FINAL

Work Plan

North Santiam Watershed Drought Contingency Plan

Prepared for:

North Santiam Drought Planning Task Force

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INTRODUCTION

This work plan will guide development of the North Santiam Watershed (NSW) Drought Contingency Plan (DCP). The intent of the DCP is to identify critical priorities for water and seek alignment among the many basin stakeholders for how to address those priorities under drought conditions.

In 2015, the headwaters of the NSW experienced "severe drought", and the western portion of the watershed experienced "moderate drought". The Governor declared a state of drought emergency for both Linn and Marion Counties due to drought, low snowpack levels, and low water conditions (Executive Orders 15-11 and 15-19). In June 2015, Detroit Lake reservoir levels were 60 feet below normal, and storage was 33 percent of normal. Air temperatures were approximately 5-10 degrees Fahrenheit (^{o}F) above normal at the beginning of the year, and the warmest on record for June (7.7 ^{o}F above average). The Oregon Climate Change Research Institute (2013) has predicted temperature increases of 0.2 to 1 ^{o}F per decade through 2100 in the Oregon Cascades, where the NSW is located. Annual precipitation patterns are expected to change, resulting in wetter winters and longer dry seasons.

In addition, releases from Detroit Lake are managed according to federally mandated regulations. As a result, most stakeholders have little control over the amount of water stored or available downstream of Detroit Lake. This lack of control over water availability creates significant uncertainty. Changes in reservoir storage and releases during drought conditions could impact many stakeholders.

SCOPE AND PURPOSE

In order to respond effectively to changing climate conditions and competing water needs, the many stakeholders within, and dependent upon, the NSW will need to collaborate in order to protect their communities, local economies, and critical natural resources. This work plan is intended to guide development of a DCP for the NSW planning area. The DCP is funded in part by a Drought Contingency Planning WaterSMART grant from the Bureau of Reclamation (Reclamation) and will follow Reclamation's guidance for DCP preparation.

The DCP planning process will enable local stakeholders to collaboratively develop a coordinated response to drought in the NSW. This includes defining drought conditions, identifying critical water supply needs (i.e., vulnerabilities), and identifying mitigation (e.g. conservation) actions for implementation before drought conditions, and response actions for implementation during drought conditions. The process will also identify a framework for administering the DCP, and updating it on a regular basis.

It should be noted that the DCP will not supersede Oregon water law. Under Oregon law, water is publicly owned, and most uses must be authorized through a water right issued by the Oregon Water Resources Department (OWRD). Under OWRD's administration of these water rights, in times of shortage, the earlier obtained water rights (senior rights) must be fully satisfied before the recently obtained water rights (junior rights) can take water. The DCP will work within this framework but will look for voluntary actions that can build resiliency and minimize impacts in the face of drought.

PROJECT GOAL

The concept of resilience is important to both built and natural systems. The U.S. National Infrastructure Advisory Council's report on 'Critical Infrastructure Resilience' defines resilience as:

The ability to reduce the magnitude and/or duration of disruptive events. The effectiveness of a resilient infrastructure or enterprise depends upon its ability to anticipate, absorb, adapt to, and/or rapidly recover from a potentially disruptive event.[1]

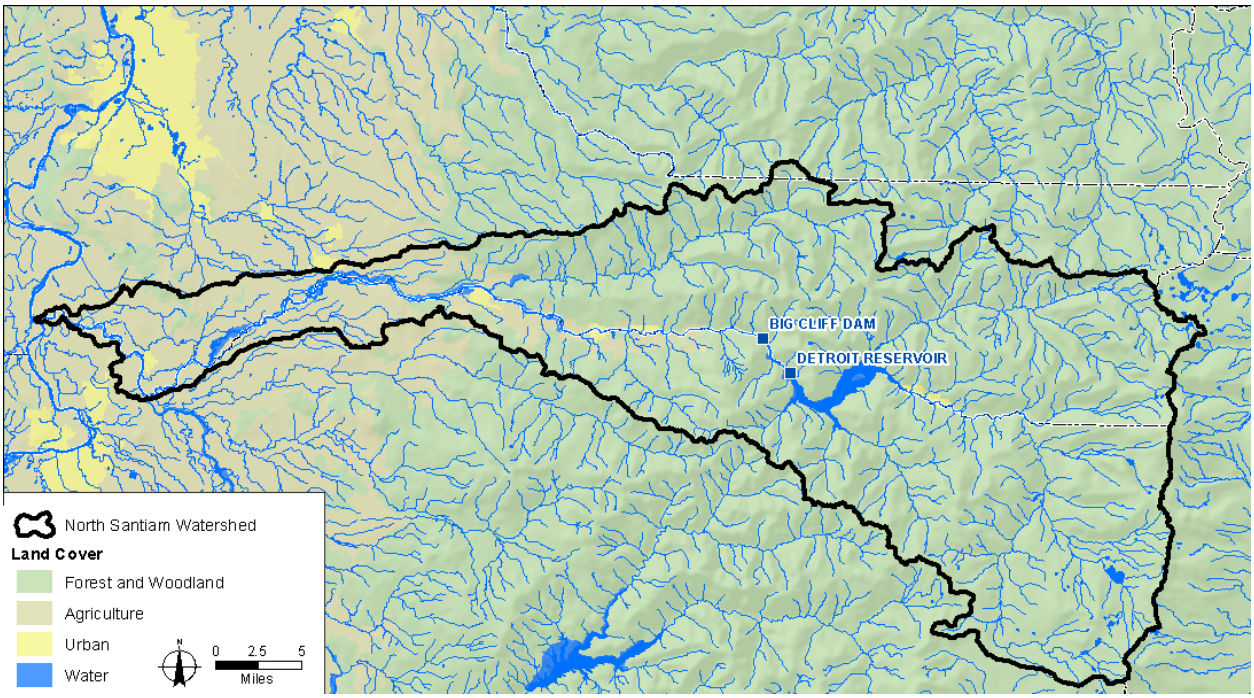
Ecologically, resilience can be defined as a system's ability to absorb disturbances and reorganize into a better configuration, while retaining its fundamental characteristics.[2] When subjected to stress, systems may adjust rather than return to their original state in order to suit changing circumstances. When stress is relieved, systems may either return to their original state or remain permanently altered.

The goal for the NSW DCP is to build long-term resiliency to drought in order to minimize impacts to the communities, local economies, and the critical natural resources within the watershed. The process will identify priorities for water, and seek to develop consensus among stakeholders to manage water before and during drought.

