

Chapter 12 Goals, Objectives, Issues, and Conflicts

12.0 Introduction

This chapter's purpose is to describe the process by which Plan goals and objectives were developed and their relationship to regional issues and conflicts, mandatory state plans and California Water Code requirements, project development, and performance metrics.

12.1 Building the Foundation for Effective Plan Implementation

Plan objectives form the foundation of the planning process. It is through the development of measurable objectives that the region establishes the intent and capacity to monitor Plan implementation. Plan implementation is then employed through projects that use a diverse set of regionally relevant California Water Plan (CWP) (2009 and 2013) resource management strategies to successfully address the region's identified issues and water-related conflicts. Additionally, the Regional Water Management Group (RWMG) ensures that the region's objectives are consistent and in support of mandatory state plans and Water Code requirements.

12.2 Describing the Process for Determination of Objectives

12.2.1 Addressing Regional Issues and Conflicts

Early in the Yuba County IRWMP Update process, the project team conducted in-person and phone interviews with the complement of stakeholders who had been identified through the stakeholder outreach and engagement process (see Chapter 3 *Stakeholder Involvement*). One of the central objectives of these initial interviews was to identify regional issues and water-related conflicts. Through reviewing the issues and conflicts from the original IRWMP, and by conducting more than two dozen interviews and facilitating discussions at the first and second RWMG meetings, the project team was able to generate a final issues and conflicts list by fall 2013. The project team used the list as the basis for creating draft goals and objectives that directly addressed identified issues and conflicts. **Tables 12-1** and **12-2** represent the issues and conflicts approved by the Yuba RWMG.

Table 12-1. Regionally Identified Issues	
Primary Issues	Associated Problem Statements Each of the following statements is prefaced by “The need to:”
Water Storage	<ul style="list-style-type: none"> Develop new water storage or identify alternatives to new storage that would increase water supply as a result of projected future uncertainties.
Infrastructure	<ul style="list-style-type: none"> Develop new infrastructure as well as repair, replace, and retrofit aging infrastructure to ensure adequate and reliable water supply.
Wastewater Management	<ul style="list-style-type: none"> Improve wastewater management and manage water quality impacts from spills and discharges while addressing the rising costs of operation and regulatory compliance.
Water Use Efficiency/ Water Conservation	<ul style="list-style-type: none"> Promote and implement policies and practices to increase water use efficiency <i>and</i> water conservation in municipal and agricultural sectors.
Groundwater	<ul style="list-style-type: none"> Promote integrated management of groundwater and surface water. Educate the public to protect groundwater resources, especially from contamination and overuse. Understand where groundwater and surface water are connected and where they have been disconnected. Protect groundwater and groundwater-dependent ecosystems, especially to address the projected impacts of climate change.
Flood Management	<ul style="list-style-type: none"> Improve integrated flood management to ensure better emergency preparedness. Increase flood protection and enhance floodplain functions and habitat. Create multi-stakeholder collaboration for flood management to achieve multiple economic, public safety, and ecological benefits.
Water Quality Contamination: Urban and Agricultural Run-off	<ul style="list-style-type: none"> Maintain and improve water quality by mitigating for urban and agricultural runoff.
Sediment Management	<ul style="list-style-type: none"> Manage sedimentation to maintain and/or increase water-holding capacity in reservoirs, and to implement erosion control to prevent contamination in water courses and water management operations.
Recreation	<ul style="list-style-type: none"> Promote and implement comprehensive recreational planning with a focus on regional economic development in the Lower Yuba River and beyond to improve local economies, improve habitat, and reduce human impact and threats to public safety.
Forest Health	<ul style="list-style-type: none"> Promote management policies and practices that protect forests and water supply and quality. Steward healthy forests, employ fire and fuels management, and restore watershed health vulnerable to the impacts of climate change.
Environmental Flows	<ul style="list-style-type: none"> At minimum, maintain quantity, timing, and quality of stream flows required to restore and protect freshwater ecosystems.
Invasive Species	<ul style="list-style-type: none"> Identify and manage for aquatic and terrestrial invasive species and their impacts on water supply infrastructure and watershed health.
Fisheries	<ul style="list-style-type: none"> Recover endangered and threatened fish species, particularly anadromous fish, and restore access to historic habitat wherever feasible.

