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: 06/25/2015

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: Ssantiam Water Control District

* b. Employer/Taxpayer Identification Number (EIN/TIN): 93-0442489

* c. Organizational DUNS: 1040655290000

d. Address:

* Street1: 284 East Water Street

Street2:

* City: Stayton

County/Parish:

* State: OR: Oregon

Province:

* Country: USA: UNITED STATES

* Zip / Postal Code: 97383-1763

e. Organizational Unit:

Department Name:

Division Name:

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

Prefix: Mr.

* First Name: Brent

Middle Name:

* Last Name: Stevenson

Suffix:

Title: General Manager

Organizational Affiliation:

* Telephone Number: 503-769-2669

Fax Number: 503-769-5995

* Email: brents.swcd@wvi.com

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 Santiam Watershed Drought Contingency Plan Grant Proposal

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: OR-005 * b. Program/Project: OR-005

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

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

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

18. Estimated Funding ($):

* a. Federal	0.00
* b. Applicant	30,000.00
* c. State	10,900.00
* d. Local	141,086.00
* e. Other	17,554.00
* f. Program Income	199,540.00
* g. TOTAL	399,080.00

*** 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 .

☐ 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: Mr. * First Name: Brent

Middle Name:

* Last Name: Stevenson

Suffix:

* Title: District Manager

* Telephone Number: 503-769-2669 Fax Number: 503-769-5995

* Email: brents.swcd@wvi.com

* Signature of Authorized Representative: Brent Stevenson * Date Signed: 06/25/2015

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. First year Drought Planning assistance	15.514	$	$	$ 99,770.00	$ 99,770.00	$ 199,540.00
2. Second year Drought Planning assistance	15.514			99,770.00	99,770.00	199,540.00
3.						
4.						
5. Totals		$	$	$ 199,540.00	$ 199,540.00	$ 399,080.00

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SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1)	(2)	(3)	(4)	Total (5)
	First year Drought Planning assistance	Second year Drought Planning assistance			
a. Personnel	$	$	$	$	$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual	90,700.00	90,700.00			181,400.00
g. Construction					
h. Other	99,770.00	99,770.00			199,540.00
i. Total Direct Charges (sum of 6a-6h)	190,470.00	190,470.00			$ 380,940.00
j. Indirect Charges	9,070.00	9,070.00			$ 18,140.00
k. TOTALS (sum of 6i and 6j)	$ 199,540.00	$ 199,540.00	$	$	$ 399,080.00
7. Program Income	$	$	$	$	$

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SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. BOR Drought Contingency Planning Grant R15AS00047 (In-Kind)	$ 15,000.00	$ 5,450.00	$ 79,320.00	$ 99,770.00
9. Second year Drought Planning assistance	15,000.00	5,450.00	79,320.00	99,770.00
10.				
11.				
12. TOTAL (sum of lines 8-11)	$ 30,000.00	$ 10,900.00	$ 158,640.00	$ 199,540.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 90,700.00	$ 22,675.00	$ 22,675.00	$ 22,675.00	$ 22,675.00
14. Non-Federal	$				0.00
15. TOTAL (sum of lines 13 and 14)	$ 90,700.00	$ 22,675.00	$ 22,675.00	$ 22,675.00	$ 22,675.00

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. BOR Drought Contingency Planning Grant R15AS00047 (Consultant) 2nd Year	$ 90,700.00	$	$	$
17. Second year Drought Planning assistance				
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	$ 90,700.00	$	$	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. Indirect Charges: $18,140

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
Brent Stevenson	District Manager
APPLICANT ORGANIZATION	DATE SUBMITTED
Ssantiam Water Control District	06/25/2015

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TITLE PAGE

SANTIAM WATER CONTROL DISTRICT

APPLICATION

FOR

U.S. BUREAU OF RECLAMATION
2015 DROUGHT CONTINGENCY PLANNING GRANT

JUNE 25, 2015

NORTH SANTIAM WATERSHED DROUGHT CONTINGENCY PLAN

Santiam Water Control District
284 E. Water St.
Stayton, OR 97317

Brent Stevenson, General Manager
Tele: (503) 769-2669
Fax: (503) 769-5995

Email: brents.swcd@wvi.com

TABLE OF CONTENTS

E. Technical Proposal & Evaluation Criteria

Executive Summary

The following is the pertinent information regarding the Applicant:

Date of Application: June 25, 2015
Name of Applicant: Santiam Water Control District
City/County/State: Stayton, Marion County, Oregon

Address and Contact Information:
SANTIAM WATER CONTROL DISTRICT
284 East Water Street
Stayton, OR 97383

ATTN: Brent Stevenson, District Manager
Telephone: (503)769-2669 / Fax: (503)769-5995
Email: brents.swcd@wvi.com

The proposed project involves working with the U.S. Bureau of Reclamation (Reclamation) and local stakeholders to develop a Drought Contingency Plan for the North Santiam Watershed (NSW). Currently, the U.S. Army Corp of Engineers (USACE) manages releases from Detroit Lake, primarily for flood control, according to federally mandated regulations. As a result, most stakeholders, including Reclamation, have little control over the amount of water available downstream of Detroit Lake. This lack of control over releases and water availability creates significant uncertainty, and makes it difficult for most stakeholders to plan. If reservoir releases were to be regulated under drought conditions as a result of the 2008 Willamette Biological Opinion of the National Oceanic and Atmospheric Administration's (NOAA) or other considerations, many stakeholders, including the City of Salem and the Santiam Water Control District (Santiam WCD), would be greatly impacted. The intent of the Drought Contingency Plan is to identify critical priorities for water and seek alignment among the many stakeholders for how to address those priorities under drought conditions. Grant funds will be used to hire a qualified consultant to work with Reclamation and the stakeholders to develop a Drought Contingency Plan that contains the six required elements: Drought Monitoring, Vulnerability Assessment, Mitigation Actions, Response Actions, Operational and Administrative Framework, and a Plan Update Process. The goal for creating a NSW Drought Contingency Plan is to build community resilience to drought *before* a crisis occurs. The proposed Drought Contingency Plan will be completed in two years with an estimated completion date of September 30, 2017.

Reclamation Projects Located in the Project Area: The Willamette Basin Project: Contracts #140510W0675 and #140510W1118, Detroit Lake (Detroit and Big Cliff Dams) are Reclamation projects located within the geographical area that will be addressed in the proposed NSW Drought Contingency Plan.

Background Data

General Description. The NSW (Figure 1) is a fourth field watershed within the Willamette Basin. It covers approximately 766 square miles (approximately 500,000 acres) on the western

slopes of the Cascade Mountains extending to the Willamette Valley floor, and includes the small subbasin that drains a 12-mile reach of the mainstem Santiam River downstream of the confluence with the South Santiam River. Together, the North Santiam River and the mainstem Santiam River are approximately 100 miles long and enter the Willamette River at River Mile 108. The NSW is characterized by steep forested uplands and flat alluvial lowlands.

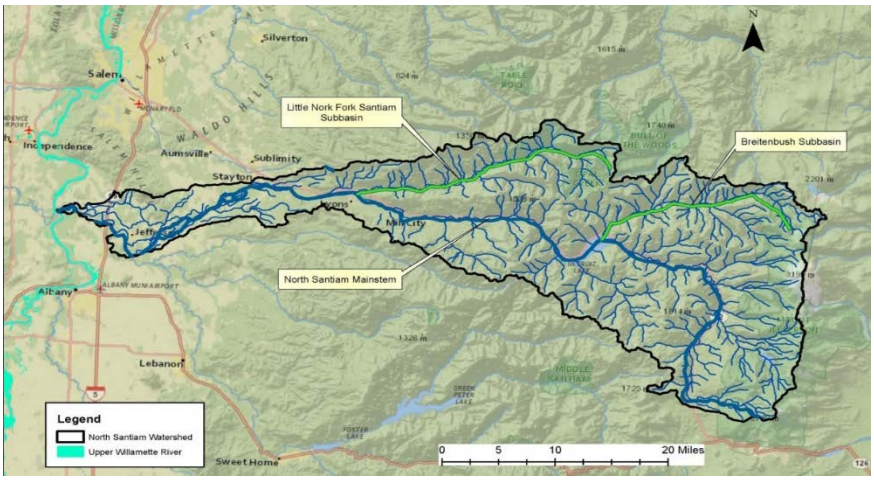

Figure 1. North Santiam Watershed

Water Uses. Approximately 75% of the land is publicly owned and managed by federal and state agencies (primarily U.S. Forest Service (USFS), Bureau of Land Management (BLM), Oregon Department of Forestry (ODF), and USACE). Land and water uses are diverse, and include timber, agriculture, recreation, habitat for fish and wildlife, transportation corridor, and rural and urban residential areas. The NSW supports two dams, Detroit and Big Cliff, which provide flood control, generate hydropower, and provide recreation at Detroit Lake. The largest water appropriations in the NSW are for municipal use (34%) and irrigation use (44%), excluding power rights. The North Santiam River serves as a drinking water source to 18 communities, which have an approximate combined population of 204,352, through surface and groundwater sources. (NSWC 2014).

The Detroit and Big Cliff Dams were constructed on the North Santiam River in 1953. The Detroit Dam is 450 feet high and has a maximum conservation pool of 436,000 acre feet (AF). Detroit Dam is a concrete gravity structure with a gated spillway containing six spill bays and four regulating outlets. The powerhouse has two generating units that produce a total of 100 megawatts of power. The Big Cliff Dam is used to smooth out the power generation water releases from Detroit Dam and to control downstream fluctuations in river level. The volumes held in the reservoir pool are only available for irrigation.

The crops grown within the lower NSW sub-basin vary from year to year, but they typically include green beans, grass seed, corn, mint, and pasture. The Santiam WCD's source of water is a combination of live flow from the North Santiam River and stored water from the Detroit Lake Reservoir system. Water rights are diverted into a network of 114 miles of earthen ditches. The District's normal diversion rates total 53,000 AF for the irrigation of 17,000 acres and 236,000 AF for hydropower generation.

Oregon Water Resource Department (OWRD) adopted minimum perennial stream flows in the NSW below the dams to support aquatic life and minimize pollution, and established restrictions on new surface water appropriation to maintain these minimum perennial stream flows. OWRD has established instream water rights for the protection of fisheries, aquatic life, and pollution abatement; however, these instream water rights are junior to most other water rights (NSWC 2014).

