

**FINDINGS AND APPROVAL OF
THE UNIVERSITY OF CALIFORNIA DAVIS
CAMPUS WASTEWATER TREATMENT PLANT EXPANSION PROJECT**

I. CERTIFICATION OF THE FINAL EIR

The Chancellor for the UC Davis Office of Resource Management and Planning (Chancellor) of the University of California (“University”) at Davis, as lead agency, hereby certifies the Final Environmental Impact Report (“Final EIR”) for the University of California, Davis Wastewater Treatment Plant (WWTP) Expansion Project (proposed project) for the University of California, Davis (“UC Davis” or “the Campus”). The Chancellor certifies that the Final EIR (State Clearinghouse No. 2004052133) has been completed in compliance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq., “CEQA”) and that the Final EIR reflects the independent judgment of the University regarding the environmental impacts of the Campus WWTP Expansion Project.

In accordance with CEQA Guidelines Sections 15152 and 15168 and Public Resource Code Section 21094, the Final EIR is tiered from the EIR that was prepared for the UC Davis 2003 Long Range Development Plan (2003 LRDP) (the "LRDP EIR," State Clearinghouse No. 2002102092). The 2003 LRDP is the comprehensive land use plan that guides the physical development on campus to accommodate projected enrollment increases and expanded and new program initiatives through the 2015–2016 academic year. The proposed project is an element of the growth that was anticipated in the 2003 LRDP, and it was evaluated in the LRDP EIR. The Final EIR is hereby incorporated in these findings by reference.

Pursuant to Title 14, California Code of Regulations, Section 15090, the Chancellor certifies that he has received, reviewed, and considered the information contained in the Final EIR, as well as information in the administrative record, prior to making the following findings in Section II and approvals in Section III, below.

Based upon the foregoing, the Chancellor finds and determines that the Final EIR provides the basis for approval of the Campus WWTP Expansion Project and the supporting findings set forth in Sections II and III below.

II. FINDINGS

The Chancellor is adopting these findings for the entirety of the actions described in these findings and in the Final EIR as comprising the Campus WWTP Expansion Project for UC Davis.

Having received, reviewed, and considered the Final EIR and other information in the record of proceedings, the Chancellor hereby exercises his independent judgment and adopts the following findings pertaining to the Campus WWTP Expansion Project in compliance with CEQA, the CEQA Guidelines, and the University’s procedures for implementing CEQA.

The Chancellor certifies that these findings are based on full appraisal of all viewpoints, including all comments received up to the date of adoption of these findings, concerning the environmental issues identified and discussed in the Final EIR.

A. ENVIRONMENTAL REVIEW PROCESS AND PROJECT DESCRIPTION

1. Environmental Review Process

CEQA Guidelines Section 15152 allows for the tiering of environmental analysis from other EIRs. Tiering is appropriate when an EIR has been prepared for a program or plan, and a subsequent project would be consistent with the program or plan. Where an EIR has been prepared and certified for a program or plan, the environmental review for the subsequent activity consistent with the program or plan should be limited to the potential significant effects on the environment that were not analyzed as significant in the prior EIR, that are susceptible to substantial reduction or avoidance, or were not adequately addressed in the prior EIR. The certified UC Davis 2003 LRDP Final EIR considered the ultimate expansion of the Campus WWTP, including the extent to which it would be expanded under the Campus WWTP Expansion Project.

UC Davis prepared a Notice of Preparation (NOP) and issued a Tiered Initial Study for this project on May 28, 2004 (see Appendix A of the Draft EIR) to determine the environmental impact analyses that would be needed to adequately address the proposed project. The Tiered Initial Study determined that the following resource areas affected by the project may not have been adequately addressed in the 2003 LRDP EIR: hydrology and water quality, biological resources, air quality, and utilities and service systems. The NOP and Tiered Initial Study were circulated for a 30-day comment period from May 28, 2004 to June 28, 2004, and six letters were received. Comments received during this public and agency review period, and responses to these comments, are included in Appendix B of the Draft EIR. In addition, a public scoping meeting was held on June 17, 2004 to receive additional comments on the scope of the EIR. No comments were provided at this meeting. The Draft EIR was circulated for a 45-day public and agency review period from October 8, 2004 to November 22, 2004. A public hearing was held on November 1, 2004. This review period was subsequently extended through January 15, 2005. Four comment letters were received and are included, along with the responses to these comments, in Chapter 2 of the Final EIR. None of the comments raised new significant issues or suggested expanding the analysis of significant impacts beyond those addressed in the Draft EIR.

Based on the foregoing, the Chancellor hereby finds that preparation of a Tiered EIR focused on these topics would satisfy the requirements of CEQA.

The Final EIR, which includes, among other components, the Tiered Initial Study, Draft EIR, public comments received during the public review period for the Draft EIR, and Campus responses was published on August 16, 2005. The information provided in the Final EIR did not include any significant new information regarding the impacts and mitigation measures evaluated in the Draft EIR, and the Campus, therefore, properly decided that document for additional public review was not warranted under the provisions of CEQA.

