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STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petitions of Minnelusa Canyon Association and Polique Canyon Association for Review of Denial of an Exemption from the Waste Discharge Prohibition Applicable to the Big Bear Area, California Regional Water Quality Control Board, Santa Ana Region. Our Files Nos. A-202 and A-203.

Order No. WQ 79-35

BY THE BOARD:

On May 12, 1978, the California Regional Water Quality Control Board, Santa Ana Region, (Regional Board) denied the requests by the Minnelusa Canyon Association and the Polique Canyon Association (petitioners) for exemption from the waste discharge prohibition applicable to the discharge of waste from leaching or percolation systems in Bear Valley and to the discharge of waste of any nature to Big Bear Lake. On June 2, 1978, the State Board received a petition for review of this decision from the Minnelusa Canyon Association; and on June 12, 1978, the Polique Canyon Association filed a similar petition. On June 8, 1979, Dr. Harold Zirin, who filed the petition on behalf of Polique Canyon Association, requested that this appeal not be heard by the State Board until after October 1, 1979. Neither Minnelusa Canyon Association nor the Regional Board objected to this request, and the State Board proceeded accordingly.

Failure to grant an exemption from a Basin Plan prohibition is not one of the Regional Board actions specifically reviewable by the State Board after a petition by an aggrieved person. (California Water Code Section 13320(a).) However, the State Board may, on its own motion, review a Regional Board action in implementing a Basin Plan. Because of the significance of the issues raised by these petitioners, we feel it is appropriate for us to review the Regional Board's failure to grant the requested exemption.

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I. BACKGROUND

Big Bear Lake is located in the San Bernardino National Forest in San Bernardino County. Its beneficial uses, according to the Water Quality Control Plan Report, Santa Ana River Basin, (Basin Plan) include water contact recreation and wildlife habitat. The lake may be used in the future for water supply purposes. The discharge of waste within Bear Valley by subsurface leaching or percolation systems is prohibited after July 1, 1980. $\frac{1}{2}$ In addition, the Regional Board adopted an addendum to its Basin Plan on February 27, 1976, (Regional Board Resolution No. 76-21) that prohibits the discharge of wastes of whatever nature to Big Bear Lake, Bear Creek, and tributaries to Big Bear Lake. An exemption from these prohibitions "may be granted whenever the Regional Board finds that the continued use, operation or maintenance of septic tanks, cesspools, or other means of subsurface leaching or percolation systems, in the particular area, will not individually or collectively, directly or indirectly, affect water quality''. $\frac{2}{}$

 Water Quality Control Plan Report, Santa Ana River Basin, Part I, Vol. I, p. 5-66, 5-67.

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Water Quality Control Plan Report, Santa Ana River Basin, Part I, Vol. I, p. 5-66; Regional Board Resolution No. 77-87, Amending the Water Quality Control Plan Report, Santa Ana River Basin, March 18, 1977.

On June 15, 1973, the Regional Board adopted guidelines for the administration of the exemption provisions provided for in the Basin Plan. Dischargers in the Polique and Minnelusa Canyon areas would have to have met one of the following conditions in order to be exempt from the discharge prohibition:

a. Areas more than approximately 1.0 mile from Big Bear Lake which have a lot size of 1/2 acre minimum and an approved soil report by the County; or

b. Areas outside the Big Bear City Community Services District boundary which have a lot size of 1/2 acre minimum and an approved soil report by the County.

The staff of the Regional Board determined that the petitioners (approximately 57 cabin leaseholders) did not meet either of the above criteria for exemption. In accordance with the guidelines for exemption, the petitioners filed a request for review of the staff determination with the Regional Board. On May 12, 1978, the Regional Board upheld the staff denial of exemption. On June 2, 1978, the Minnelusa Canyon Association and on June 19, 1978, the Polique Canyon Association petitioned the State Board to review the Regional Board denial of exemption.

II. CONTENTIONS AND FINDINGS

<u>Contentions</u>: The petitioners' major contention is that they meet the criteria for exemption from the prohibition, as defined in the Basin Plan, because there is no evidence of past, or threat of future, contamination or pollution caused by effluent from the cabins' subsurface disposal system. In addition, they

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assert that the cost of sewering the cabins, which has been determined to be the most cost-effective means of complying with the discharge prohibition, is unreasonably high, particularly in light of the limited recreational use of the cabins and the maximum 20-year leases which the U. S. Forest Service will enter into for the cabins once the sewers are constructed. It is contended that this should be given weight in deciding whether to grant an exemption. Petitioners also assert that adequate consideration was not given to a proposal to establish a septic tank maintenance district. Finally, it is contended that there is not substantial evidence in the record that discharge of waste from the disposal systems will result in violation of water quality objectives, will impair present or future beneficial uses of water, will cause pollution, nuisance or contamination or will unreasonably degrade the quality of any waters of the State, as required by Water Code Section 13280.