Primary Issues	Associated Problem Statements Each of the following statements is prefaced by “The need to:”
Land Use and Land Conservation	<ul style="list-style-type: none"> ▪ Address the connection between land use planning and water. ▪ Enhance recreational and economic development opportunities through land conservation efforts. ▪ Protect working landscapes being lost to development, particularly ranch/ag lands, and the watershed benefits they provide.
Legacy Mining Toxins	<ul style="list-style-type: none"> ▪ Address the physical and chemical hazards of abandoned mine lands with a focus on watershed-scale remediation from the most toxic mine tailings.
Regulatory Compliance	<ul style="list-style-type: none"> ▪ Mitigate for the impacts of regulatory compliance on water management decision-making and processes, including increased costs and decreased opportunities for collaboration. ▪ Ensure a regulatory framework allowing for local and regional authority to respond to water and watershed management. ▪ Promote consistent enforcement of environmental protections to achieve the recovery of economically and culturally important species.
Climate Change	<ul style="list-style-type: none"> ▪ Respond to projected climate change impacts on water supply reliability, water quality, public safety, and watershed health, and develop regional and interregional adaptive management strategies.

Table 12-2. Regionally Identified Conflicts	
Issues where a conflict or divergence was identified	Characterization of Conflict/Divergence
Water Storage	<ul style="list-style-type: none"> ▪ Stakeholders differ over whether new storage facilities should be considered for out-of-region water transfers, and whether groundwater storage should be intentionally developed by pumping down existing aquifers.
Fisheries	<ul style="list-style-type: none"> ▪ Stakeholders differ over how and where anadromous fish should be recovered.
Regulatory Compliance	<ul style="list-style-type: none"> ▪ Divergence exists among stakeholders over agency requirements and how to address regulations.

12.2.1.1 Differentiating between Issues and Conflicts

For the purposes of this section, issues are defined as problems or challenges facing water resources and watershed management in the region, identified by stakeholders and confirmed by the RWMG. Conflicts are characterized by prolonged disagreement and/or seemingly divergent, irreconcilable approaches toward addressing or resolving an issue. Therefore, differing opinions, interpretations of available data, and perspectives on the significance of an issue does not inherently make an issue a conflict.

12.2.1.2 The Nature of Existing Regional Conflicts

In the Yuba County IRWM region, the aforementioned conflicts found in **Table 12-2** were not initiated within the IRWMP framework. As further described in Chapters 6 and 7, *Region Description* and *Water Supply*, respectively, conflicts surrounding fisheries and the interrelated conflicts of regulatory compliance and out-of-region water transfers have long been a source of discord in the region. Yet, even amidst protracted litigation and negotiations, diverse groups of stakeholders are engaged in dynamic, ongoing discussion and collaborations to seek solutions or viable compromise. The Lower Yuba River Accord and ongoing collaborative

multi-party processes, such as the River Management Team and the Yuba Salmon Forum, comprise some of these efforts. Disagreement persists over the National Marine Fisheries Service’s Biological Opinion for Yuba River anadromous fisheries.

Stakeholders engaged in these processes are members of the Yuba County IRWM region’s RWMG and have contributed to the identification of issues, conflicts, and goals and objectives for the region. The diversity of stakeholders’ perspectives is reflected in the identified goals and objectives, as illustrated in **Table 12-4**. Further, these stakeholders have submitted projects for IRWMP inclusion that address these conflicts, illustrating an ongoing commitment and willingness by the RWMG to find integrated solutions to the most conflicted issues in the region. For more detailed information about projects, see Chapter 14 *Project Application, Development, and Review*.

12.2.2 Aligning Regional Objectives with Existing Plans, Policies, and Regulations

12.2.2.1 Statewide Priorities

Statewide priorities established for the IRWM Grant Program (as outlined in the IRWM Guidelines) influenced the development of the goals and objectives.¹ By consulting and integrating regionally relevant statewide priorities into the development of goals and objectives, the RWMG was able to confirm alignment of the region’s measurable objectives with Basin Plan objectives, 20x2020 water efficiency and conservation goals, and requirements of the California Water Code Section 10540(c). **Table 12-3** below is taken, in part, from a table found in the IRWM Guidelines. It is inserted in this Plan to demonstrate the clear nexus between statewide priorities, Yuba County IRWM region goals and objectives, and the consistency of the regional goals and objectives with statewide plans, policies, and regulations.