2. Description of the Campus WWTP Expansion Project

The Campus WWTP is located on approximately 16.5 acres in the south campus area of the UC Davis campus in Solano County, California. The WWTP is located approximately 0.5 miles north of Putah Creek and approximately 0.5 miles south of Interstate 80. The WWTP provides tertiary wastewater treatment for the campus, and discharges treated effluent to Putah Creek. The WWTP was constructed and became operational in March 2000, and was designed to accommodate projected campus wastewater inflows through 2005. It was constructed to allow for modular expansion to meet the needs of the campus over time.

The proposed project would expand specific modular components of the WWTP to meet campus demands for treatment capacity anticipated through 2013. The wastewater treatment capacity of the existing WWTP facilities is 2.7 million gallons per day (mgd) for average dry weather flows (ADWF) and 6.3 mgd for peak hourly wet weather capacity. The existing rate of campus wastewater inflow to the plant averages 1.7 mgd ADWF. Currently, during peak wastewater inflow periods, many of the plant's individual unit processes operate at capacity or are expected to operate at capacity by 2008. Inflows that exceed the peak hourly capacity must be diverted to temporary storage until the peak flows subside, after which they are routed back into the treatment plant for processing. Under the proposed project, the design capacity of the WWTP would be expanded to 3.8 mgd ADWF to provide capacity for projected ADWF and peak hourly inflows through 2013. The WWTP expansion would improve treatment process reliability and the plant's ability to meet current and anticipated future effluent regulatory requirements. Most construction activities associated with the proposed project would occur within the boundaries of the existing WWTP site; however, the proposed project would also include interior upgrades to increase the capacity of the central campus influent pump station. The proposed project would allow for an increase in the volume of treated effluent discharged to Putah Creek, but it would not establish a new discharge site.

B. IMPACTS AND MITIGATION MEASURES

The following section summarizes the significant environmental impacts of the Campus WWTP Expansion Project, and includes the findings of the Chancellor as to those impacts, as required by CEQA and the CEQA Guidelines. The findings provide the written analysis and conclusions of the Chancellor regarding the significant environmental impacts of the Campus WWTP Expansion Project, alternatives to the project, the project-specific mitigation measures proposed by the Final EIR for the project, and the LRDP mitigation measures previously adopted and incorporated by the Chancellor into the proposed project.

These findings provide a summary description of each impact, describe the applicable mitigation measures identified in the Final EIR and adopted by the Chancellor, and state the Chancellor's findings regarding the significance of each impact after adoption and incorporation into the project of the mitigation measures. A full explanation of these environmental findings and conclusions can be found in the Final EIR, and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the Final EIR's

determinations regarding mitigation measures and the impacts of the Campus WWTP Expansion Project.

As set forth in Part III, below, the Chancellor adopts and incorporates into the project all of the mitigation measures set forth in the Final EIR to reduce or avoid the significant and potentially significant impacts of the Campus WWTP Expansion Project to the extent it is feasible to do so, as well as to further reduce certain less-than-significant impacts. In the event a mitigation measure recommended in the Final EIR that pertains to the Campus WWTP Expansion Project has inadvertently been omitted from these findings, said mitigation measure is hereby adopted and incorporated into the findings by reference below. In addition, in the event the language of the mitigation measures set forth below fails to accurately reflect the adopted mitigation measures in the Final EIR due to a clerical error, the language of the mitigation measure shall be as set forth in the Final EIR, unless the language of the mitigation measure has been specifically and expressly modified by these findings.

1. Hydrology and Water Quality

- a. **Impact 4.1-4. Copper.** Discharges of WWTP effluent under the proposed project could contain copper. Concentrations of copper in the undiluted WWTP effluent could exceed permit limits, and concentrations in receiving water could exceed applicable regulatory guidance criteria. This is a potentially significant impact.

Mitigation Measure 4.1-4: Implement a phased evaluation/source control measure to address effluent copper levels. UC Davis will continue to monitor effluent copper concentrations and evaluate whether the frequency and measured concentration (assuming it continues to be detected in the future) warrant further measures to control its discharge to Putah Creek. UC Davis has successfully controlled copper concentrations in the past by adding polymers. Should future monitoring indicate a continued reasonable potential to exceed regulatory thresholds, the likely feasible operational change would be to modify the frequency of influent and effluent monitoring to implement earlier detection and treatment process modifications.

FINDING: Mitigation Measure 4.1-4 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of Mitigation Measure 4.1-4 will reduce the potentially significant impact associated with concentrations of copper in undiluted WWTP effluent and in receiving water resulting from the Campus WWTP Expansion Project to a less-than-significant level, because UC Davis would continue its daily monitoring and polymer additions program. As discussed on page 4.1-26 of the EIR, the Campus' operational procedures include daily monitoring of the influent (raw wastewater entering the treatment plant) for copper to determine if there are any large copper loads entering the facility. If large loads are identified, polymers are injected at the WWTP to control the copper. The injection of polymers enhances the removal of copper through the treatment process. As discussed on page 4.1-28 of the Draft EIR,

because the current daily monitoring and subsequent polymer additions when copper loading is detected have generally been successful, continued operation with this protocol is considered to be an effective means of controlling copper exceedances.

