



*County of Kings, California
Local Agency Management Program
for
Onsite Wastewater Treatment Systems ("OWTS")*

Pursuant to the State Water Quality Control Board's OWTS Policy (6/19/12)
Approved by the Kings County Board of Supervisors, April 5, 2016

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County of Kings Local Agency OWTS Management Program

PURPOSE

This Local Agency Onsite Wastewater Treatment System (“OWTS”) Management Program (“LAMP”) is proposed by the County of Kings to serve as a Tier 2 management program under the State Water Resources Control Board’s OWTS Policy (“State Water Board Policy”).

The LAMP is designed to incorporate Kings County’s (“County”) existing OWTS standards, except where the State Water Board Policy requires more stringent standards, protect groundwater sources and surface water bodies from contamination through the proper design, placement, installation, maintenance, and assessment of individual OWTS. These standards are adequately protective of the environment because the County’s existing standards are generally more stringent than those outlined in Tier 1 of the State Water Board Policy, and as described below in the “Environmental Setting” section, the County lacks unique environmental conditions that warrant more rigorous standards.

ENVIRONMENTAL SETTING

GROUNDWATER DEPTHS: Kings County spans over parts of five different water sub-basins. According to 2010 groundwater level monitoring data from the Department of Water Resources, groundwater depths in Kings County for the Kings River Basin unconfined aquifer range from 100 to 200 feet. Water levels are deeper in the Westside Basin, ranging from approximately 200 to 320 feet, which is roughly consistent with levels in the Pleasant Valley Basin to the south and west. Levels in the Kaweah Basin in the east-central part of the County range from 50 to 200 feet, which is consistent with levels in the Tulare Lake Sub-basin that covers most of Kings County. Accordingly, groundwater levels are sufficiently deep throughout the County to comply with depth requirements shown on Table 2 of Tier 1 of the State Water Board Policy. An exception applies in the vicinity of the Kings River and old Tulare Lakebed, where perched water is common. Consequently, in those areas the County’s existing standards call for OWTS to be engineered on a case by case basis, and this LAMP will continue to require such engineering.

SOILS: The soils throughout Kings County have been mapped by the U.S. Soil Conservation Service, and the following types of soils exist in the County:¹

1. **Northeast Alluvial Fans.** The alluvial fan surfaces in the northeastern portion of the County are mantled with very deep, well-drained, saline-alkali soils that include sandy loams and fine sandy loams. The permeability of these soils is moderately slow to very slow, and runoff is usually very slow and the erosion potential is slight.
2. **Low Alluvial Fans and Basin Rim.** Soils in the transition zone between the Northeast Alluvial Fans and Tulare Lake Basin and Basin Rim typically include loam, clay loam,

¹ See Appendix 1, which is also contained at Figure 4.6-2 of the Programmatic EIR for the *2035 Kings County General Plan*.

sandy clay loam surface soils and clay, or silt loam subsurfaces. The permeability is moderate to very slow and runoff is slow or very slow.

3. Tulare Lake Basin and Basin Rim. This region of the County is characterized as having areas of perched, shallow groundwater, and soils here are typically somewhat poorly drained to poorly drained. Engineering is required for OWTS within this area.
4. Southwestern Valleys. These soils typically include loam and sandy loam. They are deeply developed on alluvium and are well drained to moderately well drained. The permeability is moderately slow to moderately rapid. Runoff and erosion hazard are moderate.
5. Southwest Uplands (Including Kettleman and Kreyenhagen Hills and the Diablo Range). These soils have severe limitations for agriculture and building development. The soils are developed within colluvium on sedimentary bedrock and are shallow and well-drained to excessively well drained. Erosion hazard is high, and the area is used primarily for rangeland and wildlife habitat.

TOPOGRAPHY: Located within the San Joaquin Valley, most of Kings County is virtually flat. An exception exists in the southwest corner of the County, which includes the Kettleman Hills and portions of the Diablo Range and Kreyenhagen Hills. This area is sparsely populated and used primarily as grazing land. Consequently, OWTS exist here at low densities, and due to soil conditions, special rules requiring larger leaching areas and leaching fields apply. Additionally, pursuant to the State Water Board Policy, OWTS are prohibited in any terrain with a 30 percent slope or greater without a slope stability report approved by a registered professional. High slope areas within the Coast Rangers are also included in the Natural Resource Conservation Overlay Zone described in section 1007 of the Kings County Development Code. New structures within the zone require conditional use permits, and environmental review under the California Environmental Quality Act will therefore be required for most new construction projects in the overlay zone. This will allow for an additional layer of review with respect to any impacts resulting from new OWTS.

DEMOGRAPHICS: The average population density for the County, including for urbanized areas, is 110 persons per square mile, which is less than half of the statewide average of 246 persons per square mile. In 2010, the population of Kings County was 152,982. Out of those individuals, 100,278 lived in the County's four cities, all of which have access to sanitary sewers. An additional 18,538 individuals were housed in prisons, and 7,799 were housed on federal territories outside of the County's jurisdiction. Of the remaining 26,267 persons, 8,633 lived in the County's four unincorporated communities, all of which have access to sanitary sewers through community services districts, public utilities districts or, in the case of Home Garden, from the neighboring city of Hanford. Some of the remaining 17,734 individuals live in urban fringe areas or County islands. Approximately 1,500 such individuals are already connected to city sanitary sewers, and other parcels in fringe areas and County islands are likely in the near future to be annexed and provided access to municipal sewers. The remaining residents typically live in sparsely populated areas where OWTS exist at low densities. The California

Department of Finance estimates that by 2050, the County's population will increase to 240,599. However, most of these new residents will reside in incorporated or newly incorporated areas. Land Use Policy E1.1 of the *2035 Kings County General Plan* requires that all new urban growth within the unincorporated areas of the County must be contiguous to existing cities and annexed.

SPECIAL WATER BODIES: There are no impaired water bodies located in Kings County shown in Attachment 2 to the State Water Board Policy and subject to Tier 3 of that policy. The Kings River and Cross Creek run through Kings County. Much of the length of these streams is empty for a large part of the year, particularly during current drought conditions. Land along both water bodies is included within the Natural Resource Conservation Overlay Zone described in section 1007 of the Kings County Development Code. New structures within the zone require conditional use permits, and environmental review under the California Environmental Quality Act will therefore be required for most new construction projects in the overlay zone. This will allow for an additional layer of review with respect to any impacts resulting from new OWTS.

ADDITIONAL CONSIDERATIONS: Because the vast majority of all County residents live in settled areas with municipal services, there are no geographic areas in the County that are known to have a concentration of existing OWTS predating any adopted standard of design and construction, including cesspools. Similarly, there are no geographic areas known to have concentrations of existing OWTS located within setbacks. There also are no known areas of fractured bedrock in Kings County. Most of the County is located along the San Joaquin Valley floor, which is an alluvial plain that has been described as a "trough filled with marine sediments overlain by continental sediments, in some places thousands of feet deep."² Because OWTS exist in Kings County at low densities, it is believed that there is sufficient room for OWTS expansion in most if not all unincorporated areas of the County in the case of failure. Currently there is no concern in Kings County for susceptibility to hydraulic mounding or organic or nitrogen loading based on the most current sanitary survey. The soils in the south San Joaquin Valley and foothills are loamy sands and clays derived from shale, sandstone sediments, and some igneous rock, and leachfield suitability ranges from excellent to moderate. The only known areas of potential nitrogen loading in Kings County are its dairies, which are required by the State Water Board to comply with best management practices to mitigate such loading. New dairies are also subject to best management practices contained in the Dairy Element of the County's General Plan. For urban fringe areas near Hanford with high OWTS densities are addressed in the *Areas of Special Consideration* on pages 31-34. Also, specified under *Areas of Special Consideration*, page 32, under the County's existing General Plan the minimum lot size within agricultural zone districts is 10 acres, and under land use policy E.1.1 of the 2035 Kings County General Plan, it specifies that any new urbanized areas around existing cities and communities must be annexed before any development will be allowed.

² See Devin Galloway and Francis S. Riley, "San Joaquin Valley, California: Largest human alteration of the Earth's surface," U.S. Geological Survey, 1999. Note also that the "Soil Survey of Kings County California," prepared by the United States Department of Agriculture – Soil Conservation Service, documents the soil types located within Kings County, and makes no reference to bedrock within the County.

DEFINITIONS:

“Alternative Wastewater Treatment System” means an on-site wastewater dispersal field that consists of components other than a conventional or supplemental treatment system.

“California Regional Water Quality Control Board” means the California State agency responsible for ensuring the protection of state waters, both surface and groundwater.

“Cesspool” means an excavation into the earth without watertight walls or bottom and used for reception of human waste in its raw state.

“Community sewage system” means any sewage disposal system operated and maintained by any municipality, district, public or private corporation serving a community or part thereof.

“Construction” means construction, repair, alteration, addition, modification or relocation of a sewage disposal system.

“Conventional On-site Wastewater Treatment System” means an on-site wastewater treatment system composed of a septic tank and a dispersal field that uses leach lines, seepage pits, or other authorized methods approved by Kings County Community Development (KCCD) and Kings County Department of Public Health, Division of Environmental Health Services (KCEHS) and does not include Alternative On-site Wastewater Treatment Systems.

“Dispersal Field” means a location used for discharge of liquid sewage effluent. Standard dispersal fields include, but are not limited to, leach lines and seepage pits.

“Effluent” means the partially treated wastewater discharge from an On-site Wastewater Treatment System.

“Expansion area” means the amount of dedicated space equal in size to an existing or proposed OWTS that is capable of supporting an OWTS and will replace the primary OWTS when necessary.

“Groundwater” means water located below the land surface in the saturated zone of the soil or rock. Groundwater includes perched water tables, shallow water tables, and zones that are seasonally or permanently saturated.

“Lot” means a portion of land separated from other portions by description as on a subdivision map, record of survey map, or by metes and bounds, or the purpose of sale, lease, or separate use, and having frontage on an approved street.

“LAMP” is an acronym for a “Local Area Management Program” used for implementation of the Tier 2 standards in the State Water Resources Control Board’s Policy for Siting, Design, Operation and Management of On-site Wastewater Treatment Systems.

“Leach line” means a subsurface soil absorption wastewater dispersal system installed in a trench usually consisting of a perforated distribution pipe placed over gravel or other media and backfilled with native material.

“NSF” means the National Sanitation Foundation or NSF International, a not-for-profit, non- governmental organization that develops health and safety standards and performs product certification.

“On-site Wastewater Treatment Systems (OWTS)” means a system composed of a septic tank and a dispersal field and related equipment and appurtenances. On-site Wastewater Treatment Systems are also referred to as septic systems, on-site sewage disposal systems, individual sewage disposal systems or private sewage disposal systems and may include alternative and supplemental treatment systems.

“Percolation Test” means a subsurface test conducted to measure the absorption rate of water in soil strata. The test is conducted after initial presaturation and is usually expressed as minutes per inch (MPI).

“Permit” means a permit issued by the division for any purpose pertaining to OWTS.

“Privy” means a structure over a pit or vault used as a toilet and designed to receive human waste matter.

“Qualified Contractor” means a contractor holding a license that is current and active from the Contractors State License Board (CSLB) for Plumbing (C-36), Sanitation System (C-42), or General Engineering Contractor (A). A contractor holding a license as a General Building Contractor (B) shall be considered a qualified contractor when constructing, modifying, or abandoning an On-site Wastewater Treatment System as part of a larger construction project involving a new structure or major addition to an existing structure.

