

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petitions of)
)
ROBERT S. TAYLOR, ET AL. AND)
JOHN F. BOSTA, ET AL.)
)
For Review of Cease and Desist Orders)
Nos. 6-91-48 through 6-91-831 and)
6-91-857 through 6-91-905 of the)
California Regional Water Quality)
Control Board, Lahontan Region,)
Regarding Eagle Lake, Spalding and)
Stones-Bengard Tracts. Our Files)
Nos. A-744 and A-744(a).)
_____)

ORDER NO. WQ 92-14

BY THE BOARD:

Since 1984, the Water Quality Control Plan (Basin Plan) adopted by the Lahontan Regional Water Quality Control Board (Lahontan) which covers the Eagle Lake Basin has specified that no discharge from subsurface disposal systems would be allowed after September 14, 1989. On May 10, and July 11, 1991, Lahontan took steps to secure compliance with that ban. At public hearings in Susanville and South Lake Tahoe, Lahontan adopted over 800 cease and desist orders for all developed parcels in the Spalding and Stones-Bengard Tracts around Eagle Lake. By the terms of those orders, all property owners were to inform Lahontan of how they proposed to comply with the no-discharge requirement and to begin taking steps to assure compliance. Those living in the Stones-Bengard Tract had the option of connecting their systems to a cooperative collection system

then under construction. Those in Spalding Tract were told that their plans were not required until after it became clear whether the local community service district would proceed with its plans for a system serving the area.

Numerous property owners in both the Spalding and the Stones-Bengard Tracts filed timely petitions for review of the cease and desist orders. We will review all of the cease and desist orders, on our own motion, without regard to which were timely petitioned so as to avoid any unfairness or inequitable treatment.

I. BACKGROUND

Eagle Lake is located 14 miles northwest of Susanville in Lassen County. It is the second largest natural lake located entirely within the State of California. It is roughly thirteen miles long and runs on a northeast-southwest axis. Eagle Lake is in a basin with no natural outlets. Inflows come from intermittent streams.

Eagle Lake is a three-season retreat area although there is a small year-round population. Most of the development is in the Spalding Tract on the western side of the lake. A smaller community at Stones-Bengard (together with the much smaller Bucks Bay) is on the northwestern shore not far away. A small cluster of summer homes called Eagle's Nest is found on U.S. Forest Service land on the eastern shore near the south end of the lake. At the southern end are Forest Service campgrounds and a children's camp, all of which are connected to a sewer system.

Spalding Tract homes are served by wells and subsurface waste disposal systems. The same is true for Stones-Bengard but there is now available to most parcels a cooperative sewer collection system which transports sewage away from the lake for primary treatment. Many Stones-Bengard residents have not connected to the collection system.

Studies by State Water Resources Control Board (State Water Board) staff have shown that the geology is highly variable in the Eagle Lake Basin. For the most part, the area consists of a soil layer generally no more than eight feet thick overlying a clay layer of similar depth. This in turn overlies a fractured basalt flow or bedrock. In addition to this minimal depth to bedrock, mottling of the soil column, probably caused by high ground water, is often found.

Two concerns motivated Lahontan to take steps to eliminate the subsurface disposal systems around Eagle Lake. One was the possible eutrophication of the lake. The other was the health threat posed by the possibility of polluted well water. Over the last decade, studies have been done on the lake and the land around it. There is a little evidence in the record of impact by human habitation on the quality of the lake water. There has been some indication of human health effects from the consumption of ground water which seem to result from the use of drinking water wells in close proximity to subsurface systems. The most recent study was funded by the State Water Board and was completed by the Department of Water Resources in April 1991. That study focused on Spalding Tract.

II. CONTENTIONS AND FINDINGS

Contention: Petitioners' central argument is that the record does not support Lahontan's decision to issue cease and desist orders to enforce the ban against the use of subsurface disposal systems in the Eagle Lake Basin.¹

Finding: Lahontan adopted and we approved the prohibition zone in the Eagle Lake Basin. The zone was established pursuant to Section 13280 et seq. of the Water Code. In enacting those statutes, the Legislature set up a process for establishing septic tank prohibition areas by Regional Water Boards and for review by this Board. The statutory scheme involves three steps:

1. The Regional Water Boards are empowered to enact septic tank prohibitions if they have substantial evidence of water quality problems.
2. If an authorized public agency can provide adequate assurance that septic tanks will protect water quality, such systems can be allowed.
3. In reviewing a septic tank prohibition, this Board must explore alternatives to a prohibition such as community collection and disposal systems.²

¹ All other contentions are hereby dismissed as they fail to raise substantial issues appropriate for review. Title 23, California Code of Regulations, Section 2052(a)(1).