Statewide Priority	Description of Priority Desired Outcomes	Relevant Plans, Policies, and Regulations
Drought Preparedness	<ul style="list-style-type: none"> ▪ Promote water conservation, conjunctive use, reuse, and recycling ▪ Improve landscape and agricultural irrigation efficiencies ▪ Achieve long-term reduction of water use ▪ Efficient groundwater basin management ▪ Establish system inerties 	<ul style="list-style-type: none"> ▪ CWP Update 2009, 2013
Use and Reuse Water More Efficiently	<ul style="list-style-type: none"> ▪ Increase urban and agricultural water use efficiency measures such as conservation and recycling ▪ Capture, store, treat, and use urban storm water runoff ▪ Incorporate and implement low-impact development (LID) design features, techniques, and practices to reduce or eliminate storm water runoff ▪ Improve the water supply reliability of the Sacramento-San Joaquin Delta 	<ul style="list-style-type: none"> ▪ CWP Update 2009, 2013 ▪ SWRCB Recycled Water Policy ▪ DWR Sustainability Policy ▪ SB 790 ▪ Delta Reform Act 2009
Climate Change Response Actions	<ul style="list-style-type: none"> ▪ Assessment of vulnerabilities as a result of climate change ▪ Adaptation to climate change ▪ Reduction of Greenhouse Gas (GHG) Emissions 	<ul style="list-style-type: none"> ▪ CWP Update 2009, 2013 ▪ AB 32 ▪ Managing an Uncertain

¹ The California Natural Resources Agency, Department of Water Resources, Division of Integrated Regional Water Management, Guidelines Integrated Regional Water Management Proposition 84 and 1E, page 12 (November 2012).

Table 12-3. Statewide Priorities for Integrated Regional Water Management

Statewide Priority	Description of Priority Desired Outcomes	Relevant Plans, Policies, and Regulations
Climate Change Response Actions <i>(continued)</i>	<ul style="list-style-type: none"> ▪ Advance and expand conjunctive management of water supply sources ▪ Water management system modifications that address anticipated climate change impacts, such as rising sea level, and which may include modifications or relocations of intakes or outfalls ▪ Establish migration corridors, re-establish river-floodplain hydrologic continuity, reintroduce anadromous fish populations to upper watershed, and enhance and protect upper watershed forests and meadow systems ▪ Reduce energy consumption of water systems and uses ▪ Use cleaner energy sources to move and treat water ▪ Water-use efficiency ▪ Water recycling ▪ Water system energy efficiency ▪ Reuse runoff 	Future, DWR, October 2008
Expand Environmental Stewardship	<ul style="list-style-type: none"> ▪ Practice, promote, improve, and expand environmental stewardship ▪ Protect and enhance the environment by improving watersheds, floodplains, and in-stream functions ▪ Sustain water and flood management ecosystems ▪ Protect, restore, and enhance the Delta ecosystem 	<ul style="list-style-type: none"> ▪ CWP Update 2009, 2013 ▪ DWR Environmental Stewardship Policy ▪ Delta Reform Act 2009
Practice Integrated Flood Management	<p>Promote and practice integrated flood management to provide multiple benefits including:</p> <ul style="list-style-type: none"> ▪ Better emergency preparedness and response ▪ Improved flood protection ▪ More sustainable flood and water management systems ▪ Enhanced floodplain ecosystems ▪ LID techniques that store and infiltrate runoff while protecting groundwater 	<ul style="list-style-type: none"> ▪ CWP Update 2009, 2013
Protect Surface Water and Groundwater	<ul style="list-style-type: none"> ▪ Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses ▪ Salt and nutrient management planning as a component of an IRWMP 	<ul style="list-style-type: none"> ▪ SWRCB Recycled Water Policy
Improve Tribal Water and Natural Resources	<ul style="list-style-type: none"> ▪ The development of Tribal consultation, collaboration, and access to funding for water programs and projects to better sustain Tribal water and natural resources 	<ul style="list-style-type: none"> ▪ CWP Update 2009, 2013
Ensure Equitable Distribution of Benefits	<ul style="list-style-type: none"> ▪ Increase the participation of small and disadvantaged communities (DACs) in the IRWM process ▪ Develop multi-benefit projects with consideration of affected communities and vulnerable populations ▪ Contain projects that address safe drinking water and wastewater treatment needs of DACs ▪ Address critical water supply or water quality needs of California Native American Tribes within the region ▪ Help meet state policies intended to provide access to safe, clean, and affordable water 	<ul style="list-style-type: none"> ▪ CWP Update 2009, 2013 ▪ AB 685

12.2.2.2 Local and Regional Plans

In addition to ensuring consistency with California plans, policies, and regulations, the RWMG also aligned goals and objectives with local and regional planning documents, namely, the Yuba County General Plan (2011), the Yuba County Parks Master Plan (2008), the Yuba County Groundwater Management Plan (2005), the Yuba County Agricultural Water Management Plan (2012), and the Feather River Regional Flood Management Plan (2013 draft). Some of the municipalities in the region are subject to Urban Water Management Plans (UWMPs). The goals and objectives of this IRWMP are also consistent with local UWMPs. See Chapter 10 *Water and Land Use Planning* for further discussion of the IRWMP's relations to relevant local and regional plans.