- b.* **Impact 4.1-5. Cyanide.** Discharges of WWTP effluent under the proposed project could contain cyanide. While observed concentrations of cyanide in the undiluted WWTP effluent have not exceeded the permit limits, there is uncertainty whether the effluent and receiving water will reliably achieve applicable regulatory criteria. This is a potentially significant impact.

Mitigation Measure 4.1-5: Implement a phased evaluation/source control measure to address effluent cyanide levels. (a) Part A: Pursuant to the NPDES permit requirements, if a sample exceeds the 4-day average limit, UC Davis will collect effluent grab samples on four consecutive days so that a true 4-day average cyanide concentration can be determined. Also UC Davis will collect grab samples on each day at the R2 (downstream) monitoring station and analyze for cyanide. Finally, the R2 and effluent flows will be recorded for the same days. If this monitoring indicates that the CTR chronic cyanide criterion is or has reasonable potential to be exceeded in the receiving water more often than once in 3 years, Part B of this mitigation shall be implemented. (b) Part B involves conducting an evaluation to determine the source(s) of the cyanide, and developing and implementing modifications to WWTP operations and facilities to consistently comply with the CTR cyanide criterion in the receiving water, where it applies. Measures may be required that could include adjusting the WWTP's industrial pretreatment program and inspection of Campus-wide facilities to reduce discharges.

FINDING: Mitigation Measure 4.1-5 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of Mitigation Measure 4.1-5 will reduce the potentially significant impact associated with concentrations of cyanide in undiluted WWTP effluent and in receiving water resulting from the Campus WWTP Expansion Project to a less-than-significant level, because the Campus would continue its monitoring program and take appropriate steps to locate and control cyanide exceedances, if they occur, at the source. Control measures could include adjusting the industrial pretreatment program at the WWTP, and inspection of Campus-wide facilities to reduce discharges.

- c.* **Impact 4.1-7. Dioxin.** Discharges of WWTP effluent under the proposed project could contain dioxin. The existing data indicate that the WWTP would probably continue to comply with NPDES permit limits. While projected effluent concentrations are not expected to change with the proposed project, compliance with receiving water quality objectives cannot be confirmed with certainty due to the limited dataset available. This is a potentially significant impact.

Mitigation Measure 4.1-7. Implement a phased evaluation/source control measure to address effluent dioxin levels. UC Davis will continue to monitor effluent concentrations of dioxin and evaluate whether the frequency and measured concentration (i.e., assuming they continue to be detected in the future) warrant further measures to control their discharge to Putah Creek. Should future monitoring indicate a reasonable potential for dioxins to exceed regulatory thresholds, the likely feasible operational change would be to include dioxins into the existing industrial pretreatment program for the WWTP.

FINDING: Mitigation Measure 4.1-7 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of Mitigation Measure 4.1-7 will reduce the potentially significant impact associated with concentrations of dioxin in receiving water resulting from the Campus WWTP Expansion Project to a less-than-significant level, because the Campus would continue its monitoring program and take appropriate steps to control dioxin exceedances, if they occur. No exceedances have been detected to date. Control measures include operational changes, such as inclusion of dioxins into the WWTP pretreatment program.

- d. Impact 4.1-14. Electrical Conductivity.* Discharges of WWTP effluent under the proposed project would contain EC. Projected EC concentrations in receiving water would be expected to be fully protective of existing beneficial uses. However, EC concentrations in the undiluted WWTP effluent would likely exceed the existing NPDES permit limit, UC Davis has applied to the regulating agencies for a higher EC limit in the permit, but to date the request has not been granted, and it is not expected to be granted. Compliance with permit limits is a significance threshold, Therefore, this is a potentially significant impact.

Mitigation Measure 4.1-14. The following mitigation measures have been identified to minimize and avoid the potential continued exceedances of the NPDES permit limit, should the change in the permit not be granted or should the final permit, if changed, still require reduced EC discharges. Following implementation of one of the mitigation measures identified below, or a combination of one or more of the measures, the impact would be considered less than significant.

