

# INITIAL STUDY

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## CAPACITY INCREASE, CITY OF LEMOORE WATER RECLAMATION FACILITIES - REMOVAL OF OUTFALL LINE FLOW CONSTRAINTS

August 2011

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Quad Knopf

Initial Study  
**Capacity Increase, City of Lemoore  
Water Reclamation Facilities -  
Removal of Outfall Line Flow Constraints**

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**August 2011**

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**SECTION ONE**

**PROJECT LOCATION; THE PROJECT;  
SETTING; RESPONSIBLE AGENCY**

## **SECTION ONE - PROJECT LOCATION; THE PROJECT; SETTING; RESPONSIBLE AGENCY**

### **A. Project Location**

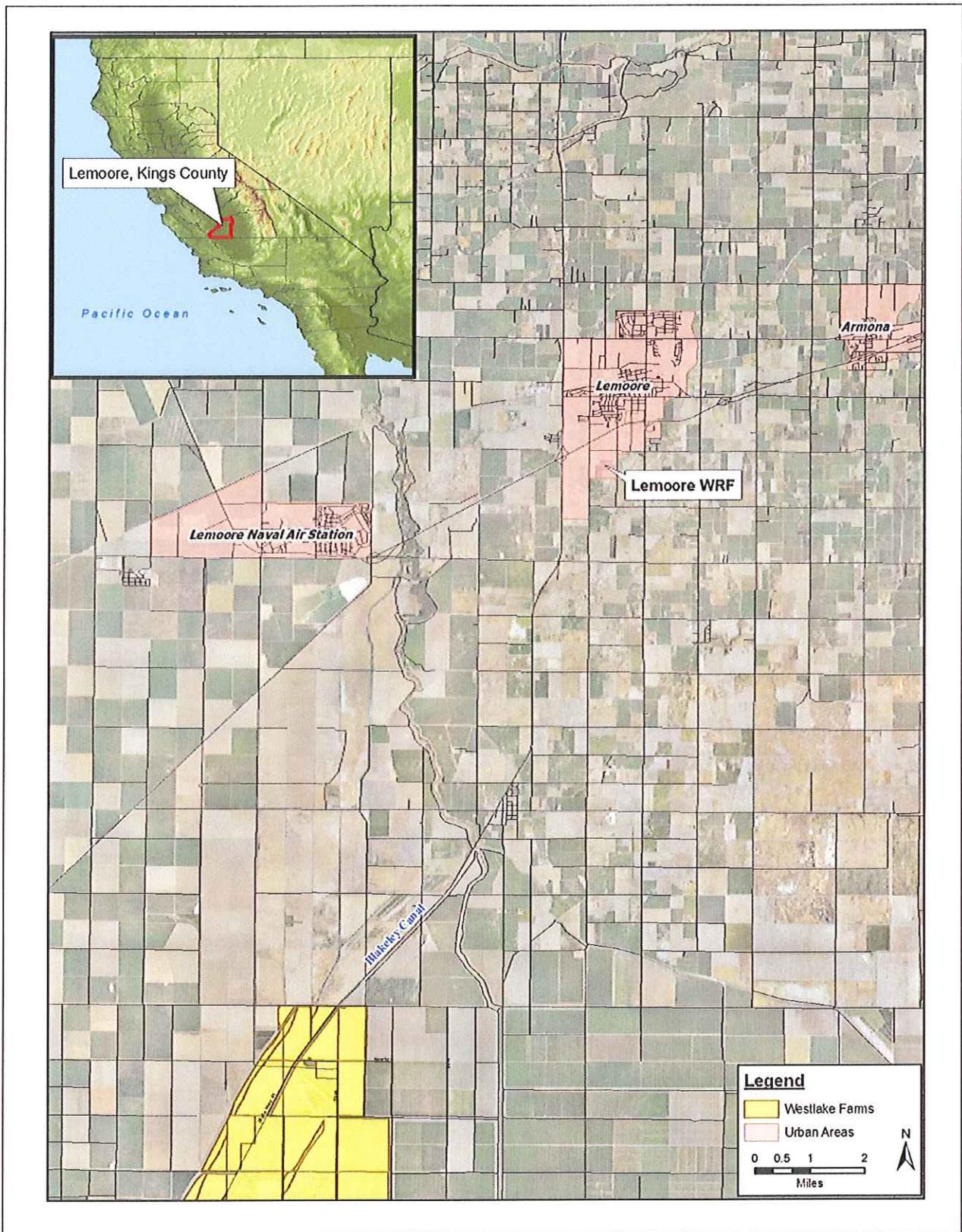
The location of the City of Lemoore, in Kings County is depicted on Figure 1; the City's Water Reclamation Facilities and the Leprino Foods industrial wastewater pretreatment facility on Figure 2; the location of the Outfall Line from the Water Reclamation Facilities and industrial wastewater pretreatment facilities to the initial point of reuse (the Westlake Canal) on Figure 3; the ultimate reuse area, Westlake Farms, and the canals thereto on Figure 4.

The City's existing Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements, February 23, 1996 (see Appendix A) further describe the Project Location as follows:

7. *The WWTF is in Section 15, T19S, R20E, MDB&M, with surface water drainage to the Kings River by sheet flow...The site lies within the Hanford-Lemoore Hydrologic Area (No. 551.90), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986. The WWTF is outside of any designated 100-year floodplain.*
8. *The outfall location for discharge of the effluent is the beginning of the Westlake Canal in Section 25, T19S, R19E, MDB&M...*
9. *The Westlake Canal connects with the Blakely Canal (collectively hereafter canals) approximately 8 miles downstream of the effluent outfall. The Blakely Canal originates at Empire Weir No. 2 on the Kings River. Both canals are entirely on Westlake Farms property, have no outlet to other surface waters, and are waters of the State. The Westlake Canal crosses under several county roads where it is accessible to the public. The Blakely Canal parallels State Route 41 for approximately 6 miles. The Westlake Canal is posted at all road access points to indicate that it contains undisinfected wastewater; however, the Blakely Canal downstream of the Westlake Canal is readily accessible to the public along State Route 41 and is not posted to indicate that it contains undisinfected wastewater. The Blakely Canal also receives 0.12 mgd of disinfected wastewater effluent from the Kettleman City Sanitary District WWTF at a downstream location, approximately 7 miles from its connection with the Westlake Canal.*