Further, to ensure alignment of local and regional plans with Plan implementation efforts, the project development process explicitly incorporated the identification of these and other planning documents, assessments, and studies into the determination of project feasibility and as a criterion in the Project Review Criteria. See Chapter 14 *Project Application, Development, and Review* for more information.

12.2.3 Regionally Identified Goals and Objectives

The project team developed draft goals and objectives based on: 1) stakeholder feedback regarding the originally developed goals and objectives found in the Yuba County IRWMP (2008), 2) the approved issues and conflicts list as discussed above, and 3) consistency with local, regional, and statewide plans and regulations, as demonstrated in Section 12.2.2.

Subsequent to the project team's completion of the initial draft, the RWMG reviewed the draft goals and objectives in October 2013, further revising them at the RWMG meeting in January 2014. The goals and objectives were then finalized following a formal stakeholder comment and review period that closed in late February 2014. The final goals and objectives developed by the RWMG through this inclusive, multi-step process are illustrated in **Table 12-4**.

Table 12-4. Regionally Identified Goals and Objectives	
Goal 1: Ensure adequate and reliable water supply that meets the diverse needs of the region	
Objectives	
1.1	Improve water supply system capacity, flexibility, and efficiency, including, but not limited to, optimizing existing water storage, upgrading and retrofitting aging infrastructure, and developing new infrastructure, where necessary
1.2	Promote water conservation and water use efficiency by instituting various techniques including, but not limited to, groundwater recharge, conjunctive management, irrigation efficiencies, municipal water conservation, water recycling and reuse
1.3	Protect and restore water supplies that support watershed health
1.4	Promote disaster preparedness and conservation planning efforts
1.5	Maintain and enhance flood control infrastructure to protect water supplies
1.6	Preserve water supplies that support recreational opportunities, ecosystem services, and agricultural uses
1.7	Support regulatory compliance with current and future state and federal water supply standards
1.8	Promote regional education and outreach regarding water supply issues and needs

<i>Goal 2: Protect, restore, and enhance water quality for water users and in support of healthy watersheds</i>
<i>Objectives</i>
2.1 Protect and improve water quality by mitigating for urban, agricultural, and wildland (sediment) run-off
2.2 Minimize water quality impacts from flood, effluent discharge, and wastewater spills
2.3 Promote recreational activities and programs that minimize or mitigate impacts to water quality
2.4 Protect and improve the water quality generated by healthy, forested watersheds
2.5 Maintain and improve water quality required to restore and protect freshwater ecosystems, fisheries, and groundwater-dependent habitat
2.6 Support regulatory compliance with current and future state and federal water quality standards
2.7 Protect public and ecosystem health from the physical and chemical hazards of Abandoned Mine Lands
<i>Goal 3: Preserve and restore watershed health and promote environmental stewardship</i>
<i>Objectives</i>
3.1 Steward healthy forests through fire and fuels management, erosion control measures, and wetland restoration
3.2 Identify and manage for aquatic and terrestrial invasive species and their impact on water supply infrastructure and watershed health
3.3 Recover endangered and threatened fish species through habitat restoration and by providing access to historic habitat, wherever feasible
3.4 Enhance floodplain function and wildlife habitat while achieving multiple flood management benefits and maintaining public safety
3.5 Promote watershed-level remediation of legacy mining toxins
3.6 Support environmental protections to prevent the extinction of economically, ecologically, and culturally significant species and communities
3.7 Steward the region's biodiversity and ecological resources that directly provide opportunities for public access, recreation, and education while maintaining the co-equal objectives of flood protection and preservation of agricultural lands
<i>Goal 4: Enhance regional economic development by supporting recreational opportunities and sustainable agriculture</i>
<i>Objectives</i>
4.1 Promote comprehensive recreation planning and implementation with a focus on regional economic development
4.2 Enhance river access points to encourage recreational use while preserving flood control/water storage infrastructure and managing for human impacts to watershed health
4.3 Create river corridor linkages while enhancing migration corridors for plants and animals
4.4 Explore opportunities to increase water-dependent tourism throughout the region while building local communities' capacity to manage their recreational amenities
4.5 Protect and restore working landscapes, particularly ranch/ag lands, and the watershed benefits they provide
4.6 Promote regulations that support local and regional economic resiliency by working with and among regulatory agencies to: 1) reduce regulatory conflicts, 2) ensure consistent enforcement of regulations, and 3) reduce costs and difficulty of meeting regulatory compliance
<i>Goal 5: Protect public safety through emergency and drought preparedness and integrated flood management</i>
<i>Objectives</i>
5.1 Improve integrated flood management to ensure emergency preparedness, increase flood protection, and enhance regional and interregional collaboration
5.2 Support regional and interregional collaboration to improve drought and emergency preparedness