- **Divert All Effluent to the City of Davis:** Diverting all of the campus WWTP effluent to the City of Davis (City) wastewater treatment facilities would cease all discharges to Putah Creek. By ceasing all discharges, the WWTP would no longer be governed by the NPDES permit and the associated effluent limitations. In turn, the UC Davis effluent would become part of the City's effluent and would therefore be subject to the permit limitations contained in the City's NPDES permit.
- **Change in Surface Water Discharge Location:** Moving the WWTP effluent discharge location from Putah Creek to the Sacramento River may allow for a modified effluent limit by obtaining a dilution credit for the discharge of its wastewater. Other

dischargers on the Sacramento River receive dilution credits. For instance, the Sacramento Regional Wastewater Treatment Plant, which treats 155 mgd, has a 14:1 dilution credit. Because the WWTP effluent exceeds the permit limit by only 100 $\mu\text{mhos/cm}$ on average, the dilution credit necessary would be fairly small and would be achievable given the size of the discharge in comparison to the flow of the Sacramento River.

- **Discharge All Effluent to Evaporation Ponds:** Instead of discharging the WWTP effluent to Putah Creek, large evaporation ponds could be constructed with sufficient storage capacity to provide complete evaporation of WWTP effluent during the dry season.
- **Agricultural Reuse with Winter Storage in Lined Ponds:** This scenario would be a variation of the evaporation ponds and would include substantial reuse of recycled water during the summer for irrigation of useable agricultural lands or urban landscape. The goal would be to beneficially recycle as much water as possible during the summer to reduce the overall area of ponds required for storage and evaporation.
- **Source Control for Campus Cooling Towers and Other Discharges:** UC Davis is currently evaluating potential modifications that could be implemented for cooling tower operations that would reduce concentrations and loading of high-EC blowdown water (Brown and Caldwell 2003). The investigation involves identifying the type and number of water softeners and other on-site water treatment devices, and the potential for providing on-site treatment for these potentially high-EC waste streams. A modification that is in advanced consideration for the expansion of the central heating and cooling plant is the installation of reverse osmosis (RO) units to replace existing water softeners and dealkalizers. Water softeners and dealkalizers are currently used across the campus for treatment of water used for heating, cooling, and other purposes (e.g., cage washers, and other industrial equipment). These devices require the addition of salt. In some instances, these devices can be replaced by RO units that do not require added salt. Such conversion projects would decrease the net salt loading to the WWTP. Optimization of these salt load sources could reduce EC levels in the WWTP effluent; however, the anticipated EC reductions would not be sufficient to fully meet the current NPDES permit limits if the mitigation measure were implemented alone.
- **Reverse Osmosis (RO) Technology:** RO could potentially be implemented, in combination with RO at the central heating and cooling plant, to reduce EC in a portion of the effluent and blended with the remainder of the effluent to meet the 900 $\mu\text{mhos/cm}$ permit limit. When combined with the RO project being considered at the central heating and cooling plant, a relatively small amount of effluent (approximately 10 percent) would be required to be treated with reverse osmosis in order to meet the 900 $\mu\text{mhos/cm}$ permit limit.

- **Dilution with Solano Project Water:** UC Davis could use a portion of its existing water from the Solano Project (Lake Berryessa), which would allow for the blending of some amount of this higher quality water with treated effluent in order to produce a combined load of less than 900 $\mu\text{mhos/cm}$. This could be accomplished either through providing a minimum flow in Putah Creek and establishment of a mixing zone, which would also require RWQCB agreement, or by adding a small amount of Solano Project water to the treatment process at the WWTP by extending the campus water system. It is estimated that 1,000 acre-feet per year of Solano Project water would be needed. This measure would require consideration of water rights; its feasibility is currently unknown.

Each of the mitigation measures listed above would result in potential secondary impacts. If the mitigation measure that diverts all effluent to the City of Davis wastewater treatment facilities is selected, it could result in adverse effects to the City's effluent quality, and could reduce beneficial flows to fish resources in Putah Creek. If the mitigation measure changing the location of the surface water discharge is changed from Putah Creek to the Sacramento River, a pipeline up to 15 miles long would need to be constructed, which could adversely affect biological, cultural, air quality, water quality, and agricultural resources, as well as fish resources in Putah Creek. If the mitigation measure requiring discharge of treated effluent to evaporation ponds is selected, up to 1,500 acres of farmland would be converted, also potentially affecting biological resources, ground water, air quality, etc. If the mitigation measure requiring agricultural reuse and winter storage in lined ponds is selected, large land areas would be required for storage and long-term commitments from agricultural land owners to use the treated effluent would be required.

The use of a portion of the Campus' existing water from the Solano project for blending with treated effluent could have additional environmental effects associated with water rights and biological resources (i.e., fish habitat) in Putah Creek, or potential traffic, noise, and air quality impacts related to extension of the campus water system. Additional environmental review may be required to implement these measures.

Implementation of the source control measure requiring installation of reverse osmosis (RO) units to replace existing water softeners and dealcalizers is being considered as a separate project by UC Davis, but it would reduce EC in treated effluent by 133 $\mu\text{mhos/cm}$. Although treated effluent would still contain 981 $\mu\text{mhos/cm}$, this would bring the effluent level within 81 $\mu\text{mhos/cm}$ of the permit limit. The measure that adds limited RO technology to the WWTP, when combined with the source control actions, would reduce the EC concentration to below the permit level of 900 $\mu\text{mhos/cm}$. This mitigation measure would result in a limited generation of brine waste, which would be disposed at an approved landfill or other treatment facility.