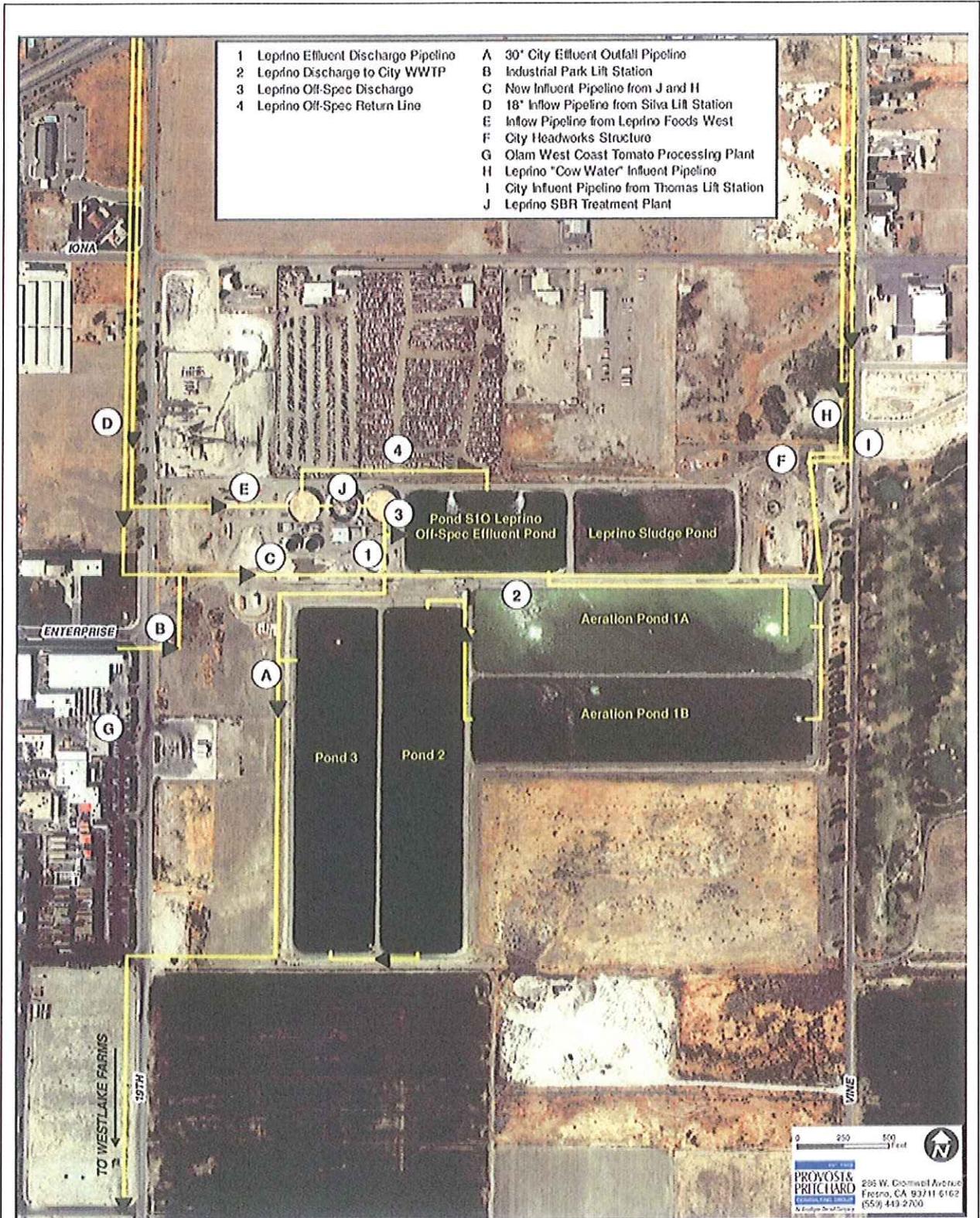
### **B. The Project**

The project is the modification of the City of Lemoore's existing 30" outfall line to permit it to carry, by gravity, six million gallons per day (mgd), correspondingly requesting of the California Regional Water Quality Control Board an amendment to the governing Waste Discharge Requirements to permit such flow.



