#### COUNTY OF MENDOCINO

### LOCAL AGENCY MANAGEMENT PLAN (LAMP)

### Introduction

# **Purpose**

This Local Agency Management Program (LAMP) is prepared pursuant to and describes Mendocino County's compliance with the State Water Resources Control Board's *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy). This LAMP includes by reference and is to be used in conjunction with the OWTS Policy. The purpose of the OWTS Policy and the LAMP is to allow the continued use of OWTS in Mendocino County while protecting water quality and public health. The OWTS Policy conditionally waives the requirement for owners of OWTS to apply for and receive Waste Discharge Requirements when they meet the conditions set forth in the OWTS Policy. The Mendocino County LAMP provides alternate OWTS standards from those identified in Tier 1 of the SWRCB OWTS Policy. These alternate standards will be used to permit the installation of new and replacement OWTS in Mendocino County by addressing local conditions while protecting water quality and public health.

# **Responsibilities and Duties**

# 2.0 OWTS Owners Responsibilities and Duties

Section 2.0 of the OWTS Policy assigns responsibility and duties to OWTS owners. Sections 2.1–2.7 are reproduced as written in the OWTS Policy and apply to OWTS owners in Mendocino County.

- **2.1** All new, replacement, or existing OWTS within an area that is subject to a Basin Plan prohibition of discharges from OWTS, must comply with the prohibition. If the prohibition authorizes discharges under specified conditions, the discharge must comply with those conditions and the applicable provisions of this Policy.
- **2.2** Owners of OWTS shall adhere to the requirements prescribed in local codes and ordinances. Owners of new and replacement OWTS covered by this Policy shall also meet the minimum standards contained in Tier 1, or an alternate standard provided by a Local Agency Management Program per Tier 2, or shall comply with the requirements of Tier 3 if near an impaired water body and subject to Tier 3, or shall provide corrective action for their OWTS if their system meets conditions that place it in Tier 4.
- **2.3** Owners of OWTS shall comply with any and all permitting conditions imposed by a local agency that do not directly conflict with this Policy, including any conditions that are more stringent than required by this Policy.

- **2.4** To receive coverage under this Policy and the included waiver of waste discharges, OWTS shall only accept and treat flows of domestic wastewater. In addition, OWTS that accept high-strength wastewater from commercial food service buildings are covered under this Policy and the waiver of waste discharge requirements if the wastewater does not exceed 900 mg/L BOD and there is a properly sized and functioning oil/grease interceptor (a.k.a. grease trap).
- **2.5** Owners of OWTS shall maintain their OWTS in good working condition including inspections and pumping of solids as necessary, or as required by local ordinances, to maintain proper function and assure adequate treatment.
- **2.6** The following owners of OWTS shall notify the Regional Water Board by submitting a Report of Waste Discharge for the following:
- 2.6.1 A new or replacement OWTS that does not meet the conditions and requirements set forth in either a Local Agency Management Program if on is approved, an existing local program if it is less than 60 months from the effective date of the Policy and a Local Agency Management Program is not yet approved, or Tier 1 if no Local Agency Management Program has been approved and it is more than 60 months after the effective date of this Policy;
- **2.6.2** Any OWTS, not under individual waste discharge requirements or a waiver of individual waste discharge requirements issued by a Regional Water Board, with the projected flow of over 10,000 gallons-per-day;
- **2.6.3** Any OWTS that receives high-strength wastewater, unless the waste stream is from a commercial food service building;
- **2.6.4** Any OWTS that receives high-strength wastewater from a commercial food service building: (1) with a BOD higher than 900 mg/L, or (2) that does not have a properly sized and functioning oil/grease interceptor.
- **2.7** All Reports of Waste Discharge shall be accompanied by the required application fee pursuant to California Code of Regulations, title 23, section 2200.

#### PART 3

# 3.2 Local Agency Monitoring and Reporting Responsibilities

The Local Agency is responsible for developing, implementing and administering the LAMP, in addition to providing data to the Regional Water Quality Control Board on the success of the LAMP in protecting water quality and public health. The Local Agency will oversee the permitting of new and replacement OWTS that accept and treat flows of less than 10,000 gallons per day of domestic wastewater, as well as OWTS that accept and treat flows of less than 10,000 gallons per day, gpd, of high strength wastewater from commercial food establishments, where the wastewater does not exceed 900 mg/l of BOD and there is a properly sized and functioning oil/grease interceptor. Any owners of OWTS not subject to the LAMP as listed above are required to submit a Report of Waste Discharge to the Regional Water Board. Currently the OWTS serving mobile home parks listed below will be subject to the LAMP:

- 1. Point Arena Light House at 45500 Lighthouse Rd., Point Arena
- 2. Vagabond Village at 32850 Mill Creek Dr., Fort Bragg
- 3. WildWood at 29700 Hwy 20, Fort Bragg
- 4. Woodside at 17900 N. Hwy 1, Fort Bragg
- 5. Leisure Time RV Park at 30801 Hwy 20

These sites have historically been permitted by the County and will continue to until the county is no longer able to. These MHPs listed above will considered Tier 0 until such a time that a repair or replacement is needed. All other new or replacement OWTS serving mobile home parks (MHPs) and special occupancy parks (SOPs) such as RV parks and Tent camps, that are regulated by the California Department of Housing and Community Development (CDHCD) and accept and treat flows of less than 10,000 gpd of domestic wastewater will not be subject to the LAMP. MHPs and SOPs with new or replacement OWTS of 5000 gpd flow volume or less will be subject to the LAMP while those that exceed that flow volume will be assessed on an individual basis by MC EH staff for LAMP applicability vs oversight by the Regional Water Board.

**Annual Report**. Mendocino County shall submit a report to the Regional Water Quality Control Board (RWQCB) that includes the following information:

- Permitting actions such as installations, replacements, repairs, and waivers.
- Complaints received and associated investigation outcomes
- Septage pumping applications received and permits issued
- Water quality assessment data

The annual report will summarize and analyze the available data in order to determine if any further actions will be required in order to maintain water quality and public health in Mendocino County. The water quality assessment data included in every fifth year report will be in accordance with section 9.3.2 of the OWTS Policy.

