ruled differently on the
underlying facts in this case. Given the complicated arrangements underlying a water system's supply, one can readily imagine an opposite conclusion from the same set of facts. This is especially true given the particular legal interpretation the trial court applied to those facts. Finally, this paper is written at some distance from the events that took place here. There may be other factors that came into play in proceedings that do not appear in the record.

Conclusion

The Safe Drinking Water Act circumscribes a water system's freedom to make new service connections without considering the availability of water. It therefore acts as a check to the unconsidered development of property without regard to the water supply. Developers should be aware of these regulations before embarking on any projects that might be halted for lack of a water supply. Similarly, those trying to prevent property development should be aware of how the regulations can be used to that end. The Residents case adds a new dimension to the Act. It establishes a legal standard by which a water system must abide and allows citizens to enforce that standard. Where the Department of Health Services interprets that standard incorrectly, or is otherwise unwilling to enforce the Act, the courts will provide a forum to ensure that public water systems continue to supply an adequate water supply.

Statutory Appendix

4017. Duties of public water system operator.

Any person who operates a public water system shall do all of the following:

(a) Comply with primary and secondary drinking water standards.

(b) Ensure that the system will not be subject to backflow under normal operating conditions.

(c) Provide a reliable and adequate supply of pure, wholesome, healthful, and potable water.

Barclays Official California Code of Regulations

Title 22. Social Security
Division 4. Environmental Health
Chapter 16. California Waterworks Standards
Article 2. General Requirements

64562. Quantity of Supply.
(a) Sufficient water shall be available from the water sources and distribution reservoirs to supply adequately, dependably and safely the total requirements of all users under maximum demand conditions before agreement is made to permit additional service connections to a system.

(b) To ascertain this, first determine the total capacity of the existing source by procedures prescribed in Section 64563 and determine the total storage volume of the existing distribution reservoirs. Then determine the needed source capacity and the needed storage volume by procedures prescribed in Section 64564. The total available source capacity shall not be less than the needed source capacity.

(c) The requirements of this section shall apply to an entire public water system and to each pressure zone within a public water system.

(1) Requirements for an entire public water system shall be determined from the total source capacity, total storage volume and the total number of service connections.

(2) Requirements for a particular pressure zone shall be determined from the total water supply available from the water sources and interzonal transfers directly supplying the zone, from the total storage volume within the zone and from the number of service connections within the zone.


(a) The source capacity of a well shall be based on the sustained yield of the well or pump output, whichever is less.

(1) Sustained yield of a well shall be determined from a pump test or from historical records.

(2) The conditions of a pump test used to determine sustained yield of a well shall be acceptable to the Department and shall include:

(A) Constant rate of water discharge from the well during the pump test.

(B) Continuation of the pump test until at least four consecutive measurements of water level drawdown in the well and the elapsed time since the beginning of the pump test yield a straight line when the drawdown is plotted against the logarithm of the elapsed time.

(b) The source capacity of a surface water supply or a spring shall be the lowest anticipated daily yield, based on adequately supported and documented data.

(c) The source capacity of a purchased water connection between two public water systems shall be included in the total source capacity of the purchaser if the purchaser has sufficient storage or standby source capacity to meet user requirements during reasonably foreseeable shutdowns by the supplier.

(d) Where the capacity of a source varies seasonally, the source capacity shall be the capacity at the time of maximum day demand.

(a) Whenever possible, needed source capacity and needed storage volume shall be
determined from existing water use records of the water system.

The records used shall clearly indicate total source capacity, total storage volume and
maximum day demand of previous years.

The existing records of the water system may be supplemented as needed by the
records of a similar water system acceptable to either the Department or a qualified
registered engineer.

(b) When the existing records of the water system are inadequate to determine these
values and no records of a similar water system can be found to supplement the existing
records, the maximum day demand, the needed source capacity and the needed storage
volume for typical residential and general commercial areas (without provisions for fire
flow) shall be determined as follows:

(1) Determine the maximum day demand \((Q_{subo})\) from Chart 1 or Chart 2.

(2) When the total capacity of the existing sources equals the maximum day demand \((Q_{subo})\), the needed storage volume \((V_{subo})\) to meet peak demand during the day shall be
determined from Chart 3 or Chart 4.

(3) When the total storage volume of the existing reservoirs \((V)\) is less than the needed
storage volume \((V_{subo})\), the existing sources shall be supplemented so that the needed
source capacity \((Q)\) is met. For a metered water system, \(Q = Q_{subo} \frac{(2.5-1.5V/V_{subo})}{(2-V/V_{subo})}\)
or for a flat rate water system, \(Q = Q_{subo} \frac{(2-V/V_{subo})}{(2-V/V_{subo})}\).

(c) The needed source capacity and needed storage volume determined under (b) may
be modified, with the approval of the Department, to reflect local conditions such as
climate, community type and kinds of users. Unless the Department's written approval is
obtained, the needed source capacity shall not be less than the maximum day demand.

(d) The data used and the calculation made by the water supplier to determine whether
sufficient water is available to accommodate additions to the systems must be kept and
are subject to the Department review and approval at its discretion.

64566. System Pressure.

(a) Changes in distribution systems shall be designed to maintain an operating pressure
at all service connections of not less than 20 pounds per square inch gauge \((psig)\) \((140\)
kiloPascals gauge \((kPag)\)) under the following demand conditions:

(1) User maximum hour demand.

