



## **The Rialto Drought Contingency Plan**

**City of Rialto**

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**CITY OF RIALTO**  
**The Rialto Drought Contingency Plan**

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## 1. EXECUTIVE SUMMARY

**Date:** February 21, 2017

**Applicant Name:** City of Rialto

**City:** Rialto

**County:** San Bernardino County

**State:** California

**Estimated completion date of Drought Contingency Plan:** June 1, 2019

**Length of time:** 2 years

Location of Project – The project efforts will address the creation of a Drought Contingency Plan. There is no Reclamation Project, facility, or activities within the geographic area that will be addressed in the plan.

**Proposal Summary** - The goal of the Drought Contingency Plan Project (DCPP) is to create a comprehensive drought contingency plan based on best available data and a collaborative effort from a diverse group of public and private stakeholders in the project area: Inland Empire. To facilitate this goal, a Drought Planning Task Force (DP Task Force) comprised of public and private stakeholders will direct the DCPP towards developing a proactive approach to drought that builds long-term resiliency for the region. This DCPP Task Force will include the City of Rialto (the applicant) as the Planning Lead, and Members City of Rialto Public Works Department, San Bernardino Valley Municipal Water District, Rialto Water Services, and Veolia solutions (leader in water, energy and materials that promote the transition toward a circular economy).

This planned project approach will serve in addressing all 6 elements of a Drought Contingency Plan: 1) Drought Monitoring, 2) Vulnerability Assessment, 3) Mitigation Actions, 4) Response Actions, 5) Operational and Administrative Framework, and 6) Plan Update Process.

A detailed outline of the planned approach for preparing the drought plan, communications and outreach plan will be accomplished with a detailed work schedule, tasks, responsibilities of Reclamation (with Reclamation's input).

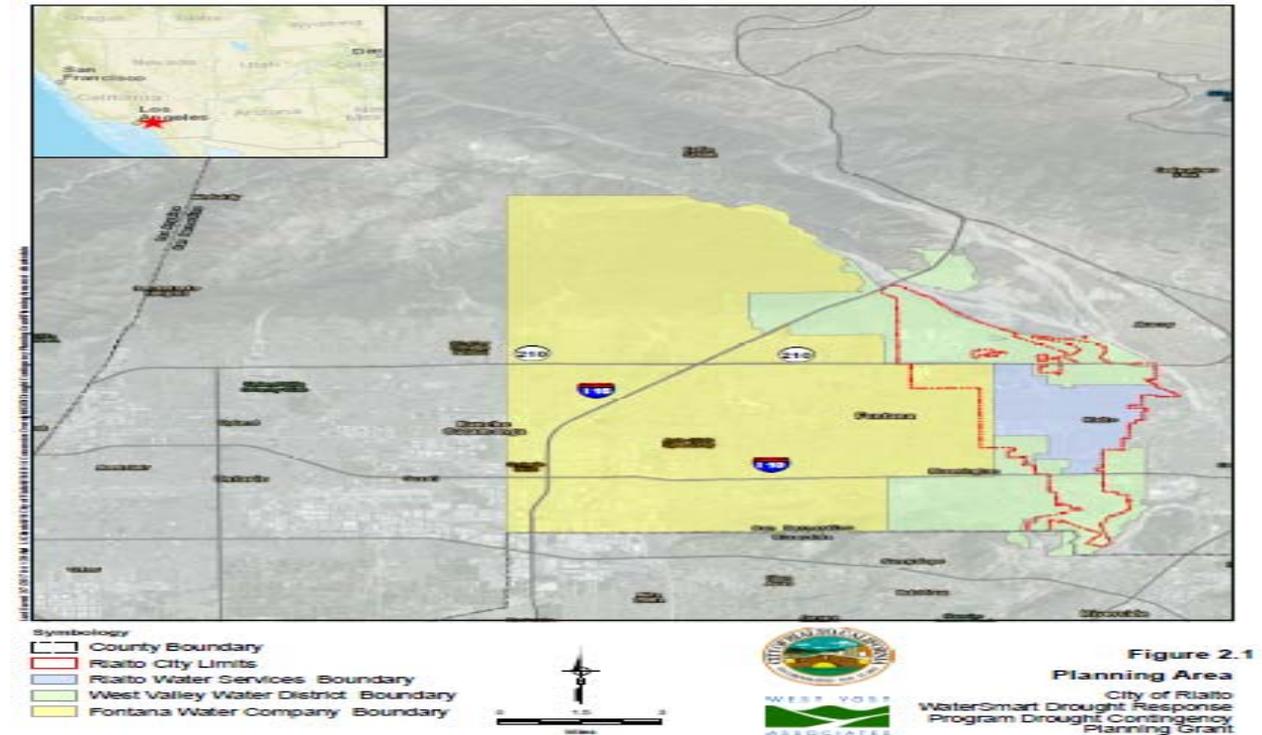
**Timeline** - The Drought Contingency Plan Project (DCPP) will take a total of two (2) years from start to finish. There are three (3) phases to this project: 1) Planning, 2) Development, and 3) Evaluation. A thorough and detailed Drought Contingency Plan will be produced by 24 months following the start of the program, or by July 1, 2019.

**Other** - There are no Reclamation projects, facilities, or activities located within the geographic area that will be addressed by the proposed Drought Contingency Plan Project.

## 2. BACKGROUND DATA

**Area Description** - Figure 2.1 below shows a map of the proposed Drought Contingency planning area for the project. The City of Rialto is located in San Bernardino County in the broader Southern California region.

Table 0.1 City of Rialto Potable Water Supplies (Exhibit 1)



**General Description of Area** - Rialto is home to 101,910 residents. The City of Rialto like many cities in Southern California have experienced severe drought conditions over the last decade and is in need of alternative solutions for water, for their residents. Rialto experiences hot and dry summers that quickly evaporates a large portion of the fresh water from rivers or lakes. While many cities in the region are experiencing drought conditions, unique to Rialto is the external circumstances making freshwater even more scarce in Rialto. In early 2014, a settlement was reached with a former pyrotechnics manufacturer that was responsible for the contamination of their freshwater well. This freshwater was contaminated with perchlorate, and active ingredient in rocket fuel. As a result, of these limiting factors, the City of Rialto has been a pioneer in the field of water recycling, water retention plans, and responsible water usage education.

Rialto was recently awarded a grant to introduce the Biological Double Efficiency Process to water treatment. This process of water treatment is anticipated to result in 50% savings in energy, land footprint, operations and maintenance, and water use. The City of Rialto is supplied with potable water by the City itself, through Rialto Water Services (City) which is operated by a third party, as well as by the West Valley Water District (WVWD) and the Fontana Water Company (FWC). The three water purveyors that serve water to the City utilize the water sources noted below.

Figure 2.1 shows a map of the proposed Drought Contingency planning area. The City of Rialto, which is located in San Bernardino County, California, is supplied with potable water by the City

itself, through Rialto Water Services (City) which is operated by a third party, as well as by the West Valley Water District (WVWD) and the Fontana Water Company (FWC). The three water purveyors that serve water to the City utilize the following water sources:

- groundwater,
- surface water,
- imported water from the Baseline Feeder and
- recycled water.

**Rialto Water Services, Sources and Rights** - Rialto Water Services (City), serves potable water to approximately 54,000 of the City’s population of 100,300. The City service area is essentially the incorporated area of the City of Rialto located between Interstate 10 and State Route 210. The primary source of potable water supply for the City is groundwater.

The City owns 14 wells, 5 of which are operational, in 5 adjudicated groundwater basins. Other potable water supplies include the Baseline Feeder from San Bernardino Valley Municipal Water District and surface water from the east side of the San Gabriel Mountains. As described in the 2015 San Bernardino Valley Urban Water Management Plan, the City’s groundwater, imported water and surface water sources experienced drought related stress in the recent drought.

Water Uses, Users Served, and Current and Projected Demand - The City is predominately a residential community with areas of commercial and industrial water users. As shown in *Table 2.2*, during the period between 2005 and 2015, single family water use made up approximately 69 percent of the total water use. Nearly 90 percent of the total service connections are identified as single family residential. Commercial and institutional accounts comprise about 8 percent of the total accounts; however, they have a high consumption rate at an average of 3033 AFY over the past five years. Landscape irrigation and "other" accounts comprise the remaining portion of the City's metered connections.

