Municipal Tools Matrix – DRAFT FOR PT DISCUSSION

July 2, 2025

Process Steps:

Step 1. Clarify/Finalize Shared Understanding/Create Common Baseline **(STARTS ON PAGE 2)**.

Make sure that all understand the Issue and the Tools in the same way – resolve confusion, technical considerations, legality, etc.

Tool/Strategy	Chapter 4 Definition	PT Notes
Access to Groundwater Rights	What would need to be done (what are the processes) to enable cities to access new groundwater rights (under GW allocation rules and mitigation program)? Plan to document where we are right now Seeking a Plan that supports the process and recommends a GW study	- No way for cities to get new GW rights to meet 20-year demands at this point – this Plan should describe why (rules, Mitigation Program, etc.) - New GW permit – OWRD not allowed to issue new permits unless under provisions of Mitigation program – 200cfs cap (presently, those issued + applications = 204cfs) - OWRD must also find that GW is available – in the context of Redmond/Thornburgh applications, it was found that GW is not available due to declines in the center of the Basin - Under new rules – only 25ft of decline (or 0.6cfs/yr rate of decline) from highest known water level, defined spatially, are allowed; OWRD found that declines are anthropogenically-elevated (artificial recharge) – doesn't address rate of decline rule - All barriers to getting a new GW right – information needed to get to common understanding of how the physical groundwater system works - Additional barrier from Tribal reviews in future – no process yet, but could impact transfers too (if city bought an existing water right) - Could address these through rulemaking or through statute - GW study to inform this discussion – that can inform future discussion around GW allocation, artificial recharge, spring recharge (the objective of the GW Subcommittee)
Access to Mitigation Credits	What are the pathways by which cities can generate mitigation credits and are there pathways that could be developed that meet the parameters of reducing consumptive use and protecting water instream that haven't been used before? What are the sideboards on mitigation projects?	- Even if City of Bend doesn't get another GW right, it will still need to generate mitigation credits and move credits around under existing Mitigation Program rules to meet future projected demands - Two ways City has done that: offset mitigation (cancelling existing GW rights to generate credits), permanently transfer water rights instream (generate credits equal to amount protected to Lake Billy Chinook) - Question of the number of acres that districts are willing to retire from their water rights? - Other potential pathways haven't been approved by OWRD in past – defined sideboards - What other pathways could generate credits within defined sideboards? - Sunset in 2029 – Cities need to act by 2027 → speculation to retire GW rights, moves value from municipal ratepayers to private landowners - Spring discharge is greater issue than Middle D summer flows right now – artificial recharge may provide greater benefit for the cost → opportunity to investigate this further when flows are higher than Scenic Waterway flows

Municipal Water Conservation (strategy)	A strategy consisting of conservation tools already in use by cities under WMCPs to reduce/slow the need for access to GW rights and mitigation credits. Includes, but is not limited to: - waterwise landscaping, - rebates/incentives for efficiency plumbing and irrigation systems, - codes and standards requiring water-efficient landscapes, - incentive pricing for municipal water, - landscape and outdoor water restrictions – cities have restrictions currently in place, for example: 25% turf requirement for homes in Redmond, can only water on certain days in Bend. Does NOT include mandatory drought restrictions	- Required conservation measures in WMCP - Required analyses within WMCP – "is there anything else that will help save water?" - Decision Support System Model – identifies level of water savings from conservation programs and costs, evaluates packages of conservation measures to determine most efficient approach (used by Bend, Redmond, Prineville) - Capital cost – what is value of avoiding drilling a well/building a reservoir? - Focus on peak season water demands - Turf removal rebates – expensive, saves a lot of water, City of Bend moving forward with that - With more resources, these kinds of measures could be scaled to save more water - What cities are doing and process used for evaluation in cost-benefit context, not in context of compulsory actions - (example) during drought, watering restrictions – due to regional timing of GW movement, conservation measures should be in place at all times, no increased benefit of added drought restrictions - Already landscape and outdoor water restrictions in place in cities, NOT the same thing as mandatory drought restrictions
Enhanced Water Conservation Policy Support	State funding, technical support, and partnerships to enable cities to expand existing water conservation efforts and trainings	- Goal of COCO bill: build a regional water conservation ethos - Trainings available for certifying water operators as water conservation techs – not available in Oregon, at state level should be doing more for this (example from Nevada) - Community college/extension programs for the same type of trainings to build conservation expertise - Need trainings for water system operators too, shortage of new operators that needs to be addressed