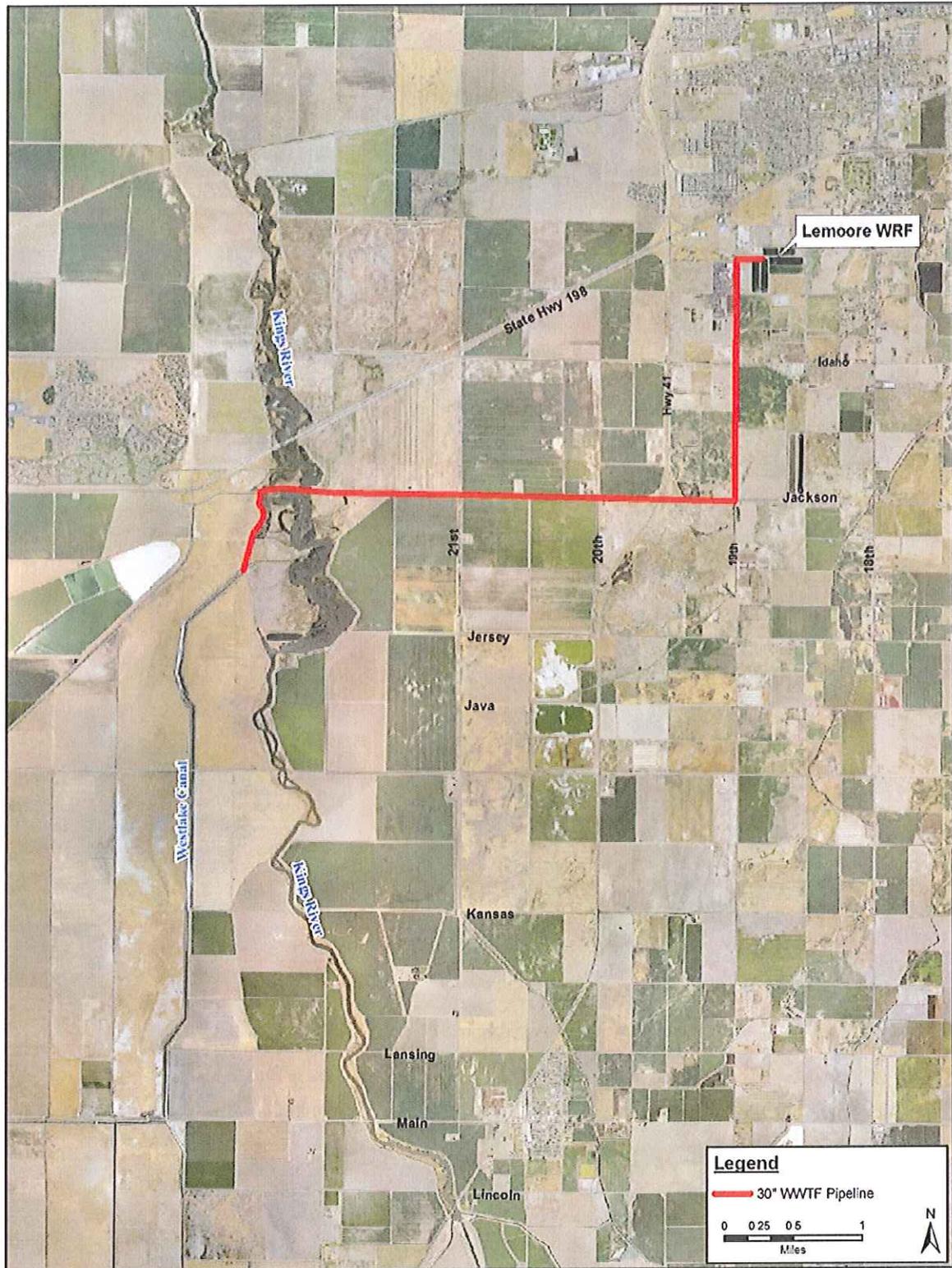
VICINITY MAP  
CITY OF LEMOORE

Figure  
1



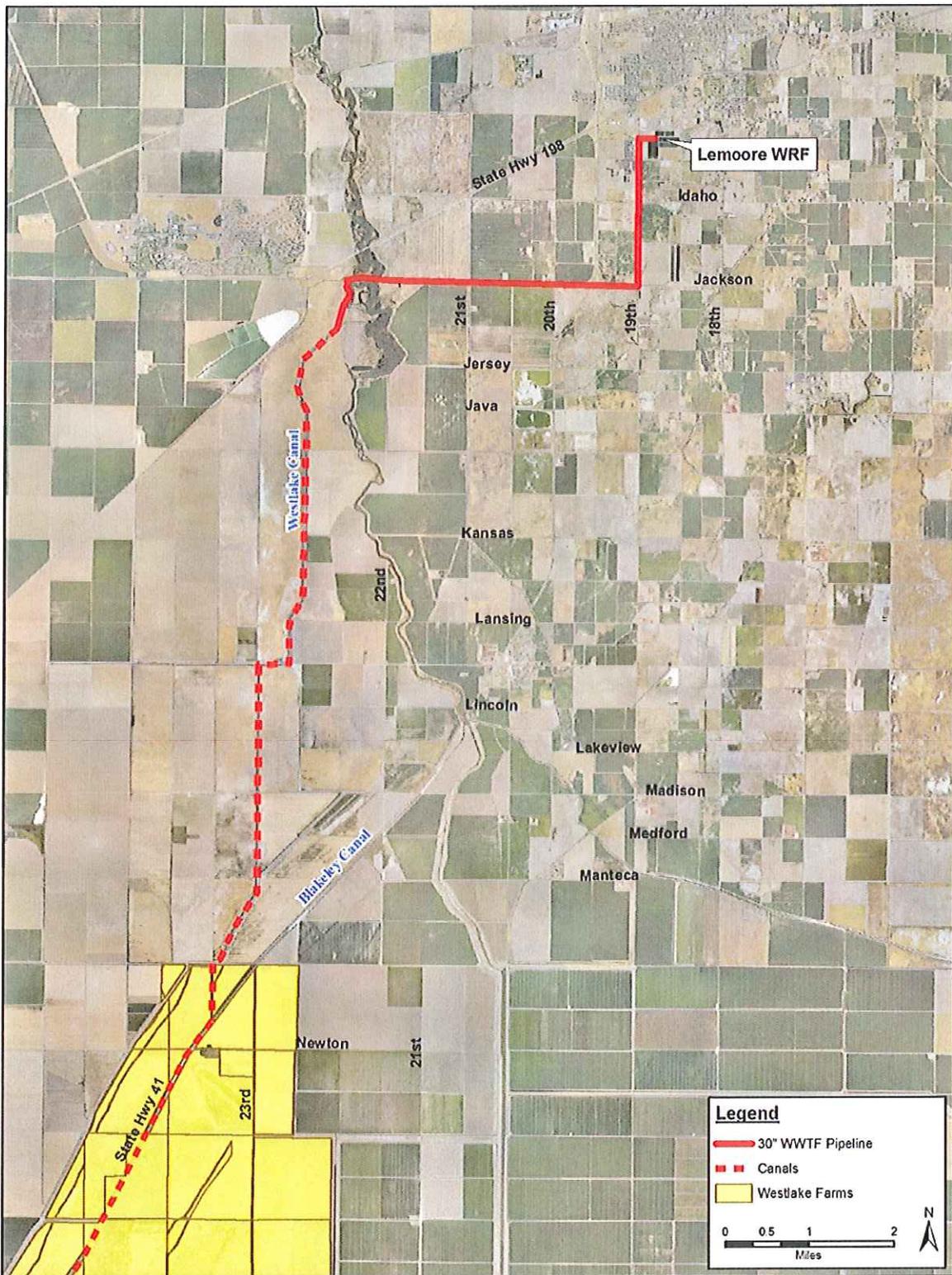
LEMOORE AND LEPRINO  
 WATER RECLAMATION FACILITIES

Figure  
 2



LOCATION OF 30-INCH OUTFALL LINE

Figure 3



LOCATION OF TRANSPORT CANALS  
AT WESTLAKE FARMS

Figure  
4

The City's existing 1996 Waste Discharge Requirements limited the monthly average discharge from the permitted facilities to 2.5 mgd because of outfall capacity line (a 12" line) limitations. It noted, however, that the previous, 1978 WDR for the facility was based on an estimated 4.4 mgd of treatment capacity assuming an adequately sized outfall line; (see Appendix A).

In 2003 the Regional Board staff noted its intent to draft waste discharge requirements for the City allowing discharge of 4.5 mgd of industrial and municipal wastewater (the then-estimated gravity flow capacity of the 30" outfall line replacing the previous 12" outfall line) (see RWQCB letter of April 21, 2003, attached as Appendix B).

The City's water reclamation treatment facilities remain (with the exception of a new headworks structure) essentially unchanged since the 1978 WDR when a treatment capacity of 4.4 mgd was estimated. The flows to the treatment facilities have, however, been significantly reduced. A major, seasonal industrial waste discharge from a tomato processing plant has been eliminated by direct land disposal of such wastes. Essentially all of the wastewater flows from Leprino Foods, a cheese production facility, are pretreated to tertiary levels and discharged to the outfall downstream of the municipal treatment facilities. The combined effluents are chlorinated by the City prior to transport through the 30" outfall to the irrigation canal disposal point.

The remaining, mostly domestic, wastewater influent (and treated effluent) flow is approximately 2.0 mgd. The existing tertiary-treated Leprino Foods effluent flow is approximately 2.5 mgd. The resulting combined flow is approximately 4.5 mgd.

The City has recently, conservatively, estimated its wastewater flows in 2020 to be 2.54 mgd<sup>1</sup> Leprino Foods has estimated its 2020 wastewater effluent flows to be 3.5 mgd in 2020 (as a result of plant expansion).

The estimated gravity flow capacity of the 30" line was 4.5 mgd based on flow testing. Flow was constrained by high points in the line as installed, particularly in crossings over Kings River. It has since been determined that by operating the line as a siphon, eliminating vacuum relief valves at the high points and by replacing a short section of undersize line serving an abandoned flow meter, the line capacity is approximately 6.19 mgd (see calculations in Appendix C). The line is designed to eventually act as a pumped pressure conduit. Its ultimate capacity greatly exceeds the gravity, siphon-flow, capacity.

No changes in Waste Discharge Requirements other than a permitted 6.5 mgd flow are requested.

### **C. Setting**

The municipal wastewater facilities and the Leprino Foods treatment facilities contributing flows to the 30" outfall are bordered by industrial land uses to the north and west, by agriculture on the

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<sup>1</sup> City of Lemoore Wastewater Reuse Study Engineering Report, March 4, 2011

south, and by a golf course on the east. The nearest residential land uses are nearly one-half mile distant from the two facilities' discharge points and pumping station.

The 30" outfall line traverses an industrially developed area, and then intensive agriculture for the balance of its six mile length. The irrigation canals to which the combined effluent is discharged extends for their entire length through irrigated agricultural areas to the irrigated 25,000 acres of Westlake Farms.

#### ***D. Responsible Agency***

The California Regional Water Quality Board, Central Valley Region, is the only identified responsible agency.

A completed Notice of Preparation including an Environmental Determination, Checklist, and Discussion of Checklist Conclusions follows this Initial Study section.

**SECTION TWO**

**ENVIRONMENTAL DETERMINATION;  
CHECKLIST; DISCUSSION**

## SECTION TWO – ENVIRONMENTAL DETERMINATION; CHECKLIST; DISCUSSION

### *Environmental Determination*

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics                 | <input type="checkbox"/> Agricultural and Forest Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources       | <input type="checkbox"/> Cultural Resources                | <input type="checkbox"/> Geology /Soils                     |
| <input type="checkbox"/> Greenhouse Gas Emissions   | <input type="checkbox"/> Hazards & Hazardous Materials     | <input type="checkbox"/> Hydrology / Water Quality          |
| <input type="checkbox"/> Land Use / Planning        | <input type="checkbox"/> Mineral Resources                 | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population / Housing       | <input type="checkbox"/> Public Services                   | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/<br>Traffic | <input type="checkbox"/> Utilities / Service Systems       | <input type="checkbox"/> Mandatory Findings of Significance |

**There are no such factors**

**On the basis of this evaluation:**

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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Prepared by: Travis Crawford  
Senior Environmental Planner  
Quad Knopf, Inc.

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Date

**Checklist**

		<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
<b>2.1</b>	<b>AESTHETICS</b>				
	Would the project:				
	a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2.2 AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12229(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by GC section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.3 AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management of air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations or hazardous emissions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.4 BIOLOGICAL RESOURCES**

Would the project:

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.5 CULTURAL RESOURCES	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.385?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.6 GEOLOGY/SOILS**

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building code (1994), creating substantial risks to life or property?

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems when sewers are not available for the disposal of wastewater?

<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
---	---	---	----------------------

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
<b>2.7 GREENHOUSE GAS EMISSIONS:</b>				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.8 HAZARDS/HAZARDOUS MATERIALS**

Would the project:

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.9 HYDROLOGY/WATER QUALITY**

Would the project:

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
g) Place housing within a 100-year flood hazard area as mapped on a federal flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.10 LAND USE/PLANNING**

Would the project:

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.11 MINERAL RESOURCES	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.12 NOISE**

Would the project result in:

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.13 POPULATION AND HOUSING**

Would the project:

	<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.14 PUBLIC SERVICES**

<u>Potentially Significant Impact</u>	<u>Less Than Significant With Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
---	---	---	----------------------

Would the project:

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact, in order to maintain acceptable service ratios for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.15 RECREATION**

<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
---	---	---	----------------------

Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant <u>Impact</u>	Less Than Significant With Mitigation <u>Incorporated</u>	Less Than Significant <u>Impact</u>	No <u>Impact</u>
<b>2.16 TRANSPORTATION/TRAFFIC</b>				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management City for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.17 UTILITIES/SERVICE SYSTEMS		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.18 MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have the potential to: substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have possible environmental effects that are individually limited but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Include environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## ***Discussion***

Rather than discussing each analysis separately in the Checklist, with its tedious and patently obvious explanations, the following discussion is provided for all "No Impact" decisions:

The project involves no new or relocated facilities other than changes from air/relief vacuum valves at high points in the outfall to air/relief valves and the replacement of 40 feet of 16" line with its incorporated, abandoned, flow meter with an equivalent length of 30" line. The only "responsible agency" approvals required will be the issuance of a flow-related amendment to the RWQCB Waste Discharge Requirements .