*Table 0.2 City of Rialto Potable Water Supplies (Exhibit 2)*

Table 2.2 Water Use by Customer Class, AFY													
Customer Class	Year											11-Year Average	Percent of Retail Water Use
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Single Family	6,811	6,161	8,211	7,606	7,315	6,923	6,945	7,410	7,313	6,794	5,561	7,005	61%
Commercial/Industrial	3,394	2,823	2,577	2,543	2,364	2,050	1,983	2,553	2,046	2,149	1,771	2,387	21%
Landscape Irrigation	538	1,983	695	527	515	448	470	542	510	469	303	636	6%
Hydrant Meters Wholesale	213	213	112	67	67	90	67	-6	65	60	78	93	1%
Non-Revenue Water	3,663	672	423	1,075	1,012	1,756	2,535	1,803	419	728	1,058	1,377	12%
<b>Subtotal</b>	<b>14,619</b>	<b>11,852</b>	<b>12,017</b>	<b>11,818</b>	<b>11,279</b>	<b>11,267</b>	<b>12,001</b>	<b>12,302</b>	<b>10,353</b>	<b>10,200</b>	<b>8,771</b>	<b>11,497</b>	<b>100%</b>
Wholesale	851	560	728	1,053	930	414	0						
<b>Total</b>	<b>15,470</b>	<b>12,412</b>	<b>12,745</b>	<b>12,871</b>	<b>12,203</b>	<b>11,681</b>	<b>12,001</b>	<b>12,302</b>	<b>10,353</b>	<b>10,200</b>	<b>8,771</b>	<b>11,497</b>	

The City has an agreement for approximately 2,500 acre feet per year (AFY) of imported water from the Baseline Feeder and water diversion rights to 1,040 gallons per minute (gpm) (1,680 AFY) of surface water from the San Gabriel Mountains. As shown in *Table 2.3*, the City has water rights equal to approximately 22,400 AFY during a normal water year and approximately 12,400 during dry years. These water rights compare with average water demand of approximately 11,420 AFY, projected for 2017 and 2018. As stated in the City’s 2013 Water Master Plan, the estimated required future annual water supply at the projected water service area buildout condition in 2040

is approximately 15,000 AF/year. Therefore, the City anticipates needing an additional 2,600 AFY to meet future water demands in a dry year.

**Table 0.2 City of Rialto Potable Water Supplies**

<b>Table 2.3 City of Rialto Potable Water Supplies<sup>(a)</sup></b>		
<b>Source</b>	<b>Normal Year AFY</b>	<b>Dry Year AFY</b>
<b>Groundwater</b>		
Rialto Basin <sup>(b)</sup>	2,766	1,382
Lytle Creek Basin	5,000	1,700
Chino Basin <sup>(c)</sup>	3,000	2,000
North Riverside Basin	2,500	2,500
Bunker Hill Basin <sup>(d)</sup>	5,000	1,700
Subtotal	18,266	9,582
<b>Other Supplies</b>		
Lytle Creek Surface Water	1,680	600
SBVMWD	2,500	2,500
Subtotal	4,180	3,100
<b>Total</b>	<b>22,446</b>	<b>12,382</b>
<sup>(a)</sup> Except where stated otherwise, numbers presented in table are from Table 4-1 of the 2013 WMP. <sup>(b)</sup> Total water right is 4,366 AFY. 1,600 AFY currently leased to San Bernardino County until 2020. <sup>(c)</sup> Referred to as "No Man's Land", no water rights limit. The City's 2015 Urban Water Management Plan estimates the long-term water supply to be between 2,000 and 3,000 AFY. <sup>(d)</sup> The City's 2015 Urban Water Management Plan estimates the long-term water supply to be between 1,700 and 5,000 AFY.		

The City has supplies available to make up for the potential potable water deficit by using recycled water to meet the demands of water users that do not need to use potable water. A total of 24 acre feet (AF) of recycled water from the Rialto Wastewater Treatment Plant was delivered to water users in the City’s recycled water service area. The Rialto Wastewater Treatment plant is a tertiary treatment plant that produces an average of 7 million gallons per day (mgd) (7,800 AFY) of effluent that meets Title 22 requirements for water usage in restricted irrigation. Recycled water that is not used for irrigation is discharged into the Santa Ana River.

**City of Rialto Relationship with DIBR** - The City does not have any working relationships with the U.S. Department of the Interior Bureau of Reclamation (Reclamation).

### 3. PROJECT DESCRIPTION

**Work Plan** - The proposed project is to develop a broadly supported Drought Contingency Plan (Task A). The Drought Contingency Plan will directly address all 6 elements of a Drought Contingency Plan (Drought Monitoring, Vulnerability Assessment, Mitigation Actions, Response Actions, Operational and Administrative Framework, Plan Update Process). Each of these elements will be completed under a separate task as described in the following sections. The efforts of each element will be documented in a separate chapter of the Drought Contingency Plan. Prior to beginning work on these six element; however, the City will establish a Drought Planning Task Force, develop a detailed work plan, and develop a communication and outreach plan. The tasks for the Drought Contingency Plan development are as follows:

**PHASE I. Planning (4 months)**

- Task 1. Establish of a Drought Planning Task Force
- Task 2. Develop a Detailed Work Plan
- Task 3. Develop a Communication and Outreach Plan

**PHASE II. Development (18 months)**

- Task 1. Drought Monitoring – *Element 1*
- Task 2. Vulnerability Assessment – *Element 2*
- Task 3. Mitigation Actions – *Element 3*
- Task 4. Response Actions – *Element 4*
- Task 5. Operational and Administrative Framework – *Element 5*

**PHASE III. Evaluation (2 months)**

- Task 1. Plan Update Process – *Element 6*

**Work Plan** - A detailed outline of the planned approach for preparing the drought plan, communications and outreach plan, work, community outreach supported by the description for each of the tasks follows. The work plan outline specified herein serves as the guidelines. A fully developed work plan will be coordinated by the City of Rialto (the planning lead) in consultation with Reclamation. These coordinated efforts will describe in detail how the various tasks (listed below) will be included in developing or updating the overall plan. This effort will further delineate how the tasks will be accomplished, a detailed work schedule, and the responsibilities of Reclamation (with Reclamation's input). The City of Rialto, the Task Force, and other interested stakeholders have devised the following outline as a framework for creating the Drought Contingency Plan (which will be submitted to Reclamation for review and acceptance before substantive work on the plan begins). The Task Force will serve in making necessary updates to the plans as/if/when conditions warrant. The framework for creating the plan includes:

**Phase I: Planning (4 months)**

The Planning Phase will be completed by Month 4 of the grant period and will cover plans for establishing a Drought Planning Task Force as well as clearly defined interests in commercial and industrial businesses, recreational organizations, environmental, and socio-economic platforms. The plans will serve in ensuring the Task Force has diverse membership representing multiple interests in the planning area.

**TASK 1. Establish a Drought Planning Task Force**

The City of Rialto (applicant) will serve as the Planning Lead of the Drought Planning (DP) Task Force. The Drought Contingency Plan Program partners who have committed to participation and will serve on the DP Task Force are:

City of Rialto (Planning Lead); Members of the City of Rialto Public Works; San Bernardino Valley Municipal Water District; Rialto Water Services; West Yost; National Resource Development Council – Local Government; and Veolia will lead the charge in coordinating efforts to establish a Drought Planning Task Force.

**Objective:** Obtain commitment from no fewer than ten (10) diverse stakeholders from community and industry to participate on the DP Task Force by Month 2.

**Activities:** Outreach - The City of Rialto, along with supporting parties listed above (with specific interest in how the Task Force will be effectively represented), will work collectively in performing outreach efforts to engage stakeholders to serve on the Task Force. Activities during

outreach will ensure that the Task Force is diverse in interest as well as in its representation of the region served. Stakeholder Engagement- in order to make the plan as comprehensive as possible with long-term resiliency to drought, stakeholders will be engaged for their input, interest, insights and service on the Drought Planning Task Force (Task Force). M.H.M & Associates will serve to engage Stakeholder's their input solicit participation on the Task Force (in coordination with other invested parties). Efforts will support developing the Drought Contingency Planning process. Members will be brought on as a result of outreach to support a diverse set of stakeholders during the planning period. Establishing the Task Force - the City of Rialto (Lead Planning agency) will solicit interested stakeholders within the planning area that want to actively participate in developing the Drought Contingency Plan. Through the recent Integrated Regional Water Management Planning process, the City has developed a listserv of key stakeholders interested in water-related issues who may be interested in participating in this Drought Contingency Planning process. The City will send an invitation to individuals on the e-mail listserv and invite others to be added. In addition, the City will post announcements about the new Task Force on its website and advertise at City Hall. The City's goal will be to engage as diverse a group of representative stakeholders as possible on the Task Force. Anticipated Task Force stakeholders will represent sectors in the City such as different City departments, commercial and industrial businesses, recreational organizations, environmental, and socio-economic. Hosting of Workshops - Task Force Workshops as described in Tasks 4 through 7 will include the following:

- Workshop #1: Drought Monitoring (Task 4)
- Workshop #2: Vulnerability Assessment Part 1 (Task 5)
- Workshop #3: Vulnerability Assessment Part 2 (Task 5)
- Workshop #4: Mitigation Actions (Task 6)
- Workshop #5: Response Actions (Task 7)

Ongoing Activities - Stakeholder involvement will occur throughout the Drought Contingency Plan development process as is described under each task. Costs - The cost of the public engagement pieces of these tasks, including circulating documents for Task Force and public review, messaging to stakeholders and the public about the Drought Contingency Plan, conducting Task Force workshops, and reviewing Task Force and public stakeholder comments, will be allocated to the task where it is described.