² Water Code Section 13283 requires us to consider possible alternatives "including, but not limited to, community collection and waste disposal systems which utilize subsurface disposal, and possible combinations of individual disposal systems, community collection and disposal systems which utilize subsurface disposal, and conventional treatment systems."

In this review, we will focus on two issues. First, we must determine if there was substantial evidence to support the prohibition. Second, we must assess whether there are alternatives to the prohibition which could afford adequate water quality protection.

A. Substantial Evidence.

Substantial evidence does not mean proof beyond a doubt or even a preponderance of evidence. Substantial evidence is evidence upon which a reasoned decision may be based. From our review of the record, we find substantial evidence to support Lahontan's decision. We conclude that Lahontan acted properly in establishing a zone of prohibition around Eagle Lake and that its efforts to enforce that prohibition by eliminating subsurface disposal systems from the Basin are justified.

Although there are no reported instances of surfacing sewage or outbreaks of water borne disease, Lahontan has relied on numerous studies conducted on domestic water supply wells, many of which have shown indications of pollution from septic systems. Testing of domestic wells in the Eagle Lake Basin has been done intermittently since the early 1980's. While none of the testing has been sufficiently comprehensive to give us a complete picture, it has provided substantial evidence that subsurface disposal is causing water quality related problems in the Basin. The most systematic series of tests was conducted in Spalding Tract by the Department of Water Resources. The focus of the testing of domestic water supply wells has been on chloride, phosphorous, nitrate, and bacteriological indicators

(total and fecal coliform, fecal streptococcus, and some bacterial speciation testing). The results, though less than conclusive, show that the situation is getting worse and that Lahontan has reason for concern.

To date monitoring of domestic water wells has not shown a clear trend toward increasing concentrations of chemical constituents in individual wells. There is no systematic increase in the concentrations of these chemical constituents in the assumed direction of the ground water flow which is generally towards the lake. There have been, however, increases in the concentrations of some constituents, such as nitrate, in some wells. These increases may be spikes in the data which disappear over time. While the exact cause of the data spikes is unknown, it is reasonable to suspect subsurface disposal systems under the circumstances.

There is, as yet, no documentation that chemical drinking water standards established by the Department of Health Services have been violated. For example, the highest observed nitrate level (measured as nitrogen) was 5.10 milligrams per liter (mg/l), below the drinking water standard of 10 mg/l. The average nitrate concentrations have been lower still. Measurements of other chemical constituents have been well below Health Department levels, too.

Bacterial testing of domestic water wells has drawn a similar picture. There are numerous instances of domestic water wells showing signs of bacteriological contamination, possibly due to the use of subsurface disposal systems or to improper well

construction. Although the data do not support a conclusion of systematic well contamination, Lahontan's decision to order abandonment of all subsurface systems is supported by the evidence.

Lahontan need not wait for a public health problem before acting. The Porter-Cologne Water Quality Control Act is a prophylactic statutory program. It is fortunate that the monitoring done to date has not disclosed a significant health hazard. But many of the data seem to be harbingers of problems that are on the way--problems which need to be addressed as soon as possible.

As we have said before, when weighing conflicting evidence, we are mindful of the legislative history of the Porter-Cologne Water Quality Control Act. That history indicates that conservatism on the side of high water quality should guide our decisions. A margin of safety must be maintained to assure the protection of all beneficial uses.³

There can be no doubt that Lahontan's concerns for water quality are appropriate. Given the geology of the area, the Eagle Lake Basin appears to be unsuited for large numbers of subsurface disposal systems. The carrying capacity of the Basin has not been established and Lahontan's efforts to address the

³ *Final Report of the Study Panel to the California State Water Resources Control Board, March 1969, page 15. (1969 Calif. Stats. Chapter 482, Section 36 (adopting report as legislative history).) See also, State Water Board Order No. WQ 91-09, Petition of Main San Gabriel Basin Watermaster.*

spread of subsurface systems before that capacity is exceeded are entirely proper. The prohibition zone established in 1984 must remain in place.