## 3.2.1 LAMP General Requirements

The Mendocino County LAMP applies to OWTS producing flows of less than ten thousand (10,000) gallons per day. If the proposed flow is greater than ten thousand (10,000) gallons per day or the project involves high strength waste the method of treatment and disposal shall be approved by the NCRQWCB. All existing mobile home parks will require approval by the NCRWCB. The County reserves the right to accept projects on a case by case basis while working with the NCRWQCB.

# 3.2.2 Permit and/or Inspection Requirements

Installation permits records are maintained in address file copies as well as the Environmental Health Access Database. Operational Permits for alternative treatment systems are also maintaining within the Environmental Health Access Database as well as complaints. Permit information can be accessed and available to the RWQCB within 10 working days upon written request.

# 3.2.3 Water Quality Assessment Program

The purpose of this LAMP is to establish standard and policies for the installation, operation, and maintenance of OWTS in order to protect water quality and public health. The water quality monitoring element is intended to track the impact of OWTS effluent on ground water and surface water as well as the effectiveness of the LAMP in addressing those impacts over time. The County will use data from available sources consistent with LAMP Section 9.2.3 to asses groundwater quality.

In addition to the water systems operated by the cities and special districts, there are a number of smaller public and semi-public water systems operating in Mendocino County. Most of these smaller systems utilize groundwater exclusively and all are required to perform routine water quality monitoring as a conditions of their Domestic Water Supply Permits. The Division of Environmental Health proposes to utilize this data to measure OWTS impacts on ground water.

# 3.2.4 Reporting to Regional Water Board/State Water Board

An annual report summarizing all installations, repairs, complaints, and alternative systems monitoring shall be supplied to the RWQCB no later than February 1 of each year. In addition to the annual reporting every fifth year an evaluation of the monitoring program shall be submitted to the RWQCB due no later than February 1. Groundwater or surface water data collected shall be uploaded to the GeoTracker, DEDEN, and SWAMP databases.

3.5 Local Agency shall notify owner of public well or water intake, and California Department of Public Health (CDPH), within 72 hours, of discovery of failing OWTS, described in section 11.1 and 11.2 (major repair) within setbacks stated in section 7.5.6. through 7.5.10.

## 3.3 Site Evaluation, Design, Construction, and Monitoring

**3.3.1** Qualified Professional Requirements. Site evaluations in accordance with this policy shall be performed by individuals who by virtue of their education, training, and experience, are qualified to examine and assess soil, geologic, and hydrologic properties as related to subsurface effluent disposal. Credentials required of such individuals shall include as a minimum, education, training, and license as geologist, soil scientist, registered civil engineer, or registered environmental health specialist.

### 3.3.2 OWTS Site Evaluation

All designs for new, replacement, and repair sewage disposal systems require a site evaluation conducted by a qualified site evaluator. It is the intent of each site evaluation to consider site specific soil application rates in the most appropriate soil horizons. Evaluators are required to demonstrate the best available evidence of the highest anticipated groundwater at each site. This may include but is not limited to the presence of soil mottling and or direct observations. Mendocino County has required setbacks to water wells as well as surface waters and potential geotechnical situations. In addition to the stringent requirements of all site evaluations Mendocino County Environmental Health staff review each submittal carefully and may at times confer with the site evaluator to address any concerns that may arise from design proposal. If staff is not confident that the design is protective enough the site evaluation may be revised until adequate protections are in place. All of these requirements are in place to prevent groundwater pollution and protect public health. The groundwater observations obtained from these assessments will be used to help identify hydrogeologically vulnerable areas, HVAs for short.

In November 2000 the State Water Board developed a map and index HVAs within Department of Water Resources (DWR) identified groundwater basins. The map was created in 2000 DWR and US Geological Survey publications. Data from these publications were used to identify areas where geologic conditions are more likely to allow recharge at rates substantially higher than in lower permeability or confined areas of the same groundwater basin. Groundwater resources underlying designated (i.e., published) recharge, rapid infiltration, or unconfined areas were considered categorically more vulnerable to potential contaminant releases than groundwater underlying areas of slower recharge, lower infiltration rates, or intervening low permeability deposits (i.e., confining layers).

DWR Basins identified in Mendocino County include:

1-11 Round Valley	1-12 Laytonville Valley	1-13 Little Lake Valley
1-19 Anderson Valley	1-20 Garcia River Valley	1-21 Fort Bragg Terrace
1-40 Ten Mile River Valley	1-41 Little Valley	1-45 Big River Valley
1-46 Navarro River Valley	1-47 Gualala River Valley	1-51 Potter Valley
1-52 Ukiah Valley	1-53 Sanel Valley	

Additional groundwater basins are presented in the list, but are identified as low use/low risk.

Section 4.14.2 (Wastewater Services) of the 2008 Environmental Analysis associated with the Mendocino County General Plan identifies Anderson Valley and Laytonville unfavorable conditions that constrain septic system usage or effectiveness. The LAMP will build off the existing knowledge for identifying areas that are vulnerable due to such hydrogeological conditions.

9.1.2 High quality waters or other environmental conditions. The Minimum Lot Size in Mendocino County requires in Inland Areas a minimum of 40,000 square feet (a Mendocino Acre) to develop a sewage disposal system with an on-site well. Inland Areas are currently only allowed two residential units per parcel. Coastal areas are prohibited from have second residences on any parcel. The average rainfall for the county is 40 inches a year. Per Table 1 of section 7.8 on the State OWTS Policy development should not exceed half and acre per residential unit which is on par with the county's' lot size requirements.