## **TASK 2. Develop a Detailed Work Plan**

The City, in consultation with Reclamation, will develop a detailed work plan to describe in detail how the various tasks included in developing or updating the plan will be accomplished, along with a detailed work schedule, and the responsibilities of Reclamation, the City, the Task Force, and other interested stakeholders. The work plan will be submitted to Reclamation for review and acceptance before substantive work on the Drought Contingency Plan begins. The work plan will be updated as needed throughout the Drought Contingency Plan process.

**Objective:** Submit Work Plan to Reclamation for review and approval by Month 3

**Objective:** Work Plan approved by Reclamation by Month 4

**Activities:** Establish detailed work schedule, determine responsibilities of various stakeholders

### **TASK 3. Development of a Communication and Outreach Plan**

As mentioned in the description of Task 1, stakeholder engagement is a key aspect of the Drought Contingency Plan. Stakeholder engagement through the Task Force as well as stakeholder involvement at other levels will help increase the transparency of the Drought Contingency Plan process and ultimately yield broader support for the plan. To foster wide-scale stakeholder involvement, the City, in consultation with Reclamation, will develop a communication and outreach plan as part of the detailed work plan. The communication and outreach plan will be spearheaded by M.H.M & Associates (MHM) who has extensive experience in effective communication and community outreach. MHM will serve to ensure efforts include clear explanation of how stakeholders and the public can be involved in the planning process and will outline the planned activities through which the public may engage.

**Objective:** Completed plan for Communication and Outreach by Month 3

**Activities:** Establish appropriate forums (public meetings, workshops) and media (television, flyers, radio) for communication and outreach, schedule regular and ongoing events

### **Phase II: Development (18 Months)**

The Development phase will take 18 months to complete, and is the period in which the first five of the six elements of a Drought Plan (Drought Monitoring, Vulnerability Assessment, Mitigation Actions, Response Actions, and Operational and Administrative Framework) will be carefully addressed. The objectives for each of these five tasks is the production of a plan covering the scope described in the task.

### **TASK 4. Drought Monitoring**

Rialto, the Task Force, and partners will establish a process for monitoring near and long-term water availability, predicting future droughts and confirming existing droughts. The specific means of data collection, the networks from which this data will be retrieved, and how it will be analyzed, evaluated, and disseminated will be a part of this plan.

**Objective:** Obtain data sharing agreements from all known water suppliers

**Objective:** Define process for vetting and incorporating other sources of water supply and drought-related data

**Activity:** Establish network of water supply and drought related data

**Activity:** Establish qualifications of evaluators to analyze data

### **TASK 5. Vulnerability Assessment**

The vulnerability assessment will evaluate the risks and impacts of drought on the City and its stakeholders. The risks assessed will specifically be risks to critical resources within the planning area and the factors contributing to those risks. Risks are a combination of the frequency of occurrence, magnitude and severity, and consequences of drought impacts.

**Objective:** Complete plan for dynamic vulnerability assessment

**Objective:** Hold 2 Task Force workshops for vulnerability assessment

**Activity:** Catalog assets and resources available to target area

**Activity:** Evaluate critical resources and determine source(s) of risk

**TASK 6. Mitigation Actions**

Based on the vulnerability assessment, the City will develop mitigation actions to reduce potential risks to critical resources. The City has already implemented some mitigation actions such as using recycled water, fixing leaking infrastructure, implementing a meter calibration program, implementing a rebate program, and transferring water. Under this task, the City and the Task Force will evaluate the effectiveness of these mitigation actions and their capacity for mitigating risks to critical resources. This assessment of existing mitigation actions will aid in the development of additional mitigation actions to be implemented.

**Objective:** Completed mitigation plan

**Activities:** Develop plans to reduce impact of critical resources and dangers

**TASK 7. Response Actions**

The City will update the stages of drought based on the triggers and indices that will be established in Task 4 and the Vulnerability Assessment conducted in Task 5. The City's current drought response actions listed in Ordinance 1560 are triggered based on the percent of supply reduction.

**Objective:** Updated Stages of Drought and Response Actions plan

**TASK 8. Operational and Administrative Framework**

In addition to the summary matrix and procedural flow charts, a narrative will be included in the Operations and Administration chapter of the Drought Contingency Plan to describe roles and responsibilities in further detail, explain the flow charts of various procedures, and describe available resources such as federal, state, and local drought relief and mitigation programs and drought resources as well as tools to aid and support community/citizen/business drought actions and decisions.

**Objective:** Framework for responsibilities and procedures completed

**Phase III: Evaluation**

**TASK 9. Plan Update Process**

Rialto and the Task Force will devise a plan for updating the Drought Contingency plan so that it may be dynamic and adjust as new data or considerations are brought to light by ongoing monitoring. Monitoring – this process will include continuous supervision of the control system and technological parameters in water distribution that supports optimum functioning of the system, safety and endurance growth (equipment used). This will also include monitoring of programmable logic controllers with basic functions (communication, adjusting, measuring, etc.). Evaluations of water and drought-related data will occur periodically and as needed to respond quickly to risks. The process will entail assessment of normal functioning parameters that support standard or dedicated interfaces as well. Updating the Plan - A process will be determined by which data-driven recommendations for the plan will occur as information is obtained that may

require modified policy, interval adjustments, etc. This process of updating the plan will be described in a chapter of the Drought Contingency Plan.

### **3. Evaluation Criteria**

#### **A. Need for a Drought Contingency Plan**

The primary known risks and the severity of the risks to water supplies in the project region are related to **a) Supply Limitations** and **b) Contaminants**.

Supply Limitations: The City of Rialto is supplied with potable water by three water purveyors (including the City of Rialto) which draw water from groundwater, surface water, recycled water, and imported water. Of the 14 groundwater wells owned by the City of Rialto (“Rialto”), only 5 are operational. If those wells are maintained and remain in present working condition, projected demands suggest that an additional 2,600 AFY would still be needed to make up water deficits in the coming dry years. Vulnerability assessments and more monitoring plans will allow suppliers to better calculate what response actions are necessary to address the current supply limitations.

Contaminants: The B.F. Goodrich Superfund Site is a well contaminated by perchlorate that is home to the City of Rialto. The vulnerability assessment’s ranking of vulnerable sites will include a consideration of the likelihood of these contaminants affecting production, and the action plans will account for redistribution to account for and balance demand. Vulnerability assessments will guide the development of mitigation actions to decrease the likelihood of contaminants affecting supply. No contaminants have been found above the Maximum Contaminant Levels (MCL) from operating wells set by the State Water Resources Control Board (DDW), however these sources are considered most vulnerable to contamination by perchlorate (a byproduct of the largely defunct fireworks and rocket fuel industries), nitrate (a byproduct of the now defunct citrus farming industry), MTBE (a gasoline related contaminant), and biological contaminants Fecal Coliform, E. Coli, and Crypto Sporidium, which are most active in warm summer months.

**Drought Risks** - Nearly 90 percent of the service area is single family residential, and so impacts to planning areas such as agriculture or tourism are limited. The primary concern is that risks to the posed by drought will result in the City’s inability to provide the most basic need of its citizens, stunting its growth and the expansion of industry via workforce availability in the region. Health Concerns - Other than the potential chemical and biological contaminants listed above, there are no known public health concerns or social concerns associated with existing or potential drought conditions. Environmental Concerns - The Santa Ana sucker fish is an endangered fish species living in a stretch of the Santa Ana River between Rialto and neighboring Colton. Stream contaminants such as red algae, degraded habitat conditions such as high water temperatures due to drought, and other risks have caused considerable biological harm to the species. The actions chosen by this Drought Contingency Plan must consider the potential damage to this endangered species and its habitat. Economic Losses – The City of Rialto continues to overcome businesses and their reluctance to move/locate into an area (due to the Superfund Site and its purported and probable impact to land development opportunities necessary to support workers (i.e. housing, retail, etc.). However, there has been no direct correlation to the economic losses to area business or agriculture associated with drought or water-related crisis or conflict. Existing Planning Efforts - The city’s current planning efforts are more directly related to land development and cost mitigation plans, these planning efforts are not duplicative of the proposed planning efforts to create a Drought Contingency Plan in Rialto.

## **B. Inclusion of Stakeholders**

The planning process of the Drought Contingency Plan will be inclusive of a diverse range of stakeholders to ensure equitable participation and input. **Stakeholders:** In addition to the City of Rialto, stakeholders which have committed to plan involvement, are: San Bernardino Valley Municipal Water District, Rialto Water Services, National Resource Development Council of Local Government, West Yost, and Veolia. These committed stakeholders will be the founding members of the DP Task Force, and as such will participate in the entire planning process and identify additional stakeholders as needed. Each has specified their area of diverse interest: City of Rialto (Planning, Environment, recreation, equity, economic and social); Members of the City of Rialto Public Works Department (Interest: Environmental); San Bernardino Valley Municipal Water District (interest: commercial and industrial businesses); Rialto Water Services (interest: commercial and industrial businesses and environmental); West Yost (interest: Environmental); National Resource Development Council – Local Government (interest: Recreational organizations, Environmental, and Socio-economic); and Veolia (interest- commercial and industrial businesses and environmental). The City of Rialto will conduct multiple outreach efforts to the community and ensure open communication between itself, the people of Rialto, and sectors of industry so that the voices of all stakeholders may be heard. As the concerns of stakeholders are the concerns of Rialto, these will be addressed in the planning and plan update processes.

