3 IRWM Plan Objectives

This section meets the following IRWMP Standard from the Integrated Regional Water Management Grant Program Guidelines.

> **C. Objectives** – Identify IRWM Plan objectives and the manner in which they were determined. The Plan must address major water related objectives and conflicts within the region, including, at a minimum, water supply, groundwater management, ecosystem restoration, and water quality.

In the IRWMP process, development of objectives is a key step, as objectives provide a basis for decision making, guide work efforts, and can be used to evaluate project benefits. In the Pajaro River Watershed IRWMP process, a mission statement, goals and objectives were developed. The planning objectives are targeted outcomes which benefit the region. When implementing regional projects, the Partners will strive to meet as many objectives as possible while also recognizing that some objectives may not be fully achieved.

3.1 Mission, Goals and Objectives

A consensus based approach was used in the development of a mission statement for the Pajaro River Watershed Collaborative and associated goals and objectives for the region. During the development of the mission, goals and objectives, the Partners considered both the needs and issues identified for the region and the statewide priorities. The goals and objectives were presented to stakeholders and then refined based on stakeholder input and consensus. The results of this collaborative effort are the following mission, goals, and objectives.

MISSION: The mission of the Pajaro River Watershed Collaborative is to preserve the economic and environmental wealth and well-being for the Pajaro River watershed through watershed stewardship and comprehensive management of water resources in a practical, cost effective and responsible manner.

Water Supply Goal: Lead Integrated Regional Water Management Planning effort to improve regional water supply reliability, reduce dependence on imported water, and protect watershed communities from drought with a focus on interagency conjunctive use of regional water resources.

Objectives:

1. Meet 100% of M&I and agriculture demands (both current and future conditions) in wet to dry years including the first year of a drought
2. Meet 85% M&I and 75% agriculture demands (both current and future conditions) in second and subsequent years of a drought
3. Provide a variety of water supply sources to meet demand
4. Optimize and sustain use of existing import surface water entitlements from the San Felipe Division
5. Optimize the use of groundwater and aquifer storage
6. Target recycled water use to make up 5% of total water use by 2010 and 10% of total water use by 2020
7. Implement water conservation programs for both M&I and agricultural uses consistent with the CVPIA
8. Protect existing appropriated surface water rights

Water Quality Goal: Lead Integrated Regional Water Management Planning effort to protect and improve water quality for beneficial uses consistent with regional community interests and the RWQCB basin plan through planning and implementation in cooperation with local and state agencies and regional stakeholders.

Objectives:

1. Meet or exceed all applicable groundwater, surface water, wastewater, and recycled water quality regulatory standards
2. Protect or improve the quality of water supply sources
3. Meet or exceed water quality targets established by stakeholders
4. Aid in meeting TMDLs established for the Pajaro River Watershed
5. Minimize impacts from stormwater through implementation of established Best Management Practices or other stormwater management projects

Flood Protection Goal: Lead Integrated Regional Water Management Planning effort to ensure flood protection strategies are developed and implemented through a collaborative and watershed-wide approach and are designed to maximize opportunities for comprehensive management of water resources.

Objectives:

1. Implement flood protection projects throughout the watershed that provide multiple benefits
2. Reach consensus on the Pajaro River Flood Protection Project necessary to protect existing infrastructure and land uses from flooding and erosion from the 100-year event
3. Work with stakeholders to preserve existing flood attenuation by implementing land management strategies throughout the watershed
4. Develop approaches for adaptive management to minimize maintenance requirements and protect quality and availability of water while preserving ecologic and stream functions, and enhancing when appropriate
5. Provide community benefits beyond flood protection such as public access, open space, recreation, agriculture preservation and economic development

Environmental Protection and Enhancement Goal: During the Integrated Regional Water Management Planning effort, the Partners will work with the community and environmental stewards to preserve the environmental wealth and well-being of the Pajaro River watershed by identifying opportunities to restore and enhance natural resources of streams and watersheds when developing water supply, water quality, and flood protection strategies.

