8th Annual
North Santiam Basin Summit

May 16, 2018

CITY OF Salem AT YOUR SERVICE

Marion County
OREGON

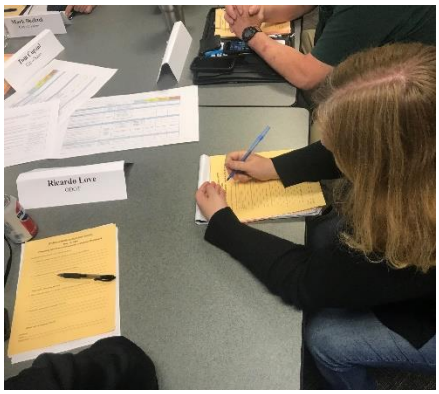
NORTH SANTIAM
watershed council

Introduction

The 8th Annual North Santiam Basin Summit focused on the recent emergency response to a spill in the North Santiam watershed as well as preparation for drought brought on by the proposed Detroit Reservoir construction by the US Army Corps of Engineers. The goal of the 2018 Summit was to develop a list of action items for agency follow-up to improve communications and conditions in the Basin over the coming years.

The morning session—*The North Santiam Spill, After Action Report Out*—involved a facilitated discussion with first responders about the incident response and improvement ideas. The afternoon session—*Preparing for Potential Reservoir Drawdown*—included roundtable discussions on potential responses and creative solutions for agencies and organizations deeply impacted by the proposed drawdown.

The Summit was held on May 16, 2018 from 9:00 a.m. to 3:00 p.m. at the Marion County Public Works Facility (5155 Silverton Road NE, Salem).



Summit Agenda

8:30 Doors Open / Sign-In

9:00 Welcome / Introductions / Summit Goals (*Libby Barg, Barney & Worth, Inc. emcee*)

9:30 North Santiam Spill, After Action Report Out (*Jack Kyle, Witt O'Brien's)*

- Introduction / purpose—*Learn and improve*
- Incident overview (Richard Franklin, EPA)
- Around the room: How did things go?
  Around the room: Improvement ideas?
  Next steps

12:00 Lunch Break

12:30 Preparing for Potential Reservoir Drawdown (*Adam Sussman, GSI Water Solutions)*

- Introduction / purpose—*Test ideas for mitigation and public information before and during a drought*
- Drought Contingency Plan
- Overview of drawdown assumption
- Roundtable discussions and report back to the group
  1. *What are the key responses for your agency during the event?*
  2. *Are there creative solutions not yet considered?*
  3. *What mitigation actions can we start now to be better prepared?*
  4. *What is the shared public message?*
- Next steps

2:30 Closing / Comment Form

3:00 Adjourn

Participation

The event was well attended with fifty-one people participating from the community and multiple organizations and agencies (see a complete list in an appendix):

- City of Salem
- City of Stayton
- Linn Soil and Water Conservation District
- Marion County Economic Development
- Marion County Emergency Management
- Marion County Fire District #1
- Marion Soil and Water Conservation District
- Mill City Independent Press
- NORPAC Foods
- North Santiam Watershed Council
- Oregon Department of Agriculture
- Oregon Department of Fish & Wildlife
- Oregon Department of Transportation
- Oregon State Police
- Oregon Water Resources Department
- Santiam Water Control District
- US Army Crops of Engineers
- US Environmental Protection Agency
- US Department of Agriculture-Natural Resources Conservation Service
- US Forest Service-Detroit Ranger District
- Consultant team: GSI, Barney & Worth, Inc., Witt O'Brien's Group

North Santiam Spill, After Action Report Out

Overview

A tanker truck spill on December 15, 2017 caused a gasoline spill into the North Santiam River above Detroit dam. Tragically, the crash resulted in the death of the driver. Following is a brief description of the event from the US Environmental Protection Agency (EPA).

> *"At approximately 11:00 pm on 12/15/17, a tanker truck and trailer loaded with 11,500 gallons of gasoline was reported to have lost control on an icy patch of Oregon State Highway 22, overturning, breaching, and causing a fire and discharge of gasoline onto soil and into the North Santiam River. Highway 22 has been shut down. Gasoline odors have been reported in the town of Detroit, OR, and oil sheen has been reported in Detroit Lake, a U.S. Army Corps of Engineers lake on the North Santiam River.*
>
> *Local and state fire and police have responded to the incident, as well as Oregon Department of Transportation. The Oregon Department of Environmental Quality (ODEQ) has mobilized a State On-Scene Coordinator and other personnel, and EPA has mobilized a Federal On-Scene Coordinator and START contract resources to the site. The Responsible Party has*

also mobilized contract resources for oil spill response and removal actions." (response.epa.gov/northsantiamriverspill)

During the spill response, participants reported challenges with communications and information sharing that resulted in missed opportunities for a better coordinated response. The After Action Report Out hosted at the North Santiam Basin Summit was organized with the purpose of sharing information about the response and ideas for improvements. The exercise was supported by Jack Kyle, Witt O'Brien's, a specialist in tanker spills. His presentation with more information about the response is in an appendix. Richard Franklin, EPA, also provided an overview of events for the group based on his records and interviews with on scene responders.