**Planned Approach** - The Task Force will facilitate communication between the DCPP, stakeholders, and the public to ensure that all parties are involved in the planning process. The timeline and specific activities to be undertaken under this plan will be determined in Phase I: Planning, and will include the following types of activities:

- Public meetings with community members to keep them apprised of efficiency goals and address shortfalls
- One-way dissemination of program information through public notices and materials including benefits to consumers, implementation costs, and implementation plan
- Activities which educate the public and allow for limited, directed feedback (e.g. surveys or comments), such as webinars
- Two-way forums such as workshops which allow stakeholders and participants to supply input on drought contingency plan activities
- Use of social networking (e.g. Facebook and LinkedIn) to engage the community
- Use of volunteers to interface with public consumers and enhance the array of stakeholder input
- Engage with K-12 programs to impart the importance of water efficiency to educators and youth

## **C. Project Implementation**

The planned approach, after planning, focuses on Phases 2 and 3 which will directly address the six required elements of a Drought Contingency plan. Phase 2 - Development is dedicated to the first five (Drought Monitoring, Vulnerability Assessment, Mitigation Actions, and Response Actions), which will begin following the second month of the grant period and ending 18 months thereafter. The sixth element, Plan Update Process, is the primary task of Phase 3 – Evaluation, and will take two months to complete.

### 1) Drought Monitoring

The City will establish a process for monitoring near and long-term water availability, along with a framework for predicting the probability of future droughts or confirming an existing drought. To do this, the City will continue to track its water supply availability from all sources, as listed in *Table 3.1 Available Water Sources* below, on an annual basis.

**Table 3.1 Available Water Sources**

Water Supply	Additional Detail on Water Supply	Actual Volume in 2015	Projected Supply in 2020 (per UWMP)	Water Quality
Groundwater	Rialto-Colton	1,498	1,456	Drinking Water
Groundwater	Riverside North	1,238	1,000	Drinking Water
Groundwater	Lytle Creek	1,757	2,500	Drinking Water
Purchased or Imported Water	SBVMWD	1,989	2,500	Drinking Water
Surface Water	Lytle Creek Surface Water	998	1,120	Drinking Water
Groundwater	Bunker Hill	971	2,000	Drinking Water
Purchased or Imported Water	SBMWD	320	0	Drinking Water
Recycled Water	Rialto WWTP	24	20	Recycled Water
		8,795	11,596	

To assess near-term droughts and water availability, the City will monitor its available supplies compared to its supply projections for the nearest 5-year interval (as defined in the UWMP) and when available supplies are at defined quantities less than their projected supply, various stages of drought will be declared. An example is shown in *Table 3.2 Near-Term Drought Stages*.

**Table 3.2 Near-Term Drought Stages**

Near-Term Drought Stage	Percent Supply Reduction	Water Supply Condition
Stage 1	10	Below Normal
Stage 2	20	Water Alert
Stage 3	25	Water Warning
Stage 4	30-50	Water Emergency

To assess long-term droughts and water availability, the City will monitor its available supplies compared to supply projections for the nearest 5-year interval (as defined in the UWMP) and when available supplies are at defined quantities less than their projected supply for three or more consecutive years, various stages of drought will be declared. An example is shown in *Table 3.3*.

**Table 3.3 Long-Term Drought Stages**

Long-Term Drought Stage	Percent Supply Reduction	Water Supply Condition
Stage 1	10	Long-term Below Normal
Stage 2	20	Long-term Water Alert

Stage 3	25	Long-term Water Warning
Stage 4	30-50	Long-term Water Emergency

**Framework** - To develop a framework for predicting the probability of future droughts or confirming an existing drought, the City, with stakeholder input, will review various drought indicators, develop drought-stage triggers, and develop drought stage indices. The City will conduct a Task Force workshop during this task to receive stakeholder input on what appropriate drought indicators, drought-stage triggers, and drought stage indices should include. Prior to the stakeholder workshop, the City will circulate draft drought indicators, drought-stage triggers, and drought stage indices for Task Force member consideration and comment. During the workshop the Task Force will discuss their key concerns related to the drought indicators, drought-stage triggers, and drought stage indices. Following the workshop, the City will review all written comments received and consider these along with the verbal discussion at the workshop as the City finalizes the drought indicators, drought-stage triggers, and drought stage indices. With this information, the City will be better able to predict the relevant near-term and long-term drought stages as defined in Tables 3.2 and 3.3.

Process for Collection - The City of Rialto will serve as the collection point for all of the beneficial and necessary water, climate, and drought data. This information may be analyzed by Rialto staff or an independent evaluator, as needed and or as established in the Drought Contingency Plan. Rialto will use the Communication and Outreach Plan as the basis for dissemination of information and with the Task Force to ensure all stakeholders have access to water availability and drought-related data.

Prediction/Confirmation of Droughts- Indicators that the City will review include groundwater levels and stream flows. Estimates of annual water runoff for the major watersheds in the Santa Ana River Basin watershed basins are produced by DWR’s Hydrology and Flood Operations Office within the Division of Flood Management. The Hydrology and Flood Operations Office produces estimates of annual water runoff beginning in January and updates these as part of DWR’s Bulletin 120 update process from February through May each year. The City monitors groundwater levels on a monthly basis at more than a dozen wells throughout its service area and will continue to conduct this monitoring at this frequency. The collected water level data will be analyzed for trends in dropping water levels.

Using the indicator information, the City will develop drought triggers, such as when groundwater levels fall below a certain level or when streamflow is less than a certain flow rate, to establish thresholds under which to define a drought stage. These triggers are anticipated to correspond with the percent reduction in supply thresholds already established by the City and indicated in the tables above. However, the City may choose to establish additional triggers.

Different Stages - The City will then develop drought stage indices based on the U.S. Drought Monitor data maintained by the National Drought Mitigation Center. The U.S. Drought Monitor regularly documents current drought conditions at the following website: <http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?CA>. With this information, the City may decide that when the U.S. Drought Monitor indicates that the region is in extreme drought, for example, the City’s Stage 4 drought condition should be considered.

Based on the indicators, triggers, and indices discussed above, the City will be able to adequately document current drought conditions and develop predictions for the probability of future

droughts. This monitoring effort and findings will be documented in a Drought Monitoring chapter of the Drought Contingency Plan.

**2) Vulnerability Assessment**

To assess “baseline” risk, i.e. vulnerability, the City will take the following steps which will be summarized in a table. An example of a vulnerability assessment summary table is shown in Table 3.4, below list of assessment steps:

1. Catalog the assets and resources within the planning area across various sectors such as municipal, industrial, recreational, and socio-economic. (Fill out Columns A and B)
2. Identify the “critical resources” that, in terms of consequences, magnitude, and severity, are highly important to protect. To do this, each asset listed in the catalog will receive a rank to indicate the level of importance to protecting that resource. (Fill out Column C)
3. Assess the potential for future drought conditions, using information collected under Task 4, and the risk to critical resources from such conditions. A range of potential future drought conditions will be considered including the incorporation of climate change information. This assessment will include both a historical perspective of climate, water supply, and water use trends, and potential future changes to those trends. This assessment may be quantitative and/or qualitative depending on the findings. (Fill out Columns D and E)
4. Assess the underlying cause of critical resource vulnerabilities. This assessment may be quantitative and/or qualitative depending on the findings. (Fill out Column F)

**Table 3.4 Sample Vulnerability Assessment Summary**

Table 3.4 Sample Vulnerability Assessment Summary					
Column A	Column B	Column C	Column D	Column E	Column F
<b>Resources</b>	Affected Stakeholders	Rank of Importance to Protect	Future Drought Conditions Frequency of Impact on Resource	Risk	Cause of Vulnerability
<b>Example: Parks</b>	Parks Department, general public	13	frequent	moderate impacts	
<b>Example: Commercial laundromats</b>	Business owners, general public	10	infrequent	substantial impact	Water is critical to business function

Rialto will conduct two Task Force workshops during this task. The purpose of the first workshop will be to receive Task Force input on assets and resources to include in the catalog, affected stakeholders, and the relative importance of the assets and resources. The second workshop will solicit input from the Task Force on the impact of future drought conditions on listed assets and resources, risk, and causes of resource vulnerabilities. Prior to the first workshop, the City will circulate a draft list of resources for Task Force consideration and comment. Prior to the second workshop, the City will circulate a draft vulnerability assessment matrix for Task Force review and comment. Following the workshop, the City will review all written comments received and consider these along with the verbal discussion from the workshops as the City finalizes the vulnerability assessment.

