Fifteenmile Watershed Council
OWRD Grant 1069 - Storage Feasibility Steering Committee Meeting
PUD Conference Room, The Dalles
May 29th, 2014
1:00 – 3:00 PM

MINUTES

Attendees:

Martin Underhill, *council member*	Beau Sorenson, *NRCS*	Bob Wood, *OWRD*
Bonnie Lamb, *ODEQ*	Chris Rossel, *USFS*	Jonathan LaMarche, *OWRD*
Andrew Wildbill, *CTWS*	Josh Thompson, *SWCD*	Bryce Macnab, *ODFW*
Rod French, *ODFW*	Stan Ashbrook, *irrigator*	Ron Graves, *SWCD*
Rosemary Furfey, *NOAA*	Natasha Bellis, *The Freshwater Trust*	Robert Wallace, *Wy'East*
Steve Springston, *council member*, *ODFW*	Ryan Bessette, *SWCD*	Smita Mehta, *ODEQ*
Phil Kaser, *council co-chair*	Jeanne Underhill, *irrigator*	Shilah Olson, *SWCD*
Jim Olson, *council member*	Anna Buckley, *coordinator*	Abbie Simmons, *SWCD*

Introduction, Review/Approval of Agenda and Minutes
Phil called the meeting to order, led introductions, pointed out the ground rules that were listed on the wall, and gave a quick review of the agenda for those who had not already reviewed it.

Overview of grant goal, objective, deliverables and timeline
Anna provided an overview presentation of the OWRD 1069 Water Conservation, Reuse & Storage grant that the Fifteenmile Watershed Council was awarded this spring. She said that the council has been working on increasing the stability of late summer water availability for farms and fish in Fifteenmile over the past years. Specifically, the goal for this grant is to evaluate whether above ground storage in the upper Fifteenmile Creek watershed could meet the dual goal of benefitting both farms and fish. The results will provide a comprehensive analysis that will conclude whether or not above-ground storage can be feasible by benefiting fish and farms. She stated that today's meeting objectives are to provide an overview of the planning study, solicit input from the stakeholders on the specific questions addressed by the specific study elements, and recruit volunteers to review applications in response to an RFP for the contracted work. Anna explained that the grant application had eight study elements that she'd like discussed further in small groups. She'd like each group to generate questions and comments about each deliverable to make sure the right questions are addressed in the study. She provided the committee with the schedule for the grant from late May 2014 to June 2015 that incorporated the study elements, identified the person responsible for that specific deliverable, as well as the time frame for completion (table listed

below). The study needs to be completed by the end of FY2015, so it's a tight timeline given the application had originally proposed an end date of December 2015.

Committee schedule

		2014			2015	
Project Planning Study Element	Lead	April-June	July - Sep	Oct-Dec	Jan-March	April-June
COMMITTEE MEETING	Watershed Council	TODAY				
Surface water availability evaluation	OWRD	X	X			
Water supply/demand evaluation	OWRD	X	X			
Water conservation assessment	Wy' East	X	X			
COMMITTEE MEETING	Watershed Council			2		
Ecological flow analysis	contractor TBD			X	X	
Environmental impact analysis	SWCD			X	X	
Physical feasibility assessment and alternatives	contractor TBD			X	X	
COMMITTEE MEETING	Watershed Council				3	
Regulatory feasibility	contractor TBD				X	
Economic feasibility	contractor TBD				X	
Draft report	contractor TBD					X
COMMITTEE MEETING	Watershed Council					4
Final report	contractor TBD					x
Project management	Watershed Council	X	X	X	X	X
Committee oversight	Watershed Council	X	X	X	X	X
Administration	SWCD		X	X	X	X

- Meet again in the fall (Oct/Nov) after the first three tasks are accomplished and the contractor is selected

Anna also briefly talked about potential reservoir locations that would be included in the study and those that would automatically be excluded. So far potential locations that are being considered are a site on Henderson Canyon and a site on Rail Hollow, and she is still looking for one other site to consider. Perennial streams or streams that support sensitive, threatened, endangered, and/or other native fish species would not be considered for reservoir locations in the study.

One watershed council member who works for an agency expressed concerns about whether he would be representing an agency versus his personal perspective. Another agency person said that they had a similar situation, but didn't feel like it was a conflict. Phil Kaser said that the results of today's work would be reported back to the council in September for final direction. Anna clarified that affiliations didn't need to be attached to comments or questions that were generated in the small group work. Another important point that was brought up was to make sure all of the landowners that would be impacted by the study are on board. Anna said that is exactly the kind of comment or question that you should capture during the small group work.

After the review and discussion, Anna had everyone count off to split up into four groups. Each group would work on developing questions and comments for two study elements at a time and then rotate to the next two study elements, until all four groups rotated through all four stations. A packet was at each group station that explained what each study element was, who would be the lead, and when the element would be worked, as written in the grant application. The groups were to read and discuss the study element, as well as write down any questions and concerns that they may have about that particular element on flip chart paper. Each group would add to the list of questions and comments from the previous group.

