



Meeting Summary
Wednesday, September 23, 2020
1:00 – 4:30 p.m
[WebEx Meeting](#)

Time*	Agenda Item (Action items are marked with "I")	Reference Materials	Presenter(s)
1:00 (15 mins)	Welcome, Introductions, Review Agenda <ul style="list-style-type: none"> Welcome Opening remarks Introductions Review agenda Review and Approve Meeting Summary 	<ul style="list-style-type: none"> Agenda July Meeting Summary 	<ul style="list-style-type: none"> Susan Gulick, Facilitator Tom Tebb, Ecology Judith Johnson, WWWMP
1:15* (75 mins)	Floodplain Issues <ul style="list-style-type: none"> Overview: Floodplain Health and Management Issues US Army Corps of Engineers Flood Control Projects in The Basin <ul style="list-style-type: none"> Mill Creek, Bennington Lake Nursery Bridge Flood Issues Local efforts to Address Flood Control 		<ul style="list-style-type: none"> Gary James, CTUIR Tracy Schwarz, USACOE Brian Wolcott, WWBWC Todd Kimball, WW County
2:30 * (20 mins)	Updates <ul style="list-style-type: none"> Update on Report to the Legislature Update on Strategic Plan: Comments on Current Conditions Update on Story Map USGS Groundwater Study Blog and Video 		<ul style="list-style-type: none"> Dave Christensen, Ecology & Chris Hyland, WWWMP Caroline Burney, Cascadia Consulting Matt Rakow, Ecology
2:50*	10 MINUTE BREAK		
3:00* (60 mins)	SPAC Discussion: Desired Future Conditions <ul style="list-style-type: none"> Review Working Group outputs SPAC Additions, Revisions, Clarifications 	<ul style="list-style-type: none"> Desired Future Conditions (from Working Groups) Discussion Guide 	<ul style="list-style-type: none"> SPAC Member Discussion Caroline Burney & Amanda Cronin, Working Group Coordinators Susan Gulick, Facilitator
4:00* (10 mins)	Topics for August SPAC Meeting/Future Meetings <ul style="list-style-type: none"> Review additional materials from Working Groups for Strategic Plan Presentation Ideas from past discussions: <ul style="list-style-type: none"> Using LIDAR to anticipate how and where hydrology impacts flooding Overview of Irrigators and Irrigation in Watershed Past, current and potential funding sources for basin projects Bi-State Flow Study How is each state addressing the instream flow protections? Basin hydrology, including existing monitoring sites Forest management Existing and future conservation projects Agency programs and roles in watershed (which agencies?) Other 		<ul style="list-style-type: none"> Susan Gulick, Facilitator

4:10* (10 mins)	Public Comment		<ul style="list-style-type: none"> Susan Gulick, Facilitator
4:20* (10 mins)	Updates and Next Steps <ul style="list-style-type: none"> Action items Updates/announcements Upcoming meetings <ul style="list-style-type: none"> SPAC, Working Groups 		<ul style="list-style-type: none"> Susan Gulick, Facilitator Caroline Burney, Cascadia Consulting
4:30*	Adjourn		<ul style="list-style-type: none"> Susan Gulick, Facilitator

Welcome, Introductions, Review Agenda

Judith Johnson, Walla Walla Watershed Management Partnership (WWWMP), and Tom Tebb, WA Department of Ecology, welcomed attendees and thanked SPAC members for their participation and efforts so far.

Susan Gulick, facilitator reviewed the agenda and led roll call. See **Appendix A** for the list of attendees.

Susan reviewed the meeting summary from the 7/22 SPAC meeting. There were no comments on the meeting summary. SPAC approved the meeting summary.

Floodplain Issues:

Susan introduced the topic by explaining that today's discussion on floodplain issues would focus on current issues and efforts in the basin. At our next meeting we will discuss strategies related to floodplain health and flood control to include in the strategic plan.

Gary James of the CTUIR was unable to provide his presentation on floodplain health and management issues due to the unavailability of internet. It will be postponed until the next SPAC meeting.

