

# **YOLO COUNTY INTEGRATED REGIONAL WATER MANAGEMENT PLAN**

## **Background Data and Information Appendix**

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## **CHAPTER 1. OVERVIEW OF IRWMP EFFORT**

### **1.1 BACKGROUND AND PURPOSE**

In March of 2001, the Yolo County Water Resources Association (WRA) and the California Department of Water Resources (DWR) agreed to “cooperatively plan an integrated resources management program identifying potentially feasible opportunities, initiatives, programs, or projects to improve water supply reliability in Yolo County.” As a result of this agreement - - formalized in a Memorandum of Understanding (MOU) - - the DWR and the WRA committed to completing a countywide integrated regional water management plan (IRWMP).<sup>1</sup>

The IRWMP will update the county’s 1992 water management plan. The IRWMP also will explore opportunities for cooperative action, serve as a countywide forum to identify and address concerns related to water supply and drought preparedness, water quality, storm drainage and flood control, aquatic and riparian ecosystem enhancement, and recreation and help provide a framework under which local water management policies, projects, and programs can be formulated, evaluated, and implemented. Local agencies and stakeholders in Yolo County have been working together with DWR to complete this plan.

### **1.2 IRWMP APPROACH**

The IRWMP is not the first effort in Yolo County to develop a countywide water management plan. Early countywide planning efforts began over 20 years ago with the completion of the Yolo County Water Plan adopted by the County Board of Supervisors in 1984. This plan was

succeeded in 1992 by an updated plan, also adopted by the County Board of Supervisors, that led to the formation of the WRA. The IRWMP builds upon these previous efforts and compliments other local water management planning efforts that have been or are being completed by local agencies within Yolo County. The IRWMP describes water resources associated with this region. The origins of many water resources associated with Yolo County originate outside of this region. These traits are addressed in the IRWMP as well.

When completed the IRWMP will address both the physical and technical underpinnings of the occurrence and delivery of water in Yolo County - - the physiography of the county's watersheds, the hydrology, geology and hydrogeology of the county, water storage and delivery infrastructure, land use and water demands, water quality, and pertinent legal issues related to water resources - - and the present and possible future policies, programs, and projects that allow for the efficient distribution, use, protection and possible enhancement of water resources in Yolo County. To accomplish these goals, the IRWMP is being developed in two phases. The first phase focuses on the collection of technical information, leading to a better and more common understanding of the county's water resources issues and concerns. The second phase uses this greater understanding to more effectively propose, formulate, and evaluate potential policies, programs, and projects that are needed to address these issues and concerns. The document described herein and entitled *Background Data and Information Appendix* represents the completion of the first phase of the IRWMP. The WRA recognizes that this appendix does not include all the information and data needed to evaluate potential solutions and will gather

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<sup>1</sup> The Conjunctive Water Management Branch (CWMB) of the DWR Division of Planning and Local Assistance initiated the process that resulted in the MOU with the WRA. The mission of the CWMB is to assist local agencies with improving regional water supply reliability through planned, coordinated use of surface water and groundwater.

additional information needed to analyze issues further and to formulate solutions that address these issues.

The subsequent phases of the IRWMP will address the five water/resource management areas described previously. The WRA views public involvement and outreach as an essential element of the process to complete the IRWMP because implementation of the IRWMP by its member agencies will require widespread community support. Accordingly, the WRA Technical Committee will conduct a public process and a public outreach effort. Based upon information obtained through the public process and additional research, the WRA Technical Committee will identify high priority issues and opportunities in each of the five areas.

### **1.3 BACKGROUND DATA AND INFORMATION APPENDIX**

The Background Data and Information Appendix of the Yolo County IRWMP provides information about the physical, institutional, and legal aspects of water management in Yolo County, including the management of water for agricultural, municipal, and environmental purposes. The appendix uses background information and data from existing reports, studies, programs, investigations, and planning efforts.

The main topics covered in the appendix include:

- Overview of IRWMP Effort (Chapter 1)
- Geology, Hydrogeology, and Groundwater in Yolo County and Vicinity (Chapter 2)
- Soils of Yolo County (Chapter 3)
- Hydrology of Yolo County (Chapter 4)

- Land Use, Water Use, and Water Supplies of Yolo County (Chapter 5)
- Environmental Water Resources of Yolo County
- California Water Rights Pertaining to Water Resource Management in Yolo County (Appendix A of Chapter 5)

A brief overview of each chapter is provided below.

### ***1.3.1 Chapter 1: Overview of IRWMP Effort***

Chapter 1 provides background information about the IRWMP. It also describes the approach to completing the Background Data and Information Appendix, its organization, and plans for completing the IRWMP.

### ***1.3.2 Chapter 2: Geology, Hydrogeology, and Groundwater in Yolo County and Vicinity***

This chapter presents the geology and hydrogeology of the Yolo County area. The geologic history is presented, providing an understanding of the geological environment and how it has influenced the formation of aquifers in the area today. Hydrogeologic and groundwater quality information are presented on geology and the delineation of groundwater subbasins.

### ***1.3.3 Chapter 3: Soils of Yolo County***

This chapter presents soils found within Yolo County and their characteristics. Most of the information provided is derived from the soil survey of Yolo County conducted by the Natural Resources Conservation Service (NRCS).

#### ***1.3.4 Chapter 4: Hydrology of Yolo County***

This chapter provides a general understanding of the surface water resources within or potentially available to Yolo County to facilitate formulating programs and projects that, if implemented, can help meet and sustain the water needs of Yolo County.

