

7th Annual North Santiam Watershed Summit

Introducing the North Santiam Drought Contingency Plan

April 17, 2017



Introduction

The City of Salem is working with watershed stakeholders to develop 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. The plan is in final draft form, with an expectation to finalize the plan summer 2017.

The goal of the 7th Annual North Santiam Watershed Summit was to introduce the North Santiam Drought Contingency Plan to partners and to practice the DCP drought response actions prior to finalizing the plan. Another key summit event was presenting ideas for implementing watershed resiliency projects and getting feedback from potential funding agencies on how to make the projects more appealing for funding partners.

The 2017 North Santiam Summit was held on April 17, 2017 from 9:00 a.m. to 3:00 p.m. at the Marion County Public Works Facility (5155 Silverton Road NE, Salem).

Summit Agenda

9:00 p.m.	Welcome / Introductions
9:15	North Santiam Drought Contingency Plan (DCP) Overview
9:25	Drought Contingency Scenario Exercise <i>This exercise allows partners try out the Drought Contingency Plan</i>
10:45	BREAK
11:00	Drought Contingency Scenario Exercise (continues)
Noon	LUNCH (Provided courtesy of City of Salem and Trexler Farm)
1:00	Presentations to Potential Funding Agencies <ul style="list-style-type: none">• Brent Stevenson, Santiam Water Control District: <i>Water Control District Project</i>• Rebecca McCoun, North Santiam Watershed Council: <i>Funding for DCP Coordinator</i>• Adam Sussman, GSI Water Solutions: <i>Water Rights Management Tools Pilot Project</i> Participating funding agencies: Bonneville Environmental Foundation, Meyer Memorial Trust, Oregon Water Resources Department, Oregon Watershed Enhancement Board
2:00	BREAK
2:15	Priority Mitigation Projects
2:50	Next Steps <ul style="list-style-type: none">– Plan Finalized (Summer 2017)– Publicity (Summer 2017)– Monitoring Reports (Contingent on funding)
3:00 p.m.	Adjourn

More than 31 people participated (see sign-in sheet in appendix) from multiple organizations and agencies:

- Bonneville Environmental Foundation
- City of Salem
- Marion County Emergency Management
- Marion County Fire District #1
- Marion SWCD
- Meyer Memorial Trust
- NOAA/NWS Portland
- Norpac Foods
- North Santiam Watershed Council
- Oregon Department of Forestry
- Oregon Department of Fish & Wildlife
- Oregon Water Resources Department
- Oregon Watershed Enhancement Board
- Salem Health Hospital & Clinics
- Santiam Water Control District
- US Army Corps of Engineers
- US Bureau of Reclamation
- US Forest Service
- Consultant team: GSI, David Evans, Barney & Worth, Inc.



Watershed stakeholders practice responding to a drought

Drought Contingency Scenario Exercise

Participant Feedback

This exercise was facilitated by Roger Stevenson, Emergency Manager with the City of Salem. Participants worked together through two scenarios:

- Stage 1 (Heads Up– Potential for Drought)
- Stage 4 (Severe Drought)

The exercise plan is included in the appendix. Feedback from the exercise is detailed below.

