Yuba County Integrated Regional Water Management Plan

Submitted to:
Yuba County IRWM Plan Water Management Group

Date: February 2008
Project No: 054310
# Table of Contents

## Abbreviations and Acronyms

## Executive Summary

### Introduction

1.1 Introduction

1.2 Purpose and Need of Yuba County IRWM Plan

1.3 Participating Agencies
  1.3.1 Regional Agency
  1.3.2 Regional Water Management Group

1.4 Related Regional Water Management Activities
  1.4.1 Sacramento Valley Integrated Regional Water Management Plan
  1.4.2 Cosumnes, American, Bear, Yuba IRWMP

1.5 Planning Horizon

1.6 Organization of the Report

1.7 Guide to How the Yuba County IRWM Plan Meets the State Standards

### Description of the Region

2.1 Plan Area
  2.1.1 Valley Floor Area
  2.1.2 Foothill and Mountain Areas
  2.1.3 Appropriateness for Yuba County IRWM Plan
  2.1.4 Economic Conditions and Trends, Disadvantaged Communities, and Cultural Makeup
  2.1.5 Ecological and Environmental Considerations

2.2 Planning Subareas

2.3 Water and Land Management Agencies
  2.3.1 Yuba County Water Agency
  2.3.2 Browns Valley Irrigation District
  2.3.3 Ramirez Water District
  2.3.4 Cordua Irrigation District
  2.3.5 Hallwood Irrigation Company
  2.3.6 Brophy Water District
  2.3.7 South Yuba Water District
  2.3.8 Dry Creek Mutual Water Company
3 Stakeholder Involvement/Public Outreach and Plan Adoption 3-1
3.1 Stakeholder Involvement 3-1
3.1.1 Regional Water Management Group 3-2
3.1.2 Coordination with State and Federal Agencies 3-3
3.2 Public Outreach 3-5
3.3 Plan Preparation 3-6
3.4 Public Hearings, Meetings, and Process for Adoption 3-7

4 Water Resources Setting and Management Issues 4-1
4.1 Surface Water Resources 4-1
4.1.1 Yuba River 4-2
4.1.1.1 Yuba River Surface Water Facilities 4-3
4.1.1.2 Yuba River Water Supply and Fisheries Operations 4-7
4.1.1.3 Yuba River Water Supplies 4-7
4.1.1.4 YCWA Water Rights 4-8
4.1.1.5 YCWA Member Units Water Contracts 4-8
4.1.2 Other Rivers in Yuba County 4-9
4.1.2.1 Feather River and Lake Oroville 4-10
4.1.2.2 Honcut Creek 4-10
4.1.2.3 Bear River 4-10
4.1.3 History of Yuba County Floods 4-11
4.1.3.1 Yuba and Feather Levees 4-13
4.1.3.2 Flood Channel Capacities 4-15
Table of Contents

4.2 Groundwater Resources 4-16
4.2.1 Alluvial Groundwater Basins 4-17
   4.2.1.1 2004 Groundwater Levels and Flow Direction 4-18
   4.2.1.2 Groundwater Level Trends 4-20
   4.2.1.3 Groundwater Storage 4-20
   4.2.1.4 Groundwater Quality 4-21
4.2.2 Foothill and Mountain Area Groundwater Resources 4-22
4.3 Water Demands, Supplies, and Budget 4-22
4.3.1 Land Use Analysis Methodology 4-23
4.3.2 Land Use Conditions 4-24
   4.3.2.1 Existing Land Use Conditions (2005) 4-24
   4.3.2.2 Near-Term Future Land Use Conditions (2015) 4-25
   4.3.2.3 Buildout 2030 Land Use Conditions 4-27
4.3.3 Water Use Conditions 4-28
   4.3.3.1 Existing Water Use Conditions 4-28
4.3.4 Future Water Use Conditions (2015) 4-30
   4.3.4.1 Agricultural Water Uses 4-31
   4.3.4.2 Urban Water Uses 4-31
4.3.5 Change in Water Use Conditions (2015 less 2005) 4-31
4.3.6 Buildout 2030 Water Use Conditions 4-33
   4.3.6.1 Agricultural Water Use 4-33
   4.3.6.2 Urban Water Use 4-33
4.4 Regional Water Management Issues 4-33
4.4.1 Flood Management Issues 4-34
   4.4.1.1 Local Flood Management Activities 4-35
   4.4.1.2 Integration with Regional and State Efforts 4-41
4.4.2 Water Supply Reliability Issues 4-44
   4.4.2.1 Proposed Lower Yuba River Accord 4-45
4.4.3 Ecosystem Preservation and Enhancement 4-47
   4.4.3.1 Fishery and Riparian Resources 4-48
   4.4.3.2 Habitats, Vegetation, Wetlands, and Wildlife 4-51
   4.4.3.3 Other Foundational Planning Efforts 4-52
4.4.4 Public Access and Recreation 4-55
   4.4.4.1 Existing Yuba River Recreational Facilities 4-55
   4.4.4.2 Existing Bear River Recreational Facilities 4-59
   4.4.4.3 Existing Feather River Recreational Facilities 4-59
   4.4.4.4 Agencies with Recreation and Public Access
      Management Responsibilities 4-60
5 IRWM Plan Goals, Objectives, and Priorities 5-1
5.1 Process of Determination of Goals and Objectives 5-1
5.2 Goals and Objectives

