Supplemental Handout to the Regional *Water Planning in Texas, Introduction to the 5th Cycle* Presentation

1) Excerpt from the 2017 State Water Plan that explains "availability" vs. "existing supply"

"6.1 Evaluating water resources for planning[1]

Estimating how much water Texans will have to meet their water demands is a two-step process that examines both water *availability* and *existing supply*. Those two terms have very specific, and not necessarily intuitive, meanings in the water planning process.

Water availability refers to the maximum volume of raw water that could be withdrawn annually from each source (such as a reservoir or aquifer) during a repeat of the drought of record. Availability does not account for whether the supply is connected to or legally authorized for use by a specific water user group. Water availability is analyzed from the perspective of the source and answers the question: *How much water from this source could be delivered to water users as either an existing water supply or, in the future, as part of a water management strategy?* Determining water availability is the first step in assessing potential water supply volumes for a planning group.

Second, planning groups evaluate the subset of the water availability volume that *is already connected* to water user groups. This subset is defined as existing supply. Existing water supplies are based on legal access to the water as well as the infrastructure (such as pipelines and treatment plant capacity) already in place to treat and deliver the water to the "doorstep" of water user groups. Existing supply is analyzed from the perspective of water users and answers the question: *How much water supply could each water user group already rely on should there be a repeat of the drought of record?*

For example, the firm yield of a surface water reservoir may be 100,000 acre-feet per year. Of that 100,000 acre-feet per year in supplies available at the source, the current pipeline to that source could only convey 60,000 acre-feet per year to users as an existing supply. There remains, therefore, an additional 40,000 acre-feet per year in available water that could serve as the basis for a future water management strategy. Within a county, for another example, there may be a modeled available groundwater volume of 50,000 acre-feet per year, but because water users' current permits and pumping facilities are only able to pump 20,000 acre-feet per year for existing supplies, there remains 30,000 acre-feet per year in available groundwater that could support water management strategies.

Because existing supplies are a subset of the availability of water sources, existing supplies cannot exceed a source's availability without the risk of a water user running short of water in a drought of record. If existing supplies exceed availability it is called an over-allocation. To ensure that planning groups did not assign more water supply to a water source than the source could provide in a drought, the TWDB performed a detailed, statewide accounting of all assigned existing water supply volumes and notified planning groups of over-allocations. Planning groups then made adjustments to their draft plans so that supplies did not exceed the availability of any source in the final plans."

[1] Page 61 of the 2017 State Water Plan.

2) Potentially feasible WMSs required to be considered by planning groups, per Texas Water Code §16.053(e)(3) and 31 Texas Administrative Code §357.34(c) include

- conservation[2] *[perennial demand management]*;
- drought management[3] *[temporary demand management]*;
- reuse;
- management of existing water supplies;
- conjunctive use;
- acquisition of available existing water supplies;
- development of new water supplies;
- developing regional water supply facilities or providing regional management of water supply facilities;
- 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);
- developing large-scale desalination facilities for marine seawater that serve local or regional entities;
- 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;
- emergency transfer of water under TWC §11.139;
- interbasin transfers of surface water;
- system optimization;
- reallocation of reservoir storage to new uses;
- enhancements of yields;
- improvements to water quality;
- new surface water supply;
- new groundwater supply
- brush control;
- precipitation enhancement;
- aquifer storage and recovery;
- cancellation of water rights; and
- rainwater harvesting.

[2] RWPGs must consider water conservation practices, including potential applicable best management practices, for each identified water need (31 TAC §357.34(g)(2)). If RWPGs do not adopt a water conservation strategy to meet an identified need, they shall document the reason in the RWP (31 TAC §357.34(g)(2)(B)).
[3] RWPGs shall consider drought management measures for each identified need... If a RWPG does not adopt a drought management strategy for a need it must document the reason in the RWP (31 TAC §357.34(g)(1)).

3) General Document Cross-Reference Table from *Draft First Amended General Guidelines for Fifth Cycle of Regional Water Plan Development*

Regional Water Planning Contract Document References			2021 Regional Water Plan Chapter, Associated TAC Sections, and Content		
TWDB Contract Reimbursement Accounting Number ('CAS')	Exhibit A - Contract SOW Task	Exhibit C - General Guidelines for Regional Water Plan Development	**Regional Water Plan Chapter Number**	Primary TAC Section	General Content
TBD	1	1	**1**	§357.30	Description of the Regional Water Planning Area
1	2A	2	**2**	§357.31	Projected Non-Municipal Water Demands
2	2B			§357.31	Projected Population and Municipal Water Demands
TBD	3	3	**3**	§357.32	Water Supply Analysis
TBD	4A	4	**4**	§357.33	Identification of Water Needs
TBD	4C			contract	Technical Memorandum
TBD	4B	5	**5**	§357.34	Identification of Potentially Feasible Water Management Strategies (WMSs)
TBD	5A			§357.34; §357.35	Evaluations of Potentially Feasible WMSs, Recommended WMSs/WMSPs, and Alternative WMSs/WMSPs
TBD	5B			§357.34	Conservation Recommendations *[as an individual subchapter]*
TBD	6	6	**6**	§357.40	Impacts of Regional Water Plan
				§357.41	Consistency with Protection of Water Resources, Agricultural Resources, and Natural Resources
TBD	7	7	**7**	§357.42	Drought Response Information, Activities, and Recommendations
TBD	8	8	**8**	§357.43	Policy Recommendations & Unique Sites
TBD	9	9	**9**	§357.44	Infrastructure Financing Analysis
3	10	10	**10**	§357.21; §357.50	Public Participation and Plan Adoption
TBD	11	11	**11**	§357.45	Implementation and Comparison to the Previous Regional Water Plan
TBD	12	12	**N/A**	§357.46	RWPG Prioritization of Recommended Water Management Strategy Projects (WMSP)