Regional Water Quality Control Board, North Coast Region
Potential Implementation Actions for Russian River Pathogen Indicator Bacteria TMDL
January 2015

Direct Municipal Wastewater Discharges
- Ensure discharge attains effluent limitations for Total Coliform Bacteria

Municipal Wastewater Discharges from Holding Ponds
- Ensure discharge attains effluent limits for E. coli and Fecal Coliform, unless demonstration that discharge meets WLAs
- Upgrades to existing disinfection systems to a process more completely destructive of wastewater pathogens (e.g., ozone, heat sterilization, ultrafiltration)
- Initial or additional disinfection of holding pond effluent immediately prior to discharge
- Zero discharge through expansion of recycled water use or enlargement of wastewater holding ponds

Wastewater Discharges to Percolation Ponds and Spray Irrigation - Effluent limits for E. coli and Fecal Coliform

Leaks from Sanitary Sewer Systems
- Permittees under General Permit for Sanitary Sewer Systems amend their Sanitary Sewer Management Plans (SSMP)
- Increasing the frequency and method of surveillance of sanitary sewer pipes, pump stations, siphons, and other sewer infrastructure that are located where overflows, spills, and exfiltration may adversely impact the Russian River or its tributaries.
- Accelerating schedules for pipeline rehabilitation and/or replacement.
- Revising sewer design standards to specify construction materials and methods that will ensure a water-tight sanitary sewer system for new and replacement sewer components in areas adjacent to the Russian River and its tributaries.
- Establishing local ordinances to require property owners to inspect their private sewer lateral upon property transfer, in response to chronic sanitary sewer overflows (SSOs), or after significant changes in property use
- Developing programs to enable and help finance ratepayers to voluntarily inspect and repair deteriorating private service laterals

Runoff from Land Application of Municipal Biosolids - Prepare Erosion Control Plan pursuant to General Order for Land Application of Biosolids

Spills and Incidental Runoff of Recycled Water
- Prepare Bacteria Load Reduction Plan (BLRP)
- Evaluating and, when necessary, improving Best Management Practices (BMPs) to prevent overspray, spills, and incidental runoff
- Increasing setbacks from recycled water points of use to waterbodies, curbs, pavement and storm water inlets
- Improving compliance with recycled water user requirements through increased public outreach and, when necessary, through progressive enforcement.

Failing and Substandard Individual OWTS
- Responsible parties are Mendocino and Sonoma Counties and Special Districts and Municipalities with OWTS within their boundaries
- Responsible parties submit BLRP that includes:
  o Priority ranking for areas within watershed
  o Performance Standards
  o OWTS Management Program under aegis of County, Special District, Onsite Wastewater Zone, or other similar oversight program

Large Private OWTS in High and Medium Priority Areas
- Performance standards for E. coli and Fecal Coliform
Waste Discharges Associated with Recreational Water Use
- Responsible parties submit BLRP
- Installing temporary or permanent restroom facilities, including diaper changing stations, near the recreation use areas and signage to effectively direct recreators to restroom facilities
- Establishing interagency agreements with local sanitation districts to provide maintenance and waste disposal for temporary restroom facilities
- Developing and distributing educational & outreach materials (fliers, brochures) to inform river recreators about proper waste disposal and sanitation at beaches and access points along the Russian River and tributaries
- Conducting outreach to private recreational beach operators and commercial river outfitters to improve beach housekeeping and provide adequate sanitation facilities for customers
- Publicizing locations of public restroom facilities on the county website and at recreational outfitters’ headquarters
- Limiting availability of parking along county roads near beach areas where waste collection is difficult.

Human Waste Discharges Associated with Homeless Encampments and Illegal Camping
- Providing or improving options for shelters, transitional housing, affordable housing, and other homeless services
- Conducting public outreach to owners of private property in the Russian River Watershed to inform and assist them on how best to prevent illegal camping and trespassing on their property, including how to report illegal use to local law enforcement
- Establishing a program, including a hotline, for reporting homeless encampments and facilitating camp cleanup activities
- Installing physical barriers to prevent illegal camping and habitation under bridges and overpasses
- Funding and implementing public works projects to clear overgrown riparian vegetation that provides or may provide cover for illegal camping and other prohibited activities
- Initiating and participating in pilot programs that provide public restroom facilities along public trails and upgraded restroom facilities at public parks.

Urban Storm Water Runoff - MS4 permittees prepare or update Non-Storm Water BMP Plan

CalTrans Storm Water Runoff – Address homeless encampments in Caltrans Right-of-Way.

Discharges of Domestic Pet Waste –
- Responsible parties (Mendocino County, Sonoma County, and municipalities) submit BLRP
- Improving or establishing a pet waste program that could include more widespread availability of pet waste collections systems and a higher profile outreach program to educate the public about proper disposal of pet waste and the environmental consequences of improper disposal, and
- Partnering with local businesses and organizations to sponsor the installation, operation, and maintenance of pet waste collection systems.

Runoff from Non-dairy Livestock and Farm Animals
- Regular cleanup of manure and soiled bedding in animal habitation areas
- Use of impermeable surfaces for storage of manure
- Use of onsite composting to stabilize and reuse manure
- Siting of manure storage areas away from water courses and off slopes
- Reduction of storm water contacting manure storage areas, paddocks, and kennel areas
- Use of vegetated buffers to encourage uptake of pollutants
- Limiting of animals’ access to waterways.

Runoff from Dairies
- Responsible parties submit BLRP
- Actions, such as riparian fencing, that prevent animal access to water courses and provide a vegetated buffers to reduce manure runoff
- A surface water monitoring plan that includes routine monitoring for pathogen indicator bacteria to demonstrate attainment of WLAs