OMB Number: 4040-0004
Expiration Date: 8/31/2016

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 06/23/2015

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Monterey Peninsula Water Management District

* b. Employer/Taxpayer Identification Number (EIN/TIN): 94-2535586

* c. Organizational DUNS: 3630076830000

d. Address:

* Street1: 5 Harris Court, Building G
Street2:
* City: Monterey
County/Parish:
* State: CA: California
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 93940-0000

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:
* First Name: Larry
Middle Name:
* Last Name: Hampson
Suffix:

Title: Planning and Engineering Manager

Organizational Affiliation:

* Telephone Number: 831-658-5620
Fax Number: 831-644-9560

* Email: larry@mpwmd.net

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

D: Special District Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Bureau of Reclamation

11. Catalog of Federal Domestic Assistance Number:

15.514

CFDA Title:

Reclamation States Emergency Drought Relief

*** 12. Funding Opportunity Number:**

R15AS00047

* Title:

WaterSMART: Drought Contingency Planning Grants for Fiscal Year 2015

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

North Monterey County Drought Contingency Plan
(Funding Opportunity R15AS00047)

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: CA-20 * b. Program/Project: CA-20

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 10/01/2015 * b. End Date: 09/30/2017

18. Estimated Funding ($):

* a. Federal	200,000.00
* b. Applicant	301,866.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	501,866.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☒ a. This application was made available to the State under the Executive Order 12372 Process for review on 06/25/2015.

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name: David

Middle Name:

* Last Name: Stoldt

Suffix:

* Title: General Manager

* Telephone Number: 831-658-5651 Fax Number: 831-644-9560

* Email: dstoldt@mpwmd.net

* Signature of Authorized Representative: Larry Hampson * Date Signed: 06/23/2015

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 06/30/2014

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Reclamation States Emergency Drought Relief - WaterSMART	15.514	$	$	$ 200,000.00	$	$ 200,000.00
2. Monterey Peninsula Water Management District					301,866.00	301,866.00
3.						
4.						
5. Totals		$	$	$ 200,000.00	$ 301,866.00	$ 501,866.00

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1) Reclamation States Emergency Drought Relief - WaterSMART	(2) Monterey Peninsula Water Management District	(3)	(4)	Total (5)
a. Personnel	$ 14,866.00	$ 20,093.00	$	$	$ 34,959.00
b. Fringe Benefits	5,282.00	7,138.00			12,420.00
c. Travel	0.00	0.00			
d. Equipment	0.00	0.00			
e. Supplies	0.00	0.00			
f. Contractual	179,852.00	274,635.00			454,487.00
g. Construction	0.00	0.00			
h. Other	0.00	0.00			
i. Total Direct Charges (sum of 6a-6h)	200,000.00	301,866.00			$ 501,866.00
j. Indirect Charges	0.00	0.00			$
k. TOTALS (sum of 6i and 6j)	$ 200,000.00	$ 301,866.00	$	$	$ 501,866.00
7. Program Income	$ 0.00	$ 0.00	$	$	$

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Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. Reclamation States Emergency Drought Relief - WaterSMART	$	$	$	$
9. Monterey Peninsula Water Management District	301,866.00			301,866.00
10.				
11.				
12. TOTAL (sum of lines 8-11)	$ 301,866.00	$	$	$ 301,866.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 85,448.00	$ 26,913.00	$ 16,607.00	$ 15,703.00	$ 26,225.00
14. Non-Federal	$ 128,970.00	40,620.00	25,066.00	23,701.00	39,583.00
15. TOTAL (sum of lines 13 and 14)	$ 214,418.00	$ 67,533.00	$ 41,673.00	$ 39,404.00	$ 65,808.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS) (b)First	(c) Second	(d) Third	(e) Fourth
16. Reclamation States Emergency Drought Relief - WaterSMART	$ 85,448.00	$ 114,552.00	$	$
17. Monterey Peninsula Water Management District	128,970.00	172,796.00		
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	$ 214,418.00	$ 287,348.00	$	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. Indirect Charges:

23. Remarks:

OMB Number: 4040-0007
Expiration Date: 06/30/2014

ASSURANCES - NON-CONSTRUCTION PROGRAMS

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
Larry Hampson	General Manager
APPLICANT ORGANIZATION	DATE SUBMITTED
Monterey Peninsula Water Management District	06/23/2015

Standard Form 424B (Rev. 7-97) Back

WaterSMART

Development of Drought Contingency Plan
Funding Opportunity R15AS00047

North Monterey County Drought Contingency Plan

June 2015

Monterey Peninsula Water Management District
(As Administrative Agency)

Point of Contact:
David J. Stoldt, General Manager
5 Harris Court, Bldg. G
Monterey, CA 93940
dstoldt@mpwmd.net
Tel: (831) 658-5650
Fax: (831) 644-9560

Table of Contents

Technical Proposal and Evaluation Criteria

Executive Summary

Applicant: Monterey Peninsula Water Management District (MPWMD) office is located in the City of Monterey in Monterey County, California. The MPWMD is the lead agency and fiscal agent for the North Monterey County Drought Contingency Plan (Plan) and convener of the Plan Task Force (Task Force), which includes MPWMD, Monterey Regional Water Pollution Control Agency (MRWPCA), Monterey County Water Resources Agency (MCWRA), Monterey County Resource Management Agency (MCRMA), and Monterey County Office of Emergency Services.

Summary: The Plan area is home to some of California's most valuable agriculture, diverse urban centers, and spectacular natural resources. The area is dependent on local rainfall and runoff and *is not served by a state or federal water project*. Groundwater basins have been over-drafted resulting in significant seawater intrusion near the coast. State-mandated actions to reduce pumping and require sustainable groundwater use could also significant constrain future water supplies. These conditions coupled with a fourth year of drought provide the catalyst to bring stakeholders together to share technical information, understand the impacts of drought and climate change to their way of life and jointly develop a Drought Contingency Plan to manage their scarce water resources to the benefit of all.

Schedule: The Drought Plan will be initiated on October 1, 2015. The study will take two years and will be complete by September 30, 2017.

Reclamation Nexus: Working relationships with Reclamation include loan funding provided to MCWRA and MRWPCA for the Salinas Valley Reclamation Project and the Castroville Seawater Intrusion Project, and a Title XVI Feasibility Study for an expansion of recycled water use. See details at Evaluation Criterion D – Nexus to the Bureau of Reclamation.

Background Data

This section provides background data consisting of a description of the area, water supply sources, water rights, water uses, water users and their demand, and past working relationships with Reclamation.

Description of Drought Contingency Plan Area

The Plan Area is the northern portion of Monterey County including a part of the Salinas Valley from the southern edge of the City of Salinas to the Pacific Ocean, the western portion of Carmel Valley, and the urbanized Monterey Peninsula area between the two valleys as shown on Figure 1. The main geographic features in the Plan Area are the lower Salinas River valley and Carmel River valley. The urban areas consist of the cities of Carmel, Monterey, Pacific Grove, Del Rey Oaks, Seaside, Marina, and Salinas, and the Castroville area. Major land uses include agriculture, rangeland, forest, and urban development.