Challenges

- The "mass response system" did not work as well as it should have.
- There was conflicting information among agencies about what was occurring at the site.
- There was a delay in contacting the United States Coast Guard, National Response Center (NRC) (www.nrc.uscg.mil/ContactUs.aspx).
- the lack of cell phone coverage made communications challenging.
- The Marion Area Multi-Agency Emergency Telecommunications Dispatch Center (METCOM) (www.metcom911.com) dispatched the Regional HazMat Emergency Response Team (www.oregon.gov/osp/SFM/pages/eru_rhm_teams.aspx). The Regional HazMat Team had traveled close to the site when they were canceled. They could have provided needed technical resources.
- Water system / water user notification system didn't work as well as it should have due to lack of good contact information.
- Booms were used at the site. There are some instances where booming can cause safety issues, although in all instances, booming is a site-specific call.
- Water quality test results had long turnaround times for reporting out to stakeholders that resulted in uncertainty with the water systems about the need to close intakes to protect drinking water quality.

Priority Actions

Communications

- As a redundancy measure, agencies should agree that anyone can call Emergency Response System (OERS) (www.oregon.gov/oem/emops/Pages/OERS.aspx) and the United States Coast Guard, National Response Center (NRC) 800-424-8802
- OERS can be provided a list of North Santiam Watershed stakeholders. When responders call OERS, they can ask for the list to be called.
- METCOM-Oregon State Police (OSP)-ODOT need to be better connected (through communication technology) so everyone has the same information.
- Verizon could build a cell tower to better serve HWY 22. As an alternative, the US Forest Service fire response group has mobile cell towers that could be "ordered up".

Water Quality

- There is a need for quick and accurate information for the water systems during an incident. Water quality data should be shared during an incident—even if it is "draft" results.
- EPA has an oil spill liability fund that can provide immediate funding up to $50,000 for a response—and more is available later.
- Salem Fire has a mobile lab that can be utilized.
- US Army Corps of Engineer can mitigate or delay impact by turning Detroit off for 24-hours or taking water from a different location if they are notified.

Incident Command

- The Incident Command System needs to be in place for the entire event. There should be a physical transfer of command.
- A Regional Geographic Response Plan should be created. There are already ones in the Clackamas and McKenzie watersheds. EPA has resources to help create this plan. Contact Randy Nattis, EPA (Nattis.Randy@epa.gov).
- Oregon Department of Public Safety Standards and Training (www.oregon.gov/DPSST/FT/pages/index.aspx) can providing free ICS trainings for volunteer fire departments. That information should be advertised.

Prevention

- Education of petroleum transportation companies on oil spill prevention may help. EPA provides trainings at petroleum transportation association meetings. EPA could do a training on transportation across highways in Oregon.
- Organize an annual check-in with the first responders (as they do in the McKenzie watershed / EWEB).

Preparing for Potential Reservoir Drawdown

Overview

US Army Corp of Engineers is in the scoping phase for the Detroit Downstream Passage Project to provide downstream juvenile fish passage at Detroit Dam and meet water temperature requirements with a temperature control tower. USACE is still studying potential impacts of alternative approaches to completing the project, but for this exercise the group assumed "Alternative 1"—two full years with reservoir levels at 1,310 feet elevation. This drawdown is comparable to a "Worst-Case Scenario" drought and has many potential implications:

- Boat ramps –1,310 feet elevation means boat ramps are inaccessible
- Water supply – City of Salem water supply availability indicator in DCP (Stage 4-Extreme Drought) triggered
- Water rights – junior water rights subject to curtailment
- Infrastructure – intakes, screens, canals impacted
- Instream resources – low flow and temperature impacts

The goal of the session was to test ideas for mitigation and public information before and during this potential drought—considering watershed partners would have some time to prepare. Adam Sussman, GSI Water Solutions, provided an overview of the recently completed *Drought Contingency Plan*, which was developed through consensus among North Santiam watershed stakeholders to collaboratively manage water before and during drought. The Drought Contingency Plan has materials that gave the group a useful starting place to discuss the potential drawdown of Detroit Reservoir: Vulnerabilities & Assets Table, Response Action Matrix, Priority Mitigation Actions / Joint Actions.

Participants sat together in small groups and discussed several key questions, then shared their ideas with the larger group.

Priority Actions

A key takeaway for the group is the issues are very complex—multiple users have considerable financial and public health risks associated with planned low-flow year(s). Examples discussed include the long-term loss of a viable farming community due to the loss of an agricultural market; negative impacts to small business and the regional economy; City of Salem's 180,000+ residents, businesses, hospitals, schools facing extreme water shortages,;and more. The solutions that are feasible and fundable do not provide the large volume of water required to develop a reliable backup to the North Santiam River source.

Priority Actions

- ✓ Reduce community and economic impacts of Detroit Downstream Passage Project
- ✓ Develop alternative sources; seek funding.
- ✓ Initiate a *Drought Contingency Plan* management.

Actions the group felt were most viable for getting prepared include:

- Work as a coordinated group to provide input on the Detroit Downstream Passage Project that reduces economic and community impacts.