Major Water Rights. In 1954, Reclamation, as the federal agency responsible for providing services to irrigators, applied to OWRD for the water rights to store water for irrigation in the reservoirs. Reclamation holds the water rights on behalf of the federal government and issues contracts to provide the stored water for irrigation purposes. The storage of water in the reservoirs and the use of the stored water must, under state law, be authorized by OWRD. This water right application process resulted in OWRD issuing water right certificates for the entire 1.64 million AF of storage for irrigation use only. Consequently, OWRD currently cannot issue water rights for this stored water for any purposes other than irrigation. To date contracts totaling only 12,269 AF have been issued.

The City of Salem holds 7 surface water rights and 25 groundwater rights for its municipal system. Salem holds five water right certificates for the use of up to 239 cubic feet per second (cfs) from the North Santiam River for municipal use. In addition, Salem holds a limited license authorizing the use of water for its Aquifer Storage and Recharge (ASR) system.

Technical Project Description

The approach for developing a Drought Contingency Plan (Task A) uses the process outlined in Appendix A of the Drought Response Program Framework: WaterSMART Program.

I.C.1 Required Elements to be Included in New Plans or Updated Plans

The methodology for completing the six required Drought Contingency Plan elements is described below. The anticipated planning schedule, which is shown on page 18, illustrates our anticipated planning process for completing the plan in the two-year time frame. We envision a two-part project structure: (1) individuals with the interest and technical expertise who can provide valuable input and resources for this planning process will form the Drought Planning Task Force that will lead the process; and (2) element-focused Work Groups will develop the individual elements of the plan. To facilitate this process, each plan element will include two workshops: the first to define roles and responsibilities for each plan element, and the second to review and discuss the draft plan element.

Engaging stakeholders is extremely important in the development of an effective plan and the long-term success of that plan. In recognition of this, the element-focused Work Groups will be composed of a diverse set of interested stakeholders and technical experts. In addition, at the beginning the project, we plan to hold a kickoff meeting with all NSW stakeholders (two will potentially be held in different locations in the watershed to encourage the involvement of more stakeholders). These kickoff meetings will provide an opportunity to discuss the planning process, brainstorm ideas, answer questions, and invite interested parties to actively participate in the planning process. Also at the completion of each planning element, the Work Groups will present results and recommendations to the larger stakeholder group.

The larger stakeholder group is anticipated to represent the following diverse interests: municipalities, irrigation districts, federal natural resource agencies, tribes, business, industry, and communities. As outlined in our planning process schedule (see page 18) stakeholders will be engaged during each phase of the planning process. Specific details about engaging stakeholders will be developed as part of the communication and outreach plan.

1. Drought Monitoring. None of the basin stakeholders have completed drought contingency plans, but there are many resources that discuss drought-related information and tools for the area, including the Willamette 2100 project–preliminary water availability assessment), the Willamette Reallocation Plan, Santiam WCD Water Management and Conservation Plan

(WMCP), City of Salem WMCP, several National Marine Fisheries Service (NMFS) biological opinions for Reclamation projects and the City of Salem and District operations, and numerous snow and rainfall forecasting resources. Drought Contingency Plans are also available for other regions and could be used as a resource.

To develop a Drought Monitoring Plan, the drought monitoring Work Group will collect, inventory, and synthesize the existing resources, tools, and data (e.g., precipitation, temperature, and streamflow levels) to develop an understanding of the data available and identify data needs. The Work Group will request this information from the basin stakeholders to form the baseline information. This information and the tools collected will be evaluated for completeness to ensure that they accurately cover the basin geography and sectors. If additional data is needed, a process for collecting this information and incorporating it into the analysis will be developed.

The Drought Monitoring Plan will set up a framework that uses the information and tools to confirm existing drought and to predict the probability of future droughts in the area. The framework will define the indices, thresholds, and stages of drought that will be used to define the mitigation and response actions for the watershed.

2. Vulnerability Assessment. A vulnerability assessment will be conducted to evaluate the risks and impacts of drought. The goal of this task will be to develop a list of priority critical resources for the development of mitigation and response actions that are supported by research, policy makers, and the public.

The vulnerability assessment Work Group will establish baseline information and assessment requirements by identifying and cataloging the assets and resources that are at risk in the event of drought. The Working Group will gather this information from basin stakeholders that have similar plans (Natural Hazard Mitigation Plans, WMCPs, etc.) and by soliciting input from the stakeholders to determine their real and perceived impacts from drought.

Using the baseline information, the vulnerability assessment Work Group will identify and prioritize the critical resources. Priority will be assigned to critical resources based on the consequences (environmental, economic, and social) of drought on the resource; the importance of protecting the resource; public opinion; trends over time; and ability of the area to recover, for example. If needed, the Work Group will identify which priority critical resources can/should be addressed by the Drought Contingency Plan, and which will be addressed later.

Using the list of highest priority critical resources, the vulnerability assessment Work Group will identify the underlying causes of vulnerabilities and the factors that drive the vulnerabilities. The goal of this process will be to direct actions towards the underlying causes of vulnerability rather than to its results. The Work Group will outline (e.g. develop a tree diagram) these vulnerabilities and causes and identify, evaluate, and prioritize mitigation and response actions.

3. Mitigation Actions. Mitigation actions conserve water and improve resiliency during non-drought conditions to mitigate risks to assets and resources. Common mitigation actions include: using recycled water, installing SCADA systems, incentivizing the use of water efficiency tools and appliances, and implement water transfer programs. This Drought Contingency Plan element will identify, evaluate, and prioritize mitigation actions, for the critical resources identified during the vulnerability assessment.

Stakeholders will be asked to identify the existing programs, policies, operational criteria, current capacity for mitigating risks, and mitigation goals and priorities for each of the critical

resources identified. The mitigation actions Work Group will review the information and discuss the list of currently employed and potentially needed mitigation tools, including the feasibility, costs, benefits, and third-party impacts associated with broader, basin-wide implementation (where relevant). The mitigation actions Work Group will develop mitigation goals and priorities, and mitigation actions guidelines and protocols to introduce to the NSW stakeholders. To help make sure that the mitigation actions are implementable and effective, the Work Group will solicit input and buy-in from the stakeholders for the guidelines and protocols.

4. Response Actions. Response actions conserve water during drought conditions to reduce risks to assets and resources. Common response actions include: public drought campaigns, curtailment, and demand reduction. This planning element will identify, evaluate, and prioritize response actions that focus on the critical resources identified during the vulnerability assessment.

Stakeholders will be asked to identify the existing programs, policies, operational criteria, current capacity for responding to risks, and response goals and priorities for each of the critical resources identified. The response actions Work Group will review the information and discuss the list of currently employed and potentially needed response tools, including the feasibility, costs, benefits, and third-party impacts associated with broader, basin-wide implementation (where relevant). The Work Group will develop goals and priorities, and response action guidelines and protocols to introduce to the NSW stakeholders. The Work Group will discuss and outline the goals for conserving water during each stage of drought, and will identifying the corresponding recommended and/or mandatory actions appropriate for each stage. For relevant actions, guidelines and protocols necessary for implementation will be developed, and the Work Group will determine whether incentives and/or enforcement will be included as part of the plan.

The response actions Work Group will prepare a recommended policy for conservation goals, response actions, guidelines and protocols, and potential incentives/enforcement. To help make sure that the response actions are implementable and effective, the Work Group will solicit input and buy-in for the response action guidelines and protocols from the NSW stakeholders.

5. Operational and Administrative Framework. It is understood that even with the proper monitoring and mitigation in place, drought conditions can come upon communities quite suddenly. If there is an emergency, it is particularly critical to have the proper response framework in place. In response, an operational and administrative framework will be developed to clarify the ongoing roles and responsibilities for the Drought Contingency Plan and to facilitate a quick and efficient response to emergency drought conditions.

We will work with Reclamation and NSW stakeholders to develop an approach and outline for this element. In the meantime, we suggest the following approach:

Include Roles/Responsibilities in Each Element: We are currently proposing to use a work group approach to develop each element of the Drought Contingency Plan. Each Work Group is proposed to consist of key stakeholders with responsibilities and/or expertise in that section. Each Work Groups will prepare its respective plan elements and will, therefore, be most familiar with the operational and administrative framework needed to most effectively carry out the necessary actions and long-term implementation of that plan element. For each element, the Work Group will discuss the following content:

- Responsibilities for developing plan elements and long-term application, for example:

    - Drought monitoring, warning, and information sharing
    - Declaration of drought
    - Initiation of mitigation and drought response actions
    - Communication and public involvement
    - Update of Drought Contingency Plan
- Roles – each responsibility, listed above, will be assigned to an entity/agency (not an individual or individuals)
    - There will be a table of each entity's (including state/local agencies') responsibilities
- Procedures that clarify the necessary processes, for example:
    - Decision-making matrix
    - Drought-declaration process
    - Process for initiating a task force or working group
    - Process for requesting state or federal assistance
- Resources, for example:
    - Description of federal, state and local drought relief and mitigation programs and drought resources
    - Tools for the urban and rural communities to support their unique drought actions and decisions
    - Drought monitoring data sources

Summarize Roles/Responsibilities for Each Element in a Separate Section: The information listed above will be addressed in detail for each element in its related section, and will then be summarized in the operational and administrative framework section. This organization structure will ensure consistency of roles and responsibilities between elements and for the Drought Contingency Plan as a whole.

6. Plan Update Process. Evaluation of the plan should occur on an ongoing basis to ensure its effectiveness. Updates are necessary to incorporate new science, regulations, legislation, and stakeholder information; reassess vulnerability of critical resources; and incorporate improvements in monitoring, mitigation and response actions. Post-drought evaluation will also be conducted to ensure that pre-drought planning was effective in achieving goals, and to identify and correct issues to improve future implementation and response. The Santiam WCD anticipates using the North Santiam Basin Summit as a forum for an annual evaluation of the previous years' actions and necessary plan updates. The North Santiam Basin Summit is an annual summit organized by the City of Salem and North Santiam Watershed Council (NSWC) that brings NSW stakeholders together to discuss water management issues. An in-depth update of the plan will be conducted every three to five years; a specific timeframe will be determined during the planning process.

I.C.2 Required Drought Contingency Planning Steps

As outlined in the Funding Opportunity Announcement No. R15AS00047, the three procedural steps for Drought Contingency Planning are: (1) establishing a Drought Planning Task Force, (2) developing a detailed work plan, and (3) developing a communications and outreach plan.