FINDING: Mitigation Measure 4.1-14 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of Mitigation Measure 4.1-14, which would require implementation

of one or a combination of several options, will reduce the potentially significant impact associated with EC concentrations in undiluted WWTP effluent resulting from the Campus WWTP Expansion Project to a less-than-significant level, for the following reasons:

- **Diversion of all effluent to the City of Davis wastewater treatment facilities would result in a cease of discharge to Putah Creek; thus, the WWTP would no longer be governed by the NPDES permit and the associated effluent limitations.**
- **Moving the WWTP effluent discharge location from Putah Creek to the Sacramento River may allow for a modified effluent limit by obtaining a dilution credit for the discharge of wastewater, in a water body that has substantially more dilution potential than Putah Creek.**
- **Construction of evaporation ponds or agricultural reuse with winter storage in lined ponds would result in a cease of discharge to Putah Creek; thus, the WWTP would no longer be governed by the NPDES permit and the associated effluent limitations.**
- **Source control for Campus cooling, in conjunction with installation of RO technology, would reduce EC levels in treated effluent to NPDES permit levels by removing salt.**
- **Dilution with Solano Project water would also reduce EC levels in treated effluent to NPDES permit levels by blending higher quality water with treated effluent.**

Each of these mitigation measures has the potential to result in additional environmental impacts and may require additional environmental evaluation, with the exception of installation of RO facilities at the WWTP. The only potentially significant secondary effect is from brine disposal, and this would be resolved by disposal of brine at an approved landfill or appropriate treatment facility.

- e.* **Impact 4.1-21. Cumulative.** Increased discharge of campus wastewater associated with growth under the 2003 LRDP, and discharges associated with other development in the region, could degrade receiving water quality. This is a potentially significant impact.

Implement 2003 LRDP EIR Mitigation Measures 4.8-4(a) and (b) to minimize the potential for degradation of receiving water quality. 4.8-4(a): The campus shall continue to monitor and modify its pretreatment program, WWTP operation, and/or treatment processes as necessary to comply with waste discharge requirements imposed by the Regional Water Quality Control Board (RWQCB).

4.8-4(b): The campus shall implement a monitoring program specifically targeted at the following constituents: copper, cyanide, iron, and nitrate + nitrite, and make appropriate modifications as necessary to the campus pretreatment program to avoid exceedance of permit limits for these constituents.

FINDING: Mitigation Measure 4.1-21 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of 2003 LRDP EIR Mitigation Measures 4.8-4(a) and (b), incorporated as Mitigation Measure 4.1-21 of this EIR, will reduce the potentially significant impact associated with the cumulative degradation of receiving water quality resulting, in part, from the Campus WWTP Expansion Project to a less-than-significant level, because the campus would implement a monitoring program specifically targeted at copper, cyanide, iron, and nitrate + nitrite, and make appropriate modifications as necessary to the campus pretreatment program to avoid exceedance of permit limits for these constituents.

2. Biological Resources

- a. **Impact 4.2-2. Impacts to Wetlands.** Implementation of the proposed project would result in the conversion of a 0.8-acre emergency wastewater storage basin to a concrete-lined drying bed. This impact is considered potentially significant because the basin provides wetland functions and values, and it may be considered a jurisdictional wetland.

Implement 2003 LRDP EIR Mitigation Measure 4.4-8(c). 4.4-8(c). The campus shall obtain the necessary ACOE, CDFG, and RWQCB permits prior to filling or other adverse modifications of any verified jurisdictional water of the U.S., or alteration, filling or modification of the channel, bed or bank of Putah Creek, South Fork of Putah Creek, Arboretum Waterway or any other natural drainage regulated under Section 1600 of the CDFG code.

FINDING: Mitigation Measure 4.2-2 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of 2003 LRDP EIR Mitigation Measure 4.4-8(c), adopted as Mitigation Measure 4.2-2 in this EIR, will reduce the potentially significant impact associated with potential impacts to wetlands resulting from the Campus WWTP Expansion Project to a less-than-significant level, because the applicant would obtain a verified wetland delineation from the ACOE, and would obtain the appropriate environmental permits, which may include a Section 404 Nationwide Permit from

the ACOE, a Section 401 Water Quality Certification from the RWQCB, a 1602 Streambed Alteration Permit from the CDFG, and Section 7 consultation between the ACOE and the U.S. Fish and Wildlife Service. Acquisition of the permits would involve agency authorization prior to any fill or waters of the U.S., and would require replacement or restoration/enhancement on a "no-net-loss" basis of any waters of the U.S. lost as a result of project activities, and would require full mitigation for effects to any listed endangered or threatened species.

- b.* **Impact 4.2-5. Cyanide.** The project could cause elevated levels of cyanide in Putah Creek, downstream of the discharge, which could adversely affect aquatic life. This is a potentially significant impact.