- Develop as many “new” water sources as feasible over the next several years funded through grants / low interest loans or other funding means that mitigate impacts to the community.
- Initiate management program detailed in the *Drought Contingency Plan* as the framework for a coordinated response. Invest in a full-time person to manage the Drought Continency Plan.

Session Notes

1. What are the key responses for your agency during the event?

- Develop special operation plan: description / intent, potential impacts and mitigation, monitoring, then execute plan in accordance with special operation and communicate extensively
- Weekly flow management calls
- Communications with customers, US Army Corps of Engineers, Forest Service, water suppliers
- Keep critical customers updated
- Status updated during project
- Public outreach
- Curtailment
- City of Salem backup water
- Partnerships with City of Stayton
- MOUs for water supply
- Keizer wells (only good for several days)
- Reduce non-essential water uses (watering lawns, car washes)
- Use non-potable water “purple pipe”
- Incentivize conservation
- Provide outreach about preparing for drought and water conservation
- Use enforcement
- Help landowners to develop projects which conserve water (irrigation efficiency)
- Response plan to help farmers (Oregon Department of Agriculture)
- “Don’t plant” advance advisory messaging for farmers
- Alternative crops
- Compensate for crops
- Help improve irrigation efficiency with possible cost share
- Work with Oregon Department of Agriculture and Linn Soil and Water Conservation District to encourage farmers to grow dry crops
- Trade with Salem for payment to farmers (pay people not to grow)
- Conserve water on fields
- Use “no irrigation” and fallow the ground
- Drill “drought year only” wells
- Work to keep more valuable / permanent crops in place
- Need cultural resource protection
- Adjust operations

2. Are there creative solutions not yet considered?

- $150M to fund system City of Salem could put into place
- Tiers of curtailment
- Public education projects
- Water conservation messaging (showers)
- "Purple pipe"
- Cisterns
- Low flow shower heads
- Reducing water usage
- More improved irrigation
- Chemical toilets
- Rain water collection
- Talk with large users about their mitigation plans
- Put agencies on notice and let them know they need backup plans (schools, etc.)
- Alternative water sources for hospitals and businesses
- Individual plans
- Consider resting ground from crops during drawdown
- Dry farming, low flow showers and toilets, brown lawns
- Limit drawdown, full or partial underwater construction
- Intake monitoring
- Build a "new dam" below Detroit that will serve the public for the next 100 years with all the fish requirements

3. What mitigation actions can we start now to be better prepared?

- US Army Corps of Engineers pay in advance for alternative water sources—with long-term benefits for everyone
- Multiple alternatives to North Santiam source
- Get funding / compensation to pay for alternatives now
- Contract for chemical toilets and water hauling
- Contracts and MOUs in place
- MOUs for water suppliers
- Portable water treatment plants
- Advance stockpiling of water
- Conservation planning and outreach
- Grey water / rain water systems
- Cisterns / rain storage
- Wastewater recycling incentive
- Encourage grey water reuse
- Recycle water more
- Switch to air cooling
- Get a drought declaration in advance
- Advance drought declaration
- Help work with National Marine Fisheries Service to relax program requirements
- Where's NMFS? They should be here to talk about mitigation.

- North Santiam Watershed stakeholder meetings and work sessions; Basin Summit
- Micro loans for “mom & pop” businesses

4. What is the shared public message?

- US Army Corps of Engineers will continue to issue updates and perform outreach.
- Cooperation / collaboration and refer to local agency/organization for more information
- Talk to home builders / landscaping companies and HOAs.
- Messaging to Homebuilders Associations / Landscapers
- Speak to HOAs and landscapers, nurseries
- Be willing to have hard conversations
- Promote water conservation

Appendices

- Participants
- Spill Overview Presentation (Witt O'Brien's Group)
- Preparing for Potential Reservoir Drawdown Presentation (GSI, Water Solutions)
- Event Feedback

Summit Participants

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Jack	Kyle	Witt O'Brien's Group	hazmatjack@gmail.com

Spill Overview Presentation

8th Annual
North Santiam Basin Summit

Spill
Incident Review

By: Jack Kyle
Witt O'Brien's

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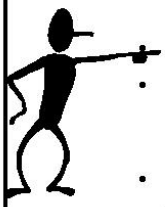
CONTROL THE OUTCOME

To be covered

- North Santiam Spill, After Action Review
  - Introduction / purpose – Learn and improve
  - Incident overview
  - Around the room: How did things go?
    - Response
    - Watershed – wide communications
  - Break
  - Around the room: Improvement ideas?
  - Close out