Mendocino County has areas with high quality waters or other environmental conditions that OWTS may adversely affect. The Areas of Special Biological Significance such as King Range ASBS, Jughandle Cove (Pygmy Forest) ASBS, Saunders Reef ASB, and California Marine Protected Areas are examples of areas that may require enhanced protections from OWTS. Such protections will include maintaining setbacks and may require advanced pretreatment units and disinfection as a part of any new, repair, or replacement OWTS. A cumulative impact study may be required of projects in or near areas where OWTS may cause adverse effects with regards to nitrates and ground water mounding.

Existing geographic areas with existing higher densities that predate current code requirements are considered as Tier 0 until a failure is documented. Upon documentation of failure the system will then be repaired per the requirement stated in Tier 2 of this LAMP. These systems will be mapped and reported to the State in the county's annual report.

- **Shallow soils** requiring a dispersal system installation that is closer to ground surface than is standard. Mendocino County has managed a program for nonstandard designs under the regional board for over two decades very successfully. Alternative methods of sewage disposal have been developed to overcome specific constraints imposed by soils, groundwater or other conditions, which would otherwise preclude the installation or proper functioning of a conventional sewage disposal system. Mendocino County Code Section Sec. 16.08 - Regulation of Installation or Alteration of Sewage Systems. Mendocino County OWTS Technical Standards requires a qualified professional perform site evaluations. If shallow soils are found an alternative sewage treatment system (ASTS) shall be designed and installed in accordance with Mendocino County OWTS Technical Standards. Mendocino County OWTS Technical Standards require conventional systems to have a minimum of 12" of soil cover which may be acceptable fill material. If unable to provide a minimum of 12" of soil cover over conventional dispersal system due to shallow soil depth and still provide 36" minimum suitable soil below trench bottom, an alternative sewage treatment system is required.
- 9.1.4 High domestic well usage area. Mendocino County staff currently GPS all new well location sites and will continue to do so. If a pattern of areas with high domestic well usage develops, consideration will be given to further study these areas relative to areas identified as having a high incidence of sewage dispersal system failure or potential for soft failures with pathogen transport toward receptor wells. Setbacks from water wells and new or replacement OWTS will be maintained to the greatest extent practicable. Any variances from the setbacks will require pretreatment with disinfection in the OWTS design. All such designs are considered non-standard designs and are required to have an operational permit. Mendocino County has managed this program for non-standard designs under the regional board for over two decades very successfully.
- 9.1.5 Fractured bedrock. Mendocino County requires a qualified professional perform site evaluations. If shallow soils are found due to fractured bedrock, an alternative sewage Treatment system (Non-Standard) shall be designed and installed in accordance with Mendocino County requirements. A minimum of 2 feet of acceptable soil between the dispersal area and the fractured bedrock is required for the design of any Non-Standard Septic Design. Specific non-standard designs with advanced treatment (mound, aerobic treatment, etc.) are suitable for sites with only 2 feet of soil between the dispersal area and the limiting condition. Disposal areas with less than 2' of adequate soil due to the presence of fractured bedrock are prohibited and no variances will be granted. All such designs are considered non-standard designs and are required to have an operational permit.

- 9.1.6 Poorly drained soils. Mendocino County requires a qualified professional perform site evaluations. If poorly drained soil is identified, limiting the amount of acceptable soil, an alternative sewage dispersal system (Non-Standard) shall be designed and installed in accordance with Mendocino County standards. New OWTS shall have minimum of 2 feet of acceptable soil above the poorly drained soils. Specific non-standard designs with advanced treatment (mound, aerobic treatment unit, etc) are suitable on sites with only 2 feet of soil. New sites with less than 2 feet of soil due to the presence of poorly drained soils or high ground water shall be prohibited. Other options for improving drainage may be identified during the site evaluation. An example would be the requirement to construct an interceptor drain if located on a sloping site.
- **9.1.7 Vulnerable surface water**. Mendocino County Code requires a 200 foot setback to any water supply watershed reservoir. Code will be modified to require a 400 foot setback if the disposal system is located less than 1200 feet to a public water system intake line. The areas around our surface water supplies are sparsely populated except where public sewer is available. We will need to adopt portions of the Basin Plan into this section.

Additional surface water bodies that may be vulnerable to OWTS include perennial and intermittent watercourses, lakes, ponds, reservoirs, wetlands, vernal pools, wet meadows, and seeps. Mendocino County requires a qualified professional perform site evaluations. If such watercourses are identified by the site evaluator standard setbacks shall be maintained as follows:

- 1. For streams which run continuously or a major portion of the year, the setback is 100 feet, as measured from the 10 year flood line elevation on a stream where a Federal Emergency Management Agency (FEMA) study has been made, or an elevation established by a qualified site consultant as the 10 year flood line.
- 2. For seasonal/intermittent streams and drains, the setback is 50 feet and is measured from the edge of the watercourse. If the stream has been mapped in a FEMA study, then the 100 feet setback to the 10 year flood line applies whether the stream is considered seasonal, intermittent, or continuously flowing
- 3. For ocean, lakes, ponds, reservoirs, springs or spring developments, the setback is 100 feet. For the ocean, the setback is from mean high tide.

Mendocino County established and has maintained these setbacks over 20 years and feel they adequately protect the public as well as water quality.

**9.1.8 Impaired water bodies**. The Russian River has a draft TMDL and is expected to be subject to Tier 3 requirements upon adoption. Due to the fact that the TMDL and its implementation program have not yet been adopted by the RWB and SWRCB and there are no special provisions included in the LAMP at this time. New or replacement OWTS within 600 feet of impaired

water bodies must meet applicable specific requirements of Tier 3 of the OWTS Policy. These may include no waivers to setback, the addition of pretreatment units, and possibly disinfection to the OWTS design. These additional design criteria will be required when surface water in the watershed is listed as impaired for Nitrogen or Pathogens in order to be protective of water quality and public health.