Municipal Infrastructure (strategy)	A strategy consisting of 3 infrastructure tools that could extend existing municipal supplies: - construction of treated water storage reservoirs → potentially keep on table as option if Cities can't get WRs - recycled or reclaimed water projects - greywater and stormwater use Include tools and discussion of why they aren't chosen for implementation in the Plan	- Recycled/reclaimed water – City of Bend is currently developing an updated Facilities Plan for the Water Reclamation Facility (wastewater treatment plant), including examining options for effluent disposal/re-use. The treated effluent currently enters Hatfield Ponds where part evaporates and part infiltrates (recharge). The City also seasonally sells treated effluent to the Juniper Preserve (Pronghorn) golf course. Other options include discharging to the NUID canal which is adjacent to the plant or other onsite or offsite re-use. These are both complicated and expensive. Discharge to the NUID canal would require an entirely new and complex discharge permit from DEQ and likely different discharge limits. Re-use water provision for other sites would require costly piping and pumping. Both options may reduce the amount of water that recharges the aquifer. - City's wastewater infiltrates into aquifer after treatment, source of artificial recharge - Would cost millions of dollars to build infrastructure for reuse of reclaimed water, same amount of pumping would happen either way with no instream benefit provided through mitigation program – takes water that would already recharge GW to help reduce demand for GW pumping, zero sum game → more benefit to spend those millions on flow restoration - City has looked at purple pipe to pump treated wastewater back into town – not cost feasible - Construction of treated water storage reservoirs – concrete treated water structures; would build a reservoir if the City can't get a new water right to pump at a certain rate - Reservoirs more expensive than wells - Build structure to moderate timing of demand, but doesn't reduce demand/benefit the resource - These tools are not useful for thinking about water balance in the Basin – preference for drilling a new well and implementing flow restoration to generate mitigation credits to allow the pumping of that well

<u>Step. 2. Specify/Detail Positions and Interests</u>

Make sure we fully understand all stakeholder positions and their underlying interests as they relate to the Issue and the Tools. We can also propose potential resolution here ("based on your knowledge of other's interests"). Lots of "what?" questions then "why?" questions.

<u>Step. 3. Matrix everything and discuss options – drive towards resolution</u>

Organize all info in a table like the one below. Group meetings to discuss/vet proposed solutions.

Big Issue	**#3 – Preference between existing pathways to generate credits from permanent vs temporary transfers?**			
Question	**Does the group agree that the Mitigation Program should be extended?**			
Tool	**Access to Mitigation Credits – Existing Pathways**			
Stakeholder	**Positions on using this Tool – What?**	**Underlying Interests – Why?**	**Suggested Solutions – How together?**	**Notes**
PT Instream Members	- KP – key is having a permanent source of mitigation, whether or not it's permanent credits or long-term leasing; want mitigation program to be extended; must ensure that water right holders have access to mitigation credits into the future - JA – supports permanent transfers for credits to support city			
PT Municipal Members	- Needs to have permanent backing regardless of regulatory description of transfers vs leases - After Jan 2029 sunset, 5yr leases in place can't generate credits – need longer term extension of program			
PT Agriculture Members	- CH – would like to generate credits for cities to benefit from - CH – could take surface water from urbanization to create mitigation for cities (ex: Redmond 500 acres			- Conserved water not allowed to be used for mitigation - Also ~50 exempt wells on 500-acre development