Scenario 1 Stage 1

Table 8 NSW DCP Current Conditions Monitoring Table														
Date: February 7, 2018		Indicators and Indices												
NSW Drought Stage	National Indices	NSW Climate Indicators		NSW Hydrologic Indicators				NSW Environmental Indicator		NSW Socioeconomic Indicator				
		US Drought Monitor (USDM)	All Temp. (1 month departure from normal)	USGS 7-day flow (drought) @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	USGS 7-day flow (drought) @ Santiam @ Oregon Bridge near Jefferson Creek, Perennial	
Indicator Monitoring Period	All Year	All Year	All Year	Dec 1 – May 1	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year	All Year
	Enter Data in This Row	D0	1.8	75	55	-5	Not ranked, no percentile	Normal (70.50)	Moderate Drought (8.8)	0.2	Low	1,480	3,300	
Stage 1) Heads Up – Potential for Drought	Current conditions (e.g., low snowpack) point to the potential for upcoming drought conditions.	D0	5 to 2	80 to 71	70 to 61	-3 to +10	Below Normal (24 to 10)	Below Normal (24 to 10)	Below Normal (24 to 10)	-1.0 to 0.0	Low	1,555 to 1,556 (based on 2 ft above highest local dam elevation – State Park Boat Ramp D)	1,555 to 1,556	1,555 to 1,556
Stage 2) Moderate Drought	Some damage to crops, pastures, streams, reservoirs, or wells low. Some water shortages developing or imminent. Voluntary water-use restrictions may be requested.	D1	2 to 4	70 to 61	60 to 51	-11 to -30	Moderate Hydrologic Drought (9 to 6)	Moderate Hydrologic Drought (9 to 6)	Moderate Hydrologic Drought (9 to 6)	0.1 to 2.0	Moderate	1,555 to 1,542 (State Park Boat Ramp D to Monge East Boat Ramp)	1,555 to 1,542	1,555 to 1,542
Stage 3) Severe Drought	Crop or pasture losses likely. Water shortages common. Water restrictions imposed.	D2	4 to 6	60 to 41	50 to 21	-31 to -40	Severe Hydrologic Drought (<=6)	Severe Hydrologic Drought (<=6)	Severe Hydrologic Drought (<=6)	2.1 to 4.0	High	1,535 to 1,470 (Mongold main boat ramp to State Park Boat Ramp D)	1,535 to 1,470	1,535 to 1,470
Stage 4) Extreme Drought	Widespread crop/pasture losses. Shortages of water in reservoirs, streams, and wells creating water emergencies.	D3 or 4	6 or greater	40 or less	20 or less	-51 or less	Extreme hydrologic drought (New low)	Extreme hydrologic drought (New low)	Extreme hydrologic drought (New low)	4.1 or greater	Very high or Extreme	<= 1,450 (below Mongold low-water boat ramp)	<= 1,450	<= 1,450
Note: Most indicator readings are not linked to take you to the appropriate website. Hovering over each indicator reading will provide instructions for gathering the relevant information from the associated website.														

Notes for the current monitoring period:
 -USGS 7-day flow (drought) @ Oregon Bridge not factored into drought stage calculations since flow percentile ranking not available.
 -Detroit Reservoir Boat Ramp Served Indicator, although noted as extreme drought, this is consistent with reservoir water control diagram for this time of year.

Exercise Feedback

Monitoring Table / Other Needed Information

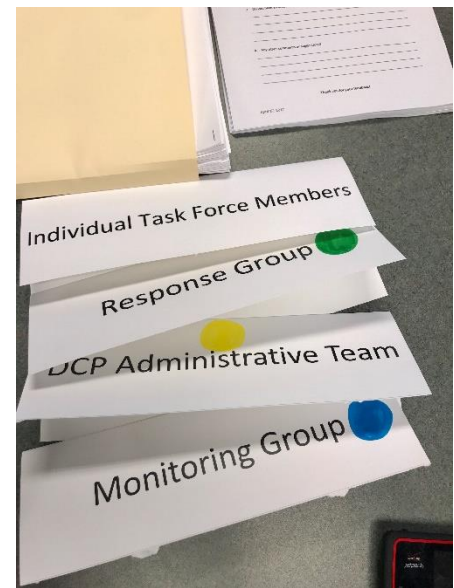
- Boat ramp being out of the water should not matter until later in the year.
- Consider adding a no drought row
- Make sure the table doesn't get too complicated. It's a tool for the monitoring team and others to use to make a decision—it is not prescriptive.
- Have a timeline that shows when each partner is most vulnerable and what's happening in the watershed (fish runs, reservoir filling, crops, etc.)

Process

- Early stages are harder to deal with than a clear-cut Stage 4 extreme drought.
- It is good to hear different perspectives.
- The number of players involved is impressive
- For the City of Salem, a drought declaration is different than curtailment because if a drought is declared, the City uses more resources (staff and money) for enforcement.
- There are other costs associated with drought declaration—health and safety issues associated with fire and long term / multiple effect on fish and wildlife.
- How will the response group coordinate with WRAPIO (Willamette Regional Area Public Information Officers)?
- How will the team know when the drought is ended?
- There needs to be flexibility in how the groups work together.