The point of discharge of the effluent conveyed by the outfall remains the same; it will still be diluted by Kings River surface water by a 25:1 ratio or greater during irrigation. The land area (Westlake Farms) being irrigated by the surface water/effluent approximates 25,000 acres; the increased, diluted effluent flow has no conceivable and significant impact on this acreage.

The population increase served by the projected year 2020 increased flow and the secondary impacts thereof have been environmentally evaluated, and approximate mitigation measures adopted, in the EIR for the City of Lemoore General Plan adopted on May 6, 2008. The projected increase in industrial effluent from Leprino Foods which will result from plant expansion was environmentally evaluated by a Mitigated Negative Declaration adopted on August 27, 2007 by the City.

It is therefore appropriate to conclude that none of the "No Impact" checked environmental effects create any conceivable project impact.

With respect to those impacts evaluated as "Less than Significant":

### *3.9 Hydrology/Water Quality*

#### *(f) Otherwise substantially degrade water quality*

The increased flows to be allowed may, conceivably, increase the mass of any existing effluent contaminants, but will not increase their concentration. Such contaminant concentrations are not currently violating RWQCB Waste Discharge Requirements with the exception of electrical conductivity (EC). The proposed increase will not increase the frequency of that continuing violation and is not projected to increase its concentration magnitude. The impact is determined to be less than significant.

### *3.12 Noise*

*(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*

The increase in duration of pumping of Leprino Foods effluent, and the increase engendered by the possible addition of another aerator in the municipal wastewater facility, will slightly increase project noise levels. The increase will be quantitatively minimal; there are no sensitive receptors within a half-mile of the municipal and Leprino facilities; there has never been a noise complaint regarding the operation of the existing facilities. The impact is determined to be than significant.

## **APPENDICES**

## **Appendix A**

### **Existing RWQCB Waste Discharge Requirements**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. 96-050

WASTE DISCHARGE REQUIREMENTS  
FOR  
CITY OF LEMOORE  
WASTEWATER TREATMENT FACILITY  
KINGS COUNTY

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

1. The City of Lemoore (hereafter Discharger) submitted a Report of Waste Discharge and a site evaluation report dated 25 October 1990, in support of a proposed flow increase and a change in the method of treatment at its wastewater treatment facility (WWTF). The property of approximately 83 acres (Assessor's Parcel Nos. 024-052-73, 024-052-74, and 024-052-80) is owned by the City of Lemoore.
2. Waste Discharge Requirements Order No. 78-89, adopted by the Board on 28 July 1978, prescribes requirements for a discharge of 2.0 million gallons per day (mgd) from the WWTF to the Westlake Farms main irrigation canal through a six-mile pipeline. The wastewater supplements irrigation of approximately 50,000 acres of crops, including grain for animal feed and cotton on Westlake Farms. No vegetable crops are grown.
3. Order No. 78-89 must be revised to reflect the flow increase, the change in method of waste treatment, and current plans and policies of the Board.
4. The WWTF was completed in September 1974 with the aid of a Clean Water Grant. The completed WWTF consisted of four aerated lagoons, with Hinde diffused air systems, and a fifth pond for storage of stormwater and emergency storage of effluent. Plant improvements that included removal of the Hinde diffused air system and installation of floating aerators were completed in 1990, increasing the plant treatment and hydraulic capacity from 2.0 mgd to 4.4 mgd. The Report of Waste Discharge indicates that the 4.4 mgd capacity is based on influent waste characteristics, treatment pond sizing, and the assumption that an adequately sized outfall line for discharge of treated effluent would be constructed. The existing 12-inch diameter effluent outfall line limits the ability of the WWTF to discharge water to a maximum of 2.5 mgd, below the potential plant treatment and hydraulic capacity of 4.4 mgd.
5. Wastewater includes industrial and domestic components. The domestic wastewater discharge averages 0.50 mgd. The industrial wastewater discharge includes discharges from the Leprino Foods cheese processing plant (0.65 mgd), the Candlewick Yarns

WASTE DISCHARGE REQUIREMENTS  
CITY OF LEMOORE WWTF  
KINGS COUNTY

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textile plant (0.03 to 0.06 mgd), and the S-K Foods tomato processing plant (0.07 to 0.3 mgd). Wastewater from S-K Foods varies seasonally, with peak flows of 0.3 mgd occurring in the months of June through October. Effluent from the industrial and domestic aerated lagoons is combined in the third and fourth ponds of the system (Pond 2 and Pond 3, connected in series) and conveyed via pipeline to the Westlake Canal about 6 miles to the southwest. The total WWTF discharge flow averages 2.2 mgd from November through May of each year and 2.5 mgd from June through October. The plant is currently operating at the maximum flow capacity of the outfall line, 2.5 mgd, for part of the year.

Sludge from the treatment process is contained in the aerated lagoons and has not been removed for disposal since the plant was constructed in 1974. Sludge was transferred from two of the aerated lagoons to the storage pond in 1987.

6. Title 23, California Code of Regulations (CCR), Section 2232, specifies that whenever a publicly owned WWTF will reach capacity within four years, the Board shall notify the Discharger that the Board will consider adopting a time schedule order or other enforcement order unless the Discharger can demonstrate that adequate steps are being taken to address the capacity problem.
7. The WWTF is in Section 15, T19S, R20E, MDB&M, with surface water drainage to the Kings River by sheet flow, as shown in Attachment A, which is attached hereto and part of this Order by reference. The site lies within the Hanford-Lemoore Hydrologic Area (No. 551.90), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986. The WWTF is outside of any designated 100-year floodplain.
8. The outfall location for discharge of the effluent is the beginning of the Westlake Canal in Section 25, T19S, R19E, MDB&M, as shown in Attachment B. Pumped groundwater is discharged to the canal and mixed with wastewater effluent about 50 feet downstream of the outfall. In all years except for some drought years, the canal water is supplemented with water from the Kings River provided by the Lemoore Canal Company through an agreement with Westlake Farms. The Westlake canal is full year-round, providing a 2:1 to 25:1 (canal water: effluent) range of dilution, but sometimes provides less (as in three of 24 recent months). In the fall (September through November), undiluted effluent is stored in the canal until irrigation resumes.
9. The Westlake Canal connects with the Blakely Canal (collectively hereafter canals) approximately 8 miles downstream of the effluent outfall. The Blakely Canal originates at Empire Weir No. 2 on the Kings River. Both canals are entirely on Westlake Farms

WASTE DISCHARGE REQUIREMENTS  
CITY OF LEMOORE WWTF  
KINGS COUNTY

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property, have no outlet to other surface waters, and are waters of the State. The Westlake Canal crosses under several county roads where it is accessible to the public. The Blakely Canal parallels State Route 41 for approximately 6 miles. The Westlake Canal is posted at all road access points to indicate that it contains undisinfected wastewater; however, the Blakely Canal downstream of the Westlake Canal is readily accessible to the public along State Route 41 and is not posted to indicate that it contains undisinfected wastewater. The Blakely Canal also receives 0.12 mgd of disinfected wastewater effluent from the Kettleman City Sanitary District WWTF at a downstream location, approximately 7 miles from its connection with the Westlake Canal.

10. The Board adopted a Water Quality Control Plan for the Tulare Lake Basin (hereafter Basin Plan), which designates beneficial uses and contains water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.
11. The canals are considered valley floor waters. As listed in the Basin Plan, the beneficial uses of these waters are industrial and agricultural supply; water contact and non-contact water recreation; warm fresh water habitat; wildlife habitat; preservation of rare and endangered species; and ground water recharge. Unlike other valley floor waters, actual beneficial uses of the canals are limited to agricultural supply, non-contact water recreation, warm fresh water habitat, wildlife habitat, and ground water recharge. The California Department of Fish and Game reports that warm water fish migrate to the canals by way of an upstream connection of the Blakely Canal to the Kings River at Empire Weir No. 2. The Department recommends a chlorine residual limitation of 0.01 mg/l and minimum dissolved oxygen concentration of 5 mg/l in the water of the canals to protect the water water fish population.
12. According to the Department of Water Resources, shallow ground water is unconfined, at a depth of approximately 10 feet below ground surface and of unknown quality. Deeper ground water, at a depth of 83 to 145 feet bgs, is of good quality with electrical conductivity (EC) of 660 to about 1,200  $\mu\text{mhos/cm}$ . This deeper ground water moves in a southwesterly direction.
13. The beneficial uses of underlying ground water are domestic, industrial, and agricultural supply.