The Drought Planning Task Force will be composed of a small group of decision-makers from the key NSW stakeholders that have the authority to initiate response actions under severe drought conditions. At this time these stakeholders include the Santiam WCD (agriculture); Marion Soil and Water Conservation District (SWCD); Linn SWCD; NSWC (environment);

and the City of Salem, Marion County, and Linn County (municipal). Additional key and interested stakeholders will be invited to participate, including those from local, state, tribal and federal agencies. In addition, element-focused Work Groups will include interested and knowledgeable stakeholders who will be responsible for developing the plan elements. They will solicit input and feedback from the larger stakeholder group at critical and key times during the planning process. The Drought Planning Task Force will develop the work plan and the communication and outreach plan, as follows:

- The *work plan* will describe in detail how the planning elements will be accomplished, and will include detailed schedule, and responsible parties. This work plan will also incorporate input from Reclamation.
- The *communication and outreach plan* will outline how stakeholders and the public will provide meaningful input into the planning process, and how information will be distributed to the public and stakeholders, and will include an outreach schedule.

Evaluation Criteria

VA1. Evaluation Criterion A – Need for a Drought Contingency Plan or Plan Update. Normally, the NSW would have healthy summer stream flows and fully stocked reservoirs. However, warm weather during the 2014-2015 winter months has meant that most of the precipitation fell as rain. The Natural Resources Conservation Service (NRCS) SNOTEL stations recorded low seasonal snowpack throughout most of the 2014-2015 water year, due to above-average temperatures and below-average precipitation this spring. This low snowpack has caused significant reduction in the water supply volume forecasts and has greatly increased drought concerns (Figure 2).

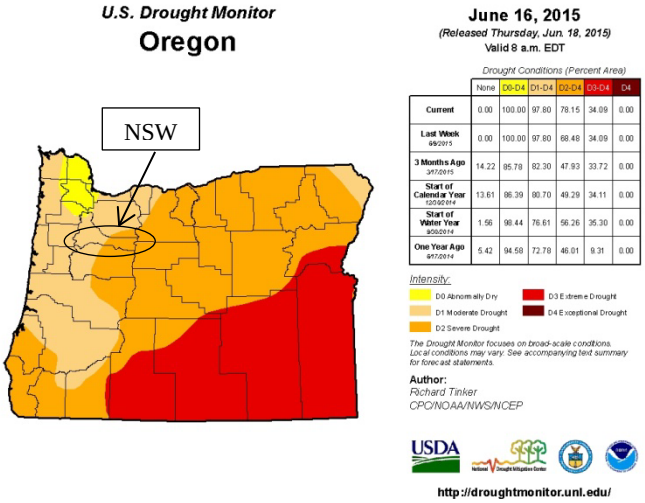

Figure 2. NRCS U.S. Drought Monitor Oregon Report for June 16, 2015

According to the June 15, 2015 Water Supply Outlook, NOAA's climate outlook indicates that above-normal temperatures are likely through the summer and fall of 2015, thus continuing the trend of above-normal temperatures seen the past several months. The summer outlook indicates increased likelihood of below-normal precipitation for northwest Oregon and equal chances elsewhere in Oregon of normal, below-normal, or above-normal precipitation. However, summer is the dry season for most of Oregon, and precipitation totals will not affect water supply forecasts significantly.

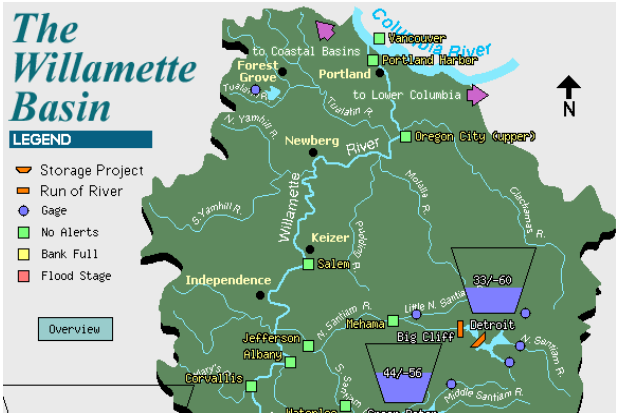

Figure 3. USACE Willamette Basin Reservoir Teacup, June 24, 2015

Currently, the headwaters (eastern section) of the NSW is experiencing "severe drought" (see Figure 2). The western portion of the watershed is experiencing "moderate drought," and "severe drought" is unavoidable as a long, hot summer has been projected. The result of these conditions in the NSW is that current (June 24, 2015) reservoir storage is 33% of normal, and Detroit Lake Reservoir levels are 60 feet below normal for June (see Figure 3).

Figure 4 depicts water year 2015 data for SNOTEL Station 584, which is located in the NSW. The data clearly illustrate that water year 2015 precipitation has only slightly lagged the average, whereas the snowpack at the site has been nearly non-existent throughout the year.

If this WaterSMART grant is awarded, it would be used by the broad-based NSW stakeholders to develop basin-wide priorities to focus mitigation and response actions, and identify ways that stakeholder entities can coordinate individual drought responses.

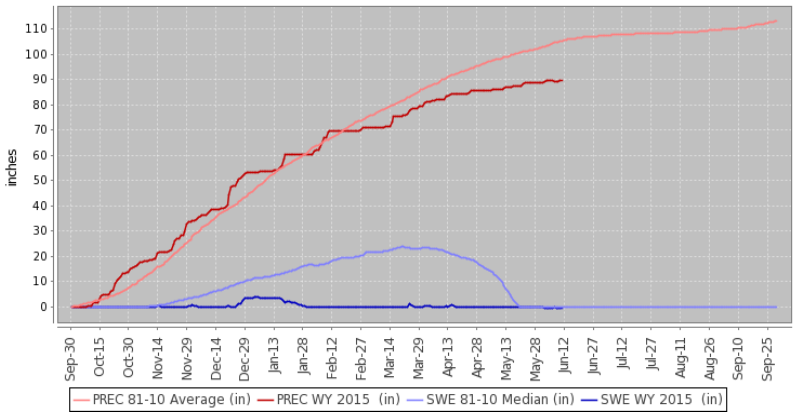

Figure 4. SNOTEL Station 584, 2015 Data

Describe any projected increases to the frequency, severity, or duration of drought in the geographic area resulting from climate change. Please provide support for this response (e.g., reference a recent climate change analysis, if available). According to the 2014 *National Climate Assessment* (NCA), a report prepared by 300 climate and weather experts and scientists under the guidance of a 60-member federal advisory committee, the climate of the Northwest is changing. Northwest temperatures are projected to increase 3.3 degrees by 2070 and 9.7 degrees by 2099. Since 1950, snowpacks in the Oregon and Washington Cascades have shown a 20% decline based on data gathered on April 1, typically the date snowpacks are at their peak levels. Diminished snowpacks mean less water not only for agriculture, but also for power generation, municipal water supplies and recreation. With the predicted increase in average regional temperatures, less annual snowpack and a change in the timing of snowmelt/rain runoff, the likelihood of the Willamette Valley experiencing drought more frequently will increase greatly.

In addition, according to the NCA report, temperatures in the Pacific Northwest forests are also experiencing the effects of climate change; they have increased 1.3 degrees from 1895 to 2011. According to the Oregon Department of Forestry, 2014 was the worst year for forest fires on state-protected land in Oregon in 60 years because of drought and the increased number of lightning strikes. The NCA report also noted that the rising temperatures and reduced precipitation will not only increase the risk of wildfire, but will also increase the frequency of insect infestations and tree disease.

Oregon Climate Change Research Institute released a report in 2013 that summarized the potential effects of climate change in Oregon, including the geographic area of the North Santiam River. The report incorporates extensive research into observed and projected impacts of climate change in the Pacific Northwest, including the Oregon Cascades (encompassing the geographic region of the North Santiam River) that predicts temperature increases of 0.2 to 1 degree Fahrenheit per decade through 2100. Although the effects on precipitation are somewhat

uncertain, with annual totals unlikely to change significantly in the short term, annual precipitation patterns are likely to change, resulting in wetter winters and longer dry seasons.

Nolin and Daly (2006) mapped the impact of these temperature increases on mountain snowpack. Mountain snowpack provides a significant direct and indirect source of runoff to the headwaters of the North Santiam River and its tributaries. They documented that rising temperatures are shifting winter and early spring precipitation in the Cascades from snowfall to rainfall, resulting in decreased snowpack and earlier snowmelt. These are precisely the conditions experienced during the 2015 water year that have led to current drought conditions in the NSW. Normal precipitation totals (Figure 5), warm winters, and longer and warmer dry seasons are anticipated to occur more frequently throughout the Pacific Northwest and in the Oregon Cascades, resulting in more frequent drought, or drought-like, conditions.

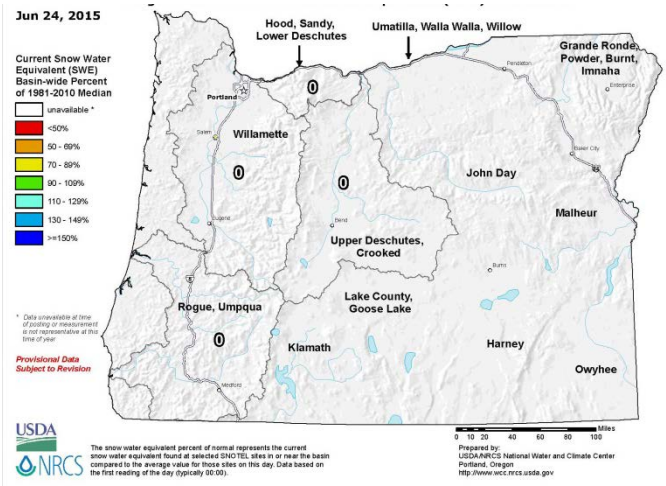

Figure 5. Oregon SNOTEL Snow Water Equivalent % of Normal, June 24, 2015

Describe the severity of the risks to water supplies that will be addressed in the Drought Contingency Plan. What are the risks to water supplies within the applicable geographic area that will be addressed in the plan or plan update, and how severe are those risks? The overall risks to water supplies to be addressed in the plan include: climate change, projected population growth and supply limitations forced by competing interests. Given the current climate change projections there will be an insufficient supply of water to meet all of the watershed's high priority needs. In addition, water users will experience uncertainty about how stored water will be allocated under severe drought conditions, posing significant risks to stakeholders.