“Qualified Professional” means an individual certified by the State of California as a Professional Engineer, Professional Geologist, or Registered Environmental Health Specialist who has accepted responsibility for the design of the OWTS. The Qualified Professional will have affixed his/her signature and stamp to the system plans and plan proposal. Dependent on work performed, soil scientists certified by the Soil Science Society of America are considered as qualified professionals.

“Registered Pumper” is a firm or person that pumps and/or hauls septage or wastewater from chemical toilets and has been issued a permit by the Department of Public Health, Division of Environmental Health Services (KCEHS).

“Repair” means any action that modifies/replaces the existing dispersal system or replaces

an existing septic tank.

"Seepage pit" means an excavation, typically cylindrical in shape and filled with rock, constructed for the purpose of disposing of sewage effluent from a septic tank or treatment tank.

"Septic tank" means a water tight receptacle which receives the discharge of a drainage system or a part thereof, which is designed and constructed to retain solids, digest organic matter through a period of retention and bacterial action and allows the liquids to discharge into the soil.

"Sewage" means any and all waste substance, liquid, semisolid or solid as associated with human habitation or which contains or may be contaminated with human or animal excrement, wastes, offal or any feculent matter. Industrial wastewater shall not be considered as sewage.

"Supplemental Treatment System" means an OWTS that utilizes engineered designs and/or technology to treat effluent to reduce one or more constituents of concern in wastewater. It may also be referred to as an Advanced Treatment System or Enhanced Treatment System. Examples include, but are not limited to, sand filters, textile filters and aerobic treatment units but do not include composting or incinerating toilets.

APPLICABILITY OF THIS LAMP

All new and replacement OWTS in the unincorporated areas of the County must comply with this policy or else receive a permit directly from the Central Valley Regional Water Quality Control Board (“RWQCB”). Existing OWTS within the County not operated under a permit from the RWQCB shall operate under Tier 0 of the State Water Board Policy. Tier 4 of the State Water Board Policy shall apply to OWTS requiring corrective action.

STATEMENT OF RESPONSIBILITIES AND DUTIES

STATEMENT OF OWNER RESPONSIBILITIES AND DUTIES

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 the State Water Board Policy.
2. Owners of OWTS shall adhere to the requirements prescribed in any other applicable County policy, ordinance, or permitting condition.
3. To receive coverage under this LAMP, OWTS shall accept and treat only flows from domestic wastewater. In addition, OWTS that accept high-strength wastewater from commercial food service buildings are covered if the wastewater does not exceed 900 mg/L Biochemical Oxygen Demand (“BOD”) and there is a properly sized and functioning oil/grease interceptor (a.k.a., grease trap).
4. Owners of OWTS shall maintain their OWTS in good working condition including inspections and pumping of solids as necessary to maintain proper function and assure adequate treatment.

STATEMENT OF COUNTY RESPONSIBILITIES AND DUTIES

1. The County shall report annually to the RWQCB. The annual report shall include the following information, organized in a tabular spreadsheet format, and summarize whether further action is warranted to protect water quality or public health:
 - a. The number and location of complaints pertaining to OWTS operation and maintenance, and identification of those complaints that were investigated and how they were resolved;
 - b. Identification of the applications and registrations issued as part of the local septic tank cleaning registration program pursuant to Health and Safety Code section 117400;
 - c. The number, location, and description of permits issued for new and replacement OWTS;

- d. Identification of the tier of the State Water Board Policy pursuant to which each of the above permits was issued; and
 - e. Information concerning the status of Nos. 3 and 4 below.
 2. The County shall retain permanent records of all permitting actions and make those records available within ten working days of any written demand for review by the RWQCB. The records for each permit shall reference the tier of the State Water Board Policy under which the permit was issued. The county building official will scan OWTS permits into the existing permanent electronic record for building permits, and will make those documents available for inspection by the state and regional boards upon request.
 3. The County shall maintain records of the number, location, and description of permits issued for OWTS where a variance is granted.
 4. The County's Environmental Health Department (KCEHS) routinely monitors small public water systems operating under the authority of domestic water supply permits issued by the state Department of Public Health. These systems are located throughout the County, particularly in areas with large numbers and/or high densities of OWTS. The following data are obtained through such monitoring, which are recorded in the County's Geotracker database (Geotracker GAMA-secure), and can be made available to the state: well location and depth; screening depth; screening intervals; pumping volume; soil types; depth to bedrock; sample date; and analysis of bacteria, total dissolved solids, sodium, chloride, and nitrogen series, including organic nitrogen, ammonia, and nitrite. In time, these data may be coordinated and supplemented with data obtained through salt and nutrient management programs, including the Salt and Nutrient Management Plan, local implementation of the Sustainable Groundwater Management Act, and the State Water Board's Groundwater Assessment Program. If these data, or information obtained because of complaints, OWTS failures, or inspections of wells or OWTS, reveal a concern with OWTS in a particular area of the County, the Environmental Health Department will notify the county building official promptly in writing. The building official will take appropriate action, which may include taking voluntary samples from shallower, domestic wells in that area, or mandatory, random samples if legally possible. Also urban and rural areas of special consideration will be taken into account. See the *Areas of Special Consideration* section identified in this LAMP on page 32.
 5. Annual Status Reports will be due annually on February 1, beginning one year after Regional Board approval of this LAMP.
 6. Every fifth year, the County shall submit an evaluation of the water quality assessment program described in No. 4 above, as well as an assessment of whether water quality is being impacted by OWTS. The evaluation should also identify any changes in this LAMP that will be undertaken to address impacts from OWTS.

7. Until such time as the RWQCB shall require otherwise, all groundwater data submitted by the County to the RWQCB shall be submitted in EDF format for inclusion in Geotracker, and surface water monitoring shall be submitted in CEDEN in a SWAMP comparable format.
8. The County shall notify the owner of a public well or water intake and the State Water Resources Control Board, Division of Drinking Water (DDW) as soon as practicable, but within not more than 72 hours, upon discovery of a failing OWTS within setbacks prescribed in this LAMP between OWTS and public well or water intake. Initial contacts will be via phone and email using available contact information. The County will follow up with the owner in writing as promptly as possible including any information that by law or in good faith should provide. In an emergency situation, prompt contact with well users will be made with the assistance of County public safety personnel, if necessary.

GENERAL OVERVIEW OF OWTS

STANDARDS FOR NEW OR REPLACEMENT OWTS

1. Building permits shall be required for all OWTS subject to this LAMP.
2. The document attached hereto as Appendix 2 describes basic design criteria for OWTS in Kings County. Those criteria are based upon the County's pre-existing OWTS policy, as amended to reflect requirements in the State Water Board Policy regarding setbacks between OWTS and public wells or water intakes.
3. Except where other standards prescribed by this LAMP are more protective of the environment, all new or replacement OWTS shall comply fully with regulations for private sewage disposal systems prescribed in the most recent adoption of the California Plumbing Code. Also see *Standards for New or Replacement OWTS*, page 13, #8 and *Additional Components*, page 16, #1, of this LAMP which requires County Health Officer approval for engineered and large OWTS systems.
4. In areas identified in Figure B of Appendix 2, page 26, as requiring engineering, engineered plans are required. A Professional Engineer (P.E.) would be required to assess those areas identified, it should also be stated that the Tulare Lakebed is sparsely populated. The design of these plans shall comport with this LAMP, including the standards included in Appendix 2 insofar as those standards are applicable, Standards for New or Replacement OWTS which requires engineered plans in areas with shallow or perched groundwater, and the standards described in Tier 1 of the State Water Board Policy. Engineered plans shall also comport, to the extent consistent with this LAMP and the State Water Board Policy, with the United States Environmental Protection Agency's "Manual for Septic Tank Practice," and the most recently adopted edition of the California Plumbing Code.

5. OWTS shall be designed in such a manner to accommodate all setbacks, described herein and in Appendix 2, as well as leaching areas required by Appendix 2. In addition to prescribed leaching areas, a “fail safe” area equal in size to the leaching area shall be required.
6. Areas that are within the minimum distances which are necessary to protect water quality shall not be used for waste disposal. The following areas also are considered unsuitable for the location of disposal systems or expansion areas:
 - a. Areas within any easement which is dedicated for surface or subsurface improvement;
 - b. Paved areas;
 - c. Areas not owned or controlled by property owners unless any such area is dedicated for waste disposal purposes; and
 - d. Areas occupied or to be occupied by structures.
7. Soil depth below the bottom of the dispersal system to groundwater or bedrock shall in no case be less than five feet, nor less than ten feet below a seepage pit.
8. The standards attached as Appendix 2, page 26 to this LAMP are intended primarily for use with single family residences. Very few larger institutions in Kings County are on OWTS, and the County’s General Plan policies to protect agricultural land uses direct future development to urban areas, so that new large-scale OWTS will be rare. Land uses requiring OWTS with capacity greater than 1,200 gallon shall be designed in a manner substantially consistent with the standards stated in this LAMP to the extent practicable, and plans for such systems shall require approval by the County Health Officer. In evaluating proposed septic systems, the health officer shall use the rubric attached to this policy as Appendix 3. Approval shall be based upon the professional judgment of the health officer, with appropriate consideration given to available scientific data, anecdotal information obtained from files, and the results of any surveys and interviews.
9. For percolation testing, this LAMP will adopt and amend Section H-4.0, H-13, and H-14 of the 2013 California Plumbing Code, or most current available. Percolation tests shall be performed by a **Qualified Professional** (defined on page 8 in the definitions section of this plan) and shall be acceptable to Kings County Community Development and the Department of Public Health’s Environmental Health Services Division and performed as set forth in the Manual of Septic Tank Practice, U.S. Environmental Protection Agency (U.S. EPA) or as approved by KCCD Agency. A minimum of 3 percolation tests in each primary and reserve area (total minimum of 6) and at least one deep boring or test pits dug by a backhoe or excavator shall be conducted. The percolation test holes shall be spaced uniformly in the undisturbed soil horizons proposed for the dispersal field(s). Percolation tests shall only be conducted under saturated soil conditions. Deep borings,

backhoe excavations, and percolation tests are used to demonstrate that the dispersal site is located in an area of uniform soil, and that no conditions exist which could adversely affect the performance of the system or result in groundwater degradation.

PROHIBITIONS STATED IN THE STATE WATER BOARD POLICY

The following are not allowed under this LAMP:

1. Cesspools of any kind or size.
2. OWTS receiving a projected flow of over 10,000 gallons per day.
3. OWTS that utilize any form of effluent disposal that discharges on or above the post installation ground surface such as sprinklers, exposed drip lines, free-surface wetlands, or a pond.
4. Slopes greater than 30 percent without a slope stability report approved by a registered professional.
5. Decreased leaching areas for IAPMO certified dispersal systems using a multiplier less than 0.70.
6. OWTS utilizing supplemental treatment. Supplemental treatment may be allowed subject to a variance with appropriate provision for periodic monitoring and inspection. Any such variance shall be consistent with all requirements of the State Water Board Policy and all applicable state and federal laws.
7. OWTS dedicated to receiving significant amounts of wastes dumped from RV holding tanks.
8. Installation of new or replacement OWTS where public sewer is available. The public sewer may be considered as not available where such public sewer or any building or exterior drainage facility connected thereto is located more than 200 feet from any proposed building or exterior drainage facility on any lot or premises that abuts and is served by such public sewer. Unless required by the California Plumbing Code or other law, this provision does not apply to replacement OWTS where the connection fees and construction cost are greater than twice the total cost of the replacement OWTS if the health officer makes findings that the discharge from the OWTS will not affect groundwater or surface water to a degree that makes it unfit for drinking or other uses.
9. Except as provided in Nos. 10 and 11 below, new or replacement OWTS with minimum horizontal setbacks less than any of the following:
 - a. 150 feet from any public water well where the depth of the effluent dispersal system does not exceed 10 feet.