5.2.1 Flood Management Goals and Objectives

5.2.1.1 Flood Management Goals

5.2.1.2 Flood Management Objectives

5.2.2 Water Supply Reliability Goals and Objectives

5.2.2.1 Water Supply Reliability Goal

5.2.2.2 Water Supply Reliability Objectives

5.2.3 Groundwater Management Objective

5.2.3.1 Groundwater Management Goal

5.2.3.2 Groundwater Management Objectives

5.2.4 Water Quality Protection and Improvement Goals and Objectives

5.2.4.1 Water Quality Goal

5.2.4.2 Water Quality Improvement Objectives

5.2.5 Ecosystem Restoration Objective

5.2.5.1 Ecosystem Restoration Goal

5.2.5.2 Ecosystem Restoration Objectives

5.2.6 Recreation and Public Access Objective

5.2.6.1 Recreation and Public Access Goal

5.2.6.2 Recreation and Public Access Objectives

5.3 Statewide Objectives and Priorities

5.4 Regional Priorities

Primary Priorities

Secondary Priorities

6 Assessment of Water Management Strategies

6.1 Flood Management Strategy

6.1.1 Flood Management Strategy Approach

6.1.2 Yuba County Flood Management Strategies

6.1.2.1 Strategy 1 – Levee Improvement

6.1.2.2 Strategy 2 – Upstream Flood Control

6.1.2.3 Strategy 3 – Non-Structural Flood Management

6.1.2.4 Strategy 4 - Stormwater Management

6.1.3 Flood Management Projects

6.2 Water Supply Reliability Strategy

6.2.1 Water Supply Reliability Strategy Approach

6.2.2 Yuba County IRWM Plan Water Supply Reliability Management Strategy

6.2.2.1 Strategy 1 - Implement Proposed Lower Yuba River Accord

6.2.2.2 Strategy 2 – Groundwater Management/Conjunctive Use Strategy

iv
6.2.2.3 Strategy 3 – Water Conservation Strategy 6-26
6.2.2.4 Strategy 4 – Support Self-Reliance for Rural and Isolated Communities 6-28
6.2.3 Water Supply Reliability Projects 6-28
6.3 Water Recycling and Reuse Strategy 6-29
6.3.1 Water Recycling and Reuse Strategy Approach 6-29
6.3.2 Yuba-Sutter Regional Recycled Water Facilities Master Plan - (May 2007) 6-30
   6.3.2.1 Yuba City 6-33
   6.3.2.2 City of Marysville 6-33
   6.3.2.3 Linda County Water District 6-34
   6.3.2.4 Olivehurst Public Utility District 6-36
6.3.3 Yuba County IRWM Plan Water Recycling Strategy Approach 6-36
   6.3.3.1 Water Recycling Goals and Objectives 6-36
   6.3.3.2 Water Recycling Regulatory Requirements 6-37
   6.3.3.3 Ranking and Prioritizing Water Recycling Projects 6-39
6.4 Water Quality Improvement Strategy 6-43
6.4.1 Water Quality Improvement Strategy Approach 6-43
6.4.2 Water Quality Improvement Strategy 6-44
   6.4.2.1 Strategy 1 – Improve Surface Water Quality 6-45
   6.4.2.2 Strategy 2 – Improve Groundwater Quality 6-46
   6.4.2.3 Strategy 3 – Water Quality Monitoring 6-46
6.4.3 Water Quality Improvement Projects 6-47
6.5 Ecosystem Restoration Strategy 6-47
6.5.1 Ecosystem Restoration Strategy and Approach 6-47
6.5.2 Ecosystem Restoration Strategy 6-48
   6.5.2.1 Strategy 1 - Proposed Lower Yuba River Accord Implementation Fishery Actions 6-48
   6.5.2.2 Strategy 2 – Promote multipurpose projects to improve flood management and ecosystem restoration 6-51
   6.5.2.3 Strategy 3- Streamline environmental compliance and permitting 6-52
6.5.3 Ecosystems Restoration Projects and Related Actions 6-52
6.6 Recreation and Public Access Strategy 6-53
6.6.1 Yuba County IRWM Plan Recreation and Public Access Approach 6-53
6.6.2 Yuba County Recreation and Public Access Strategy 6-53
6.6.3 Recreation and Public Access Projects 6-54
6.7 Integration of State and Local Management Strategies 6-54
6.8 Other Projects 6-58
6.9 Integration of Water Management Strategies 6-59
7 Plan Implementation