Objectives:

1. Identify opportunities to enhance the local environment and protect, enhance, and/or restore natural resources, consistent with urban and agricultural land uses, when developing water management strategies
2. Minimize adverse effects on biological and cultural resources, including riparian habitats, habitats supporting sensitive plant or animal species and archaeological/historic sites when implementing strategies and projects
3. Identify opportunities to protect, enhance, or restore habitat to support Monterey Bay marine life in conjunction with water supply, water quality or flood protection projects
4. Identify opportunities for open spaces, trails, parks along creeks and other recreational projects in the watershed that can be incorporated with water supply, water quality or flood protection projects, consistent with public use and property rights

Some of the objectives developed for a specific goal also meet other IRWMP goals. The following discussions present the intent of each objective, and Table 3-1 illustrates how the objectives benefit multiple goals.

3.1.1 Water Supply Objectives

The following paragraphs provide additional explanation of the objectives developed to support the water supply goal.

The Partners established the objective of meeting "100% of M&I and agriculture demands in wet to dry years" to reflect the importance of a reliable water supply. As stated in the California Water Plan, a big challenge now and for the future is ensuring that water demands are met. As with all the objectives, this objective may not be met every year, but it serves as targets for the Partners to strive towards as they implement projects.

This water supply challenge is greatest during dry years when less than average precipitation increases the pressure on supplies. In recognition of the increased obstacles faced in meeting demands during drought years, the Partners established the secondary goal of meeting "85% of M&I and 75% of agriculture demands in second and subsequent years of a drought". Because surface water supplies generally cannot be relied upon during dry years, this objective is geared towards developing supplies that are not dependent on yearly precipitation or surface water supplies that are being developed specifically to address dry year reliability.

Increasing water supply reliability and operational flexibility is important to ensuring that water demands can be met, and diversification of water supplies is essential to increasing reliability and flexibility. The objective to "provide a variety of water supply sources to meet demand" captures the value of diversifying the region's water supply portfolio. This objective is intended to encourage the development of untapped supplies for the watershed.

"Optimizing and sustaining the use of existing import surface water entitlements from the San Felipe Division" is included as an objective because the Partners each hold CVP entitlements and their shared connection to the CVP system through the San Felipe Division presents significant opportunities for optimizing the use of CVP import water in the region. Sustaining the use of CVP water is important given the current deficit in water supplies for the region; this is especially true for PVWMA. PVWMA is in need of new water supplies to bring its groundwater basin into balance, but if the agency does not exercise its right to its current assignment of CVP water through Mercy Springs, its right to that water will expire in 2017. This objective is designed to encourage coordination among the Partners in use of CVP import water to maximize the benefit that can be gained from each of the agency's contract options.

The objective to "optimize the use of groundwater and aquifer storage" promotes the use of groundwater management and conjunctive use in water supply planning. This objective encourages the Partners to consider the use of groundwater from a regional perspective as both a supply source and a storage area. It also captures the intent of the Partners to coordinate groundwater and surface water management activities locally and regionally. Management of these supplies on a regional basis can aid in addressing the current imbalance between areas of the watershed which are hindered by high groundwater conditions and areas of the watershed facing overdraft conditions. Optimizing the use of groundwater and aquifer storage involves capturing the potential synergies offered from coordinated management and use of the groundwater basins.

Recycled water is valued as a local, drought-proof water supply. By establishing the objective to "target recycled water use to make up 5% of total water use by 2010 and 10% of total water use by 2020", the Partners are promoting the continued development of this reliable supply.

The objective to "implement water conservation programs for both M&I and agricultural uses consistent with the CVPIA" is a reminder to the Partners to continue to pursue water use reduction activities as

appropriate. Increasing water use reductions for users that have already increased water use efficiency is difficult, but water conservation is one of the most effective ways to manage demands and the Partners are committed to continuing conservation measures.