Several entities in the watershed (the City of Salem and Marion County) have outlined drought response actions and the City of Salem has taken steps toward building a more resilient water supply; however, other basin stakeholders do not have a plan for responding to drought. In some cases, these stakeholders might not even fully understand the risks that drought poses. The proposed planning project would bring those other stakeholders (agriculture, business, economic, and state and federal natural resource agencies) together to develop a comprehensive drought plan describing the risks and outlining both mitigation and response actions.

The North Santiam River serves as a drinking water source to 18 community (with an approximate combined population of 204,352) and non-transient non-community public water systems through surface and groundwater source. All of these communities would be impacted by drought; not to mention the impacts drought would have on the environmental, economic, and recreational sectors (described later). Table 1 lists the watershed communities that would be impacted by drought.

Table 1. Public Water Systems in the North Santiam Watershed				
Public Water System (PWS) Name	**County**	**System Type**	**Source Type**	**PWS ID#**
Idanha City Water	Marion	Community, Population 140	Surface Water	4100394
Detroit Water System	Marion	Community, Population 205	Surface Water	4100257
Breitenbush Hot Springs	Marion	Community, Population 160	Surface Water	4193461
Stayton Water Supply	Marion	Community, Population 7,830	Surface Water	4100843
City of Jefferson	Marion	Community, Population 2,620	Surface Water	4100408
Salem Public Works	Marion	Community, Population 189,000	Surface Water	4100731
Lyons/Mehama Water District	Linn	Community, Population 1,875	Surface Water	4100493
City of Gates	Marion	Community, Population 490	Surface Water	4100317
Mill City Water Department	Linn	Community, Population 1,640	Groundwater	4100520
Century Farm Court	Marion	Community, Population 40	Groundwater	4101326
Frank Lumber Co., Inc.	Linn	Non-transient, non-community	Groundwater	4194873
Freres Lumber Company	Linn	Non-transient, non-community	Groundwater	4194872
Jefferson Mobile Acres	Marion	Community, Population 65	Groundwater	4100409
Marion Elementary	Marion	Non-transient, non-community	Groundwater	4193754
Oakdale Trailer Park	Marion	Community, Population 32	Groundwater	4101416
Scravel Hill Water Co-op	Linn	Community, Population 255	Groundwater	4100018
USFS Detroit Ranger Station	Marion	Non-transient, non-community	Groundwater	4101224
West Stayton Elementary	Marion	Non-transient, non-community	Groundwater	4190577

The City of Salem, the largest municipal water user of the North Santiam, with a population of 189,000, currently relies on surface water from the North Santiam River as its primary source to meet its municipal water supply needs. Water diverted from the North Santiam River is treated at the water treatment facility on Geren Island, and the treated water is conveyed approximately 17 miles to Salem in the City's transmission lines. Salem classifies its customers as: residential, multifamily, commercial, industrial, public, municipal, irrigation, and wholesale. Salem's wholesale customers are Suburban East Salem, the City of Turner, and Orchard Heights Water.

Figure 6. City of Salem's Drinking Water Delivery System

Describe the existing or potential drought risks to specific sectors in the project area (e.g., impacts to agriculture, environment, hydropower, recreation and tourism, forestry). For example, risks could include but are not limited to: whether there are public health concerns or social concerns associated with existing or potential drought conditions. For example, are there water quality concerns including past or potential violations of drinking water standards, increased risks of wildfire, or past or potential shortages of drinking water supplies?

Risks to agriculture: Water rights in the NSW have been issued for a variety of uses, including: industrial, agricultural, domestic, municipal, and hydroelectric power generation. The largest percentage of water appropriations in the NSW is 79% used for irrigation and municipal use, with 44% associated with irrigation water rights (NSWC 2014). In the lower NSW, the Santiam WCD is responsible for delivering irrigation water (water pulled from the North Santiam) to cover 17,000 acres of agricultural land. The boundaries of the District encompass a total of 31,000 acres (Figure 7). The multiple purpose District also supplies water for several additional uses, including pond and wildlife, fire protection, and domestic delivery to the City of Stayton water treatment plant.

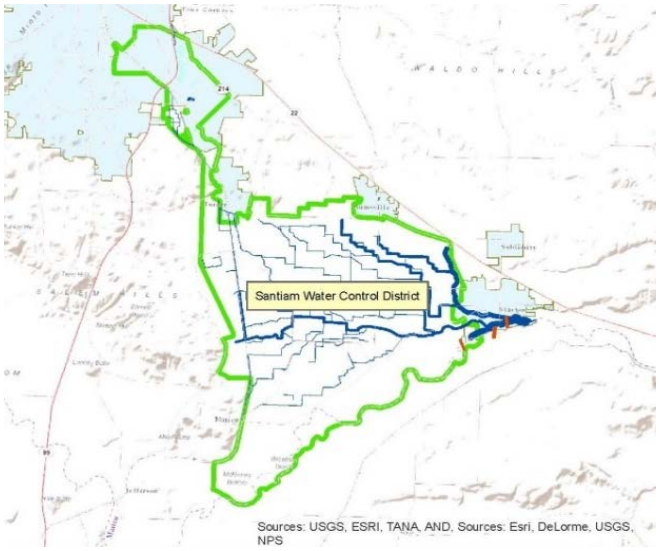

Figure 7. Santiam Water Control District Map

The agricultural community may, to some degree, be able to adapt to some of the effects of climate change by adjusting their crops and using more efficient farming methods. However, given the high cost associated with adaptation and the change in timing for availability of the water supply, agriculture will experience significant impacts. For instance, increased air and water temperature coupled with intense periods of precipitation and runoff will result in sediment and nitrogen stream loading. Crops that are stressed from drought conditions may also experience a greater number of pest attacks and disease, and more competition with non-native invasive weed species.

Risks to forestry: The upper and middle reaches of the NSW are characterized by steep, forested uplands; the Willamette National Forest Detroit Ranger District makes up the majority of the Upper North Santiam subbasin. The middle to upper NSW subbasin communities rely heavily on the forest land management jobs and on the forest product industries. USFS, ODF, and BLM land managers, along with Lumber Frank Company and Freres Lumber Company, employ a large number of residents of the NSW. The increased frequency of drought would have a significant impact on these forest-related employment sectors.

According to the 2009 *Global Climate Change Impacts in the United States* report, forest ecosystems will be greatly impacted by drought:

> "Drought stress and higher temperatures would likely impede tree growth, though high-elevation forests may experience increased growth in the short term. These climate impacts would also contribute to increased frequency and intensity of attacks from

mountain pine beetles and other insects. These attacks would worsen fire risk and reduce timber production. Projected climate changes will likely cause shifts in the composition, range, and even existence of Northwest tree species."

Risk of wildfire: The incidence of forest fires increases substantially during extended droughts, which in turn places both human and wildlife populations at risk. Higher summer temperatures, earlier spring snowmelt, and potential reductions in summer soil moisture are some of factors that contribute to the increased risk of wildfires in the watershed. With the headwaters of the North Santiam River lying entirely within the Willamette National Forest Detroit Ranger District, an increased risk of fire means there is a higher potential for the many downstream water users to be impacted by forest fire. Wildfires can disrupt the intake of water by either damaging the water source or polluting the water. According to the June 17, 2015 Oregon Drought Monitoring report, the Willamette National Forest Detroit Ranger District is experiencing "severe drought."

Risks to water quality: Water quality declines during drought because low flow affects the dilution of effluents from both runoff and wastewater treatment plants. The NSW already has ten stream segments on the Oregon Department of Environmental Quality (ODEQ) 303(d) list for exceeding the summer time water temperature criterion (Bear Branch, Blowout Creek, Boulder Creek, Chehulpum Creek, Stout Creek, Elkhorn Creek, Little North Santiam River, Marion Creek, an Unnamed tributary to Marion Creek upstream of Detroit Reservoir, and Mill Creek). The most sensitive beneficial uses identified by the ODEQ for the North Santiam River, for which these listings are intended to protect are: resident fish and aquatic life; salmonid spawning, rearing, and migration; and anadromous fish passage (NSWC 2014). With the occurrence of severe drought the number of streams segments exceeding Oregon's summer time water temperature criterion will increase.

Risks to Recreation: Water-dependent recreational activities will experience lower recreational users and decreased economies because of dry conditions, reduced snowpack, lower summer flows, impaired water quality, and reduced reservoir storage. The sport fishing industry is likely to be impacted by the climate change effects on native fish including salmon and steelhead. The Detroit Lake Recreational Area and City of Detroit are already feeling the negative impacts of drought on recreation with reservoir levels already at 34% of normal.

Do the communities have another water source available to them in the case that their water service is interrupted? The NSW includes a large number of stakeholders that represent the majority of economic interests and people living within the watershed. Many of these stakeholders are either mostly or entirely reliant on the availability of water in the North Santiam River and do not have viable alternate sources of water available. Groundwater is probably not a viable alternative for most stakeholders for a variety of reasons, such as the volume needed, and the lack of suitable aquifers in places, and because aquifers in the Willamette Valley are generally either closed for further appropriation because of connection to surface water (alluvial sediments), or closed or limited because of water level declines (Columbia River Basalts).

The City of Salem relies almost entirely on the North Santiam River as its source for potable water, but does have limited storage, groundwater supplies, and interconnections with other cities that can provide water on a short-term basis. Seventeen finished water storage reservoirs provide a total of 135-million gallons of storage. As backup, Salem has 20 groundwater wells and 3 operational ASR wells, totaling approximately 54 million gallons per day (mgd). The

North Santiam River is used to fill all of the City's storage facilities during the high-flow winter months. The City has interconnections with the Cities of Keizer and Stayton. The connection with Keizer allows for water to be passed either to Keizer from Salem or vice-versa. The connection with Stayton only allows Salem to supply water to Stayton. Salem intends to use water from the Willamette River to help meet its future water demands and to provide a redundant water supply if its North Santiam River water supply is not available or is insufficient.

Lyons/Mehama Water District relies solely on drought-sensitive surface water sources. It has three storage reservoirs, and its backup water supply comes from storage in the Big Cliff Reservoir.

Select examples of public water systems that do not have a backup supply include:

- City of Stayton has some groundwater capacity, but its groundwater supply is dependent on the river. Low river levels equate to diminished groundwater capacity.
- The City of Mill City stopped using the North Santiam River as its drinking water source and drilled two new municipal groundwater wells in 2003 that it now uses.
- City of Jefferson has two wells for back-up to its surface water supply.