PLANNING AREA

The planning area for the NSW DCP covers the entirety of the NSW as well as water users outside the basin that source their water from the NSW. Communities, businesses, and threatened fisheries (Upper Willamette River Chinook and winter steelhead) inside and outside of the watershed depend upon the North Santiam River for drinking water, commercial uses, irrigation, instream flows, and water quality needs (e.g., temperature management).

Figure 1: North Santiam Watershed



Geographically, the NSW is a fourth field watershed within the Willamette River Basin (Figure 1). 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 a small subbasin that drains a

[1] http://www.globalwaterforum.org/2012/09/16/understanding-resilience-implications-for-the-water-sector/

[2] Walker, B., Holling, C. S., Carpenter, S. R. and Kinzig, A. (2004). "Resilience, adaptability and transformability in social-ecological systems", Ecology and Society, vol. 9, no. 2.

12- mile reach of the mainstem 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.

Detroit Lake, formed by Detroit Dam and its re-regulating structure Big Cliff Dam, is operated by the U.S. Army Corps of Engineers (USACE) as part of the Willamette Valley project (Contracts #140510W0675 and #140510W1118). Located within the NSW, Detroit Lake will be included in the proposed NSW DCP.

BACKGROUND

Water use in the NSW is diverse, and includes: drinking water, irrigation, commercial (e.g., washing, canning), hydropower, fire suppression, habitat for fish and wildlife, recreation, and transportation. 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.

Municipal, irrigation, commercial. The largest water appropriations are for municipal use and irrigation use, 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 City of Salem holds multiple surface water rights for the use of the North Santiam River as well as groundwater rights and an Aquifer Storage and Recovery (ASR) system. Salem also supplies water to wholesale customers. The City of Salem and the Santiam Water Control District both have outlined drought response actions in their *Water Management and Conservation Plans* (WMCP), and Marion County has done so in its *Emergency Operations Plan*.

Reclamation holds water rights for the storage of water in Detroit Lake and issues irrigation contracts for the use of stored water. Though the dams were originally constructed for multiple purposes, the storage water right for the Willamette Valley Project reservoirs, is for irrigation and supplemental irrigation use only. Consequently, "secondary water rights" to use the stored water can only be for irrigation. To date, contracts totaling 12,269 acre-feet (AF) have been issued for the use of Detroit Lake stored water[3].

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 Water Control District's source of water is a combination of live flow from the North Santiam River and stored water from Detroit Lake. Water is diverted into a network of 114 miles of earthen ditches. In an average year, the Santiam Water Control District's diversion totals 53,000 AF for all uses, other than power generation. The Santiam Water Control District holds additional water rights for power generation. During the non-irrigation season, flows associated with these rights return to the river.

Flood control and hydropower. Construction of Detroit and Big Cliff Dams was completed in 1953. The Detroit Dam 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. Currently, the USACE manages releases from Detroit Lake, primarily for flood control, according to federally mandated regulations. As a result, most stake-holders have little control over the amount of water stored and available downstream of Detroit Lake.

[3] USACE, Bonneville Power Administration, Bureau of Reclamation (2007). *Supplemental Biological Assessment of the Effects of the Willamette River Basin Flood Control Project of Species Listed Under the Endangered Species Act*. Submitted to National Marine Fisheries Service and U.S. Fish and Wildlife Service. Final May 2007.

Recreation. Water-dependent recreational activities in the planning area include sport fishing, boating and swimming. Detroit Lake is a state park and regionally significant recreation destination. The Oregon Legislature has directed OWRD, when discussing seasonal operations of impoundments with USACE, to specify that the State has determined Detroit Lake to be an important recreational resource, and to encourage USACE to place Detroit Lake as the highest priority recreational use lake in the Willamette Basin reservoir system (Oregon Revised Statute 536.595).

Instream flow and habitat. OWRD has established minimum perennial streamflows in the NSW below the dams to support aquatic life and minimize pollution. OWRD also holds instream water rights in trust for the protection of fisheries, aquatic life, and pollution abatement; however, these instream water rights are junior in priority date to most other water rights (NSWC 2014). The most sensitive beneficial uses identified by the Oregon Department of Environmental Quality for the North Santiam River are: resident fish and aquatic life; salmonid spawning, rearing, and migration; and anadromous fish passage (NSWC 2014). With the likelihood of an increased occurrence of drought, the number of stream segments exceeding Oregon's summer time water temperature criterion will increase. In addition, as part of the 2008 Endangered Species Act (ESA) Section 7(a)(2) Consultation Biological Opinion for the Willamette River Basin Flood Control Project (Willamette BiOp), flow targets were established for several Willamette River tributaries, including the North Santiam River, and the mainstem Willamette River.

Water Availability for New Appropriations. According to OWRD's on-line Water Availability Reporting System, surface water is available for "new" appropriations from the North Santiam River (below Detroit Lake and Big Cliff Dam) during the months of November through July. However, the Willamette Basin Program administrative rules, which are established by the Oregon Water Resources Commission, describe the authorized uses of water in the NSW. The rules establish additional restrictions on "new" surface water appropriations. In the upper basin, above the gage at Niagara (which is just below Big Cliff Dam), "new" appropriations are limited to 0.01 cubic feet per second. Below Niagara, most "new" appropriations are limited to the months of September through June. Finally, as part of OWRD's review of a proposed "new" appropriation, it is likely that use limitations would be proposed through an inter-agency review of the application. Inter-agency reviewers would include OWRD, Oregon Department of Fish and Wildlife, and Oregon Department of Environmental Quality.

PLANNING APPROACH

APPROACH

Reclamation has identified six elements necessary to complete a DCP:

1. **Drought Monitoring** involves predicting and recognizing drought conditions
2. **Vulnerability Assessment** identifies and evaluates the risks and impacts of drought
3. **Mitigation Actions** reduce risks and impacts before drought
4. **Response Actions** reduce impacts during drought
5. **Operational and Administrative Framework** identifies roles and responsibilities
6. **DCP Update Process** conducts post-drought evaluation to ensure effectiveness, and improve future implementation and response

A two-part project structure will be used to complete each element of the DCP:

- A **Drought Planning Task Force** (Task Force) composed of individuals with interest and technical expertise will lead the process.

- **Working Groups** will support development of the individual planning element chapters of the DCP.