- b. 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet.
 - c. Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth, the horizontal setback shall be sufficient to achieve a two-year time of travel for microbiological contaminants. This setback shall be determined by a qualified professional, and in no case shall the setback be less than 200 feet.
 - d. Where the effluent dispersal system is within 1,200 feet from a public water system's surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.
 - e. Where the effluent dispersal system is located more than 1,200 feet but less than 2,500 feet from a public water system's surface water intake point, within the catchment area of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.
10. 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 cases, the replacement OWTS shall use supplemental treatment for pathogens that provides sufficient pretreatment of the wastewater so that effluent from the supplemental treatment components does not exceed a 30-day average TSS of 30 mg/L, and that further achieves an effluent fecal coliform bacteria concentration less than or equal to 200 Most Probable Number (MPN) per 100 milliliters. Effluent from supplemental treatment components designed to reduce nitrogen shall be certified by NSF, or other approved third party tester, to meet a 50 percent reduction in total nitrogen when comparing the 30-day average influent to the 30-day average effluent. Supplemental treatment shall not be necessary if the public health officer makes finding that: (1) there is no indication that the previous system is, due to its location, affecting the public water source, (2) there is limited potential that the replacement system could impact the water source based on topography, soil depth, soil texture, and groundwater separation.
11. For new OWTS installed on parcels of record existing as of May 13, 2013, that cannot meet the above horizontal separation requirements, the OWTS shall meet the horizontal separation to the greatest extent practicable and shall utilize supplemental treatment for pathogens that provides sufficient pretreatment of the wastewater so that effluent from the supplemental treatment components does not exceed a 30-day average TSS of 30 mg/L, and that further achieves an effluent fecal coliform bacteria

concentration less than or equal to 200 Most Probable Number (MPN) per 100 milliliters. Effluent from supplemental treatment components designed to reduce nitrogen shall be certified by NSF, or other approved third party tester, to meet a 50 percent reduction in total nitrogen when comparing the 30-day average influent to the 30-day average effluent.

ADDITIONAL COMPONENTS

1. A variance from any guideline set forth in this LAMP shall be granted by the County building official only with the written concurrence of the public health officer. Any variance thus approved shall ensure substantial compliance with all guidelines set forth herein to the greatest extent practicable, and in no event shall any variance authorize the use or installation of a cesspool or of an OWTS where a public sewer is available. See the *Standards for New or Replacement OWTS*, on page 13, #8, which requires County Health Officer approval for engineered and large OWTS systems.
2. Within one year of the effective date of this LAMP, the Kings County Community Development Agency and Public Health Department shall work cooperatively to develop a plan for public education and outreach which shall, at a minimum, call for making available on the County's internet site informational materials to inform OWTS owners about how to locate, operate, and maintain their OWTS as well as any Water Board order (e.g., Basin Plan prohibitions) regarding OWTS restrictions within the County. The education and/or outreach program shall also include procedures to ensure that alternative onsite system owners are provided an informational maintenance or replacement document by the system designer or installer. This document shall cite homeowner procedures to ensure maintenance, repair, or replacement of all critical items within 48 hours following failure.
3. The State Water Board's OWTS Policy requires an assessment of existing and proposed disposal locations for septage, the volume of septage anticipated, and whether adequate capacity is available. Septage from OWTS in Kings County is brought to the City of Hanford's Wastewater Treatment Plant, which has a current capacity of 8 million gallons per day (mgd). Average daily flow to the plant from all sources is 5 mgd. The city's master plan also identifies expansion of the plant in the future to accommodate anticipated growth. Because future population growth in the County is being directed to urban areas that will be connected to local sewer systems, the volume of septage from OWTS is not anticipated to grow in the future. Therefore, adequate capacity exists to receive additional septage from the unincorporated area of the County.
4. Whenever a permit is sought for an OWTS to be installed on a parcel located within any County island, or any exterior boundary of which is 200 feet or less from a city, public utility district, or community services district, the County building official will contact the adjacent city or district to determine whether the parcel is within 200 feet of any public sewer or any building or exterior drainage facility connected thereto.

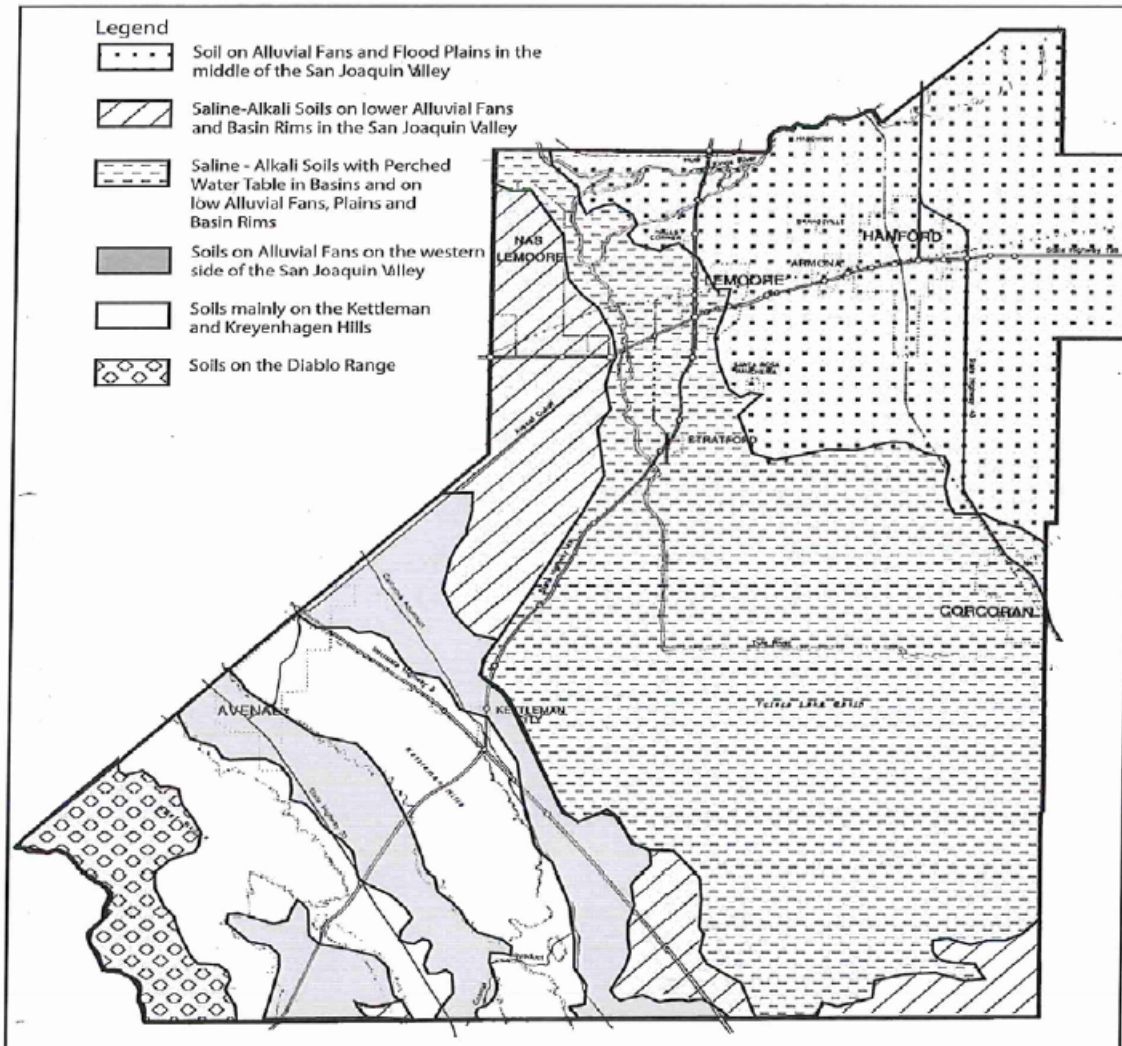
5. Before issuing an installation or repair permit for an OWTS in the vicinity of Avenal or Kettleman City or any additional future communities that will rely on surface water, the County building official shall consult Geotracker or a similar GIS mapping system to determine whether the proposed location for the OWTS is within 1,200 feet of an intake point for a surface water treatment plan 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. If the OWTS will be so situated, before issuing any permit, the owner of the affected public water system shall be contacted in writing, and will be given a reasonable opportunity to comment on the issuance of a permit.

6. Before issuing an installation or repair permit for an OWTS in the vicinity of any public well within the County, the County building official shall consult Geotracker or a similar GIS mapping system to determine whether the proposed location for the OWTS is within the sanitary setback for the well. If the OWTS will be so situated, before issuing any permit, the owner of the affected public water system shall be contacted in writing, and will be given a reasonable opportunity to comment on the issuance of a permit.

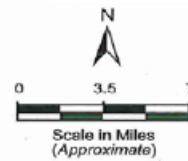
CEQA EXEMPTION

This LAMP and activities carried out pursuant to, except for site-specific significant impacts relating to activities for which a discretionary permit is required, are exempt from compliance with the California Environmental Quality Act. (See Pub. Res. Code, § 21080, subd. (b)(15); Cal. Admin. Code, tit. 14, § 15251, subd. (g).)

**APPENDIX 1: FIGURE 4.6-2 OF THE PROGRAM EIR FOR THE
2035 KINGS COUNTY GENERAL PLAN**



Base map source: USDA, 1986 and County of Kings, 2002.



APPENDIX 2: KINGS COUNTY OWTS DESIGN CRITERIA

KINGS COUNTY BUILDING DEPARTMENT

Location of Sewage Disposal System

<i>Minimum Horizontal Distance In Clear From:</i>	Building Sewer	Septic Tank	Disposal Field	Seepage Pit
Building or Structure ¹	2'	5'	8'	8'
Property Line Adjoining Private Property	Clear	5'	5'	8'
Property Line When Wells Are Used ^{10,11}	-	25'	50'	75'
Water Supply Wells	50' ²	50' ¹¹	100'	150'
Streams ⁵	50'	50'	100'	100'
Drainage Course or Ephemeral Streams ⁶	-	25'	50'	50'
Seepage Pits	-	5'	5'	12'
Disposal Field	-	5'	4' ³	5'
Domestic Water Line	1' ⁴	5'	5'	5'
Distribution Box	-	-	5'	5'
Public Water Well ¹²	-	150'	150'	150'
Cut or Fill Bank	-	10'	4h	4h
Lakes or Reservoirs ⁸	-	50'	200'	200'
Swimming Pools ⁹	-	10'	2h	4h

Note: When disposal fields and/or seepage pits are installed in sloping ground the minimum horizontal distance between any part of the leaching system and the ground surface shall be fifteen (15) feet.

1. Including porches and steps whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways and similar structures or appurtenances.
2. All non-metallic drainage piping shall clear domestic water supply wells by a minimum of fifty (50) feet. This may be reduced to not less than twenty-five (25) feet when approved metallic piping is installed. Where special hazards are involved, the distance shall be increased as may be directed by the Health Officer or the Administrative Authority.
3. Plus two (2) feet for each additional foot of depth in excess of one (1) foot below the bottom of the drain line. (See CPC, Appendix H)
4. See CPC Section 720.0
5. As measured from the line which defines the limit of a ten year frequency.
6. As measured from the edge of the channel.
7. Distance in feet equals four (4) times the vertical height of the cut of fill bank. Distance is measured from the top of edge of the bank.
8. As measured from the high water line.
9. Distance from the lip of the pool. h=depth of pool nearest disposal field or seepage pit.
10. When minimum distance between waste disposal and wells cannot be measured.
11. Unless specific Engineered Design for development is approved with subdivision/parcel map, then 5'.
12. 150 feet from any public water well where the depth of the effluent dispersal system does not exceed 10 feet.
 - a. 200 feet from a public water well where the depth of the effluent dispersal system exceeds 10 feet.
 - b. Where the effluent dispersal system is within 600 feet of a public water well and exceeds 20 feet in depth, the horizontal setback shall be sufficient to achieve a two-year time of travel for microbiological contaminants. This setback shall be determined by a qualified professional, and in no case shall the setback be less than 200 feet.
 - c. Where the effluent dispersal system is within 1,200 feet from a public water system's surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake

point for flowing water bodies, the dispersal system shall be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body.

