

## Theses and Professional Projects: 2016/2017AY

### Master of City and Regional Planning

#### City and Regional Planning Department, Cal Poly San Luis Obispo

For fulfillment of the MCRP degree at Cal Poly's CRP department, the student may choose between developing a thesis or a professional project, or a specific individual project in a final planning studio.

The following abstracts are from master's theses and projects defended in the 2016/2017 AY. They are available to download from Cal Poly's Kennedy Library at <http://digitalcommons.calpoly.edu/theses>.

#### **A Geospatial Assessment of Social Vulnerability to Sea-Level Rise in Coastal San Luis Obispo.**

*Jesse A. Carpentier*

Assessment of social vulnerability to sea-level rise in the unincorporated coastal area of the County of San Luis Obispo (County) using geospatial and statistical analysis to inform local climate adaptation efforts now required by state legislation. A social vulnerability index was generated at the Census block group level using 32 variables positively correlated with social vulnerability. GIS software was used to map social vulnerability scores and building footprints attributed each block group in the coastal planning area. To provide a preliminary assessment of exposure to sea-level rise hazards, social vulnerability and buildings are overlaid with existing spatial datasets for inundation, bluff erosion, dune erosion, and wetland migration induced by sea-level rise in the year 2100. Implications for existing plans and further research include the incorporation of sea-level rise vulnerability into the general plan (safety, land use, and environmental justice elements in particular), local hazard mitigation plan, and local coastal programs.

<http://digitalcommons.calpoly.edu/theses/1765/>

#### **Ecosystem-Based Management in the Morro Bay Watershed and Estuary.**

*Lucas E. Crandall*

Discussion of the implementation of ecosystem-based management in the Morro Bay watershed and estuary as a solution to problems associated with human interaction with the natural environment. The theory behind ecosystem-based management challenges many tenets of existing natural resource management. This thesis finds the concept of ecosystem-based management as favorable despite tradeoffs and impacts of

changing status quo. The preliminary research question asked if key criteria of ecosystem-based management were integrated into existing management plans of institutions such as the Coastal San Luis Resource Conservation District, Morro Bay National Estuary Program, and the San Luis Obispo Science and Ecosystem Alliance. Survey and interviews were used to assess inconsistencies between management plan goals and on-the-ground implementation in the Morro Bay ecosystem. The results were used to incorporate tenets of ecosystem-based management into the Coastal San Luis Resource Conservation District's five-year and annual strategic plan update.

<http://digitalcommons.calpoly.edu/theses/1723/>

*The following are projects developed in the final planning studio; Spring Quarter 2016/2017AY. Most result from policy recommendations from the general plan that the class developed in CRP 552/554 Planning Studio (Fall 2016 & Winter 2017).*

#### **Transfer of Development Rights: Analyzing alternatives for conserving agriculture and open space to keep the small-town feel for Leemore.**

*Noe Contreras*

An analysis of the feasibility of a transfer of development rights (TDR) program as an additional tool to support the permanent conservation of agriculture and open spaces in City of Lemoore. Which location might be best suited if TDR is a planning tool? Analyzing alternatives for conserving agriculture and open space to keep the small-town character, several TDR sites are identified as "receivers and senders. Criteria for choosing the sites include improving downtown development, location near major employment areas, and conservation of agriculture and open space.

#### **Leemore Water Management Plan Update.**

*Shane Mahoney-Barnett*

This report was prepared in order to assist Lemoore in future

development of an Urban Water Management Plan. The report describes the City's water supply, infrastructure, and some design and policy solutions in order to better conserve water.

### **City of Lemoore Farmers Market Feasibility Study.**

*Justin Guan*

The City of Lemoore Farmers' Market Feasibility Study explores city potential to support a community farmers' market. It provides an approach to defining the demand for a market through analysis of select indicators, delineates the size and scope of the market according to projected demand, and, if deemed a prosperous venture, suggests factors to consider in determining how the market should be organized and where it should be located for optimal success.

### **City of Lemoore Downtown Revitalization Plan**

*Kimia Kiani*

The City of Lemoore Downtown Revitalization Plan focuses on D Street to identify development opportunities which can create a vital main street for the City. The goal is to serve residents and tourists with attractive places to gather, recreate, and shop. The Plan includes site analysis of the focused area to identify potential sites for development, comparable case studies, goals and programs, design guidelines, a proposed concept map and implementation strategies to improve the vitality and local economy of D street.

### **Man-Made Hazard Amendment to the 2013 Kings County Multi-Jurisdiction Local Hazard Mitigation Plan for the City of Lemoore.**

*Caitlin Miller*

Requested by the City of Lemoore, this is an amendment to the 2012 Kings County Multi-Jurisdiction Local Hazard Mitigation Plan that focuses on decreasing vulnerability to both natural and man-made hazards specific to Lemoore. This plan includes an analysis of man-made hazards, risk assessment, and mitigation actions with input from a public community-wide survey.

### **Strategies for Diversification of Housing in the City of Lemoore**

*Caitlin Milich*

This report analyzes current demographic trends and future population projections in the City of Lemoore to ensure there is adequate housing for future decades. The document takes information outlined in the current County of Kings Housing Element as well as the 2040 General Plan Update and develops innovative strategies for improving on and expanding existing housing stock to meet future demand.

### **Lemoore Strategic Parks Plan.**

*Aaron Peth*

The Lemoore Strategic Parks Plan (LSPP) provides guidance for the development of future park space in Lemoore. The LSPP presents three unique park types that should be prioritized for Lemoore to meet the current and future needs of the City's residents: pocket parks, a wetlands park, and a canal linear park.

### **The Lemoore Bikeway Master Plan.**

*Benjamin C. Rady*

This plan provides improvements to bicycle infrastructure development for the City of Lemoore. It includes an exploration of existing conditions and describes performance measures that are also described to monitor the city's progress. This plan is guided by goals and policies for facility design safety, education and enforcement, and implementation and funding.

### **Urban Agriculture Strategies for Lemoore.**

*Ryan Russell*

Urban agriculture is becoming more recognized as an important solution to a variety of health, environmental, and economic issues that are arising in cities globally. This report analyzes existing conditions in Lemoore, the various methods of urban agriculture, and implementation tools. From these, strategies specific to Lemoore are recommended.

### **Lemoore Economic Development Strategic Plan.**

*Allison Rustick*

This Economic Development Specific Plan is intended to provide guidance for future economic development in the City of Lemoore. The Strategic Initiatives seek to focus on priorities identified as the following Initiatives: Safe and Vibrant Community, Growing and Dynamic Economy, Fiscally Sound Government, Operational Excellence, and Community and Neighborhood Livability.

### **2040 Annexation Plan, City of Lemoore, CA.**

*Carol Ziesenhenn*

A factual analysis of annexation feasibility for unincorporated parcels to the North of Lemoore's city boundary. This project features a summary of procedural considerations for annexation, as well as recommendations for the City. Two annexation alternatives are presented that most closely support the long-term vision of the General Plan Update.