Northeast Water Purification Plant Expansion

Presentation to Council
Transportation, Technology & Infrastructure Committee

Department of Public Works
& Engineering
February 13, 2017
NEWPP EXPANSION

• Project Background
• Ongoing Activities & Upcoming Authorizations
Project Background
In Partnership With:

- North Harris County Regional Water Authority
- North Fort Bend Water Authority
- West Harris County Regional Water Authority
- Central Harris County Regional Water Authority

Design-Builder: Houston Waterworks Team

Legal: Hawkins Delafield & Wood LLP

Project Advisor: Carollo Engineers...Working Wonders With Water®
NEWPP Expansion Necessary to Meet Local Groundwater Subsidence Regulations

% of Water Demand Supplied by Surface Water

- Current requirement
- January 2025 requirement
- January 2035 requirement

January 2025 requirement
January 2035 requirement
NEWPP Expansion is One Piece of Regional Plan to Deliver & Treat Trinity River Water

- Finished Water TM
- New Plant & Intake
- Luce Bayou Interbasin Transfer (CWA Project)
- Trinity River
- Lake Houston
Houston is Delivering Project on Behalf of Four Authority Partners

Cost Share

- North Harris Co. RWA: 35.31%
- Central Harris Co. RWA: 25.76%
- N. Fort Bend WA: 21.41%
- West Harris Co. RWA: 16.00%
- City of Houston: 1.53%
320-mgd Expansion with Early 80-mgd Milestone is Planned

80-mgd module on-line no later than Aug. 2021

Additional 240-mgd on-line no later than Jun. 2024
New Intake in Lake Houston will Supply Raw Water to Plant
Expansion being Delivered using 2-Phase (Progressive) Design-Build

Preliminary Services

- Basis of Design
- Component 1
- Early Work Packages
- Component 2

Final Design & Construction Services

- GMP Proposal
- Phase 1 (80 mgd) milestone
  - NLT 8/31/21
- Phase 2 (240 mgd) milestone
  - NLT 6/30/24

- NEWPP Construction
- Transition & Warranty Services
- Final Acceptance
- Final Completion

We are Here

Contract Award & NTP
- Amendment No. 1 Approval
- GMP Amendment Approval
- Amendment No. 1 Approval
- Final Acceptance
Ongoing Activities & Upcoming Authorizations
Expansion Plan Developed During Component 1

Existing 80 mgd plant to remain operational

320 mgd addition fits within current site
Anticipating Record of Decision for 404 permit in Spring 2017

Impacts to jurisdictional wetlands & streams require mitigation
Early Work Package Construction will Begin in 2017

EWP 1 – Site Prep
EWP 2 – Filter Structure
EWP 3 – Powerline Relocation
EWP 4 – Raw Water Pipelines
EWP 5 – Early Equipment Procurement
## Upcoming Authorizations

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<tr>
<th>Action</th>
<th>Approximate Date</th>
<th>Estimated Amount($)*</th>
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<tr>
<td>Approve Additional Component 2A Funds</td>
<td>March 2017</td>
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<tr>
<td>Approve Stream Mitigation Purchase</td>
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<td>Approve GMP Amendment</td>
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*Budgetary estimates, actual values to be based on negotiated amendments*
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Q & A