

TO: PWPG
CC: Simone Kiel
FROM: Jeremy Rice
SUBJECT: Project Prioritization Assumptions
DATE: February 4, 2014
PROJECT: PPC11456

The TWDB as required by HB4 has developed a standardized spreadsheet for prioritizing projects in the 2012 State Water Plan. The following memo documents the assumptions that Freese and Nichols used in prioritizing the 79 water management strategies in the Panhandle Water Planning Area. This methodology is to be confirmed by the PWPG. Some questions require additional information from the project sponsors. These criteria will be completed with the PWPG input.

Uniform Standard 1A - What is the decade the RWP shows the project comes online? [2060 = 0 points; 2050 = 2; 2040 = 4; 2030 = 6; 2020 = 8; 2010 = 10]

- Assumed the first decade the supply is available is the online decade.

Uniform Standard 1B – In what decade is initial funding needed? [2060 = 0 points; 2050 = 2; 2040 = 4; 2030 = 6; 2020 = 8; 2010 = 10]

- Used the data responses from the IFR survey if available. In cases when the IFR survey indicated the strategy and funding is needed after the online date, the online date was used. This was for consistency with the RWP.
- If there was no IFR response, it was assumed the funding is needed the decade before the supply is online (supply online in 2050, funding is needed in 2040). If the project capital cost is greater than \$100 million then the funding is needed two decades before the supply is online (supply online in 2050, funding is needed in 2030).

Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; Field tests and measurements confirm sufficient quantities of water = 5]

- Assumed municipal conservation and precipitation enhancement are zero since no modeling was performed.
- Remaining strategies were set to 3 since modeling was performed for groundwater and surface water supplies.
- Individual strategies with field testing need to be verified on a case by case basis.
- **Require PWPG input.**

Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5]

- **Require PWPG input.**

Uniform Standard 2C - What level of engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10]

- **Require PWPG input.**

Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5]

- If the project sponsor replied to the survey and either confirmed the 2011 strategy or did not indicate a change in the 2011 strategy, then it is assumed that the strategy is still required in the 2016 state water plan
- **Require PWPG input.**

Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGs') needs satisfied by this project? [0-100%]

- Calculated the % need for the first decade by dividing the supply in the first decade online by the need in the first decade the supply is online. In instances where the need was zero in the first decade online it was assumed that the strategy met 100% of the need.

Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGs') needs satisfied by this project? [0-100%]

- Calculated the % need for the final decade by dividing the supply in the final decade by the need in the final decade. In instances where the need was zero it was assumed that the strategy met 100% of the need.

Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5]

- **Require PWPG input.**

Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5]

- Assumed that if the strategy supplies multiple WUGs then yes, if not then no.

Uniform Standard 4A – Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10]

- Assumed that each decade there is a supply amount the supply was available for 10 years. If the number of decades was greater than 2 the supply was online for greater than 20 years.

Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5]

- Assumed that if the supply in the first decade is the same as the supply in the last decade, then the supply remains the same and is assigned 3 points. If the supply in the first decade is greater than the supply in the last decade, then the supply decreases and is assigned 0 points. If the supply in the first decade is less than the supply in the last decade, then the supply increases and is assigned 5 points.

Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5]

- Calculated the unit cost in the first decade online in \$/acre-foot. Then calculated the median unit first decade cost of all of the strategies. The unit cost of each individual strategy was divided by the median unit cost of all strategies for the region to assess the relative cost.

Strategy Grouping (Rollup)

- **Require PWPG input.**
- Based on the purpose of HB4 and guidance provided by TWDB, any project grouping will be done based on funding relationship. Just because projects have supply relationships does not roll them together. This means that most of the supply lines will remain separate entries and be scored individually.
- WWP to WUG contracts, Conservation, and other WUG-centric infrastructure strategies will be listed at the WUG level as that is the true level of implementation and finance. Exceptions will only occur if there is a direct funding tie-in with another strategy.
- Phased infrastructure projects will remain as separate line items as they will be implemented and funded in different timesteps, even if they are part of an overarching longer-term strategy.
- The items above only refer to a process of complete strategy rollup, for which lines rolled together will receive identical scores for all criteria.
- All rollups will be discussed with the PWPG.