WITT | O'BRIEN'S

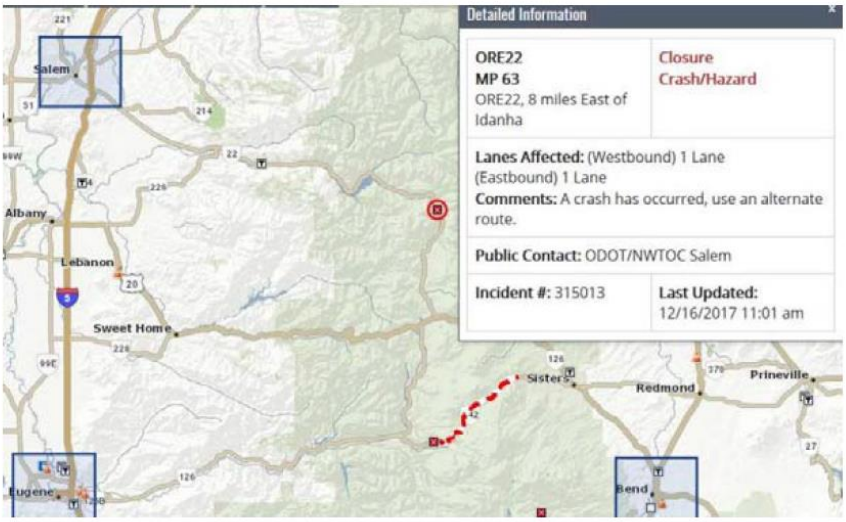
Incident Facts



- December 15th, 2017 @ 2256 hrs. (10:56 pm) Incident occurs
- 2324 hrs. (11:24 pm) MetCom 911 dispatch contacts Oregon Emergency Response System (OERS):
- Caller reports a Tanker has rolled over and is on fire on Hwy 22 @ MP 64, Unknown injuries, unknown fuel type. Fuel is leaking into the North Santiam River. Roads are very icy!
- A responding Fire Truck has also rolled over with minor injuries
- Fire department on scene calls for 2nd alarm. Requests Regional Hazmat Team from Salem to respond.
- Approximately 11,500 gallons of gasoline on board the tanker
- Confirms Truck Driver Fatality

WITT|O'BRIEN'S

Incident Facts



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Incident Scene

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Incident Scene

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OERS Call-out Time Line

OERS # 2017-3522 / NRC # 1199829

12/15/2017

- 2230 hrs. Paged: Department of Environmental Quality (DEQ)
- 2330 hrs. Paged: State Fire Marshal (SFM)
- 2330 hrs. Paged: Oregon Fish & Wild Life (ODFW)
- 2331 hrs. Paged: Department of Agriculture
- 2332 hrs. Notification: Oregon State Police / Fish & Wild Life
- 2332 hrs. E-mail: ODOT Truck Enforcement Officer
- 2332 hrs. Paged: Second and third pages go out to DEQ
- 2332 hrs. Paged: Department of Agriculture
- 2332 hrs. Paged: State Fire Marshal (SFM)
- 2333 hrs. Paged: ODFW
- 2342 hrs. Answered: OSP / Fish & Wild Life
- 2345 hrs. Answered: SFM

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OERS Call-out Time Line

OERS # 2017-3522 / NRC # 1199829

12/16/2017

- 0016 hrs. NWFF Environmental Arrives: request DEQ contact
- 0725 hrs. E-mail: Oregon Health Authority (OHA)
- 0726 hrs. Paged: OHA Duty Officer (Hansen)
- 0739 hrs. Answered: OHA DO
- 0821 hrs. Paged: Office of Emergency Management (OEM)
- 0823 hrs. Answered: OEM (Fella)
- 1645 hrs. Notification: Oregon Water Resource Dept (WRD)
- 1955 hrs. DEQ request OERS to notify USFW (Szumski)

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OEM to OERS Staff Update

OERS # 2017-3522 / NRC # 1199829

12/18/2017

- ODOT notes: all crews working well together
- ODOT is developing a plan to reopen the roadway without "Digging it up"
- 300 yards of contaminated materials have been removed
- EPA Initial soil & water samples of the site and water intakes to be completed in 24 hours
- DEQ has made several stops along the river for sampling (No sheen or odors to Detroit Dam)
- Hard Containment and Soft Absorbent Boom continues to be in place
- Fish & Wild Life identified one dead fish in river (more to come)
- City of Salem & Stayton's water intakes are still on bypass
- OHA determined that Detroit & Mill City's water systems are not at risk