Tracy Schwarz, US Army Corps of Engineers (USACOE), Brian Wolcott, Walla Walla Basin Watershed Council (WWBWC), and Todd Kimball, Walla Walla County presented on floodplain issues in the basin.

US Army Corps of Engineers Flood Control Projects in the Basin

Tracy presented on the [Mill Creek Flood Control Project](#) and its operations.

- The purpose of the Mill Creek Flood Control Project is to provide flood protection for the City of Walla Walla and adjacent areas through flood storage and conveyance.
 - Flood Storage
 - Diversion dam
 - Storage dam
 - Conveyance: downstream channel
 - Levee reach designed to carry 3500 cfs – leaves assurance for uncertainties
 - Concrete channel
- To operate, flood waters go through the diversion dam. Peak flood waters are diverted to Bennington Lake, stored, then released through Russell or Mill Creek.
- USACOE makes diversion decisions using a rule curve:
 - Natural flow (as represented on the y axis) is what is forecasted to come into the diversion at Mill Creek (just upstream of Bennington Lake diversion).
 - Colored lines represent an elevation in the reservoir pool.
 - US Army Corps of Engineers takes forecasted information, follows it horizontally until it hits elevation of water in lake, then drops down vertically to determine the target regulated flow to let through town.
 - There are no diversions below 1400 cfs.
 - There is not enough data to make informed decisions about inflows greater than 5000 cfs.

- The three major flood events (1931, 1996, 2020) all are notably different events in terms of shape of hydrograph and volumes of water.
- Drawdown of Bennington Lake:
 - When reservoir is full, can release up to 400 cfs out of the lake.
 - Don't want to induce or cause flooding on Russell Creek outlet.
 - There are gauges on Depping Road and Third Street to monitor flows.

USACOE is conducting a Mill Creek General Investigation (GI) study to improve the flood risk protection provided by the project.

- USACOE developed measures to evaluate potential projects through input from stakeholders and the public. Came up with 25 structural measures and 8 nonstructural measures.
- Using these measures, USACOE tentatively selected a combination of projects for the Mill Creek GI study to maximize benefits:
 - Change project operations so that initial diversions start at 1700 cfs (up from 1400 cfs).
 - Raise levee to improve design flow to 3700 cfs (up from 3,500 cfs).
 - USACOE needs assurance for uncertainties and wants to account for inaccuracies of gauges during flood events, as well as uncertainties in hydraulics.
 - Channel rehabilitation: pier replacement at building at 1st and main, tiebacks at Otis Street Wall, remove parking lot cover between 2nd and 3rd Avenues.

Discussion:

- Brian Wolcott asked whether there is anything that can be done to improve constriction at bridges?
 - Tracy clarified that when USACOE looked at benefits from projects, USACOE could not afford to raise bridges for the benefits gleaned. As levees are raised, will build headwalls across the front. If the bridges get too high, will pressurize the headwalls.
- Tom asked how not improving fish passage meets state and federal law and Tribal treaty rights?
 - The operating project will address Tribal, State, and Federal rights. The authority for this study is specifically for the flood risk project.
- Tom asked how the flood control infrastructure modifications affect water quality, particularly total suspended sediments (TSS) and temperature?
 - Cindy added via the chat function that the USACOE does not specifically regulate water quality (that falls under the purview of EPA and Ecology). The USACOE is limited in the actions they can take to improve water quality.
 - Tom added that per Washington's water quality standards, you can only increase temperature 0.3 C. He asked whether this analysis has been done?
 - Cindy to check with the USACOE team and circle back.
- Dale Bambrick asked what is meant by fish passage? He added that there are upstream and downstream passage issues associated with the project. He appreciates that the minimum flow is raised so there are slightly less frequent diversions, but depending on the maximum diversions, consultation may not be relevant and there will still be fish passage issues.
 - Tracy clarified that the study's project purpose was flood risk management, so any fish passage improvements are good – but they are not the primary benefit of the study.
 - Cindy Boen added via the chat function that the funding authority for this study is flood risk reduction. However, any federal project requires consultation with NOAA Fisheries and USFWS to determine whether any ESA species and habitat are present within the study area. For this study, USACOE has initiated formal consultation with both entities. It is expected that the Corps will receive recommendations from the services for improvements to be added to our project. However, because this project is funded for flood reduction, alternatives must be focused on flood management, not fish.
- Tom asked what is the total cost and schedule for these improvements?
 - Tracy shared they do not have specific project costs yet. Estimate that it's under \$20 million.
 - Tracy clarified that funding is controlled by Congress – USACOE does not know when funding will come through to complete the project. After the study is complete, compete for funding for construction phase. Since the anticipated costs are less than \$20 million, it may help expedite funding.
- Chris Marks added that the WWW2050 Plan effort may have an opportunity to help push some of the add-on projects to address the gaps between current and desired future conditions.
 - Cindy added that the GI study included a needs assessment that looked at the cumulative effects and actions reasonable in the future, such as in-channel habitat improvement in Mill Creek.