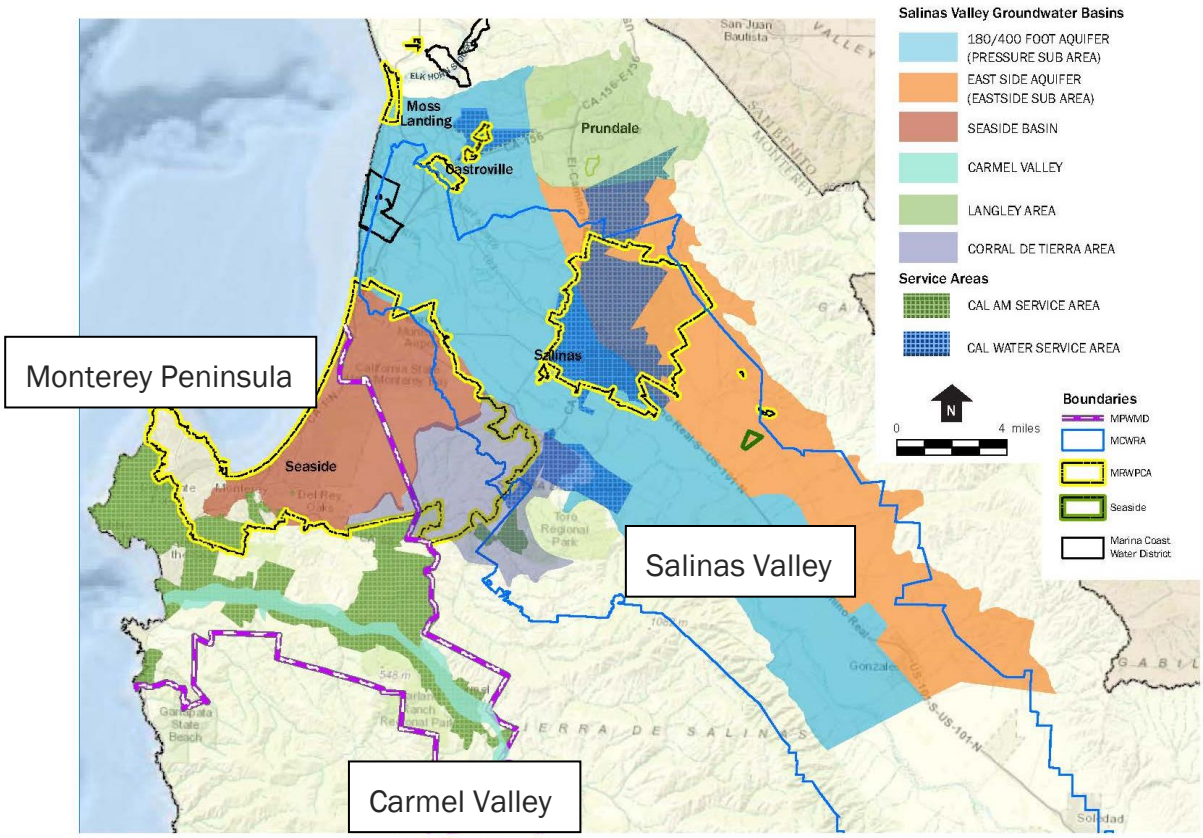

Figure 1. Drought Contingency Plan Area

Water Supply Sources

The water supply sources are surface water, groundwater, and recycled water. The Plan Area does not receive imported water. The significant surface water sources are the Salinas River in the Salinas Valley, the Carmel River, and the coastal waters of the Monterey Bay National Marine Sanctuary (MBNMS).

The Salinas River is the largest river on California's Central Coast and the third longest river in the state of California, originating in the center of San Luis Obispo County and then flowing 170 miles north and northwest to the MBNMS. The San Antonio, Nacimiento, and Arroyo Seco Rivers are the largest tributaries of the Salinas River. The Nacimiento and San Antonio Dams were constructed to control floodwaters and provide water for summer recharge of the Salinas Valley Groundwater Basin for urban and agricultural use. Average annual flows to the ocean from the Salinas River are approximately 360,400 acre-feet/year (AFY). A portion of this flow is released for environmental purposes to promote the threatened anadromous steelhead run in the Central Coast.

Groundwater recharge in the Salinas Valley is principally from reservoir releases to the Salinas River, flow into the Salinas River from the Arroyo Seco River and other tributaries to the Salinas River, and from percolation of rainfall. Seawater intrusion in the northern Salinas Valley was first documented in 1933 by the California State Water Commission and

has continued so that it now reaches as far as eight miles inland from the coast due to pumping to meet agricultural and urban demands.

The MCWRA, in partnership with the MRWPCA, built the Salinas Valley Reclamation Project and the Castroville Seawater Intrusion Project to retard the advancement of seawater intrusion. The water recycling facility and a reclaimed water distribution system delivers recycled water to approximately 12,000 acres of agricultural users near Castroville with 14,722 AFY of tertiary treated recycled water delivered directly to the Castroville area for agricultural use during the 2013 irrigation season.

The Carmel River flows along a 36-mile course through the Carmel Valley to the Carmel River lagoon and into the MBNMS at Carmel Bay. Runoff from the basin averages about 75,000 AFY. The Carmel River currently supplies about 70% of the municipal supply for the Monterey Peninsula; however, a 1995 State Water Resources Control Board (SWRCB) order and subsequent cease and desist order (CDO) issued in 2009 to California American Water (Cal-Am), the major local water supplier for the Monterey Peninsula, requires Cal-Am to find replacement supplies for two-thirds of the annual diversions from the Carmel River by January 1, 2017, although a time extension is being requested.

The Seaside subarea, which provides about 30% of urban supplies for the Monterey Peninsula, is recharged through percolation of rainfall and by excess winter flows in the Carmel River that are diverted, pumped into the local distribution system, and then injected into the basin for recovery in the dry season. The basin was adjudicated in 2006 and is subject to a series of production cutbacks in order to stabilize basin production at a safe yield by 2021.

The key water supply challenges facing the Plan Area are as follows:

Groundwater Quality. Seawater intrusion and nitrate pollution of groundwater aquifers.

Agricultural and Rangeland Water Quality. Runoff, tail water, and percolation of agricultural and rangeland water continues to negatively impact regional surface waters and groundwater.

Salinas River Watershed. Flood risk, river channel congestion, seawater intrusion, nitrate contamination, and the distribution of water supplies continue to be a challenge to this critical watershed.

Carmel River Watershed. Flood risk, channel erosion, and over pumping.

Water Reliability. The Monterey Peninsula must develop new water supplies due to State-ordered cutbacks in existing supply sources from the Carmel River and the Seaside Groundwater Basin.

Steelhead Fisheries. The Carmel River steelhead population is a threatened species under the ESA that has declined by up to 90% since the early 20th century. Although presently low in numbers, the Salinas River system is identified as one of the few areas within the Central Coast with the potential to support a viable sub-population. Surface water diversions and development on the floodplain have greatly reduced steelhead habitat in both the Salinas and Carmel Rivers.

In addition to the above listed water supply challenges there are also state and federal water quality protection goals for the Monterey Bay where the Carmel River, Salinas River, and urban areas drain into the Bay.

Water Rights

Water allocations from the Salinas River are 239% of the mean annual natural runoff. Rights to percolating groundwater in the basin have not been adjudicated, but the basin is recognized to be in a state of overdraft. In the Carmel River Basin, the State declared the stream to be fully appropriated in the dry season (May 1 through November 30 – SWRCB Water Rights Order 98-08). In 2006, the Seaside Groundwater Basin subarea was adjudicated by court order to prevent further seawater intrusion into the shallow aquifers due to urban consumption. Several local agencies and landowner representatives including the MCWRA representing Monterey County and the MPWMD form the court-appointed watermaster of the basin.

Urban Water Uses and Number of Users

Municipal uses include water used by residential, commercial, industrial, public customers, and for environmental purposes. There also are some small domestic customers served by private wells. Groundwater is the primary source of supply. The largest urban water purveyors are California American Water (Cal-Am) with 40,000 connections within the MWPMD area, California Water Service Company (Cal Water) Salinas District water system with 35,000 connections, Alco Water Service in Salinas with 8,800 connections, and Marina Coast Water District with 8,000 connections. These three urban water suppliers serve a total of approximately 92,000 customers and a population of 265,000.

Table 1. Potable Water Supplies for Urban Areas (AFY)

Water source	2010	2015	2020	2025	2030
Carmel Valley Aquifer, MPWMD/Cal-Am Monterey	8,253	8,165	3,376	3,376	3,376
Seaside Groundwater Basin MPWMD/Cal-Am Monterey	2,811	2,999	1,820	1,494	1,494
Salinas Valley Groundwater Basin, Cal-Am (outside Monterey)	539	502	465	428	392
Salinas Valley Groundwater Basin, Cal Water Salinas	16,940	21,053	19,840	21,125	22,504
Salinas Valley Groundwater Basin, Alco Water Service Salinas	4,250	-	8,307	10,550	11,233
Salinas Valley Groundwater Basin, Marina Coast Water District	4,554	6,134	8,262	9,053	9,701
Seaside Basin Aquifer Storage and Recovery Phase 1, MPWMD/Cal-Am Monterey	1,106	920	920	920	920
Aquifer Storage and Recovery Phase 2, Cal-Am Monterey	0	0	1,000	1,000	1,000
Sand City Desalination, Cal-Am Monterey	99	94	94	94	94
Ocean Desalination, Cal-Am Monterey (Proposed)	0	0	6,250	6,250	6,250
Ocean Desalination, Marina Coast Water District (Proposed)	0	0	275	725	1,156
Pure Water Monterey (Proposed)	0	0	3,500	3,500	3,500
Total Demand	**38,552**	**39,867**	**54,109**	**58,515**	**61,620**

Source: Urban water suppliers' 2010 Urban Water Management Plans, except for Alco Water Service (data from Greater Monterey County IRWM Plan), ocean desal Cal-Am and Pure Water Monterey DEIRs.