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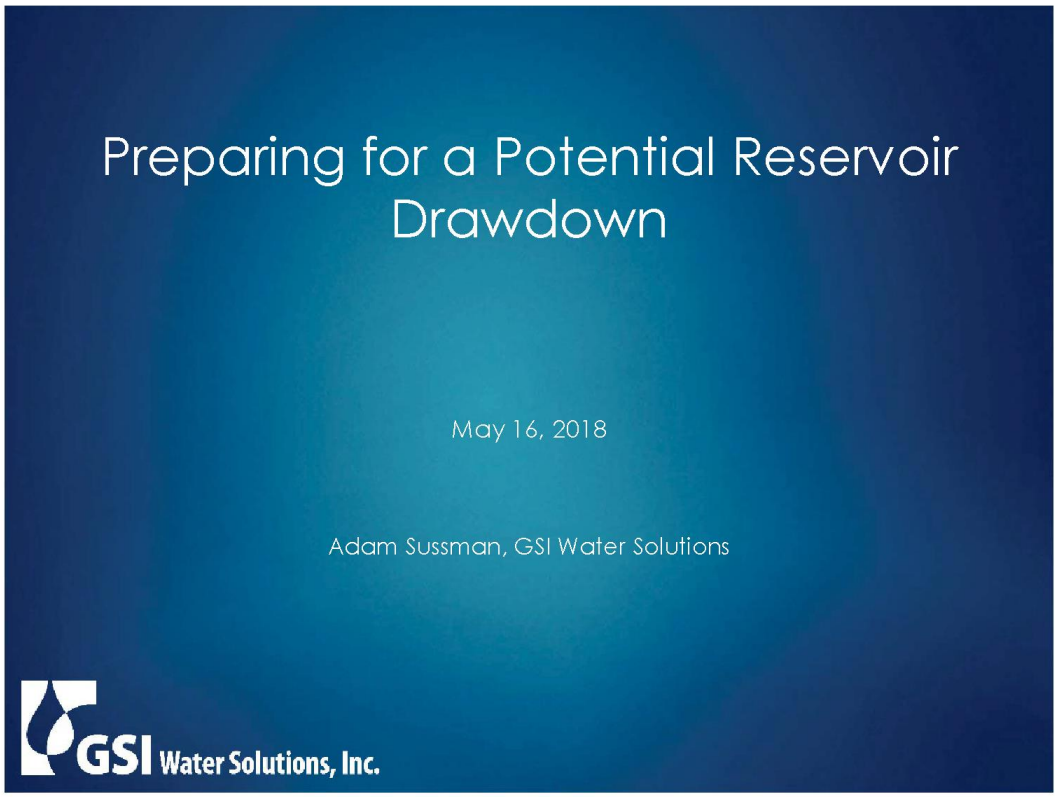
Response Respective

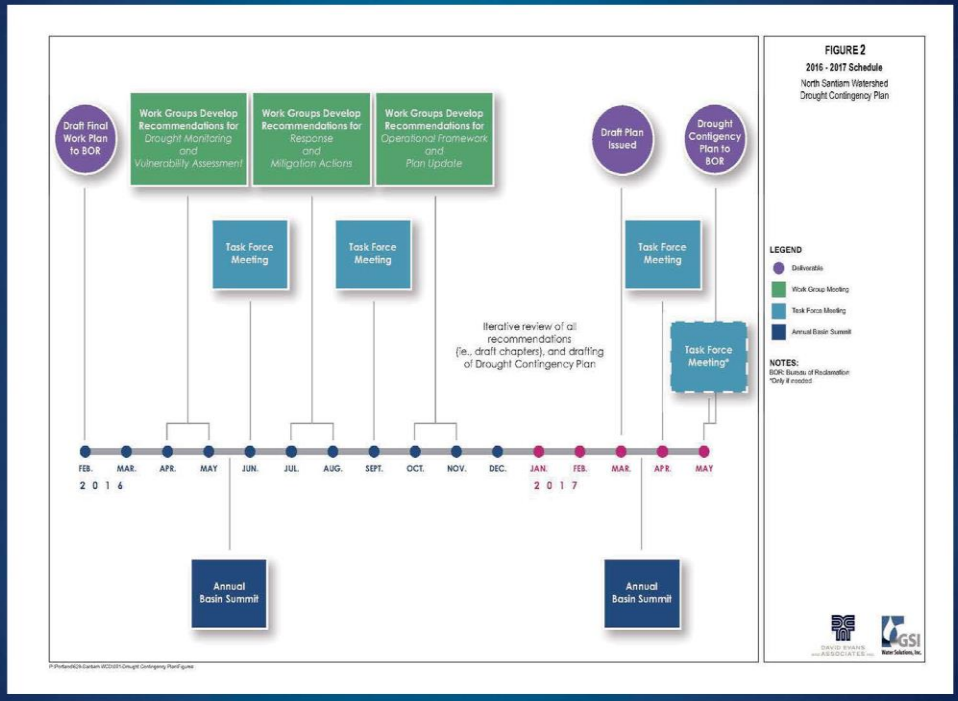
- Fire Department's use of AFFF firefighting foam on Tanker Fires:
  - FD's need to **limit** the use of AFFF Foam unless Life Safety issues are present.
  - Foam use on modern-day gasoline fires are less effective, due to Ethanol being used in most fuels, which causes fuels to mix with water easier.
  - Foam (dish soap on steroids) breaks the surface tension of the water allowing the fuels to drop out into the water column
  - Fuel won't float as easy, and is harder to collect

WITT|O'BRIEN'S


Preparing for a Potential Reservoir Drawdown
May 16, 2018
Adam Sussman, GSI Water Solutions
GSI Water Solutions, Inc.


The Drought Contingency Plan
Develop consensus among stakeholders to collaboratively manage water before and during drought
How will we recognize drought in the early stages?
How will the drought affect us?
How can we protect ourselves from the next drought?