Communications

- There is a benefit of showing to the public that agencies and organizations are working together (even if the messages are different).
- Messaging needs to make people think about their actions.
- Communication is a hurdle—we have initiated that process.
- The group should not start messaging about drought in the spring.
- Make sure stakeholder get the information they need—especially if there are economic decisions.
- Each organization will be responsible for getting



information to their stakeholders.

Scenario Feedback Forms

What did you value most about the operational process for responding to drought conditions?

- It helped me understand the pieces and parts of how a response works.
- The process and its “situational” practice with communication between groups; how it can incorporate managers and decision makers, to field persons and various stakeholders: working together.
- The past 1 ½ years have resulted in a framework that’s pretty usable and understandable.
- Great discussion. Really pointed out complexity of drought response. Many actions have winners and losers.
- Having the stakeholders / partners at the table to convey our message about common messaging.
- Having a much better understanding about how a drought process is looked at and the stages and process for declaration and notification.
- Much progress has been made. We won’t know for sure how good it is until it gets tested.
- Participating in the mock scenarios.

What one improvement would you consider the most valuable for the DCP operational framework?

- I liked the spread sheet as a tool to standardize a response.
- Working on efficiency of communication and messaging, and messaging sources.
- Monitoring framework—try to use data that results in the fewest follow-up questions. For example, boat ramp information is best understood in context with seasonal and rule curve information. Maybe compliance with rule curve is a better data point.
- Keep the ball rolling.
- I like the idea of the plan having a section on the groups vulnerabilities by month to show the risk for the different stakeholders.
- I’m too new to this to provide improvement feedback. Today went very well from my perspective.
- Something that might show what users will be impacted in what months.
- Fine-tuning the monitoring table.

Do you have an idea for future training related to drought response?

- Messaging and stakeholder networking.
- Get this out into the business community. They are big point users of water and need to understand this process so they can be prepared to make economic decisions, rather than simply respond to emergencies.
- Keep doing this. Great benefits.
- Would like to see training on water conservation ideas for the region.
- Create and train on a mass-agency involved public information piece so when it does get to the point of information sharing the public will see/know it is not just one or two

agencies, but many involved saying the same thing.

- Not training, just coordinating to get people together in small groups and communicate.

Any other comments or suggestions?

- What is the “Task Force”?
- Awesome job. It is great to see how active and efficient this is.
- With a couple of exceptions, this task force was entirely government/ non-profit in makeup. Recognize your biases concerning information sharing. It is better to share early and often than to hold information back.
- It is hard to “weight” items over time (for example: effects on boat ramps, at various time.) Weighing the need to talk to those folks that have economic effects early in the drought stages.

Presentations to Potential Funding Agencies

Three high priority projects that emerged from the DCP were presented to a panel of funding agencies to get advice about funding options, partnership opportunities, and ways the projects could better meet their organization’s funding criteria.

Panel members:

- Todd Reeve, Bonneville Environmental Foundation (BEF)
- Allison Hensey, Meyer Memorial Trust (MMT)
- Kim Ogren, Oregon Water Resources Department (OWRD)
- Liz Redon, Oregon Watershed Enhancement Board (OWEB)

Project presentations:

- Brent Stevenson, Santiam Water Control District:
Piping and Lining of Irrigation Canals Project
- Rebecca McCoun, North Santiam Watershed Council:
Funding for DCP Coordinator
- Adam Sussman, GSI Water Solutions:
Water Rights Management Tools Pilot Project



After each presentation, there was time for Q&A and feedback from panel members. A summary of the feedback follows.

Water Control District Project

- MMT-has loans for this type of project. Would be good to have the businesses chip in—they will benefit from paying less for water.
- BEF-need to build awareness, best practices, building efficient, and social benefit! Put together a holistic package. Many stories to tell—can be scaled up to corporate level. (College, prison, private businesses, fish, water conservation, recreation, etc.) Where is the drought component?