The results of this vulnerability assessment, and the process used to arrive at the results, will be documented in the Vulnerability Assessment Chapter of the Drought Contingency Plan. A summary table similar to the example provided in Table 3.4 will be included in this chapter. Wherever possible, the vulnerability assessment will utilize existing resources, such as the Southern California Association of Governments Climate study.

### **3) Mitigation Actions**

Based on the vulnerability assessment, the City will develop mitigation actions to reduce potential risks to critical resources. This assessment of existing mitigation actions will aid in the development of additional mitigation actions to be implemented.

Using recycled water reduces the City's dependency on potable water, which is good for internal and external stakeholders. By reducing potable water dependency, the City is less impacted by drought and can sell/lease water rights to adjacent water purveyors, thus reducing potential conflict over water -which is a priority for Reclamation. Recycled water is currently being used by two water users, Rialto Regional Biosolids Processing Facility and Caltrans. The City will continue researching the potential for expanding the recycled water service area.

Meters are installed on all the City's service connections. Meters not only provide incentives for water users to reduce water usage with the use of tiered rates, but they also help locate leaks. To further improve the efficacy of the installed water meters the City has implemented a water meter calibration and replacement program. The City also has an active Visible Leak Detection Program in which three field meter readers and two production operator employees inspect wells, tanks, booster pump stations, meter boxes, fire hydrants, backflow preventers, above ground pipelines, and appurtenances. They also look for signs of leaks in soil and paved areas. By fixing leaks quickly the City can reduce the amount of non-revenue water (also called "unaccounted for water"). Non-revenue water accounted for 21 percent of the water production in 2011.

Mitigation Measures - The City will assess these, and other, existing mitigation actions' ability to reduce and mitigate the risk to critical resources – thereby reducing the need for response actions. To develop additional mitigation actions, the City will first develop mitigation goals and priorities. Once a collection of mitigation actions is identified, the City will identify a strategy to prioritize the measures for implementation. This strategy will include technical feasibility, costs, benefits, and third party impacts.

The City will conduct a stakeholder workshop during this task to receive stakeholder input on the City's mitigation goals and priorities and proposed mitigation actions. Prior to the stakeholder workshop, the City will circulate draft mitigation goals and priorities along with the draft mitigation actions for stakeholder consideration and comment. During the workshop the City will facilitate discussion with stakeholders to understand their key ideas and concerns as they relate to mitigation. Following the workshop, the City will review all written comments received and consider these along with the verbal discussion at the workshop as the City finalizes the mitigation goals and priorities and the list of mitigation actions.

The final mitigation actions, and the process used to arrive at them, will be documented in the Mitigation Actions Chapter of the Drought Contingency Plan.

### **4) Response Actions**

The City adopted Ordinance 1560 in July 2015 that describes drought response actions that can be implemented quickly and provide expeditious benefits. As shown in Table 4.1, the response actions are grouped into four “stages” that are based on the severity of the drought. Nearly all the water restrictions and prohibitions are enforced with penalties. Penalties range from a written warning to a surcharge of five hundred dollars and a two-day termination of water service at the water user’s expense.

**Table 4.1 Current Stages of Drought Response Actions**

Stage	Drought Stage	Trigger Points - Percent Supply Reduction	Goal/Objective	Response Actions
1	Normal	0	NA	NA
2	Water Alert Conditions	20	Educate public on water shortage and encourage conservation	Implement public awareness campaign. Customers shall be asked to voluntarily conserve water mainly through reductions in outdoor water use.
3	Water Warning Conditions	25		
4	Water Emergency Conditions	30 to 50		

(a) Source: City Ordinance 1560, adopted July 2015.

The City will conduct a stakeholder workshop during this task to receive stakeholder input on appropriate response actions for different drought stages. Prior to the stakeholder workshop, the City will circulate the list of drought stages and triggers along with the proposed goal for each stage and the proposed response actions for stakeholder review and comment. During the workshop the City will facilitate discussion with stakeholders to understand their key ideas and concerns as they relate to response actions. Following the workshop, the City will review all written comments received and consider these along with the verbal discussion at the workshop as the City finalizes the response actions.

The final response actions, and the process used to arrive at them, will be documented in the Response Actions Chapter of the Drought Contingency Plan.

A description of the City’s existing drought stages and response actions is provided below.

Stage 1 – Normal Conditions

Stage 1 is implemented under normal conditions when supply and distribution capacity is not restricted in any way. In Stage 1, the following water conservation measures shall apply even though a drought condition is not present:

A. Recommendations for Use of Water (No penalties are used for enforcement).

1. Watering with automatic sprinklers should be done between eight p.m. and six a.m. Hand watering and non-automatic sprinklers should be done between six p.m. and eight a.m. Drip irrigation is exempt from this recommendation.
2. Water conservation should be practiced within the home or business.

3. All restaurants and food establishments are requested not to serve water to their customers unless specifically requested by the customer.

#### B. Water Use Regulations (Penalties are used for enforcement/Partial List)

1. There shall be no application of water to sidewalks, walkways, driveways, parking areas, patios, porches, verandas, tennis courts or other paved, concrete or other hard surface areas, except that flammable or other similarly dangerous or unhealthy substances may be washed from said areas by direct hose flushing for the benefit of public health or safety.
2. Washing of automobiles, trucks, trailers, boats, airplanes, and other types of mobile equipment is prohibited unless done with a bucket or hand-held hose equipped with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use.
3. Use of water for any purpose which results in flooding or run-off in gutters, driveways or streets is prohibited.
4. The use of sprinklers for any type of irrigation during high winds, which divert a significant amount of water away from the intended landscaping, is prohibited.

#### Stage 2 – Water Alert

Stage 2 means that the City may not be able to meet all water demands of all water customers, or the state has adopted regulations requiring the City to implement requirements and actions of a Stage 2 water alert. Stage 2, the following partial list of water conservation measures shall apply:

1. All policies and prohibitions listed in Stage 1.
2. All customers are required to reduce potable water consumption by a minimum twenty percent compared to their potable water consumption in the 2013 base year.
3. The city shall screen all new applications for water service installations and shall limit water use to that essential for construction and testing of landscape plumbing. Limited landscaping for new development shall be allowed as approved by the city.
4. All landscape irrigation shall be limited to no more than four days per week for no more than ten minutes per station per day..
5. Operators of hotels and motels must provide guests with the option of choosing not to have towels and linens laundered daily and prominently display notice of this option.
6. All restaurants are prohibited from serving water to their customers except when specifically requested by the customer.

#### Stage 3 – Water Warning

During Stage 3, the City is not able to meet all water demands of all water customers, or the state has adopted regulations that require the City to implement requirements and actions of a Stage 3 water warning. In Stage 3, the following water conservation measures shall apply:

##### ***Sub-stage 3-A.***

1. All policies and prohibitions listed in Stages 1 and 2.
2. All customers are required to reduce potable water consumption by a minimum twenty-five percent compared to their potable water consumption in the 2013 base year.

3. New water service shall be installed but water shall be used before occupancy for essential construction only and for testing of landscape irrigation systems. The installation of new landscaping for all new development/projects must be approved by the city.
4. Swimming pools, ornamental ponds, fountains, water displays, hot tubs, spas and artificial lakes shall not be filled or refilled after being drained.
5. All landscape irrigation with potable water shall be limited to no more than three days per week for no more than ten minutes per station per day. This provision does not apply to any landscape that has water-efficient devices that are operated properly. Water-efficient devices are drip irrigation systems and operational weather-based irrigation controllers. Week is defined as Sunday through Saturday.

***Sub-stage 3-B.***

1. All policies and prohibitions listed in Stages 1 and 2 and sub-section A of Stage 3, except that all landscape irrigation with potable water shall be limited to no more than two days per week for no more than ten minutes per station per day.
2. Water used for compaction, dust control, and other types of construction shall be by permit only and will be limited to conditions of the permit or may be prohibited as determined by the city administrator, or his/her designee.

***Sub-stage 3-C.***

1. All policies and prohibitions listed in Stages 1 and 2 and sub-sections A and B of Stage 3, except that all landscape irrigation with potable water shall be limited to no more than one day per week for no more than ten minutes per station per day.
2. Washing of automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment is prohibited. Washing of the above-listed vehicles or mobile equipment shall be done only at a commercial car wash where recirculating or recycled water is being utilized. Such washings are exempt from these regulations when the health, safety, and welfare of the public is contingent upon frequent vehicle cleaning such as garbage trucks and vehicles used to transport food and perishables.

**Stage 4 – Water Emergency**

Stage 4 means that the City is experiencing a major failure of water supply or distribution, or the state has adopted regulations requiring the City to implement requirements and actions of a Stage 4 water emergency.