The purpose of the objective to "protect existing appropriated surface water rights" is aimed at maintaining rights to local surface waters. Maintaining the option to use surface waters for water supply provides flexibility in water supply planning.

3.1.2 Water Quality Objectives

The following paragraphs provide additional explanation of the objectives developed to support the water quality goal.

The objective to "meet or exceed all applicable groundwater, surface water, wastewater and recycled water quality regulatory standards" is included in recognition of the importance of complying with regulations. This objective is intended to promote, at a minimum, compliance with all regulations.

The objective to "protect and improve the quality of water supply sources" applies to both the quality of source waters and delivered water. This objective encompasses source water protection to prevent contaminants from entering water supply sources as wells as activities that improve the quality of source or delivered water supplies. This objective recognizes the value in going beyond regulatory compliance for sustaining the long-term usability of water supply sources.

The objective to "meet or exceed water quality targets established by stakeholders" recognizes the importance of providing water supplies that meet users' water quality requirements, even those that go beyond regulatory requirements. This objective is especially important for expanding the use of recycled, where user water quality requirements are frequently more stringent than some regulatory standards.

The objective to "aid in meeting TMDLs established for the Pajaro River Watershed" refers to TMDLs, which are either established or being established by the Central Coast RWQCB for the region. Various TMDLs currently exist on the Pajaro River mainstem and its tributaries. This objective encompasses activities that protect or improve the quality of water bodies subject to TMDLs but may not achieve regulatory compliance. The objective to "minimize impacts from stormwater through implementation of established Best Management Practices or other stormwater management projects" is intended to protect the region's water bodies from pollutant loading that is not already captured in the TMDLs.

3.1.3 Flood Protection Objectives

The following paragraphs provide additional explanation of the objectives developed to support the flood protection goal.

The Partners' commitment to protecting communities throughout the watershed from floodwaters is expressed in the objective to "implement flood protection projects throughout the watershed that provide multiple benefits." While all three Partners do not have flood management responsibilities within their charter, all three participate in the Pajaro River Watershed Flood Prevention Authority (FPA), and the importance of developing and implementing flood protection strategies for the watershed is recognized by each of the Partners. Specifying multiple beneficial projects is a reflection of the Partners' desire to move away from the single-purpose flood management projects of the past and move towards the implementation of flood protection projects that can also incorporate water supply, water quality and environmental protection elements.

The objective to "reach consensus on the Pajaro River Flood Protection Project to protect existing infrastructure and land uses from flooding and erosion from the 100-year event" is worded specifically to

stress the importance of achieving consensus in implementing a flood protection project for the Pajaro River. Developing a solution to the flooding issue of the Lower Pajaro River is a watershed-wide issue.

Maintaining flood attenuation properties of the watershed is necessary to preventing further increases in storm flows. The objective to "work with stakeholders to preserve existing flood attenuation by implementing land management strategies throughout the watershed" addresses this need, and it also emphasizes the necessity of working with stakeholders to make land use decisions that are appropriate for the region.

To maximize the benefits from flood management projects, the DWR Floodplain Management Taskforce recommended pursuing adaptive management approaches which adjust to changing conditions and improved understanding of flooding issues. The objective that the Partners developed to correspond to this recommendation is the objective to "develop approaches for adaptive management to minimize maintenance requirements and protect quality and availability of water while preserving ecologic and stream functions, and enhancing where appropriate".

The objective to "provide community benefits beyond flood protection such as public access, open space, recreation, agriculture preservation and economic development" addresses multi-objective flood protection projects not covered by the first objective.

3.1.4 Environmental Protection and Enhancement Objectives

The following paragraphs provide additional explanation of the objectives developed to support the environmental protection and enhancement goal.

The environmental protection and enhancement objectives reflect the Partner's commitment to preserve the environmental wealth of the watershed. In most cases, the environmental objectives are written such that the Partners will aid in identifying opportunities for environmental partnerships, though they will not implement environmental projects themselves.