- 9.1.9 High OWTS density areas. Nitrate has not been identified as a chronic issue in any area of Mendocino County. Should monitoring results (see comprehensive monitoring plan in section (9.3.2) or GeoTracker & GAMA data analysis show a concerning trend over the next five years for nitrate contamination this LAMP will be reevaluated and updated as needed to consider nitrogen loading per area. Mendocino County include the requirement for total and fecal coliform testing as well as nitrate testing whenever a yield test is required for new development. The areas in Mendocino County that have historically been identified as areas with a high density of OWTS may have additional criteria required or considered for new or replacement OWTS. These areas have densities that exceed the average 0.5 acres/single family dwelling unit where the average annual rainfall >40 in/yr. This is typically due to the fact that these areas have public water systems available and were able to create smaller parcels based on no on-site water per parcel. Permitting of new or replacement OWTS in these areas will be protective of water quality by maintaining standard setbacks to the greatest extent practicable. Design criteria for new and replacement OWTS may include pretreatment & disinfection in order to maintain public safety and water quality.
- **9.1.10 Limits to Parcel Size**. Per Mendocino County Code Sec. 16.08.060 Minimum Lot Area; No on-site sewage system shall be installed or approved unless it complies with the following minimum lot size requirements:
  - (A) Where a water supply and distribution system and sanitary sewer system are provided, the lot area shall be not less than six thousand (6,000) square feet, and the lot width shall be not less than sixty (60) feet in width on the building line or less than eighty (80) feet in depth.
  - (B) Where a water supply or distribution system is provided, the lot area shall not be less than twelve thousand (12,000) square feet, and the lot width shall be not less than eighty (80) feet.
  - (C) Where neither a water supply and distribution system nor a sanitary sewer system is provided, the lot area shall be not less than forty thousand (40,000) square feet, and the lot width shall be not less than one hundred (100) feet.
  - (D) For lots which are to be used for commercial or industrial purposes or where there are unusual topographical or other special conditions, the Health Department may grant exceptions to this provision.

(E) Each and every lot or parcel of a subdivision approved based upon the use of an alternative sewage system shall be a minimum of forty thousand (40,000) square feet net. Systems proposed for lots less than eighty thousand (80,000) square feet net may be required to complete a cumulative impact survey prior to approval of the subdivision.

In addition to the Minimum Lot size Code all new site evaluations for sewage disposal systems are required to account for an area for 100% replacement of the current level of use ion that parcel. In lots of 12,000 square feet where either public water or public sewer are available shall maintain standard setbacks. Where public sewer is available there is less on-site hydraulic mounding, or nitrogen loading as compared to site with OWTS. Conversely areas with public water supplied the mounding or loading from the OWTS is mitigated by the fact that the water source is offsite and pre-treated. In both cases the County has approved a diminished lot size requirement.

- **9.1.11** Areas with OWTS that predate adopted standards are dispersed throughout the County. Mendocino County has been issuing permits for OWTS since the late 1950s. While NCRWQCB Basin Plan Policy was introduced in 1974 and adopted in 1987 Mendocino County design and construction standards predate those of the regional board. No additional requirements are required of predated OWTS. The failures of these older OWTS will be tracked, and assessed for possible future LAMP updates. All existing OWTS will remain subject to Tier 0 "until or unless a failure occurs," whereupon corrective action will occur in accordance with Tier 4 of the OWTS Policy. Those OWTS in Tier 0 are allowed to continue in Tier 0 after the failure is corrected if the failure is of one of its components other than those failures covered in section 11.1 and 11.2 (i.e., pooling or surfacing effluent, backups, no percolation, and major structural failures). OWTS with failures consistent with section 11.1 and 11.2 are required to be brought into compliance with the Tier 2 LAMP. These failures will also be captured in a data base and in the future mapped to a GIS layer when made available. If a particular area of Mendocino County with OWTS that predate adopted standards is identified during the 5 years between LAMP assessment reports as being one with a significantly higher number of failures, the LAMP will be updated as needed to address and include special considerations for continued protection of groundwater and the environment.
- **9.1.12** Areas with OWTS either within prescriptive, Tier 1 setbacks, or within setbacks that a Local Agency finds appropriate. There are no identified areas in Mendocino County with known multiple, higher density developments with existing OWTS that are within the prescriptive setbacks set forth in Tier 1. Those that may exist are limited and dispersed throughout the County with no known concentrations of systems of this type. While it is acknowledged that the Technical Standards discusses variances and the basis for variances, allows for variances of all of the setbacks cited in Table 4-1 (needs to be

included in TS), as long as the variance request is substantiated by a qualified site evaluators report these have not been associated with a particular area of the county. Rather they are scattered across the entire county. The review and issuance of these variances is protective of water quality due to the fact that both the county inspector and the site evaluator evaluate the specifics of each site carefully. Any site that requires more than one variance to any criteria were automatically placed in the non-standard system program and monitored for the life of the system. If multiple variances are found to have been given in a specific geographic area perhaps then groundwater monitoring and assessment should be undertaken to confirm that these variances are not impacting water quality. Such finding may require additional supplemental treatment be installed.

## 9.2 SITING DESIGN AND CONSTRUCTION REQUIREMENTS

The Mendocino County LAMP shall cover the following types of Onsite Wastewater Treatment Systems (OWTS): domestic residential, domestic commercial and high strength commercial food service facility wastewater systems producing flows of 10,000 gpd or less. Industrial wastewater systems and their discharges are not authorized per the LAMP or OWTS Policy. Those sites require authorization by the Regional Water Board.

The LAMP does not allowed these types of OWTS in a as per 9.4 of the OWTS Policy; cesspools (OWTS Policy 9.4.1), surface discharge (OWTS Policy 9.4.3), decreased leaching area (OWTS Policy 9.4.5, RV waste (OWTS Policy 9.4.7),), Slopes >30% without a geotechnical study (OWTS Policy 9.4.4), less than 24 inches separation to groundwater (OWTS Policy 9.4.8), public sewer availability (OWTS Policy 9.4.9 (OWTS Policy 9.4.12).