B. Alternatives

We cannot ignore the high costs of construction of a sewer collection and treatment system at Spalding Tract. The costs are very high for the rudimentary system at Stones-Bengard and there is every indication that Spalding would be even more expensive to sewer. As the County has refused to permit the use of holding tanks in the area, there may be no alternative but to construct a sewer system. We believe, however, that the residents of the area should be given an opportunity to try at least one other alternative before the full effect of the prohibition takes hold.

There are examples in other parts of California where septic tank maintenance districts have been used to monitor the effects of existing systems and to carefully regulate any new or replacement systems. Circumstances at Eagle Lake are not particularly favorable for such a district given the geologic conditions found there. However, the problems caused by poor soil conditions are tempered by the sporadic usage and relatively small population. If the people who own property in the Eagle Lake Basin are willing to do what is necessary and to pay what it costs to set up and operate a properly crafted maintenance district, they should be given a chance to do so. Such an alternative will likely require enabling legislation. We believe that a period of 12 months from the date of this order is

an appropriate time within which to introduce legislation to set up the district. The district should have begun operation within two years of this date. A full monitoring and maintenance program should be in place three years from now. So long as these time limits are met, it would be improper to take enforcement action based on the prohibition. If the district is able to deal with all the problems at Eagle Lake, it would be appropriate to rescind the prohibition.

To satisfy the need to protect the water quality of the Basin, the legislation which sets up the district will have to contain certain basic requirements. These include:

1. The district must conduct comprehensive studies on the effectiveness of on-site waste disposal systems within the Eagle Lake Basin and on any problems associated with their continued use. (We would expect this and other studies to involve consultation with Lahontan.)
2. The district must develop construction standards for on-site waste disposal systems which are appropriate for the local geologic and topographic conditions.
3. The district must provide technical assistance for locating new on-site waste disposal systems.
4. The district must inspect the construction of the new on-site systems to ensure that construction standards have been met.
5. The district must survey existing systems to ensure that they meet applicable construction standards.

6. The district must inspect all on-site systems on a regular basis to determine that the systems are operating in a manner which protects water quality.

7. The district must require a schedule for such maintenance related activities as pump-out of septic tanks and switching of leach fields, where appropriate, based on occupancy patterns.

8. The district must require the repair or replacement of failed or failing on-site systems or those which do not meet the district's construction or siting criteria.

9. The district must take enforcement action against owners of substandard or failing systems who do not take the necessary corrective action in a timely manner. This enforcement authority should include the ability to levy and collect fines or penalties and the power to obtain injunctive relief.

10. The district must require the use of off-site or other alternative treatment and disposal if it determines that conditions are not suited for the use of standard on-site systems or if it determines that water quality is not being fully protected.

11. The district must conduct public education and outreach programs regarding the problems inherent in the continued use of on-site waste disposal systems.

12. The district must develop and implement a revenue program which will generate the funds necessary to provide the district with the resources to carry out these duties.

It will be up to the district to decide what role the existing sewer system in Stones-Bengard should play in the area. Separate districts dealing with the Spalding Tract and the Stones-Bengard Tract may also be appropriate. Nothing in this order should be construed to prevent that.

III. CONCLUSION

We find no basis in the record to reconsider the validity of Lahontan's basin plan prohibition on subsurface disposal in the Eagle Lake area. However, the options available to the residents to comply with the zero discharge requirement are limited and very expensive. We believe that, consistent with the mandate of the Porter-Cologne Water Quality Control Act, the residents should be given an opportunity to deal with the situation through an on-site septic maintenance district which will both monitor and regulate the use of subsurface disposal in the Basin.

IV. ORDER

The basin plan prohibition for the Eagle Lake area will remain in effect until it is no longer needed. Lahontan shall take no action to enforce the prohibition through cease and

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desist orders unless the district is not established or fails to take action according to the schedule outlined above. Any property not included within the district will be subject to Lahontan's enforcement authority.

CERTIFICATION

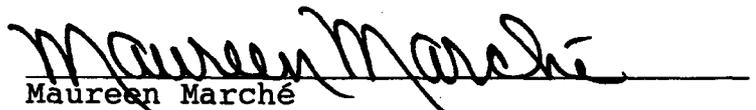
The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 22, 1992.

AYE: W. Don Maughan
John Caffrey
Marc Del Piero
James M. Stubchaer

NO: None

ABSENT: Eliseo M. Samaniego

ABSTAIN: None


Maureen Marché
Administrative Assistant to the Board