

# PROCESS FOR IDENTIFYING AND SELECTING POTENTIALLY FEASIBLE WATER -MANAGEMENT STRATEGIES TO BE EVALUATED FOR THE 2021 PLATEAU REGION WATER PLAN

## Strategy Types

As required by TWC §16.053(e)(3), and 31 TAC §357.34(c) the RWPGs 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 control
21. Precipitation enhancement
22. Aquifer storage and recovery
23. Cancellation of water rights
24. Rainwater harvesting

## Needs Analysis

Receive a Needs Analysis Report from the TWDB, which provides a comparison of existing water supplies and projected water demands for each water user group (WUG) and wholesale water provider (WWP) in the region. Based on this comparison, the report identifies WUGs and WWPs that are expected to experience needs for additional water supplies within the 50-year time frame of the regional water plan.

## Identification and Selection Process

1. Review and consider recommended water management strategies adopted by the water planning group for the 2016 Plateau Region Water Plan.
2. Review and consider any issues identified in the most current TWDB Water Loss Audit Report, including leak detection and supply side analysis.
3. Solicit current water planning information, including specific water management strategies of interest from WUGs and WWP with identified needs.
4. Review and consider the most recent Water Supply Management, Water Conservation, and/or Drought Contingency Plans, where available, from WUGs and WWP with identified needs.
5. Consider potentially feasible water management strategies that may include, but are not limited to (*Chapter 357 Subchapter C §357.34*):
  - Extended use of existing supplies including:
    - a. System optimization and conjunctive use of water resources
    - b. Reallocation of reservoir storage to new uses
    - c. Voluntary redistribution of water resources including contracts, water marketing, regional water banks, sales, leases, options, subordination agreements, and financing agreements
    - d. Subordination of existing water rights through voluntary agreements
    - e. Enhancement of yields of existing sources
    - f. Improvement of water quality including control of naturally occurring chlorides
  - New supply development including:
    - a. Construction and improvement of surface water and groundwater resources
    - b. Brush control
    - c. Precipitation enhancement
    - d. Desalination
    - e. Water supply that could be made available by cancellation of water rights
    - f. Rainwater harvesting
    - g. Aquifer storage and recovery
  - Conservation and drought management measures including demand management
  - Reuse of wastewater
  - Interbasin transfers of surface water
  - Emergency transfers of surface water
6. Consider other potentially feasible water management strategies suggested by planning group members, stakeholders, and the public.
7. Based on the above reviews and considerations, establish a preliminary list of potentially feasible water management strategies. At a discussion level, consider the following feasibility concerns for each strategy:
  - Water supply source availability during drought-of-record conditions
  - Cost/benefit
  - Water quality
  - Threats to agriculture and natural resources
  - Impacts to the environment, other water resources, and basin transfers
  - Socio-economic impacts
8. Based on the above discussion level analysis, select a final list of potentially feasible water management strategies for further technical evaluation using detailed analysis criteria.