It is unknown if the other small communities have been able to develop a redundant supply of water. Part of this planning process would be to help those communities identify what to do if drought causes a water shortage.

Whether there are environmental concerns, such as existing or potential impacts to endangered, threatened or candidate species. Historically, the NSW provided 60% of winter steelhead and approximately one-third of the spring Chinook salmon production for the entire Willamette Basin. The Upper Willamette River (UWR) Chinook salmon and winter steelhead are now both listed as Threatened under the federal Endangered Species Act (ESA). These species have habitat requirements that often conflict with the needs or desires of the human environment. For example, in times of drought, the amount of water necessary to maintain certain fish species may conflict with the needs of the local agricultural community. Unfortunately, salmon in the Willamette Basin are currently experiencing firsthand the effects of drought.

On June 18, 2015, local station KPTV-KPDX reported:

> "ODFW biologists and survey crews said they have seen unusually large numbers of dead spring Chinook salmon in the Willamette, Clackamas and Santiam rivers. 'Pre-spawning mortality is normal and happens every year to some extent,' said Tom Friesen, manager of ODFW's Upper Willamette Research, Monitoring and Evaluation Program. 'But usually we don't see dead spring Chinook in the mainstream Willamette until mid-summer.' According to ODFW, Chinook are more prone to disease, injury and stress when water temperatures exceed 60 degrees. This past week, water temperatures in the Willamette River have gone from 70 degrees to 74 degrees. 'We get concerned about the impact on Chinook anytime water temperatures approach 70 degrees,' said Friesen. If drought conditions and elevated water temperatures continue, some spring Chinook will likely die before they have a chance to spawn."

A Drought Contingency Plan would significantly help the diverse stakeholders within the NSW prepare for and mitigate the potential for these drought-related conflicts. The following describes the environmental risks of drought on the NSW.

Risks of Drought – Aquatic Habitats. The NSW is home to native salmonids including spring-run, UWR Chinook salmon (*Oncorhynchus tschawytscha*) and winter-run UWR steelhead (*Oncorhynchus mykiss*) (Figure 8). Also present are resident and fluvial cutthroat trout (*O. clarki*), resident rainbow trout (*O. mykiss*) and the introduced fall-run chinook, summer-run steelhead, and coho salmon (*O. kisutch*) populations.

The UWR Chinook and steelhead are both listed as Threatened and, therefore are protected under the federal ESA. Both species are considered by NOAA Fisheries to be a top priority for recovery (NMFS Willamette Biological Opinion 2008), and each is addressed in a shared Conservation and Recovery Plan (ODFW 2011). In the NSW specifically, steelhead currently has a low risk of extinction, but the Chinook has a very high risk of extinction (ODFW 2011).

Reduced flows and elevated water temperatures are considered key threats to the survival of both species' (NMFS Willamette Biological Opinion 2008). In terms of flows and water quality, the Conservation and Recovery notes the following management strategies specific to the North Santiam (ODFW 2011):

- Evaluate water allocation policies and legal and illegal water withdrawals and look for opportunities to keep more water in the stream.
- Implement the Willamette Project Biological Opinion actions that prescribe flows releasing from Detroit and Big Cliff Dams to meet flow targets in the North Santiam River that protect spawning, incubation, rearing, and migration of salmonids.
- Implement the flow actions that increase the occurrence of peak flows that maintain and create habitat, thereby contributing to increased channel complexity and habitat diversity.

OWRD has established instream flow water rights in much of the North Santiam River to support aquatic life (Snyder et al. 2002). However, because these instream flow water rights are junior to nearly all water uses in the basin, they primarily protect aquatic life from further degradation and do not lead to recovery of the ESA-listed species or their habitat.

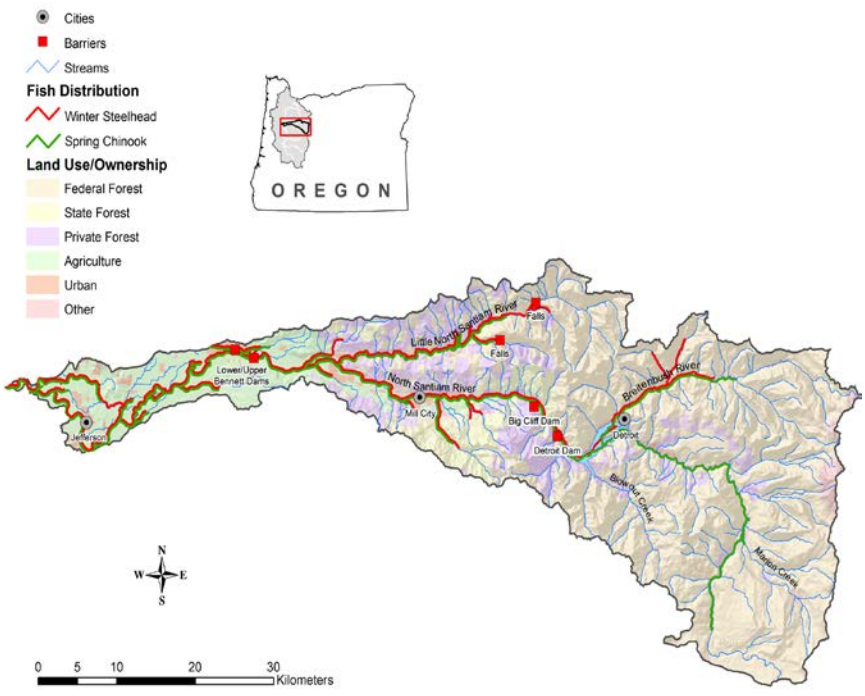

Figure 8. Fish distribution for the NSW.

In the North Santiam, Chinook have a high density of spawning areas in reaches immediately downstream of dams (Schroeder et al. 2006), which may increase the potential for dams and their reservoirs to affect fish survival by influencing water quality and flows. Low summer flows limit

juvenile rearing habitat and sudden increases in diversion rates can entrap and strand juveniles rearing in the vicinity. The effects of diversion-caused flow reductions in the mainstem North Santiam are somewhat offset during July through September by releases of stored water from the Detroit Lake and Big Cliff Reservoirs to meet minimum flow objectives; however, during drought conditions, these releases may be compromised.

Reclamation contracts to sell stored water impounded by the USACE dams in the NSW, thus providing a regulatory nexus to require protective measures for fish for diversions associated with those federal water contracts. Drought conditions and insufficient flows may impact survival of the listed fish within the watershed, thereby putting these contracts and the communities that depend on them at significant risk.

Risk of Drought – Terrestrial Habitats. The NSW's coniferous forests provide habitat to several species of concern. In addition to Chinook and steelhead, the forests are home to the northern spotted owl, marten, red tree vole, tailed frog, and northern torrent salamander (NSWC 2014). Several rare plants are also found in these forests, such as Thompson's mistmaiden (*Romanzoffia thompsonii*) and Brewer's reedgrass (*Calamagrostis breweri*).

A drought will have a significant impact on these forest habitats and species. Drought conditions, similar to what the watershed is experiencing this year, lead to a significant risk of forest fire and an increase in insect pests, each of which could devastate the sensitive species that rely on this habitat. A large fire in the watershed would have significant effects on fish and wildlife habitat, forest and lake recreation economies, and would potentially degrade the drinking water source on which the entire basin currently relies.

Whether there are ongoing or potential, local, economic losses associated with drought conditions (e.g., business, agriculture, reduced real estate values). Drought can affect all segments of a jurisdiction's population, particularly those individuals employed in water-dependent activities (e.g., agriculture, hydroelectric generation, recreation). Also, domestic water-users may be subject to stringent conservation measures, such as rationing, and could be faced with significant increases in electricity and water rates. Marion and Linn Counties have large agricultural economies that would suffer significantly during an extended drought. During the exceptionally dry years of 2000 and 2001, the City of Detroit's recreation economy suffered hardships when the water levels of Detroit Lake were too low to support normal summer activities. Currently, the City of Detroit is feeling the economic impact of Detroit Lake being filled as of June 24, 2015 to only 33% of normal capacity.

Whether there are other drought-related risks not identified above, including tensions over water that could result in a water-related crisis or conflict, or risks to tribes. Population growth, increasing development, expanding irrigation, and the listing of UWR Chinook salmon and winter steelhead under the ESA are placing new demands on Detroit Lake.

Currently, the USACE manages releases from Detroit Lake, primarily for flood control according to federally-mandated regulations. As a result, most stakeholders, including Reclamation, have little control over the amount of water available downstream of Detroit Lake, and thus uncertainty about future water availability. If reservoir releases were to be regulated under drought conditions, many stakeholders, including the City of Salem and Santiam WCD, would be greatly impacted. The intent of this Drought Contingency Plan is to identify the critical priorities for water and seek alignment among the many stakeholders for how to address those

priorities under drought conditions of differing severity, and thus reduce tensions related to drought-related risks.

Describe the status of any existing Drought Contingency Plan. Please explain generally why the applicant is seeking to conduct a drought contingency plan or plan update. Currently, no comprehensive NSW basin-wide Drought Contingency Plan exists. The NSW includes many stakeholders in Marion and Linn Counties that depend on the river for their water supply significantly. A strong need and now urgency for developing a Drought Contingency Plan for the watershed is evident. This need is especially great now, given both the uncertainty in the release and management of the reservoir water supply, and the effects of climate change, which make the amount and timing of the water supply is becoming more unreliable.

If a drought contingency plan already exists for the relevant geographic area, please explain why a new plan or plan update is needed. For example, is the existing plan outdated or is there a need to make the plan more comprehensive or inclusive of various sectors or interests (i.e., municipal, agricultural, industrial, or environmental)? A NSW Drought Contingency Plan does not currently exist.

Is there a need to incorporate consideration of climate change in the existing plan? If a drought contingency plan exists, please attach a copy of the applicable plan, or sections of the plan as an appendix to the application. Yes, according to the Reclamation and OWRD 2013 draft Willamette Basin Plan of Study:

> "[S]cientific models project warmer, wetter winters and hotter, drier summers in the Willamette Valley and other areas west of the Cascade Range. Climate change projections show an increase in the average temperature in the Willamette Basin by 2 to 7 degrees Celsius during the next century; a decrease in snowpack in the Cascades by 60 percent; and a decrease in summertime streamflow's by 20 to 50 percent. In the critical low-flow summer months, melting snowpack — water coming from elevations higher than 1,200 meters — constitutes up to 80 percent of the volume of the Willamette River. The area's reliance on high-elevation water during summer months highlights the vulnerability of the Willamette Basin to the influences of a warming climate. Water imbalances, disruptions, and conflict are likely to increase due to reduced snowpack and increased periods of drought, especially on a seasonal basis."