- d. Where the effluent dispersal system is located more than 1,200 feet but less than 2,500 feet from a public water system's surface water intake point, within the catchment area of the drainage, and located such that it may impact water quality at the intake point such as upstream of the intake point for flowing water bodies, the dispersal system shall be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

LEACH LINE REQUIREMENTS

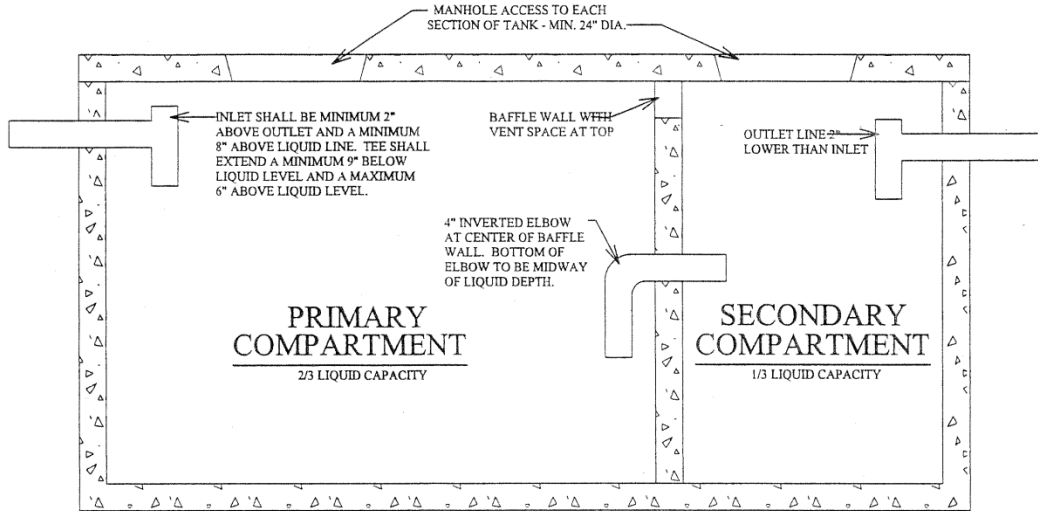
40 Square Feet Leaching per 100 Gallons Septic				
<u>GALLONS</u>	<u>TOTAL</u>	<u>LEACH LINES</u>	<u>CHAMBERS</u>	<u>EZflow</u>
	<u>SQUARE FEET</u>			
750	300	1 - 3' Wide x 100' Length	1 - 3' Wide x 70' Length	1 - 3' Wide x 70' Length
		2 - 3' Wide x 50' Length	2 - 3' Wide x 35' Length	2 - 3' Wide x 35' Length
1000	400	2 - 3' Wide x 67' Length	1 - 3' Wide x 94' Length	1 - 3' Wide x 94' Length
		3 - 3' Wide x 45' Length	2 - 3' Wide x 48' Length	2 - 3' Wide x 48' Length
1200	480	2 - 3' Wide x 80' Length	2 - 3' Wide x 56' Length	2 - 3' Wide x 56' Length
		3 - 3' Wide x 54' Length	3 - 3' Wide x 38' Length	3 - 3' Wide x 38' Length
60 Square Feet Leaching per 100 Gallons Septic				
<u>GALLONS</u>	<u>TOTAL</u>	<u>LEACH LINES</u>	<u>CHAMBERS</u>	<u>EZflow</u>
	<u>SQUARE FEET</u>			
750	450	2 - 3' Wide x 75' Length	2 - 3' Wide x 53' Length	2 - 3' Wide x 53' Length
		3 - 3' Wide x 50' Length	3 - 3' Wide x 35' Length	3 - 3' Wide x 35' Length
1000	600	2 - 3' Wide x 100' Length	2 - 3' Wide x 70' Length	2 - 3' Wide x 70' Length
		3 - 3' Wide x 67' Length	3 - 3' Wide x 47' Length	3 - 3' Wide x 47' Length
		4 - 3' Wide x 50' Length	3 - 3' Wide x 33' Length	3 - 3' Wide x 33' Length
1200	720	3 - 3' Wide x 80' Length	2 - 3' Wide x 84' Length	2 - 3' Wide x 84' Length
		4 - 3' Wide x 60' Length	3 - 3' Wide x 56' Length	3 - 3' Wide x 56' Length
90 Square Feet Leaching per 100 Gallons Septic				
<u>GALLONS</u>	<u>TOTAL</u>	<u>LEACH LINES</u>	<u>CHAMBERS</u>	<u>EZflow</u>
	<u>SQUARE FEET</u>			
750	675	3 - 3' Wide x 75' Length	2 - 3' Wide x 79' Length	2 - 3' Wide x 79' Length
		4 - 3' Wide x 57' Length	3 - 3' Wide x 54' Length	3 - 3' Wide x 54' Length
		5 - 3' Wide x 45' Length	4 - 3' Wide x 40' Length	4 - 3' Wide x 40' Length
1000	900	3 - 3' Wide x 100' Length	1 - 3' Wide x 94' Length	3 - 3' Wide x 70' Length
		4 - 3' Wide x 75" Length	4 - 3' Wide x 53' Length	4 - 3' Wide x 53' Length
		5 - 3' Wide x 60' Length	5 - 3' Wide x 42' Length	5 - 3' Wide x 42' Length

1200	1080	4 - 3' Wide x 90' Length	3 - 3' Wide x 84' Length	3 - 3' Wide x 84' Length
		5 - 3' Wide x 72' Length	4 - 3' Wide x 63' Length	4 - 3' Wide x 63' Length
		6 - 3' Wide x 60' Length	5 - 3' Wide x 51' Length	5 - 3' Wide x 51' Length

Notes:

1. No single leach line shall exceed 100 feet in length.
2. Where more than one line is needed, they should be equal in length and direction.
3. Leach lines shall be laid level. Where multiple lines are used, a distribution box shall be utilized with the outlets being 1 inch lower than the inlet.
4. Leach lines are to be a minimum of 3 feet in width with 1 foot of rock below the leach pipe. Only where restricted by limited area for proper installation shall consideration of extra rock and trench depth be given to gain amount of leach area required.
5. Gravelless products must be IAPMO certified.
 - a. Approved chamber models for use with this sizing chart are: Arc 36, Quick4 Standard, and Quick4 Plus Standard.
 - b. Approved EZflow model for use with this sizing chart is 1203H-GEO.

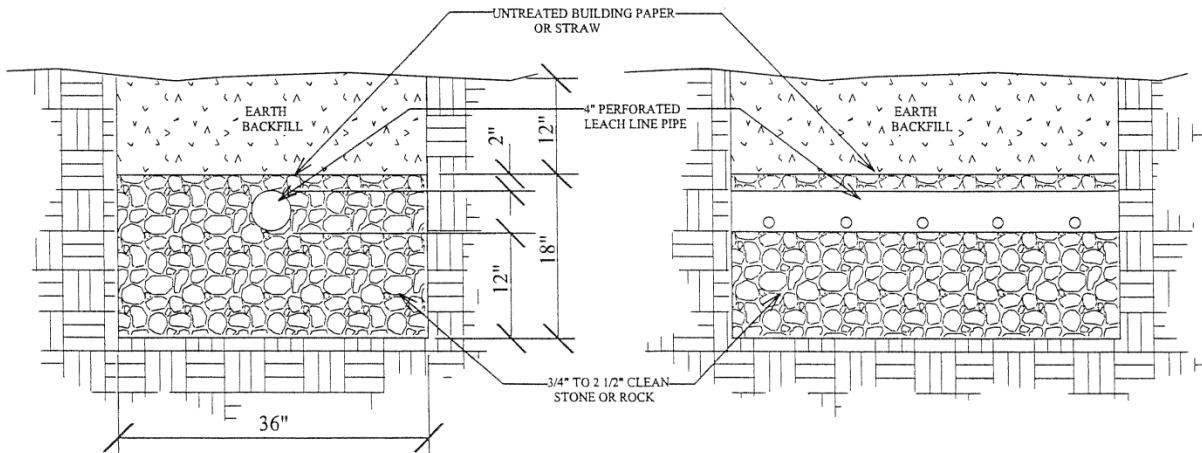
SEPTIC TANK DETAILS



MINIMUM SIZE SEPTIC TANK

NUMBER OF		MINIMUM SIZE TANK GALLONS	INSIDE DIMENSIONS			THICKNESS OF CONCRETE				REBAR
BEDROOMS	FIXTURE UNITS		LENGTH	WIDTH	DEPTH	SIDES	ENDS	FLOOR	TOP	TOP
1 OR 2	15	750	8' - 0"	3' - 6"	5' - 0"	5"	5"	5"	4"	#4 @9" O.C.
3 OR 4	20	1000	10' - 0"	3' - 6"	5' - 0"	5"	5"	5"	4"	#4 @9" O.C.
5 OR 6	25	1200	12' - 0"	3' - 6"	5' - 0"	5"	5"	5"	4"	#4 @9" O.C.

LEACH LINE DETAILS





KINGS COUNTY PLANNING AGENCY

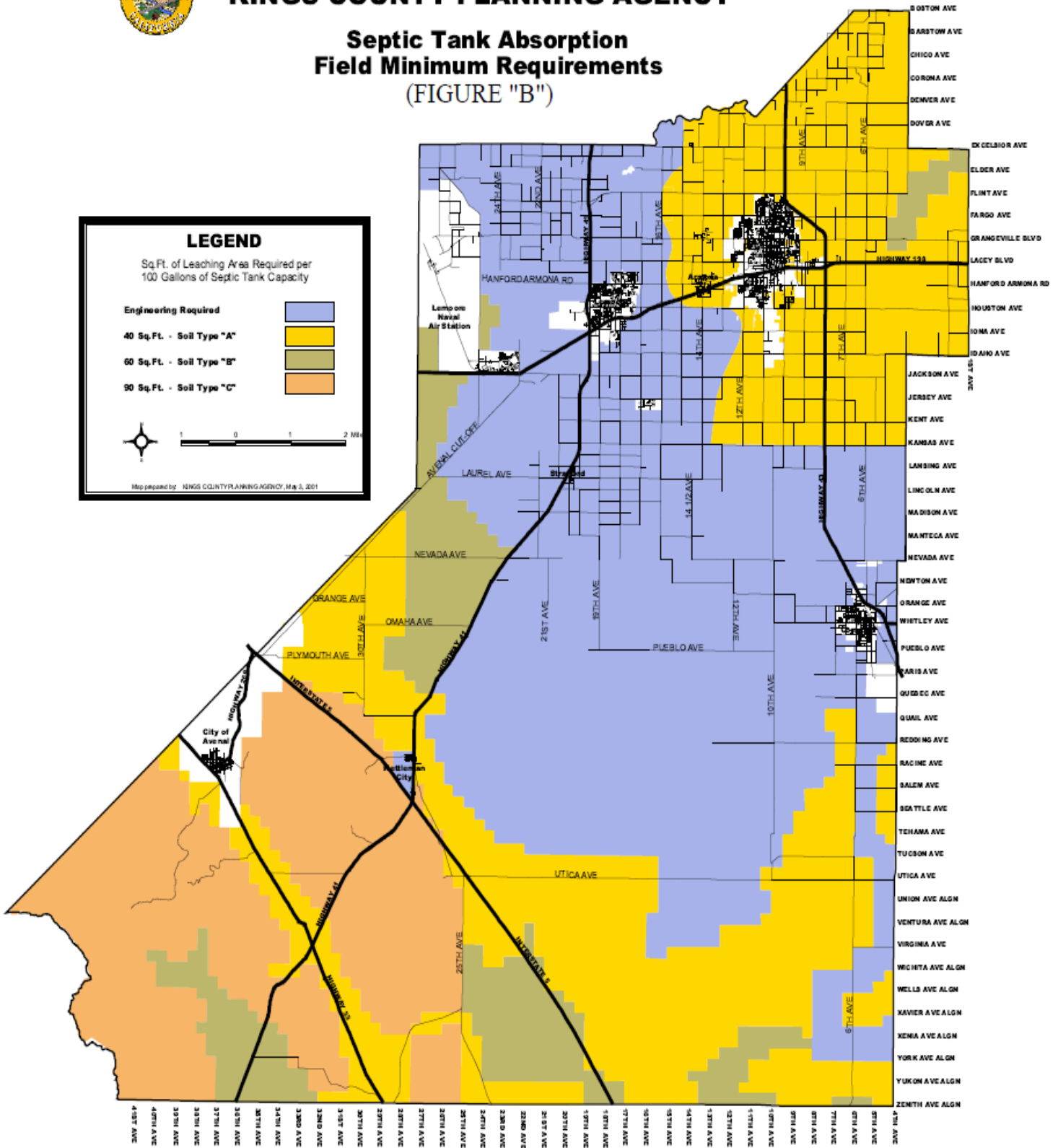
Septic Tank Absorption Field Minimum Requirements (FIGURE "B")

