



AGENDA MEMORANDUM

Future Item for the City Council Meeting of June 10, 2014
Action Item for the City Council Meeting of June 24, 2014

DATE: May 28, 2014

TO: Ronald L. Olson, City Manager

THRU: Gustavo Gonzalez, P.E., ACM for Public Works and Utilities

FROM: William J. Green, P.E., Interim Director, Environmental & Strategic Initiatives (billg@cctexas.com)
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Resolution regarding the City of Corpus Christi Water Management Plan 2015-2050

CAPTION:

Resolution of the City of Corpus Christi, Texas regarding the City's Water Management Plan 2015-2050

PURPOSE:

To secure by resolution, City Council policy and direction to city staff on the City of Corpus Christi Water Management Plan 2015-2050.

BACKGROUND AND FINDINGS:

Staff presented the Water Management Plan 2015-2050 to the City Council on May 20, 2014. This presentation was a brief outline of the elements which reflects city staff understanding of the path forward in water supply strategic policy.

For over one hundred years, the City of Corpus Christi has been the water supplier for the coastal bay region extending from the City of Rockport south to the City of Kingsville. During this period, the region has grown into a very distinct and diverse customer class to include industrial, commercial, residential, wholesale and WCI districts with separate governing boards, general managers and a variation of contract terms.

As such, the region is at a defining moment in its ability to improve the reliability of water supply. Currently the system is solely dependent on surface water. Based on the Corpus Christi Water Supply model, the safe yield of the system is approximately 205,000 ac-ft. Adding the Garwood water to the system increases the safe yield to approximately 240,000 ac-ft. This leaves 75,000 ac-ft in the reservoir or six months of water. Currently the annual average demand is approximately 125,000 ac-ft, and the difference between safe yield and demand is the theoretical surplus.

The City of Corpus Christi Water Management Plan 2015-2050 will integrate water management strategies of surface, reuse, conservation, aquifer storage and recovery, and industrial / municipal desalination water to sustain the economic prosperity of the Coastal Bend Region. Planning is underway to commit to the construction of industrial desalination facility in 2016.

The conceptual plan compliments the Coastal Bend Regional Water Planning Group N for specific water management strategies. It identified least expensive water management strategies such as conservation as well as more expensive supplies such as water reuse and brackish or saltwater desalination. It has been determined that groundwater supplies are currently untenable, given the regulatory constraints at the state and conservation districts level.

Strategic elements of the Water Management Plan 2015-2050 include:

- A. Implementing conservation program focusing on best management practices for reduction of demand;
- B. Targeting the development of drought-resistant water reuse supplies;
- C. Developing local and regional industry desalination water supplies;
- D. Working towards improved environmental flows regime; and
- E. Adding new water every 5 to 10 years in a minimum of 20,000 acre-foot increments (with the exception of desalination supply).

Ongoing and future tasks to develop these supplies include:

- A. Implementation of water conservation strategic initiatives program to extend supply and reduce demand;
- B. Amending the Unified Development Code for residential landscaping using drought tolerant criteria;
- C. Implementing distribution system line loss and leak detection program;
- D. Evaluation of a wastewater treatment plant consolidation plan to produce 15,900 acre-foot supply for industrial reuse within 5 years;
- E. Completion of the Water Supply Strategic Plan;
- F. Plan for the commencement of an industrial desalination facility construction in early 2016;
- G. Completion of Phase II and III of the Variable Salinity Desalination Pilot Project; and,
- H. Conducting financial analysis and planning to lessen utility rate spikes.

While there are several initiatives ongoing, the pinnacle of the program is completion of the Water Supply Strategic plan to be completed by an outside firm. Once the plan is completed and adopted by City Council, city staff will implement in a deliberate and phased manner to insure a reliable, diverse and sustainable water supply for the Coastal Bend Region.

ALTERNATIVES:

1. Approve the resolution as proposed which provides policy direction for the City of Corpus Christi Water Management Plan 2015-2050.
2. Modify the resolution as necessary.
3. Not approve the resolution (**NOT RECOMMENDED**).

OTHER CONSIDERATIONS:

Not applicable

CONFORMITY TO CITY POLICY:

This resolution conforms to the Coastal Bend Regional Planning Group N recommended strategies.

DEPARTMENTAL CLEARANCES:

Environmental & Strategic Initiatives Department

FINANCIAL IMPACT:

Operating Revenue Capital Not applicable

Fiscal Year: 2013-2014	Project to Date Expenditures (CIP only)	Current Year	Future Years	TOTALS
Line Item Budget				
Encumbered/ Expended Amount				
This item				
BALANCE				

Comments: Future Water Supply Reserve Fund expenditures are anticipated to support respective water source strategy elements. Amendments to water supply utility rate and Water Supply CIP anticipated in future out-year implementation.

RECOMMENDATION:

Approval of the Resolution as proposed.

LIST OF SUPPORTING DOCUMENTS:

Resolution
Supply & Demand Chart