1. All policies and prohibitions shown in Stages 1, 2 and 3.
2. All customers are required to reduce potable water consumption by a minimum thirty percent compared to their potable water consumption in the 2013 base year.
3. No water shall be used for construction purposes unless they are using reclaimed water. All fire hydrant and construction meters shall be locked off or removed.
4. Commercial nurseries shall water only between the hours of eleven p.m. and six a.m. and only with hand-held devices or with drip irrigation.
5. There shall be no watering of any lawn or landscaped area, except by use of reclaimed water.

The use of water shall be limited to essential household, commercial, manufacturing or processing uses only, except where other uses may be allowed by permit.

**5) Operational and Administrative Framework**

The City will develop an operational and administrative framework to identify who is responsible for implementing various actions contained in the Drought Contingency Plan and to avoid slow and inefficient emergency responses. *Responsible Party* - The City will be responsible for undertaking the actions necessary to implement each element of the plan and document the operational and administrative framework through a series of tables and flow charts. The operational and administrative framework will be documented in an Operations and Administration chapter of the Drought Contingency Plan.

Examples of drought contingency roles, responsibilities, procedures, and resources are listed in Table 5.1 and Exhibit 2. This matrix will be refined and updated, with responsibilities assigned to specific employees, in the Drought Contingency Plan.

*Table 5.1 Operational and Administrative Framework (Exhibit 3)*

Table 5.1. Operational and Administrative Framework				
Person(s) Responsible	Task Forces	Responsibilities	Roles and Procedures	Resources
Staff Member	Monitoring	Drought monitoring, warning, and information sharing	Record drought indicators and indices and organize to be shared within the organization. Meet and provide monthly updates.	U.S. Drought Monitor, Streamflow data
		Education and outreach programs regarding drought	During times of drought create and manage programs to educate the public.	County/State/Federal water efficient appliance rebate programs
		Update of drought contingency plan	Work with "Drought Contingency Planning Group".	Drought Contingency Plan
Senior Staff Member	Drought Declaration	Declaration of drought	Declare drought based on indicators and indices recorded by monitoring group.	Monitoring Task Force
		Activation of "Drought Management Task Force"	Organize a task force to meet regularly regarding drought and enforce appropriate water use restrictions.	
		Initiation of drought response actions	Declare appropriate drought stage and enforce water use restrictions.	City Ordinance 1560
		Initiation of mitigation actions	Implement mitigation actions.	Drought Contingency Plan
		Procurement and resource tracking		
		Update of drought contingency plan	Work with "Drought Contingency Planning Group".	Existing Drought Contingency Plan
Senior Staff Member	Request Assistance	Request for assistance under State and Federal assistance programs	Request for assistance under State and Federal assistance programs.	State and Federal assistance programs
		Request for a Presidential Disaster Declaration (if needed)	Request for a Presidential Disaster Declaration (if needed).	Presidential Disaster Declaration
		Update of drought contingency plan	Work with "Drought Contingency Planning Group".	Existing Drought Contingency Plan

*Flow charts showing the process for the operational and administrative framework will identify roles responsible for the Operations and Administration chapter of the Drought Contingency Plan that covers:*

- Drought monitoring and declaration
- Initiation of response and emergency actions
- Initiation of mitigation actions
- State or federal assistance requests
- Updating plans

The means by which this information will be communicated to the public will be outlined in the Communications and Outreach chapter of the Drought Contingency Plan. The Operational and Administrative Framework will be documented in the Operational and Administrative Framework Chapter of the Drought Contingency Plan

**6) Plan Update Process**

The City will create a detailed set of procedures for periodic evaluation and updates of the plan. This set of procedures will address the following elements:

- Monitoring of Sources and Resources
- Evaluating the Effectiveness of a Plan
- Timing of Plan Update

To maximize the effectiveness of the Drought Contingency Plan, the Plan will include procedures for ongoing and post-drought evaluations. The ongoing evaluation will test the effectiveness of the drought contingency plan under simulated drought conditions prior to implementation and periodically thereafter. The City will also test the effectiveness of the drought plan given changes in technology, new laws, changes to water infrastructure, changes to political leadership, and other changes. The post-drought evaluation will assess the effectiveness of the plan once it has actually been implemented with the purpose of learning from past successes and mistakes. Post drought evaluations will include an analysis of the climatic and environmental aspects of the drought; its economic and social consequences; the extent to which pre drought planning was useful in mitigating the impacts, in facilitating relief or assistance to stricken areas, and in post-recovery; and any other weaknesses or problems caused by or not covered by the plan.

In addition to the plan evaluation process, the evaluation process will include an objective approach to measuring the effectiveness of the drought plan. The City is considering teaming with a local college or university to conduct this evaluation. The chapter in the Drought Contingency Plan on the evaluation and revision of the plan will also address the timing of updating various components of the Drought Contingency Plan as well as the Plan itself. The City and the Task Force will provide input into which elements require annual or bi-annual updates and which elements only require updates every three to five years.

**Plan Elements-** Each of the six required elements of a Drought Contingency Plan will be addressed by the Drought Contingency Plan in Phase II: Development and Phase III: Evaluation, which together will take no more than 20 months. Experts on the Task Force and among partners will among them address each and every element to produce chapters for the Drought Contingency Plan which are clear and comprehensive. The estimated project schedule is located in Exhibit 3

**DCP Schedules, Available Data, Technical Assistance and Roles -** Project partners have worked and assembled a highly skilled and experienced team to complete the Rialto Drought Contingency Plan along with the Task Force. West Yost operates as an extension of the City of Rialto, on an on-call services contract and will provide technical assistance to the Force along with Reclamation. We anticipate that with the proposed funding being in the form of a cooperative financial agreement that Reclamation will have substantial involvement throughout the project. (See Exhibit 4 for detailed schedule)

**Experts/Technical Assistance - Thomas J. Crowley, PE,** City of Rialto: Received a Bachelor's degree in 1985 at California State Polytechnic University, Pomona and obtained a Professional Civil Engineers Certificate in February 1989. Worked over the next 11 years in the professional consulting environment to designed water and waste water systems, roads, sewer systems, and site facilities for public and private agencies. Managed capital improvement programs for city and county governments and special districts. Established project scope, budget, and schedule for design and construction. Procured environmental permits from U.S. Army Corp of Engineers, U.S. Fish and Wildlife, Santa Ana Regional Water Quality Control Board, and California Department

of Fish & Game. Acquired encroachment permits from the San Bernardino County Flood Control District and Caltrans. Developed hydrology and hydraulic studies for storm drain and water resource projects. Managed project staff and consultants. Administered construction contracts. In February 2000, joined the San Bernardino Valley Water Conservation District. At the District, was responsible for collecting streamflow data for the Santa Ana River and Mill Creek headwaters, monitor groundwater levels and production data, and tabulate water quality information from various agencies. This information was used to develop an Annual Engineering Investigation Report that provided the status of the Bunker Hill Groundwater Basin to the surround agencies. In addition, designed open flow channels and dikes to support the recharge activities of the agency. In February 2006, joined West Valley Water District where he oversaw and managed the groundwater wells, water distribution system, pump station, storage, treatment systems, interties with surrounding agencies for the District. Oversaw the development of master plans, urban water management plans, source water assessments, water supply assessments and other planning documents.