For each of the DCP elements, it is anticipated that the Working Groups will conduct two workshops: the first to discuss each DCP element and provide input and information; the second to review the draft DCP chapter. The first workshop is intended to take place in-person, while the second workshop could potentially take place as a conference call. At the completion of each DCP element, the Working Groups will present their draft DCP chapter to the Task Force for concurrence. The Task Force and current Working Group members by element are listed in Appendix A.

The methodology for completing each of these required elements, as well as interconnections between the elements, are discussed in this section. More information about the planning oversight structure and roles and responsibilities is provided later in this document.

Drought Monitoring (Element #1)

Objective: Establish a framework that uses available 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 to be used to define the mitigation actions (Element #3) and response actions (Element #4) for the watershed.

Approach: The drought monitoring Working Group will collect, inventory, and synthesize the existing resources, tools, and data to develop an understanding of the information available to establish a drought monitoring framework. This information will include: (1) data (e.g., precipitation, temperature, and streamflow levels) and sources of data to confirm and predict drought conditions, and (2) existing frameworks that define indicators, indices, thresholds and stages to declare drought (and trigger mitigation/response actions). This information will be evaluated for completeness to ensure that it accurately covers the basin geography and is relevant for all sectors. It is expected that data evaluation will be qualitative (e.g., no hydrogeologic modeling). If data gaps are identified, the Working Group will research information and incorporate it into the analysis. Once data gaps are filled, to the extent practicable, the Working Group will prepare a draft chapter for the Task Force that recommends the data, data sources, and framework that should be used to confirm and predict drought in the NSW. The draft chapter will also highlight assumptions made during development of the framework.

Known Resources: None of the basin stakeholders have completed DCPs, but there are many resources that discuss drought-related information and tools for the area. These include:

- Willamette Water 2100 project (preliminary)
- Willamette Basin Review Feasibility Study (in process)
- Santiam Water Control District WMCP
- City of Salem WMCP
- City of Stayton WMCP
- Several National Marine Fisheries Service (NMFS) biological opinions for USACE projects and the City of Salem and Santiam Water Control District operations
- Natural Resources Conservation Service (NRCS) monthly Water Supply Outlook Report (http://www.or.nrcs.usda.gov/snow/watersupply/)
- National Drought Mitigation Center US Drought Monitor weekly update (http://droughtmonitor.unl.edu/)
- NOAA Climate Prediction Center, Drought Information website (http://www.cpc.ncep.noaa.gov/products/Drought/)

- OWRD Drought Watch website (http://www.oregon.gov/owrd/pages/wr/drought.aspx#Drought_Status_&_Current_Conditions)
- USGS Streamflows Water Watch website (http://waterwatch.usgs.gov/index.php?r=or&id=ww_drought)
- Northwest River Forecast Center Water Supply Forecast (http://www.nwrfc.noaa.gov/ws/index.html?version=20150727v1)
- USACE Willamette Project Teacup Diagrams http://www.nwd-wc.usace.army.mil/nwp/teacup/willamette/

Vulnerability Assessment (Element #2)

Objective: Evaluate the risks and impacts of drought. Develop a list of priority critical assets and resources. This list will inform the mitigation and response actions in Elements #3 and #4.

Approach: The vulnerability assessment Working Group will:

(1) Identify and catalog the assets (e.g., crops, commercial products) and resources (e.g., drinking water, fish habitat) that are at risk in the event of drought, and

(2) Identify base flow conditions using water use/water rights and mandated baseline conditions for aquatic resources.

The Working Group will gather this baseline information from the Task Force members that have plans and by soliciting input to determine real and perceived impacts from drought.

Using the baseline information, the vulnerability assessment Working Group will first identify the critical resources at risk by assessing the environmental, economic, and social consequences; magnitude; and severity of impact. This assessment may be either qualitative, quantitative, or both. The assessment will also include how the severity of impacts may change over time. This assessment will include population growth, climate change, and other factors that may change water supply and trends in use. If needed, the Working Group will identify which resources can/should be addressed by the DCP, and which will be addressed by other means.

Second, using the list of critical resources, the vulnerability assessment Working Group will identify the underlying causes of vulnerabilities and the factors that drive the vulnerabilities. Factors may include specific drought characteristics such as duration and severity, or social, economic or environmental considerations. The goal of this process will be to direct actions towards the underlying causes of vulnerability rather than to its results. Once critical assets and resources, and their underlying causes of risk are identified, the Working Group will prepare a draft chapter for the Task Force that recommends the critical resources for which mitigation and response actions will be identified.

Known Resources:

- Santiam Water Control District WMCP
- City of Salem WMCP
- OWRD water rights database
- 2008 Willamette Bi-Op
- 2011 Upper Willamette River Conservation & Recovery Plan for Chinook Salmon & Steelhead
- Marion County Emergency Operations Plan
- Linn County Emergency Operations Plan
- Oregon Natural Hazards Mitigation Plan

- Marion County Multi-Jurisdictional Natural Hazard Mitigation Plan
- Linn County Natural Hazard Mitigation Plan
- Oregon Climate Change Research Institute
- Oregon Climate Impacts Research Consortium
- National Drought Mitigation Center

Mitigation Actions (Element #3)

Objective: Identify, evaluate, and prioritize mitigation actions to conserve water and improve resiliency before drought conditions, for the critical resources identified during the vulnerability assessment. Mitigation action examples include:

- Increasing use of recycled water
- Decrease non-essential water consumption
- Rehabilitating old infrastructure prone to breaks
- Building new facilities to enhance or improve diversions or storage
- Incentivizing installation of water efficient appliances and irrigation systems
- Water transfer and/or leasing programs
- Monitoring improvements
- Operational changes or arrangements

Approach: First, the mitigation actions Working Group will develop goals and priorities (e.g., decrease consumption, prevent economic loss) that are relevant to all stakeholder sectors. Then, the Working Group will identify the existing tools, programs, policies, operational criteria (e.g., for Detroit and Big Cliff dams), and current capacity for conserving water for each of the critical resources identified in Element #2. Regulatory, operational and programmatic tools, programs and policies will be considered. The Working Group will gather this information and solicit input from the Task Force members.

The Working Group will then use this information to develop a strategy to prioritize mitigation actions for implementation across all stakeholder sectors. This may include identifying new actions to meet goals and priorities. The prioritization will involve an appraisal level evaluation of costs, benefits, and third-party impacts associated with implementation.

Based on the mitigation goals and mitigation actions discussed above, the Working Group will present its recommendations for mitigation goals and prioritized actions for each sector to the Task Force in a draft chapter for the DCP.