<u>Findings</u>: Big Bear Lake is located in San Bernardino National Forest. It is considered moderately eutrophic in regard to nigrogen, phosphorus and organic content.^{3/} There are about 7,000 permanent residents in the area, but during each summer the influx of day-use and weekend tourists commonly increases the population to over 50,000 per day. There are about 600 recreational cabins on individual disposal systems in the prohibition area. Approximately 20% of the individual systems on small lots have

 Irwin, G. A. and M. Lemons, 1974, <u>A Water Quality Reconnaissance</u> of Big Bear Lake, San Bernardino County, California 1972-73. U.S.G.S. Water Resources Investigations, p. 1.

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failed in the Fawnskin area which, like Polique and Minnelusa Canyons, is on the north shore of Big Bear Lake. $\frac{4}{}$

The Regional Board staff recommended denial of the requests for exemption from the prohibition because:

a. Neither of the criteria for exemption are met since petitioners' cabins are within 1.0 mile of Big Bear Lake and the lots are less than 1/2 acre;

b. Continued discharges of sewage to subsurface disposal systems will result in pollution or threatened pollution of waters of Big Bear Lake; and

c. Continued discharges will be in violation of the prohibition in the Basin Plan $\frac{5}{}$

The Regional Board staff was correct in determining that the specific criteria for exemption which were adopted by the Regional Board on June 15, 1973, to implement the exemption provision contained in the Basin Plan are not met by the discharge. However, in considering the request for exemption, the Regional Board did not consider the provisions of Water Code Sections 13280-13284 because the prohibition involved was adopted prior to January 1, 1978 -- the effective date of Sections 13280-13284. We believe that in order to carry out the legislative intent behind Sections 13280-13284 effect must be given to these sections when requests for exemption are considered after January 1, 1978, even when the underlying prohibition was adopted prior to January 1, 1978.

4. 1972 survey by the State of California Department of Health.

5. Minutes of the Regional Board meeting on May 12, 1978.

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In this particular case, in considering the request for exemption the Regional Board should consider all relevant evidence to fulfill the intent of Section 13281. This includes the factors set forth in Section 13241 (beneficial uses, the hydrographic unit involved, and economic considerations) and the factors set forth in Section 13281 (failure rates, adverse impacts reasonably expected, possible contamination, existing and planned land use, dwelling density, population growth, etc.). Of course, other factors may be relevant and should be considered in the discretion of the Regional Board.

Since all relevant factors were not considered, the record before us is not sufficient for us to make an independent judgment on whether the exemption should be granted. Our review has, however, disclosed certain aspects which the Regional Board should consider.

Big Bear Lake has been found to be semi-eutrophic, and staff of the Regional Board state that the lake is presently exceeding the nitrogen objective contained in the Basin Plan $(0.15 \text{ mg/l total inorganic nitrogen}) \cdot \frac{6}{}$ The prohibition of discharge to Big Bear Lake appears to be largely based on a concern about the amount of nutrients that will be contributed to the lake. The record does not indicate the sources of nutrients to the lake or the specific contribution of nutrients from subsurface disposal facilities, particularly from those on the north shore of the lake where these cabins are located. In fact, "of nitrogen

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^{6.} Water Quality Control Plan Report, Santa Ana River Basin, Part I, Vol. I, p. 4-18.

and phosphorus loads transported to the lake, most seemed to have been contributed from the southern part of the basin". $\frac{7}{}$ It is estimated that 16 tons of nitrogen entered the lake by precipitation from April 1972 to April 1973. $\frac{8}{}$ The estimated total nitrogen discharged from residences in Polique and Minnelusa Canyons is approximately 260 pounds per year (Appendix 1), and this total amount of nitrogen discharged would not reach the lake even if all groundwater flows into the lake as some of the nitrogen will be utilized by plants, some will be attached to soil particles, etc. In addition to precipitation, surface runoff and droppings from the large number of waterfowl in the lake also contribute nitrogen.