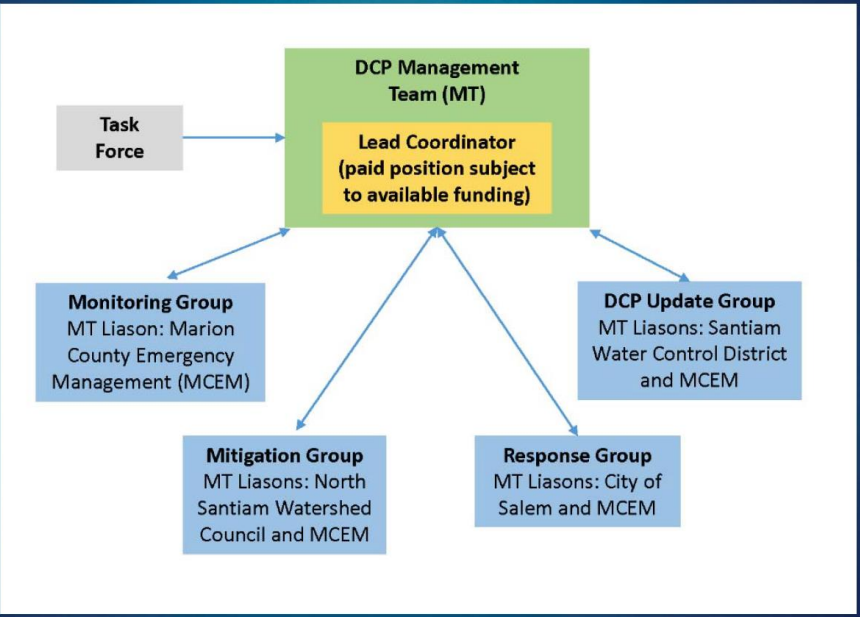
DCP Was Created Over Two Years



The DCP Creates a Framework and Structure

- 1. Drought Monitoring (predict, recognize, and respond)
- 2. Vulnerability Assessment (risks and impacts)
- 3. Mitigation Actions (before drought)
- 4. Response Actions (during drought)
- 5. Operational and Administrative Framework
- 6. Plan Update Process

The Framework: Ongoing Roles and Responsibilities



DCP Identifies Vulnerable Assets

Asset/resource	Underlying causes
Municipal water – Salem	Intake limitations, insufficient backup, reliant on single source to large degree
Municipal water – Lyons-Mehama	Below reservoir, single source, no backup, no interconnection, all water rights junior* to large downstream water users
Municipal water – Gates	Below reservoir, all but .10 cfs junior to potential future instream water right, all water rights junior to large downstream water users, no interconnection
Municipal water – Detroit, Idanha	Above reservoir, supply from small tributaries, single source, no backup, no interconnections
Instream natural resources	Below reservoir**, subject to prior out of stream appropriation, no backup, "single source"
Commercial crop production	Below reservoir, insufficient backup
Muni commercial/industrial use	Below reservoir**, insufficient backup, potentially subject to municipal curtailment
Water dependent recreation - River boating/fishing	Below reservoir**, subject to prior out of stream appropriation, no backup, "single source"
Water dependent recreation - Reservoir recreation	USACE operations (ie., rule curve/Bi-Op implementation), infrastructure limitations (eg., parks, ramps, docks)

DCP Establishes Response Actions

It is the intent that all sectors and local water users, regardless of vulnerability, will participate in the response actions to reduce impacts to the health, safety, and welfare of communities; economies; and the critical natural resources within the watershed.

- Messaging, education and outreach
- Monitoring and evaluation
- Water rights management
- Water conservation
- Emergency response

DCP Prioritizes Mitigation Actions

Entity Specific Actions

Joint Actions for Water Supply Resiliency Implementation Plan

- NSW DCP Education and Outreach Partnership
- Water Rights Management Program
- WMCPs for Small Communities and Large Water Users
- Critical Infrastructure for Small Cities
- NSW Water Budget Study
- Expand Emergency Drought Tool Usage