LEGEND

Sq. Ft. of Leaching Area Required per 100 Gallons of Septic Tank Capacity

Engineering Required	
40 Sq. Ft. - Soil Type "A"	
60 Sq. Ft. - Soil Type "B"	
90 Sq. Ft. - Soil Type "C"	

Map prepared by: KINGS COUNTY PLANNING AGENCY, March 3, 2001



APPENDIX 3: COUNTY HEALTH OFFICER RUBRIC FOR APPROVAL OF LARGE OWTS

RUBRIC FOR APPROVAL OF LARGE OWTS

Instructions: For each of the items below, identify whether the proposed OWTS meets public health standards, will meet public health standards with the incorporation of appropriate mitigation, or will not meet standards. A proposed system that meets OWTS standards in all areas of evaluation shall be approved either conditionally or unconditionally, depending upon the necessity of mitigation.

Note: Proposed OWTS designed to receive in excess of 10,000 gallons per day require approval of the Central Valley Regional Water Quality Control Board, and are beyond the County's jurisdiction.

1. Is the size of the proposed OWTS sufficient to meet the demands of the facility that will be served by it?

- Yes. (Attach justification.)
- Yes, with the incorporation of the following mitigation: _____

- No.

2. Will the proposed OWTS comply with the setback requirements set forth in Appendix 2 of the County's OWTS Policy?

- Yes.
- Yes, subject to a variance with the following mitigation incorporated: _____

- No.

3. Is the proposed OWTS engineered in compliance with all applicable state and local regulations so that it will be suitably located with an appropriately sized leachfield and application rates adequately protective of public health?

- Yes. (Attach justification.)
- Yes, with the incorporation of the following mitigation: _____

- No.

4. Is the parcel selected for the OWTS appropriate?

- Yes. (See criteria on attached page for justification.)
- Yes, with the incorporation of the following mitigation: _____

- No.

Factors to Consider in Determining the Suitability of a Parcel for Proposed OWTS

Assessment Factors	Criteria for a Finding of Suitability	Criteria Suggesting the Need for Mitigation	Criteria Justifying Denial of Application
<i>Geology, Soils, and Groundwater Constraints</i>	There is no evidence of serious inherent geologic, soil, or groundwater constraints.	A fair argument can be made that the proposed site may have geologic, soil, or groundwater constraints, but any such concern can be assuaged through appropriate mitigation.	The site is unsuitable for the proposed OWTS system because it has unmitigable geologic, soil, or groundwater conditions that are atypical for the County.
<i>Lot Size and Density of Nearby Systems</i>	The median lot size within one-half mile of each next adjacent parcel is in excess of one acre.	The median lot size within one-half mile of each next adjacent parcel is one-half to one acre.	The median lot size within one-half mile of each next adjacent parcel is less than one-half acre.
<i>Total Number of Septic Systems</i>	There are fewer than 50 parcels served by septic systems within one-quarter mile of each next adjacent parcel, and the site is not surrounded by an urban area with sewer connections.	There are between 50 and 100 parcels served by septic systems within one-quarter mile of each next adjacent parcel, and the site is not surrounded by an urban area with sewer connections.	There are more than 100 parcels served by septic systems within one-quarter mile of each next adjacent parcel, or the site is surrounded by an urban area with sewer connections.
<i>Evidence of Cumulative Water Quality Impacts</i>	No serious water quality impacts implicating septic systems have been documented in the vicinity of the proposed OWTS, except for fully remediated past impacts.	Water quality analysis results within the vicinity of the proposed OWTS are suggestive of possible impacts from OWTS, and mitigation is appropriate to prevent any further environmental degradation.	Water quality impacts have been documented in the vicinity of the proposed OWTS, which cause or threaten to cause exceedance of water quality criteria, and the proposed OWTS cannot be designed in such a manner to avoid further environmental degradation.
<i>Past Incidents</i>	The applicant has no history in Kings County of violations of OWTS regulations, and there is no history of incidents involving OWTS on the proposed site.	The applicant has a history in Kings County of violations of OWTS regulations, which have all been remedied; and/or there have been past incidents involving OWTS on the proposed site that can be avoided in the future if the proposed OWTS is designed properly.	The applicant for the OWTS has a history in Kings County of unremedied violations OWTS regulations; and/or there have been past incidents involving OWTS on the proposed site that could not have been avoided through the exercise of due care, and that are likely to be repeated if a new or replacement OTWS is constructed onsite.

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Areas of Special Consideration

Areas of Special Consideration

As an additional component of the County's water quality assessment program, the Deputy Health Director for Environmental Health Services and County Building Official will meet at least annually prior to submitting reports required under Paragraph 9.3.3 of the State Water Board Policy, to discuss water quality test results, variances, complaints, reports of OWTS failure, and permits issued in those areas identified in the attached map as Rural Areas of Special Consideration and Urban Fringe Areas of Special Consideration. During that meeting, the two officials will determine whether a finding may be *made*, based upon the evidence, that the County's LAMP is functioning effectively. This finding will be supported by a brief substantiating paragraph to be included with any report submitted under Paragraph 9.3.3. If the evidence does not support the required finding, a "qualified professional," as that term is defined in the State Water Board Policy, who may be an employee of the County, shall be engaged to submit recommendations to the Board of Supervisors for amending the County's LAMP.

Attached as **Figure 1** is a map identifying Rural Areas of Special Consideration. These areas were identified by doing the following: (1) identifying those parcels within the County's jurisdiction in agricultural zoned districts that are less than the required 10 acre minimum under the County's existing General Plan and Development *Code*, and which are not also located in that area of the County for which engineering of OWTS is required under this LAMP and under Land Use Policy EI.1 of the 2035 *Kings County General Plan*; (2) plotting out the approximate locations of most of the regulated public water systems located within the County's jurisdiction; and (3) identifying areas of sparse population based on locations within the County for which no ZIP code is assigned by the U.S. Postal Service. Using this data, two areas of the County were identified as having higher than average potential concentrations of OWTS in areas for which engineering is not required. The boundaries of those areas were designed with reference to the locations of nearby public water systems that will provide useful data to County officials about the effectiveness of this LAMP.

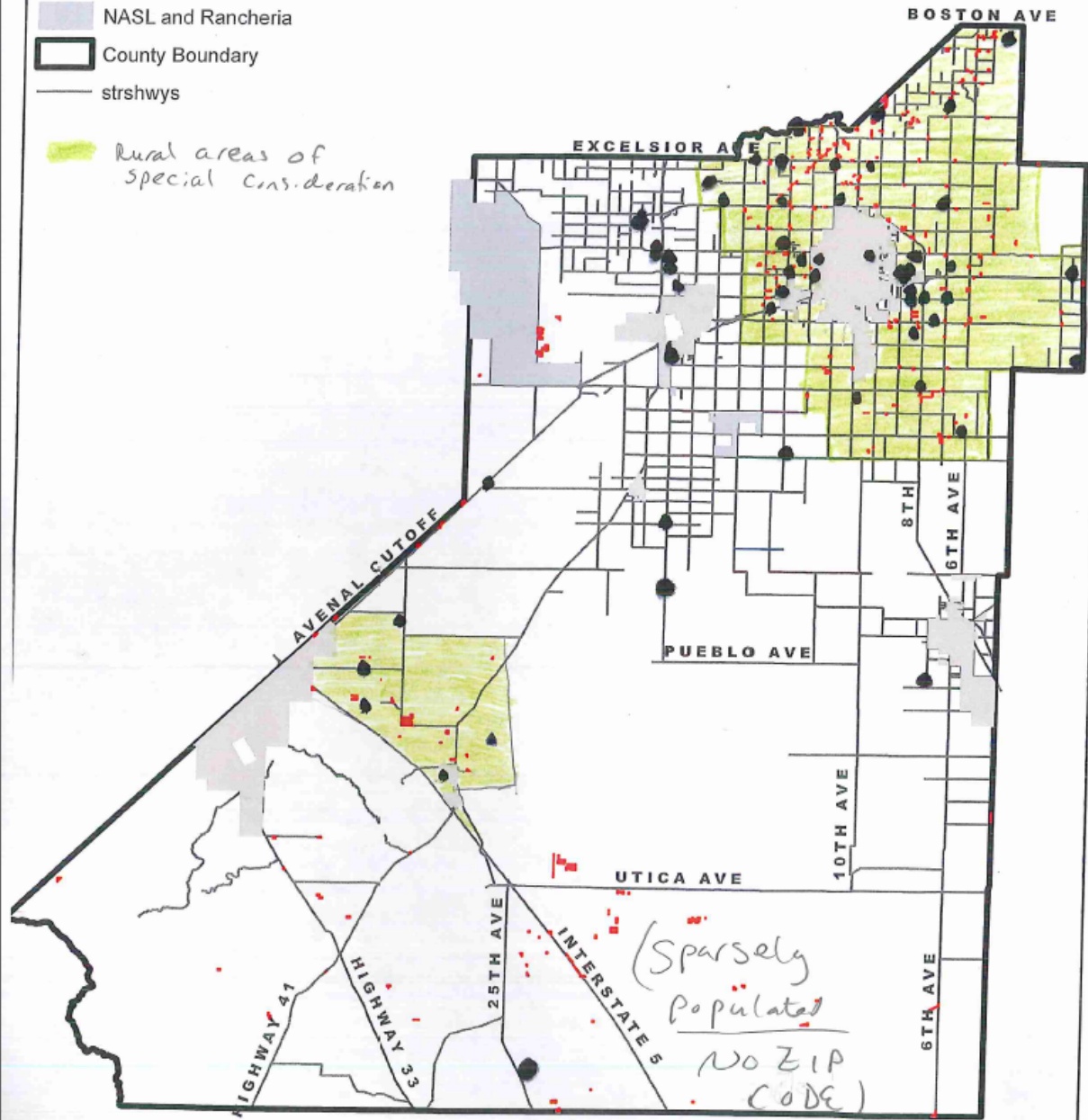
Attached as Figure 2, is a map identifying Urban Fringe Areas of Special Consideration, page 34. There are 1,256 non-agricultural parcels for which engineering is not required for OWTS systems, and that are located within the jurisdiction of the County, i.e., not within a city, special district providing sewer service, or federal reserve. Nearly all of those parcels are located within the County islands and urban fringe areas in and around the City of Hanford. Over 400 residential parcels in this area are connected to city sewers. Those areas identified on the map that are immediately or closely adjacent to the City of Hanford and not connected to sewers that are highlighted in green are deemed to have higher than average concentrations of non-engineered OWTS, and merit special consideration to determine the effectiveness of this LAMP. It should be noted, that under Land Use Policy EI.1 of the 2035 *Kings County General Plan*, any new urbanized areas that may develop within the area covered by the map and around other existing cities and communities must be annexed before any development will be allowed. This policy will prevent new urbanized areas with high concentrations of OWTS from being created in Kings County.