The objective "to identify opportunities to enhance the local environment, and protect, enhance and/or restore natural resources consistent with urban and agricultural land uses, when developing water management strategies" encourages the development of environmental enhancements to projects through partnerships. Maintaining consistency with urban and agricultural land uses was specified in recognition of the potential for conflicts between the broad base of stakeholders.

The next objective, "Minimizing adverse effects on biological and cultural resources, including riparian habitats, habitats supporting sensitive plant or animal species, and archaeological/historic sites when implementing strategies and projects", reflects the Partners' commitment to support and, where appropriate, participate in the preservation of the region's environmental and cultural well-being. This objective is also met through environmental documentation required for project implementation.

The Pajaro River drains to Monterey Bay, which is a federally protected marine area that supports a diverse marine ecosystem. To continue protection of this critical resource, the Partners developed the objective "to identify opportunities to protect, enhance or restore habitat to support Monterey Bay marine life in conjunction with water supply, water quality or flood protection projects".

Because recreational elements can often be well paired with water resource management projects, the Partners included the objective "to identify opportunities for open spaces, trails, parks along creeks and other recreational projects in the watershed that can be incorporated with water supply, water quality or flood protection projects, consistent with public use and property rights". As with the first objective,

maintaining consistency with public use and property rights was specified to avoid potential conflicts between stakeholders.

3.2 Prioritization of the Goals and Objectives

Since the goals and objectives will be used to guide the Partners and their stakeholders in the evaluation and ranking of projects proposed for implementation under the IRWMP process, the Partners recognized a need to prioritize the goals and objectives. Clearly defining the priorities of the region allows for a more objective prioritization process for proposed projects.

The Partners came to agreement on the priorities of the region by first looking at the priorities for their own service area. This exercise allowed the Partners to identify those areas where they shared the strongest connections and to engage in discussions on how the regional priorities should be shaped. All the goals and objectives are important to the region. Thus, the prioritization is relative rather than an absolute determination of importance.

The goals and objectives, as they were presented in Section 3.1, are listed in order of priority.

3.2.1 Water Supply Prioritization

The water supply goal was given the highest priority of the four goals because the primary purpose for the formation of each of the three Partner agencies was to manage water supplies for their constituents. . In addition, a focus on water supply reliability is consistent with IRWM program preferences to support and improve local and regional water supply reliability. The first two objectives that fall under this goal (i.e. meeting 100% of M&I and agricultural demands in wet to dry years and meeting 85% of M&I and 75% of agricultural demands) were ranked as the first and second priorities, respectively; again the reasoning being that PVWMA, SBCWD and SCVWD were formed for the purpose of providing a water supply to reliably meet the demands of their respective jurisdictions. Providing a variety of water supply sources to meet demands was ranked third because developing and maintaining a diverse portfolio of water supply sources provides "insurance" against not being able to meet demands due to problems with a single source. A variety of sources also provides more opportunities for conjunctive management. CVP entitlement is the one water supply source that ties all three agencies together, and as such, it follows that optimizing and sustaining the use of entitlements from the San Felipe Division is ranked as the fourth highest water supply objective for the region. Optimizing the use of groundwater and aquifer storage is ranked fifth because a regional conjunctive use strategy including optimization of the San Felipe Division requires strategic management of the groundwater basins. The recycled water targets were ranked sixth since recycled water provides yet another way to reduce dependence from CVP supplies, but unlike the optimization of groundwater and aquifer storage which ranked fifth, the recycled water opportunities are currently more individual agency efforts than regional programs. Although all three of the Partners recognize the value of conservation in water supply management, the implementation of water conservation programs was ranked seventh for the region because each of the agencies continues to aggressively pursue water conservation strategies individually and regional priorities are focused on areas that show greater, untapped benefits. Finally, protecting existing appropriated surface water rights was ranked eighth because surface water rights, outside of the import surface water entitlements, are more an individual agency issue than a regional issue.