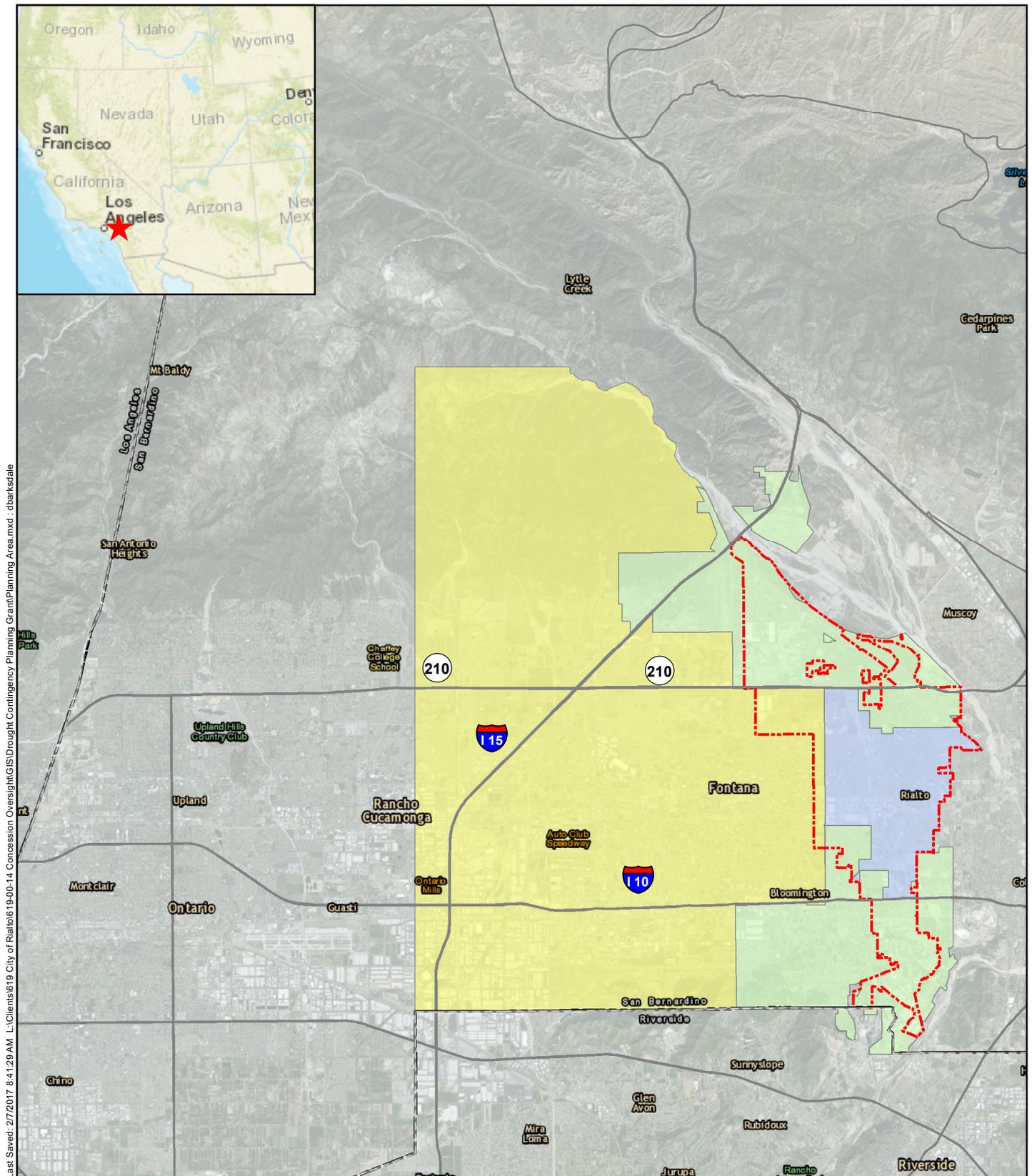
***Stephen Dopudja, PE, West Yost Associates*** - Stephen Dopudja has 27 years of experience managing water resources projects. His experience also includes residential land development and roadway infrastructure improvements, including storm drains. His capabilities range from the planning and computer modeling of water and sewer systems, serving as an Owner's Advisor, to the design and construction of water resource facilities including pump stations, reservoirs, and pipelines. He is experienced in using a variety of project delivery methods including Design-Build, traditional Design-Bid-Build and Public Private Partnerships. He has also worked on several international projects.

***Monique Day, PE, West Yost Associates:*** Monique has 13 years of experience in civil and environmental engineering. She has a master's degree in environmental engineering with a focus in water quality and water resources management. Monique's water supply reliability expertise includes water transfers, conservation, water quality, surface and groundwater storage, conjunctive use, permitting, water rights, water reuse, and integrated regional water management and urban water management planning. Much of Monique's project work has involved multi-stakeholder planning and implementation processes as well as funding strategy and pursuits.

***Kristen Whatley, PE, West Yost Associates:*** Kristen Whatley has over 13 years of experience working on and managing water resources and wastewater projects. Her capabilities range from the planning and computer modeling of water systems, designing and bidding of water resources projects including wells and wastewater, water treatment, booster pump stations, reservoirs, and pipelines. Project experience includes serving as the project manager on major water resources and wastewater design and permitting projects and residential land development projects; water storage, treatment, and distribution projects; and master planning efforts on several land development projects including coordination with regulatory agencies. Water system permitting experience includes obtaining CC&N extensions and coordination on rate cases, obtaining

#### **D. Nexus to Reclamation**

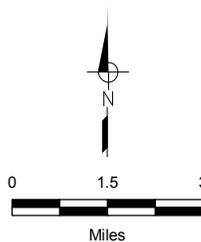
There is no Reclamation project, facility, or activity within the planning area or in the same basin as the planning area. There is no Reclamation project, facility, or activity within the planning area. The project supports the implementation of a relevant Department of the Interior initiative.



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**Symbology**

- County Boundary
- Rialto City Limits
- Rialto Water Services Boundary
- West Valley Water District Boundary
- Fontana Water Company Boundary



**Figure 2.1**

**Planning Area**

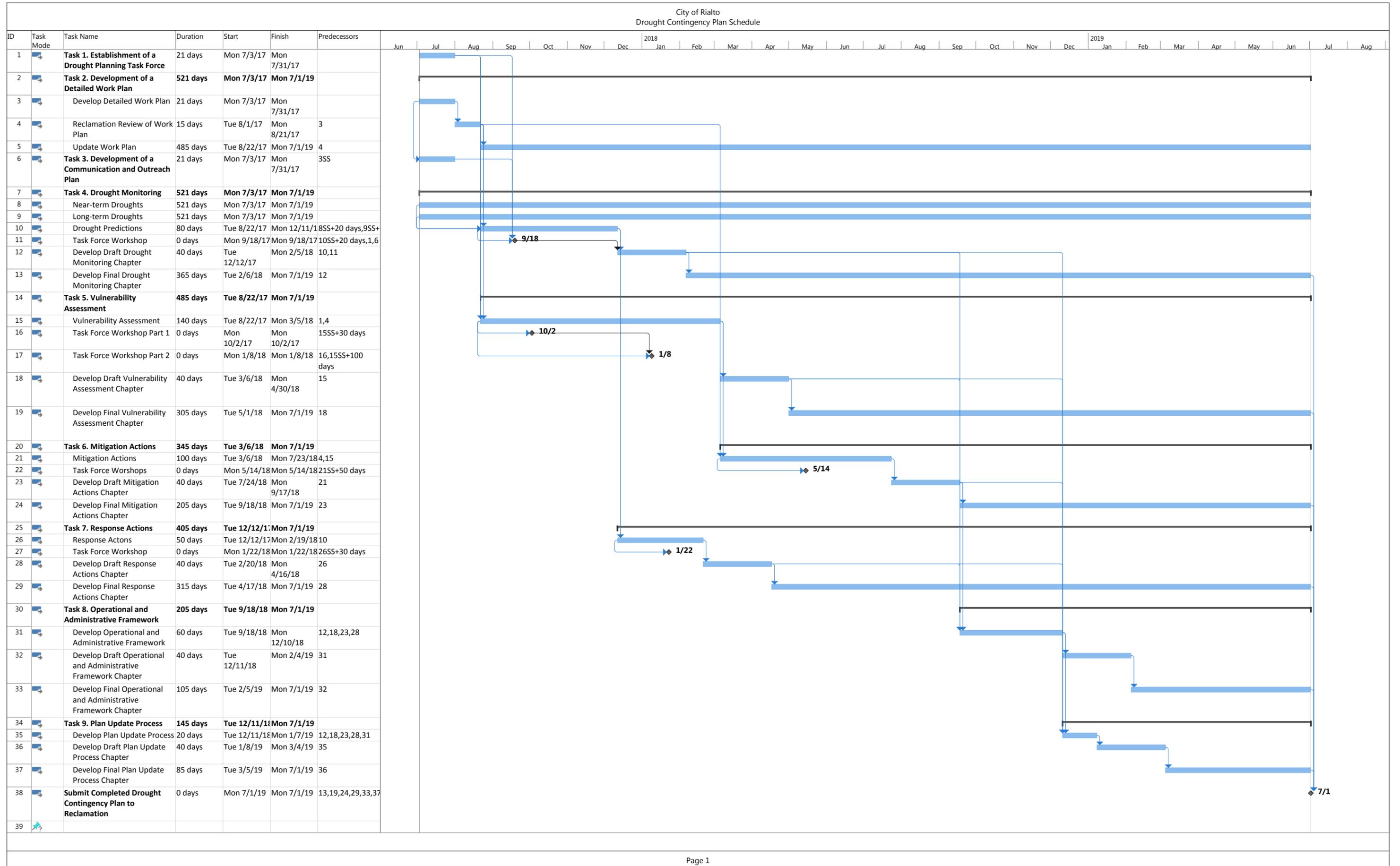
City of Rialto  
 WaterSmart Drought Response  
 Program Drought Contingency  
 Planning Grant

Exhibit 2

Customer Class	Year											11-Year Average	Percent of Retail Water Use
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Single Family	6,811	6,161	8,211	7,606	7,315	6,923	6,945	7,410	7,313	6,794	5,561	7,005	61%
Commercial/Industrial	3,394	2,823	2,577	2,543	2,364	2,050	1,983	2,553	2,046	2,149	1,771	2,387	21%
Landscape Irrigation	538	1,983	695	527	515	448	470	542	510	469	303	636	6%
Hydrant Meters Wholesale	213	213	112	67	67	90	67	-6	65	60	78	93	1%
Non-Revenue Water	3,663	672	423	1,075	1,012	1,756	2,535	1,803	419	728	1,058	1,377	12%
<b>Subtotal</b>	<b>14,619</b>	<b>11,852</b>	<b>12,017</b>	<b>11,818</b>	<b>11,273</b>	<b>11,267</b>	<b>12,001</b>	<b>12,302</b>	<b>10,353</b>	<b>10,200</b>	<b>8,771</b>	<b>11,497</b>	<b>100%</b>
Wholesale	851	560	728	1,053	930	414	0						
<b>Total</b>	<b>15,470</b>	<b>12,412</b>	<b>12,745</b>	<b>12,871</b>	<b>12,203</b>	<b>11,681</b>	<b>12,001</b>	<b>12,302</b>	<b>10,353</b>	<b>10,200</b>	<b>8,771</b>	<b>11,497</b>	