WASTE DISCHARGE REQUIREMENTS  
CITY OF LEMOORE WWTF  
KINGS COUNTY

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14. Soils at the site of the WWTF are sandy loams of the Grangeville series with moderate soil permeabilities. Based on testing of site soils with various mixtures of bentonite clay, 1.5 lbs of bentonite per square foot of wetted area were combined with the upper 4 inches of native soil and compacted in place in each pond to limit seepage losses. A water balance submitted for the ponds indicates seepage from the ponds is minimal.
15. City of Lemoore WWTF is identified as SIC 4952; which would need to obtain a NPDES stormwater permit due to flows greater than 1.0 mgd except that stormwater from the WWTF is contained in an on-site pond.
16. Statewide plans and policies applicable to this discharge and not referenced in the Basin Plan include the "Policy Statement on Wastewater Discharge to Watercourses in Water Deficient Areas, Resolution No. 79-45" and the "Policy with respect to Water Reclamation in California, Resolution No. 77-1".
17. The California Department of Health Services has established statewide reclamation criteria in Title 22, CCR, Section 60301, et seq. (hereafter Title 22) for use of reclaimed water, and has developed guidelines for specific uses. The Board consulted with the Department in developing appropriate conditions for this Order. To protect public health the Department recommends that the wastewater effluent be disinfected prior to discharge to the Westlake Canal such that the median number of coliform organisms does not exceed 23 MPN/100 ml.
18. On 3 January 1989, the City of Lemoore certified a final environmental impact report (EIR) in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines for a flow of 3.3 mgd. The project as approved will not have a significant effect on water quality.
19. The permitted discharge is consistent with the antidegradation provisions of State Water Resources Control Board Resolution No. 68-16.
20. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

WASTE DISCHARGE REQUIREMENTS  
CITY OF LEMOORE WWTF  
KINGS COUNTY

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21. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 78-89 is rescinded and the City of Lemoore, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. Discharge of wastes to surface waters or surface water drainage courses other than the irrigation canal specified in Finding No. 8 is prohibited.
2. Bypass or overflow of untreated or partially treated waste is prohibited.
3. Discharge of waste classified as 'hazardous' or 'designated', as defined in Sections 2521(a) and 2522(a) of Title 23, CCR, is prohibited.

B. Discharge Specifications:

1. The monthly average discharge shall not exceed 2.5 mgd.
2. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.
3. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
4. The effluent from the treatment facility shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Maximum</u>
BOD <sub>5</sub> <sup>1</sup>	mg/l	40	80
Settleable Solids	ml/l	0.2	0.5

<sup>1</sup> 5-day, 20° Celsius biochemical oxygen demand.

WASTE DISCHARGE REQUIREMENTS  
CITY OF LEMOORE WWTF  
KINGS COUNTY

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5. Effective 15 February 1997, effluent from the treatment facility shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Median</u>	<u>Maximum</u>
Coliform Organisms	MPN <sup>1</sup> /100 ml	23	500

<sup>1</sup> Most Probable Number.

6. The dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds shall not be less than 1.0 mg/l.
7. The discharge shall not have a pH less than 6.0 or greater than 9.0.
8. The maximum electrical conductivity (EC) of the discharge shall not exceed the average EC of the source water plus 500  $\mu$ mhos/cm.
9. Ponds shall be managed to prevent breeding of mosquitos. In particular:
- An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
  - Weeds shall be minimized through control of water depth, harvesting, or herbicides.
  - Dead algae, vegetation, and debris shall not accumulate on the water surface.
10. Public contact with wastewater at the WWTF and in the canal shall be precluded through such means as fences, signs, or other acceptable alternatives.

**C. Sludge Disposal Specifications:**

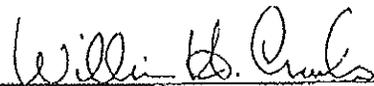
- Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Title 23, CCR, Section 2510, et seq. (Chapter 15) and approved by the Executive Officer.
- Any proposed change in sludge use or disposal practice shall be reported to the Executive Officer at least 90 days in advance of the change.

WASTE DISCHARGE REQUIREMENTS  
CITY OF LEMOORE WWTF  
KINGS COUNTY

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- b. Public participation shall be required during the preparation of the technical report. The report shall be accompanied by a statement outlining how interested persons were involved in the preparation of the technical report.
9. The Discharger shall use the best practicable, cost-effective control technique currently available to comply with this Order.
10. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
11. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
12. The Board will review this Order periodically and will revise requirements when necessary.

I, WILLIAM H. CROOKS, 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 23 February 1996.

  
\_\_\_\_\_  
WILLIAM H. CROOKS, Executive Officer

LML:lml/fmc

**Appendix B**

**RWQCB Letter of April 21, 2003**



Winston H. Hickox  
Secretary for  
Environmental  
Protection

# California Regional Water Quality Control Board

## Central Valley Region

Robert Schneider, Chair



Gray Davis  
Governor

Fresno Branch Office

Internet Address: <http://www.swrcb.ca.gov/~rvqcb5>  
1685 E Street, Fresno, California 93706-2020  
Phone (559) 445-5116 • FAX (559) 445-5910

21 April 2003

Mr. David Wlaschin  
Public Works Director  
City of Lemoore  
119 Fox Street  
Lemoore, CA 93245

DAVE STRINGFIELD  
talked with BOBNO STARR  
said letter would be in  
before end of month. They  
were ok.

### NOTICE OF VIOLATION, CITY OF LEMOORE WASTEWATER TREATMENT FACILITY (WWTF), KINGS COUNTY

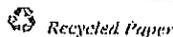
We reviewed your 7 April 2003 technical report by Carollo Engineers that responds to our 7 March 2003 Notice of Violation regarding violation of the fecal and total coliform requirements of Waste Discharge Requirements (WDRs) Order No. 96-050. The technical report attributes the violations to a combination of hydraulic and contact time problems that resulted from discharge of undisinfected cheese process wastewater by Leprino Foods Company (LFC) to the City's 30-inch outfall and the City's reliance on the outfall to achieve adequate chlorine contact time. The WWTF does not have a chlorine contact basin or tank.

The technical report proposes short- and long-term solutions to providing adequate disinfection of the City's WWTF effluent. The short-term solution, which has been implemented by the City, is to route LFC's treated wastewater, with a biological oxygen demand of around 12 mg/L, through the City's entire pond treatment process (i.e., Pond 1A, Pond 2 and Pond 3 in series) and then chlorinate just prior to discharging to the City's outfall. This increases the hydraulic load on the City's pond system, lessening detention time and decreasing treatment efficiency.

The long-term solution proposed by the City is to route the LFC discharge to Pond 3. Implementation of this alternative will require pipeline construction to direct discharge of treated LFC effluent into the upgradient end of Pond 3. At this point LFC's treated wastewater will be commingled with the City's. Commingled wastewater will be treated in Pond 3 before being chlorinated by the WWTF's existing chlorination system and discharged into the outfall. To reduce chlorine consumption by the facility, the technical report requests that the City's disinfection compliance point at the WWTF be relocated from 350 feet downstream to 2,500 feet downstream, about 50 feet upstream of the SK Foods connection.

We agree with both solutions. However, we expect that the long-term solution be implemented as soon as possible given that the short-term solution reduces treatment efficiency of the City's pond treatment system. By 12 May 2003, please provide us with a time schedule for implementing the long-term solution. We also concur with your proposal to move the disinfection compliance point 2,500 feet down

*California Environmental Protection Agency*



The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at <http://www.swrcb.ca.gov/rwqcb5>

Mr. David Wlaschin

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21 April 2003

the outfall, about 50 feet upstream of SK Foods' connection. The installation of the sample station should be done under the supervision of California registered civil or mechanical engineer. Please provide us with a letter giving installation details that is signed and stamped by the engineer once the work is complete.

Previously, we have proposed to prepare two tentative Waste Discharge Requirement Orders, one for the City's discharge of up to 2.5 mgd of municipal wastewater, the other to LFC and the City for the discharge of 2.0 mgd of LFC industrial process wastewater. The City's proposed rerouting of the LFC discharge into the Pond 3 effectively gives the City control over LFC's discharge and alters the character of its municipal wastewater. Therefore, we will be drafting the City Waste Discharge Requirements for discharge of 4.5 mgd of industrial and municipal wastewater. LFC will not be named in the Order and the City will need to exercise sufficient regulatory control over LFC to insure consistent compliance with conditions of discharge (i.e., an industrial pretreatment program).