3.2.2 Water Quality Prioritization

The water quality goal was given the second highest priority for the region, just behind the water supply goal, because PVWMA, SBCWD and SCVWD each face water quality issues that affect their water supply management strategies and water quality is an integral part of water supply reliability. Additionally, addressing water quality issues is a significant focus of the statewide priorities. Of the

water quality objectives, meeting or exceeding all applicable regulatory standards was ranked first. This ranking reflects the importance of water quality in meeting water demands; at a minimum, the appropriate regulations for a given water resource must be met if it is to be used as a water supply source. The Partners also are interested in going beyond simply meeting or exceeding regulatory standards. The Partners recognize the intrinsic value in protecting and improving the quality of their water supply sources and ranked it as their second water quality objective. The third water quality objective is to meet or exceed stakeholder water quality targets that are not already achieved by higher ranked objectives of meeting applicable water quality standards and protecting and improving water quality. The objective to aid in meeting TMDLs established for the Pajaro River Watershed was ranked fourth because it is a statewide priority and because PVWMA, SBCWD and SCVWD all have 303(d) listed, impaired water bodies in their regions. Minimizing impacts from stormwater was given the lowest water quality priority for the region, which is consistent with the prioritization for each of the Partners.

3.2.3 Flood Protection Prioritization

The flood protection goal was ranked third among the regional goals. Flood protection is an important issue for the watershed, but the Partners have different levels of responsibility for flood protection and flood protection is not an IRWM program preference. The general flood protection objective, which covers flood protection projects throughout the watershed, was ranked as the first priority. The more specific Pajaro River Flood Prevention Project was given second priority. The high priority of the objective to reach consensus on the Pajaro River Flood Prevention Project reflects an understanding that a regional, watershed-wide approach will be necessary to implement a project that protects existing infrastructure and land uses from a 100-year event. Working with stakeholders to preserve existing flood attenuation by implementing land management strategies was ranked third in recognition of the importance flood attenuation plays in the Pajaro River Flood Prevention Project, as well as mitigating some development impacts. Developing approaches for adaptive management was ranked fourth since this objective works to maintain the flood protection properties of implemented projects; maintaining the benefits of implemented projects prevents the need for additional projects. The flood protection aspects are of greater importance than providing additional community benefits, which was ranked fifth.

3.2.4 Environmental Protection and Enhancement Prioritization

The environmental protection and enhancement goal, which is ranked fourth, represents the Partners' commitment to look for opportunities to incorporate environmental elements into their water management projects. Of the four objectives under this goal, the two which speak to protection of environmental resources throughout the watershed are ranked first and second. The objective to identify opportunities to enhance the local environment and protect, enhance and/or restore natural resources reflects the desire of the Partners and their stakeholders to provide environmental benefits throughout the watershed, and this objective was given the highest priority among the environmental objectives. In some cases, enhancement and restoration will not be possible, and the best that can be done is protection through minimization of adverse effects; the objective covering this situation was given second highest priority. Protection of the Monterey Bay National Marine Sanctuary marine life specifically was ranked third after the general protection of natural resources throughout the watershed. Finally, identifying opportunities for recreational elements was ranked fourth out of the four objectives. The Partners would like to create opportunities for open spaces, trails, parks and other recreational projects but this work is not within their jurisdiction and is considered secondary to the objectives that work towards preserving habitats and biological resources.

3.3 Conflicts

Regional water management conflicts within the Pajaro River watershed arise where inconsistencies between proposed water management strategies and watershed objectives exist. Recognizing these inconsistencies is a step toward cooperative planning that will aid in the prioritization of integrated water management strategies for the region and will allow the Partners to minimize and resolve potential conflicts.