7.1 Project Evaluation and Prioritization
7.1.1 Project Rating System
7.1.1.1 Step 1 – Determination of Project Readiness
7.1.1.2 Step 2 - Project Prioritization and Implementation
7.1.1.3 Project Implementation Approach

7.2 IRWM Plan Implementation Responsibility
7.2.1 Obstacles to Implementation
7.2.2 Periodic Review and Update of the IRWM Plan

7.3 Yuba County IRWM Plan Project Financing
7.3.1 State Grant Funding
7.3.2 Federal Funding
7.3.3 Local Agency Funding

7.4 Project Funding Opportunities
7.4.1 IRWM Plan Project Funding Opportunities
7.4.2 Non-IRWM Plan Project Funding Opportunities
7.4.3 Funding Roles and Responsibilities

7.5 IRWM Plan Impacts and Benefits
7.5.1 IRWM Plan Benefits
7.5.2 IRWM Plan Impacts

7.6 Recommendations

7.7 Plan Implementation Schedule
7.7.1 Projects Ready to Proceed
7.7.2 Projects Not ‘Ready to Proceed’
7.7.2.1 High-Priority Projects
7.7.2.2 Low-Priority Projects

8 Technical Analysis, Data Management and Monitoring, and Plan Performance

8.1 Use of Available Information to Develop IRWM Plan
8.1.1 Existing Information and Reports
8.1.2 Technical Analysis to Develop IRWM Plan and Projects

8.2 Data Management and Monitoring
8.2.1 Existing Monitoring Programs
8.2.1.1 Groundwater Monitoring
8.2.1.2 Water Quality Monitoring
8.2.2 Data Gaps/ Additional Monitoring Requirements
8.2.3 Data Dissemination to Stakeholders and Public

8.3 Evaluation of Yuba County IRWM Plan Performance

8.4 Project Performance Evaluation

9 References

References
Appendix A  Meeting Announcements  A-1
Appendix B  Regional Water Management Group Letters  B-1
Appendix C  Project Descriptions  C-1
Appendix D  Resolutions of Adoption  D-1

List of Tables

Table 1-1  YCWA IRWM Plan and State IRWM Plan Standards  1-10
Table 4-1  Yuba County Water Agency Contract Amounts (AF per year)  4-9
Table 4-2  Yuba County Water Agency Water Supply Contract Deficiency Provisions  4-9
Table 4-3  Summary of Major Floods on the Yuba and Feather Rivers  4-12
Table 4-4  Corps of Engineers Flood System Design Flows  4-16
Table 4-5  Land Use Conditions  4-25
Table 4-6  Existing Conditions (2005) Water Use  4-29
Table 4-7  Future Conditions (2015) Water Use  4-30
Table 4-8  Projected Change in Water Use from 2005 to 2015  4-31
Table 4-9  Current and Projected Water Use (2015 less 2005)  4-32
Table 6-1  Flood and Stormwater Management Project Summary Table  6-22
Table 6-2  Water Supply Reliability Project Summary Table  6-29
Table 6-3  Permitted Uses of Recycled Water  6-38
Table 6-4  Alternative Recycled Water Projects  6-40
Table 6-5  Sutter Yuba Regional Recycled Water Sub-Projects for Phase One Implementation  6-42
Table 6-6  Water Recycling Project Summary Table  6-43
Table 6-7  Water Quality Project Summary Table  6-47
Table 6-8  Interim Instream Flow Requirements for the Lower Yuba River Included in Revised Decision 1644  6-50
Table 6-9  Minimum Flow Requirements for the Feather River  6-51
Table 6-10  Ecosystem Management Project Summary Table  6-53
Table 6-11  Recreation and Public Access Project Summary Table  6-54
Table 6-12  Yuba County IRWM Plan Integration of State and Local Program Strategies  6-56
Table 6-13  Other Projects Summary Table  6-58
Table 6-14  Integration of Water Management Strategies  6-60
Table 7-2  Yuba County and California Median Household Incomes  7-18
Table 8-1 - Representative List of Monitoring Efforts for Evaluating Project Performance

