



City of Corpus Christi

1201 Leopard Street
Corpus Christi, TX 78401
cctexas.com

Meeting Minutes

City Council Workshop Session

Monday, April 26, 2021

8:00 AM

Texas State Aquarium
2710 N. Shoreline Boulevard
Flint Hills Resources (FHS) STEM Center Room

A. Mayor Paulette M. Guajardo to call the meeting to order.

Mayor Guajardo called the meeting to order at 8:09 a.m.

B. City Secretary Rebecca L. Huerta to call the roll of the required Charter Officers.

City Secretary Rebecca L. Huerta called the roll and verified that a quorum of the City Council and the required Charter Officers were present to conduct the meeting.

Charter Officers:

City Manager Peter Zanoni, City Attorney Miles K. Risley and City Secretary Rebecca L. Huerta.

Present 9 - Mayor Paulette M. Guajardo, Council Member Roland Barrera, Council Member Gil Hernandez, Council Member Michael Hunter, Council Member Billy Lerma, Council Member John Martinez, Council Member Ben Molina, Council Member Mike Pusley and Council Member Greg Smith

C. BRIEFINGS TO CITY COUNCIL:

1. [21-0196](#) City Council Seawater Desalination Workshop

Strategic Communications Manager Amber Oetting facilitated the meeting and reviewed meeting agenda.

Jason Cocklin, Project Manager and Environmental Engineer with Freese & Nichols and Water Resource Manager Esteban Ramos presented information on the following topics: the timeline shows efforts that this project is feasible: 1) environmentally sustainable; 2) affordability; and 3) operational longevity; time and money invested; potential candidate preferred; site selection strategy; matrixes and criteria; all sites considered; Inner Harbor Ship Channel; La Quinta and Harbor Island; and twenty-one sites - breakdown of selection criteria.

Council Members, Mr. Cocklin, Mr. Ramos, City Manager Peter Zanoni, and Director of Water Utilities Kevin Norton discussed the following topics: a Council Member's concern whether the citizens of Corpus Christi had any input on choosing the site; a survey was not sent out to Corpus Christi residents, but there was community outreach; the decisions made by City Council included public comment; original stakeholders were City Council, staff, Port of Corpus Christi, Port Industries and San Patricio Municipal Water District; the

Cities of Beeville and Alice buy water from Corpus Christi, so it's important to begin with the Inner Harbor; a Council Member is opposed to the Inner Harbor location because of the environmental impact that desalination will have on oysters; San Patricio County needs to share the groundwater study with Corpus Christi; CC Polymers has excess water available for Corpus Christi, but it's not approved for drinking; as the regional water supplier, the City of Corpus Christi has all of the customers in the region; private industries are not part of the Region N plan; the water is on the acidic side so it has to be blended and stabilized from the O.N. Stevens plant; the project will be at or below the trigger point of 75% that the City Council approved around 2023-2024; and both sites will benefit the regional water supply growth.

Jorge Arroyo, Professional Engineer with Freese & Nichols and Director of Water Utilities Kevin Norton presented information on the following topics: site selection goal-Economics & Environment; site selection: strategy; merit of candidate sites; the goal is to have two desalination plants, one in San Patricio County and one in Nueces County; and La Quinta and Inner Harbor sites both have potential, but overall Inner Harbor is the better choice.

Council Members, Mr. Arroyo, Director Norton, President and Co-founder of Water Globe Consultants Nikolay Voutchkov and Mr. Cocklin discussed the following topics: the Inner Harbor will be built with 20 Million Gallons per Day (MGD) capacity, but is expandable to 30 MGD; the discharge at Harbor Island seems to have direct access to the ship channel; the permit for the Inner Harbor allows for production of 30 MGD potable water and La Quinta is 20 to 40 MGD; a Council Member's concern that limiting the expansion size could affect future growth for the entire region; arsenic and lead contamination in the Bay are an issue; and Council Members' concerns about not having a detailed report.

