

O.N. STEVENS WATER TREATMENT PLANT WEIR IMPROVEMENTS – BASINS 3 & 4

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BACKGROUND



The O.N. Stevens Water Treatment Plant (ONSWTP) treats a blend of surface waters from the Western Reservoirs (Choke Canyon & Lake Corpus Christi via the Nueces River) and from the Eastern Supply (Lake Texana & Colorado River via the Mary Rhodes Pipeline)

ONSWTP has two separate treatment systems:

- Plant 1 (using Basins 1 & 2, a 4 MG Clearwell 1)
- Plant 2 (using Basins 3 & 4, a 10 MG Clearwell 2)
- Note: Clearwell 3 is expected to come online in January 2026

BACKGROUND

Plant 2 has operational challenges in secondary Basins 3 and 4 due to their finger-style weirs. Weirs help control water flow and separate solids.

- Weirs in Basins 3 and 4 extend too far, causing uneven flow distribution, potential short-circuiting (especially on windy days), and problems like solids carry-over and caustic deposits



PROJECT GOAL AND SCOPE



The primary goal of this project is to upgrade Plant 2's weirs to enhance hydraulic performance and settling efficiency.

- Scope of services for this proposal include design, bid, and construction phase services for Basins 3 and 4
- Scope also includes evaluation of the existing straight weirs in Plant 1's secondary basins, which are deteriorated and need replacement
 - A rehabilitation or replacement recommendation for Plant 1 will be developed during the preliminary phase

PROJECT TIMELINE

2025		2026												2027				
N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
Design Services																		

Project schedule reflects City Council award in November 2025 with anticipated construction completion by December 2028.

STAFF RECOMMENDATION

City Staff recommends approval of the professional services contract with Ardurra Group, Inc. in an amount not to exceed \$1,433,817.00 for the ONSWTP Weir Improvements – Basins 3 & 4 Project with an estimated design completion by November 2027. The fiscal impact for Corpus Christi Water in FY 2026 is an amount of \$700,000.00, with future funding being available in FY 2027 in an amount of \$733,817.00 with funding available from the Water Capital Fund.