Known Resources:

- Santiam Water Control District WMCP
- City of Salem WMCP
- 2008 Willamette Bi-Op
- 2011 Upper Willamette River Conservation & Recovery Plan for Chinook Salmon & Steelhead
- Marion County Multi-Jurisdictional Natural Hazard Mitigation Plan

Response Actions (Element #4)

Objective: Identify, evaluate, and prioritize response actions to conserve water and improve resiliency during drought conditions, for the critical resources identified during the vulnerability assessment. Response actions reduce risks to assets and resources.[4] Example response actions include:

- Public drought campaigns
- Demand reduction
- Water use restrictions, or curtailment

Approach: First, the Working Group will develop achievable goals and priorities for each stage of drought (stages are identified in Element #1). For each drought stage, the Working Group will identify the existing programs, policies, operational criteria, current capacity for responding to declared drought, and protecting the critical resources identified. They will gather this information and solicit input from the Task Force members. The response actions Working Group will discuss the list of currently employed and potentially needed response actions, and organize them into a matrix of drought stages, triggers, objectives (e.g, reduce water use by 20%), and response actions for each sector. To the extent necessary, the Group will identify alternative sources of water, should the drought exceed the level of curtailment. Guidelines and protocols will be developed for implementing each response action. For relevant actions, the Working Group will determine whether incentives and/or enforcement will be included as part of the DCP.

The Working Group will present its recommendations for response goals and response actions for each sector to the Task Force in a draft chapter for the DCP.

Known Resources:

- Santiam Water Control District WMCP
- City of Salem WMCP
- Marion County Emergency Operations Plan

Operational and Administrative Framework (Element #5)

Objective: Develop an operational and administrative framework to clarify the ongoing roles and responsibilities for the DCP and to facilitate a quick and efficient response to drought conditions. 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.

Approach: Each of the Working Groups will review the recommendations in their planning elements and identify the tasks/responsibilities, resources needed, decision-making procedures, and parties responsible (possibly for each Task Force member) for implementation. For example, to identify drought conditions, the Drought Monitoring Working Group will identify what data are needed, a drought declaration process for the planning area, and who has the authority to communicate this information to stakeholders (thereby triggering mitigation or response actions).

The information for each DCP planning element will be pulled together in the operational and administrative framework planning chapter. This organizational structure will ensure consistency of roles and responsibilities between elements and for the DCP as a whole.

[4] Note that response actions are planned actions, implemented based on specific triggers identified in Element #1. Response actions are not intended to be crisis driven (i.e., in response to unanticipated circumstances). Such actions are implemented by emergency response programs.

Potential Resources:

- Planning element recommendations

DCP Update Process (Element #6)

Objective: Evaluate and update the DCP on an ongoing basis to ensure its effectiveness. A specific timeframe for DCP updates will be developed.

Approach: 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, and to identify and correct issues to improve future implementation and response. Working Group members will identify a process to identify new information, gather post-drought feedback and suggest ways to improve effectiveness, review and update the DCP, and determine how it will be budgeted. This may include reconvening the Task Force or Working Group(s), or new subgroups. This may also include surveying changes in the basin to identify new stakeholders in the planning area. The Working Group will also identify a time-frame for updates; it is anticipated that this will occur every three to five years.

SCHEDULE AND BUDGET

Schedule

An overview of the proposed project schedule is provided in Figure 2. It is anticipated that two Working Group meetings will be held for each project element, and a draft chapter will be developed by the end of each DCP planning element. After drafting two DCP chapters, recommendations will be presented to the Task Force for feedback and concurrence. A complete draft will be presented to the Task Force for review in April 2017, and a final draft will be submitted to Reclamation by July 2017, to complete the project within the grant specified two-year time period.

Budget

Funding for the DCP is provided by a federal grant from Reclamation, and cost share partner cash and in-kind contributions. The total project budget per the grant agreement is $317,266. Currently $149,865 of the budget is authorized through a contract with the Santiam Water Control District for consultants (in the Management Team) to support each DCP planning element and complete the DCP chapters. Table 1 provides an estimate of how the budget will be allocated; the effort by task may vary but the total budget will not change unless approved by the Santiam Water Control District. The final task involves the completion of the draft DCP.

