

TO: File TR116409

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SUBJECT: Methodology for Identifying Potentially Feasible WMSs

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PROJECT: 2021 Region C Water Plan

Section 5.1 of the *First Amended General Guidelines for Fifth Cycle of Regional Water Plan Development* (Exhibit C, April 2017) provides guidance on Potentially Feasible Water Management Strategies (WMSs) by listing 24 types of WMSs that the RWP shall consider for all identified water needs. In addition, Potentially Feasible WMSs are governed by TCW Section 16.053 (e)(3) and 31 TAC Section 357.24(c).

This memo summarizes the method by which Region C consultants will identify Potentially Feasible Water Management Strategies. This methodology was presented to the Region C Water Planning Group on December 18, 2017 and was approved at the same meeting. This methodology is similar to methodology used in previous rounds.

1. Conservation for all municipal WUGs with needs – Per TWDB rules, conservation is required to be considered as a WMS for all WUGs with a need. It is anticipated that we will include recommended conservation strategies for most if not all municipal WUGs, as was done in the 2016 RCWP.
2. Conservation for non-municipal WUGs – Conservation will be considered for all non-municipal WUGs with a need. In the 2016 RCWP, conservation was included for irrigation and manufacturing WUGs. In this round of planning, the RCWPG will consider the degree to which conservation is embedded in demand projections in determining appropriate conservation strategies for non-municipal WUGs.
3. WMSs from previous Regional Plans – For each WUG/WWP, we will consider all WMSs that were included in the 2016 RCWP unless that WMS has been determined to be infeasible or unsupported by the WUG/WWP.
4. Contact with Water Providers – We will contact all WUGs/WWPs to get their input on what WMSs they want included in the plan.
 - a. Meetings were held with the large WWP in the spring of 2017 at which time they were asked about their WMSs. We will continue to discuss this with the WWPs throughout the planning process.
 - b. A survey of WUGs and smaller WWPs (not previously met with) was conducted in Nov 2017 that presented the WMSs from the 2016 plan and specifically asked if the water

supplier agreed with the WMSs and if not, it asked them to provide other WMSs that they are considering.

5. Seek Input from Region C Members – As the planning cycle progresses, all Region C members will be given opportunity to comment and/or provide input on the potentially feasible WMSs. These comments will be verified with the related water provider.
6. Accept Input from public - As the planning cycle progresses, the public will be given multiple opportunities to comment and/or provide input on the potentially feasible WMSs. These comments will be verified with the related water provider.
7. Sufficient Quantity of Supply – To be considered potentially feasible, a supply would need to provide a reasonable percentage of the need. This avoids having numerous WMSs that supply smaller percentages of the need. The exceptions to this would be: conservation, drought management, and ASR.

5.1 Potentially Feasible Water Management Strategies

As required by TWC §16.053(e)(3), and 31 TAC §357.34(c) the RWP shall consider, **but not be limited to considering**, the following types of water management strategies for all identified water needs:

1. conservation
2. drought management
3. reuse
4. management of existing water supplies
5. conjunctive use
6. acquisition of available existing water supplies
7. development of new water supplies
8. developing regional water supply facilities or providing regional management of water supply facilities
9. developing large-scale desalination facilities for seawater or brackish groundwater that serve local or regional brackish groundwater production zones identified and designated under TWC §16.060(b)(5)³⁴
10. developing large-scale desalination facilities for marine seawater that serve local or regional entities
11. voluntary transfer of water within the region using, but not limited to, contracts, water marketing, regional water banks, sales, leases, options, subordination agreements, and financing agreements
12. emergency transfer of water under TWC §11.139
13. interbasin transfers of surface water
14. system optimization
15. reallocation of reservoir storage to new uses
16. enhancements of yields
17. improvements to water quality
18. new surface water supply
19. new groundwater supply
20. brush control³⁵
21. precipitation enhancement
22. aquifer storage and recovery
23. cancellation of water rights
24. rainwater harvesting

The Technical Memorandum, IPP, and final adopted RWP shall include:

1. the documented process used by the RWPG to identify potentially feasible WMS; and,
2. the list of all identified WMSs that were considered potentially feasible for meeting a need in the region per 31 TAC §357.12(b). Potentially feasible WMSs shall include those listed

³⁴ Note that local or regional brackish groundwater production zones are only relevant to brackish groundwater sources, not seawater.

³⁵ See Section 5.2.2 for further guidance when evaluating brush control strategies.

Table E – Template for Presenting Water Management Strategies Considered and Evaluated

Every WUG Entity with an Identified Need		WMSs NAMED TO BE CONSIDERED BY STATUTE ¹											Additional WMSs named to be considered by Rule									
Water User Group Name	maximum need 2020-2070 (af/yr)_	conservation	drought management	reuse	management of existing supplies	development of large-scale marine seawater or brackish groundwater	conjunctive use	acquisition of available existing supplies	development of new supplies	development of regional water supply or regional management of water supply facilities	voluntary transfer of water (including regional water banks, sales, leases, options, subordination agreements, and financing agreements)	emergency transfer of water under Section 11.139	system optimization, reallocation of reservoir storage to new uses, contracts, water marketing, enhancement of yield, improvement of water quality	new surface water supply	new groundwater supply	brush control; precipitation enhancement	interbasin transfers of surface water	aquifer storage and recovery	cancellation of water rights	rainwater harvesting	other	other
City A	20,000	PF	nPF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	PF	nPF	nPF	nPF	nPF	nPF	nPF		
City B	5,500	PF	PF	PF	nPF	PF	nPF	PF	PF	nPF	PF	nPF	PF	nPF	PF	nPF	nPF	PF	nPF	nPF		

¹ Texas Water Code §16.053(e)(3)

nPF = considered but determined 'not potentially feasible' (may include WMSs that were initially identified as potentially feasible)

PF = considered 'potentially feasible' and therefore evaluated

(all pertinent information for WMS evaluations shall be presented in the regional water plan, including for WMSs considered potentially feasible but not recommended)