Agricultural Irrigation

Agricultural water users are typically self-supplied with private wells and there are no irrigation districts that supply multiple users. Groundwater production for agricultural use in the Salinas Valley was 460,000 AF in 2010. However, approximately 12,000 acres of farmland near the Castroville area are supplied with recycled water through the Castroville Seawater Intrusion Project. In 2013 recycled water deliveries were 14,722 AF. The number of individual agricultural users in the Plan Area has not been quantified.

The major crops in Monterey County are broccoli and lettuce with a total of approximately 280,000 acres under cultivation for all crop types. The Salinas Valley is often referred to as America's Salad Bowl and provides 76% of all lettuce in the US, 99% of artichokes, 92% of broccoli, 94% of processing tomatoes, 94% of celery, 86% of garlic, 83% of cauliflower, 67% of carrots, and 58% of asparagus. The economic value of the agricultural economy is $4.6 billion per year. The agricultural acreage in the Plan Area is not quantified. A key task of the Drought Contingency Plan is to develop the specific information for the Plan Area.

Current and Projected Water Demand

As shown in Table 1, the 2010 water demand by the urban water suppliers was approximately 38,500 AFY. The projected future demand for the major urban areas is estimated to be up to 61,600 AFY in 2030. Much of the 2010 groundwater use from the two Salinas groundwater basin subareas within the Plan area was for agricultural use. Total groundwater pumping was 194,842 in the Pressure and East Side basins, which was split between agriculture (86.5%) and urban use (13.5%). Because the groundwater basin is considered a "high priority" basin by the State, a groundwater sustainability plan must be completed by 2020 that would enable the basin to be managed sustainably by 2040. Demand for urban water supplies for the Monterey Peninsula may rise from about 15,000 AFY in 2015 to 19,000 AFY in 2030 with full General Plan build-out.

Table 1 identifies the historical and projected use of potable water supplies by the urban areas by source of supply, excluding recycled water supplies. As shown in Table 1, in the absence of completion of proposed facilities, the future reduction in groundwater supply from the Carmel groundwater basin and Seaside subarea will further exacerbate the constrained water supplies for the Plan Area.

Reclamation Relationships

For detailed description see **Evaluation Criteria D - Nexus to the Bureau of Reclamation.**

Technical Study Description

This technical study description describes the specific activities to be accomplished for the development of a **Drought Contingency Plan** that meets the requirements of the Drought Response Program. The technical study description includes the six elements of a Drought Contingency Plan and several required procedural steps. The Drought Contingency Plan will incorporate the work done by some of the urban water agencies in their urban water management plans and water shortage contingency plans and incorporate information from the MCWRA Salinas River Groundwater Basin Investigation.

Task 1. Initial Drought Contingency Plan Steps

Following finalization of the financial assistance agreement, MPWMD and their consultants will work with Reclamation to finalize the Drought Contingency Plan work plan before development of the plan begins.

Establish the North Monterey County Drought Contingency Plan Task Force. MPWMD will lead a Drought Contingency Plan Task Force (Task Force) and Advisory Committee made up of various stakeholders in the region that represent multiple interests within the planning area as listed below. **For detailed description of the Task Force and Advisory Committee see Evaluation Criterion B – Diversity of Stakeholders.**

Development of a Detailed Work Plan. Develop a work plan in consultation with Reclamation that will describe in detail how the various tasks included in developing the Drought Contingency Plan will be accomplished. This includes a detailed project schedule, coordination and responsibilities of Reclamation, MPWMD as the planning lead, the Task Force, Advisory Committee, and other interested stakeholders.

Development of a Communication and Outreach Plan. The purpose of this effort is to build understanding and support for drought contingency planning. The process for inclusion includes establishing a Task Force that will coordinate and make initial planning decisions to be vetted by the Advisory Committee, various stakeholders and the North County communities through a series of collaborative activities. An Advisory Committee made up of additional interests, not specifically represented on the Task Force, will review Task Force proposals and provide vital feedback.

Once the Task Force and the Advisory Committee is formed, kickoff activities will include a summit session defining the objectives, timeline, and financial obligations of each participating agency and/or organization represented. A series of relevant topical Workshops or Public Informational meetings will be developed to inform stakeholders, the public, and media alike.

Providing information and receiving input from various community members will occur through written communication, face-to-face, web, and external events.

Task 2. Background, Study Area, and Participating Agencies

The background, study area, participating agencies and water and wastewater agencies in the Plan area are described here, in the Executive Summary and in the Background Data sections of the funding application.

In addition to the information previously described, existing relevant water contingency and drought plans, response policies, emergency response plans, urban water management plans, water management plans, the Greater Monterey County and Monterey Peninsula Integrated Regional Water Management Plans, California Department of Water Resources and Reclamation drought planning guidelines, groundwater management plans, general plans, and other relevant information will be reviewed. The history of drought in the area, current drought situation, severity of drought conditions, recent drought experiences, and the period of time that the area has been experiencing drought conditions will be described. In addition to existing meteorological and drought analysis data and summarize historical drought frequency and magnitude, including multi-year droughts and seasonal droughts.

Task 3. Water Supplies and Demands

Review and summarize existing water supply and demand data for all pertinent water agencies and end users. Describe the availability and quality of existing data and models applicable to the proposed plan. For a detailed description of available models see Evaluation Criterion C - Project Implementation.

Describe existing water supplies and the key water supply facilities. These sources include river surface water, ocean water, groundwater, recycled water, wastewater, stormwater, agricultural return water, and interconnections with neighboring systems. Quantify stream flows, reservoir storage levels and yield, water quality, and historic flow patterns, flow requirements, including magnitude and timing of release.

Define the drought impacts to each water purveyor's water supply, water quality, and the vulnerability of the existing water supply sources. Describe water quality impacts of drought conditions. The water supply and demand comparison will compare the water supply sources available in normal and dry periods to the projected water demands.

Task 4. Drought Monitoring Process

Establish a process for monitoring near and long-term water availability, and a framework for predicting the probability of future droughts or confirming an existing drought. Develop a process for the collection, analysis, and dissemination of water availability and other drought-related data. Explain how this data will be used to predict or confirm droughts, including identifying metrics and triggers that may be used to define stages of drought, to trigger mitigation or response actions, and to define the different stages or levels of severity of drought.

Identify drought indicators and trigger levels that are currently being used by each participating agency to signal pending drought conditions and severity. Summarize current drought monitoring strategies used by each water purveyor. Develop as necessary specific parameters and triggers to monitor for drought conditions. Provide recommendations for drought indicators and triggers to use for deciding when a drought starts and when it ends.

Task 5. Vulnerability Assessment

Evaluate the vulnerability of water supplies to drought and climate change. Describe the reliability and vulnerability of the water supply to seasonal or climatic shortage. Consider a range of future conditions, including the effects of climate change.

Describe the severity of consequences for not addressing drought risks to water supplies. Present descriptions of existing or potential risks to human health and safety including water quality risks; endangered, threatened, or candidate species; agricultural water supplies; hydropower production; fish and wildlife habitat; recreation; and any other significant areas of risk. The consequences of seawater intrusion and sea level rise will be evaluated.

Provide an analysis of the drought impacts of climate change and the resulting practical implications for drought planning for the plan area. Identify impacts to water supplies for a range of possible drought and climate change scenarios. Review and summarize the climate change work being done by Reclamation, the State of California, and other federal and state agencies. Summarize the climate change analysis presented in each of the two integrated regional water management plans.