List of Figures

Figure 1-1 Yuba County IRWM Plan Planning Schematic 1-3
Figure 2-1 Plan Area 2-2
Figure 2-2 Disadvantaged Areas within Yuba County 2-5
Figure 2-3 Water Management Subareas 2-8
Figure 2-4 Plan Area and Water Management Agencies 2-10
Figure 2-5 Land Use by Water District 2-13
Figure 4-1 Principal Drainage Basins 4-2
Figure 4-2 Water Development Facilities 4-4
Figure 4-3 Recent Flooding in Yuba County 4-13
Figure 4-4 Status of Project Levees 4-15
Figure 4-5 Groundwater Resources in Plan Area 4-17
Figure 4-6 Spring 2004 Groundwater Elevations in the Yuba Basin 4-19
Figure 4-7 Current Water Supply Mix in Plan Area 4-26
Figure 6-1 Project Locations 6-12
Figure 7-1 Project Evaluation and Prioritization Process 7-3
## Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AWMP</td>
<td>Agricultural Water Management Plan</td>
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<td>Basin Management Objectives</td>
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<td>best management practices</td>
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<td>Biological Opinions</td>
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<td>CABY</td>
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<td>CDFG</td>
<td>California Department of Fish and Game</td>
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<td>cfs</td>
<td>cubic feet per second</td>
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<td>Corps</td>
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<td>CVHJV</td>
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<td>efficient water management practices</td>
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<td>F-CO</td>
<td>Forecast-Coordinated Operations</td>
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<td>FEIR</td>
<td>Final Environmental Impact Report</td>
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<td>Federal Emergency Management Agency</td>
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<td>GAMA</td>
<td>Groundwater Ambient Monitoring Assessment</td>
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<td>LCWD</td>
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<td>M&amp;I</td>
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<td>MCL</td>
<td>maximum contaminant level</td>
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<td>million gallons per day</td>
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<td>PAEP</td>
<td>Performance Assessment and Evaluation Plan</td>
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<td>RCP</td>
<td>reinforced concrete pipe</td>
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<td>regional flood management plan</td>
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<td>RWQCB</td>
<td>California Regional Water Quality Control Board</td>
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<td>SCADA</td>
<td>Supervisory Control and Data Acquisition</td>
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<td>sphere of influence</td>
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<td>TRLIA</td>
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<td>TTU</td>
<td>tertiary treatment unit</td>
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Executive Summary

For more than a decade, water agencies within Yuba County have worked together to improve water management in the region by addressing local issues such as providing flood protection to protect lives and property, and providing reliable water supplies to meet agricultural and urban water needs while protecting the fisheries and riparian resources of the Yuba River.

In 2005, local agencies and stakeholders in Yuba County met and agreed to develop an Integrated Regional Water Management Plan (IRWM Plan). The IRWM Plan would address local water management issues for the communities within Yuba County on a regional perspective. The goal of the IRWM Plan is to continue to build upon past efforts to capitalize on present and future water management opportunities, including improving flood protection, water supply reliability, and other water resources needs in an environmentally appropriate approach that maximizes the benefits for the citizens of Yuba County.

Development of a comprehensive and coordinated regional water management plan for Yuba County involved the cooperation of many parties interested in water management in the region. Through the stakeholder outreach efforts included during the development of the IRWM Plan, the eight original water agencies that formed the Regional Water Management Group (Management Group) was expanded to 11. Yuba County Water Agency (YCWA) served as the regional lead agency in the coordinated development of the IRWM Plan, including the stakeholder outreach. YCWA also served as the lead agency for the Management Group in the preparation of the Proposition 50 IRWMP Planning Grant Application, which funded the preparation of the Yuba County IRWM Plan. The members of the Management Group include:

- Yuba County Water Agency (Lead Agency)
- Reclamation District 784
- Linda County Water District
- Brown’s Valley Irrigation District
- City of Marysville
- Olivehurst Public Utility District
Yuba County

North Yuba Water District (formerly Yuba County Water District)

Yuba City

City of Wheatland

Yuba County Resource Conservation District

**Integrated Regional Water Management Plan Area**

The Yuba County IRWM Plan area includes the valley floor area and the foothill/mountain areas of the county, which face a variety of water management challenges resulting from natural and man-made conditions. Much of the Plan Area has been identified as disadvantaged, which presents additional challenges regarding the funding and implementation of projects and programs.