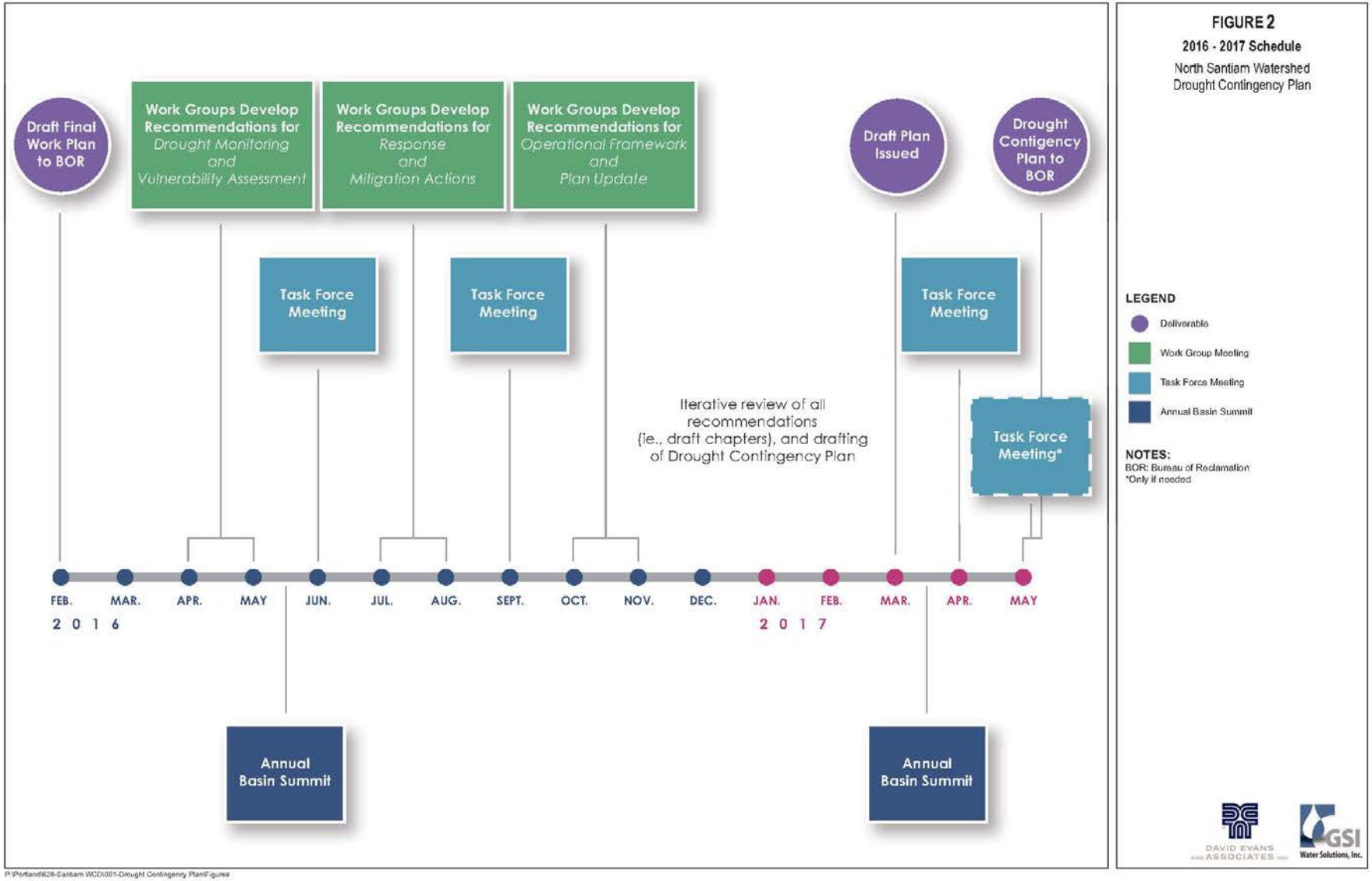


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Table 1: Project Budget

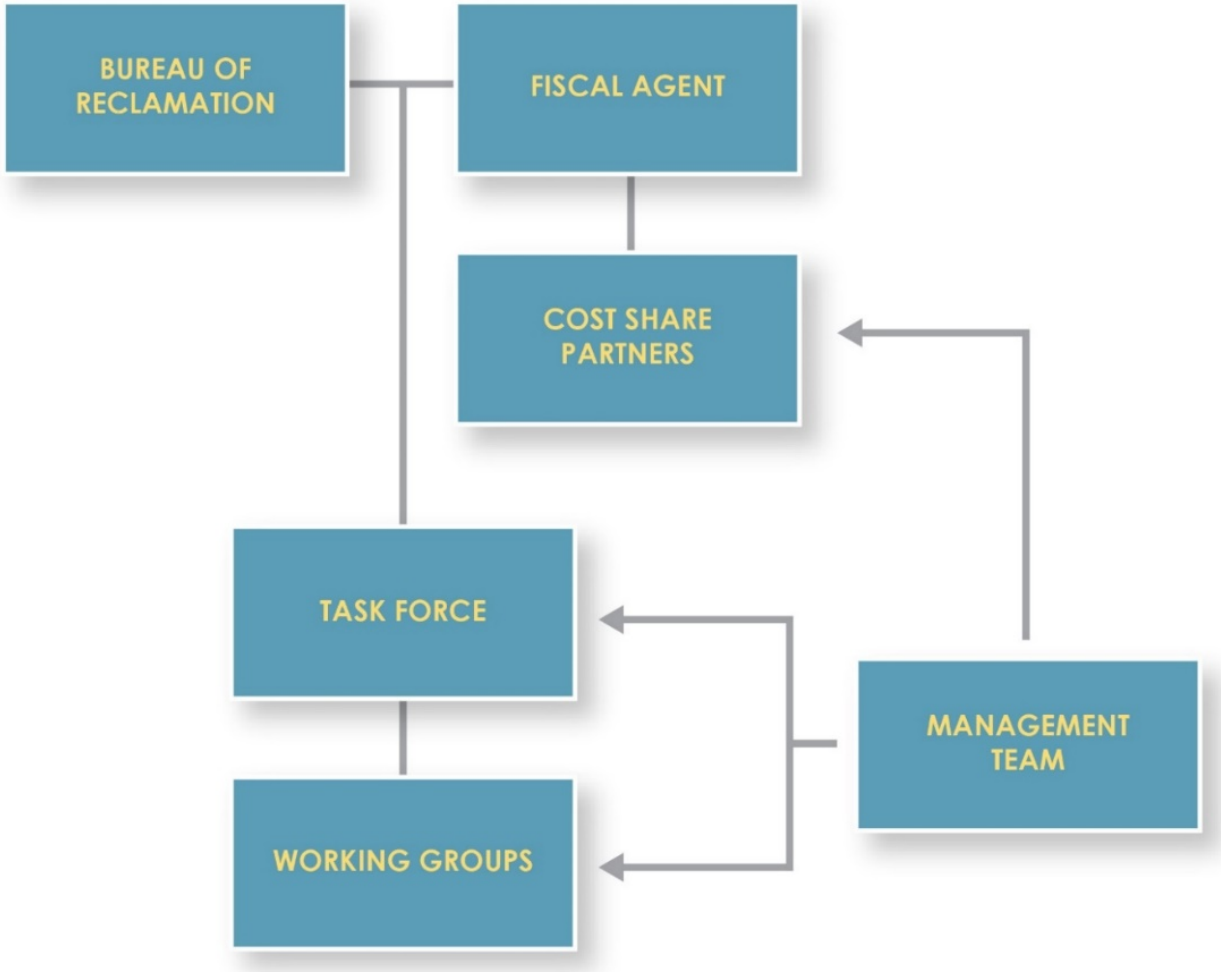
Tasks	Consultant Budget	Cost Share Partner Budget	Projected Expenditure Timeline
Initial Coordination/Work Plan Development	$22,095	$17,428	Jan - Feb 2016
Survey Existing Information and Tools	$4,402	$62,262	Mar - June 2016
Develop Drought Monitoring Process	$17,902		
Vulnerability Assessment	$24,038		
Develop Mitigation Actions	$25,979	$36,064	July - Sept 2016
Develop Response Actions	$24,616		
Develop Operational and Admin Framework	$9,748	$8,279	Oct - Nov 2016
Develop DCP and DCP Update Process	$21,085	$45,225	Dec 2016 - May 2017
Total Budget	**$149,865**	**$169,258**	

PLANNING OVERSIGHT STRUCTURE

The planning oversight structure consists of six groups, discussed here, and is shown in Figure 3.