- Amanda Cronin asked whether there is documentation on the list of projects that were not recommended to move forward under the GI study?
 - The full alternatives formulation process will be described in the final Feasibility study, which is scheduled to be completed in March 2021.

Local Impacts of February 2020 Flood

Brian Wolcott presented photos and impacts of the 100-year flood event that occurred in February 2020.

Background:

- The Milton-Freewater area is protected by a flood control levee that was constructed by USACOE in the 1950s.
 - This levee system is along a 5-mile length of the river.
 - For the most part, the levee has done a good job of protecting Milton-Freewater, but has negatively impacted fish passage, habitat, and water quality.
- The levee was turned over to Umatilla County and a local flood control district was established. Several local board members manage the levee system, with an annual tax paying for basic maintenance costs.
- There are several known constriction points, including Cemetery Bridge.
 - The levee failed when logs started piling up on Cemetery Bridge and backwater tore out boulders along the levee.
 - Throughout most of the flood, excavators shoved logs under bridge to keep the logs moving downstream.
 - The Lower Walla Walla River (LWWR) diversion structure presents complications at this site. Just upstream of the diversion is a fish ladder and inflatable rubber dam to get fish over the diversion.
 - Each year (even with low flood events), the fish ladder fills with gravel.
 - Potential solutions such as raising the bridge are expensive.
 - Every year since levee was built, there have been downcutting issues.
- 200 feet of levee failed below Couse Creek Bridge exposing pipes, distributing debris, and flooding roads in the surrounding area.
 - Neighboring landowners have been supportive of moving the levee but USACOE has said they will need to build the levee in its original alignment so they can continue to manage it.
 - When OR's Governor declared a state of emergency for Umatilla County, people thought they did not need a permit to take actions to protect their property.
- By contrast, at a CTUIR and WWBWC project in which they took out a private levee and constructed a side channel, the only flood damage at the site was a bit of erosion. The river inundated the floodplain area that was created, occupied the side channel, and the site performed well.
 - This example highlights the importance of floodplain reconnection projects.
- At Nursery Bridge, WWBWC is trying to recreate limited meander within the levee prism to allow a limited floodplain to occur in the system.
 - WWBWC is exploring options of setting back the levee at the old gravel pits to allow more room for the river to meander.
 - The issue with the current narrow levee system is that sediment gets flushed out, leading to high seepage rates.
 - Phase 2 of the project is looking to maintain fish passage throughout the reach and support sediment transport.
 - Phase 3 of the project will explore levee setbacks for gravel pits.

Discussion:

- Tom asked what percentage of fish successfully pass the Nursery Bridge fish ladder? Is there a requirement for riparian buffer width at these several locations?
 - Brian clarified that the old fish ladder from the 1960s was the only fish passage route for last few months because the one built in the 1990s one was full of gravel.
 - Gary James to provide more information on requirements for riparian buffer.
- Teresa added via the chat function that the levee, as built, precludes recovery of listed species and constricts flow every winter and spring. It is undersized and provides very little assurance to landowners that live or operate businesses near the levee. If locals didn't get in and "fix" the levee section every year, it would provide no flood protection.