Potential Reservoir Drawdown is like a Worst-Case Scenario Drought

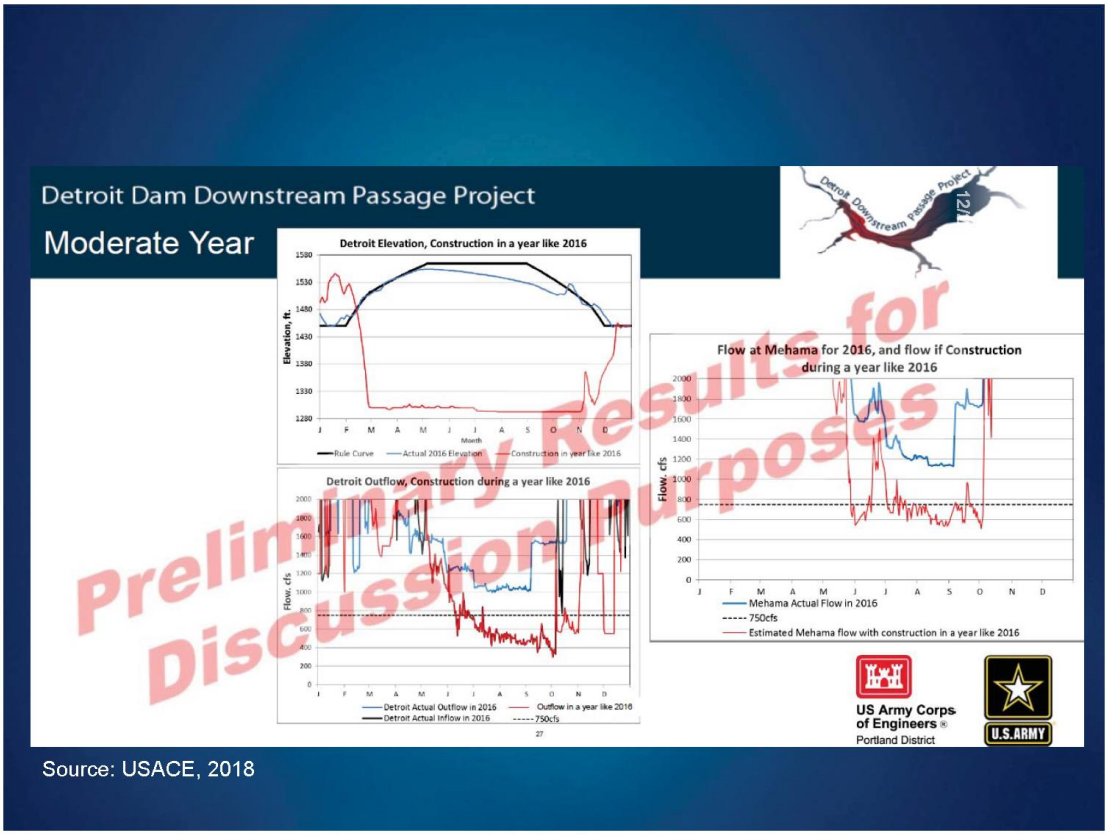
- USACE is in the scoping phase for the Detroit Downstream Passage Project
  - Provide downstream juvenile fish passage at Detroit Dam
  - Meet water temperature requirements with a temperature control tower

Source: USACE, 2018

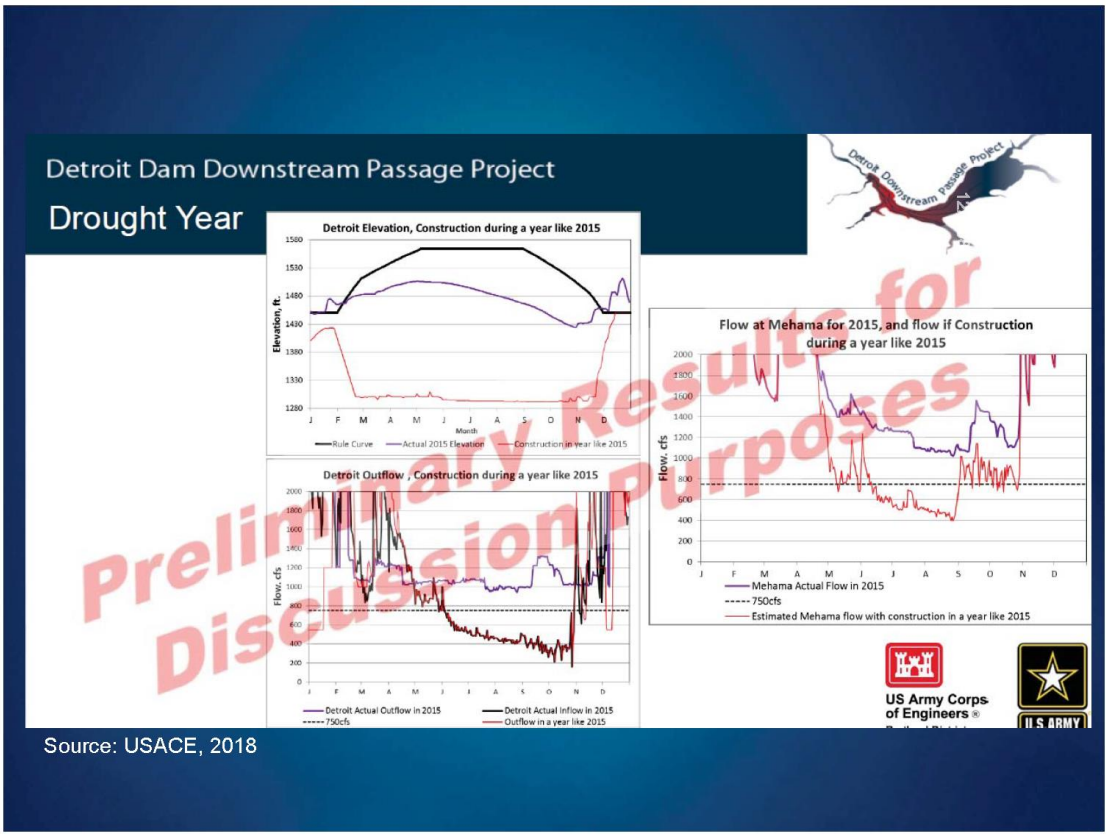
USACE Planning Takes Time, so Do Mitigation Actions

Source: USACE, 2018

- USACE is still studying potential impacts of alternative approaches to completing the project
- Assume Alternative 1 for NSW Basin Summit brainstorming
  - 2 full years with reservoir levels at 1,310 feet elevation



