Strategic Plan Advisory Committee

DISCUSSION GUIDE: Challenges and Opportunities within Geographic Areas
June 24, 2020

Introduction
There are unique challenges and opportunities within the Walla Walla watershed. The concerns are diverse and vary throughout the basin. Many areas are facing severe water restrictions due to over-appropriation some areas face serious water quality concerns. It is easy to agree on a 2050 vision that includes adequate water for fish, farms, and people; it is much more difficult to discern how to make that happen.

Continuing our conversations about the scope and scale of the strategic plan, today’s discussion will identify the SPACs key concerns within geographic areas. It will also help clarify where there are potential opportunities to address over-appropriation in different areas of the watershed. Feedback from the SPAC will direct additional work on these issues by the Working Groups.

The lists included here are results of an initial brainstorming and are intended to stimulate thinking by SPAC and Working Group members. The lists are not meant to be comprehensive.

Touchet Area
Key characteristics and attributes of the Touchet area include:
- The predominate land use is a mix of irrigated and dryland agriculture. Irrigation generally occurs along the river corridor. Dryland wheat is the predominate crop away from the river.
- The area has a rural character with small towns (Dayton, Waitsburg, Prescott, Touchet) and not a lot of growth.
- There is distinct variation in precipitation from the lower Touchet to the upper Touchet River tributaries.

Key challenges within this area include:
- Improving flows in the lower Touchet so critical fish species can access high quality habitat in the upper watershed.
- Addressing temperature challenges in mid to lower Touchet.

Opportunities to address these challenges may include:
- Water right acquisitions.
- Irrigation efficiencies.
- Transitioning some irrigated wheat to dryland wheat.
- Further direction of municipal reclaimed water and effluent to support stream flow via Managed Aquifer Recharge (MAR).
- Stormwater management for improved water quality and flood mitigation.

**Discussion Questions: Touchet Area**
1. Are there additional water-related challenges or opportunities you would add to the list? Why?
2. What are the best opportunities in this area to address over-appropriation?
3. What water-related questions would you like the strategic plan to address within this sub-basin?

**Little Walla Walla River (LWWR)/Spring Branches Area**
Key characteristics and attributes of the Little Walla Walla/Spring Branches area include:
- This area consists of a series of distributaries of the Walla Walla River.
- The conveyance provides water for agricultural irrigation.
- Groundwater-fed springs and streams support habitat.
- The Little Walla Walla and spring branches provides cold water refugia for rearing and cool water inputs to the mainstem Walla Walla River.
- The landscape has unique aesthetic values.
- The area bisects the OR-WA border.

Key challenges within this area include:
- Dry and low stream flows (year-round and seasonally) that are insufficient for habitat and limit out of stream water rights.

Opportunities to address these challenges may include:
- Increase flow from the main stem to the LWWR.
- Expanding the monitoring network to improve understanding between dry year/season and spring branch low flow.
- Expanding the MAR system to support flow in the spring branches.

**Discussion Questions: Little Walla Walla River/Spring Branches Area**
1. Are there additional water-related challenges or opportunities you would add to the list? Why?
2. What are the best opportunities in this area to address over-appropriation?
3. What water-related questions would you like the strategic plan to address within this area?

**Mill Creek/Yellowhawk Area**
Key characteristics and attributes of the Mill Creek/Yellowhawk area include:
- The Cities of Walla Walla and College place are within the floodplain of Mill Creek.
- Mill Creek is part of an engineered Army Corps of Engineers flood control project that places Mill Creek in a concrete channel throughout the City of Walla Walla.
- Yellowhawk is a distributary of Mill Creek meaning it flows out of Mill Creek and into the Walla Walla river upstream of the confluence of Mill Creek and the Walla Walla River.
- Upper Mill Creek supports relatively good habitat conditions for fish.
- The City of Walla Walla relies on surface flow from Mill Creek for municipal supply.

Key challenges within this area include:
• Poor channel habitat, which impacts fish migration to spawning grounds in the upper watershed.
• Flooding impacts on the Cities of Walla Walla and College Place.
• High temperatures and low flow conditions in Mill Creek.
• Increased development around Walla Walla and reliance on permit-exempt wells.

Opportunities to address these challenges may include:
• Floodplain and levee modification.
• Water conservation (agricultural and municipal conservations, reclaimed water / purple pipe, etc.).
• Water right acquisitions.
• Managed aquifer recharge.
• Aquifer storage and recovery.
• Improved water storage and management at Mill Creek Dam / Lake Bennington.
• Stormwater management for improved water quality and flood mitigation.
• Riparian habitat restoration.

**Discussion Questions: Mill Creek/Yellowhawk Area**
1. Are there additional water-related challenges or opportunities you would add to the list? Why?
2. What are the best opportunities in this area to address over-appropriation?
3. What water-related questions would you like the strategic plan to address within this sub-basin?

**Mainstem Walla Walla**
Key characteristics and attributes of the main stem Walla Walla area include:
• It includes a unique hydrology and distributary system.
• There are both losing and gaining reaches in the main stem.
• Irrigation occurs nearly year-round.
• The river starts in OR ends in WA, bisecting the state line.
• Headwater areas are relatively undeveloped.
• A variety of agricultural crops grow in the area, including grains, orchards, vineyards, onions, asparagus, and alfalfa seed.

Key challenges within this area include:
• Meeting agricultural demand with surface water, especially in dry years.
• Concerns that declining groundwater levels signal long-term sustainable source water issues for agriculture and City of Milton-Freewater.
• The need for cool, clean water source in gaining reaches of the main stem, especially in low flow periods.
• Fish migration challenges and fish stranding due to low flows in the lower watershed.
• Legal and physical protection of instream flow water rights across the state border.
• Reach-specific channel/levee structures that create sub-optimal habitat.

Opportunities to address these challenges may include things such as:
• Building a reservoir and/or pump exchange with the Columbia River to support irrigated water use and leave more water in the river for fish.
• Managed aquifer recharge.
• Water right acquisitions.
• Levee setback, channel modification and/or floodplain restoration.
• Municipal and agricultural Aquifer Storage and Recovery (ASR).
• Conversion to crops that need less irrigation.
• Stormwater management for improved water quality and flood mitigation.

Discussion Questions: Mainstem Walla Walla
1. Are there additional water-related challenges or opportunities you would add to the list? Why?
2. What are the best opportunities in this area to address over-appropriation?
3. What water-related questions would you like the strategic plan to address within this area?