The eight study elements and associated questions generated by the meeting participants are listed below:

1. Surface Water Availability - What: A hydrologic determination of surface water availability for storage during high stream flow periods on a daily time scale, including potential rates, durations, and volumes. Who: Jonathan LaMarche, OWRD Hydrologist. When: Fall 2014

Questions/comments:

1. Fish need peak winter flows - need to assess via IFIM(Instream Flow Incremental Methodology)?
2. Flood stage? Will this affect the stream's ability to move gravel. Channel formation, flush sediment pollutants, invasive species?
3. Will off-channel habitat be maintained?
4. Would stored water be used every year or just in water short years? Storage may not be available every year.
5. Paper water rights vs. actual use?
6. How much water can be captured & how much needs to be left in stream for fish, etc.?
7. How will storage / capture affect water quality , temperature, etc. during all seasons? (ex. spring, winter and summer)?
8. What are normal flows like?
9. Will we base availability on normal years? 50% exceedence? 80% exceedence?
10. How to account for future conditions (climate change)?
11. What time of year will water be available for both storage and release?
12. How will change in ground water availability affect watershed?
13. Flow frequency & magnitude: Seasonal flows, peak flows, hydrograph, refill reliability on storage

2. Water Supply and Demand - What: An assessment of long term water supply demands on both surface and ground water based on past, current and projected agricultural, domestic, and ecological needs. This will include an evaluation of the need for storage to augment in-stream flows to conserve, maintain, and enhance aquatic life and other ecological values. Who: Jonathan LaMarche/Bob Wood, OWRD. When: Fall 2014

Questions/comments:

1. Water rights on paper vs. actual use vs. actual flow?
2. Ecological needs (IFIM or similar)
3. What are the projected climate issues (snowpack, etc.)?
4. How do you determine flow needs to support ecological needs? Also water quality (temp.)
5. What is the time frame - 5 yr, 10 yr, 50 + yr?
6. What is our goal for stream flow?
7. Does this need to change overtime as fish populations increase? Or as agriculture practices change?
8. Ag demands: Surface water, ground water, timing & amounts, future needs/wants, future climate. Existing and with efficient improvements.
9. Environmental demands: Fish, habitat

3. Water Conservation - What: Evaluation of water conservation opportunities to offset current and future demand, including impact on above ground storage suitability. Who: Josh Thompson, SWCD Planner & Robert Wallace Wy'East RC & D When: Fall 2014

Questions/comments:

1. For stored water, what is the distribution system?
2. Suitability for pressurized delivery?
3. Delivery to creek(s) or farms?
4. Opportunity for efficiency improvements for application mechanisms?
5. Efficiency of reservoir, how to operate to reduce losses?
6. What are current distribution losses?
7. What are opportunities to improve?
8. What are opportunities for Orchard Ridge Ditch?
9. What happens to current losses?
10. Technology improvements to meet crop demand?
11. Need inventory of type of irrigation systems - % impact sprinkler, pivot, drip, etc. for surface water and ground water.
12. Assessment of ability to transfer better priority water rights to better land
13. What better technology is available? i.e. subsurface irrigation less expensive than a reservoir
14. Effect on ground water?

4. Physical Feasibility and Assessment - What: Physical evaluation of potential storage sites. Suitability factors considered: geology, topography, delivery logistics and other issues. Who: Contractor TBD. When: Winter 2014/2015

Questions/comments:

1. Landowner cooperation
2. Conveyance to storage?
3. Conveyance away from storage?
4. Geologic suitability (structure/seepage)
5. Topographic suitability
6. Effects on existing fish habitat?
7. Effects on existing wildlife habitat?
8. Limit evaporation losses (deep vs. shallow)
9. Soil suitability?
10. Company Hollow site?
11. How high up in the system does the site need to be?
12. Safety considerations & liability (humans & infrastructure below, who owns liability)?
13. Consider off-channel sites
14. If piped, who will monitor and maintain system?
15. Will one site or multiple small sites meet the needs?
16. How will site location(s) relate to losing/gaining reaches, fish habitat, etc.?
17. Opportunity for small-scale hydro?
18. Safety of community downstream?
19. What is the storage interplay with groundwater? How does this differ between sites?
20. Cost associated with each site?

5. Ecological Flow Analysis - What: An ecological flow analysis including by-pass, optimum peak, flushing and other ecological flow needs of any affected stream and their impact on potential surface storage projects. Who: Contractor TBD When: Winter 2014-2015

Questions/comments:

1. When do peak flushing events occur?
2. How does this affect water availability?
3. How do we consider high/low flow years?
4. How do we plan for low flow?
5. Will the analysis look at all species not just steelhead (ex. Flushing for lamprey)?
6. Gravel moving flows?
7. Historic levels?
8. Trade-offs of reduce peak flows (winter/spring) vs. increased peak flows (summer)?
9. What are ecological flows? Duration and magnitude? Or other peak flow year event?
10. Can temperature evaluation be included as part of ecological flows?
11. Timing (seasonality) of key points in hydrograph for fish

6. Environmental Impact Analysis - What: The evaluation of potential long-term and short-term environmental impacts for each proposed storage facility using the Natural Resource Conservation Service Environmental Evaluation Method (CPA-52). Who: Josh Thompson, SWCD Planner. When: Spring 2015

Questions/comments:

1. Is the CPA 52 adequate?
2. Will this NEPA document be enough?
3. Will USFS have to be involved ? OWRD for grant? ODEQ? NOAA Fisheries? ODFW?
4. What are the effects on summer creek temperatures if releases are into creek?
5. Are there temperature effects of storage during spring spawning?
6. What kind of district? Irrigation district? Ditch company?
7. Cumulative effects if multiple reservoirs?
8. Is there a need for (more) monitoring sites?