Local Efforts to Address Flood Control

Todd presented on Walla Walla County's work to address flood impacts.

Background:

- Walla Walla County is responsible for managing the concrete reach through Walla Walla.
- The Mill Creek General Investigation (GI) study is being finalized. Anticipating that project costs will be \$10-12 million.
 - Local partners will need to contribute \$3 million.
- Walla Walla County does not do floodplain improvement projects unless they are associated with bridge or road repair projects.
 - Floodplain restoration projects are mostly completed by Walla Walla Conservation District or Snake River Salmon Recovery Board.
- From the County's perspective, the biggest issue with the February 2020 flood was the loss of Seven Mile Bridge.
 - Estimated replacement cost: \$5 million.
 - Will need to replace with a bridge that spans a larger width. Updated estimate: \$7-9 million.
- In addition to the loss of the bridge, City of Walla Walla water lines and roadways were damaged.

Discussion:

- Brian added via the chat function that both Umatilla County and Walla Walla County are currently updating their Natural Hazards Mitigation Plans, which includes floods.
 - Cindy replied via the chat function that Walla Walla County Emergency Management works closely with the USACOE to monitor and respond to high water and flooding.

Updates:

Report to Legislature

Chris Hyland, WWWMP, presented an update on the report to the legislature.

- Hope to have an updated draft of the report for the WWWMP Board to review by September 29.
- The report is due to the legislature on November 1.

Current Conditions Draft Chapter

Angela Pietschmann, Cascadia Consulting Group, provided an update on the Current Conditions Draft Chapter.

- The draft chapter was distributed to working groups (WG) for review from 9/4 – 9/15.
- The facilitation team is working to address the WG comments and leaving placeholders where additional research and analysis is needed.
- SPAC will be invited to review the draft from 9/28 through 10/12.

Discussion:

- Ralph Perkins noted that there is not information on land use and cover.
 - The Land Use WG will begin meeting in late October or early November.
- Brian noted that there could be more detail when describing the reaches of the river. He added that the Walla Walla Subbasin Plan is a good resource to reference.
- Tom asked whether the plan will describe the actions that have been occurring throughout the decades to get us to the state that we are in now?
 - Angela clarified that there will be separate Introductions and Accomplishments Chapters that will describe the work to date.
- SPAC members briefly discussed what level of technical detail to include in the plan.
 - Dale Bambrick added that a qualitative overview of what we know about the basin is sufficient.
 - Chris Marks said he'd like to see the detail of going through the steps from Current Conditions to Desired Future Conditions to the Gap Analysis to Strategies.
 - Cindy added that she does not believe there is time to deliver a report with significant detail. A high-level plan with recommendations for follow up actions is sufficient.

Story Map

Matt Rakow, WA Department of Ecology, is developing a story map to highlight the efforts in the basin.

- Story Map is a multimedia web app used for outreach and education. The map will coincide with the legislative report.
- Ecology recognizes this is a process led by local stakeholders and people who care about the basin and requests the SPAC's input on core messages for the story map.
 - Email Matt at mrak461@ecy.wa.gov with ideas.

- Brian added that the story map should include the state of salmon and habitat. The map should mention how low the flows get and the thermal barrier issues. It's important to demonstrate that we have a severe problem and it will take funding to repair the issue.
- Steven Patten noted via the [Google Sheet](#) that the Story Map should drive home current conditions of where we are not meeting flow, habitat, and temperature issues. The story map should provide a spatial idea of how those pieces come together under this process.

USGS Groundwater Study Blog & Video

Ryan Lancaster, formerly WA Department of Ecology, developed a [blog and video](#) to highlight the USGS Groundwater Study. The blog and video are intended to be told to educate the public about the science-based approach being used to address these problems.