Mitigation Measure 4.2-5: Implement a phased evaluation/mitigation source control measure to address effluent cyanide levels as specified in Mitigation Measure 4.1-5, as appropriate.

FINDING: Mitigation Measure 4.2-5 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of Mitigation Measure 4.2-5 will reduce the potentially significant impact associated with elevated levels of cyanide in Putah Creek resulting from the Campus WWTP Expansion Project to a less-than-significant level, because, as discussed in Mitigation Measure 4.1-5, the Campus would continue its monitoring program and take appropriate steps to locate and control cyanide exceedences, if they occur, at the source. Control measures could include adjusting the industrial pretreatment program at the WWTP, and inspection of Campus-wide facilities to reduce discharges.

3. Air Quality

- a.* **Impact 4.3-2. Cumulative.** Cumulative development in the region, in conjunction with the proposed WWTP and 2003 LRDP development, would result in increased emissions of criteria pollutants. This impact is considered significant and unavoidable.

2003 LRDP EIR Mitigation Measure 4.3-6 requires implementation of 2003 LRDP EIR Mitigation Measure 4.3-1 (a-c), which provide for vehicular and area source measures. None of the measures listed, which include carpooling, alternative fuel vehicles, use of solar water heaters, etc., would apply to the proposed project so they are not listed here. There are no other measures available to reduce the project's incremental contribution to criteria pollutants.

FINDING: Mitigation Measure 4.3-6 is hereby adopted and incorporated into the project. For the reasons stated in the Final EIR, the Chancellor finds that implementation of 2003 LRDP EIR Mitigation Measure 4.3-6 (and therefore 2003 LRDP EIR Mitigation Measure 4.3-1 (a-c)), which provide for vehicular and area

source measures to reduce cumulative emissions, would not apply to the proposed project and no other measures are available to reduce project emissions. Therefore, this impact remains significant after mitigation. The Chancellor finds this remaining significant impact to be acceptable because the benefits of the project outweigh this unavoidable environmental impact of the project for the reasons set forth in Section II.D of these findings.

C. MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code Section 21081.6 and CEQA Guidelines Section 15091(d) require the lead agency approving a project to adopt a mitigation monitoring and reporting program (MMRP) for the changes to the project which it has adopted or made a condition of project approval in order to ensure compliance during project implementation. The 2003 LRDP EIR MMRP adopted by the Board of Regents on November 20, 2003 sets forth the means by which the University will monitor mitigation measures designed to further reduce or eliminate the significant impacts of the 2003 LRDP, as well as those mitigation measures designed to reduce environmental impacts which are less than significant. The 2003 LRDP EIR MMRP includes all of the 2003 LRDP EIR Mitigation Measures identified in the Final EIR that pertain to the Campus WWTP Expansion Project. The mitigation monitoring and reporting program for the project, Table 4-1 in Chapter 4 of the FEIR, includes all of the project-specific mitigation measures as specified in these findings, and has been designed to ensure compliance during implementation of the project-specific mitigation measures applicable to the Campus WWTP Expansion Project.

D. ALTERNATIVES

The EIR evaluated a reasonable range of alternatives to the Campus WWTP Expansion Project in Chapter 6 of the Draft EIR, as amended by a text revision in Chapter 3 of the FEIR. In compliance with CEQA and the CEQA Guidelines, the alternatives analysis also included an analysis of a No Project Alternative and identified the environmentally superior alternative. The EIR examined the feasibility of each alternative, the environmental impacts of each alternative, and the ability of each alternative to meet the project need and objectives as identified in Chapter 3.4.2 of the Draft EIR. The Chancellor certifies that he has independently reviewed and considered the information on alternatives provided in the EIR and the record of proceedings.

1. Project Objectives

The Chancellor finds that the objectives for the Campus WWTP Expansion Project are as described in Chapter 3.4.2 of the Draft EIR. The specific objectives of the Campus WWTP Expansion Project are as follows:

- Meet anticipated campus demands through 2013 for average daily and peak hourly wastewater inflows.

- Increase treatment reliability.
- Improve the plant's ability to meet the current and anticipated regulatory requirements.
- Expand the WWTP capacity using its original modular design, which was intended for flexibility and ease in upgrades.

2. Alternatives to the Campus WWTP Expansion Project

The University evaluated four alternatives to the proposed project: No Project – Holding Pond; Divert Additional Wastewater to City of Davis; Seasonal Recycled Water Irrigation; and Divert Additional WWTP Effluent to Evaporation Ponds.

i. Alternative 1. No Project – Holding Pond

The project would not be constructed. Holding ponds would be constructed to accommodate a limited number of facilities that are now operating at capacity or are expected to be operating at capacity by 2008. Treatment reliability would be reduced under this alternative, leading to potential water quality impacts. This alternative would limit growth on the campus or, alternatively, would result in overflows of treatment plant capacity. This alternative is environmentally inferior to the project.