Task 6. Mitigation Actions

Identify, evaluate, and prioritize mitigation actions and activities that will build long-term resiliency to drought, mitigate the risks posed by drought, decrease sector vulnerabilities, and reduce the need for response actions.

Identify drought actions, responses, programs, and strategies. Review, compare, and summarize the staged demand reduction program used by each participating agency. Identify and evaluate potential additional responses for use at each stage of drought. Consider the best way to equitably allocate drought water resources to the various types of water needs. Provide recommendations to improve the consistency of the region's drought response.

Identify potential mitigation projects that would build long-term resilience to drought and reduce the need for emergency response actions. Work with the participating agencies to include projects that have been previously identified and discussed, regardless of the level of planning and development that has been done to date.

Evaluate the projects using screening criteria and develop a short list of the best projects, mitigation actions, and response actions and their associated triggers. This criteria list will be compiled into a matrix of criteria with weighting factors and used to screen potential response Actions and mitigation actions.

For the short list of potential drought mitigation projects, describe each mitigation project and how the identified project would address the existing or potential drought risks and develop cost estimates.

Describe the benefits that are expected to result from implementing the projects based on whether the projects will result in benefits to the health and safety of people and fish and wildlife and the environment. Describe benefits that are not captured above including projects that support agriculture, promote and encourage collaboration among parties, prevent a water-related crisis or conflict, and facilitate the voluntary sale, transfer or exchange of water.

Describe how the identified projects have a nexus to Reclamation project activities. Define the steps that are required for implementing the identified projects, including developing an estimated project schedule for implementing each project. Describe the magnitude of the impacts if the identified projects are not implemented including economic, social, public health, and number of people impacted by the risks.

Task 7. Response Actions

Identify, evaluate, and prioritize drought response actions and activities that can be implemented quickly during a drought to mitigate the impacts and provide rapid benefits. Establish a staged approach to implementation. Develop bundles of response actions that would be implemented at each stage. Define the stages of drought when the response actions are triggered to manage the limited supply and decrease the severity of immediate impacts. Estimate the expected ability each stage of response actions are expected to have on reducing water demands on a temporary basis. Consider water savings, lead time to activate response actions, costs, and procedural requirements for implementation.

Task 8. Administrative and Organizational Framework

Develop an operational and administrative framework to identify who is responsible for undertaking the actions necessary to implement each element of the plan, including communicating with the public about those actions. Identify roles, responsibilities, and procedures necessary to conduct drought monitoring, initiate response and mitigation actions, and update the Drought Contingency Plan.

The organizational structure currently used by each of the participating agencies to respond to a drought will be reviewed, and updated if appropriate. This includes elements such as the establishment of a described water shortage response team, public information, interagency coordination, staffing, costs, communications, and drought response actions.

The participating agencies process for the development of the Drought Contingency Plan will consist of having regular progress meetings, providing status reporting, and conducting workshops. Conduct joint session workshops with the elected Directors from all participating agencies regarding the Drought Contingency Plan effort.

Task 9. Update Process

Describe a process and schedule for monitoring, evaluating, and updating the Drought Contingency Plan. Develop an organizational framework and process to routinely update the Drought Contingency Plan. Develop guidelines to use to determine the triggers to identify when an update should be done.

Task 10. Drought Contingency Plan Document

Summarize all task efforts and findings into a Drought Contingency Plan document. Prepare the Drought Contingency Plan document and associated appendices, maps, figures, tables, and computer models.

Submit first and second draft of the Drought Contingency Plan for review and comment. Twenty copies of each of the draft reports will be submitted. Based on the results of agency input, a final submittal will be prepared. Twenty copies of each submittal, as well as one electronic/digital copy, will be provided.

Task 11. Project Management

Provide monthly updates of project status, issues, and concerns. Maintain project schedule. Conduct project progress meetings once per month with senior staff. Provide weekly email project status reports. Provide project documentation, quality control checks on project deliverables, management of progress against budget and schedule commitments, and submittal of monthly invoices and monthly project status reports.

Evaluation Criteria

Evaluation Criterion A – Need for a Drought Contingency Plan or Plan Update

Up to 40 points *may be awarded based on the extent to which the proposal demonstrates a compelling need to develop or update a Drought Contingency Plan.* Proposals that address more urgent needs and more severe drought risks will receive higher priority consideration on this criterion than proposals to address less significant needs and risks.

Describe existing or potential drought conditions to be addressed in the Drought Contingency Plan.

The plan will address a geographic area that has been experiencing multiple impacts associated with what will now be the fourth-year of drought. There is a long-term water supply to demand imbalance as demonstrated by State orders to cut use of existing surface and groundwater resources, and over 80-years of documented seawater intrusion and groundwater level declines. ***The region is not served by a state or federal water project*** and all domestic, industrial, and agricultural supply is dependent on local surface and groundwater sources.

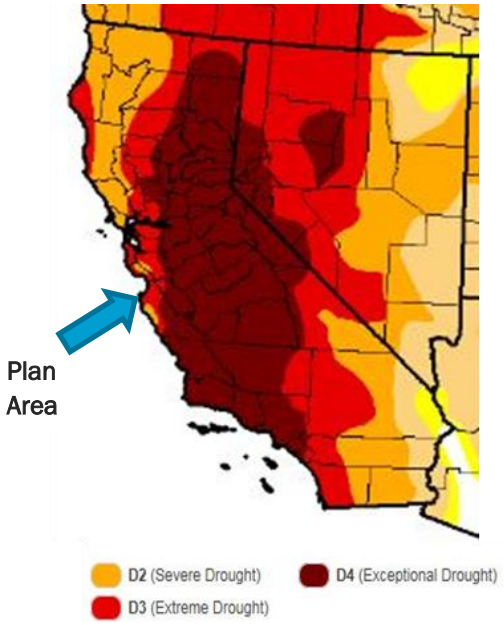

Figure 2. U.S. Drought Monitor for May 26, 2015

The drought monitor map (Figure 2) shows that the entirety of Monterey County is in a Severe to Exceptional Drought, with approximately the eastern half of the County in Exceptional Drought and most of the western half in Extreme Drought. Precipitation and resulting river flows have been significantly below normal since 2012, as a result of a four-year dry period. Figure 3 depicts how dry the Carmel River has been for the last two years as measured by unimpaired streamflow. The rainfall total for Water Year 2014 was the second lowest on record, with only 1924 lower.

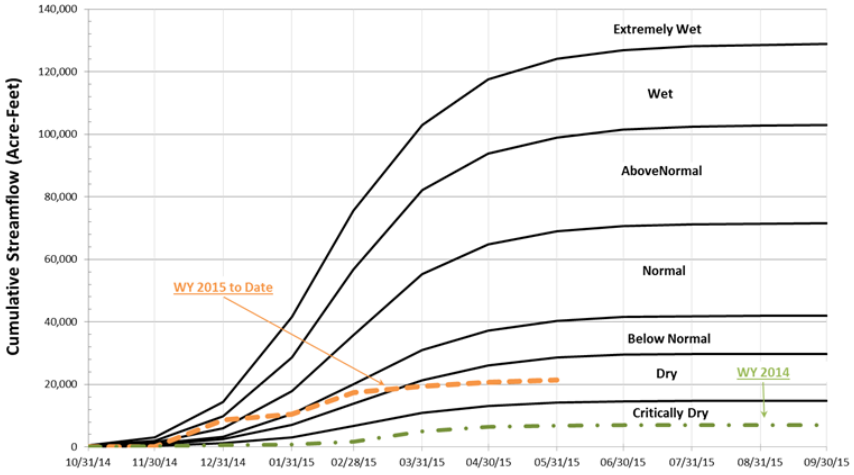

Figure 3. Water Year Cumulative Unimpaired Streamflow for the Carmel River

Most of the water supply in Monterey County comes from groundwater, with the Nacimiento and San Antonio Reservoirs providing surface water storage that is released in part to maintain groundwater levels in the aquifers. During past short-term droughts, the storage in the reservoirs has been sufficient to carry the Salinas groundwater basin through the drought period, making up for decreased natural recharge. However, when a drought lasts long enough, the storage in the reservoirs declines to the point where releases are heavily curtailed, and groundwater pumped out of the aquifers is not replenished by water from the

Salinas River. Surface storage in the Carmel River Basin is less than 2% of the annual runoff and releases from storage are made primarily to benefit steelhead habitat. It is during these extended droughts with little to no reservoir releases that the greatest declines in water storage and habitat downstream of reservoirs have been observed.