- **Reclamation** reviews and authorizes this Work Plan, which will then release additional grant funding needed to complete the DCP. Reclamation awards funding to the Fiscal Agent.
- The **Fiscal Agent** is the entity that has a contractual obligation with Reclamation to complete the DCP. The Santiam Water Control District is the fiscal agent on behalf of the Task Force.
- The **Cost Share Partners** financially support the Fiscal Agent by providing the in-kind match and services needed to prepare the DCP. The complete list of Cost Share Partners is included in Appendix B.
- The **Task Force** is composed of the Cost Share Partners as well as other interested stakeholders that represent interests in the planning area. The Task Force is the oversight entity that ensures that all stakeholder interests are represented in the final document, and will review and provide feedback at various stakes in the planning process. Task Force members are listed in Appendix A.
- The **Working Groups** are a subset of the Task Force, and represent the technical, on-the-ground knowledge to complete the individual DCP planning element chapters (Appendix A).
- The **Management Team** provides general administrative support to the groups listed above by: coordinating meetings, tracking cost share funding, and supporting development of DCP planning element chapters. The Management Team consists of the Santiam Water Control District, the City of Salem, the North Santiam Watershed Council, Marion County, and the consultant team, GSI Water Solutions and David Evans and Associates. The **Consultant Team** specifically will be responsible for preparing for each Working Group meeting, gathering feedback from the Working Groups, preparing the draft DCP chapters for presentation to the Task Force, and incorporating Task Force comments into final DCP chapters.

Figure 3: Planning Oversight Structure



DECISION-MAKING PROCESS

The goal of the Task Force and the Working Groups is to operate by consensus. Members have agreed to do their best to consider the interests of all members. Consensus means that all members have expressed their point of view and no more than one member is unable to agree. If consensus is not clear on a particular recommendation or deliverable, members will be asked to show their level of support using a green, yellow and red card system. (This approach may be used via e-mail as well, when needed.) This approach may become necessary at any stage of the planning process, from prioritizing recommendations within the planning elements, to submitting the final draft DCP to Reclamation. In the event that more than one "red card" is observed for a particular decision point, a subcommittee made up of Reclamation, the Santiam Water Control District, and a small number of Task Force members will be formed to resolve the concerns.

RESPONSIBILITIES

Current members of the Task Force are listed in Appendix B. Representatives for each member have been identified and invited to participate in the DCP process. Alternates can be named but should be kept apprised of the process so they can fully participate when called on to do so. Once a representative agrees to join, they are agreeing to fully participate. If a representative (or alternate) misses a meeting, they

cannot participate in decision-making until after the representative (or alternate) attends the next scheduled Task Force meeting.

Task Force and Working Group members agree to the following ground rules:

- Attend meetings, or arrange for an alternate, as much as possible.
- Fully participate in meetings and articulate the views of their organization and constituents.
- Be willing to engage in respectful, constructive dialogue with other members.

DOCUMENTATION AND REPORTING

DELIVERABLES AND DOCUMENTATION REQUIREMENTS

The Task Force will submit two final deliverables to Reclamation. These are:

- This Work Plan and Communications and Outreach Plan
- Final Draft DCP

As noted previously, each Working Group (supported by the Management Team) will collaboratively prepare the draft planning chapters for the Final Draft DCP. The Working Groups will submit draft chapters to the Task Force for review and concurrence as follows:

- Draft DCP chapters with recommendations for Element #1 and Element #2
- Draft DCP chapters with recommendations for Element #3 and Element #4
- Draft DCP with recommendations for Elements #1-6
- Final draft DCP for submittal to Reclamation

The review process for the draft planning chapters and final draft DCP is discussed in detail in Section 3.3. Approximate dates for preparing the draft chapters and submitting deliverables to Reclamation are provided in the Project Schedule (Figure 2).

REPORTING REQUIREMENTS

The Santiam Water Control District will submit financial status reports to Reclamation twice a year, by April 30 and October 30, for two years. Reports are due within 30 days after the end of each semi-annual reporting period. Reporting periods are October 1 through March 31, and April 1 through September 30, of both 2016 and 2017. To prepare these reports, the Santiam Water Control District will request quarterly time sheets and receipts from the Cost Share Partners on January 15, April 15, July 15 and October 15 of both 2016 and 2017. Both the Task Force member and their supervisor will be asked to sign the reports. The Cost Share partners understand that non-compliance may result in withholding of payments, denying the use of funds, whole or partial suspension, termination of the Agreement, recovery of funds already paid or withholding of future awards.

REVIEW PROCESS

The consultant team will prepare for the initial Working Group meetings by identifying the areas where their expertise and feedback will be needed. This may include preparing chapter outlines, lists of questions, flowcharts, etc. Working Groups will provide the technical knowledge to complete the DCP planning element chapters. The consultant team will gather feedback from the Working Groups in meetings and via email, and develop draft chapters for Working Group review. After Working Group concurrence, draft DCP chapters will be circulated to the Task Force for review at least one week prior to each Task Force meeting. One Task Force meeting will be convened to discuss the chapters for Elements

#1 and 2, and one Task Force meeting will be convened to discuss the chapters for Elements #3 and 4. Both meetings will be used to discuss the information and recommendations in the draft chapters, and gather additional information and feedback as needed. The Management Team will incorporate feedback from the Task Force from both meetings, and if necessary, reconvene any Working Groups. Feedback may also be received via email for up to one week after completion of the relevant Task Force meeting.

A compiled draft version of the DCP for Elements #1-6 will be circulated again prior to a third Task Force meeting, and the Task Force will be convened to discuss the draft document in its entirety. After all of the planning element chapters have been drafted, there will be an iterative process to ensure that individual planning elements are integrated with one another, which may result in additional changes to the individual element chapters. Therefore, this third Task Force meeting will allow members to ensure that their initial comments are adequately addressed, and to see how the document has evolved after the iterative process. If necessary, a fourth Task Force meeting may be convened to resolve any remaining issues.

After the third (or fourth) Task Force meeting, the Management Team will incorporate feedback from the Task Force and circulate a final draft of the DCP. Task Force members will be asked in person, or via email, for concurrence to submit the document to Reclamation. The evaluation of consensus described above (Section 2.4) will be invoked as necessary.

Approximate dates for preparing the draft planning element chapters and submitting the deliverables are provided in the Project Schedule (Figure 2).