Source: USACE, 2018



Source: USACE, 2018

Water Rights Will be Regulated According to Priority Date

Senior water rights on the North Santiam River

Rank	Name on Water Right	Certificate/Permit /Claim		Priority	Rate (cfs)
65	City of Salem	88641	Municipal	12/31/1856	60
64	City of Salem	87959	Municipal	12/31/1856	55
63	City of Salem	87958	Municipal	12/31/1856	62
62	City of Salem	45786	Aesthetics	12/31/1856	10
61	Santiam Water Control District	30336	Industrial/Manufacturing and power development	12/31/1866	762
60	City of Salem	88871	Municipal	12/31/1866	50
59	Sidney Irrigation Cooperative	75135	Irrigation	12/31/1870	8.31
58	Sidney Irrigation Cooperative	53767	Irrigation & Livestock	12/31/1870	29.68
57	City of Stayton	80349	Municipal	12/31/1907	0.6
56	Santiam Water Control District	85878	Irrigation	5/14/1909	0.37
55	Sidney Irrigation Cooperative	88625	Irrigation	5/14/1909	24.63
54	City of Stayton	80348	Municipal	5/14/1909	0.39
53	City of Stayton	80346	Municipal	5/14/1909	2.78
52	Santiam Water Control District	68672	Irrigation	5/14/1909	0.26
51	Santiam Water Control District	68671	Irrigation	5/14/1909	0.02
50	Santiam Water Control District	68670	Irrigation	5/14/1909	0.2

Water Rights Will be Regulated According to Priority Date

Junior water rights on the North Santiam River

Rank	Name on Water Right	Certificate/Permit/ Claim		Priority	Rate (cfs)	Comment
1	City of Detroit	S-54663	Municipal	5/5/2009	1	Trib. To N. Santiam
2	City of Stayton	S-52447	Municipal	5/13/1991	25	October - April season
3	Sidney Irrigation Cooperative	S-54817	Irrigation and Supplemental Irrigation	2/13/1991	27.92	Includes both natural flow and stored water.
4	City of Gates	S-50686	Municipal	9/19/1988	0.75	
5	Sidney Irrigation Cooperative	83257	Irrigation	6/2/1987	1.04	Includes both natural flow and stored water.
6	Sidney Irrigation Cooperative	83257	Irrigation	5/22/1987	0.2	Includes both natural flow and stored water.
7	Santiam Water Control District	88960	Irrigation	4/10/1987	3.5	Includes both natural flow and stored water.
8	City of Salem	65400	Aesthetics	11/6/1985	70	
9	Santiam Water Control District	S-49254	Power Development	8/20/1984	185	
10	Lyons-Mehama Water District	S-48873	Municipal	7/10/1984	3.8	
11	Sidney Irrigation Cooperative	83257	Irrigation	10/4/1983	7.5	Includes both natural flow and stored water.
12	Santiam Water Control District	S-49254	Power Development	6/23/1983	185	
13	City of Jefferson	S-47330	Municipal	12/1/1982	1.89	Santiam R.
14	City of Jefferson	87497	Municipal	12/1/1982	1.2	Santiam R.
15	City of Gates	S-45022	Municipal	4/7/1980	0.75	
16	Santiam Water Control District	88959	Irrigation	3/17/1978	4.98	
17	Sidney Irrigation Cooperative	54639	Agriculture	9/13/1977	0.3	
18	City of Jefferson	50707	Municipal	10/29/1973	1.32	Santiam R.
19	City of Idanha	42015	Municipal	11/28/1969	0.22	
20	City of Gates	55193	Municipal	9/19/1969	0.1	
21	City of Detroit	S-32449	Municipal	3/21/1967	1	
22	City of Idanha	S-32347	Municipal	2/15/1967	0.46	Trib. To N. Santiam

2-Year Draw-Down Has Many Potential Implications

- Boat ramps - 1,310 feet elevation means boat ramps are inaccessible
- Water supply - City of Salem water supply availability indicator in DCP (Stage 4-Extreme Drought) triggered
- Water rights - junior water rights subject to curtailment
- Infrastructure – intakes, screens, canals
- Instream resources – low flow and temperature impacts

Preparation and Mitigation Can Start Now

- What mitigation actions can we start now to be better prepared?
- What are the key responses for your agency during the event?
- Are there creative solutions not yet considered?
- What is the shared public message?

Event Feedback

What was your overall impression of the today's summit?

- Very good. Very informative. Everyone wanted to and was given opportunities for participation.
- Good feedback on a lot of issues with other partners and agencies.

What did you like best? What could have been better?

- The open sharing of information and ideas.
- Potential drawdown issue, as I've realized, is a very complicated issue.
- Needed explanation of the "build underwater" option. Need an explanation of who actually uses how much water compared to expected flow during drawdown.

Was the information presented of interest to you?

- Absolutely.
- Potential drawdown issue.

Do you feel like you had an opportunity to share your ideas and thoughts with others?

- 150% yes.
- Yes

Do you have recommendations for future Summit activities?

- Will put some thought to that and get back with you.
- Same format that brings diverse information to one place.

Other comments or suggestions?

- I have enjoyed and learned tons from attending and participating in these summits.