If you have any questions on this matter, please contact Stephen Klein at (559) 445-5558 or via email at [kleins@rh5f.swrcb.ca.gov](mailto:kleins@rh5f.swrcb.ca.gov).



BERT E. VAN VORIS  
Supervising Engineer  
RCE No. 24105

cc: California Department of Health Services, Fresno  
Kings County Environmental Health Department, Hanford  
Mr. Harry Tow, Quad Knopf, Visalia  
Mr. John Howe, Westlake Farms  
Mr. David Stringfield, Carollo Engineers, Fresno  
Mr. D. Scott Joslyn, Carollo Engineers, Sacramento  
Mr. Robert Garcia, Leprino Foods Company, Denver

**Appendix C**

**Projected 30" Outfall Flow Calculations**

July 11, 2011

David Wlaschin, Public Works Director  
City of Lemoore  
711 W. Cinnamon Drive  
Lemoore, CA 93245

**Subject: Wastewater effluent outfall capacity**

Dear David:

As you know, we have been conducting an analysis of the reasons for the difference between the reputed approximate 6 million gallon per day gravity flow capacity of the subject 6-mile outfall and the measured approximate 4.5+ million gallon per day flow capacity. This difference is, of course, critical when the City's projected flow of nearly 2.5 million gallons per day or more combines with Leprino's projected flow of 3.5 million gallons per day..

The 30" line was designed as a pumped outfall. It thus included pipe spans, attached to two bridges over the Kings River, which are above the hydraulic gradient between the treatment plant pond(s) and the outfall discharge point. During construction, we are advised, other high points in the line were created to avoid pipeline route obstructions. Each known, or suspected, high point in the line has been fitted with a combination air relief/vacuum relief valve.

The hydraulic gradient from the pond(s) to the top of the apparent highest point in the line, the pipe crossing over the west branch of the Kings River, permits a calculated flow of about 4.5+ million gallons per day. It is evident that there is no siphon effect. The calculated flow for the line if the line were acting as a siphon and flow was dependent upon the hydraulic gradient from the pond(s) to the point of discharge would be nearly 6 million gallons per day. The installation and operation of vacuum relief valves at the high points of the line precluded the line acting as a siphon and reaching its full hydraulic capacity. The relief valve at the westerly Kings River crossing is now missing, leaving a small pipe open to the atmosphere. The measured depth of flow on the 30" pipe at that point, during normal City pond/Leprino discharge, was 16", confirming that siphon flow is not occurring.

A minor, but now critical, factor in head loss reduction (about 1.3 feet) affecting line capacity, is the currently abandoned meter in a 40' length of 16" line just downstream from the ponds. This probably results in a loss of about 300 gallons per minute of line capacity. Replacement of this pipe/meter section with 30" line will result in an additional 300 gallons per minute of line capacity, .43 million gallons per day.

*May 26, 2010*

It is suggested that the following steps be taken at an early date, particularly in view of the daily flows now emanating from Leprino and their need to increase such flow capability to 5.0 million gallons per day:

1. An invitation to Leprino to authorize a review by their engineering staff of the apparent outfall capacity problem and our analyses of outfall capacity constraints.
2. As a part of that review, evaluation with us of the desirability and timing of the following interim actions:
  - (a) Replacement of the 40' of 16" line with a 30" line (.43 mgd capacity increase).
  - (b) Replacement of all combination air relief/vacuum relief valves with air relief valves (enabling a 5.76 mgd capacity).
  - (c) Installation, if required, of a valve at the manhole nearest the 30" line discharge point to assist in siphon flow initiation.

We will be pleased to review this brief report and its recommendations with you at your convenience.

Sincerely,

Charles Sanford, P.E.

Harry A. Tow, P.E.  
City Engineer

Enclosures:

cc: Jeff Briltz, City Manager  
Fred Jimenez, City of Lemoore, Wastewater Treatment Plant

L100002/01  
HAT/wbe

**Database – 30"**  
**Effluent Outfall Flow Capacities,**  
**City of Lemoore**

Line size: 30"

Line material: SDR 41 PVC (31,550 feet in length) plus 400 feet of welded steel pipe (see construction plans, 1.11/96, Sheets 1 to 17).

Intake and outfall system details: See Figures 1-5 (attached).

Distance from upstream 30" line intake to apparent highest point in line: 28,200 feet.

Water surface at 30" intake: (211.83 to 212.33): 212.08<sup>1</sup>

Top of pipe at highest point in line = (205.45 – .25): 205.20<sup>1</sup>

Water surface at discharge manhole: 199.76<sup>1</sup>  
(108' upstream from canal)

Water surface at canal: 199.68<sup>1</sup>

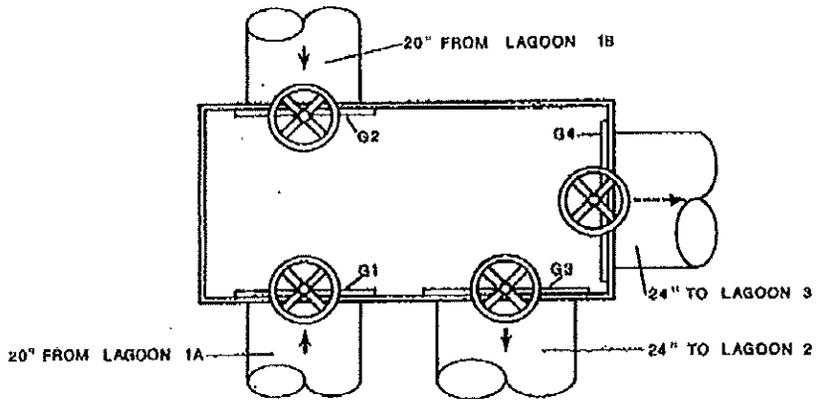
Maximum measured flow: 3100 gallons/minute<sup>2</sup>, 4.5 mgd

Estimated maximum flow, with Leprino: 1900 gpm + 1600 gpm = 3500 gpm  
(2.7 mdg + 2.3 mdg = 5.0 mgd)

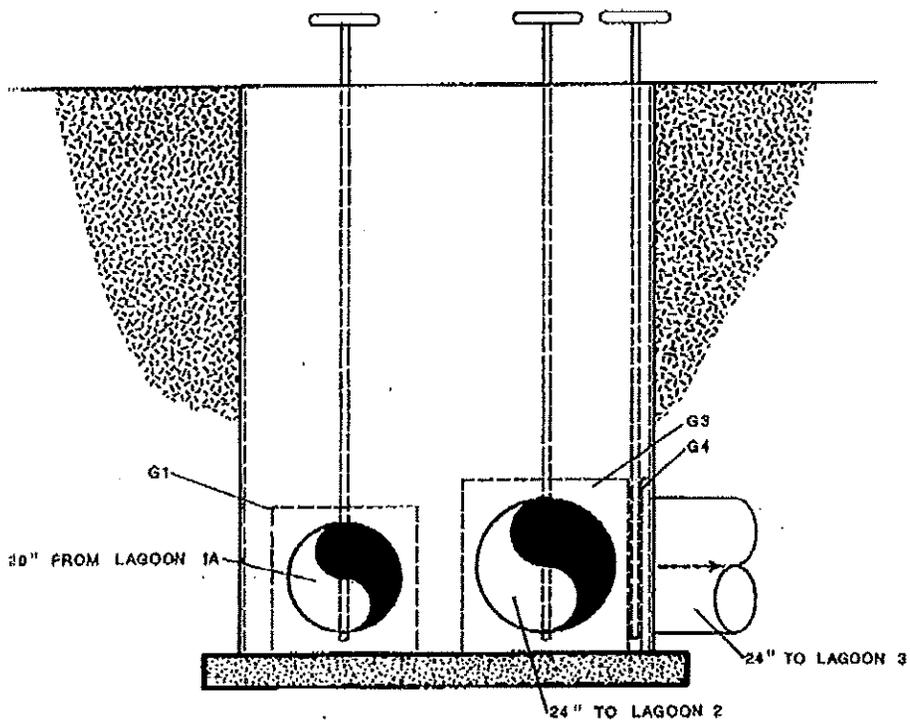
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<sup>1</sup> See Attachment A

