

Section 3: Objectives

The following table provides an overview of the *Objectives* IRWM Plan Standard Requirements, according to 2016 IRWM Guidelines, indicating whether they have been met in the 2014 IRWMP and/or whether they will be addressed in this Amendment.

Table 3-1 IRWM Plan Standard Requirements – Objectives

Requirement from IRWM 2016 Guidelines	IRWM 2016 Guidelines Page Number	Location of Standard (2014 IRWMP or 2018 Amendment)
Through the objectives or other areas of the plan, the 7 items on Pg. 49 of GL are addressed ⁽¹⁾ .	49	2014 IRWMP: §6
Describe the collaborative process and tools used to establish objectives: <ul style="list-style-type: none"> • How the objectives were developed • What information was considered (i.e., water management or local land use plans, etc.) • What groups were involved in the process • How the final decision was made and accepted by the IRWM effort 	48 - 50	2014 IRWMP: §6
Identify quantitative or qualitative metrics and measurable objectives: Objectives must be measurable - there must be some metric the IRWM region can use to determine if the objective is being met as the IRWM Plan is implemented. Neither quantitative nor qualitative metrics are considered inherently better ⁽²⁾ .	49	2014 IRWMP: Table 6.1-1
Explain how objectives are prioritized or reason why the objectives are not prioritized	50	2014 IRWMP: §6.1
Reference specific overall goals for the region: RWMGs may choose to use goals as an additional layer for organizing and prioritizing objectives, or they may choose to not use the term at all.	50	NA
Address adapting to changes in the amount, intensity, timing, quality and variability of runoff and recharge.	39	This standard is met with the 2014 IRWMP: §5, Table 5.1-4, and §6.2.6, and Amendment Section 3.1
Consider the effects of sea level rise (SLR) on water supply conditions and identify suitable adaptation measures.	39	This standard is met with the 2014 IRWMP: §5, Table 5.1-4, §5.1.3.2.9, and §6.2.6; and Amendment Section 3.1

Reducing energy consumption, especially the energy embedded in water use, and ultimately reducing GHG emissions.	39	This standard is met with the 2014 IRWMP: §5, §6.2.7, and Amendment Section 3.2
In evaluating different ways to meet IRWM plan objectives, where practical, consider the strategies adopted by CARB in its AB 32 Scoping Plan.	39	This standard is met with the 2014 IRWMP: §5.1.1.1.3, and Amendment Section 3.3
Consider options for carbon sequestration and using renewable energy where such options are integrally tied to supporting IRWM Plan objectives.	39	This standard is met with the 2014 IRWMP: §5, §6.2.7, and Amendment Section 3.2

Notes:

- (1) Requirement must be addressed per CWC §10540 (c).
- (2) Requirement must be addressed per CWC §10541 (e).

3.1 Address adapting to changes in the amount, intensity, timing, quality and variability of runoff and recharge.

The 2014 IRWMP provides a thorough assessment of the following climate change evaluation criteria:

- (1) The Region’s ability to adapt to changes in the amount, intensity, timing, quality and variability of runoff and recharge (as noted in IRWMP Section 5, Table 5.1-4, Section 6.2.6).
- (2) The potential effects of sea level rise (SLR) on water supply conditions and the identification of suitable adaptation measures (as noted in IRWMP Section 5, Table 5.1-4, Section 5.1.3.2.9, and Section 6.2.6).
- (3) The reduction in energy consumption, energy embedded in water use, and ultimately the potential to reduce GHG emissions within the Region (as noted in IRWMP Section 5, and Section 6.2.7).

To further ensure these climate change evaluation criteria are considered in the IRWM Objectives and considered in the review of projects for implementation of the IRWMP, the text is amended as indicated in the Table below (Table 6.1-1 of the 2014 IRWM Plan).

These additions have also been added to the current Project Submission Form which is used by stakeholders to submit projects for consideration into the IRWMP. The updated Form is provided as Attachment E.