Goal 6: Address climate vulnerabilities and reduce greenhouse gas emissions
Objectives
6.1 Support efforts to reduce greenhouse gas emissions in the region, particularly those related to water management operations
6.2 Improve data, modeling, and technical analyses to better understand the impacts of climate change on regional and interregional water supply and watershed health
6.3 Increase system flexibility and resiliency to adapt to climate variability
6.4 Promote alternative energy and energy efficiency throughout the region
6.5 Promote education about climate change/variability and its impacts on water management and watershed health throughout the region
6.6 Promote regional and interregional collaboration to implement climate change adaptive management strategies
Goal 7: Promote equitable distribution of resources to disadvantaged communities and Tribes across the region
Objectives
7.1 Support DAC and Tribal project development/implementation activities by providing ongoing outreach, proposal, and funding development assistance and training
7.2 Prioritize ongoing participation of DACs and Tribes in the Regional Water Management Group
7.3 Foster partnerships to build the capacity of DACs and Tribes throughout the region to manage their own recreational amenities
7.4 Promote regional education and outreach in collaboration with DACs and Tribes

12.3 Prioritization of Objectives

Throughout the IRWMP Update process, the RWMG has consistently discouraged the prioritization of IRWMP objectives, perceiving that this practice would result in unnecessary conflict among RWMG entities. Furthermore, a prioritization or ranking of objectives can erode efforts to promote integrated, multi-objective solutions to water and watershed management issues. Just as Resource Management Strategies are inherently interrelated, so too are the objectives. Many of the complex issues facing water and watershed management in the region require multi-objective solutions. Therefore, the prioritization of objectives has not been viewed as an effective approach to Plan implementation in the Yuba County IRWM region.

12.4 Integration of Issues, Goals, and Objectives into the Project Development Process

The central means of implementing the IRWMP is through project implementation, making it essential for the project development process to be aligned with the development of issues, goals, and objectives. From the outset of the process, the project team emphasized, and the RWMG concurred with, the importance of identifying regional issues and conflicts, which formed the basis for the development of goals and objectives, before officially commencing the project development process.

This approach enabled the RWMG to confirm the issues and conflicts and draft goals and objectives before submitting projects for Plan inclusion consideration. This sequenced strategy made it possible for project sponsors to demonstrate through the project application process (*Project Solicitation Form*) how their proposed projects addressed the regionally identified issues while meeting the goals and measurable

objectives. Also, the Project Review Criteria require project sponsors to illustrate how individual projects meet multiple objectives (Criterion #1). This streamlined, explicit structure further enables the region to concretely illustrate how successful project implementation provides assurance of effective Plan implementation and performance. For more information about the project development process and Plan performance, see Chapters 14 and 17, *Project Application, Development, and Review* and *Plan Performance and Monitoring*, respectively.

12.5 Goals, Objectives, and Performance Measures

As stated above, IRWMPs are implemented through projects designed to achieve measurable objectives. **Table 12-5** illustrates both quantitative and qualitative performance metrics associated with each objective. All Yuba County IRWMP projects have been developed to meet the regional objectives and to be measured accordingly by each objective's corresponding performance measures. The process by which the Plan and Performance Measures were developed and approved can be found in Chapter 17 *Plan Performance and Monitoring*.