The LAMP shall provide regulations and guidelines for the local site evaluation conducted by a qualified professional, siting, design, construction monitoring and maintenance requirements (see Mendocino County OWTS technical standards). It additionally covers each of the following:

9.2.1 Installation and inspection permits. The LAMP provides requirements for OWTS inspection, monitoring, maintenance, and repairs, including procedures to ensure that replacements or repairs to failing systems are done under permit from Mendocino County Environmental Health Division (see Chapter 16.08 of County Code related to repairs and variances). Refer additionally to Mendocino County OWTS technical document. All new installations require a plan review, installation permit and construction inspections. Additionally all new Non-Standard sewage disposal systems require semi-annual operating permits and routine inspections by either County staff and/or a service provider. A standard operation and maintenance manual (O&M) will be provided by the County for conventional sewage disposal systems. All Non-Standard systems will have an O&M manual prepared by the design professional.

A non-standard system has either a supplemental treatment system, a disinfection unit, or the site required more than one waiver to standard site criteria. All non-standard system required to be in the Operational Permit Program. High-strength OWTS from commercial food service buildings may also be required to be under the Operational Permit Program as determined on a case by case basis.

- 9.2.2 The NCRWQCB and the State Water Resources Control Board (SWRCB) have a draft to the Water Quality Control Plan (Basin Plan) for the North Coast Region to establish a Russian River Watershed Pathogen Total Maximum Daily Load (TMDL) and Implementation plan. The draft TMDL proposes to designate Mendocino County, specifically the Division of Environmental Health as the responsible party for implementing actions related to OWTS and may require a plan and implementation schedule be submitted to the NCRWQCB. Existing, new and replacement OWTS near the Russian River will be addressed with the implementation of this TMDL. The draft TMDL report data indicated that failing OWTS may be contributing to creek contamination therefore Mendocino County proposes: All parcels with septic systems bordering the main stream Russian River, Commisky Creek, Dry Creek, Feliz Creek, Forsythe Creek, Pieta Creek, York Creek, and Mill Creek are flagged in the Divisions current septic permit tracking system as being adjacent to an impaired water body. This will trigger extra diligence from County staff in reviewing and septic system related permit or inquiry. Should any parcel near the impaired creeks be identified as having a failing septic system, the County will expeditiously use all tools at its disposal to immediately remedy the situation.
- 9.2.3 The LAMP recognizes that not all new, replacement, or repair OWTS will be able to meet minimum required setbacks, soil depth, groundwater separation, and/or additional minimum requirements and has therefore provided for a variance section to address such circumstances. Each proposal shall strive to provide a greater protection to groundwater and neighboring parcels than any existing systems. Variances will not be permitted for cesspools or seepage pits of any kind or size or for new, replacement, or repair. The variance process will not authorize any of the prohibited items in Section 9.4 of the Policy.
- 9.2.4 The LAMP has licensing requirements that will be required of OWTS Site Evaluators, Installers, Maintenance Contractors, and any other person relating to OWTS. Currently the requirements for a qualified site evaluator are listed in section 3.3.1. The requirements for service providers, installers, maintenance contractors or any other person relating to OWTS include but are not limited to class A & B licensed contractors. Homeowners may also install OWTS on their properties if capable. All sites regardless of installer type must be inspected by Environmental Health or a qualified site evaluator prior to final approval.

- 9.2.5 The LAMP provides a plan for an education and outreach program including informational materials to inform OWTS owners about how to locate, operate, and maintain their OWTS. Additionally see section 9.2.2 above. Property owners are further advised to visit Mendocino County's Public Website (http://www.co.mendocino.ca.us/hhsa/chs/eh/landuse.htm) as well as the State Water Board website for publications (e.g. Basin Plan prohibitions) regarding OWTS restrictions within its jurisdiction. Regarding education related to ongoing operation and maintenance, alternative OWTS designers must provide the homeowner with an operation and maintenance manual specific to the type of system installed. Verification of delivery of a copy of the operation and maintenance manual must be documented. The County will retain a copy of the operations manual for future replacement needs. The operation manual shall cite homeowner or Service Provider procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure.
- 9.2.6 There are currently three septage receiving facilities within Mendocino County. The City of Willits Waste Treatment facility, the H-H Ranch (Hay Site) septage site in Point Arena, and the Tunzi Ranch in Comptche. Future septage treatment sites are of interest and benefit to the county. The Division of Environmental Health maintains records and permits of septage haulers operating in this county. See Mendocino County Code Chapter 9.12 Regulation of Sewage and Septage Pumpers for the detailed requirements. All pumpers must submit quarterly reports of their monthly pumping and dumping locations to the division. DEH also conducts annual inspections of all vehicles hauling sewage in the county. DEH will continue to maintain the records in our current database and conduct inspections.
- 9.2.7 Presently there are no onsite wastewater maintenance districts in Mendocino County and currently none are under consideration. Mendocino County Code Sec. 16.08.070 prohibits the development of subdivisions using Innovative Sewage Systems. Mendocino County Code sections 16.12 & 16.16 prohibit any development utilizing onsite septic with the Ukiah and Meadowbrook Manor Sanitation Districts and can be connected to an existing public sewer system. County Code further restricts the creation of small lot subdivisions (by minimum parcel size requirements) which geographically restricts the possibilities for an onsite wastewater maintenance district. Should a proposal be submitted in the future for any onsite wastewater maintenance district and/or community type wastewater solution in a particular area, feasibility studies would have to include, as project alternatives, consideration of such formation in accordance within the provisions of Health and Safety Code. To clarify, a maintenance district or zone does not necessarily apply to only community wastewater systems. A district or zone may oversee the operation and maintenance of individual OWTS in a particular area such as an area where a high number of variances have been granted and/or localized ground or surface water have been impacted.