Desired Future Conditions

Caroline Burney, Cascadia Consulting Group, and Amanda Cronin, AMP Insights, introduced the discussion to refine and prioritize Desired Future Conditions (DFC). The Ecological Function, Water Supply Needs, and Data, Studies, and Monitoring WGs have been meeting to develop the DFCs. The draft DFCs are available [here](#).

Discussion:

- Dale added that the list of DFCs should be prioritized so that we can align funding.
 - He suggested prioritizing by focusing on significant reach and tributary. For example, in Mill Creek, need to solve fish passage problems.
 - Cindy agreed via the chat function. She added that this is a complex problem to solve which will require trade-offs and prioritization. She added that the DFCs should address the following questions:
 - What is required by law?
 - What is most important?
 - Who is willing to give something up and what?
 - Chris Kowitz suggested identifying impediments or roadblocks to implementing DFCs.
 - For example, some things are already in process like the Basin study, whereas others have regulatory, financial, or legal barriers.
- Todd asked what is meant by 'historic levels' in the DFC "sustaining springs flowing at historical rates?"
 - Brian added that the US Supreme Court conducted an investigation in the 1930s. They documented groundwater levels in the shallow aquifer.
 - Tom asked via the chat function whether there are any aerial photos from the 1930s?
 - WWBWC has 1939 photos for upstream of Milton-Freewater. WWBWC does not have the area north of Milton-Freewater to the state line.
- Brian added that PCBs are a water quality issue for Mill Creek.
- Tom asked what are we doing to make shallow aquifer recharges functional? He also noted that there is no mention of forest health and management issues.
 - Amanda clarified that the WGs have not put a ton of emphasis on upland health as we were not envisioning that as a large piece of the water plan.
- Tom asked whether we have information on how much surface and groundwater we are using now?
 - Amanda clarified that it is easier to get data from OR than WA. There are more small diversions on the WA side than OR.
 - Jim Mathieu has been compiling data.
 - Brian added via the chat function that alluvial aquifer use in Oregon is not metered. Surface water and basalt aquifer use in Oregon is metered.
 - Chris Kowitz added via the chat function that some alluvial wells are metered in OR, but not all. Alluvial wells were not included in the metering and reporting requirements as part of the SWMPA.
- Todd added that many of the DFCs are contradictory and that many of them are strategies.
 - Dale added that the strategies need to be pursuant to an outcome. For example, the goal is not to recharge the aquifer – that's something you might do to make water available during the summertime.
- Judith added that as priorities are developed, we should call out specific projects that should be included in the 2050 plan.
- Chris Marks added that it would be helpful to have more detail on the DFCs by providing more specificity around the quantities of water desired.
 - For example, on the municipal water supply side, based on growth projections and changes in hydrograph 30 years out, 'we need X quantity of water to achieve our objectives.'
- SPAC members provided initial feedback on which DFCs are most important to quantify:
 - Flow targets – integrate data from flow study.
 - How many fish passing through Mill Creek?

- What is the change in flow from fall to spring?
- Municipal growth projections.
 - Most cities are required to do 20-30-year planning effort.
 - Chris Marks added that it will be important to ensure that municipalities are meshing with targets from the integrated plan.
- Chris Marks added that he'd like to see integrated and multi-beneficial DFCs and strategies.
- Judith asked how much water is produced by the watershed each year and what we anticipate in the future?
 - Amanda clarified after the meeting, that there is background on how much water is produced by the watershed in the Watershed Plan and the Subbasin Plan. Future water production will be included in the climate change section of the 2050 Plan.
- Teresa added that a DFC is to restore agricultural water availability to a level that eliminates reliance on groundwater. Irrigators are infinitely more efficient in our delivery systems and application methods than we were in the 1930s so we should be relying less on groundwater than historically.
- Ralph added that land use in the upland areas is extremely important to account for climate change and fuel build up.

Next Steps:

- Consultant team will refine DFCs based on SPAC input.
- Consultant team will work with WGs to add detail to quantify DFCs.
- Consultant team will work with WGs to prioritize DFCs.

