Good Morning. My name is Errol Summerlin. I am a resident of Portland and a co-founder of CAPE, the Coastal Alliance to Protect our Environment.

I mention I am a resident of Portland because I am a consumer of water that is allocated to San Patricio County by the City of Corpus Christi, as are many residential users residing in the 7 counties that the City purports to manage for us. As such, I and many others who are not residents of Corpus Christi, have a vested interest in what the City does with our water supply. Yet, our voices are suppressed and our concerns dismissed by City leaders. They profess to have the responsibility of providing water to 500,000 residents but they relegate those 500,000 residents to what I call *second tier users* while they search for water for industry, their *first tier users*.

We know from numerous comments and actions made and taken by City leaders over the past 5 years, the fixation on desalination as a reliable source of water for the future is being driven by the many heavy industries waiting to locate or expand in Nueces, San Patricio, and Kleberg Counties. At a workshop in 2021 one councilman stated emphatically "the next time another Exxon calls, we want to be able to pick up the phone and tell them we have their water". In a formal briefing to the City Council by Port Commissioner Engel, the City's appointee to the Port Commission, Mr. Engle spoke of the many industries wanting to come here and stated "I hope the TCEQ grants all four Permits" under review. In another briefing he was even more clear when

he stated “the only way to stop them is to turn off the water”. Well, we take that to heart, Mr. Engel.

The passage of the Ordinance allowing industries to pay a nominal fee to be exempt from Stages 1, 2, and 3 of drought restrictions is another example of preference given to these *tier one users*. They have paid in $14 million to be applied to the costs of baywater desalination, which is a drop in the bucket when you look at what desalination will cost.

There is unanimity among the CAPE alliance that industry should not be given *tier one* preference and that future water supplies should not be centered on the heavy industries seeking to locate here. In no way should this report on the costs associated with the alternative water supplies be considered an endorsement of those supplies being allocated to future industrial development.

There is also unanimity among the CAPE alliance that desalination facilities located on Corpus Christi Bay is a disaster in the making and will not be supported in any manner. We do not engage in the selection of the lesser of the evils. That’s what the City and the Port are thoroughly engaged in. We don’t want a single one built anywhere in the bay system!

The study was commissioned because neither the City or the Port have provided one iota of information on the long term costs of these facilities. They simply will not provide any operational costs saying they don’t know who will operate them,

those costs are too speculative, the cost of power fluctuates, and a host of other reasons why they can't tell the public what those costs are.

At the same time, they dismiss any negative social or environmental impacts to the area, preferring to take the position that *all will be well in the bay*, that diffusers will take care of salinity and disregard studies by the Harte Research Institute and Dr. Montagna about the perils of taking such action in the bay.

The City is only now looking at alternatives such as groundwater, wastewater reuse, reclamation and storage, and other alternatives. It is only during drought they urge conservation and they do so with no incentives, only penalties; you want a rain barrel to capture rain water, you have to buy it; Why is that? Why has conservation been a low priority? As one Councilman stated, conservation is a two-edged sword. If residential or commercial users conserve too much, it reduces revenue to the city for maintenance, which then results in raising the rates to those users. What a conundrum.

No doubt the staff's "business model" would agree with that statement. But, conservation works; and the City's own conservation plan has stated that a 1% reduction in use through conservation would satisfy the needs of a growing population for the next 50 years, through 2070, when the increase in population would be approximately 129,000 for the entire 11 counties encompassing Region N, an increase of only .6%.

Conservation works and, in normal circumstances, we need not look at these alternatives. However, as long as this State and particularly our local leaders support the fossil fuel industry growth and the concomitant increase in GHG emissions up and down the supply chain, we have to prepare for the increasing threats of climate change and increasing frequency of drought conditions. Accordingly, we wanted to include in the study groundwater and another long-term alternative, floating solar in this cost analysis.

The study has its limitations due to the funds we had available. That brings me to another important point about the impacts monetized in this Report. While the City and Port refuse to acknowledge any negative impacts from their proposed desalination facilities, this Report does quantify a limited number of negative externalities that can be readily quantified or monetized. But, there are so many externalities that are not addressed due to funding constraints. The Report looked at the economic loss of a limited number of aquatic species. As noted in the Report, there are a number of other aquatic species that were not included but which will be impacted. Due to those same limitations, the impacts to tourism and recreational fishing and associated recreational economies that will be impacted were not included.

Similarly, and most important, the impacts to public health that will be exacerbated by directing desalination to enhance industrial growth is not quantified. As we were informed by

Autocase, those externalities can be measured and are looked at in many areas of the country; but it requires a more deliberate and detailed study to quantify. Closer to home however, how do you monetize the fact that residents living near Refinery Row have a life expectancy of 70 compared to residents 10 miles away that have a life expectancy of 85. How to you quantify the loss of 15 years of one's life?

The Report shows us that, if the City really cared about its residents and the potential impacts of their path toward desalination, they could have looked at them instead of ignoring them and spending an approximate $11 million on buying land and design and engineering services to build these facilities in a vacuum.

The City and Port of Corpus Christi have been irresponsible in not doing this kind of research themselves. Given they refuse to be open, transparent, and myopic in their approach, we took it upon ourselves to look at the true costs of their folly.

The study assumes that these facilities will operate at optimum efficiency during the life of the facility, 30 years. But, we know from the experiences at Carlsbad in California and Tampa Bay that the desalination facility does not provide optimum yield 100% of the time. For example at the Carlsbad facility, during one quarter of 2020, the yield was 45% of optimum. The year as a whole showed a much lower yield than designed for.

Those facilities have shown they do not consistently produce the desired yield and neither will the City's or the Port's.

On the floating solar concept, it is a novel approach that we decided was worthy of additional study. It reduces evaporation rates to the desired 30 MGD but only at the scale of covering much of Choke Canyon. We know that is not feasible but such a project is scalable and it is the only alternative that literally pays for itself regardless of its size. A combination of a smaller scale floating solar farm, conservation and groundwater should be seriously considered before embarking on desalination that, as the study indicates, will cost well over a billion dollars.