Climate change is projected to make resolving the water supply and demand imbalance even more challenging. According to the climate change analysis for the greater San Francisco Bay Area (including Santa Cruz County, just to the north), "an easily understandable climate future is one where the Pacific storm track moves northward, leading to drier conditions overall with a compression of the rainy season."

The Cal-Adapt tool was used to model changes in climate variables that may affect water resources within the Monterey Peninsula Integrated Regional Water Management planning area. The Cal-Adapt tool predicts that average rainfall will begin to decline throughout the Greater Monterey County region with projected decreases of approximately three inches in the Salinas Valley region (20 percent) by 2100 (High Emissions Scenario A2).

Describe the severity of the risks to water supplies that will be addressed in the Drought Contingency Plan.

The severity of risk to water supplies can be quantified by the amount of overdraft of the groundwater supplies. Brown & Caldwell's "State of the Basin" indicates that the Salinas basin usage exceeds yield by 17,000 to 24,000 AFY, significant groundwater reserves could be used to offset temporary overdraft conditions in the future, and the consequences would be water level and water quality declines with continued seawater advancements

For the Monterey Peninsula, an extreme lack of surface storage in the Carmel River watershed limits the capability to weather extreme droughts through reservoir releases. Surface water diversions are set to be reduced by 70% in the near future. In drought periods a lack of runoff and dewatering of the aquifer to meet domestic demand depletes aquifer storage and dries up the river for 10 to 11 miles. The largest underground reservoir serving the peninsula, in the Seaside subarea, is overdrafted and subject to pumping cutbacks. In most years, the area has only an 18-24 month supply of water.

The drought risks to specific sectors are described as follows:

At risk of not meeting existing drinking water demands – The lack of sufficient recharge in the Salinas Valley groundwater basin and over pumping in the Carmel River basin places the domestic water supply at risk. Continued groundwater pumping to satisfy demands risks is compromising water quantity and quality due to seawater intrusion.

At risk of not meeting existing agricultural water demands – As a consequence of the drought, MCWRA has suspended diversions from the Salinas River Diversion Facility, which also provides irrigation water to growers in the Castroville Seawater Intrusion Project area, because of insufficient supply in the Nacimiento and San Antonio reservoirs. Growers in the area continue to compensate for the drought by increasing pumping from local wells, which undermine recent achievements in slowing seawater intrusion in the Castroville area.

At risk of causing damage to the local economy - Drought related water shortages would have significant negative economic consequences to the local economy. A 2015 analysis of the economic impact of the drought on the California agricultural economy estimated the total economic loss as $2.7 billion, with loss of 18,600 jobs. The impact on the local agricultural economy due to the current drought has not been estimated. Monterey County

hosts 9 million visitors a year, generating $2.3 billion in revenue, and 22,000 jobs in the hospitality sector, the primary economic driver on the Monterey Peninsula. In 2009, the Marriott hotel estimated that in order to achieve a 10% savings in water use it would require a 10% decrease in business. The local hospitality association also calculated at that time that every 10% reduction in hotel occupancy would translate to a reduction in direct spending of $180 million per year. The association also determined a 30% reduction in water use could cause the loss of 10,000 to 12,000 jobs in the sector. In 2010, the economic consulting firm *The Brattle Group* concluded "a conservatively-estimated 50% water supply reduction would have negative consequences for residential customers of between $17 and $51 million annually. Industrial and commercial customers would be forced to reduce output and employment to cope with reduced water supplies. It is estimated that annual industrial sales losses within the Cal-Am service territory would be $261 million, annual commercial sales losses would be $742 million."

At risk of not meeting ecosystem water demands – Diminished river flows threaten aquatic species and riparian habitat. Instream flow requirements set for the Carmel River and reservoir releases required in the Salinas River in order to protect steelhead habitat and encourage adult migration are in jeopardy of not being met.

At risk of groundwater basin overdraft and seawater intrusion – Should groundwater levels continue to fall near the coast in this unconfined aquifer, data from the 1987-91 drought shows that the existing positive gradient normally exhibited in the aquifer could reverse and seawater could begin to mix with freshwater. Groundwater extraction primarily for agricultural use continues to exceed the recharge rate and seawater intrusion continues to move inland as growers continue to rely on groundwater production to provide irrigation water. Continued drought will intensify this reliance and speed up the rate of saltwater intrusion.

At risk of discharge water total maximum daily load (TMDL) violations – Agricultural and urban stormwater runoff discharges to the Salinas River, which flows to the Monterey Bay. Pollutants discharged to the river may cause serious adverse impacts in downstream environments, including critical habitat for steelhead as well as other sensitive habitats within the Monterey Bay National Marine Sanctuary. As the drought has reduced surface flows in the Salinas River, the concentration of these pollutant loads has increased.

Other drought related adverse impacts – Continuation of the drought beyond the end of 2015 may trigger extraordinary measures to curtail water use in the Plan Area. Given the current low level of per capita water usage and the demographics of the community, further reductions in water use will be a hardship for all water users and would result in further economic impacts that have not been quantified.

Describe the status of any existing Drought Contingency Plan.

No current regional drought plan exists. Further, the agricultural areas are underrepresented in terms of consensus drought contingency planning. However, each urban water supplier has a water shortage contingency plan that is required by the California Department of Water Resources as part of the urban water management plan that defines stages and temporary response actions to take in the event of a water shortage. These water shortage contingency plans provide some of the elements of a drought plan, but do not include most of what is required to be included in the Drought Contingency Plan. These existing plans will

be incorporated, where appropriate, into the Drought Contingency Plan to create a holistic regional approach with a common language and consistency of approach.

The lack of a regional plan demonstrates the historically independent, sub-regional approach to management of the region's water resources. Until now, urban water users on the peninsula have had little need to develop comprehensive water management plans inclusive of the agricultural sector. However, the historic drought, climate impacts, and actions by the State are bringing these interests to the table. The Drought Contingency Plan proposes a stakeholder driven planning process where urban, industrial, environmental, and agricultural interests can develop mitigation and response actions together, to the mutual benefit of all water-users in the region.

Evaluation Criterion B – Diversity of Stakeholders

Up to 35 points may be awarded based on the extent to which the proposal demonstrates that the planning process will incorporate input and participation by a diverse range of stakeholders. Note, "stakeholders" may include a mix of both internal and external stakeholders (e.g. stakeholders internal and external to a tribe, city or district)

Describe the diversity of stakeholders to be involved in the planning process.

The process to develop the Drought Contingency Plan will incorporate input and participation by a diverse range of stakeholders that will include a mix of both internal and external stakeholders.

Identify stakeholders who have committed to be involved and have provided letters of support

The **Drought Contingency Plan Task Force** that will be established as part of the initial planning steps will consist of the following agencies that have committed to be involved. These agencies represent a variety of interests. Support letters are included in this document.