- OWRD-Need to focus on big picture to sell the story, but details are very important. Need to quantify benefits.
- OWEB-Ecological and watershed benefit is the way to get a grant approved. This project could qualify for water acquisition grant. Benefits to North Santiam would be more competitive than Mill Creek.

Funding for DCP Coordinator

- Why is the position for two years? Then what?
- It would be good to tie the work to water quality, not just drought. This is about community well-being.
- Don't hitch this idea to drought or resiliency. Look at Lake Mead as an example. Water for all, or water security may work better.
- OWEB - technical soundness is important. What are the benefits of a resilient system? Could this be covered under a monitoring grant? What is the end product and how does it move the watershed forward?
- ¼ FTE for \$51,000 seems too high. What about hiring a ½ time person instead of using a consultant.

Water Rights Management Tools Pilot Project

- This work is critical.
- Needs to be linked to water conservation effort.
- Talk about why this is important. Highlight the outcomes.
- Where would long-term funding come from?
- Tell the bigger story—could other watersheds be involved?
- The story should include water security and food security
- OWEB has feasibility grants. (3 types: design, planning and landowner recruitment)
- MMT-no match required, but usually want partners.
- OWRD-feasibility grants require 50/50 cost share.
- OWEB-documenting partners and a 25% match
- BEF-needs to facilitate corporate needs.

Appendix

- Participants
- North Santiam Watershed Drought Contingency Plan Scenario Exercise
- Feedback Form

Summit Participants

1. Joe Arbow	ODF	Joseph.m.arbow@oregon.gov
2. Libby Barg	Barney & Worth, Inc.	libbybarg@barneyandworth.com
3. Randy Bentz	Norpac Foods	rbentz@norpac.com
4. Andy Bryant	NOAA/NWS Portland	Andy.bryant@noaa.gov
5. Robert Chandler	City of Salem	rchandler@cityofsalem.net
6. Jane Dagliesh	US Army Corps of Engineers	Jane.d.dagliesh@usace.army.mil
7. Patricia Farrell	City of Salem	pfarrell@cityofsalem.net
8. Robert Gentry	US Forest Service	rgentry@fs.fed.us
9. Mike Gotterba	Salem PW	mgotterba@cityofsalem.net
10. Karen Hans	ODFW	karen.m.hans@state.or.us
11. Allison Hensey	Meyer Memorial Trust	allison@mmt.org
12. Meredith Hoffman	Marion SWCD	Meredith.Hoffman@marionswcd.net
13. Kathy Kihara	US Bureau of Reclamation	kkihara@usbr.gov
14. Brandin Krempasky	City of Salem	bkrempasky@cityofsalem.net
15. Rebecca McCoun	North Santiam Watershed Council	council@northsantiam.org
16. Wayne McFarlin	Salem Health Hospital & Clinics	Wayne.mcfarlin@salemhealth.org
17. Kim Orgen	Oregon Water Resources Department	Kim.L.Ogren@oregon.gov
18. Lacy Goeres Priest	City of Salem	lgoeres@cityofsalem.net
19. Jason Pulley	City of Salem	jpulley@cityofsalem.net
20. Gary Pullman	Salem (citizen)	Gary.pullman@gmail.com
21. Liz Redon	Oregon Watershed Enhancement Board	Liz.Redon@oregon.gov
22. Todd Reeve	Bonneville Environmental Foundation	treeve@b-e-f.org
23. Terry Riley	Marion County Fire District #1	terryr@mcfd1.com
24. Ethan Rosenthal	David Evans	eiro@deainc.com
25. Mary Karen Scullion	US Army Corps of Engineers	mary.k.scullion@usace.army.mil
26. Kathleen Silva	MCEM	ksilva@co.marion.or.us
27. Libby Smith	GSI	lsmith@gsiws.com
28. Mark Steele	Norpac Foods	steele@norpac.com
29. Roger Stevenson	City of Salem	rstevenson@cityofsalem.net
30. Brent Stevenson	SWCD	Brents.swed@wvi.com
31. Adam Sussman	GSI	asussman@gsiws.com