It is asserted that nutrients from a subsurface disposal system could reach the lake through surface flow from failed leach fields. Such failures could also cause contamination of the surface waters of the lake and create an unacceptable health risk. Although some of the dischargers have been discharging waste by means of subsurface disposal facilities since 1923, with the exception of the Department of Health survey, the Regional Board's records do not contain any specific data regarding the surfacing of sewage due to the failure of such systems in Polique and Minnelusa Canyons. The Regional Board therefore relied on the

7. Irwin, G. A. and M. Lemons, 1974, <u>A Water Quality Reconnaisance of Big Bear Lake</u>, San Bernardino County, California 1972-73. U.S.G.S. Water Resources Investigations, p. 1.

8. Irwin, G. A. and M. Lemons, 1974. <u>A Water Quality Reconnaisance of Big Bear Lake, San Bernardino County, California 1972-73</u>. U.S.G.S. Water Resources Investigations, p. 1.

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determination made by the Department of Health survey of Bear Valley that the existing urban development on small lots with individual systems had a failure rate of 20 percent. The report acknowledges, however, that very little information was obtained from the individual homes on the north shore, east of Fawnskin. The survey indicates that in Minnelusa Canyon one resident stated he had surfacing sewage problems, one had replaced his leach lines, and one resident stated that his system overflowed last year. Nothing was mentioned about the failures of the disposal facilities in Polique Canyon. Failure rates in the specific areas which have requested exemption from the prohibition should be considered in the Regional Board's reevaluation of this matter.

It should be noted that the State Board is required by Water Code Section 13283 to preliminarily review possible alternative systems when it reviews a denial of an exemption after January 1, 1978. Petitioner Polique Canyon Association repeatedly asserted its willingness to seek formation of an onsite wastewater disposal zone in order to ensure that its septic tanks are properly designed, operated and maintained. In a letter to the State Board dated January 8, 1979, Polique Canyon Association stated its willingness to contract for biennial inspection and triennial pumping of the septic tanks. We feel that it is most appropriate that such inspection and maintenancebe conducted by an onsite wastewater disposal district formed pursuant to Sections 6950, et seq. of the California Health and Safety Code rather than by a private contractor. A public entity would assume legal authority and responsibility for monitoring and

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maintaining the onsite wastewater disposal systems. It has been our experience throughout the state that public entities are more capable of providing adequate resources to assure successful operation of a maintenance district. In addition, with the establishment of a public entity, legal procedures and remedies are greatly simplified in the event that water quality problems should occur.

It is our belief that the Regional Board should consider the formation of an onsite wastewater disposal district as a means of controlling water quality problems posed by the petitioners. This is particularly true in light of the sewers which have been installed or are being planned for installation in other parts of the prohibition area.

Before concluding this order, there are two additional points that we wish to make. Our direction on this matter is solely intended to apply to the dischargers who have requested an exemption; we do not intend in any way to imply that the original prohibition should not have been imposed. Secondly, the ultimate burden is on the applicant to show that an exemption should be granted. However, a Regional Board is responsible for evaluating all relevant information pursuant to Sections 13280-13284 when considering a request for exemption.

III. CONCLUSIONS

The Regional Board should reevaluate the request for exemption in light of the factors discussed above.

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IV. ORDER

IT IS, THEREFORE, ORDERED that the Regional Board reconsider the request for exemption in accord with the factors discussed in this order.

Dated: OCT 181979

Carla M. Chairwoman

Chairman ce

W. Don Maughan, Nember

Mitchell, Member L.

APPENDIX 1

Estimated occupancy in Polique and Minnelusa Canyon (Estimate for Minnelusa Canyon derived from analysis of Lakeview Tract which includes Minnelusa Canyon) 1/

<u>Tract</u> <u>Res</u>	sidences	Summer	<u>Winter</u>	<u>Fall</u>	Spring	Total	Average No. of Persons
Poliq ue Canyon	24	633 +	255 +	240 +	247 =	1375	x 2.81
Minnelusa	35`	1026 +	355 +	460 +	487 =	2328	x 3.16
Total Days Occupied in a Year							
1375 x 2.81 = 3864 2328 x 3.16 = 7356							
		3864 +	7356 = 11	.220		·	
Assuming: 70 gal/capita/day and 40 mg/l total N							

Assuming: 70 gal/capita/day and 40 mg/l total N

 $11220 \times 70 \times 10^{-6} \times 8.34 \times 40 = 262$ lbs. total nitrogen

^{1.} CM Engineering Associates, Feasibility study for sewering alternatives at Northshore Big Bear Lake for San Bernardino County Service Area No. 53, Improvement Zone B, February 1977, p. 4.