Figure 1

Legend

- AG <10 acres, not in Eng. Req., not in City/Community, NASL, Rancheria
- Cities Communities
- NASL and Rancheria
- County Boundary
- strshwys

Rural areas of special consideration



(Sparsely populated
No ZIP CODE)

● = Partial Sampling of
Public water
Supply under County
jurisdiction
(approx location)

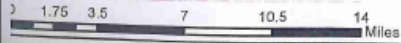
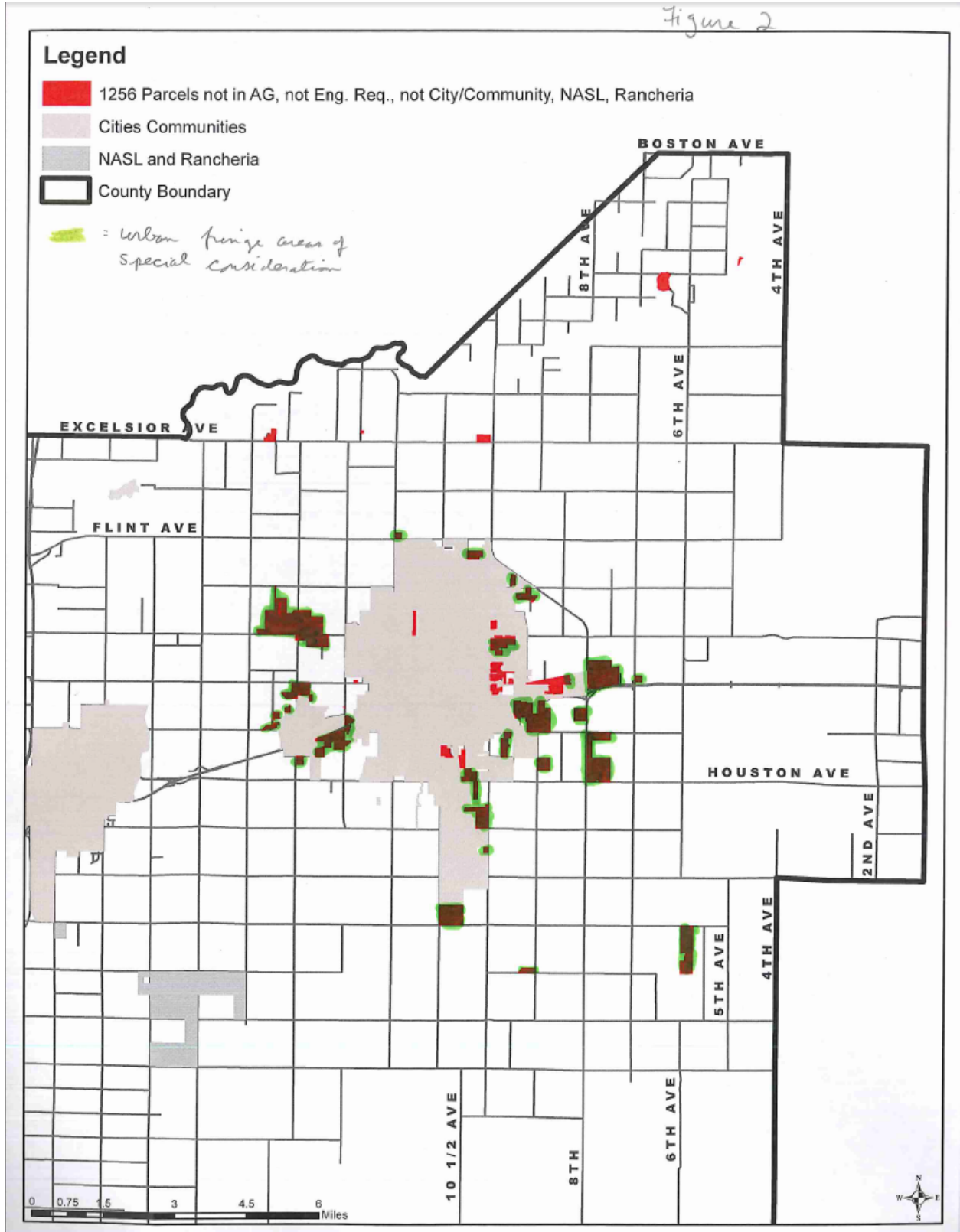


Figure 2



Areas of Potential Concern

Areas of Potential Concern

As an additional component of the County's water quality assessment program, the Deputy Health Director for Environmental Health Services and County Building Official will also meet at least annually prior to submitting reports required under Paragraph 9.3.3 of the State Water Board Policy, to discuss water quality test results, variances, complaints, reports of OWTS failure, and permits issued in those areas identified as Areas of Potential Concern. During that meeting, the two officials will determine whether a finding may be made, based upon the evidence, that the County's LAMP is functioning effectively for those areas. This finding will be supported by a brief substantiating paragraph to be included with any report submitted under Paragraph 9.3.3. If the evidence does not support the required finding, a "qualified professional," as that term is defined in the State Water Board Policy, who may be an employee of the County, shall be engaged to submit recommendations to the Board of Supervisors for amending the County's LAMP.

The Environmental Setting section of this LAMP on pages 4-6, addresses the areas of potential concern as well as Appedix 1. It should also be noted that under Land Use Policy E1.1 of the *2035 Kings County General Plan*, any new urbanized areas that may develop within the area covered by the map and around other existing cities and communities must be annexed before any development will be allowed. This policy will prevent new urbanized areas with high concentrations of OWTS from being created in Kings County.

California Regional Water Quality Control Board-Central Valley Region Orders:

1) 75-071

2) 77-20

3) 77-224

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 75-071

REVISION AND AMENDMENT OF WATER QUALITY CONTROL PLAN (INTERIM)
BY THE ADDITION OF A PROHIBITION OF WASTE DISCHARGE FROM
SEPTIC TANKS OR CESSPOOLS WITHIN
KETTLEMAN CITY COUNTY SERVICE AREA NO. I
KINGS COUNTY

The California Regional Water Quality Control Board, Central Valley Region, finds:


1. The Board adopted, on 15 June 1971, a Water Quality Control Plan (Interim), Basins 5A, B, C and D (hereafter "Interim Plan").
2. The Interim Plan contains areas where waste discharge from septic tanks and cesspools is prohibited.
3. On 21 March 1975 in the City Hall Council Chambers, 2326 Fresno Street, Fresno, after due public notice, the regional board conducted a public hearing at which evidence was received concerning the discharge from failing septic tanks and cesspools in Kettleman City County Service Area No. 1.
4. Kettleman City is an isolated, unincorporated community located generally in the northeastern portion of Kings County north of the intersection of Highways 41 and I-5 and the California Aqueduct. The community occupies portions of Sections 18, 19, and 30, T22S, R19E MDB&M.
5. A November 1974 sanitary survey of 91% of the developed lots in the Service Area by the Kings County Health Department indicated that failing individual systems were observed in 18%; another 12% exhibited signs of failures and surfacing sewage was found in 5% of the residences surveyed. The Health Department has concluded that a community sewage disposal system would prevent further deterioration of the environment and improve local health condition. Therefore the County has imposed a building ban to prevent the expansion of existing individual disposal systems or the addition of new ones.
6. Continued use of existing individual waste disposal systems or the installation of new systems will increase the threat to public health.

IT IS HEREBY ORDERED THAT:

1. The discharge of waste within the Kettleman City County Service Area No. 1, Kings County from leaching or percolation systems installed after approval of this amendment by the State Water Resources Control Board is prohibited. An exemption to this prohibition may be granted after presentation by the proposed discharger of geologic and hydrologic evidence that leaching system disposal will not, individually or collectively, result in a pollution or nuisance.
2. The discharge of waste within the Kettleman City County Service Area No. 1, Kings County from leaching or percolation systems is prohibited after 1 January 1979. An exemption to this prohibition may be granted whenever the regional board finds that the continued operation of septic tanks, cesspools, or other means of disposal in a particular area will not, individually or collectively, directly, or indirectly, adversely affect water quality.

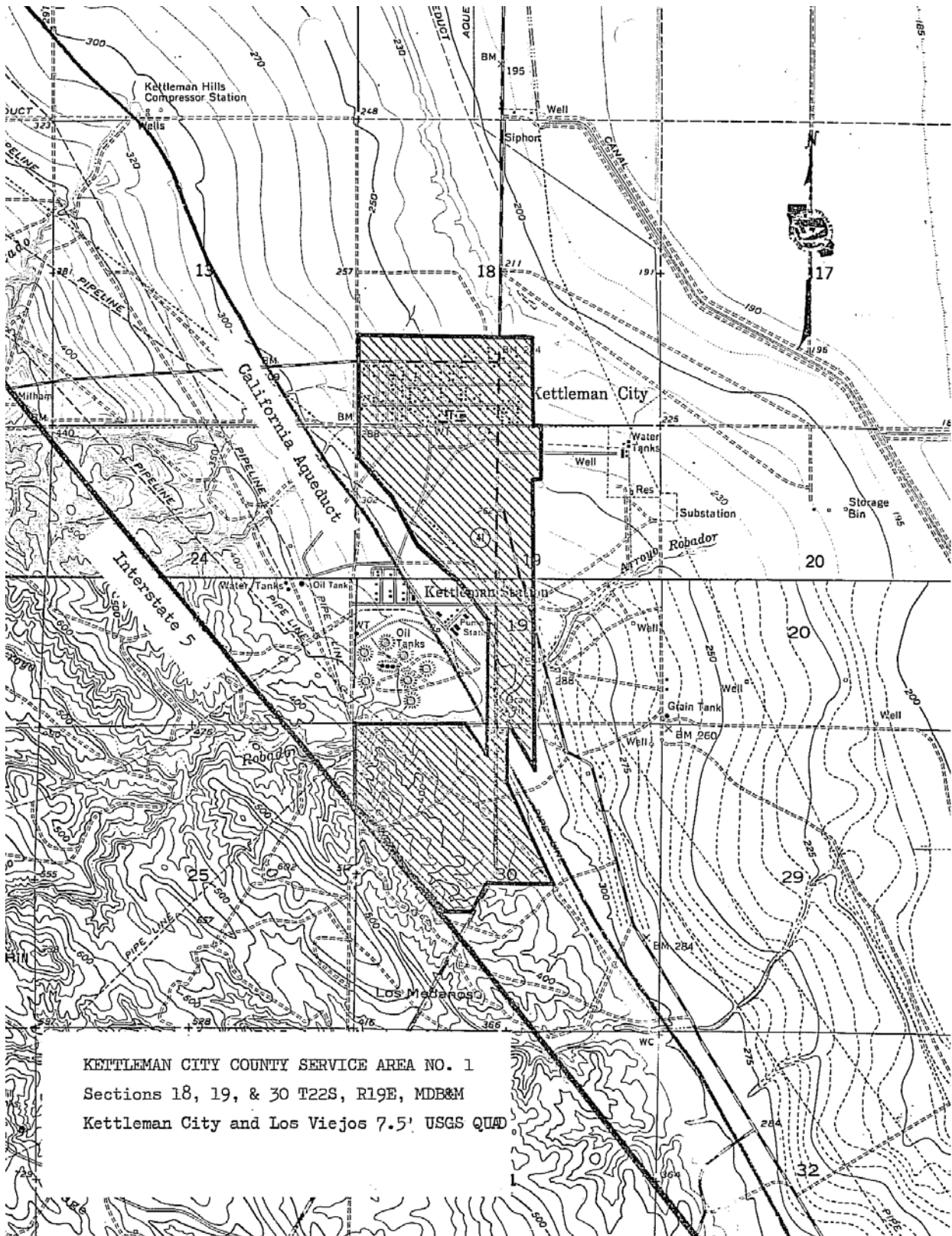
3. Chapter VI of the Interim Plan is revised by the addition of this prohibition, upon approval of the State Water Resources Control Board.