7. Regulatory Feasibility - What: A regulatory review of existing water rights and exploration of other water rights permitting options including water rights exchange and associated relative costs of each option. This will also include a review of local, state, and federal permitting requirements for both on- and off-channel reservoir sites. Who: Contractor TBD. When: Spring 2015

Questions/comments:

1. Would this be public use? Private? No public access?
2. Would recreational use be feasible?
3. If no regulation exists to allow trading in-stream for stored, make one!!
4. Which agencies have jurisdiction?
5. Where will the water rights come from?
6. What is the use for the stored water? (Irrigation rights may be transferred…)
7. Can there be potential exchange of ground & surface water rights?
8. How will the stored water be distributed to irrigators in relation to existing water right priority dates? Would the permits differ for on-channel storage vs. off-channel siting?
9. Who will hold the stored water right? Who will manage the water?

10. Would it be beneficial to organize irrigators into a water users association or district?
11. How are we calculating irrigation water needs?
12. Are we basing on the Watermaster regulation records? In other words, what priority dates are we looking to serve?
13. How to regulate for fish water (water being replaced by storage water) ? Does OWRD do this and how?

8. Economic Feasibility - What: Analyses of surface storage compared to conservation alternatives and to a blended approach. Who: Contractor TBD. When: Spring 2015

Questions/comments:

1. What are actual & lost opportunity costs to irrigators to implement conservation measures?
2. Impact to ground water to increase conservation?
3. Cost of structure vs. Benefit to fish?
4. What is the economic agricultural production potential vs. Cost of structure?
5. Hydro feasibility study? (at the end of Orchard Ridge Ditch)
6. Would this be public use? Private? No public access?
7. Would recreational use be feasible?
8. Who's going to pay for the reservoir, pipe, etc.?
9. Who will own the dam/pipe /etc.?
10. Who will be responsible for maintenance, liability, etc.?
11. Is there a way to guarantee that irrigators won't be worse-off? (ex. Klamath has reservoirs now and some irrigators get much less water than in the past)
12. Will there be recreation on the reservoir?
13. Will there be an economic benefit?
14. Who gets to use the water? Will there be a cost to users?
15. What kind of programs do you use to evaluate cost / benefit?
16. What benefit is lost now by users being cut off early?
17. What is the cost of allowing the water to flow in-stream to irrigators vs. an off-site distribution center?
18. If there is off-channel storage, will more irrigation water be available later in the year?

Summarize priorities & group discussion

At the end of the small group activity everyone reconvened and discussed what happens next. Anna said that she had planned to have the group prioritize questions for each study element at this meeting but didn't think there was adequate time left. She asked the group what they thought about her synthesizing the information first and then she could send it out to the group remotely. A suggestion was made to do it using an online survey, such as Survey Monkey. There was general agreement to not try to rush the prioritization today.

Shilah asked when the RFP would be solicited. Anna said that the goal is to have the RFP out in early July, solicit by August and have it ready to review in September. She also asked for volunteers to be part of a review committee that will go through applications for contractor selections. Jim Olson, Rod French with assistant from a colleague in Salem familiar with IFIM (Tim Hardin), Natasha Bellis, and Bonnie Lamb, all volunteered as well as Ron Graves and Shilah Olson. Stan Ashbrook asked what kind of contractor does this type of work and Anna replied a team of with experience in ecological flow modeling; surface hydrology, hydrogeology and engineering; surface

water law and regulation of both in stream and out-of-stream water uses; and agricultural and natural resource economics.

Another question that was brought up was how do contractors deal with getting information from the agencies? Bob Wood and Rod French both answered by saying that the contractor will normally contact them and work together to get all the information needed. Ron Graves suggested giving applicants a list of the prioritized questions and having the potential contractors answer them. Stan also suggested that if the contractor concludes that a reservoir is not going to work, the contractor could provide us with other alternatives.

Next steps

Anna reviewed the purpose of the meeting and what was accomplished. Since we didn't get to the prioritization step, she will synthesize and email/mail the list of questions to the people present at this meeting, as well as all of the council members and irrigators for the prioritization. Anna stated that what comes out of this meeting will be brought to the next watershed council meeting in the fall. She would also like to reconvene this steering committee again after the first three elements are completed and the contractor is hired. Meeting adjourned at 2:45.