

Onsite Wastewater Disposal Zones

California Health and Safety Code (6950-6982)

Formation

Resolution of Intent to form the “Zone” must include:

- (a) **Description.** A description of the boundaries of the territory proposed to be included within the zone. The description may be accompanied by a map showing such boundaries.
- (b) **Public Benefit.** The public benefit to be derived from the establishment of such a zone.
- (c) **Wastewater Plan.** A description of the proposed types of on-site wastewater disposal systems and a proposed plan for wastewater disposal.
- (d) **Number of Users.** The number of residential units and commercial users in the proposed zone which the public agency proposes to serve.
- (e) **Financing.** The proposed means of financing the operations of the zone.
- (f) **Public Hearing Details.** The time and place for a hearing by the board on the question of the formation and extent of the proposed zone, and the question of the number and type of the residential units and commercial units that the public agency proposes to serve in the proposed zone and that at such time and place any interested persons will be heard.

Powers

An on-site waste water disposal zone shall have the following powers:

- (a) To collect, treat, reclaim, or dispose of waste water without the use of communitywide sanitary sewers or sewage systems and without degrading water quality within or outside the zone.
- (b) To acquire, design, own, construct, install, operate, monitor, inspect, and maintain on-site wastewater disposal systems, not to exceed the number of systems specified pursuant to either Section 6960 or Section 6960.1, within the zone in a manner which will promote water quality, prevent the pollution, waste, and contamination of water, and abate nuisances.
- (c) To conduct investigations, make analyses, and monitor conditions with regard to water quality within the zone.
- (d) To adopt and enforce reasonable rules and regulations necessary to implement the purposes of the zone. Such rules and regulations may be adopted only after the board conducts a public hearing after giving public notice pursuant to Section 6066 of the Government Code.

Health Officer and Regional Water Board Review and Report of Findings:

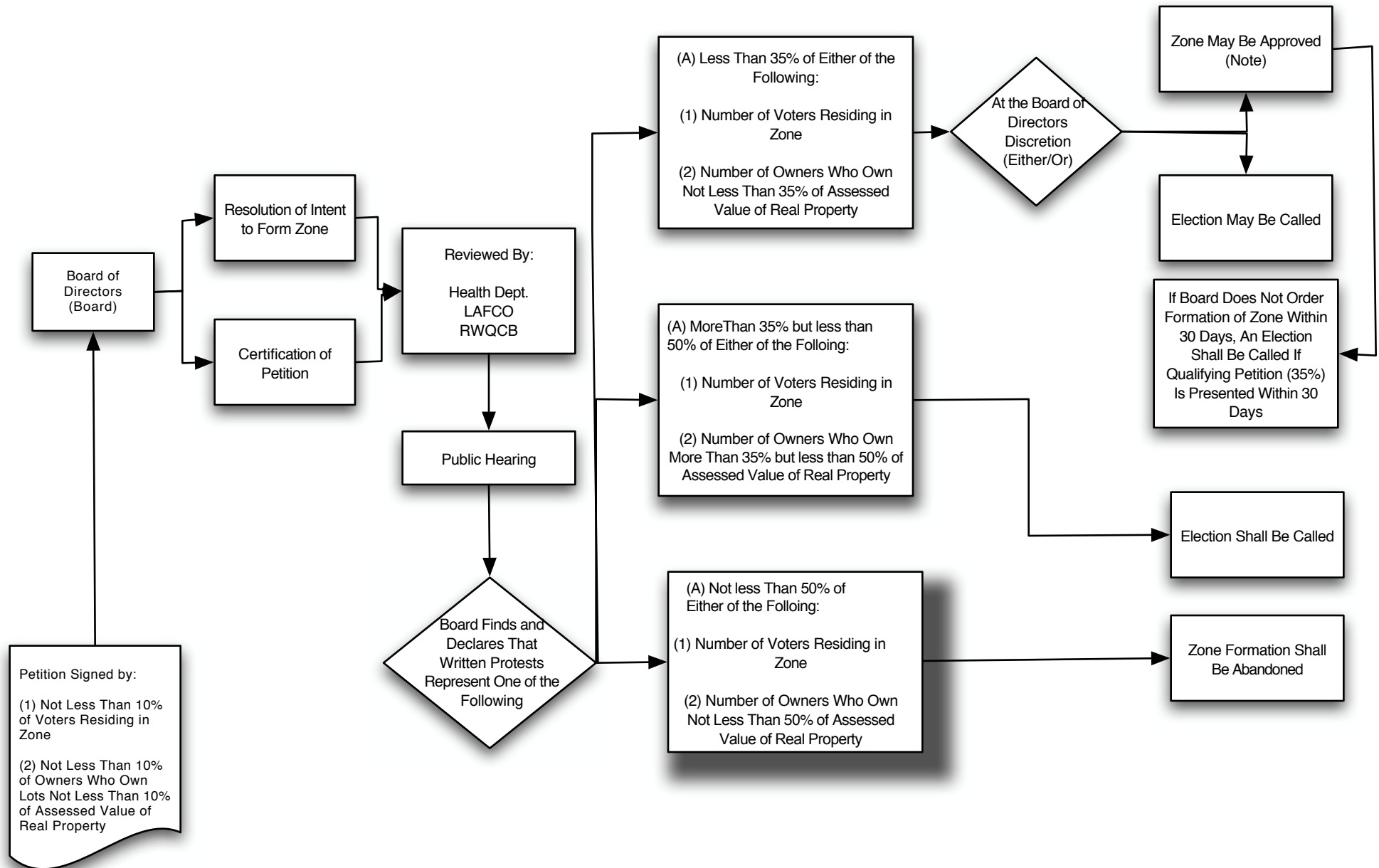
After receiving notice pursuant to subdivision (b) of Section 6958:

