



Agenda Report

Agenda of: June 10, 2025

Department: Administration

Subject: Discussion and possible action regarding the reservation of water rights with the Nueces River Authority.

Recommended Motion: I move to authorize staff to reserve _____ gallons of water per day with the Nueces River Authority Desalination project at an estimated cost of _____.

.5 MGD/day = **\$13,688.16** ; 1 MGD/day = **\$27,376.32**

Background: The Nueces River Authority (NRA), a legislatively authorized regional water agency, has initiated planning for a large-scale seawater desalination plant located on Harbor Island. This regional project is designed to increase long-term water supply resilience in response to prolonged drought conditions and dwindling surface water resources in South Texas. Currently, Lake Corpus Christi and Choke Canyon Reservoir are only 20.8% and 14.5% full respectively, with a combined total of just 16.3% capacity.

In alignment with the Texas Water Plan's regional approach to water security, the NRA project will provide up to 100 million gallons per day (MGD) of desalinated water, which can be reserved by regional cities, water districts, and industry users for future delivery.

Purpose of Item

The purpose of this item is to consider the City of Castroville's participation in the project through the reservation of future water capacity. This reservation does not require immediate use or pipeline construction but secures a designated volume of water at the project's current pricing for future planning and integration.

Staff Recommendation

Staff recommends participation in the capacity reservation phase of the project for the following reasons:

- **Future Security:** Castroville currently relies on a finite water supply. With continued population growth and regional development, diversifying sources is a prudent long-term strategy.
 - **Low-Risk Entry:** The reservation process only commits the City to securing capacity—it does not bind the City to construction or delivery timelines at this stage.
 - **Regional Leverage:** Early participation provides Castroville a voice in the regional planning effort and preserves its access to a major water supply source.
 - **Economic Planning:** Future water access can support economic development goals and industrial growth while insulating the City from unpredictable water availability and pricing.
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Project Development & Timeline

- The plant is expected to be developed over the next 12–18 months.
- A final pipeline plan to deliver water to participating entities will be refined during this period.
- Each participant’s long-term infrastructure decisions will be based on those design and cost details, which will follow this initial reservation step.

Fiscal Impact: The immediate reservation fee is \$24.44 per acre-foot (equivalent to \$27,376.32 per MGD/day reserved). The initial future take-or-pay per 1,000 gallon cost is estimated at \$12.52

☐ Budgeted ☐ Requires Budget Amendment

Source of Funding:

Attachments: Nueces River Authority Desalination Project Presentation

Urgency (0-5 = Low Urgency to High Urgency): 5

Impact (0-5 = Low Impact to High Impact): 4

Submitted by: R. Scott Dixon