Table 12-5. The Relationship between Objectives and Performance Measures	
Goals and Objectives	Performance Metrics
Goal 1: Ensure adequate and reliable water supply that meets the diverse needs of the region	
Objectives	
1.1 Improve water supply system capacity, flexibility, and efficiency, including, but not limited to, optimizing existing water storage, upgrading and retrofitting aging infrastructure, and developing new infrastructure, where necessary	<ul style="list-style-type: none"> ▪ Acre-feet per annum of water supply conserved or enhanced ▪ Acre-feet per annum water supply conserved per household ▪ Number of projects implemented ▪ Reduction in water system operational costs ▪ Tons of carbon sequestered or emissions avoided
1.2 Promote water conservation and water use efficiency by instituting various techniques including, but not limited to, groundwater recharge, conjunctive management, irrigation efficiencies, municipal water conservation, water recycling and reuse	<ul style="list-style-type: none"> ▪ Acre-feet per annum of water supply conserved ▪ Number of projects implemented ▪ Number of collaboratively developed plans and assessments ▪ Reduction in water system operational costs ▪ Tons of carbon sequestered or emissions avoided
1.3 Protect and restore water supplies that support watershed health	<ul style="list-style-type: none"> ▪ Acre-feet per annum of water supply conserved or enhanced ▪ Miles of stream where streamflow improved or protected ▪ Number of projects implemented ▪ Number and frequency of monitoring and assessment
1.4 Promote disaster preparedness and conservation planning efforts	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans, studies, and assessments ▪ Number of stakeholders collaborating in the development of interregional drought response ▪ Number of planning efforts resulting in project implementation ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Measurable changes in knowledge or behavior
1.5 Maintain and enhance flood control infrastructure to	<ul style="list-style-type: none"> ▪ Number of water supply facilities protected

protect water supplies	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans and assessments ▪ Number of stakeholders collaborating in the development of interregional flood response ▪ Number of planning efforts resulting in project implementation
1.6 Preserve water supplies that support recreational opportunities, ecosystem services, and agricultural uses	<ul style="list-style-type: none"> ▪ Number of new, improved, or preserved economic activities ▪ Number of jobs created ▪ Acre-feet per annum of water supply conserved or enhanced ▪ Miles of stream where streamflow improved or protected ▪ Number of projects implemented
1.7 Support regulatory compliance of state and federal water supply standards	<ul style="list-style-type: none"> ▪ Number of projects implemented that comply with state and federal water supply standards ▪ Number of collaboratively developed plans and assessments ▪ Number and frequency of monitoring and assessment
1.8 Promote regional education and outreach regarding water conservation, water supply issues and needs	<ul style="list-style-type: none"> ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Measurable changes in knowledge or behavior
Goal 2: Protect, restore, and enhance water quality for water users and in support of healthy watersheds	
Objectives	
2.1 Protect and improve water quality by mitigating for urban, agricultural, and wildland (sediment) run-off	<ul style="list-style-type: none"> ▪ Mass pollutant reduced per year ▪ Number of BMPs implemented ▪ Number of projects implemented ▪ Increased water quality monitoring and sampling ▪ Measurable improvement in water quality
2.2 Minimize water quality impacts from flood, effluent discharge, and wastewater spills	<ul style="list-style-type: none"> ▪ Mass pollutant reduced per year ▪ Measurable improvement in water quality ▪ Reduced number of violations for water quality standards ▪ Number of BMPs implemented ▪ Number of water supply facilities protected ▪ Number of wastewater treatment plants designed to revised specifications considering climate change
2.3 Promote recreational activities and programs that minimize or mitigate impacts to water quality	<ul style="list-style-type: none"> ▪ Number and frequency water quality monitoring and sampling ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Measurable changes in knowledge or behavior
2.4 Protect and improve the water quality generated by healthy, forested watersheds	<ul style="list-style-type: none"> ▪ Number of fire and fuels management and watershed restoration projects implemented ▪ Linear feet of streambank protected or restored ▪ Mass pollutant reduced per year ▪ Acres of land treated, improved, or restored ▪ Number and frequency of water quality monitoring and sampling ▪ Number of BMPs implemented