If no applicable drought plan exists, please explain why no drought contingency plan has been developed to date. Several entities in the watershed (City of Salem, Linn and Marion Counties) have outlined drought response actions, but those plans are specific to those entities and are extremely limited in scope. Many of the smaller entities in the watershed have not gone through a thorough drought planning effort. The North Santiam Basin Summit, which was formed in 2009, had been focusing its early efforts on emergency planning (spill response), but the summit stakeholders have since identified drought planning as one of their priority actions (see Table 2, below). Now more than ever, given the unprecedented low water year and with the climate change prediction models showing drought for the Willamette Valley, the NSW stakeholders are focusing on drought planning.

V.A.2 Evaluation Criterion B – Diversity of Stakeholders (35 points)

Describe the diversity of stakeholders to be involved in the planning process. Identify stakeholders in the planning area who have committed to be involved in the planning process and describe their commitment. Do these stakeholders represent diverse interests (e.g.,

agricultural, municipal, environmental, tribal)? A North Santiam Watershed Collaborative Planning initiative started in 2009 when the City of Salem and the NSWC asked Oregon Consensus to conduct a neutral assessment of the potential for collaboration relating to water management in the North Santiam Basin. The assessment consisted of interviews with parties representing a range of perspectives on issues and concerns related to water management. Now an annual summit is hosted by the City of Salem and the NWSC with the general purpose of bringing together NSW stakeholders to build and strengthen relationships, to communicate new and relevant information, and to work toward protecting the watershed.

NSW stakeholders are committed to developing a Drought Contingency Plan, and have expressed interest in being involved. In April 2013, participating stakeholders were asked a series of questions to identify what the group wanted to focus on moving forward. One question was: *What is your highest priority for the North Santiam basin efforts?* Of the possible responses, "drought emergency" received the most votes. For the past few years NSW stakeholders have focused on the second highest ranked priority "Hazardous Materials Spills," but with the 2014-2015 turning out to be an extremely "unprecedented" low water year for the Detroit Reservoir, water shortages and drought has become the top issue for the stakeholders.

The following is a list of stakeholders that have been participating in or have been invited annually to participate in the North Santiam Basin Summit discussions. These stakeholders will be invited to participate in the planning process. These stakeholders come from a variety of sections and have had success collaborating together on other water management issues.

Federal: U.S. Bureau of Reclamations, U.S. Army Corp of Engineers, U.S. Forest Service, U.S. Geological Society, U.S. Bureau of Land Management, National Marine Fisheries Service; **Tribal:** Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz, Confederated Tribes of Warm Springs; **State:** Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, Oregon Water Resource Department, Oregon Department of Agriculture, Oregon Department of Forestry; **Counties:** Marion County, Linn County, Polk County; **Cities:** Cities of Salem, Stayton, Gates, Mill City, Detroit, Idanha, Jefferson, Marion, Turner, Aumsville, Keizer; **Districts**: Marion Soil and Water Conservation District, Linn Soil and Water Conservation District, Stayton Fire District, Suburban East Salem Water District, Santiam WCD, Orchard Heights Water District, Cascade School District; **Industrial**: NORPAC Foods Inc., Frank Lumber Company, Freres Lumber Company; **NGO:** The Nature Conservancy **Local:** Detroit Lake Recreation Area Business Association, Federal Lakes Recreation Committee Detroit Lake, North Santiam Watershed Council, North Santiam Forest Collaborative, landowners

A majority of the stakeholders listed above have been actively participating in the annual North Santiam Basin Summit meetings and will likely continue to be involved to discuss and assist with the development of a NSW Drought Contingency Plan (See Funding Plan).

If the Santiam WCD's is awarded the WaterSMART grant, we will send out an invitation to the drought planning kickoff meeting to all current and newly identified stakeholders. This initial kickoff meeting will provide the stakeholders with an overview of the process, a discussion of information needs, and a timeline, among other things. All drought planning meeting dates and locations will be placed in the local newspapers and on our website. Meeting announcements will also be sent by email using the North Santiam Basin Summit Water Management listserv.

V.A.3 Evaluation Criterion C – Project Implementation (20 points)

Describe the approach for addressing the six required elements of a Drought Contingency Plan within the two year timeframe. The general approach for developing the Drought Contingency Plan is provided in the Technical Project Description section. The schedule (below) illustrates how and when we propose to complete all six of the required elements and prepare the Drought Contingency Plan within the two-year time frame. The schedule has been prepared with the following in mind:

- The final Financial Assistance Agreement with Reclamation will detail all of the mandatory reporting requirements and be incorporated into the master schedule, including reporting milestones.
- Work will not begin on the Drought Contingency Plan until the Financial Assistance Agreement has been finalized with Reclamation.
- The initial steps for preparing the Drought Contingency Plan (referred to as the Drought Contingency Plan Framework on the schedule) are as described in Section II.D.6 of Reclamation's Drought Response Program Framework: WaterSMART Program.
- The schedule includes several workshops intended to engage the diverse stakeholders of the watershed in an open and proactive planning effort to build long-term resiliency and to answer the following three questions:
    - How can we predict or recognize the next drought in the early stages?
    - How will drought affect us?
    - How can we protect ourselves from the next drought?
- The schedule includes three weeks of "float" to account for unexpected circumstances.
- This schedule should be considered a draft that is intended only to demonstrate how the work would be accomplished in two years. The actual process, schedule and milestones will be developed as part of the initial Drought Contingency Plan Framework step, which will be reviewed and approved by Reclamation.

Table 3. Drought Contingency Planning Process Schedule

Task	*Schedule*
Drought Contingency Plan (DCP) Kickoff and Framework Workshop with Reclamation	August 28, 2015 – September 18, 2015
Establish Drought Planning Task Force	September 2015 – December 2015
Establish Drought Planning Task Force	September 2015 – October 2015
Develop Detailed Work Plan and Communication and Outreach Plan	
Internal Review	November 2015
Submit Framework for Reclamation Review	November 2015 – December 2015
Final Approval of DCP Framework	December 2015
Kickoff with Stakeholders (2 meetings) (Establish Work Groups for each Plan element)	January 2016
Elements 1 through 5 (To be completed by separate Work Groups for each plan element.)	December 2015 – January 2017
Develop Baseline Information and Plan Requirements	December 2015 – March 2016
Task Force Workshop #1 (define roles/responsibilities)	March 2016 – April 2016
Prepare Draft	April 2016 – September 2016

Table 3. Drought Contingency Planning Process Schedule	
Task	*Schedule*
Task Force Workshop #2 (plan review)	September 2016 – October 2016
Internal Review and Revisions	October 2016 – November 2016
Stakeholder Review and Comment	November 2016 – January 2016
Prepare Drought Contingency Plan	January 2017 – August 2017
Develop Report Outline and Requirements	January 2017 – February 2017
DCP Workshop #1 (roles/responsibilities)	February 2017
Prepare DCP Report	February 2017 – March 2017
DCP Workshop #2 (plan review (x2))	April 2017
Internal Review and Revisions	April 2017 – May 2017
Stakeholder Review and Comment	May 2017 – June 2017
Reclamation Review and Revisions	June 2017 – August 2017

Describe the availability and quality of existing data and models applicable to the proposed plan or plan update. Numerous previous and ongoing studies and watershed monitoring in the Willamette Basin, including for tributaries such as the North Santiam River, provide a broad set of data for use in the evaluating and selecting drought monitoring indicators, triggers, and levels of drought; evaluating risks to water supply, and evaluating mitigation and response actions. These data sets have been used extensively for developing reservoir, water quality and flow models, including several models specific to the North Santiam River. Sources and types of data and model output that the project may draw upon are summarized below.

Data Sources

- U.S. Geological Survey (USGS): historic and recent flow and water quality data from gaging stations and river surveys
- OWRD: water rights and water availability data, groundwater levels from the OWRD state observation well network and well logs from the GRID database.
- ODEQ: water quality data
- U.S. Department of Agriculture, NRCS: SNOTEL weather and climate data, soil data, Climate Center reports
- Oregon Climate Service: climatological data
- PRISM Climate Group at Oregon State University (OSU): spatial climate datasets, including drought indicator tools
- Reclamation: AgriMet and HydroMet: ET/soil moisture, crop water use, climate statistics, and hydrologic data.
- NOAA Advanced Hydrologic Prediction Service: streamflow projections
- USACE: water control data including flow and reservoir level data

Models and Modeling Results

- Climate Impacts Research Consortium: downscaled model simulations of future changes to Pacific Northwest climate, hydrology and vegetation change, and associated datasets
- Willamette Water 2100 (University of Oregon, and Portland State University): integrated modeling of scenarios of how climate change, population growth and human factors affect water availability

- PRISM Climate Group: spatial climate data modeling
- USGS: precipitation runoff models for predicting climate change effects on flows in the North Santiam River, HEC-RAS and CE-QUAL-W2 flow and temperature models of the North Santiam River, and Willamette Basin groundwater model
- USACE: Regional Recreation Demand Model (RRDM); HEC-ResSim reservoir model

Identify staff with appropriate technical expertise and describe their qualifications. Describe any plans to request additional technical assistance from Reclamation, or by contract.
Contracted Consultants (GSI Water Solutions, Inc./David Evans and Associates, Inc.):
Adam Sussman has more than 20 years of experience, including 14 with OWRD, where he developed expertise in water rights and water law, including the development and implementation of statewide policies and programs. Adam worked extensively on the Drought Contingency Plan for the ranchers in the Upper Klamath Basin. He is also very familiar with the water situation and stakeholders in the NSW having been involved with the remapping and recertification of the water rights in the Santiam WCD, and having managed the WMCP process for the City of Salem.

Kim Grigsby has been working on Oregon water law and water resource policy for 18 years. Having previously worked for OWRD for more than 7 years, Kim developed an expertise in water rights processes and procedures and water resource policy. She uses this knowledge and experience to help water managers in Oregon develop strategies and policies for effectively managing their water resources. She also has experience working on the Klamath Basin Drought Contingency Plan and the Willamette Reallocation Study.

Jennifer Miller has been working on waters supply and drought contingency planning across the West for more than 15 years, including for Reclamation, USACE, Tribes, irrigators and municipalities. Jennifer understands water demands and distribution from agricultural and municipal perspectives. Having worked extensively in the Klamath Basin, she understands the environmental and community impacts of climatic and regulatory drought. Recently, she led a team that developed a Drought Contingency Plan for ranchers in the Upper Klamath Basin.

