

Understanding Rural Water System Permits for Marin County Agriculture

Background

Growing interest in agritourism and on-farm agricultural processing has increased public visitation to Marin County farms and ranches. In some cases, hosting the public or developing processing facilities triggers the need for landowners to operate water systems under permits from the State or County. These permits ensure that water quantity is adequate for expanded uses and that water quality is safe for the public to drink per County, State or Federal drinking water regulations.

The Marin County Environmental Health Department (EHS) issues permits to construct and operate private water systems, while the California Department of Public Health (CDPH) issues permits to operate Public Water Systems.

Obtaining appropriate water system permits can require water yield and quality tests, installation of water storage tanks and water treatment systems, and water monitoring. Development of new water sources may be subject to additional County and State permits. The following information outlines the basic types of water systems and related topics. More specific information can be obtained by contacting EHS or CDPH staff.

Water source permits

Well drilling permits for new water wells are issued by EHS. New wells within the Coastal Zone are also subject to Coastal Permits, through the Marin County Community Development Agency Planning Division (Planning Division). Spring development may also require a Coastal Permit and the Planning Division should be consulted to see if a Coastal Permit is necessary.

Development of natural springs and other surface waters that are isolated, meaning that they do not flow into a creek, can be developed without permits from the U.S. Army Corps of Engineers or State Water Resources Control Board Division of Water Rights.

Development of springs that flow into a creek may require a water right from the State Water Resources Control Board Division of Water Rights and a permit from the U.S. Army Corps of Engineers.



Types of water systems

In Marin County, all domestic water systems must be permitted. EHS or CDPH permit all water systems that serve residences, food processing facilities, retail food outlets, or any other facility that serves the public. EHS issues permits for private water systems while CDPH permits public water systems. Figure 1, Decision Tree for Classification of Water Systems, illustrates the triggers that necessitate the three types of State licensed Public Water Systems as well as the County permitted State-Small and Common Water Systems. The CDPH will determine the type of water system required if there is any question. The boxes labeled "unregulated system" indicate those private systems that are not regulated on an on-going basis.

PRIVATE WATER SYSTEMS: Two types of permits are issued by EHS for private water systems. These are the permit to construct and the permit to operate: co.marin.ca.us/depts/CD/main/pdf/EHS/water_program/DomesticWaterSupplyPermitToOperateApplication.pdf. The kinds of private water systems include:

- **An Individual Domestic¹ Water Supply Permit** is the most common type, and is adequate for rural properties that have fewer than five service connections² and do not regularly serve drinking water to the public, as described under Public Water Systems. County involvement by EHS is normally limited to when the individual Domestic Water Supply Permit is originally issued, and when it is amended after approved changes occur in water use.
- **A State Small Water System Permit**, which despite its name is regulated and permitted by the County, is needed if a water system serves between five and 14 service connections and does not regularly serve drinking water to at least 25 individuals daily on any 60 days out of the year.³ On-going regulation by the County is required. Some dairies that house multiple families may be required to have this type of water system permit.
- **A Common Water System Permit** is a small mutual water system made up of two to four residences on two to four lots.

PUBLIC WATER SYSTEMS: These are subject to State permits, and are required on farms and ranches if public visitation exceeds certain thresholds, if retail sales or product tasting is offered, or if the system regularly serves drinking water to at least 25 individuals daily at least 60 days out of the year², or if public restrooms are provided⁴. The kinds of public water systems include:

- **A Community Water System Permit** is required for properties that have 15 or more service connections used by yearlong residents or regularly serve at least 25 yearlong residents.
- **A Transient-Noncommunity Water System** serves at least 25 individuals daily, at least 60 days of the year, but not more than 24 yearlong residents. This type of water system serves restaurants, campgrounds, small wineries, and retail facilities with tasting rooms or restrooms, such as cheese plants that sell retail and/or provide tasting, and/or provide public restrooms to at least 25 individuals daily.
- **A Nontransient-Noncommunity Water System** serves at least 25 of the same persons over six months of the year. This type of water system serves schools and places of employment with 25 water users including employees, management, on-site owners, others who are non-staff residents, or on-site lessees. Larger agricultural processing operations might fall into this category.

Water systems, yield and treatment

Water sources for permitted water systems can come from 1) groundwater sources such as wells; 2) groundwater under the influence of surface water, such as shallow wells or springs that have surface water intrusion; or 3) surface water, such as lakes or streams. EHS or CDHP determines which of these three categories a given water source falls into, with the latter two requiring more intensive water treatment than groundwater.

Each type of water system permit requires adequate water yield (volume), which has to be established through a water yield test. Public water system yield tests are more rigorous, as only 20% to 50% of the water yield is typically allowed for use. In all cases, water storage is required.



¹ Despite the name, Domestic Water Supplies also cover non-domestic uses.

² Service connections can generally include residential or business water system connections.

³ Health and Safety Code, Division 1., Part 12, Chapter 4, California Safe Drinking Water Act, Article 1., Section 116275(n).

⁴ If public restrooms are provided, it is assumed that water from sinks could be consumed by users, and must therefore come from a Public Water System.