I, JAMES A. ROBERTSON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 21 March 1975.



JAMES A. ROBERTSON
Executive Officer

Amended 3/21/75



KETTLEMAN CITY COUNTY SERVICE AREA NO. 1
 Sections 18, 19, & 30 T22S, R19E, MDB&M
 Kettleman City and Los Viejos 7.5' USGS QUAD

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 77-20

REVISION AND AMENDMENT OF WATER QUALITY CONTROL PLAN BY THE
ADDITION OF A PROHIBITION OF WASTE DISCHARGE FROM
SEPTIC TANKS OR CESSPOOLS WITHIN
HOME GARDEN COMMUNITY SERVICES DISTRICT
KINGS COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Board), finds:

1. The Board adopted a Water Quality Control Plan for the Tulare Lake Basin 5D (hereinafter Basin Plan).
2. The Basin Plan states that the Regional Board will consider adoption of a ban on new septic systems and will require elimination of existing systems in areas where the systems contaminate underlying groundwater or where a substantial percentage of existing systems fail annually.
3. On 25 February 1977, at the Visalia City Hall Council Chambers, 707 West Acequia Street, Visalia, after due public notice, the Board conducted a public hearing at which evidence was received concerning the discharge from failing septic tanks in the Home Garden Community Services District.
4. Home Gardens is an unincorporated area contiguous to the City of Hanford with a population of 1,750 (1970 Census). The area is generally located in the northern portion of Kings County and occupies the southern portions of Section 1, T19S, R21E and Section 6, T19S, R22E, MDEEM. The area is delineated on the attached map.
5. Home Gardens has a long history of failing septic tank systems. The Comprehensive Water and Sewer Plan for Kings County of 1971 placed Home Gardens first on its priority list for sewer projects.
6. A sewage disposal system survey of the Home Garden area was conducted by the Kings County Health Department during June and July of 1975. The survey showed that out of 368 developed parcels surveyed, 15, or 4% of the individual disposal systems had surfacing sewage; and another 124, or 34% exhibited one or more signs of failure. A combined failure rate of 38%, or 139 out of 368 systems was reported.
7. The Kings County Health Department concludes that serious public health hazards are being created in the Home Garden area as a result of the use of individual sewage disposal systems and recommends that the Home Garden area be served by a community sewage system and that the Board prohibit discharges from individual sewage disposal systems in the area.
8. Continued operation of existing waste disposal systems, and installation of new septic tank disposal systems will prolong the threat to public health.

HOME GARDEN COMMUNITY SERVICES DISTRICT
KINGS COUNTY

9. Flow from this collection system would not be a significant additional load on the City of Hanford plant. Construction of the collection system would mitigate and improve environmental conditions. Construction of the collection system would be implementation of the Basin Plan.

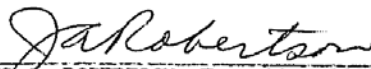
IT IS HEREBY ORDERED THAT:

1. In order to achieve water quality objectives, protect present and future beneficial water uses, protect public health and prevent nuisance, discharge of waste from new individual waste disposal systems^{1/} is prohibited forthwith and discharge of waste from existing individual disposal systems is prohibited after 1 January 1981 in the area described as follows:

Home Garden Community Services District

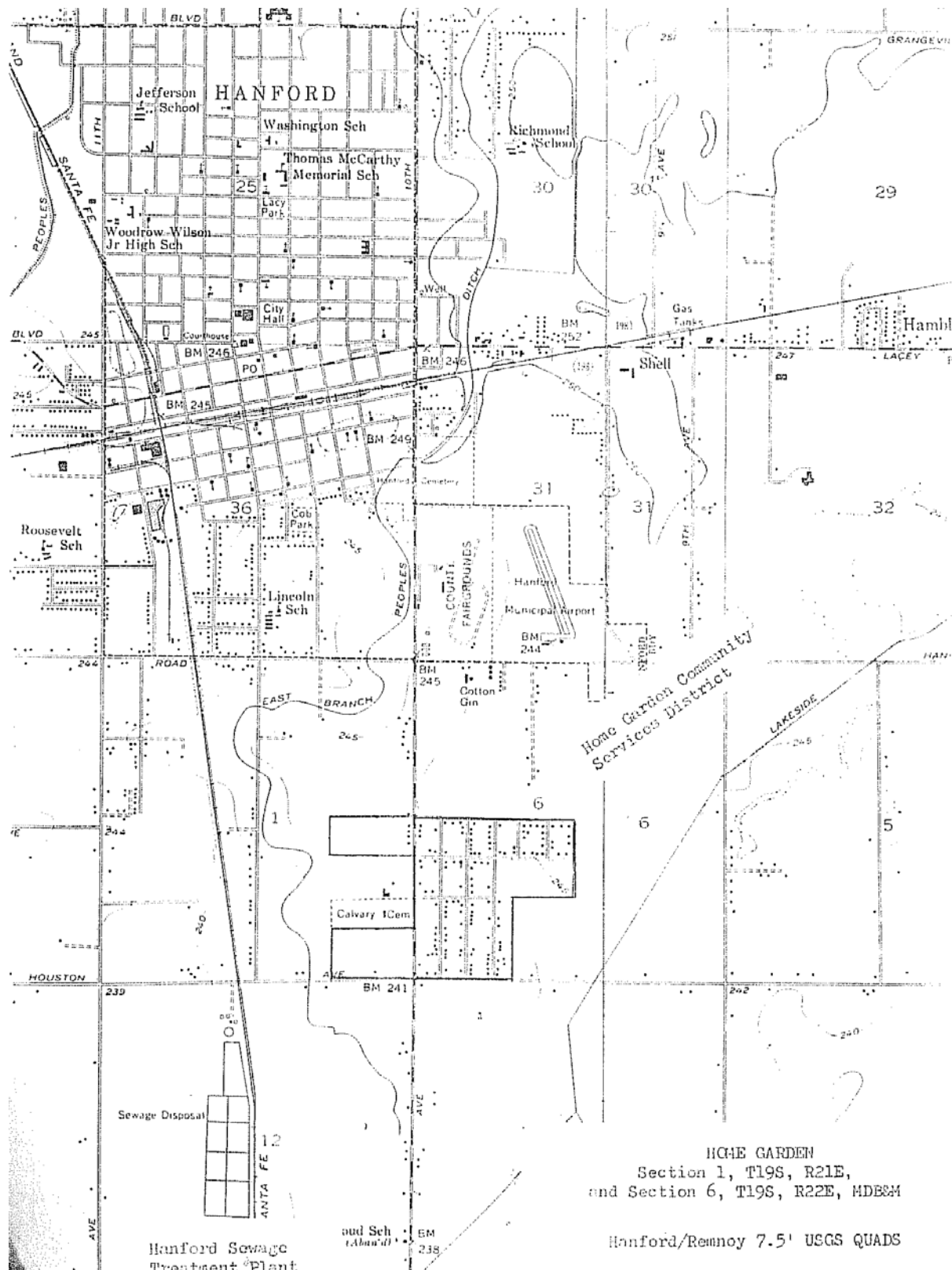
2. The Board may grant an exemption to the prohibition for (1) new individual disposal systems after presentation of geologic and hydrologic evidence by the proposed discharger that such system(s) will not individually or collectively result in a pollution or nuisance, and (2) existing individual disposal systems if it finds that the continued operation of such system(s) in a particular area will not, individually or collectively, directly or indirectly, affect water quality adversely.
3. Chapter V of the Basin Plan is revised by the addition of this prohibition, upon approval of the State Water Resources Control Board.

I, JAMES A. ROBERTSON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on FEB 25 1977.



JAMES A. ROBERTSON, Executive Officer

^{1/} Individual waste disposal system means any waste disposal system designed and constructed to provide for collection, storage or disposal of liquid wastes from five or fewer commercial or family dwelling units.



HOME GARDEN
 Section 1, T19S, R21E,
 and Section 6, T19S, R22E, MDB&M

Hanford/Remnoy 7.5' USGS QUADS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. 77-224

REVISION AND AMENDMENT OF WATER QUALITY CONTROL PLAN
BY THE ADDITION OF A PROHIBITION OF
WASTE DISCHARGE FROM SEPTIC TANKS OR
CESSPOOLS WITHIN THE CORCORAN FRINGE AREA
KINGS COUNTY

The California Regional Water Quality Control Board, Central Valley Region (hereinafter Board), finds:

1. The Corcoran Fringe Area includes unincorporated community areas around the City of Corcoran as well as areas within the Corcoran city limits. The Corcoran Fringe Area has a population of about 2,000 persons, is generally located in the east central portion of Kings County, is in T21S, R21E, MDB&M, and specifically designates the four sub-areas shown on the attached map.
2. During July and August of 1975 the Kings County Health Department conducted a sewage disposal system survey of 987 parcels, 633 of which were developed, within the Corcoran Fringe Area. The survey found signs of sewage system failures in 299 (45%) of the sewage systems surveyed. Observed failures included 214 instances (32%) of laundry waste being discharged onto the ground; 22 instances (3%) of sewage surfacing onto the ground; 38 instances (6%) of excessive pumping frequency (defined as more than once a year); 37 instances (6%) of septic tanks or cesspools uncovered; and 38 instances (6%) of septic tanks or cesspools caving in.
3. The Kings County Health Department investigated 354 vacant lots during their disposal system survey and found that 183 (52%) were too small for development, because of inadequate separation between wells, property lines, and future sewage disposal systems.
4. The Kings County Health Department collected 310 water samples during their disposal system survey; 78 (26%) of these samples were found to be positive for coliform bacteria, and fecal coliform were present in 35 (11%) of the positive samples. Since completion of the survey, a water system has been completed that will serve many of the residents within the Corcoran Fringe Area.
5. The Kings County Health Department has concluded that sewage disposal conditions within the Corcoran Fringe Area are creating a severe community health hazard that requires immediate attention and should include the cessation of subsurface sewage disposal applications.
6. Beneficial uses of local groundwaters include domestic and agricultural use. Depth to groundwater ranges from less than 10 to over 50 feet, with the shallow water tables found in the southwest portions of the area.
7. Soils in the Corcoran Fringe Area pose moderate to severe limitations for septic tank leaching systems. Results of 24 percolation tests conducted within the fringe areas indicate a mean percolation rate of 343 minutes per inch.