Libby Smith brings a background in watershed management to the team. She has experience with water conservation planning and has helped several cities, including the City of Salem, develop WMCPs. She has gained an understanding of the complexities associated with multi-stakeholder watershed management from working for a water conservation district in Eastern Oregon.

V.A.4 Evaluation Criterion D: Nexus to the Bureau of Reclamation (5 Points)

Is there a Reclamation project, facility, or activity within the planning area? Yes. The Willamette Basin Project: Detroit Lake Contracts #140510W0675 and #140510W1118 are Reclamation projects located within the geographical area that will be addressed in the proposed North Santiam Drought Contingency Plan.

Is the planning area in the same basin as a Reclamation project, facility, or activity? Yes

Will the proposed plan or plan update benefit a basin where a Reclamation project, facility, or activity is located? Yes

IV.D.8 G) Required Permits and Approvals

No Permits or approvals are required

LINN SOIL AND WATER CONSERVATION DISTRICT

33935 HWY 99E
SUITE C
TANGENT OR 97389

(541) 926-2483
FAX(541) 926-2369

LINN.SWCD@OACD.ORG

June 19, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
234 E. Water Street
Stayton, Oregon 97383

RE: North Santiam Watershed Drought Contingency Plan Grant Proposal

To Whom It May Concern,

On behalf of the Linn Soil Water and Water Conservation District, I am writing this letter in support of the Santiam Water Control District's 2015 WaterSMART "North Santiam Watershed Drought Contingency Plan" grant proposal.

As part of our District, the land and water uses in the North Santiam watershed are diverse, including timber, agriculture, recreation, and rural residential and urban uses. Drought, and the effects of drought, are a major issue of concern for all those who rely on the North Santiam River system. Climate trend modeling data suggests the new normal for western Oregon to include less snow pack and lower reservoir water levels. Therefore, the development of a resilience building North Santiam Drought Contingency Plan for the entire watershed is important.

The District values its partnerships and wants to work with its fellow community stakeholders on projects that will protect, conserve and enhance the North Santiam watershed's natural resources.

Linn SWCD supports the North Santiam Watershed Drought Contingency Plan Proposal. The District will contribute a minimum of 33 hours at $38/hr. of support as well as mileage to attend meetings, assist with reviews and the development of the drought plan over the next two years totaling approximately $1500 of in-kind match.

Please contact me if you have any questions regarding this letter of support.

Sincerely,

David Neal
Chair
Linn Soil and Water Conservation District

Marion Soil & Water
Conservation District

338 Hawthorne Ave. NE, Salem, OR 97301-4607 ● Phone: 503-391-9927 ● Web: www.marionswcd.net

June 22, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

RE: ***North Santiam Watershed Drought Contingency Plan Grant Proposal***

To Whom It May Concern:

On behalf of the Marion Soil and Water Conservation District, I am writing this letter in support of the Santiam Water Control District's 2015 WaterSMART "***North Santiam Watershed Drought Contingency Plan***" grant proposal.

The land and water uses in the North Santiam Watershed are diverse, including timber, agriculture, recreation and rural residential and urban uses, which all merge together to form a complex mix of natural resource related opportunities and challenges. Drought and the effects of drought are a major issue of concern for all those who rely on the North Santiam River system. With the June 2015 watershed conditions being such as they are with no snow pack, low reservoir water levels and with the climate trend modeling data suggesting this may be the new normal for western Oregon we believe the development of a resilience building North Santiam Drought Contingency Plan for the whole watershed to be extremely important.

The Marion Soil and Water Conservation District values its partnerships and wants to work with its fellow community stakeholders on projects that will protect, conserve and enhance the North Santiam watershed's natural resources.

The Marion Soil and Water Conservation District is in strong support of the North Santiam Watershed Drought Contingency Plan proposal. The Marion Soil and Water Conservation District will contribute a minimum of 24 hours at $37.45 per hour of support over two years totaling approximately $900.00 of in-kind match. The in-kind support will be in the form of staff time spent on attending planning meetings and time spent on assisting with the review and development of the drought plan.

Please contact me if you have any questions regarding this letter of support. Thank you for your time.

Sincerely,

Jane Keppinger

District Manager

NORPAC FOODS, INC.

3225 SW 25th Ave
PO Box 14444
Salem, OR 97309
(503) 480-2100

June 23, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

RE: ***North Santiam Watershed Drought Contingency Plan Grant Proposal***

To Whom It May Concern:

On behalf of Norpac Foods, I am writing this letter in support of the Santiam Water Control District's 2015 WaterSMART "***North Santiam Watershed Drought Contingency Plan***" grant proposal.

The land and water uses in the North Santiam Watershed are diverse, including timber, agriculture, recreation and rural residential and urban uses, which all merge together to form a complex mix of natural resource related opportunities and challenges. Drought and the effects of drought are a major issue of concern for all those who rely on the North Santiam River system. With the June 2015 watershed conditions being such as they are with little snow pack, low reservoir water levels and with the climate trend modeling data suggesting this may be the new normal for western Oregon, we believe the development of a resilience-building North Santiam Drought Contingency Plan for the whole watershed to be extremely important.

As a major industrial user of North Santiam water, Norpac values its partnerships and wants to work with its fellow community stakeholders on projects that will protect, conserve and enhance the North Santiam watershed's natural resources.

Norpac is in strong support of the North Santiam Watershed Drought Contingency Plan proposal. Norpac's Technical Services department will contribute a minimum of 80 hours at $50/hr of support over two years totaling approximately $4,000 of in-kind match. The in-kind support will be in the form of staff time spent attending planning meetings and time spent on assisting with the review and development of the drought plan.

Please contact me if you have any questions regarding this letter of support.

Sincerely,

Randy Bentz
Norpac Foods, Technical Services Department Manager

North Santiam Watershed Council

284 E Water Street, Stayton, Oregon 97383
503-930-8202
northsantiam.org

June 24, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

RE: North Santiam Watershed Drought Contingency Plan Grant Proposal

To Whom It May Concern:

On behalf of the North Santiam Watershed Council (NSWC), I am writing this letter in support of the Santiam Water Control District's "North Santiam Watershed Drought Contingency Plan" proposal. Bringing together local stakeholders to work with Bureau of Reclamation to develop a plan that would help the watershed build drought resilience is consistent with the NSWC mission of working together with interested parties to facilitate the restoration and protection of habitats important to fish and wildlife and to support the economy and quality of life in its communities.

The North Santiam Watershed (NSW) is a fourth field watershed within the Willamette Basin. It covers approximately 766 square miles (approximately 500,000 acres) on western slopes of the Cascade Mountains to the Willamette Valley floor. Land and water uses are diverse, including timber, agriculture, recreation, rural residential and urban areas, which merge with the following complex mix of features and regulations that intersect in this watershed:

- Drinking water source to Salem and 9 small communities within the watershed
- Willamette National Forest
- Federally designated Detroit Lake
- Detroit and Big Cliff Dams
- Marion Forks Hatchery
- Stayton Complex Dams and Diversions
- Wild and Scenic waterway on the Little North Santiam
- Essential Salmonid Habitat
- Federally protected old growth forest in Opal Creek
- Forest Practices Act and Northwest Forest Plan
- USACE Willamette Project Biological Opinion
- ESA listed plants- e.g. Bradshaw's Lomatium, Oregon Larkspur, White-topped Aster and Willamette Valley Daisy
- ESA listed animals- e.g. Bald Eagle, Spotted Owl, Chinook salmon and Steelhead
- DEQ's Three Basin Rule
- 303 (d) list of water quality impaired water bodies and TMDL Plan
- Water laws and water rights
- ODFW's Conservation Strategy
- Natural Heritage Resource Area that is also a Bird Conservation Area

As a result, the North Santiam Watershed is a crossroads of a diversity of natural resource related challenges.

The NSWC and the City of Salem have been holding collaborative watershed stakeholder annual summits since 2009. Major discussion topics to date have included: communication, data management, emergency planning, infrastructure failure, flooding and drought. Given many of the basins communities rely heavily on the North Santiam River, drought and the effects of drought are a major issue of concern. With the June 2015 watershed conditions being such as they are with no snow pack, low reservoir water levels and with the climate trend modeling data suggesting this may be the new normal for Oregon developing a North Santiam Drought Contingency Plan is extremely critical.

The North Santiam Watershed Council is in strong support of the North Santiam Watershed Drought Contingency Plan proposal. **The NSWC will contribute a minimum of 300 hours at $28/hour of support, over two years, totaling approximately $8,400 of in-kind match.** The in-kind support will be in the form of staff time spent on organizing and facilitating stakeholder meetings and time spent on assisting with the review and development of the drought plan.

Sincerely,

Rebecca McCoun

Rebecca McCoun
Council Coordinator

Oregon
Kate Brown, Governor

Department of Agriculture
635 Capitol St NE
Salem, OR 97301-2532

June 23, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

RE: North Santiam Watershed Drought Contingency Plan Grant Proposal

Mr. Stevenson:

On behalf of the Oregon Department of Agriculture (ODA), I am writing this letter in strong support of the Santiam Water Control District's 2015 WaterSMART grant proposal, "*North Santiam Watershed Drought Contingency Plan.*"

Land and water uses in the North Santiam watershed are diverse, including timber, agriculture, recreation and rural residential and urban uses, and form a complex mix of natural resource related opportunities and challenges. Drought and effects of drought are major concerns for those who rely on the North Santiam river system. June 2015 watershed conditions are dry due to no snow pack and low reservoir water level, plus climate modeling suggests that 2015 conditions may be the new normal, rather than the exception, for western Oregon. Consequently, developing the North Santiam Watershed Drought Contingency Plan is extremely important to build watershed and economic resilience against dry and drought conditions.

ODA values partnerships and works with community stakeholders on projects that protect, conserve, and enhance the North Santiam watershed's natural resources, and help resources adapt and develop resilience to changing climate conditions.

In support of the North Santiam Watershed Drought Contingency Plan proposal, ODA will contribute a minimum of 160 hours of support over two years at $28/hour, totaling approximately $4,500 of in-kind match. The in-kind support will entail staff time for participating in planning meetings, and assisting with review and development of the drought plan.

Thank you for your time, and please contact me if you have any questions regarding this letter of support.