The major potential for conflict between water management strategies and watershed objectives exists under the environmental protection and enhancement objective to "minimize adverse effect on biological and cultural resources, including riparian habitats, habitats supporting sensitive plant or animal species and archaeological/historic sites when implementing strategies and projects." Generally, water management strategies that include construction or involve infrastructure as potential projects have the potential to conflict with biological and cultural resources; strategies which will likely involve construction efforts include water supply reliability, groundwater management, water recycling, desalination, imported water, surface storage, water and wastewater treatment, conjunctive use, storm water capture and management, flood management and recreation and public access. Though efforts will be made to minimize the effects of construction, to avoid sensitive habitat and to enhance the environment where practicable, the potential for conflict does exist.

Other conflicts between water management strategies and watershed objectives can arise where projects which are focused on addressing the objectives within one goal fail to meet key objectives within other goals. For example, a desalination or recycled water project that is developed to increase water supply for the region may meet numerous water supply objectives; however it should also take into account associated water quality objectives. Proposed water supply projects which cannot meet the water quality objective of "meeting or exceeding water quality targets established by stakeholders" can lead to conflicts between suppliers and their proposed markets. The imported water strategy, which is intended to meet water supply objectives, can conflict with water quality objectives through the introduction of foreign salts into the basin; this may be viewed as a conflict with the objective to "protect or improve the quality of water supply sources." Similarly, water and wastewater treatment and recycled water strategies that lead to increased salt loading to the groundwater basin can cause conflict with that water quality objective.

Additionally projects which are focused on local solutions without considering the regional perspective or projects competing for the use of common resources can be a source of conflict. Examples of projects which may run into this type of conflict in implementation are the Levee Reconstruction Project, the North San Benito County Regional Recycled Water Project and the San Juan Bautista Surface Water Treatment Plant. The Levee Reconstruction Project is an example of a project that some stakeholders feel is too narrowly focused; these stakeholders have expressed concern that the project, which is intended to provide flood protection along the lower Pajaro River Watershed, should be expanded to include studies to reduce flows and sediment loads in the upper watershed. The North San Benito County Regional Recycled Water Project and the San Juan Bautista Surface Water Treatment Plant are two projects that have conflicting project plans. Both projects are considering the use of the CVP distribution system in SBCWD for water deliveries; however, because recycled water and potable water distribution systems cannot be connected, these two projects cannot both be implemented as originally envisioned by their proponents. For additional details of these projects, please refer to Section 4.

A growing area of concern is the potential for conflicts between agricultural food safety interests and various types of water management strategies. Additional research is needed to evaluate potential sources of crop contamination and the relationship between environmental protection strategies and food safety. However, various agricultural industry guidelines are now encouraging growers to develop "clean" fields

by removing any non-crop vegetation that could attract wildlife; these guidelines are being created in response to the increasing pressure to address food safety problems and the fear that wildlife near cropland is a significant threat. At the same time that growers are being asked to consider the use of bare soil buffers, they are also being regulated by the Central Coast RWQCB to reduce the water quality impacts from their operations. Unfortunately best management practices such as filter strips, vegetative buffer strips, grassed waterways and constructed wetlands, which have been implemented by farmers to comply with the RWQCB's Conditional Agricultural Waiver program and which continue to be promoted by local agencies and conservation organizations, directly conflict with the push to remove non-crop vegetation. The development of recreation and public access trails alongside croplands is also viewed as a potential threat to food safety. Conflicts could arise if recreational projects fail to consider the surrounding urban and agricultural land uses.

It is clear that there exists the potential for regional water management conflicts within the Pajaro River watershed. Identifying these conflicts early in the process and working together to develop solutions to minimize or eliminate the conflict could result in a mutually acceptable or enhanced solution that furthers the goals and objectives of the originally conflicted parties.

Through the IRWMP collaborative efforts, it is envisioned that the stakeholder process will bring together conflicting parties, foster conflict understanding and discussion, provide a forum for conflict resolution, build consensus, and identify mutually beneficial strategies. Ultimately, the hope is to mitigate conflict to the extent practicable while optimizing the potential for integrated strategies with multiple benefits. Resolution of conflicts will be a critical task in the implementation of the IRWMP.