(2) User average day demand plus design fire flow.

(b) In a public water system supplying users at widely varying elevations, a water supplier
may furnish a service to a user which does not comply with (a) if the user is fully advised
of the conditions under which minimum service may be expected and the user's
agreement is secured in writing. This waiver shall be applicable only to individual service
connections.
(c) Water mains shall be designed to have at least five psig (35 kPag) pressure throughout any buried length of the main except when the main is removed from service for repairs or maintenance. This requirement shall not apply to short lengths of water main near reservoir inlets and outlets provided:

(1) The water main is on premises owned, leased or controlled by the water supplier; or

(2) The prior review and written approval of the Department is obtained.

64568. Conditions for Adding Service Connections.

A new service connection may be added to a distribution system only if the water system will comply with Section 64562 after the new service connection is added and adding the new service connection will not cause pressure at an existing service connection to be reduced below the standards set in Section 64566.

Notes


[2] Codified at 4010 - 4039.6. (return to text)

[3] 4010 (g) (return to text)

[4] 4010 (a) (return to text)

[5] A public water system is defined in the Act as "a system for the provision of piped water the public for human consumption that has 15 or more service connections or regularly serves an average of at least 25 individual daily at least 60 days out of the year." 4010.1 (f). (return to text)

[6] 4023.3 (return to text)

[7] 4011 (return to text)

[8] 4016. Note that even if the changes comply with Department standards, the Department retains the discretion to require a permit. 4016 (b). (return to text)

[9] 4011 (return to text)

[10] 4012 (return to text)

[11] 4013 (return to text)

[12] 4015 (return to text)

[13] 4014 (return to text)


[16] Lower court cases are generally unreported; this is the first published appellate decision bearing directly on this issue. As an appellate decision, it has more authority than would a lower court case. (return to text)

[17] 41 Cal. Rptr. 2d at 124-25. The lower court opinion sets out the facts in exhaustive detail, Residents For Adequate Water v. Redwood Valley County Water Dist., No. 55595 (Super. Ct. Mendocino County 1989). (return to text)

[18] 41 Cal. Rptr. 2d at 126-27. (return to text)

[19] Gilbert, 266 Cal. Rptr. at 896. (return to text)

[20] "'Continuous supply' as referring to quality rather than quantity of water; prohibited consideration of over drafting in determining whether small water permit should be granted or denied, unless quality of water is deemed affected by the permittee's use of the water." 57 Ops Atty Gen 472. (return to text)

[21] 266 Cal. Rptr. at 896. (return to text)

[22] 4017 (return to text)

[23] Defined in the Act as "regulations adopted by the department that take cognizance of the latest available 'Standards of Minimum Requirements for Safe Practice in the Production and Delivery of Water for Domestic Use' adopted by the California section of the American Water Works Association." 4010.1 (m). The Waterworks Standards are found at Cal.Code Regs. title 22 64551-64642, ch. 16. (return to text)

[24] Id. 64562. (return to text)

[25] Id. 64568. (return to text)

[26] Id. 64562-64. (return to text)

[27] 41 Cal. Rptr. at 126-27. (return to text)

[28] The court also looked to studies showing that the county would have a general water deficiency by the year 2000. Residents, No. 55595 (Super. Ct. Mendocino County 1989) at 11. (return to text)

[29] The court opined that lax enforcement was no reason to ignore the legal rights of the parties "[i]t is the duty of the State through its regulatory agencies to 'take vigorous action to enforce the terms and conditions of existing permits and licenses to appropriate water and to prevent the unlawful diversion of water.'" (quoting Water Code 1825). (return to text)

[30] Id. at 21. (return to text)

[31] See Gilbert, 266 Cal. Rptr. 891, note 14 supra. (return to text)

[32] 4036.5 (return to text)
The remedies were found to be non-exclusive in *Citizens Utilities Co. v. Superior Court*, 128 Cal. Rptr. 582 (1976) (Attorney General could bring *quo warranto* action to enforce standards of Act). ([return to text](#))

In *Gilbert*, the plaintiffs sought a writ of mandamus to compel the Department to grant a permit to the local water system that would allow plaintiffs to add service connections and develop their property. The court denied the relief, holding that conditioning the permit on a moratorium on new connections was within the Department's discretion where a water shortage existed. *Id.* at 896. ([return to text](#))

For the Water District this meant providing an adequate water supply; the Department in turn had a duty to enforce the regulations against the Water District. ([return to text](#))

Resident For Adequate Water v. Redwood Valley County Water District, No. 55595 (Super. Ct. Mendocino County 1989) at 21. ([return to text](#))

"One regarding which nothing is left to discretion - a simple and definite duty, imposed by law, and arising under conditions admitted or proved to exist." Black's Law Dictionary 996 (6th ed. 1990). ([return to text](#))

"Where a sufficient showing of duty and substantial right is made, and no other adequate remedy is available, the 'discretion' to deny it practically disappears." *Id.* ([return to text](#))

"[W]here the question is one of public right and the object of the mandamus is to procure the enforcement of a public duty, the relator need not show that he has any legal or special interest in the result, since it is sufficient that he is interested as a citizen in having the laws executed and the duty in question enforced . . . ." *Common Cause v. Board of Supervisors*, 49 Cal. 3d 432, 439 (1989); see Witkin, *supra*, 74. ([return to text](#))

([return to text](#))