#### ***1.3.5 Chapter 5: Land Use, Water Use, and Water and Supplies of Yolo County***

This chapter addresses land use, water use, and water supplies in Yolo County. The chapter presents a countywide land use summary, countywide water use summary, a description of water management, and water use and supply characteristics of various water-related administrative bodies.

#### ***1.3.6 Chapter 6: Environmental Water Resources of Yolo County***

Yolo County's water resources benefit a variety of plant, fish, and wildlife species, from cottonwoods clustering along creeks to Chinook salmon migrating from the Delta in search of spawning habitat. This Chapter describes these benefits to aquatic ecosystems, while recognizing that Yolo County's water resources are also used for agricultural, municipal, and recreational purposes. The term "environmental water resources" is used in this Chapter to describe water

resources that benefit aquatic ecosystems, although these same water resources may also benefit farmers, businesses, homeowners, and kayakers.

### ***1.3.7 Appendix A: California Water Rights Pertaining to Water Resource Management in Yolo County***

This appendix presents a brief overview of water law, rights, and institutional frameworks, under which surface water and groundwater resources are managed, and highlights these elements for water-related administrative bodies in Yolo County.

## **1.4 COMPLETION OF THE IRWMP**

Yolo County interests generally agree that water/resource management programs, policies, and projects need to be developed to address water supply and drought preparedness, water quality, storm drainage and flood control, aquatic and riparian ecosystem enhancement, and recreation . The Background Data and Information Appendix will serve as a primary source of information during the completion of the IRWMP. Completion of the IRWMP will provide an opportunity to identify potential agency collaboration. It will require considerable stakeholder input to help accomplish these objectives.

For the IRWMP to be successful, voluntary cooperation among agencies and other interested parties involved with Yolo County water management issues is required, including technical and legal experts, decision and policy makers, stakeholders, and other key members of the public. Forums such as the WRA exist (within the county) for collaboration. Through these forums and other coordinated activities, stakeholders and the WRA can complete the IRWMP, setting the

stage for moving forward with eventual implementation of policies, programs, and projects that are recommended for the benefit of Yolo County interests.

The scope of work anticipated for the completion of the IRWMP has been developed. There are key factors that are considered important for completing this plan and other coordinated regional efforts in Yolo County. These factors, based largely on observations made during the preparation of the Background Data and Information Appendix, are preliminary and will be further reviewed, revised, and expanded as efforts to complete the IRWMP move forward. Input from Yolo County interests will be critical during these initial efforts to ensure success of the IRWMP. The preliminary list of factors is listed below.

- **Regional Framework:** The IRWMP should explore ways that Yolo County agencies and other interested parties can more easily collaborate on projects and programs of mutual interests. Such efforts might achieve water supply reliability-related goals and objectives and resolve other water-related issues more effectively than are possible if individual entities work alone. Collaboration may also open up new partnership opportunities with regional, state, and federal agencies, as well as identify new sources of funding. A clear and deliberate regional coordination, as demonstrated by a Yolo County IRWMP, enables the County to qualify for significant funding through the state's Integrated Regional Water Management grant program, passed as voter initiative Proposition 50.

There are other benefits to establishing a collaboration in conjunction with the IRWMP, including providing an opportunity to better define the manner in which WRA member agencies, as well as other agencies in Yolo County, might serve and benefit the IRWMP.

The IRWMP might also serve as a base document for regional policy development. For

instance, the IRWMP could provide a framework under which local agencies comply with State Senate Bill (SB) 1938 requirements.

- **Develop and Assess Water Management Options:** Agencies and interested stakeholders must consider options for addressing the water resources issues and concerns that face Yolo County stakeholders. Some local agencies already have amassed a number of potential projects and programs and continue to plan others that could improve the management of water resources in the County. The merits of these projects with regards to their ability to help address countywide interests such as water quality, improved water supply reliability, environmental restoration, recreation, and protection of the overall health of watersheds should be evaluated. This evaluation can reveal whether projects have mutual benefits. Opportunities to combine similar efforts leading towards broader collaboration will also be explored.
- **Valuing Local and Regional Benefits:** A major challenge of the IRWMP is placing regional opportunities in context with ongoing efforts of individual agencies. To successfully implement programs and projects that target regional benefits, balance must be achieved between individual agency values and the value of these regional actions. Efforts to identify this balance will be considered during completion of the IRWMP.
- **Public Involvement and Outreach:** Advancing the management of water resources requires the coordinated effort of water purveyors, political jurisdictions, and other interested stakeholders. Success also requires keeping these and other stakeholders informed through public outreach and public involvement efforts. During the completion of the IRWMP efforts will be made to coordinate with ongoing stakeholder and public outreach activities and to ensure adequate public involvement.

- **Funding Strategy:** Yolo County interests acknowledge that outside funding and assistance from DWR and related grant programs has been critical to the success of recent regional water management planning efforts in Yolo County. To advance these regional efforts a review of potential funding options is needed and a strategy for pursuing them. For example, Proposition 50 funding will be made available in early 2005 and again in 2007 and could be a key source of financial support. Other funding sources also exist and must be addressed as part of this strategy.

This preliminary list is not intended to be comprehensive. It is a suggested list of factors that has direct influence on how the IRWMP is completed. This preliminary list needs to be carefully reviewed and discussed further by water resources stakeholders of Yolo County.