	<ul style="list-style-type: none"> ▪ Measurable improvement in water quality
2.5 Maintain and improve water quality required to restore and protect freshwater ecosystems and fisheries	<ul style="list-style-type: none"> ▪ Miles of stream protected or restored ▪ Number and frequency of water quality monitoring and sampling ▪ Number of BMPs implemented ▪ Measurable improvement in water quality ▪ Acres of riparian habitat and/or floodplain protected, restored, or created ▪ Number of collaboratively developed plans, studies, and assessments ▪ Mass pollutant reduced per year
2.6 Support regulatory compliance with state and federal water quality standards	<ul style="list-style-type: none"> ▪ Number of projects implemented to comply with state and federal water quality standards ▪ Number of collaboratively developed plans and assessments ▪ Number and frequency of monitoring and assessment ▪ Decrease in water quality violations ▪ Mass pollutant reduced per year ▪ Plant certification achieved
2.7 Protect public and ecosystem health from the physical and chemical hazards of Abandoned Mine Lands (AMLs)	<ul style="list-style-type: none"> ▪ Number and acres of Abandoned Mine Land sites improved or restored ▪ Mass pollutant reduced per year ▪ Measurable improvement in water quality
Goal 3: Preserve and restore watershed health and promote environmental stewardship	
Objectives	
3.1 Steward healthy forests through fire and fuels management, erosion control measures, wetland and groundwater-dependent ecosystems restoration	<ul style="list-style-type: none"> ▪ Acres of land treated, improved, or restored ▪ Miles of stream protected or restored ▪ Acres of riparian habitat and/or floodplain protected, restored, or created ▪ Tons of carbon sequestered ▪ Number of projects developed or implemented ▪ Number of BMPs implemented ▪ Increased monitoring, sampling, and data analysis ▪ Measureable groundwater recharge
3.2 Identify and manage for aquatic and terrestrial invasive species and their impact on water supply infrastructure and watershed health	<ul style="list-style-type: none"> ▪ Monitoring, sampling, and data analysis ▪ Number of collaborative plans, studies, and assessments developed ▪ Number of acres treated, improved, or restored ▪ Acres of riparian habitat and/or floodplain protected, restored, or created ▪ Number of projects implemented ▪ Number of BMPs implemented
3.3 Recover endangered and threatened fish species through habitat restoration and by providing access to historic habitat, wherever feasible	<ul style="list-style-type: none"> ▪ Miles of stream protected or restored ▪ Acres of riparian habitat and/or floodplain protected, restored, or created ▪ Number of projects developed or implemented ▪ Acre-feet per annum streamflow improved ▪ Number of collaborative plans, assessments, studies developed ▪ Increased monitoring, sampling, and data analysis

<p>3.4 Enhance floodplain function and wildlife habitat while achieving multiple flood management benefits and maintaining public safety</p>	<ul style="list-style-type: none"> ▪ Tons of carbon sequestered ▪ Miles of stream protected or restored ▪ Acres of riparian habitat and/or floodplain protected, restored, or created ▪ Number of projects developed or implemented ▪ Number of collaborative plans, assessments, studies developed ▪ Measurable groundwater recharge ▪ Lowered flood insurance rates, flood danger, and flood risk
<p>3.5 Promote watershed-level remediation of legacy mining toxins</p>	<ul style="list-style-type: none"> ▪ Number of projects implemented ▪ Number of collaborative plans, assessments, studies developed ▪ Mass pollutant reduced per year
<p>3.6 Support environmental protections to prevent the extinction of economically, ecologically, and culturally significant species</p>	<ul style="list-style-type: none"> ▪ Number of projects implemented ▪ Number of collaboratively developed plans, assessments, and studies ▪ Number and frequency of monitoring and assessment
<p>3.7 Steward the region’s biodiversity and ecological resources that directly provide opportunities for public access, recreation, and education</p>	<ul style="list-style-type: none"> ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Number of projects implemented ▪ Measurable changes in knowledge or behavior
<p>Goal 4: Enhance regional economic development by supporting recreational opportunities and sustainable agriculture</p>	
<p>Objectives</p>	
<p>4.1 Promote comprehensive recreation planning and implementation with a focus on regional economic development</p>	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans and assessments ▪ Percent of planning efforts resulting in project implementation ▪ Number of jobs created ▪ Number of businesses supporting project recreational features
<p>4.2 Enhance river access points to encourage recreational use while managing for human impacts to watershed health</p>	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans and assessments ▪ Number of projects implemented ▪ Number of recreational amenities/opportunities developed ▪ Number of visitors to project recreational facilities
<p>4.3 Create recreational river corridor linkages while enhancing migration corridors for plants and animals</p>	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans and assessments ▪ Number of projects implemented ▪ Miles of river enhanced
<p>4.4 Explore opportunities to increase water-dependent tourism throughout the region while building local communities’ capacity to manage their recreational amenities</p>	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans, assessments, and studies ▪ Number of projects implemented ▪ Number of recreational amenities/opportunities developed ▪ Number of businesses supporting project recreational features ▪ Number of jobs created