<sup>2</sup> See Attachment B



**PLAN**



**ELEVATION**

Figure 1

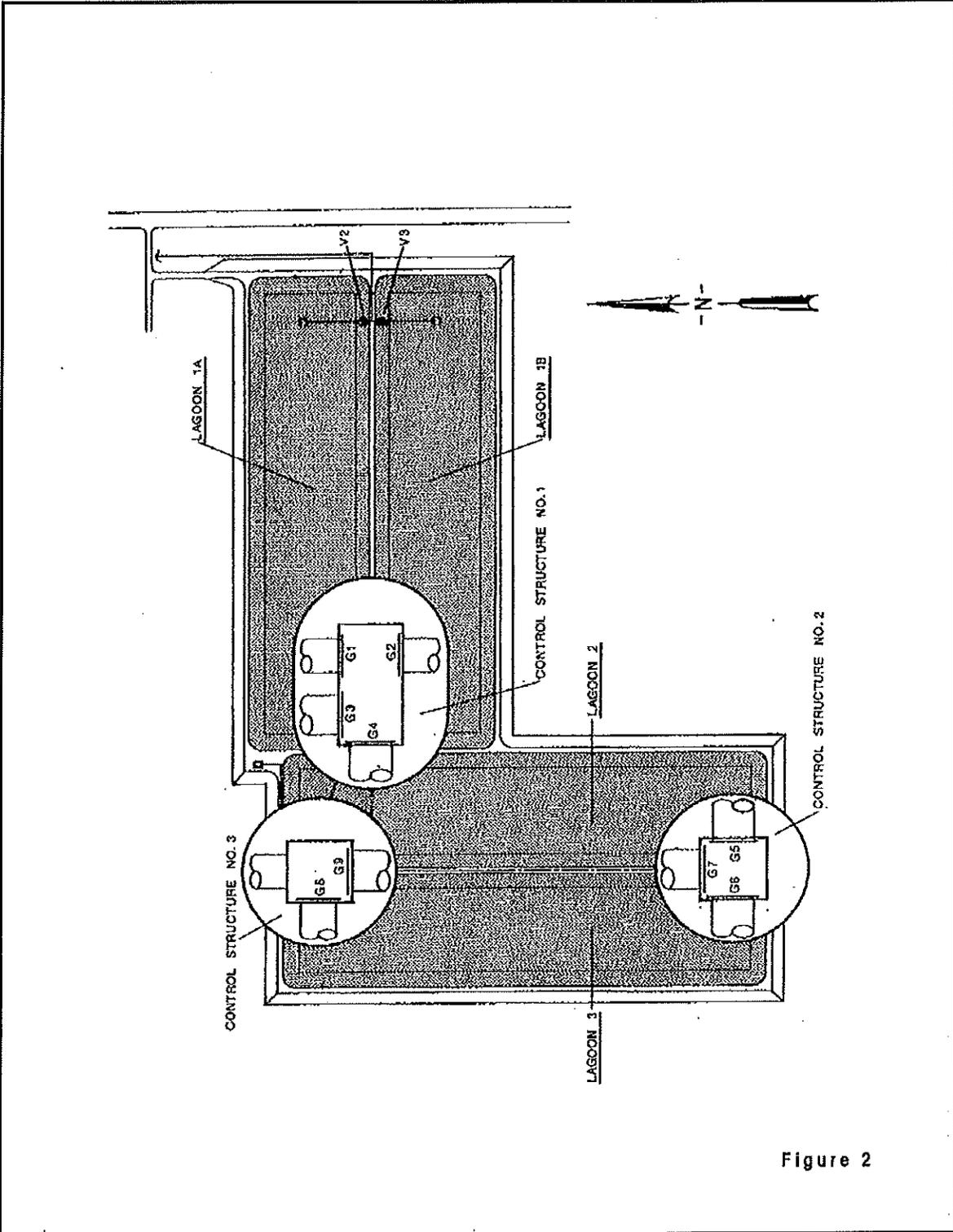


Figure 2

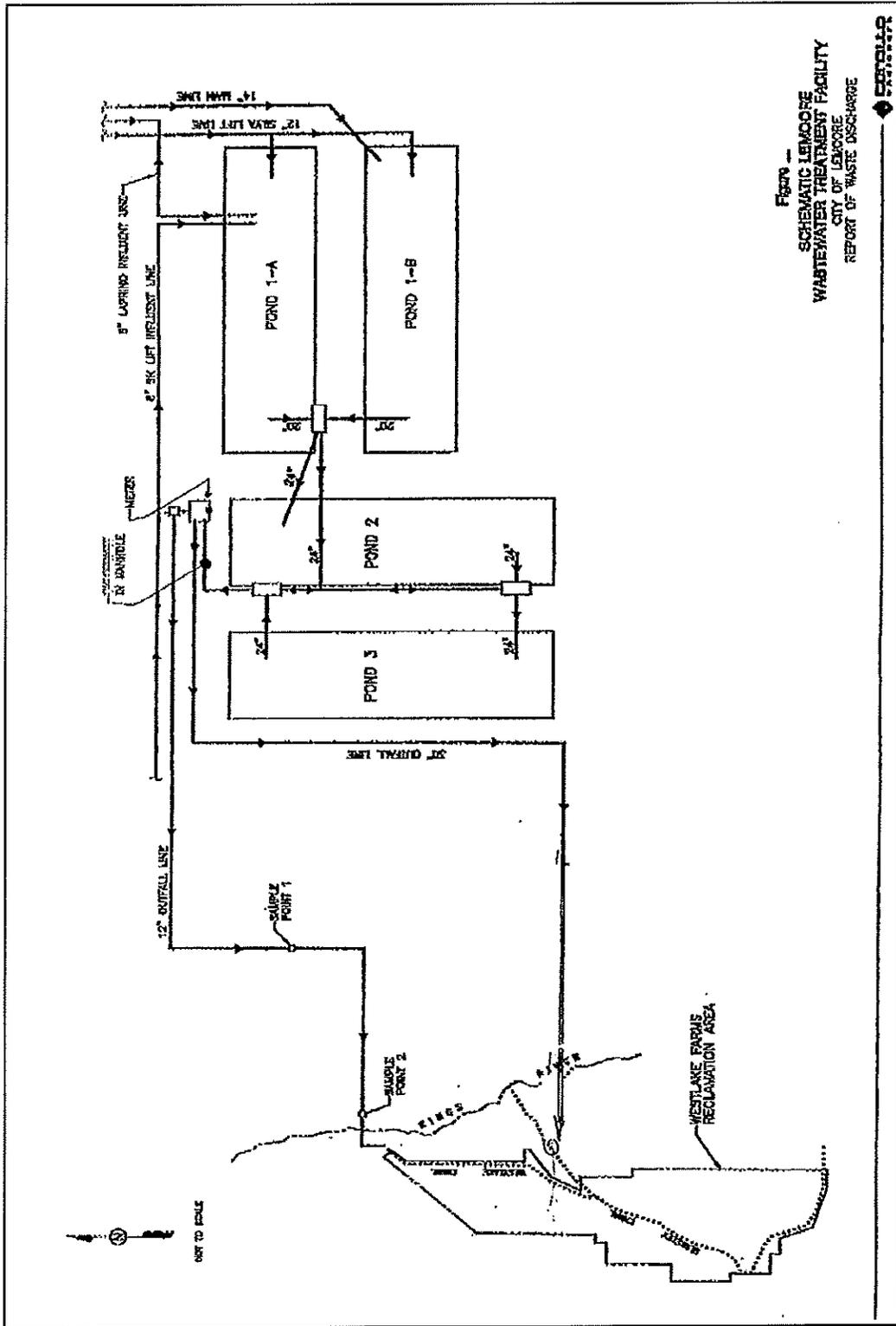


Figure 3  
 SCHEMATIC LEMORE  
 WASTEWATER TREATMENT FACILITY  
 CITY OF LEMORE  
 REPORT OF WASTE DISCHARGE



Figure 3

## ATTACHMENT A

Outfall line topo 4/29/10

1. Water level at Pond 3 = 212.58'
2. Water level in valve box between Ponds 2 & 3 = 212.47
3. At the effluent valve box, on the west side of the WWTP office, the water surface level fluctuated from 211.83' to 212.33'. The flow meter indicated 1800 GPM at 8:00 am and 1500 GPM at 12:45 pm. The fluctuation was greatest at 8:00 am.
4. At the East Kings River Bridge the top of the 30" steel pipe at the highest point, the middle of the bridge, was 205.00'.
5. At the West Kings River Bridge the top of the 30" steel pipe at the highest point, the middle of the bridge, was 205.45'.
6. At the manhole north of the Westlake Canal the water surface level was 199.76', the invert of the 30" line north was 197.11' and the invert of the 30" line south was 197.01'. This manhole is 108' North-Northwest of the discharge point at the Westlake canal. The plans indicate that a new manhole was to be constructed approximately 20' North Northwest of the discharge point. We searched for another manhole closer to the discharge point but could not locate one.
7. At the discharge point into the Westlake Canal the canal water level was 199.68' and the invert of the 30" pipe is 192.17'.