IRWMP Section 6.2. Regional Objectives (page 6-4)

**TABLE 6.1-1
UPPER SANTA CLARA RIVER IRWMP OBJECTIVES, DEFINITIONS AND
MEASUREMENTS**

Objective	Measurement
Reduce Potable Water Demand: Implement technological, legislative and behavioral changes that will reduce user demands for water.	Twenty (20) percent overall reduction in projected urban water demand throughout the Region by 2020 through implementation of water conservation measures.
Increase Water Supply: Understand future regional demands and obtain necessary water supply sources.	Increase use of recycled water by up to 9,600 AFY by 2030, consistent with health and environmental requirements. Improve water system operational flexibility and efficiency. Increase water supply as necessary to meet anticipated peak demands at buildout in the LACWWD No. 37 service area (7.91 MGD) and peak demands at buildout in the Acton and Agua Dulce areas (up to 12.16 MGD).
Improve Water Quality: Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.	Meet all drinking water standards. Prevent migration of contaminant plumes. Comply with TMDLs.
Promote Resource Stewardship: Preserve and improve ecosystem health; improve flood management; and preserve and enhance water-dependent recreation.	In areas of the floodplain where the majority of plant species are invasive: <ul style="list-style-type: none"> • Reduce invasive plant species to 40 percent or less cover of the understory and canopy in years 1 to 5. • Every five (5) years reduce by half the percentage of invasive species. • In years 20 and beyond, keep invasive species to 5 percent or less. Keep invasive species to 2 percent or less in the upper reaches and tributaries where little to no invasive plants are currently located. Acquire 12 miles along the Santa Clara River for development as a recreational trail/park corridor. Acquire acreage or conservation easements for 10,900 acres of remaining proposed South Coast Missing Linkage. Purchase private property from willing sellers in the 100-year floodplain.
Flooding/Hydromodification: Reduce flood damage and/or the negative effects on waterways and watershed health caused by hydromodification and flooding outside the natural erosion and deposition process endemic to the Santa Clara River.	Meet state permits and policies related to stormwater management. Reduce impervious area within the watershed. Promote low impact development, green streets and other stormwater recharge projects.

Objective	Measurement
Take actions within the watershed to adapt to climate change	<p>Implement strategies that adapt flood management, water supply, water quality, water dependent recreation, water-dependent habitat, and fire risk for climate change, but also have other benefits that would occur in the absence of climate change (“no regrets strategies”). <i>Consideration should be given to:</i></p> <p><i>Potential effects of climate change on the Region and whether adaptations to the water management system are necessary.</i></p> <p><i>Potential contributions to adapting to climate change vulnerabilities.</i></p> <p><i>Change in amount, timing, intensity, quality and variability of runoff and recharge.</i></p> <p><i>Effects of sea level rise on water supply conditions.</i></p>
Promote project and actions that reduce greenhouse gas (GHG) emissions	<p>Prioritize development and use of water source with lowest GHG emissions.</p> <p>Identify and implement the use of renewable energy and conservation of energy within water and wastewater systems.</p> <p>With assistance of local energy utility, perform energy audits on all water-related facilities regularly.</p> <p>Reduce, on an agency-by-agency basis, energy use per volume treated or delivered.</p> <p><i>Further considerations of GHG emissions shall include:</i></p> <p><i>Quantification of GHG emissions</i></p> <p><i>Ability to help the IRWM region reduce GHG emissions</i></p> <p><i>Reduces energy consumption (especially embedded energy in water use)</i></p>

3.2 Reducing energy consumption, especially the energy embedded in water use, and ultimately reducing GHG emissions.

The 2014 IRWMP provides a discussion of the reduction in energy consumption, energy embedded in water use, and ultimately the potential to reduce GHG emissions within the Region in Section 5, and Section 6.2.7. To further ensure this climate change evaluation is considered in the IRWM Objectives, see the proposed edit to Table 6.1-1 Upper Santa Clara River IRWMP Objectives, Definitions and Measurements) (page 6-4), shown above in this Amendment Section 3.1.

These additions have also been added to the current Project Submission Form which is used by Stakeholders to submit projects for consideration into the IRWMP. The updated Form is provided as Attachment E.