- 9.2.8 Mendocino County does not anticipate developing or implementing a Regional Salt and Nutrient Management Plan. Mendocino County will collaborate with regional efforts on a plan if asked to participate in the future. The LAMP should address salts and nutrients programmatically and in areas outside the DWR identified groundwater basins by coordinating with local groundwater planning efforts and data collection and analysis. The LAMP and associated water quality assessment programs will coordinate with localized or county-wide groundwater planning efforts as well as data available from but not limited to the GAMA & GeoTracker databases.
- **9.2.9** The County will work with the Resource Conservation District, which conducts watershed activities in the area, to determine if their activities identify any septic system issues near local water ways or issues specifically pertaining to the draft Russian River TMDL. The Lamp will coordinate with local groundwater management planning efforts such as groundwater sustainability plans or voluntary groundwater management plans to share local resources, assessments and monitoring program implementation.
- **9.2.10** The LAMP includes procedures for evaluating the proximity of public sewer systems to new or replacement OWTS installations (See County Code Sections 16.12-16.16). Currently sewer district boundaries are mapped and if a property is close to a boundary, staff will consult with the district prior to issuance of any permits. Parcels within designated service areas will not be issued a permit until or unless the district issues a waiver based on specific conditions (see County Code Chapter 16.08).
- 9.2.11 The County will notify the owner of a public water system/NCRWQCB prior to issuing an installation permit for any new, replacement, or repair OWTS in such cases that the OWTS is; within 1200 feet of an intake point for a surface water treatment plant for drinking water, is in the drainage area catchment in which the intake point is located, and is located such that it may impact water quality at the intake point such as upstream of the intake point for a flowing water body, or if the OWTS is within a horizontal sanitary setback from a public well. Mendocino County staff will record GPS data for such systems.
- **9.2.12** The LAMP outlines policies and procedures to be followed when a proposed OWTS dispersal area is within the horizontal sanitary setback of a public well or a surface water intake point. These policies and procedures establish best available technology and siting practices which shall mitigate the potential adverse impact to the public water source (County Code section 13.28.040 and 13.32.050).

New or replacement OWTS shall meet a minimum horizontal setback of 150 feet from a public water well where the depth of the effluent dispersal system

does not exceed 10 feet in depth. Mendocino County does not allow any OWTS with effluent dispersal deeper than 10 feet.

For replacement OWTS that do not meet the above horizontal separation requirements, the replacement OWTS shall meet the horizontal separation to the greatest extent practicable. In such case, the replacement OWTS shall utilize supplemental treatment and other mitigation measures, unless the permitting authority finds that there is no indication that the previous system is adversely affecting the public water source, and there is limited potential that the replacement system could impact the water source based on topography, soil depth, soil texture, and groundwater separation

For new OWTS, installed on parcels of record existing at the time of the effective date of this Policy that cannot meet the 150 horizontal setback to a public water supply, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment which may include disinfection for pathogens and other mitigation measures as described in the LAMP and County Code Chapter 16.08.

The OWTS may utilize supplemental treatment for pathogens, such as disinfection, and any other mitigation measures prescribed by Mendocino County Environmental Health. Additionally, per section 4.2.1 of the Policy, OWTS in the Russian River Watershed are exempt from Tier 2 and will continue to be subject to the requirements within the Basin Plan Policy on the Control of Water Quality with Respect to On-Site Waste Treatment and Disposal Practices Specific to the Russian River Watershed, Including the Laguna de Santa Rosa, until the Russian River TMDL is adopted.

- **9.2.13** Cesspools are not permitted in Mendocino County and any Cesspool discovered shall be properly abandoned and a repair or replacement system installed as soon as practicable.
- **9.2.14** Seepage Pits are not permitted in Mendocino County and any Seepage pit discovered to be in failure shall be properly abandoned and a repair or replacement system installed as soon as practicable.

#### 9.3 MANAGEMENT RESPONSIBILITIES FOR LAMP

#### 9.3.1 Records Maintenance

## 9.3.2 Water Quality Assessment

**Inspection data**. All ASTS systems are inspected by either a service provider, fore department, or County staff. Information from the inspections is maintained the Environmental Health Access Database as well as the State CERS database. Should a site fail an inspection the site will be identified in the annual report.

**Complaints**. All complaints are currently logged into the Environmental Health Access Database. As a part of the LAMP all complaints will be reported to the RWQCB in the annual reports. Upon receipt of a complaint in investigation will be conducted and a permit may be issued for a repair or replacement.

**Failures**. There are several ways in which a failure is identified. Property owners may hire a contractor to or site evaluator to works with the county on a repair. In other cases failures may be identified as a result a complaint received. All repair permits issued will be maintained in the Environmental Health Access Database as well as associated complaints.

Monitoring Well Sampling. There is currently no County sampling of monitoring wells in addition to those required by the RWQCB. There are currently no plans to conduct County sampling of monitoring wells. Sampling reports are available on the States GeoTracker site, and WDR facilities monitoring data, as well as data in the Annual Report or the Water Quality Assessment Report.

**State Small Water Systems**. Currently the County performs the inspections of all State Small Water Systems. A quarterly water sample is taken at each inspection for total fecal coliform as well as E.coli. The other quarter sampling results are also reviewed during each inspection. When a sample is positive for either Environmental Health log the violation and include this information in the annual report. Because public drinking water wells typically pull from deep aquifers the available water monitoring data may not provide much insight into the impacts from OWTS that discharge to the shallow aquifer.

**State Maintained Databases**. The RWQCB has stated that they will make available additional datasets that the State maintains. This will include the GAMA and Drinking Water Program databases in addition to GeoTracker. The County will utilize this additional information as needed. Monitoring data for NPDES permittees is available in CIWQS online and will also be utilized.

**Domestic Well Sampling including new well development**. Currently domestic well sampling occurs during the subdivision process or when new

water source is added to a State Small Water System. There is current legislation that may require additional testing that will be incorporated into the County LAMP. Sampling may be needed in areas of high domestic well usage where variances to setback to new and replacement OWTS are regularly granted. Sampling areas of high groundwater and high domestic well usage may also be warranted. Both areas should be prioritized if and when domestic well sampling is required.

**Real estate transactions**. No information is captured at this time and there are no plans to require this in the future. Sampling may be needed in areas of high domestic well usage where variances to setback to new and replacement OWTS are regularly granted at the time of the real estate transaction.