REVISION AND AMENDMENT OF WATER QUALITY CONTROL PLAN
BY THE ADDITION OF A PROHIBITION OF WASTE DISCHARGE FROM SEPTIC TANKS OR
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KINGS COUNTY

8. The Board adopted a Water Quality Control Plan for Tulare Lake Basin 5D (hereinafter "Basin Plan"), on 25 July 1975.
9. The Basin Plan states that the Regional Board will consider a ban on new septic tank systems and will require the elimination of existing systems in areas where the systems contaminate the underlying groundwater or where a substantial percentage of existing systems fail annually. Each area will be considered on a case by case basis.
10. On 22 July 1977, after due notice, the Regional Board conducted a public hearing at which evidence was received concerning the discharge from failing septic tanks in the Corcoran Fringe Area.
11. Continued operation of the existing waste disposal systems and installation of new septic tank disposal systems will increase the threat to public health and degrade the quality of local groundwaters.
12. The County of Kings has prepared a final Environmental Impact Report in accordance with the California Environmental Quality Act (Public Resources Code, Section 2100 et seq).
13. The EIR discussed a project which has a basic objective to eliminate existing or potential public health hazards created by the use of septic tanks and pit privies in the Corcoran Fringe Area.
14. The project as approved by the County of Kings may have the following significant effects on the environment:
 - a. Possible displacement of 90 acres of agricultural land for a new treatment facility.
 - b. Odors from the treatment facilities.
 - c. Provision of a wastewater collection and treatment facility will permit further urbanized development in the Corcoran Fringe on vacant lots and in existing residential areas.
 - d. The City of Corcoran will have to expand the capacity of their waste treatment facility in order to provide for treatment of wastes collected in the Corcoran Fringe Area.
 - e. Wastewater treatment will require the consumption of additional electrical energy.

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15. Installation and operation of sewage collection and treatment facilities in accord with waste discharge requirements adopted and implemented by the Regional Board will abate and mitigate public health hazards and nuisance conditions in Corcoran Fringe Area. Other significant affects on the environment identified as Findings 14a and 14c are within the responsibility and jurisdiction of other public agencies and corrective measures should be implemented by such other agencies. Findings 14d and 14e are unavoidable adverse environmental effects and it is infeasible to mitigate or avoid those conditions.

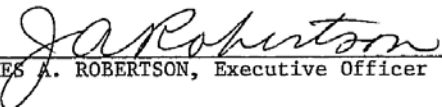
IT IS HEREBY ORDERED that:

1. In order to achieve water quality objectives, protect present and future beneficial water uses, protect public health and prevent nuisance, discharge of waste from new individual waste disposal systems ^{1/} is prohibited forthwith and the discharge of waste from existing individual disposal systems is prohibited after 1 July 1981 in the area described as:

Corcoran Fringe Area, which is comprised of the four sub-areas shown on the attached map.

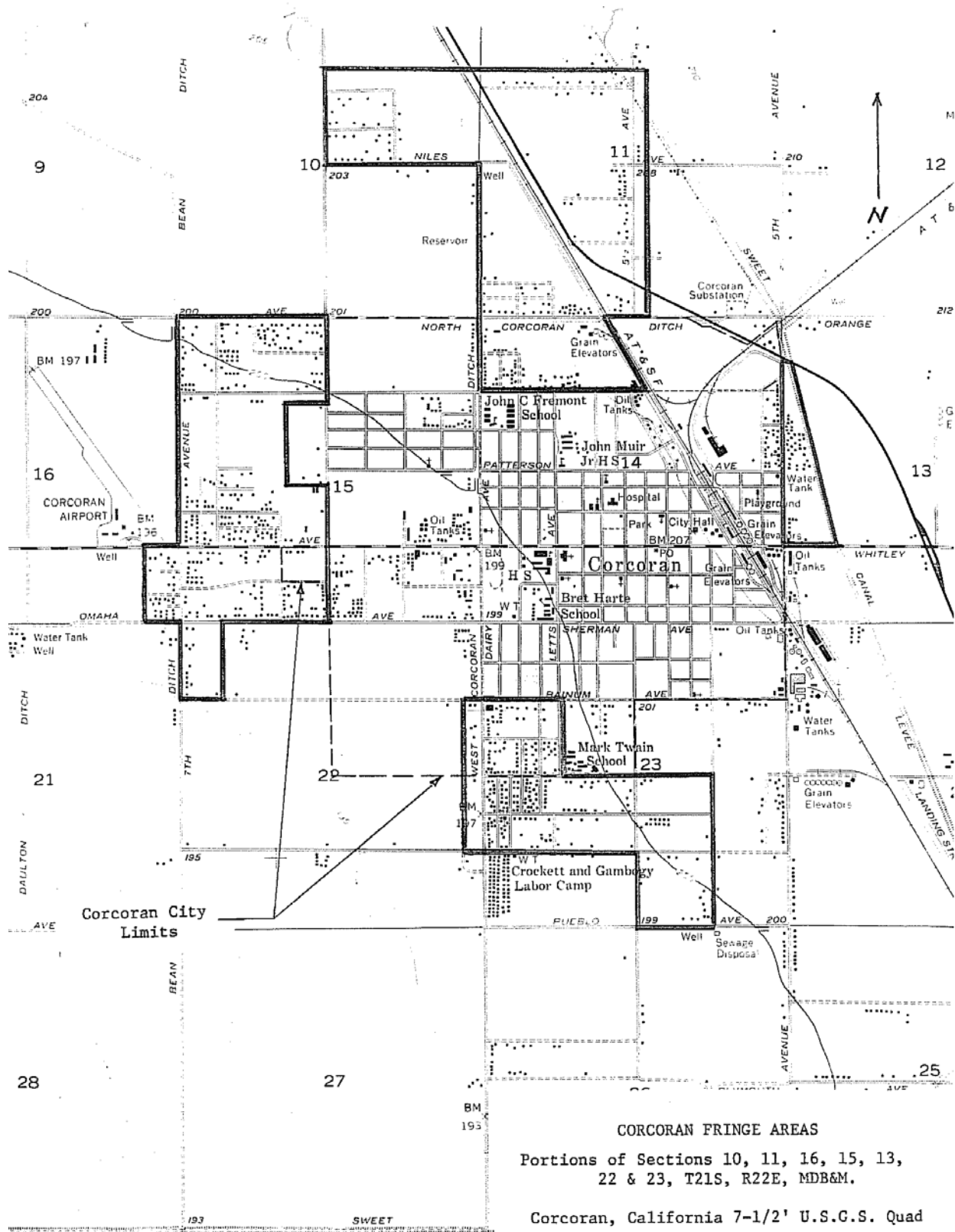
2. The Board may grant an exemption to the prohibition for (1) new individual disposal systems after presentation of geologic and hydrologic evidence by the proposed discharger that such system(s) will not individually or collectively result in a pollution or nuisance, and (2) existing individual disposal systems if it finds that the continued operation of such system(s) in a particular area will not, individually or collectively, directly or indirectly, affect water quality adversely.
3. Chapter V of the Basin Plan is revised by the addition of this prohibition, upon approval of the State Water Resources Control Board.

I, JAMES A. ROBERTSON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 22 July 1977.



JAMES A. ROBERTSON, Executive Officer

^{1/} Individual waste disposal systems means any waste disposal system designed and constructed to provide for collection, storage or disposal of liquid wastes from five or fewer commercial or family dwelling units.



III. SUMMARY:

Kings County OWTS standards are protective of public health and environment and meet the POLICY's OWTS Tier 2 standards and the Basin Plan policies of the applicable California Regional Water Quality Control Boards by:

- Addressing areas vulnerable to OWTS Pollution;
- Identifying limiting conditions during site evaluations;
- Requiring site evaluations to be performed by licensed/registered consultants;
- Requiring septic designs to be performed by Certified Engineering Geologist, Registered Environmental Health Specialist, or a Professional Civil Engineer;
- Requiring enhanced protection by the use of advanced treatment and denitrification units;
- Responding to complaints of failing OWTS;
- Requiring failing OWTS to be destroyed, repaired, or replaced under permit;
- Addressing shallow soils, poor drained soils, and fractured bedrock if applicable;
- Addressing high OWTS density by requiring increased lot size and specifying the use of a hydrological study of the cumulative impact of a proposed subdivision;
- An established operation and maintenance program that requires permitting, annual maintenance, routine inspections, and triennial maintenance by a service provider;
- Not allowing cesspools and seepage pits;

A. References

- *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems*, State Water Resource Control Board, June 19, 2012
- *Onsite Wastewater Treatment System Policy, Draft Substitute Environmental Document*, State Water Resources Control Board, June 6, 2012
- *Environmental Engineering and Sanitation*, Joseph Salvato, 4th Edition
- *Design Manual --- Onsite Wastewater Treatment and Disposal Systems*, United State Environmental Protection Agency, October 1980
- *Onsite Wastewater Treatment Systems Manual*, United States Environmental Protection Agency, February 2002
- <http://water.epa.gov/infrastructure/septic/manuals.cfm>

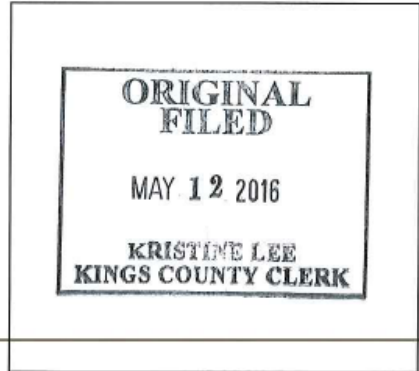
Notice of Exemption

TO: Office of Planning and Research
For U.S. Mail *Street Address*
P.O Box 3044, Room 113 1400 Tenth St.
Sacramento, CA 95812-3044 Sacramento, CA 95814

County Clerk
County of Kings
Kings County Government Center
Hanford, California 93230

FROM: Health Department, attn.: J. Taber
Kings County Government Center
Hanford, CA 93230

Date Received For Filing



PROJECT TITLE: Local Agency Management Plan for Onsite Wastewater Treatment Systems

PROJECT LOCATION - Specific: All unincorporated areas of Kings County, CA, except Community Services Districts, federal reserves, Public Utilities Districts, and parcels in urban fringe areas connected to sanitary sewers

PROJECT LOCATION - N/A

PROJECT LOCATION - County:
Kings

DESCRIPTION OF PROJECT: On May 10, 2016, the Board of Supervisors approved a revised Local Agency Management Plan ("LAMP") for submission to, and approval by, the Central Valley Water Quality Control Board, pursuant to Tier II of the State Water Resources Control Board's Policy for Onsite Wastewater Treatment Systems. Previously the Board approved a LAMP on April 5, 2016, for which an NOE was filed.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Board of Supervisors, County of Kings

NAME, ADDRESS, & PHONE NUMBER OF PERSON OR AGENCY CARRYING OUT PROJECT: County of Kings, attn.: Clerk of the Board of Supervisors, Kings County Government Center, 1400 W. Lacey Boulevard, Hanford, CA 93230, ph. 559-852-2362.

EXEMPT STATUS: (check one)

- Ministerial (Section 21080(b)(1); 15268);
- Declared Emergency (Section 21080(b)(4); 15269(a));
- Emergency Project (Section 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: 14 CCR §§ 15061(b)(3), 15308
- Statutory Exemptions. State code number: Pub. Res. Code, § 21080, subd. (b)(15), 14 CCR § 15251(g)

REASONS WHY PROJECT IS EXEMPT: The LAMP implements a regulation under a certified regulatory program, is intended to protect the environment, and preserves existing baselines except where state law requires more stringent standards.

CONTACT PERSON: Jeff Taber

TELEPHONE NUMBER:
(559) 852-2620

/s/ Jeff Taber

Signature

Title: Deputy Dir. Pub. Health, Env't. Health

Date: May 12, 2016