- Monterey Peninsula Water Management District (MPWMD), lead agency and represent urban interests on the Monterey Peninsula.
- Monterey Regional Water Pollution Control Agency (MRWPCA), owners of recycled water infrastructure that provides recycled water for urban and agricultural reuse.
- Monterey County Water Resources Agency (MCWRA), agency responsible for water management information in agricultural areas in the Salinas groundwater basin; cooperator with MRWPCA on supplying recycled water for agricultural use.
- Monterey County Resource Management Agency (MCRMA), responsible for building services, planning, and public works and manages infrastructure and county facilities, and protects natural resources.
- Monterey County Office of Emergency Services, by action of Board of Supervisors have convened the Monterey County Inter-Agency Drought Task Force

Describe stakeholders who have expressed support

The following agencies will be members of the **Advisory Committee:**

- City of Salinas, represents urban water demands in the City
- Marina Coast Water District, represents urban water demands in the City

- California American Water Company, private water company providing urban water supplies to the Monterey Peninsula and selected Salinas Valley areas
- California Water Service Company, private water company providing urban water supplies to the City of Salinas
- Monterey County Farm Bureau, represent the regional agricultural interests
- Salinas Valley Water Coalition, a non-profit public benefit corporation and was organized for the specific purpose to promote fair representation and evaluation of water issues in Monterey County.
- Coalition of Peninsula Business, an umbrella organization that represents hospitality, realtors, chambers, commercial property owners, and a variety of other local business interests
- Grower Shipper Association of Central California, represents local business interests of the agricultural industry

Efforts to ensure participation by a diverse array of stakeholders

Create an Outreach Group. Although time consuming, it is imperative to the success of this planning effort to identify the appropriate regional organizations, their leaders and staff. An opinion leader can be identified by a few characteristics: the person's appointed or elected position, his or her values and traits, his or her competence or expertise, and his or her social position. During the initial planning steps these opinion leader stakeholders will be contacted to determine their support and interest in participating in the process. The specific efforts that will be undertaken to engage them in the planning process will be developed in the communication and outreach plan. Opinion organizations and their leaders can include, but are not limited to, the following:

- Hospitality; Monterey County Convention & Visitors Bureau, Monterey County Hospitality Association, and Monterey Peninsula Chamber of Commerce, and other local chambers
- Agriculture: Salinas Jaycees, Young Ranchers and Farmers
- Environmental: Sustainable Monterey County (Each city has their own chapter), Coast Keepers, Big Sur Land Trust, Watershed Institute of CSU Monterey Bay
- Special Interests: Landwatch, Carmel Valley Association, Public Water Now

Evaluation Criterion C – Project Implementation

Up to 20 points may be awarded based on the extent to which the proposal supports the applicant's ability to meet the program requirements within the two- year timeframe, based on the following:

Describe the approach for addressing the six required elements of a Drought Contingency Plan within the two year timeframe.

The six elements of the Drought Contingency Plan will be addressed within the two year time frame in accordance with the schedule presented in Table 2.

Table 2. Drought Contingency Plan Schedule												
Task	Month											
	2	4	6	8	10	12	14	16	18	20	22	24
1. Initial Drought Contingency Plan Steps												
2. Background, Study Area, and Participating Agencies												
3. Water Supplies and Demands												
4. Drought Monitoring Process												
5. Vulnerability Assessment												
6. Mitigation Actions												
7. Response Actions												
8. Administrative and Organizational Framework												
9. Update Process												
10. Drought Contingency Plan Document												
11. Project Management												
Stakeholder meetings												

Multiple tools, models, and sources of data exist that can be used to evaluate the projections of water supply and demand under variable conditions, including water supply risks related to climate change. The models applicable to the proposed plan include the current effort by MCWRA to develop the Salinas River Groundwater Basin Investigation. The investigation includes a Salinas Basin-wide integrated groundwater-surface water model that will provide information regarding future land use, future water use, groundwater impacts, and climate change impacts. The Salinas River Groundwater Basin Investigation will provide input to the Drought Contingency Plan. Other models that are existing or under development include the linked surface-groundwater flow model for the Carmel River Basin using GSFLOW, Seaside Groundwater Basin Model, and the 2014 Integrated Watershed/Groundwater Basin Computer Model (HSPF/MODFLOW).

Identify staff with appropriate technical expertise and describe their qualifications.

David J. Stoldt, General Manager, MPWMD - Mr. Stoldt joined the Monterey Peninsula Water Management District as General Manager in 2011. He has over 27 years of experience in the public infrastructure sector, including investment banking and consulting to public agencies, including the Reclamation funded CSIP and SVRP projects. He has also served as chief executive and chief financial officer for early stage start-up companies where his roles have included cross-functional experience in strategic planning, finance, marketing, logistics, and management. Mr. Stoldt has also served in various positions in the public sector, both appointed and elected, leading to an understanding of how to achieve results amidst the delicate balance of public and political interests. His analytical and financial background has resulted in creating high-impact outcomes working in the context of legal agreements, organizational constraints, and political frameworks. He has worked on 40 other public agency projects totaling over $3 billion. Mr. Stoldt has an MBA and Certificate in

Public Management from Stanford, an MS in Energy and Resources from UC Berkeley, and a BS in Civil and Environmental Engineering from University of Illinois.

Also supporting project management will be Larry Hampson, District Engineer, MPWMD and Stephanie Locke, Water Demand Manager, MPWMD, and other MPWMD staff as necessary.

Larry Hampson is MPWMD's District Engineer/Planning and Engineering Division Manager and is in charge of professional staff and consultants engaged in management of the Carmel River, development and review of water supply projects, and regulation of water distribution systems. Mr. Hampson also facilitates the implementation of the Integrated Regional Water Management Plan for the Monterey Peninsula planning region Water supply activities include investigations and preparation of proposals for surface storage, desalination, water recycling, and new wells. The District Engineer represents MPWMD at California Public Utilities Commission and State Water Resources Control Board hearings, provides testimony, and assists in negotiations with regulatory agencies. Mr. Hampson is a Registered Civil Engineer in California and Professional Engineer in Colorado and obtained a B.S. in Engineering Science from Colorado State University and an MBA from the University of Colorado.

Stephanie Locke is the Water Demand Manager MPWMD, where she has been involved in all facets of water demand management and water policy on the Monterey Peninsula for over two decades, overseeing water conservation, permitting, and public outreach programs. Stephanie has been an instrumental figure in developing new regulations to the benefit of Peninsula home and business owners, adding much needed flexibility and opportunity for improvement of properties during drought and moratorium.

This past year, in response to the unprecedented California Drought, Stephanie contributed to the Association of California Water Agencies' Drought Action Group and provided input to the California State Water Board during development of Governor Brown's emergency drought regulations. Stephanie is currently a member of the Monterey County Inter-Agency Drought Task Force, helping focus drought response efforts in greater Monterey County.

The MPWMD staff are expected to be supported by a multi-discipline team of water resources planners, hydrologists, climate change experts, environmental scientists, and public involvement specialists. It should be noted that the consulting team members described below have worked closely with MPWMD in the preparation of this grant proposal. However, if this grant is awarded, there may be a competitive process to select the consulting team that will support MPWMD with the preparation of the Drought Contingency Plan.

- Paul Selsky (Brown and Caldwell) has 39-years of experience in the water industry providing water supply planning and design to western water agencies with a regional and policy-level focus. Paul provided drought planning assistance for El Dorado County Water Agency including developing drought strategy, preparing informational materials, and assisting with the interagency committee and focus group meetings. This Agency represents El Dorado Irrigation District, South Tahoe Public Utility District, Georgetown Divide, and Grizzly Flats. The plan developed by Paul in 2007 is now being implemented.
- Mike Savage (Brown and Caldwell) is a water resources engineer with more than 40 years of experience. He specializes in leading large and complicated water resources programs and offers a broad perspective to each program that enables him to examine options clearly, use available resources, and evaluate each potential solution to meet overall

water agency goals. He is accomplished at working closely with Boards of Directors, City Councils, and multiple stakeholders to address tough water issues using a range of decision making tools.

- **Dr. Donald Wilhite** is founding director of the National Drought Mitigation Center and co-author of "Drought Preparedness Planning: Building Institutional Capacity" that describes the 10-step drought planning process. Dr. Wilhite worked with Paul Selsky on the Eldorado Water Agency Plan.
- **Les Chau** (Brown and Caldwell) brings 24 years of consulting experience in groundwater resource studies and is currently conducting a basin wide groundwater and surface water supply study in response to the drought conditions in the County of Monterey. The first part of the project is the assessment of the "State of the Basin" and its findings will include potential immediate actions to be taken by the County to address continued drought related water supply issues. The second part of the project includes quantitative evaluation of the Salinas River groundwater basin that focuses on a basin-wide groundwater surface-water model.
- **Matthew Baillie** (Brown and Caldwell) is a Senior Hydrogeologist with10 years of experience as a Professional Geologist and Certified Hydrogeologist in California. Matt has worked on a variety of water resources projects, including the Salinas River Groundwater Basin Investigation as the chief technical lead on an in-depth study on the hydrogeology of the Salinas River Groundwater Basin.
- **Mark Millan** (Data Instincts) has over 20 years of experience in marketing and public relations, and ten years in Web development strategies. His firm specializes in developing public outreach strategies for challenging public projects and specifically public information and community relations for Environmental Impact Reports and construction of water projects.
- **Ginger Bryant** (Bryant & Associates) has developed, directed and participated in diverse consulting teams comprised of individuals with the technical and policy expertise required to address complex water management issues in the West. Her watershed-based management strategies bring a comprehensive understanding of the value of water from many perspectives, be it landowner, community interests, state or federal agency. As a participant in technical teams, Ginger works closely with her team members to develop innovative alternatives to water management issues that reflect her expertise.

