

# City of Corpus Christi Variable Salinity Desalination Project



Council Presentation April 22, 2014



### Variable Salinity Desalination Project



- Project Goals and Objectives
  - Feasibility and cost estimate for desalination in region
  - Testing of emerging technologies
  - Determine basis for design of full scale facility
  - Be prepared to start full scale facility

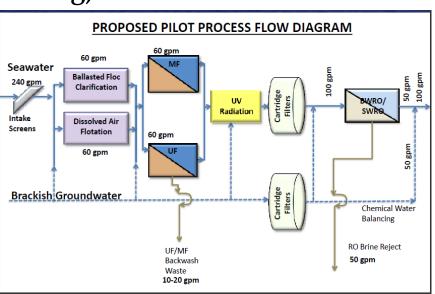


### Variable Salinity Desalination Project



#### **Overview**

- Original Contract COMPLETE
  - USBR Grant Application \$400,000 Awarded
- Amendment No. 1 (This Item)
  - Variable Salinity Desalination (VSD) Perspective and Research
  - Groundwater assessment
  - Demonstration Plant Site Selection
- Future Works (Partial USBR Grant Funding)
  - VSD Protocol Development
  - Demonstration Plant Operation
  - Technology Testing and Data Collection
  - CCEDC Memorandum of Understanding





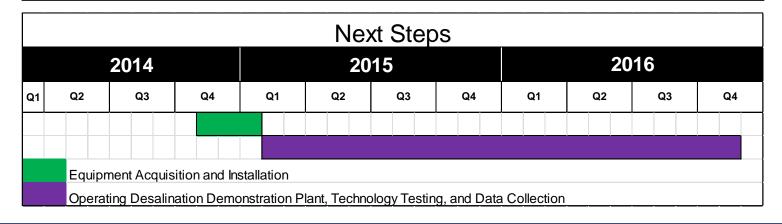
#### Program Schedule





#### **Current Contract Estimate:** <u>180</u> Calendar Days ≈ 6 Months

Projected Schedule reflects City Council award in <u>May 2014</u> with anticipated completion in <u>October 2014</u>.





## Variable Salinity Desalination Project



#### Program Budget

FUNDING REQUIREMENTS			
Water Operating		\$	101,932
Raw Water Supply Development Fund FY 2014		\$	1,080,735
*Raw Water Supply Development Fund FY 2015		\$	1,372,700
Bureau of Reclamation Grant		\$	400,000
TOTAL FUNDING REQUIREMENTS		\$	2,955,367
PROJECT REQUIREMENTS			
Original Contract: Pilot Study Grant Application			
**Engineer (Freese and Nichols, Inc.)		\$	49,348
***Engineer (INTERA, Inc.)		\$	49,500
Reimbursements		\$	3,084
TOTAL		\$	101,932
Amendment No.1: Plant Siting and Variable Salinity Testing Protocol		_	
Amendment No. 1 (Freese and Nichols, Inc.)		\$	966,699
TM-1 Desalination Technology Research			
TM-2 Plant Siting Analysis	224,709		
TM-3 Plant Technical Criteria (Program Development)	194,073		
TM-4 Study Protocol (TCEQ Permit Criteria)	120,292		
Communications & Outreach and Funding Applications	157,375		
Groundwater (Site Specific Evaluation)	90,000		
Reimbursements		\$	65,386
TOTAL		\$	1,032,085
Future Work: Variable Salinity Data Collection and Technology Testing (Estimate)		\$	1,772,700
TOTAL PROJECT EXPENDITURES		\$	2,906,717
PROJECT BUDGET BALANCE		-	48,650
*Future funding in the amount of \$1,372,700 will be required for future works of this project. This funding may			
be secured by a future request through the Raw Water Supply Development Fund and/or by a future grant.			
If the City receives a grant, less money will be needed.			
**Contract administratively approved on 6/25/13			
***Contract administratively approved on 6/26/13			
This assumes the Demonstration Project is constructed on City owned Land.			