NUECES DELTA INFLOW
STRATEGIES

May 1, 2017

Texas Water Development Board

AmaTerra
ENVIRONMENTAL, INC.

AND
FREES
NICHOLS

Alan Plummer Assoc.
GOAL

FIND WAYS TO ADD WATER TO THE NUECES DELTA
INTERVIEWS

K. ALEXANDER
R. ALLEN
J. DODSON
K. DUNTON
L. J. FRANCIS
R. FREUND
B. HODGES
INTERVIEWS

P. MONTAGÑA
B. MOULTON
S. RAMOS
C. SHOCKLEY
T. SMITH
J. TUNNELL
G. WARD
NUECES RIVER TIDAL/NUECES BAY ADDITIONS TO DELTA
MODIFY PUMPING REGIME
<table>
<thead>
<tr>
<th>Source location</th>
<th>Amount</th>
<th>Frequency and season</th>
<th>Location added</th>
<th>Cost to obtain</th>
<th>Cost to add</th>
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<td>Impacts of taking water</td>
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<td>Impacts of adding water</td>
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<td>Permits required</td>
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<td>Time to implement</td>
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FOR MAP QUESTIONS:

• New interactive map (ESRI story map) for Nueces freshwater inflow strategies created at

  • [http://arcg.is/2pjv4zZ](http://arcg.is/2pjv4zZ)

• All maps are screenshots from the interactive map.

• For map edits and questions please contact: eto@apaieenv.com
Hondo Creek Realignment

Potential Replumb Path
San Patricio
Hondo Creek
Gascon Bayou Diversion
Calallen
Calallen Pool
BRACKISH SEEPAGE ABOVE CALLALEN DAM
OFF-CHANNEL RESERVOIR AND/OR AQUIFER STORAGE
PLACE INFLATABLE DAMS IN NUECES RIVER TIDAL AND LOWER LEVEES
CONSERVATION MEASURES
Municipal Return Flows
OPEN PASSAGE UNDER RAILROAD TRACKS
INSTALL DEEP WATER WELLS IN NUECES DELTA
AQUIFER STORAGE RECOVERY (ASR)
<table>
<thead>
<tr>
<th>Source of water</th>
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<tbody>
<tr>
<td>Amount of water</td>
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<tr>
<td>Water provided (frequency, season)</td>
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<tr>
<td>Location of source</td>
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<td>Potential points—addition to delta</td>
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<tr>
<td>Conceptual opinions of cost of obtaining source of water</td>
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<td>Conceptual opinions of cost of providing water to delta</td>
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<td>Potential physical, chemical, biological effects of removing water</td>
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<td>Potential physical, chemical, biological effect of adding water</td>
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<td>Permits required for adding water</td>
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<td>Time required to complete permitting and infrastructure</td>
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ALTERNATIVES-OUTSIDE AGREED ORDER

DIVERSIONS-NUECES RIVER TIDAL/BAY

HONDO CREEK REALIGNMENT

DEEP WELLS IN DELTA

SORENSON’S SAND PITS

NUECES RIVER TIDAL DAM
ALTERNATIVES-OUTSIDE AGREED ORDER

DIVERIONS-NUECES RIVER TIDAL/BAY

HONDO CREEK REALIGNMENT

DEEP WELLS IN DELTA

SORENSON’S SAND PITS

NUECES RIVER TIDAL DAM
TWDB/NEAC NEEDS