- The valley floor portion of the county overlies the alluvial aquifer system of the Sacramento Valley. Good soils and access to surface and groundwater supplies have developed and supported the agricultural economy of the region. Recent increases in urbanization have resulted in changes in water supply requirements and supply sources.

- In contrast, the foothill/mountain areas have a much less intensive agricultural and urban development. Water supply availability and reliability is one of the primary issues because of the lack of groundwater and difficulty moving water from the rivers to the areas of use across the rugged terrain.

Households in much of the Plan Area have a low annual income and have been identified as disadvantaged by the State. Historically, the low population base and limited financial resources have presented challenges to the area to fund and implement water management projects and programs.

Much of the region’s present and future population growth is expected to occur on the valley floor area, where many of the low lying areas are at risk of regional flooding from the Yuba, Feather, or Bear rivers or of local flooding from stormwater runoff.

The changes in land use patterns and the associated changes in water use and supply source, changes in regulatory requirements, and hydrologic uncertainty have resulted in the need for improved surface water and groundwater supply reliability for agricultural and urban water users.
The concentration of the urban areas adjacent to the rivers has led to the investigation of recycled water opportunities in the Sutter-Yuba region. These opportunities extend beyond Yuba County to the west across the Feather River to include Yuba City. As a result, the IRWM Plan Area is expanded to include the Yuba City sphere of influence to identify water recycling opportunities.

**Developing the IRWM Plan**

From the beginning, the RWMG encouraged all stakeholders and interested parties to participate in the development of the Yuba County IRWM Plan. The Plan will be used by the Management Group and by the individual local agencies to provide guidance on water management planning and support the implementation of projects and programs that improve water management in the Plan Area. Public participation will continue to be encouraged and promoted, and will be an essential part of the implementation of projects and refinement of the IRWM Plan.

Many of the water management issues in the region have been identified and described through the prior work completed by the local agencies. These efforts developed the foundational documents for the region and were relied on by the Management Group during the development of the IRWM Plan to identify the most pressing issues and support the development of solutions. Some of these foundational efforts include:

- Preparation and adoption of the Yuba County Groundwater Management Plan.
- Preparation of the technical documents in support of the Proposed Lower Yuba River Accord EIR/EIS.
- Completion of the Yuba-Feather Supplemental Flood Protection Project and supporting documentation.
- Formation of the Three River Levee Improvement Authority and implementation of levee improvements along the Bear, Feather, and Yuba rivers.
- Preparation and adoption of urban water management plans.
- Completion of specific plan amendments and general plan updates.

One of the first steps of the IRWM Plan included identifying the most important water management issues in the Plan Area and formulating the water management objectives for the region, which provide the overarching statements that define the desired outcome from implementation of the Plan. The Management Group identified the following as the most important water resources issues to the region:
Yuba County Integrated Regional Water Management Plan

- Providing local flood protection and regional flood management
- Improving water supply reliability for all water uses
- Providing groundwater management to protect and utilize the groundwater resources in a sustainable manner
- Protecting the fishery and riparian resources of the Yuba River
- Protecting and improving water quality
- Expanding recreation and public access opportunities along water features in Yuba County
- Expanding water recycling and reuse opportunities

**Water Management Strategies**

A wide range of water management strategies are identified in the IRWMP Guidelines. Some of these strategies overlap with the resources management strategies included in the California Department of Water Resources Water Plan Update 2005.

The Management Group used these lists of water management strategies to be responsive to the IRWMP Guidelines, evaluate the comprehensive list of potential strategies, and guide the development of strategies that address the most pressing water management issues in the Plan Area. The Management Group identified the following as the most important strategies:

- Flood Management
- Water Supply Reliability
- Water Quality Protection and Improvement
- Ecosystem Restoration
- Water Recycling and Reuse
- Recreation and Public Access

The complex and integrated nature of water resources in the county is reflected in the relationships between water management issues and requires integration of these strategies to meet the differing needs in a cost-effective manner. In addition, strategies
need to be prioritized to address the most pressing issues such as public safety. During the development of the IRWM Plan, over 65 projects were identified by the individual project proponents that support the implementation of these strategies. These projects were evaluated, screened, and prioritized by the Management Group to guide the order of implementation.

**Plan Adoption and Implementation**

Following a public review of the Draft Plan, the Management Group adopted the Yuba County IRWM Plan in February 2008. This was followed by adoption of the Plan by the individual members of the Management Group.

The Management Group plans to utilize an adaptive management approach to maintain and update the Plan, and project prioritization to keep them current with changing conditions in the Region. This will include periodic review of the water management strategies and preparation of periodic updates of the Plan.