Sincerely,

Margaret A. Matter

Margaret A. Matter, Ph.D.
Water Resources Specialist

Oregon
Kate Brown, Governor

Department of Environmental Quality
Western Region Medford Office
221 Stewart Avenue, Suite 201
Medford, OR 97501
(541) 776-6010
FAX (541) 776-6262
TTY 711

June 23, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

RE: ***North Santiam Watershed Drought Contingency Plan Grant Proposal***

To Whom It May Concern:

On behalf of the Oregon Department of Environmental Quality, I am writing this letter in support of the Santiam Water Control District's 2015 WaterSMART "***North Santiam Watershed Drought Contingency Plan***" grant proposal.

The land and water uses in the North Santiam Watershed are diverse, including timber, agriculture, recreation and rural residential and urban uses, which all merge together to form a complex mix of natural resource related opportunities and challenges. Drought and the effects of drought are a major issue of concern for all those who rely on the North Santiam River system. With the June 2015 watershed conditions being such as they are with no snow pack, low reservoir water levels and with the climate trend modeling data suggesting this may be the new normal for western Oregon we believe the development of a resilience building North Santiam Drought Contingency Plan for the whole watershed to be extremely important.

Several waterbodies in the North Santiam are water quality limited and impacted by hydromodification. Drought contingency planning will assist with documenting the collaborative process for implementing such modifications more effectively and efficiently. The DEQ values its partnerships and wants to work with its fellow community stakeholders on projects that will protect, conserve and enhance the North Santiam watershed's natural resources.

The DEQ is in strong support of the North Santiam Watershed Drought Contingency Plan proposal and will contribute a minimum of 80 hours at $50/hr of support over two years, totaling approximately $4,000 of in-kind match. The in-kind support will be in the form of staff time spent on attending planning meetings and time spent on assisting with the review and development of the drought plan.

Please contact me if you have any questions regarding this letter of support. Thank you for your time.

Sincerely,

Heather Tugaw

Heather Tugaw
Integrated Water Resources Specialist
Oregon Department of Environmental Quality

June 23, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

RE: ***North Santiam Watershed Drought Contingency Plan Grant Proposal***

To Whom It May Concern:

On behalf of the Oregon Department of Forestry, I am writing this letter in support of the Santiam Water Control District's 2015 WaterSMART "***North Santiam Watershed Drought Contingency Plan***" grant proposal.

The land and water uses in the North Santiam Watershed are diverse, including timber, agriculture, recreation and rural residential and urban uses, which all merge together to form a complex mix of natural resource related opportunities and challenges. Drought and the effects of drought are a major issue of concern for all those who rely on the North Santiam River system. With the June 2015 watershed conditions being such as they are with no snow pack, low reservoir water levels and with the climate trend modeling data suggesting this may be the new normal for western Oregon we believe the development of a resilience building North Santiam Drought Contingency Plan for the whole watershed to be extremely important.

The Oregon Department of Forestry values its partnerships and wants to work with its fellow community stakeholders on projects that will protect, conserve and enhance the North Santiam watershed's natural resources.

The Oregon Department of Forestry is in strong support of the North Santiam Watershed Drought Contingency Plan proposal. The Oregon Department of Forestry will contribute a minimum of 80 hours at $30/hr of support over two years totaling approximately $2400 of in-kind match. The in-kind support will be in the form of staff time spent on attending planning meetings and time spent on assisting with the review and development of the drought plan.

Please contact me if you have any questions regarding this letter of support. Thank you for your time.

Sincerely,

Joe Arbow
Stewardship Forester – Oregon Department of Forestry – Santiam Unit

Oregon
Kate Brown, Governor

Water Resources Department
North Mall Office Building
725 Summer Street NE, Suite A
Salem, OR 97301-1266
503-986-0900
FAX 503-986-0904

June 23, 2015

U.S. Bureau of Reclamation
Attention: Ms. Irene M. Hoiby
Mail Code: 84-27852
P.O. Box 25007
Denver, CO 80225

RE: North Santiam Watershed Drought Contingency Plan Grant Proposal

Dear Application Review Committee,

On behalf of the Water Resources Department, I am writing this letter to express our support for the development of a drought contingency plan for the North Santiam watershed. In recent years, the WaterSMART Program has benefitted water users and interests all across the state by supporting collaborative planning processes and providing funding and technical assistance for numerous projects that protect and conserve Oregon's water resources. The Department commends the Bureau of Reclamation for its support throughout the years. This current funding opportunity will facilitate a pro-active approach to managing drought-related risks, which can ultimately lead to a suite of response actions that help build resiliency in the North Santiam watershed.

The land and water uses in this watershed are diverse and include timber, agriculture, recreation, rural residential and urban uses, which all merge together to form a complex mix of water-related opportunities and challenges. Drought and its related effects are a major issue of concern for all those who rely on the North Santiam River system. The water supply conditions this past year, with record low snowpack, reservoirs at half capacity, and climate data suggesting this may be the new normal for western Oregon makes it imperative to develop a drought response plan that benefits the diversity of water users and interests within the watershed.

The Department values its working relationship with water users, conservation, and other interests in North Santiam watershed. The Department has a strong working relationship with the Natural Resources Conservation Service and the Marion County Soil and Water Conservation District. Our staff often collaborate with these entities to implement irrigation water improvement projects throughout the area. The Department regularly monitors streamflows on high priority streams in the watershed.

Department field staff will continue to provide technical assistance and information to partners in the North Santiam watershed during development of the drought contingency plan. Staff will also attend planning meetings and assist with review and development of the plan.

Should you have any questions regarding this letter, please feel free to contact the Department's Northwest Region Manager, Mike McCord at 503-986-0893 or mike.l.mccord@state.or.us.

Sincerely,

Thomas M. Byler
Director

c: Brent Stevenson, Santiam Water Control District
Rebecca McCoun, North Santiam Watershed Council

STAYTON FIRE DISTRICT

1988 W. Ida Street
Stayton, Oregon 97383

Phone: 503-769-2601
Fax: 503-769-1487
www.staytonfire.org

June 19, 2015

Brent Stevenson
Operations Manager,
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

RE: ***North Santiam Watershed Drought Contingency Plan Grant Proposal***

To Whom It May Concern:

On behalf of Stayton Fire District I am writing this letter in support of the Santiam Water Control District's 2015 WaterSMART "***North Santiam Watershed Drought Contingency Plan***" grant proposal.

The land and water uses in the North Santiam Watershed are diverse, including timber, agriculture, recreation and rural residential and urban uses, which all merge together to form a complex mix of natural resource-related opportunities and challenges. Drought and the effects of drought are a major concern for Stayton Fire District and all those who rely on the North Santiam River system. With the June 2015 watershed conditions being such as they are with no snow pack, low reservoir water levels and with the climate trend modeling data suggesting this may be the new normal for western Oregon, we believe the development of a resilience building North Santiam Drought Contingency Plan for the whole watershed to be extremely important.

Stayton Fire District values its partnerships and wants to work with its fellow community stakeholders on projects that will protect, conserve and enhance the North Santiam Watershed's natural resources.

Stayton Fire District is in strong support of the North Santiam Watershed Drought Contingency Plan proposal. The District will contribute a minimum of 40 hours at $ 50.00/hr. of support over two years totaling approximately $2,000.00 of in-kind match. The in-kind support will be in the form of staff time spent on attending planning meetings and time spent on assisting with the review and development of the drought plan.

Please contact me if you have any questions regarding this letter of support. Thank you for your time.

Respectfully,

Jack R. Carriger
Fire Chief, Stayton Fire District

United States Department of Agriculture **Forest Service** **Willamette National Forest**
Detroit Ranger District
44125 North Santiam Highway Southeast
Detroit, OR 97342

File Code: 3170
Date: June 23, 2015

Brent Stevenson
Operations Manager
Santiam Water Control District
284 E. Water Street
Stayton, OR 97383

To Whom It May Concern:

As district ranger of the Detroit Ranger District, USDA Forest Service, I am writing this letter in support of the Santiam Water Control District's 2015 WaterSMART "***North Santiam Watershed Drought Contingency Plan***" grant proposal.

The land and water uses in the North Santiam Watershed are diverse, including timber, agriculture, recreation and rural residential and urban uses, which all merge together to form a complex mix of natural resource related opportunities and challenges. Drought and the effects of drought are a major issue of concern for all those who rely on the North Santiam River system. With the June 2015 watershed conditions being such as they are with no snow pack, low reservoir water levels and with the climate trend modeling data suggesting this may be the new normal for western Oregon we believe the development of a resilience building North Santiam Drought Contingency Plan for the whole watershed to be extremely important.

The US Forest Service values its partnerships and wants to work with its fellow community stakeholders on projects that will protect, conserve and enhance the North Santiam Watershed's natural resources.

The Forest Service is in strong support of the North Santiam Watershed Drought Contingency Plan proposal. The Detroit Ranger District will contribute a minimum of 300 hours at $25/hr of support over two years totaling approximately $7,500 of in-kind match. The in-kind support will be in the form of staff time spent on attending planning meetings and time spent on assisting with the review and development of the drought plan.

Please contact me if you have any questions regarding this letter of support. Thank you for your time.

Sincerely,

/s/ Grady A. McMahan

Grady A. McMahan
District Ranger

City of Stayton

Department of Public Works
362 N. Third Avenue • Stayton, OR 97383
Phone: (503) 769-2919 • Fax (503) 769-2134

June 24, 2015

Santiam Water Control District
Brent Stevenson
284 E Water St
Stayton, OR 97383

Regards: North Santiam Drought Contingency Plan Grant

Dear Grant Review Committee,

The City of Stayton is pleased to express our support for the Santiam Water Control District (District) and their application for a Water SMART Grant to complete the North Santiam Drought Contingency Plan. Every citizen within our community would benefit from receipt of this grant.

As the Public Works Director for the City of Stayton I have reviewed how the receipt of this Grant would benefit the City of Stayton and the surrounding community. When drought occurs within our region, having a contingency plan in place is necessary to help meet the needs of our local farmers and the citizens of Stayton with the limited resource.

The City of Stayton will be donating $1000 to help meet the matching commitment for this grant, as well as providing our full support in continuing and maintaining a close working relationship with the District.

We are giving our fullest support and commitment to this project.

Best Regards,

Lance S. Ludwick
Public Works Director

IV.D.8 H) Official Resolution

To be submitted within 30 of the application deadline.

Santiam Water Control District Board next meets July 13th, 2015