Topics for Future SPAC Meetings

Susan introduced the discussion to decide topics for future SPAC Meetings.

- We will continue the floodplain topic at the next meeting. We will hear the presentation Gary James intended to give today, as well as presentations on potential strategies to address flooding issues, including representatives from the Conservation Districts and the Floodplain by Design program.
- Chris Marks suggested that it may be timely for a forest management discussion.
 - There is a new district ranger in Walla Walla. Judith has contact information.
 - Tom suggested representatives from USFS, DNR, and private timber interests.
- John Foltz added that there is a Floodplains by Design [article and video](#) from the Touchet that might be of interest at the next meeting.
- Steven Patten suggested an overview of irrigation, water use, and current flows and comparison to DFC flows.
- Todd suggested a presentation on irrigation, including groundwater versus surface water usage, and timing of both.

Public Comment:

- Sean Thurston noted via the chat function that with a majority of our upper basin rainfall on dry land agriculture and forests, the soil conditions (usually due to management practices) in these areas can have an impact on water timing and aquifer recharge. He asked whether this should be addressed in the plan? Should we review current and future conditions for the soils (unsaturated zones) in these areas?
 - Consultant team will consider incorporating.
 - Renee Hadley noted that there is very little data about this topic.
 - Sean added that we may use the plan to identify this as a data gap that needs to be addressed.

Action Items & Next Steps:

Upcoming Meetings:

- SPAC: October 28 from 1:00 p.m. – 4:30 p.m.
 - Susan added that the November and December Meetings will need to be rescheduled due to holidays.
- Working Groups:
 - Joint Ecological Function & Water Supply Needs WG Meeting: October 15 from 1:00 p.m. – 3:00 pm.
- Groundwater Study Public Scoping Meeting: October 14 from 4:00 p.m. - 6 p.m.

Appendix A. Attendance

SPAC Members in Attendance:

Name	Affiliation
Bambrick, Dale	NMFS, NOAA
Boen, Cindy	USACE
Byerley, Annie	WA Irrigation at-large
Dymecki, Sarah	WWT
Johnson, Judith	WWWMP, <i>Ex-Officio</i>
Kilmer, Teresa	Walla Walla River ID
Kimball, Todd	Walla Walla County
Kowitz, Chris	OWRD
Marks, Chris	CTUIR
Patten, Steven	City of Milton-Freewater
Perkins, Ralph	WWBWC
Talbott, Mike	Columbia County
Tebb, Tom	Ecology, <i>Ex-Officio</i>
Wachtel, Mark	WDFW

Name	Affiliation
Sara Ogier	Parametrix Consulting
Schwarz, Tracy	Army Corps of Engineers
Short, Jaime	Ecology
Tarbutton, Scott	Ecology
Thurston, Sean	Ecology
Verner, Mary	Ecology
Warriner, John	Aspect Consulting
Wolcott, Brian	WWBWC

SPAC Members Not in Attendance:

Name	Affiliation
Shafer, John	Umatilla County
Wagoner, Mark	Gardena Farms Irrigation District

Other Attendees:

Name	Affiliation
Beard, Chris	Ecology
Beeler, Brook	Ecology
Birdsall, Doug	WWWMP
Burney, Caroline	Cascadia Consulting
Christensen, Dave	Ecology
Cronin, Amanda	Amp Insights
Downes, Melissa	Ecology
Fagan, Colleen	NMFS, NOAA
Foltz, John	Snake River Salmon Recovery Board
Garcia, Tony	Walla Walla County Public Works
Glick, Catherine	Ecology
Gulick, Susan	Sound Resolutions
Hyland, Chris	WWWMP
James, Gary	CTUIR
Kraft, James	WWT
LaMarche, Jon	OWRD
LeValley, Chloe	Walla Walla Union-Bulletin
Navarrete, Laura	USFW
Pietschmann, Angela	Cascadia Consulting
Poppleton, Tim	Ecology
Rakow, Matt	Ecology
Sater, Chet	US Bureau of Reclamation
Redfield-Wilder, Joye	Ecology