COMMUNICATIONS AND OUTREACH PLAN

During development of the DCP, information will be provided to a broader range of stakeholders within the planning area that are not necessarily represented by the Task Force and Working Groups. The Communication and Outreach Plan (COP), provided in Appendix C, identifies the opportunities for stakeholders, including the general public, to seek information and provide input during the DCP planning process.

APPENDIX A:

Task Force Members

Joe Arbow – Oregon Department of Forestry
Lauri Aunan – Governor's Office
Les Bachelor – USDA Natural Resource Conservation Service
Dwayne Barnes – City of Salem
Greg Benthin – City of Gates
Randy Bentz – Norpac Food, Inc.
Dave Carpenter – Outdoor Excursions
Jack Carriger – Stayton Fire
Cpt. Duffy Cavanaugh – US Army Corps of Engineers
Patricia Farrell – City of Salem
Danette Faucera – Oregon Department of Fish & Wildlife
Sharyl Flanders – City of Detroit
Ed Flick – Marion County
Mark Hughs – Lyons/Mehama
Steve Human – City of Jefferson
Genoa Ingram – Marion County Farm Bureau
David Johnson – Portland General Electric
Kim Kagelaris – City of Albany
Elise Kelley – Oregon Department of Fish and Wildlife
Mike Kennedy – Siletz Tribe
Jane Keppinger – Marion Soil & Water
Katherine Kihara – Bureau of Reclamation
Jennifer Knoellinger – Bonneville Power Administration
Chuck Knoll – Linn County
Chris Kowitz – City of Salem
Kim Kraft – National Marine Fisheries Service
Lance Lindsay – Army Corps of Engineers
Lance Ludwick – City of Stayton
Traci Martinez – City of Idanha
Margaret Matter – Oregon Department of Agriculture
Mike McCord – Oregon Water Resources Department
Rebecca McCoun – North Santiam Watershed Council
Megan Montague – US Bureau of Reclamation
Alyssa Mucken – Oregon Water Resources Department
Dean O'Donnell – Detroit Lake Business Association
Darren Olsen – Olsen Farms
Debbie Paul – Linn Soil & Water Conservation District
Christine Pavoni – City of Detroit
Clay Penhollow - Confederated Tribes of Warm Springs
Chuck Perino – Department of State Lands

Tresa Peters – Santiam Water Control District
Lacey Goeres Priest – City of Salem
Erik Petersen – US Army Corp of Engineers
Kristin Preston – City of Albany
Jason Pulley – City of Salem
Brenda Sanchez – Marion Soil & Water Conservation District
David Sawyer – City of Turner
Lawrence Schwabe – Confederated Tribes of Grand Ronde
Kevin Seifert – Linn Soil & Water Conservation District
Tim Sherman – City of Salem
Kathleen Silva – Marion County
Kendra Smith – Bonneville Environmental Foundation
Mark Steele – Norpac Foods, Inc.
Brent Stevenson – Santiam Water Control District
Roger Stevenson – City of Salem
Heather Tugaw – Oregon Department of Environmental Quality
Kelly Warren – Confederated Tribes of Warm Springs
Dave White – Federal Lakes Recreation Committee Detroit Lake

Working Group Members

Element #1: Drought Monitoring Working Group members include:

- Joe Arbow – Oregon Department of Forestry
- Patricia Farrell – City of Salem
- Elise Kelley – Oregon Department of Fish and Wildlife
- Lance Ludwick – City of Stayton
- Margaret Matter – Oregon Department of Agriculture
- Debbie Paul – Linn Soil & Water Conservation District
- Brent Stevenson – Santiam Water Control District
- Rebecca McCoun – North Santiam Watershed Council
- Chris Kowitz – City of Salem
- Dwayne Barnes – City of Salem
- Tim Sherman – City of Salem
- Roger Stevenson – City of Salem
- Ed Flick – Marion County

Element #2: Vulnerability Assessment Working Group members include:

- Joe Arbow – Oregon Department of Forestry
- Randy Bentz – Norpac Food, Inc.
- Cpt Duffy Cavanaugh – US Army Corps of Engineers
- Margaret Matter – Oregon Department of Agriculture
- Mike McCord – Oregon Water Resources Department
- Kathleen Silva – Marion County
- Heather Tugaw – Oregon Department of Environmental Quality
- Dave White – Federal Lakes Recreation Committee Detroit Lake
- Brent Stevenson – Santiam Water Control District
- Rebecca McCoun – North Santiam Watershed Council
- Roger Stevenson – City of Salem
- Lacey Goeres Priest – City of Salem
- Dwayne Barnes – City of Salem
- Chuck Perino – Department of State Lands
- Ed Flick – Marion County

Element #3: Mitigation Actions Working Group members include:

- Kendra Smith – Bonneville Environmental Foundation
- Les Bachelor – USDA Natural Resource Conservation Service
- Brenda Sanchez – Marion Soil & Water Conservation District
- Margaret Matter- Oregon Department of Agriculture
- Heather Tugaw – Oregon Department of Environmental Quality
- Brent Stevenson – Santiam Water Control District
- Rebecca McCoun – North Santiam Watershed Council
- Patricia Farrell – City of Salem
- Dwayne Barnes – City of Salem
- Roger Stevenson – City of Salem
- Ed Flick – Marion County

Element #4: Response Action Working Group members include:

- Les Bachelor – USDA Natural Resource Conservation Service
- Lance Ludwick – City of Stayton
- Kathleen Silva – Marion County
- Brent Stevenson – Santiam Water Control District
- Rebecca McCoun – North Santiam Watershed Council
- Lacey Goeres-Priest – City of Salem
- Roger Stevenson – City of Salem
- Dwayne Barnes – City of Salem
- Ed Flick – Marion County

Element #5: Operational and Administrative Working Group members include:

- Brent Stevenson – Santiam Water Control District
- Rebecca McCoun – North Santiam Watershed Council
- Patricia Farrell – City of Salem

Element #6: Plan Update Process Working Group members include:

- Brent Stevenson – Santiam Water Control District
- Rebecca McCoun – North Santiam Watershed Council
- Patricia Farrell – City of Salem

APPENDIX B: Cost Share Partners

City of Salem

City of Stayton

Linn Soil and Water Conservation District

Marion County

Marion Soil and Water Conservation District

Norpac Foods, Inc.