Water testing

All water system permits require that water meet certain quality standards, which means that various water tests must be done before the systems are permitted. In the case of Public Water Systems, test results from a certified lab are submitted to the CDHP. The frequency of routine tests varies depending on the classification of the water system, type of water source and the levels of contaminants.

Typical water tests that are required for water system permits include:

- Primary bacteriological test
- Primary inorganic chemical test (heavy metals, nitrates etc.)
- Secondary drinking water tests (private water systems test about eight constituents)
- Organic chemicals including volatiles, such as fuels; and synthetics, such as pesticides, may be tested for in some cases.

Contacts for water system permits

For more information on permits to construct and operate private water systems, and water testing labs, contact Scott Callow, Senior Environmental Health Specialist with Marin County EHS at (415) 473-6907.

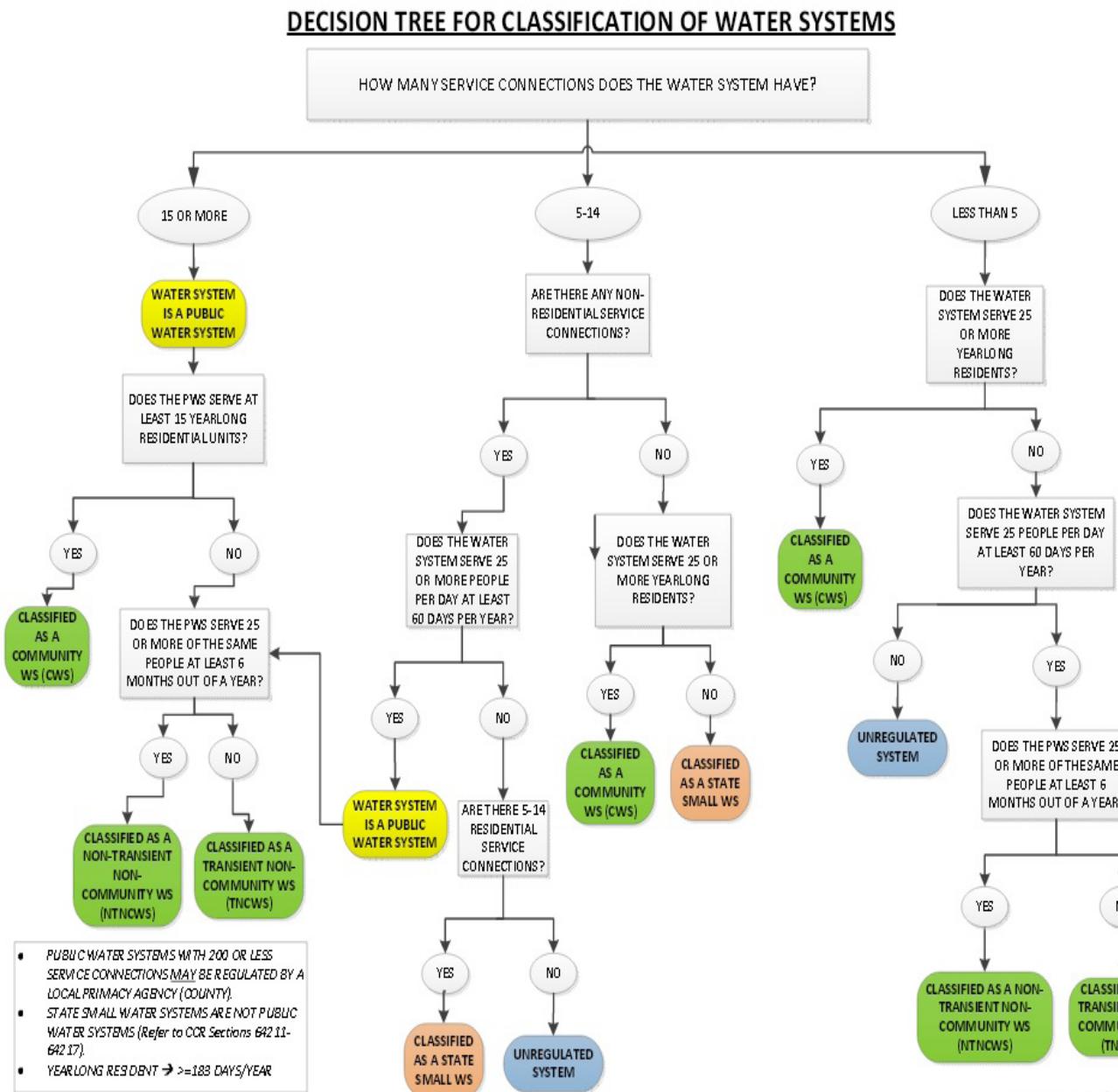
For detailed information on Public Water System permits to operate, contact the Northern California Drinking Water Field Operations Branch of CDPH in Santa Rosa at (707) 576-2145, or cdph.ca.gov/certlic/drinkingwater/Pages/default.aspx

For information about water rights for surface water, contact the California Division of Water Rights at waterboards.ca.gov/waterrights/



Figure 1. From CDHP

cdph.ca.gov/certlic/drinkingwater/Documents/Public%20Water%20Systems/DecisionTreeClassifyingWate%20SystemsDetailed4-2012.pdf



Note: Despite the name, Domestic Water Supply Permits also cover non-domestic uses.