- The Health Officer and Regional Water Board shall each review the proposed formation and report their findings in writing to the board of directors of the public agency.
- The report(s) shall specify the maximum number, type, volume, and location of on-site wastewater disposal systems which could be operated within the proposed zone without individually or collectively, directly or indirectly, resulting in a nuisance or hazard to public health.
- The Health Officer and Regional Water Board may require from the public agency such information as may be reasonably necessary to make the findings required in this section.

Onsite Wastewater Management Zone/District Alternative Approaches

Function/Activity	Base Program	Mid-Level Program	Comprehensive Program (District)
Summary	Creates a special management area to implement alternative OWTS design standards, along with provisions of additional monitoring and oversight, and a vehicle for cluster systems and public financing opportunities.	Similar to Base Program, but with added opportunities for local involvement in monitoring, inspections, corrective actions and oversight responsibilities; reduces ACDEH staff time with potential cost savings.	Public entity (such as Zone 7) assumes responsibility for all OWTS regulation in place of ACDEH; subject to RWQCB approval through WDRs; can cover all items in Base and Mid-level Programs, including cluster systems.
Structure	Zone of Benefit	Dependent District/Zone	Independent Special District
Examples	Marshall (Marin County)	Sea Ranch (Sonoma County)	Stinson Beach County Water District Town of Paradise City of Malibu
Board of Directors	BOS	BOS	Independent Board of Directors
Regulatory Coverage	ACDEH LAMP	ACDEH LAMP	RWQCB - WDRs
Staff	ACDEH	ACDEH, Zone & Outside Services	District Staff/Outside Services
OWTS Standards	ACDEH	ACDEH & Zone	District
Construction Permitting	New & Repairs – ACDEH	New – ACDEH; Repairs – Zone	District
Operating Permits – OWTS	ACDEH	Zone	District
Operating Permits - Cluster	ACDEH or RWQCB	ACDEH or RWQCB	RWQCB
Cluster System Ownership	County/Zone	County/Zone	District
Monitoring & Inspection	ACDEH & Outside Services	Zone & Outside Services	District
Record Keeping & Reporting	ACDEH/Zone	Zone	District
Public Education	ACDEH/Zone	Zone	District
Fees & Ordinances	Adopted by BOS	Adopted by BOS	Adopted by District
Grants & Loan Opportunities	Yes	Yes	Yes

Process for Formation of an On-Site Wastewater Disposal Zone
California Health and Safety Code, Article 2, Sections 6955 - 6973



THE SEA RANCH, CALIFORNIA

PROBLEM

Just a two-hour drive from San Francisco, The Sea Ranch community extends 10 miles along the northern California coastline. Built in the 1960s and 1970s, many of the homes relied on individual wastewater systems. Half of the homes were built in areas susceptible to high groundwater, with coastal meadows and terrace soils causing wastewater system malfunctions. Aging infrastructure, challenging conditions, and poor system maintenance in the upscale resort community posed a threat to local and coastal waterways. As a result, a moratorium was placed on future development in the community.