**Ocean Beach Monitoring**. The County currently performs Ocean Beach Monitoring from April 1st to October 31<sup>st</sup>. The data collected from this program will be submitted in the annual report as well as utilized in the five year assessments.

In the future it is the intention of the County to maintain a GIS layer for LAMP Monitoring program with in a data management program. No such program currently exists, but as the technologies become available GIS layers for all permits issued and sampling data will be utilized.

Note that any changes made to the LAMP to address impacts identified in the Water Quality Assessment Report should be "proposed" changes that will be approved by the Regional Water Quality Control Board.

# 9.3.3 Annual Reporting Process

An annual report shall be submitted to the NCRWQCB no later than February 1<sup>st</sup> of each year. This report will summarize the following items:

- 1. All housing, water, or septic complaints Environmental Health received with locations and status.
- 2. Applications and permits issued to Septage Pumping operators.
- 3. New and Replacement Permits issued by location and status.
- **4.** All Variance and or Repairs Shall be identified with location and justification.
- **5.** Water Quality Assessment Program data shall be submitted annually. Such Data available in GAMA & GeoTracker will be included.
- **6.** Domestic Well sampling data
- 7. Groundwater Monitoring data generated by Mendocino County shall be submitted in EDF format for inclusion into GeoTracker and surface water monitoring data will be submitted to CEDEN in a SWAMP comparable format (including ocean beach monitoring data).

**The five year water quality assessment report.** Every 5 years the annual report will be accompanied by water quality assessment evaluation report that summarizes the information and findings. The report will provide an analysis of any evidence of water quality impacts from OWTS as well as any appropriate changes to the LAMP developed to address the identified impacts.

The RWQCB is expecting to issue a guidance document o how this information should be gathered and organized for submittal. Upon receipt of this guidance document all pertinent requirement will be incorporated into this section of the LAMP. The being said it is understood that any water quality data generated or collected by the County from monitoring activities will be submitted in a an electronic data format as requires.

#### 9.4 Prohibitions

- 9.4.1 Projected flows greater than 10,000. The Mendocino County LAMP applies to OWTS producing flows of less than ten thousand (10,000) gallons per day. If the proposed flow is greater than ten thousand (10,000) gallons per day or the project involves high strength waste the method of treatment and disposal shall be approved by the NCRQWCB. All mobile home parks will come under the jurisdiction of the NCRWCB. The County reserves the right to accept projects on a case by case basis while working with the NCRWQCB. Except those identified in section 3.2 of the LAMP Mobile Home Parks and Special Occupancy Parks fall under the jurisdiction of the NCRWQCB
- **9.4.2** Cesspools. Cesspools are not permitted for new construction in Mendocino County. Any Cesspool discovered shall be properly abandoned and a repair or replacement system installed as soon as practicable.
- **9.4.3 Seepage Pits**. Seepage pits are not permitted for new construction in Mendocino County. Any Seepage pit discovered to be in failure shall be properly abandoned and a repair or replacement system installed as soon as practicable.
- **9.4.4 Pit Privies**. Pit Privies are not permitted for new construction in Mendocino County. Any Pit Privies discovered shall be properly abandoned and a repair or replacement system installed as soon as practicable.
- **9.4.5 Holding Tanks**. The use of holding tanks shall be prohibited except where the County determines that:
  - 1. It is necessary to abate an existing nuisance or health hazard; or
  - 2. The proposed use is within a sewer service area, sewers are under construction or contracts have been awarded and completion is expected within two years, there is capacity at the wastewater treatment plant and the sewer agency will assume responsibility for maintenance of the tanks; or

- 3. It is for use at a campground or similar temporary public facility where a permanent sewage disposal system is not necessary or feasible and maintenance is performed by a public agency. In cases new and replacement OWTS with significant RV holding tank wastewater may be handled by the County. The point non-significant amounts become significant amounts of waste so that it is no longer domestic waste and is outside the jurisdiction of the LAMP shall be determined on a case by case basis in consultation with the NCRWQCB. Amounts below 1% of the estimated total daily flow may not be considered significant.
- **9.4.6 OWTS with surface discharge**. Mendocino County will NOT allow any surface discharge of sanitary wastewater. All proposed surface disposal of sanitary effluent shall be under the jurisdiction of the NCRWQCB.
- **9.4.7** Supplemental treatment without Monitoring and Inspection is not allowed. All systems with supplemental treatment (Non-Standard) require annual permitting and monitoring as well as inspection by either a service provider or County or both (Mendocino County Code Sec. 16.08.090).
- 9.4.8 Significant Waste from R.V. Holding Tanks. Mendocino County defines domestic wastewater to include only incidental RV holding tank dumping but does not include wastewater consisting of a significant portion of RV holding tank wastewater such as a RV dump station. The point non-significant amounts become significant amounts of waste so that it is no longer domestic waste and is outside the jurisdiction of the LAMP shall be determined on a case by case basis in consultation with the NCRWQCB.
- **9.4.9 Installations near existing sewers.** For any property where the installation of a new, expanded or replacement OWTS is proposed, Mendocino County Code Section 16.12 and 16.16 require connection to a public sewer when the nearest building proposed on any lot or parcel is no more than 200' from a public sewer. Upon the creation of new State permitted sanitation districts it is assumed that any development within 200" of the district will require connection to that sanitation district.
- 9.4.10 Supplemental Treatment, New OWTS That Do Not Meet Minimum Setback Requirements. For new OWTS on parcels created prior to the effective date of the LAMP that are unable to meet the horizontal setback requirements of 9.4.10.1- 9.4.10.5, the new dispersal field shall meet the setback requirements to the greatest extent practicable. Per County Code Chapter 16.08, an alternative sewage treatment system with supplemental treatment shall be required and shall be sited to meet the required setback to the maximum extent possible. Supplemental treatment with disinfection may be required when deemed necessary by the administrative authority for protection of the water supply. The LAMP requires such sites to utilize supplemental treatment for pathogens as specified in section10.8 of OWTS

Policy and any other mitigation measures prescribed the Local Agency. In no case shall a new sewage system that is a result of new construction be installed any closer than 100 feet to a public water supply well or public surface water intake point.