North Santiam Watershed Council

Oregon Department of Agriculture

Oregon Department of Environmental Quality

Oregon Department of Forestry

Santiam Water Control District

Stayton Fire District

APPENDIX C: Communications and Outreach Plan

The Task Force and Working Groups will develop the DCP, and provide information to a broader range of stakeholders within the planning area that are not necessarily represented by these groups. For the purpose of this Communication and Outreach Plan (COP), a stakeholder is defined as anyone who is potentially affected by or interested in the DCP, including participants actively engaged and those who have interest but may not wish to be actively engaged (e.g., the public, residents in the basin, and other interest groups). Stakeholders include municipalities, irrigation districts, federal and state agencies, Tribes, business, industry, interest groups, communities, and individuals. Being able to communicate the DCP and technical detail to this broad group of stakeholders, and gather feedback in a meaningful way, is critical not only to completing the DCP but also to implementing its recommendations.

This COP intended to create opportunities for, and maintain, stakeholder engagement. Embracing, valuing, incorporating, and encouraging public input and involvement are of paramount importance.

OUTCOMES, GOALS, AND OBJECTIVES

Outcomes

The desired outcome of this COP is an open and visible DCP process that builds:

- Awareness and understanding of the water-related challenges in the North Santiam Basin
- Credibility and accountability for the DCP process and document
- Support for implementation of the DCP's recommendations

Goals and Objectives

The goal of this COP is to inform and enable stakeholders to provide meaningful feedback on the analyses and recommendations in the DCP that will build support for the DCP planning process.

Objectives of this COP are to:

- Provide factual, accurate, and consistent information to stakeholders throughout the DCP planning process.
- Identify stakeholder concerns and values.
- Provide meaningful opportunities for stakeholders to participate and provide input to the problems, issues, and possible solutions considered by the Task Force.
- Evaluate input received by stakeholders for full and effective consideration during the DCP.

OPPORTUNITIES AND TOOLS

The communication vehicles for the COP are discussed in this section. The vehicles outline the opportunities and tools for stakeholders to provide meaningful input into the planning process, and how information will be distributed and input received. As the planning process progresses, stakeholder involvement may be assessed to determine whether the methods of communication in use are effective, and what adjustments are needed.

DCP Meetings:

Task Force Meetings. The Task Force will meet over the two-year period to develop the DCP element recommendations. The timing of the meetings will be based on when input is needed, such as the concurrence with certain DCP elements. Task Force meetings will be open to the public, with opportunities for public comments and questions at each meeting. In addition, comment forms will be available for stakeholders to provide feedback at each meeting. Stakeholders may request to be added to the mailing list and receive meeting notices and meeting materials via email. Requests may be made to Rebecca McCoun at (503) 930-8202 or council@northsantiam.org. Outreach efforts will be made to publicize meetings and obtain names for the mailing list, such as by email distribution lists, the DCP website (see below), or partner stakeholder websites.

Working Group Meetings. The Working Groups meetings will not have a public component, but Working Group members will predominantly be stakeholders in the DCP process. Members were identified and recruited at the Task Force kick off meeting, but may be added as appropriate.

North Santiam Basin Summits. Two annual day-long events will focus on the DCP for 2016 and 2017. Task force members, Working Group members, and the public will attend. This will be an opportunity to discuss process, identify gaps, and work through drought scenarios. The 2017 meeting will announce the opportunity to provide comments on the draft DCP.

Other Public Meetings:

North Santiam Watershed Council Meetings. The Watershed Council holds monthly meetings in Stayton, Oregon, that are open to the public. These meetings may be used to provide regular updates on the DCP planning process and solicit feedback from the public.

Community Events. Community events are another tool for providing outreach to stakeholders. The following community events are targeted for providing DCP planning information:

- Agricultural Water Quality Town Hall (Stayton)
- NSWC semi-annual cleanup events

Printed Flier. An informational flier will be developed to present general DCP Planning information, and the website and social media addresses for more up to date information. The flier may be distributed to stakeholders at meetings and community events, and can be posted in various locations within the watershed.

Website. A webpage for the DCP has been created, and will be used to post information and updates about the planning process and meeting information, such as dates, meeting locations, agendas, handouts, and meeting summaries. It is expected that content will be updated before and after Task Force meetings, and as necessary. For questions or comments on the website, Rebecca McCoun at (503) 930-8202 or council@northsantiam.org will be the primary point of contact. The web page URL is: http://northsantiam.org/?p=6212

Social Media. The goal of the social media platform is to provide another vehicle to keep stakeholders, including the public, informed about the DCP process. Messages will be posted to https://www.facebook.com/nsantiamwatershed before Task Force meetings, and as necessary. Meeting notices can be re-posted on other social media accounts. For questions or comments on the material posted on the social media platform, Rebecca McCoun at (503) 930-8202 or council@northsantiam.org will be the primary point of contact.

Email. A primary method of communication will be via email. An inclusive distribution list will be utilized for updates and dissemination of agendas, etc. The NSWC sends monthly electronic updates via email that can be used to provide updates on DCP planning. In addition, comments or questions may be submitted by email at any time to Rebecca McCoun at council@northsantiam.org. All comments and questions will receive a professional response in a timely manner.

Media News Releases. In an effort to maximize public outreach, media news releases may also occur at key points in the project, such as at the release of the draft DCP, to inform stakeholders including the public, and request comments. Newspapers would include the *Stayton Mail* and the *Statesman Journal*.

CONSIDERATION OF PUBLIC COMMENTS

Stakeholder comments may be submitted to the Task Force at meetings or via email (to the North Santiam Watershed Council). The Task Force will consider public input received and determine how to incorporate it into the DCP.

SCHEDULE FOR OUTREACH AND INPUT

Engaging stakeholders is important in the development of an effective COP and the long-term success of the DCP. The following is a general schedule for providing information about the NSW DCP planning process to, and opportunities to gather input from, stakeholders:

Monthly NSWC meetings	Throughout 2016
Community Event: Agricultural Water Quality Town Hall	February 18, 2016
Media Release: Work Plan approved	March 2016
North Santiam Summit 2016	May 2016
Community Event: NSWC Community outreach event	Spring 2016
Task Force Meeting	June 2016
Media Release	Summer
Task Force Meeting	September 2016
Community Event: NSWC Community outreach event	Fall 2016
Monthly NSCW meetings	Throughout 2017
Media Release: Draft DCP completed	March 2017
North Santiam Summit 2017	April 2017
Community Event: NSWC Community outreach event	Spring 2017
Task Force Meeting	April 2017

Other opportunities are on-going, such as administration of the website and social media page, email and electronic updates, and distribution of the printed informational flier.