SOLUTION

Sonoma County, the California Water Resources Control Board, and The Sea Ranch community reached an agreement to improve performance and track compliance of new and existing wastewater systems by forming a wastewater management zone. The moratorium was lifted after the solutions were implemented.

The Sea Ranch
P.O. Box 16
Sea Ranch, CA 95497
www.tsra.org

CONTACT

Randy Burke, Director of Works
p: (707) 785-2411
e: rburke@tsra.org



OVERVIEW

The residents of The Sea Ranch are served by a combination of clustered and individual wastewater systems. Of the 2,300 platted lots, approximately 1,500 have homes with

individual systems and about 600 are on two large clustered systems. Treated effluent from the clustered systems is used to irrigate golf courses and other areas. In 1987, Sonoma County authorized The Sea Ranch Association Onsite Wastewater Disposal Zone (the Zone) to operate the individual and clustered system management program. The program consists of:

- **Operating permit requirements and performance standards**
- **Routine inspection requirements**
- **Maintenance contract requirements**
- **Establishment of an enforcement authority**
- **Maintenance of inventory and recordkeeping**
- **Surface and groundwater quality monitoring**

PERFORMANCE-BASED PERMITS

The Zone inspects conventional and advanced systems to ensure compliance with permits and performance standards. The Zone conducts inspections of conventional septic systems every three years. Inspections of advanced designs—including mounds, sand filters, and pressure distribution dispersal units—are conducted annually and include monitoring for nitrates, ammonia, and fecal/total coliform. The Zone sends system owners an inspection notice one month before the inspection date.

Homeowners are responsible for obtaining permits from the Zone and installing and repairing systems as required under county regulations. Inspectors from the Zone conduct regular system inspections using an online template tailored for this use. The Zone issues a renewable operating permit for advanced systems and holds the system owner accountable for proper operation and performance. If the system is operating properly and does not require preventive maintenance or repairs, the Zone issues a renewable, three-year operating permit. If the system functions but is not operating optimally, the Zone issues a one-year operating permit and monitors the system performance. Performance indicators



Photo: Sea Ranch Water Company.

include standard hydraulic parameters (no backups, no sewage surfacing), as well as wet and dry weather groundwater and surface water monitoring in the vicinity of some drainfields. Monitoring parameters include biochemical oxygen demand, bacteria, some metals, and total suspended solids. If the system has structural integrity problems or leachfield malfunctions, the owner must obtain a sewage disposal repair permit from the Zone. If the owner does not repair the system in a timely manner, the county can attach a notice to the land records or revoke the building's certificate of occupancy. Moreover, the Zone is authorized to revoke an operating permit at any time for noncompliance. In these cases,

the Zone can compel the repair or replacement of a wastewater system under county rules. The Zone also operates the potable water supply system and can suspend water service if its requirements are not met.

FUNDING SOURCES

The annual budget of the wastewater management program is \$250,000 as approved by the Sonoma County Board of Supervisors. The budget is funded through an annual, per-system fee of \$180.

RESULTS

Surface and groundwater monitoring results have found no evidence of groundwater pollution associated with the hundreds of individual systems and two clustered wastewater systems in The Sea Ranch community. System malfunctions, such as the sewage surfacing and groundwater contamination that spurred the creation of the program no longer pose a significant threat due to routine operation, maintenance, and management procedures.

References and Resources

Hantzsche, N., Moore, R.A., and Smiell, J. No date. Data Management System for Onsite Wastewater Inspection Program at The Sea Ranch, California. National Onsite Demonstration Program, West Virginia University, Morgantown, WV.

The Sea Ranch Association. 2004. Onsite Wastewater Disposal Zone Homeowner's Guide. www.tsra.org/Zone.htm. The Sea Ranch Association, Sea Ranch, CA.

Population data—derived from Census Bureau, The Sea Ranch, 2010. <http://www.census.gov/> and http://www.census.gov/geo/www/gazetteer/files/Gaz_places_national.txt