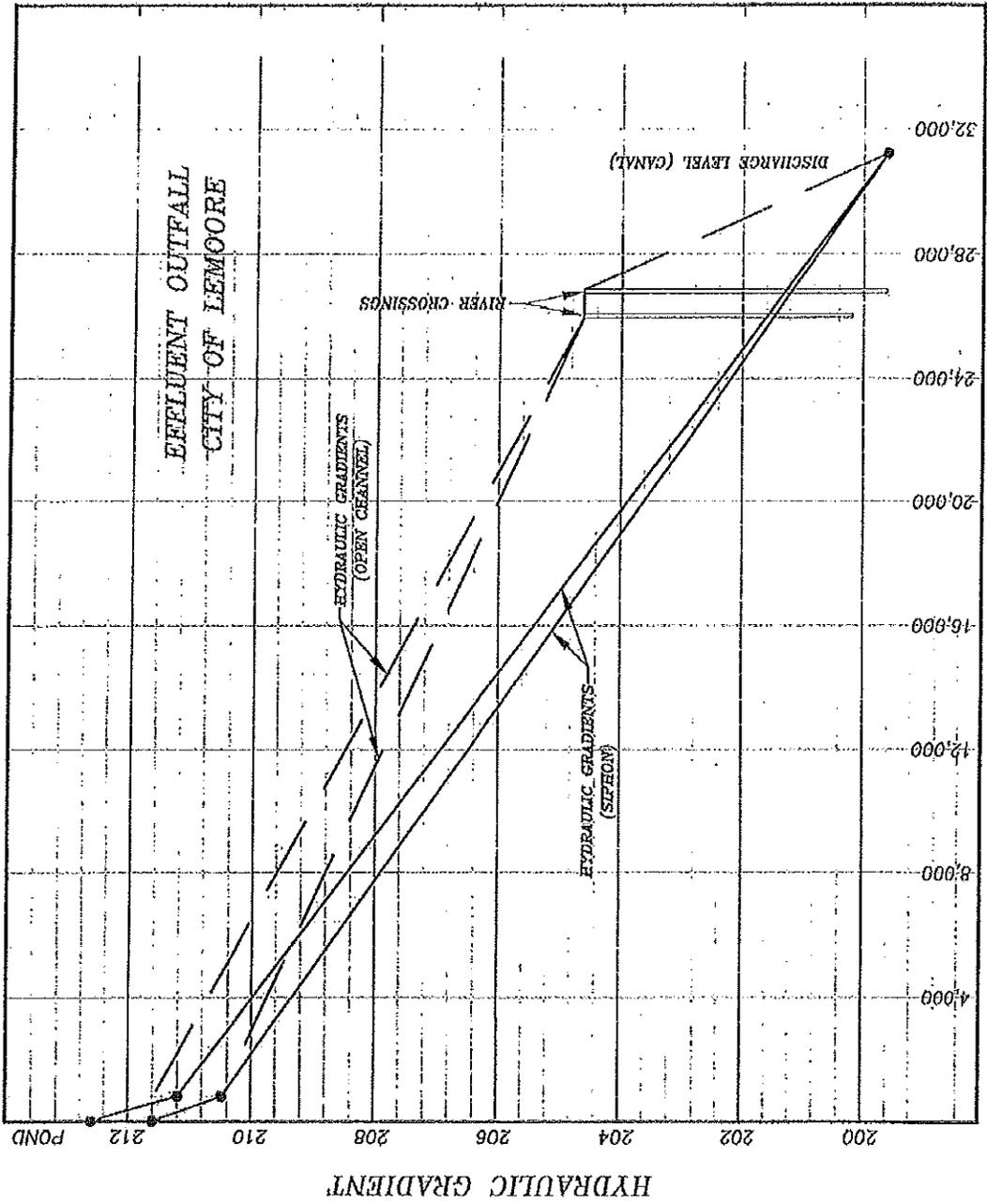
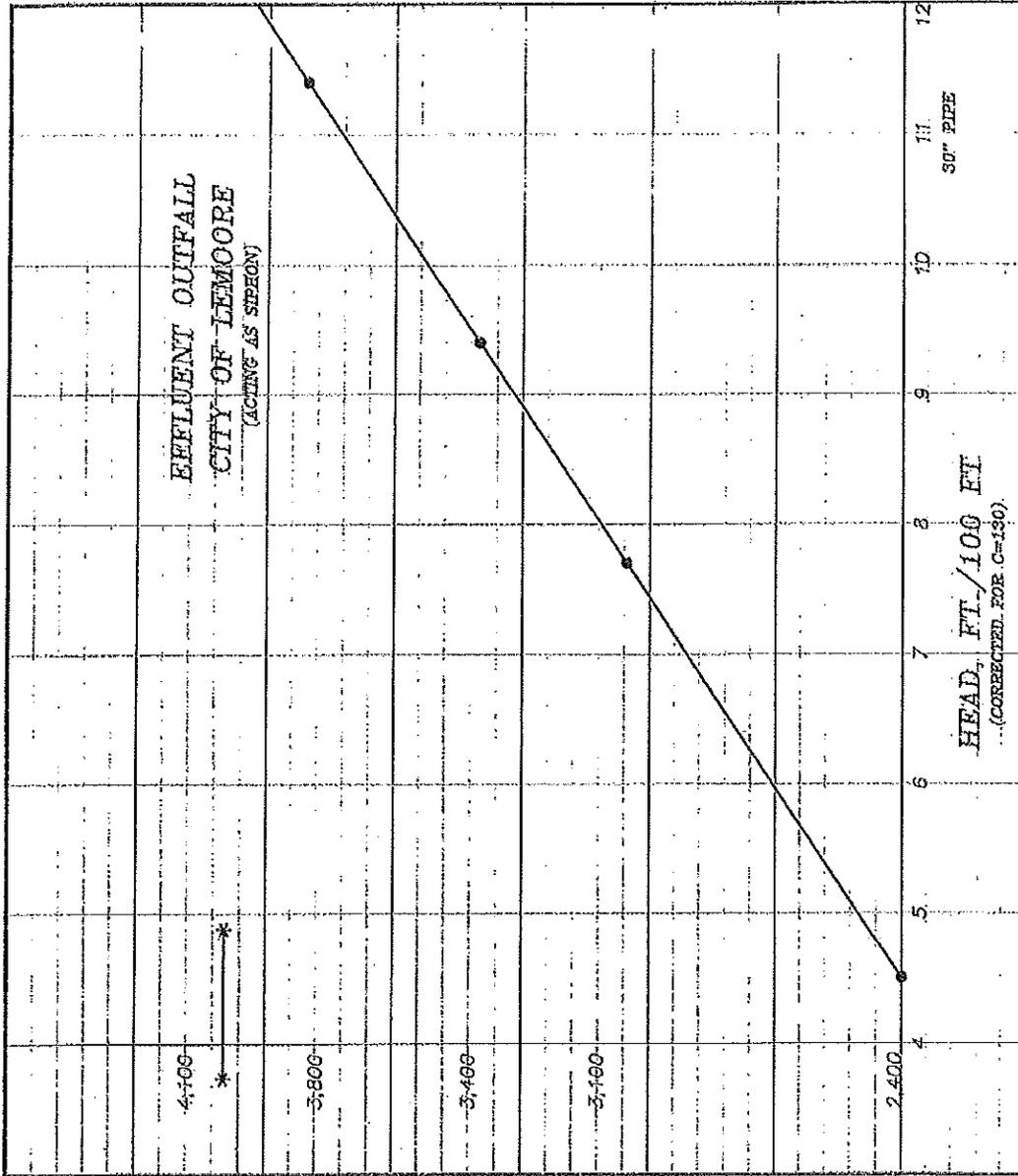


Figure 4



GALLONS PER MINUTE

Figure 5