This alternative would result in impacts that would be equal to (for terrestrial biological resources and air quality) or more significant than (for water quality and fish and riverine resources) the project .

This alternative would not attain the basic objectives of the project. It would only provide limited ability to handle an increase in flows as the campus implements its LRDP; rather than accommodating demands that would be generated through 2013, it is estimated that demands would only be able to be accommodated at a level of campus growth expected to occur by 2008 or 2009. Rather than increasing treatment plant reliability, this alternative would place pressure on current facilities to operate at a level that eliminates reliability margins. This alternative would not address improving the plant's ability to meet current and anticipated regulatory requirements, and would likely result in new significant impacts as described above.

This alternative is hereby rejected as infeasible because it would not attain the basic objectives of the project, and it would result in greater impacts on water quality and fish and riverine resources than the project.

ii. Alternative 2. Seasonal Recycled Water Irrigation

A limited amount of potential for recycled water use exists on campus. Under this alternative, up to 0.25 mgd of treated wastewater could be recycled for seasonal irrigation, slightly reducing the load of pollutants discharged to Putah Creek. None of the significant

environmental impacts of the project would be substantially reduced under this alternative, but impacts would be somewhat less than the project. This is the environmentally superior alternative.

This alternative would attain all of the project objectives. It would provide sufficient treatment capacity to meet anticipated demands through 2013, would increase treatment plant reliability, would be constructed to meet current and anticipated regulatory requirements, and would expand the WWTP using its modular design.

This alternative is hereby rejected as infeasible because, although it would attain the basic objectives of the project, a user of the recycled water has not been identified, and this alternative would not substantially lessen the impacts of the project.

iii. Alternative 3. Divert Additional Wastewater to the City of Davis Wastewater Pollution Control Plant

Flows above the current campus treatment plant capacity would be diverted via new pipelines to the City of Davis' treatment plant for treatment and ultimate disposal. A total of 1.1 mgd would be diverted to the City through 2013. None of the significant impacts of the project on water quality concentrations in Putah Creek would be substantially reduced under this alternative, but the contaminant mass loading to Putah Creek would be less than under the project. This alternative could result in additional water quality impacts because the City plant treats to only a secondary level, and is currently experiencing problems meeting several waste discharge requirements. Further, this alternative may involve conversion of between 440 and 550 acres of farmland (also used as habitat) to storage ponds. This alternative is environmentally inferior to the project.

This alternative would attain three of the four project objectives. It would provide sufficient treatment capacity to meet anticipated demands through 2013, would increase treatment plant reliability, and would allow for modular expansion of the treatment plant. However, it would place the burden of meeting water quality regulatory requirements on the City of Davis. The City is currently evaluating its operations so it can meet its current regulatory requirements. Because of this, it is not known if this objective would be met.

This alternative is hereby rejected as infeasible because it would not meet all of the project objectives; it would result in several, more substantial environmental impacts compared with the project, and it would not substantially lessen the impacts of the project.

iv. Alternative 4. Divert Additional WWTP Effluent to Evaporation Ponds

Flows above the current treatment plant capacity would be diverted to evaporation ponds for evaporative disposal. The plant would treat the additional wastewater up to 3.8 mgd, but would divert the increment of treated wastewater above 2.7 mgd to the ponds rather than discharging it to Putah Creek. A total of 1.1 mgd of treated wastewater would be sent via a new pipeline to ponds that would be constructed on 440 to 500 acres of nearby agricultural fields (also used as habitat), resulting in conversion of agriculture and habitat. None of the significant impacts

of the project on water quality in Putah Creek would be substantially reduced under this alternative, but loading would be less than under the project. This alternative is environmentally inferior to the project.

This alternative would attain the project objectives. It would provide sufficient treatment capacity to meet anticipated demands through 2013, would increase treatment plant reliability, would improve the plant's ability to meet current and anticipated regulatory requirements, and would allow for modular expansion of the treatment plant. However, it would result in significant environmental impacts that would not occur with the project, while not substantially reducing environmental impacts to water quality.

This alternative is hereby rejected as infeasible because it would result in greater impacts to terrestrial biological resources, fisheries and riverine resources, air quality, and agricultural resources than the proposed project.

v. Environmentally Superior Alternative

The Chancellor finds that Alternative 2, the Seasonal Recycled Water Irrigation Alternative, is the environmentally superior alternative. It slightly reduces water quality impacts though seasonal reduction in mass loading of water pollutants. It does not avoid or substantially reduce any of the significant impacts of the project. All other alternatives considered result in additional environmental impacts compared to the project and to this alternative, and none substantially lessen the impacts of the project.

E. STATEMENT OF OVERRIDING CONSIDERATIONS

1. Impacts that Remain Significant

As discussed above, the Chancellor has found that the following impact potentially resulting from the Campus WWTP Expansion Project remains significant following adoption and implementation of the mitigation measures described in the EIR.