Evaluation Criterion D – Nexus to the Bureau of Reclamation

Up to 5 points may be awarded based on the extent that the proposal demonstrates a nexus between the development of Drought Contingency Plan and a Reclamation project or activity.

Members of the Task Force have various working relationships with Reclamation.

Reclamation provided loan funding for the Salinas Valley Reclamation Project and the Castroville Seawater Intrusion Project that supplies recycled water to offset groundwater pumping for agricultural use. MCWRA and MRWPCA collaborated to build the Salinas Valley Reclamation Project, the tertiary treatment water recycling facility (Reclamation loan #5-07-20-W1283), and the Castroville Seawater Intrusion Project, the conveyance and distribution

network that works in conjunction with the Salinas Valley Reclamation Project (Reclamation loan #5-07-20-W1284).

There is also a Title XVI Feasibility Study nearing completion that supports the Pure Water Monterey Program (currently not authorized for construction). This study includes expansion of these two Reclamation funded projects as part of the Pure Water Monterey Program and it is anticipated they would be key aspects of the Mitigation Actions identified in the Plan.

The proposed Pure Water Monterey Program includes advanced water treatment facilities for indirect potable reuse for the Monterey Peninsula and improvements to the Salinas Valley Reclamation Project to expand available recycled water to the Castroville Seawater Intrusion Project for agriculture. New source water supplies required for these expansions would include diversion of unused stormwater and agricultural drain water for water supply to the existing Regional Treatment Plant, where they would be further treated with the expanded Salinas Valley Reclamation Project and the proposed advanced water treatment plant. New sources of water being evaluated during the Drought Contingency Plan include the following:

- Blanco Drain: Agricultural return flow and surface runoff from 6,400 acres of agricultural lands would be diverted before entering the Salinas River and conveyed to the existing Regional Treatment Plant for use with the Salinas Valley Reclamation Project and the advanced water treatment plant for supplying indirect potable reuse water to the Seaside Groundwater Basin.
- Reclamation Ditch: A network of excavated earthen channels constructed from 1917-1920 is used to drain agricultural return flow and surface runoff from a watershed of approximately 157 square miles that includes headlands and agricultural areas. The drainage system collects water from several sources, which would be diverted to the Regional Treatment Plant through the existing sanitary sewer system for treatment and reuse.
- Lake El Estero, Monterey: Stormwater is currently captured and stored at Lake El Estero then discharged to nearby beaches before large storm events. The proposed project would divert stormflows from Lake El Estero to the sanitary sewers where it would supplement flows to the Salinas Valley Reclamation Project and advanced water treatment plant.
- Salinas stormwater: This proposed project would capture and divert stormwater runoff that currently drains an area of about 2.5 square miles and eventually flows to the Salinas River. Flow would be conveyed directly to the Regional Treatment Plant through the sanitary sewer system or to the Salinas Industrial Wastewater Treatment Facility ponds where it would be held until it is pumped out during the summer to provide additional source water at the Regional Treatment Plant.
- Salinas agricultural wash water: This is wastewater from agricultural industries, 80 to 90% of which is water used for washing produce. Currently during part of the year the water is conveyed the Salinas Industrial Wastewater Treatment Facility for treatment and disposal. Treatment and conveyance improvements would enable agricultural wash water to be recycled at the Regional Treatment Plant.

There is also a proposed Salinas and Carmel Rivers Basin Study under consideration and as of this writing, it is unknown if this Study will be funded by Reclamation. The Salinas and Carmel Rivers Basin Study proposes a collaborative investigation to evaluate future water

supply and demand imbalances in a changing climate and to develop potential adaptation strategies to meet future demands.

The Plan Area for the North Monterey County Drought Contingency Plan includes several of the northern sub-basins identified in the Salinas and Carmel River Basin Study proposal – the sub-basins most impacted by current drought conditions – but does not include all of the area in the proposed Basin Study. Although these two study efforts are complementary, there would be no duplication of effort but instead, a synergy could result where the level of specificity of the near-term actions of the Drought Contingency Plan could serve to inform the long-term investigation of the Basin Study.

It should also be noted that the Basin Study investigation describes a nexus to Reclamation through the State and Federal Coordinating Operating Agreement that provides San Luis Obispo County an annual allocation of 25,000 AFY of water from the State Water Project, the Coordinating Operating Agreement provides that delivered water may be supplied by either by the State Water Project or by Reclamation's Central Valley Project. The study area for the North Monterey County Drought Contingency Plan is not in San Luis Obispo County and therefore, cannot claim a federal nexus to Reclamation through the Coordinating Operating Agreement.

Finally, Reclamation's Climate Change Adaption Strategy identifies four primary goals for Reclamation, its customers, and stakeholders to build resiliency to climate change impacts. Of these, three have direct application to the study region:

Goal 1 – *Increase Water Management Flexibility* identifies funding Title XVI projects as one of the actions Reclamation can take to implement adaption strategies supported by climate analysis. As noted above, the Plan Area includes a Title XVI Feasibility Study nearing completion and it is anticipated that key aspects of this Study will be identified as Mitigation Actions under the Drought Contingency Plan.

Goal 2 – *Enhance Climate Adaption Planning* recognizes the importance of planning as a tool for building resiliency to climate change. This region has the potential to interface and share information between a Basin Study and a Drought Contingency Plan demonstrating how near and long-term planning activities inform and support climate resiliency planning.

Goal 4 – *Expand Information Sharing* supports active partnering, information and data exchange with stakeholders, federal and state agencies and nongovernmental organizations. The proposed Basin and Drought Contingency Plan activities offer structured processes for integration of both relevant information and inclusion of multiple stakeholder perspectives.

Existing Drought Contingency Plan (if applicable)

No regional drought contingency plan exists. There are only the water shortage contingency plans that are an element of urban water management plans that the urban water suppliers are required to prepare by the California Department of Water Resources. For a more detailed description of the water shortage contingency plans, see **Evaluation Criterion A-Need for a Drought Contingency Plan or Plan Update.**

Attachment: MPWMD Board Resolution

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

RESOLUTION NO. 2015-13

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE MONTEREY PENINSULA WATER MANAGEMENT DISTRICT TO APPLY FOR A WATERSMART DROUGHT CONTINGENCY PLANNING GRANT, ENTER INTO AN AGREEMENT WITH THE UNITED STATES BUREAU OF RECLAMATION, AND AUTHORIZE THE GENERAL MANAGER TO EXECUTE CONTRACTS AND AGREEMENTS TO COMPLETE A DROUGHT CONTINGENCY PLAN

WHEREAS, the Monterey Peninsula Water Management District (District) wishes to promote and expand the beneficial use of recycled water in partnership with the Monterey Regional Pollution Control Agency (Agency) through the permitting, design, and development of the Pure Water Monterey groundwater replenishment program; and

WHEREAS, the District, the Agency, Monterey County Water Resources Agency, City of Salinas, and Marina Coast Water District signed a Memorandum of Understanding in October 2014 to implement regional solutions for the diversion and conveyance of source waters for recycling and drought response; and

WHEREAS, the United States Bureau of Reclamation (Reclamation) Drought Response Program supports a proactive approach to understanding and managing drought by providing assistance to local water managers for drought planning - including consideration of climate change information - to take actions to build long-term resiliency to drought. Reclamation provides financial assistance to water users in 17 Western States and Hawaii through its WaterSMART grant programs and will provide up to 50 percent of the costs for development of a Drought Contingency Plan related to the North Monterey County study area; and

WHEREAS, Reclamation has issued Funding Opportunity Announcement No. R15AS00047 – "WaterSMART Drought Contingency Planning Grants for Fiscal Year 2015" to assist project sponsors with development of drought contingency plans.