Exhibit 3

Table 5.1. Operational and Administrative Framework				
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		Request for a Presidential Disaster Declaration (if needed)	Request for a Presidential Disaster Declaration (if needed).	Presidential Disaster Declaration
		Update of drought contingency plan	Work with "Drought Contingency Planning Group".	Existing Drought Contingency Plan



**Exhibit 5**

		Program Manager \$72.00 hr	Public Works Program Coordinator 52.77 hr	Public Works Analyst \$44.41	West Yost \$208.89	MHM \$100.00 hr	
<b>Task 1</b>	<b>Establishment of a Drought Planning Task Force</b>						
1.01	Establishment of a Drought Planning Task Force	5	5	35	5	70	
<b>Task 2</b>	<b>Development of a Detailed Work Plan</b>						
2.01	Development of a Detailed Work Plan	10	30	10	60		
<b>Task 3</b>	<b>Development of a Communication and Outreach Plan</b>						
3.01	Development of a Communication and Outreach Plan	5	5	35	15	130	
<b>Task 4</b>	<b>Drought Monitoring</b>						
4.01	Monitor Existing Data	25	76	20	70		
4.02	Near-term Droughts	25	76	20	70		
4.03	Long-term Droughts	25	76	20	70		
4.04	Drought predictions	10	42	0	222		
4.05	Task Force Workshop	10	10	10	20	70	
<b>Task 5</b>	<b>Vulnerability Assessment</b>						
5.01	Vulnerability Assessment	25			168		
5.02	Task Force Workshop Part 1	10	10	10	20	70	
5.03	Task Force Workshop Part 2	10	10	10	20	70	
<b>Task 6</b>	<b>Mitigation Actions</b>						
6.01	Mitigation Actions	25			130		
6.02	Task Force Workshop	10	10	12	20		
<b>Task 7</b>	<b>Response Actions</b>						
7.01	Response Actions				110		
7.02	Task Force Workshop	10	10	10	20	70	
<b>Task 8</b>	<b>Operational and Administrative Farmework</b>						
8.01	Operational and Administrative Farmework	25			80		
<b>Task 9</b>	<b>Plan Update Process</b>						
9.01	Plan Update Process	10			50		
<b>Total Hours</b>		<b>240</b>	<b>360</b>	<b>192</b>	<b>1150</b>	<b>480</b>	
<b>Total Cost</b>		<b>\$ 17,258</b>	<b>\$ 18,997</b>	<b>\$ 8,527</b>	<b>\$ 240,224</b>	<b>\$ 48,000</b>	

January 20, 2017

Mayor Deborah Roberson  
City of Rialto  
150 S. Palm Ave  
Rialto, CA 92376

RE: Letter of Support

Dear Mayor Robertson:

San Bernardino Valley Municipal Water District (Valley District) supports the City of Rialto's (City) Water SMART grant application to prepare a Drought Contingency Plan.

Valley District believes that a Drought Contingency Plan will help the City ensure a reliable water supply for its residents. Through the contingency planning process, the City will identify the appropriate actions to be taken during the various stages of drought so that the City will be able to continue to provide water for public health and safety, economic activity and environmental needs.

Valley District looks forward to providing input that will help Rialto develop a proactive plan that will build long-term resiliency through the ongoing drought cycle in our region.

Sincerely,

for Douglas Headrick  
General Manager

**Board of Directors and Officers**

JUNE HAYES  
Division 1

GIL NAVARRO  
Division 2

SUSAN LONGVILLE  
Division 3

MARK BULOT  
Division 4

STEVE COPELAN  
Division 5

DOUGLAS D. HEADRICK  
General Manager

January 24, 2017

Mayor Deborah Roberson  
City of Rialto  
150 S. Palm Ave  
Rialto, CA 92376

RE: Letter of Support

Dear Mayor Robertson:

On behalf of Rialto Water Services, this letter is being submitted in support of the City of Rialto's application to the U.S. Department of the Interior, Bureau of Reclamation WaterSMART Drought Response Program: Drought Contingency Planning Grants FY 2017.

Rialto Water Services believes that the planning and completion of a new Drought Contingency Plan in the City of Rialto is an essential step toward ensuring long-term water security. Through the historic drought of the past 5 years, we have collaborated closely with the City in managing water resources, and will continue to do so over the course of our 30-year partnership. While we have endured the rather dramatic challenges of recent years successfully, it is past time to develop and put in place a proactive plan now. This is the right thing to do to make the City more resilient to water supply challenges in the future.

We all know that a reliable water supply is essential to economic stability and human health and well being. Its importance highlights the need to prepare for a drought or other water shortage. Contingency planning before a shortage allows selection of appropriate responses consistent with the circumstances and situation of the region. A drought contingency plan will enable the City to provide water for public health and safety, and minimize impacts on economic activity and environmental resources, while protecting the interest of its citizens.

We look forward to providing support and any input desired to help the City of Rialto develop a proactive plan to build long-term drought resiliency for its ratepayers.

Sincerely,



Peter Luchetti

President, Rialto Water Services



February 10, 2017  
Mayor Deborah Roberson  
City of Rialto  
150 S. Palm Ave  
Rialto, CA 92376

**RE: Letter of Support for Bureau of Reclamation – WaterSMART Drought Response Program**

Dear Mayor Robertson:

On behalf of Veolia North America (Veolia), this letter is being submitted in support of the of the City of Rialto's application to the U.S. Department of the Interior, Bureau of Reclamation WaterSMART Drought Response Program: Drought Contingency Planning Grant FY 201.7. Veolia believes that the planning and completion of a new Drought Contingency Plan in the City of Rialto is important because as the contracted operator of the City's water and wastewater systems we see firsthand the adverse impacts the drought is having on groundwater supply levels and on the quality of groundwater and imported water.

A reliable and high quality water supply is essential. Its importance highlights the need to prepare for a drought or other water shortage. Contingency planning before a shortage, allows selection of appropriate responses consistent with the circumstances and situation of the region. A drought contingency plan will enable the city to provide water for public health and safety and minimize impacts on economic activity, environmental resources while protecting the interest of its citizens.

Our agency looks forward to providing input and serving on the Drought Planning Task Force that will help Rialto develop a proactive plan that will build long-term resiliency to drought in the region.

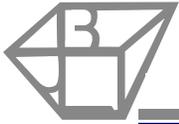
Sincerely,

A handwritten signature in black ink that reads "Clarence C. Mansell, Jr." in a cursive script.

Clarence C. Mansell, Jr.  
General Manager, Veolia -Rialto  
437 N. Riverside Avenue, Rialto, CA 92376

[clarence.mansell@veolia.com](mailto:clarence.mansell@veolia.com)

[www.veolianorthamerica.com](http://www.veolianorthamerica.com)



**M.H.M. & ASSOCIATES**  
MANAGEMENT • CONSULTING • GRANT WRITING  
2001 E. FINANCIAL WAY, SUITE 104, GLENDORA, CALIFORNIA PHONE: (951) 682-4646

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*14 February 2017*

US Department of Interior  
Bureau of Reclamation Policy and Administration  
Denver, Colorado

Re: Project Funding - Drought Response Program: Drought Contingency Planning Grants for Fiscal Year 2017

To Whom it May Concern:

On behalf of M.H.M. and Associates, Inc., this letter is being submitted in support of the City of Rialto's application to the U.S. Department of the Interior, Bureau of Reclamation WaterSMART Drought Response Program: Drought Contingency Planning Grants FY 2017. M.H.M. and Associates, Inc. is in support of assisting with project funding in the amount of \$24,000.45, which will be available upon receipt of grant being funded and project commencing. There are no constraints or contingencies associated with this commitment.

We all know that a reliable water supply is essential to economic stability and human health and well being. Its importance highlights the need to prepare for a drought or other water shortage. Contingency planning before a shortage allows selection of appropriate responses consistent with the circumstances and situation of the region. A drought contingency plan will enable the City to provide water for public health and safety, and minimize impacts on economic activity and environmental resources, while protecting the interest of its citizens.

We look forward to providing support and any input desired to help the City of Rialto develop a proactive plan to build long-term drought resiliency for its ratepayers.

Sincerely,

DocuSigned by:

*Luvina Beckley Knight*

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Luvina Beckley Knight,  
Chief Executive officer