	<ul style="list-style-type: none"> ▪ Number of visitors to project recreational features
4.5 Protect and restore working landscapes, particularly ranch/ag lands, and the watershed benefits they provide	<ul style="list-style-type: none"> ▪ Number of collaborative plans, assessments, and studies developed ▪ Number of acres treated or improved ▪ Number of acres of land preserved ▪ Number of projects implemented ▪ Number of BMPs implemented
4.6 Promote regulations that support local and regional economic resiliency by working with and among regulatory agencies to: 1) reduce regulatory conflicts, 2) ensure consistent enforcement of regulations, and 3) reduce costs and difficulty of meeting regulatory compliance	<ul style="list-style-type: none"> ▪ Number of projects implemented that comply with state and federal regulations ▪ Number of collaboratively developed plans, assessments, and studies
Goal 5: Protect public safety through emergency and drought preparedness and integrated flood management	
Objectives	
5.1 Improve integrated flood management to ensure emergency preparedness, increase flood protection, and enhance regional and interregional collaboration	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans and assessments ▪ Number of stakeholders collaborating in the development of interregional flood response ▪ Number of planning efforts resulting in project implementation ▪ Increased level of flood protection provided ▪ Decrease in flood insurance rates and risks ▪ Miles of levees constructed or improved ▪ Number of projects implemented
5.2 Support regional and interregional collaboration to improve drought and emergency preparedness	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans, studies, and assessments ▪ Number of stakeholders collaborating in the development of interregional flood response ▪ Number of planning efforts resulting in project implementation ▪ Decrease in flood insurance rates and risks ▪ Increased level of flood protection provided ▪ Miles of levees constructed or improved
Goal 6: Address climate vulnerabilities and reduce greenhouse gas emissions	
Objectives	
6.1 Support efforts to reduce greenhouse gas emissions in the region, particularly those related to water management operations	<ul style="list-style-type: none"> ▪ Tons of carbon sequestered or emissions avoided ▪ Number of collaboratively developed plans and assessments ▪ Number of projects implemented
6.2 Improve data, modeling, and technical analyses to better understand the impacts of climate change on regional and interregional water supply and watershed health	<ul style="list-style-type: none"> ▪ Data management improved ▪ Ongoing development and expansion of climate change modeling throughout the region ▪ Technical analytical capacity increased
6.3 Increase system flexibility and resiliency to adapt to climate variability	<ul style="list-style-type: none"> ▪ Number of collaboratively developed plans, studies, and assessments ▪ Number of projects implemented ▪ Number of adaptive strategies implemented in the

6.3 (continued)	<p>region and interregionally</p> <ul style="list-style-type: none"> ▪ Number and frequency of monitoring, sampling, and analysis
6.4 Promote alternative energy and energy efficiency throughout the region	<ul style="list-style-type: none"> ▪ Kilowatts of renewable energy production capacity created ▪ Tons of carbon sequestered or emissions avoided ▪ Number of projects developed or implemented
6.5 Promote education about climate change and its impacts on water management and watershed health throughout the region	<ul style="list-style-type: none"> ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Measurable changes in knowledge or behavior
6.6 Promote regional and interregional collaborations to implement climate change adaptive management strategies	<ul style="list-style-type: none"> ▪ Number of adaptive strategies implemented in the region and interregionally ▪ Number and diversity of stakeholders participating in regional discussion forums, such as the Sierra Water Work Group
Goal 7: Promote equitable distribution of resources to disadvantaged communities and Tribes across the region	
Objectives	
7.1 Support DAC and Tribal project development/ implementation activities by providing ongoing outreach, proposal and funding development assistance, and training	<ul style="list-style-type: none"> ▪ Number of projects developed or implemented ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Number of trainings conducted ▪ Number of collaboratively developed plans, studies, and assessments ▪ Number of planning efforts resulting in project implementation
7.2 Prioritize ongoing participation of DACs and Tribes in the Regional Water Management Group	<ul style="list-style-type: none"> ▪ Number and diversity of people reached ▪ Number of projects developed or implemented ▪ Number of DACs and Tribes actively participating on the RWMG ▪ Number and diversity of outreach materials developed
7.3 Foster partnerships to build the capacity of DACs and Tribes throughout the region to manage their own recreational amenities	<ul style="list-style-type: none"> ▪ Number of projects developed or implemented ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Number of collaboratively developed plans and assessments ▪ Number of planning efforts resulting in project implementation ▪ Number of trainings conducted
7.4 Promote regional education and outreach in collaboration with DACs and Tribes	<ul style="list-style-type: none"> ▪ Number and diversity of people reached ▪ Number and diversity of outreach materials developed ▪ Number of trainings conducted