To further assist Stakeholders with identifying and evaluating the energy requirements embedded in water use, information has been added to IRWMP Section 6.2.7:

IRWMP Section 6.2.7 Promote Reduced Greenhouse Gas Emissions (page 6-12)

As part of this Plan update, specific projects proposed for implementation will be evaluated in part based on their contribution to climate change, particularly their emissions per acre foot of water delivered, treated, or produced. *Decreasing the amount of energy required to produce water supply is a way the Region can mitigate against further climate change impacts (e.g., reduction in pumping from the SWP). By optimizing facilities and using less energy intensive water resource strategies to meet needs, the Region and its Stakeholders can reduce GHG emissions and lessen future climate change impacts. The Region can also consider implementing green infrastructure projects that use natural solutions such as carbon sequestration (ex. peat production, wetland restoration, ocean storage) and/or projects that use renewable energy to reduce GHG emissions. As such, Stakeholders have identified a goal to promote projects and actions that reduce GHG emissions with the following measurement:*

- *Prioritize development and use of water sources with lowest GHG emissions*
- *Identify and implement the use of renewable energy and conservation of energy within water and wastewater systems*
- *With assistance of local energy utility, perform energy audits on all water-related facilities regularly*
- *Reduce, on an agency-by-agency basis, energy use per volume treated or delivered*

*Stakeholders can get additional information about embedded water use from the CARB's AB 32 Scoping Plan, and also through DWR from its Energy-Water Nexus website: <http://www.water.ca.gov/climatechange/water-energy.cfm>. Also helpful is the recently published DWR white paper, *Connecting the Dots between Water, Energy, Food, and Ecosystems Issues for Integrated Water Management in a Changing Climate* (February 2017), which can be found on the above weblink.*

3.3 In evaluating different ways to meet IRWM plan objectives, where practical, consider the strategies adopted by CARB in its AB 32 Scoping Plan.

The 2014 IRWMP provides a description of the AB 32 Global Warming Solutions Act and Executive Order S-3-05, including the Scoping Plan in IRWMP Section 5.1.1.1.3. To further suggest Stakeholders utilize this resource when evaluating projects the following edits to the IRWMP text is provided:

IRWMP Section 5.1.1.1.3. AB 32 Global Warming Solutions Act and Executive Order S-3-05 (page 5-2)

California continues to lead the nation in developing public policy responses to address issues related to climate change and GHG emissions — most notably through the implementation of Assembly Bill 32 (AB 32). AB 32 established GHG reduction targets for California and put the California Air Resources Board (ARB) in charge of implementation and rulemaking through the

development of the “Scoping Plan.” AB 32 aims to reduce statewide GHG emissions to 1990 levels (427 million MTCO_{2e}) by 2020. California is currently at about 469 million MTCO_{2e}, and under the business-as-usual case, most recently updated in 2010, 2020 emissions are expected to be about 507 million MTCO_{2e}. In order to meet the 2020 target, California will need to reduce GHG emissions by about 80 million MTCO_{2e}, an approximate 16 percent reduction from the state’s projected 2020 emissions, by 2020. To meet these targets a two percent reduction is needed each year for the next ten years. To accomplish the goal the state is pursuing a number of direct regulations and market-based mechanisms that have been laid out in a Scoping Plan. The core measures of the Scoping Plan are tailpipe standards, transportation and land-use changes, low carbon fuel standard, enhanced energy efficiency, a Renewables Portfolio Standard (RPS) of 20 percent by 2010 and 33 percent by 2020, and a Cap & Trade program. More information about the Scoping Plan can be found at: <http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>.

The City of Santa Clarita Climate Action Plan (described in IRWMP Section 2.3.1.1) provides a methodology, measurement, and strategies for calculating the amount of GHG emissions generated within the City. In particular, Table 5-1 of the Climate Action Plan summarizes estimated 2020 CO₂ emissions (MTCO_{2e}) by sector in the City, including by water usage.

Stakeholders are encouraged to utilize the Scoping Plan and the City’s Climate Action Plan as resources for identifying water management strategies to meet IRWMP objectives for adapting to climate change and reducing GHG emissions.