WHEREAS, Reclamation requires a resolution certifying the approval of an application by the Applicant's governing board before submission of said application to Reclamation; and

WHEREAS, the District intends to apply for a grant to conduct a drought contingency plan for the Pure Water Monterey study area; and

WHEREAS, the District, if selected, will enter into an agreement with Reclamation to carry out the drought contingency plan.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Monterey Peninsula Water Management District to: (1) make application to the United States Bureau of Reclamation to obtain a Drought Contingency Planning Grant pursuant to Title II of the Reclamation States Emergency Drought Relief Act of 1991 (Public Law 102-250, 43 United States Code Section 2201-2214), as amended; (2) enter into an agreement with the United States Bureau of Reclamation to receive a grant and prepare a Drought Contingency Plan (Plan). The General Manager of the Monterey Peninsula Water Management District is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, execute a grant agreement, and enter into such agreements as necessary with agencies, stakeholders, and consultants to complete a Plan.

On motion of Director Potter, and second by Director Clarke, the foregoing resolution is duly adopted this 15th day of June 2015, by the following votes:

AYES: Directors Potter, Clarke, Lewis, Markey and Pendergrass

NAYES: None

ABSENT: Directors Brower and Byrne

I, David J. Stoldt, Secretary of the Board of Directors of the MPWMD, hereby certify that the foregoing is a full, true and correct copy of a resolution duly adopted on the 15th day of June 2015.

Witness my hand and seal of the Board of Directors, this 16th day of June, 2015.

David J. Stoldt, Secretary to the Board

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COPY CERTIFICATION

I, David J. Stoldt, Secretary to the Board of Directors of the Monterey Peninsula Water Management District, hereby certify the foregoing is a full, true and correct copy of Resolution No. 2015-13 duly adopted on the 15th day of June 2015.

David J. Stoldt, 6-16-15
Secretary to the Board of Directors Date

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Monterey Regional Water Pollution Control Agency

"Dedicated to meeting the wastewater and reclamation needs of our member agencies, while protecting the environment."

Administration Office:
5 Harris Court, Bldg. D, Monterey, CA 93940-5756
(831) 372-3367 or 422-1001, FAX: (831) 372-6178
Website: www.mrwpca.org

June 15, 2015

Monterey Peninsula Water Management District (MPWMD)
Board of Directors
5 Harris Court, Building G
Monterey, CA 93940

Re: Support Letter for MPWMD U.S. Bureau of Reclamation Drought Contingency Planning Grant

The Monterey Regional Water Pollution Control Agency (MRWPCA) has partnered with the Monterey Peninsula Water Management District (MPWMD) for developing Pure Water Monterey, a Groundwater Replenishment Project. The Project has multiple agencies working together to implement diverse water resource management projects to counter the effects of climate change and drought on surface and groundwater supplies. These efforts are a high priority for many of the agencies and MRWPCA for building resiliency into the region's water supply.

Planning for a sustainable, resilient water supply to meet the urban, agricultural and environmental needs of Monterey County will take consistent coordination, cooperation and focused planning and management. To this end, MRWPCA strongly supports the MPWMD's grant application for funds to work with North Monterey County stakeholders on the preparation of a Drought Contingency Plan.

We look forward to MPWMD being awarded this critical funding. MRWPCA will also be an active participant in developing the Plan, and in turn, implementing solutions that protect and enhance our increasingly valuable water resources.

Sincerely,

Keith Israel, General Manager

MONTEREY COUNTY

THE BOARD OF SUPERVISORS

MONTEREY COURTHOUSE - 1200 AGUAJITO ROAD, SUITE 001, MONTEREY, CALIFORNIA 93940

DAVE POTTER
SUPERVISOR - DISTRICT FIVE
(831) 647-7755 - FROM MONTEREY
(831) 755-5055 - FROM SALINAS
(831) 667-2770 - FROM BIG SUR
(831) 647-7695 (FAX)
e-mail: district5@co.monterey.ca.us

KATHLEEN LEE
CHIEF OF STAFF

June 15, 2015

Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey CA 93940

Re: Support Letter for Monterey Peninsula Water Management District (MPWMD)
U.S. Bureau of Reclamation Drought Contingency Planning Grant

To: District Board of Directors,

For decades, the County of Monterey has led the state in water conservation efforts for both residential and commercial uses. Given the worsening drought conditions in California, it is imperative that communities and public agencies continue to work together to create viable solutions and plan for the future. A well-developed drought contingency plan would further bolster our efforts to successfully navigate through this difficult time, not only in the North County, but also on the Peninsula, Salinas Valley and throughout the County of Monterey.

Planning for a sustainable, resilient water supply to meet the urban, agricultural and environmental needs of Monterey County will take consistent coordination, cooperation and focused planning and management. To this end, I strongly support the Monterey Peninsula Water Management District's grant application for funds to work with North County stakeholders on the preparation of a Drought Contingency Plan.

I look forward to MPWMD being awarded this critical funding, being an active participant in developing the Plan, and in turn, implementing solutions that protect and enhance our increasingly valuable water resources.

Sincerely,

Dave Potter

Dave Potter
Supervisor, Fifth District
County of Monterey

MONTEREY COUNTY

OFFICE OF EMERGENCY SERVICES

1322 Natividad Road, Salinas, CA 93906
Phone: (831) 796-1900 • FAX: (831) 796-1911

June 15, 2015

District Board of Directors
Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey CA 93940

To Whom It May Concern

Re: Support Letter for Monterey Peninsula Water Management District (MPWMD)
U.S. Bureau of Reclamation Drought Contingency Planning Grant

Monterey County Office of Emergency Services has been working with local water districts and water suppliers to collaborate on water conservation effort since Governor Brown signed the emergency proclamation. We have hosted the inter-agency drought task force as a platform to bring stakeholders together to share best practices and concerns as the drought emergency continues. Evident in the forum is the need for great drought contingency planning throughout the county.

Planning for a sustainable, resilient water supply to meet the urban, agricultural and environmental needs of Monterey County will take consistent coordination, cooperation and focused planning and management. To this end, Monterey County Office of Emergency Services strongly supports the Monterey Peninsula Water Management District's grant application for funds to work with North County stakeholders on the preparation of a Drought Contingency Plan.

We look forward to MPWMD being awarded this critical funding, being an active participant in developing the Plan, and in turn, implementing solutions that protect and enhance our increasingly valuable water resources.

Sincerely,

Sherrie L. Collins
Emergency Services Manager
County of Monterey

MONTEREY COUNTY
RESOURCE MANAGEMENT AGENCY

Carl P. Holm, AICP, Acting Director
John Guertin, Acting Deputy Director

Daniel Dobrilovic, Acting Building Official
Michael Novo, AICP, Director of Planning
Robert K. Murdoch, P.E., Director of Public Works

168 W. Alisal Street, 2nd Floor
Salinas, CA 93901
www.co.monterey.ca.us/rma

June 15, 2015

Monterey Peninsula Water Management District
Attn: District Board of Directors
5 Harris Court, Building G
Monterey CA 93940

Regarding: Support Letter for Monterey Peninsula Water Management District (MPWMD)
U.S. Bureau of Reclamation Drought Contingency Planning Grant

Dear District Board of Directors:

Monterey County Resource Management Agency is responsible for planning, building services, environmental services, capital projects, facilities, and road/bridge maintenance within the unincorporated area of Monterey County. These services involve planning water for current and future land use as well as use of water at County facilities.

Planning for a sustainable, resilient water supply to meet the urban, agricultural and environmental needs of Monterey County will take consistent coordination, cooperation and focused planning and management. To this end, the Resource Management Agency strongly supports the Monterey Peninsula Water Management District's grant application for funds to work with North County stakeholders on the preparation of a Drought Contingency Plan.

We look forward to MPWMD being awarded this critical funding, being an active participant in developing the Plan, and in turn, implementing solutions that protect and enhance our increasingly valuable water resources.

Sincerely,

Carl P. Holm, AICP
Acting Director
Monterey County Resource Management Agency