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Tool	**Access to Mitigation Credits – Existing Pathways**			
	development); delivery problem because urbanization not equal on canals → permanent transfers on table in this situation, would want investment from cities - MB – concern for competition for that water, districts can't compete with cities for purchasing that water; may need a discussion at some point about limiting development if water not available			
Other PT participants (e.g. Chairs; State)	- PC – cities can be regulated from getting water rights, but any rural user can get an exempt well; concern that constraining rights for cities forces development out into rural residential			
Solution(s) Proposed by Group				

Tool	**Access to Mitigation Credits – Potential Future Pathways**			
Stakeholder	**Positions on using this Tool – What?**	**Underlying Interests – Why?**	**Suggested Solutions – How together?**	**Notes**
PT Instream Members				

Tool	Access to Mitigation Credits – Potential Future Pathways			
PT Municipal Members				
PT Agriculture Members				
Other PT participants (e.g. Chairs; State)				
Solution(s) Proposed by Group				

Tool	Access to Groundwater Rights			
Stakeholder	Positions on using this Tool – What?	Underlying Interests – Why?	Suggested Solutions – How together?	Notes
PT Instream Members				
PT Municipal Members				
PT Agriculture Members				
Other PT participants (e.g. Chairs; State)				
Solution(s) Proposed by Group				

Tool	Aquifer Recharge (in future when Upper D winter flows are in excess of HCP targets)			
Big Issue:	Can cities fund aquifer recharge to generate mitigation credits? Or just "recharge for recharge's sake"?			
Question:	Are there other issues with using winter flows to recharge aquifer?			
Stakeholder	Positions on using this Tool – What?	Underlying Interests – Why?	Suggested Solutions – How together?	Notes
PT Instream Members				
PT Municipal Members				
PT Agriculture Members				
Other PT participants (e.g. Chairs; State)				
Solution(s) Proposed by Group				

Expedited topics discussed at May 2nd and June 6th PT meetings:

Strategy	Municipal Water Conservation (includes various tools already in use)			
Stakeholder	**Positions on using this Tool – What?**	**Underlying Interests – Why?**	**Suggested Solutions – How together?**	**Notes**
PT Instream Members				
PT Municipal Members				
PT Agriculture Members				
Other PT participants (e.g. Chairs; State)				
Solution(s) Proposed by Group	6/6 notes: broad support from collaborative on the City's continued use of existing tools and cities' efforts to expand conservation tools, including detail on decision support tools used by cities for cost-benefit analysis. Clarify intent of "landscape and outdoor watering restrictions" tool – focus is on existing restrictions cities use, not on mandatory additional drought restrictions.			

Tool	Enhanced Water Conservation Policy Support			
Stakeholder	**Positions on using this Tool – What?**	**Underlying Interests – Why?**	**Suggested Solutions – How together?**	**Notes**
PT Instream Members				
PT Municipal Members				
PT Agriculture Members				
Other PT participants (e.g. Chairs; State)				
Solution(s) Proposed by Group				

Strategy	Municipal Infrastructure			
Stakeholder	**Positions on using this Tool – What?**	**Underlying Interests – Why?**	**Suggested Solutions – How together?**	**Notes**
PT Instream Members				
PT Municipal Members				
PT Agriculture Members				
Other PT participants (e.g. Chairs; State)				
Solution(s) Proposed by Group	6/6 notes: PT confirmed that we should exclude this set of tools from Chapter 5 implementation; provide a justification for why they don't make sense in this Basin to include in the Plan (figure out where the best location for this goes in document)			

Strategy	Municipal Infrastructure
	Comment from KP that treated water storage reservoirs should be considered to avoid a new GW right – but muni rep's clarified the cost burden of this strategy without changing the water balance/reducing the GW burden (benefit of this strategy would be to flatten daily fluctuations in summer demand, but would still result in the same amount of pumping for a significant cost)