Panel and open discussion: Council Members, Jason Cocklin, Project Manager and Environmental Engineer with Freese & Nichols, Water Resource Manager Esteban Ramos, Procurement and Contract Expert of WSP Neil Callahan, Jorge Arroyo, Professional Engineer with Freese & Nichols, Coastal Environmental Scientist Dave Buzan, and President and Co-founder of Water Globe Consultants Nikolay Voutchkov discussed the following topics: the limitation on the discharges is the reason for having two different sites, a single "mega-site" would require more expensive infrastructure; desalination technology is still improving; discharge volume is limited which could increase production capacity in the future based on environmental impact; staff looked at the option that was best for the demand in the region; desalination offers the region the opportunity to bring on drought proof supply; the Port of Corpus Christi proposed five or six potential sites; the Carlsbad, CA desal plant intake is near the lagoon connected to the ocean; Carlsbad plant has an open ocean discharge of 50 MGD versus Corpus Christi's limited discharge location; a Council Member's concern of taking the brine further out from the beach and the Bay; oysters on the Texas coast prefer a range of salinity from 10 to 30 parts per thousand; seawater is about 35 parts per thousand; the normal range is 20 to 30 parts per thousand for oysters; the discharge will only allow the salinity to increase by 2 parts per thousand; TCEQ will not issue a permit that will allow a

big difference in salinity; the downfalls of building in the Inner Harbor are same downfalls as anywhere else; the main disadvantage of the Inner Harbor is being a dead-end channel and a lack of ventilation; cost of water is only an estimate of \$3 to \$4 per thousand gallons; the lower salinity of water always yields lower costs; 60% discharge versus 40% production is the overall recovery rate; the estimated cost of water generated from Inner Harbor project would be less than that from Mary Rhodes Pipeline Phase II; in response to a Council Member's inquiry about out-sourcing desal, Mr. Voutchkov said, current industry trends favor short-term contracts (5-7 years) during which the private sector manages plant while public sector learns the operation in preparation to take over when the contract ends; a Council Member's concern about the City being in the desalination plant business; TCEQ establishes maximum limits of how much can be discharged; a recommendation to use a skilled and experienced private sector for the first five to seven years; and the City of Corpus Christi has been treating water for over 100 years.

Texas Water Development Board: Director of Finance Heather Hurlbert and Jorge Arroyo, Professional Engineer with Freese & Nichols presented information on the following topics: the nitty gritty of SWIFT II; City's timeline; project due diligence; and the City has been approved through the SWIFT program for \$222.4 million for the design, engineering, permits and construction of a potential desalination plant.

Council Members, Director Hurlbert, City Manager Peter Zaroni, Mr. Arroyo, Director Norton, and Water Resource Manager Ramos discussed the following topics: staff's request for an extension of the August 2021 deadline; the drought surcharge will produce about \$5.8 million annually; the project is eligible to receive state funding once it is included in the regional water plant; there is a minimal rate impact for the desalination; there is a separate water fund and a separate waste water fund; and the extension in August 2021 will not obligate us to the financial commitment until August 2022.

What if? Possible Alternatives: Water Resource Manager Esteban Ramos and Environmental Engineer Maria Corona presented information on the following topics: Option A - desalination; Option B -groundwater; Evangeline - groundwater; Dimmit Utility WSC - groundwater; Option C - water reuse; Option D - Aquifer Storage and Recovery; in summary; helpful documents; and 2021 goals for seawater desalination.

Council Members, Water Resource Manager Ramos, Environmental Engineer Corona, Water Globe Consultants Nikolay Voutchkov, and WSP Procurement and Contract Expert Neil Callahan discussed the following topics: groundwater is a difficult alternative because it involves individual groundwater conservation districts with individual boards to get permits from; chloride is customer based and could affect the taste of water; groundwater would be take or pay contracts; the drought surcharge could not be used for take or pay contracts; there is no pricing included for Dimmit Utility because they did not provide any background information to verify that the cost is less than \$3 per thousand gallons; the ultimate capacity is 30 MGD for Inner Harbor and 40 MGD for La Quinta; permit requirements have volume limitations, but not salinity limitations; a Council's

Member's request for an environmental evaluation on Inner Harbor and La Quinta; a Council Member's request for a Request for Proposal (RFP) on other options, as opposed to just a Request for Information (RFI); Mary Rhodes pipeline is producing about 43 MGD, so in order to increase capacity by 30 MGD, an upgrade of tanks, new pumps and electrical costs would be needed and could cost up to \$20 million; and the La Quinta site is a better location than the Inner Harbor in terms of environmental impact and capacity.

D. ADJOURNMENT

The meeting was adjourned at 12:23 p.m.