- **9.4.11** The replacement dispersal field shall meet the setback requirements to the greatest extent practicable as set forth in County Code Chapter 16.08 and shall incorporate supplemental treatment and other measures, as appropriate, unless there is no evidence of an existing or potential threat of impact to the public water source by the OWTS based on topography, soil depth and composition, and ground water conditions. When the established horizontal setbacks cannot be met, in no case shall a repair sewage system be installed any closer than the existing system to a public water supply well or public surface water intake point.
- **9.4.12 Minimum setbacks** identified in 9.4.10 (9.4.10.1-9.4.10.5 and County Code Chapter 16.08) shall be maintained unless authorized through the repair/variance process (9.4.11, 9.4.12 and Mendocino County Code Chapter 16.08 New, expanded or replacement OWTS with horizontal setbacks less than those identified in 9.4.10 of the OWTS Policy are prohibited except as provided in sections 9.4.11 and 9.4.12 of the OWTS Policy and Mendocino County Code).

The minimum setback requirement from a leach field to a private well is 100 ft. Where possible, the OWTS shall be located down the groundwater gradient of a private well to provide an extra measure of protection for a well. This setback may be waived to no less than 75 ft. from a private well and an OWTS that service the same parcel. The setback to neighboring private wells shall not be less than the stated 100 ft.

As per the Plumbing code the setback from a private well to a septic tank is a minimum of 50 ft. with no variances allowed.

The minimum distance between and OWTS and septic tank and a potable water main is 25 ft.

Septic transmission lines shall be placed below all potable drinking water service lines at a distance no less than 45-degrees to and at least one foot below the crossed potable water pipeline. The minimum standard in the cases that septic mains must cross potable water service lines are based of the distances stated in the Title 22 California Code of Regulations, §64572. Water Main Separation.

If the OWTS is less than or equal to 10 feet deep, then setback from public water well less than 150 feet is not allowed.

If the OWTS is greater than 10 feet deep, then setback from public water well less than 200 feet is not allowed.

If the OWTS is greater than 20 feet deep, and less than 600 feet from public water supply well, then the setback must be greater than the distance for two-year travel time of microbiological contaminants, as determined by qualified professional. In no case shall the setback be less than 200 feet

If the OWTS is greater than 1,200 feet, but less than 2,500 feet from public water system's surface water intake, within its drainage catchment, and potentially threatens an intake, then the setback must be greater than 200' from high water mark of surface water body.

- **9.4.13 Sizing reduction** and decreased leaching area for International Association of Plumbing and Mechanical Officials (IAPMO) certified dispersal systems using a multiplier less than 0.70 not allowed. (Mendocino County OWTS Technical Standards).
- **9.4.14 Installations on slopes greater than 30%** are prohibited without a without a slope stability report prepared by a registered professional.
- **9.4.15 Minimum Soil Depth.** New OWTS shall have minimum of 2 feet of acceptable soil. Specific non-standard designs with advanced treatment (mound, aerobic treatment unit, etc) are suitable on sites with only 2 feet of soil. New sites with less than 2 feet of soil due to the presence of poorly drained soils or high ground water shall be prohibited.
- **9.5 Technical Support of LAMP.** The LAMP including all technical documents includes adequate detail, to support how all the criteria in this local program work to protect water quality and public health.
- **9.6** The NCRWQCB will consider past performance of local programs to protect water quality based on reviews of annual status and evaluation reports. Should deficiencies be identified, the County and the NCRWQCB will work together to make programmatic improvements.
- **10.1 Special Provisions**. New or replacement OWTS (i.e., OWTS constructed for which a construction permit has been issued after May 13, 2013) within 600 feet of an impaired water body must comply with all of the Tier 3 requirements until a TMDL is in effect or Special Provisions are approved. Because the TMDL and its implementation program have not yet been adopted by the RWB and SWRCB and there are no special provisions included in the LAMP. New or replacement OWTS within 600 feet of impaired water bodies must meet applicable specific requirements of Tier 3 of the OWTS Policy.
- **11.1 Corrective Action**. As Per the OWTS Tier 4 Any OWTS that has pooling effluent, discharges wastewater to the surface, or has wastewater backed up into plumbing

fixtures, because its dispersal system is no longer adequately percolating the wastewater is deemed to be failing, no longer meeting its primary purpose to protect public health, and requires major repair, and as such the dispersal system must be replaced, repaired, or modified so as to return to proper function and comply with Tier 1, 2, or 3 as appropriate.

Any OWTS septic tank failure, such as a baffle failure or tank structural integrity failure such that either wastewater is exfiltrating, or groundwater is infiltrating is deemed to be failing, no longer meeting its primary purpose to protect public health, and requires major repair, and as such shall require the septic tank to be brought into compliance with the requirements of Section 8 in Tier 1 or a Local Agency Management Program per Tier 2.

Any OWTS that has a failure of one of its components other than those covered above, such as a distribution box or broken piping connection, shall have that component repaired so as to return the OWTS to a proper functioning condition and return to Tier 0, 1, 2, or 3.

In such cases a failure analysis shall be performed to document the problem and establish the probable cause of the failure. If the cause is a collapsed or disconnected pipe the applicant is advised of the cause and that no repair permit is required. If the septic tank is determined to be the cause of the problem, advise the applicant to obtain a permit for the septic tank replacement. The abandonment of a functioning field in order to expand a structures footprint shall not constitute a repair.

When it is determined that the leach field is in failure, a site evaluation investigation shall be conducted to identify a replacement primary leach field area of acceptable soil conditions. A site investigation might rely on a backhoe test trench or three hand augers in combination with previous personal experience in the immediate area.

Owners of OWTS will address any corrective action requirement of Tier 4 as soon as is reasonably possible, and must comply with the time schedule of any corrective action notice received from a local agency or Regional Water Board, to retain coverage under this Policy.