Impact 4.3-2: Cumulative development in the region, in conjunction with the proposed WWTP and 2003 LRDP development, would result in increased emissions of criteria pollutants.

2003 LRDP EIR Mitigation Measure 4.3-6 requires implementation of 2003 LRDP EIR Mitigation Measure 4.3-1 (a-c) which provides for vehicular and area source measures. None of the measures listed, which include carpooling, alternative fuel vehicles, use of solar water heaters, etc., would apply to the proposed project, and no other measures are available to reduce project emissions. Therefore, this impact remains significant after mitigation. The Chancellor finds this remaining significant impact to be acceptable because the benefits of the project outweigh this unavoidable environmental impacts of the project for the reasons set forth in Section II.D of these findings.

2. Statement of Overriding Considerations

In accordance with CEQA Guidelines Section 15093, the Chancellor has, in determining whether or not to approve the Campus WWTP Expansion Project, balanced the economic, social, technological and other benefits of the project against its unavoidable environmental risks, and has found that the benefits of the project outweigh the significant adverse environmental effects that are not mitigated to less-than-significant levels, for the reasons set forth below. The Findings and Statement of Overriding Considerations adopted by the Regents in connection with its approval of the 2003 LRDP are equally relevant to, and are adopted as part of, these findings. All cumulative significant and unavoidable impacts were previously addressed in the Findings and Overriding Considerations adopted by the Regents in connection with its approval of the 2003 LRDP and certification of the 2003 LRDP EIR.

The Chancellor finds that each of the overriding considerations set forth below constitutes a separate and independent ground for finding that the benefits of the proposed project outweigh its significant adverse environmental impacts. This Finding is supported by substantial evidence in the record that includes, but is not limited to, the NOP, Initial Study, Draft EIR and Final EIR for the proposed project. The additional reasons for approval of the project despite the occurrence of significant and unavoidable impacts are as follows:

A. The project implements a portion of the 2003 LRDP and is consistent with the analysis in the Final EIR. The project allows the campus to continue its growth as envisioned in the LRDP through 2103.

B. The project would result in phasing of wastewater treatment and disposal infrastructure, as originally established in the design of the existing WWTP facilities, to link logically with the phasing of Campus development and avoid undue capital cost burdens to the University.

C. The project would allow the Campus to provide for a greater degree of reliability in treating its wastewater and meeting current and potential future regulatory requirements.

D. The phased development of wastewater treatment and disposal infrastructure provides the opportunity to plan for the provision of wastewater treatment and disposal on a comprehensive and coordinated basis, and allows for a coordinated approach to the mitigation of associated environmental impacts.

C. There is no other project alternative which would be consistent with the 2003 LRDP and would attain project objectives while avoiding or substantially lessening the significant cumulative air quality impact of the proposed project.

F. INCORPORATION BY REFERENCE

These findings incorporate by reference in their entirety the text of the 2003 LRDP, the 2003 LRDP Final EIR, and the Findings and Statement of Overriding Considerations adopted by the Chancellor in connection with its approval of the 2003 LRDP. Without limitation, this incorporation is intended to elaborate on the scope and nature of the Campus WWTP Expansion Project, potential environmental impacts that could result from the Campus WWTP Expansion Project, related mitigation measures, and the basis for determining the significance of the impacts of the Campus WWTP Expansion Project.

G. RECORD OF PROCEEDINGS

Various documents and other materials constitute the record of proceedings upon which the Chancellor bases his findings and decisions contained herein. Documents related to this project are located in the Office of Resource Management and Planning in Mrak Hall, Third Floor, University of California, One Shields Avenue, Davis, California 95616. The custodian for these records of proceedings is the Office of Resource Management and Planning.

H. SUMMARY

1. Based on the foregoing Findings and the information contained in the record, the Chancellor has made one or more of the following Findings with respect to the significant environmental effects of the Campus WWTP Expansion Project identified in the EIR:

a. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

b. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

c. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

2. Based on the foregoing Findings and the information contained in the record, it is hereby determined that:

a. All significant effects on the environment due to approval of the project have been eliminated or substantially lessened where feasible.

b. Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in Statement of Overriding Considerations in Section II.E., above.

III. APPROVALS

The Chancellor hereby takes the following actions:

- A. Adopts and incorporates into the Campus WWTP Expansion Project all mitigation measures within the responsibility and jurisdiction of the University set forth in Sections II.B of the Findings, above.
- B. Adopts the Mitigation Monitoring Program for the Campus WWTP Expansion Project and discussed in Section II.C of the Findings, above.
- C. Adopts these findings in their entirety as its findings for these actions and approvals pertaining to the Campus WWTP Expansion Project.
- D. Having independently reviewed and analyzed the certified Final EIR, adopted and incorporated the mitigation measures into the project, and adopted findings and a statement of overriding considerations, the Chancellor hereby approves the proposed expansion of the Campus WWTP.