

MEMORANDUM

March 30, 2012

TO: Board of Mayor and Aldermen

FROM: Mark Hilty, Water Management Director

David Parker, City Engineer/CIP Executive

Eric Stuckey, City Administrator

SUBJECT: Resolution 2012-18: Resolution to Adopt the Integrated Water Resources

(IWRP) Six (6) Priority Projects

Purpose

This memorandum is to transmit the draft of Resolution 2012-18 to the Franklin Board of Mayor and Aldermen (BOMA) for their review, comment and consideration.

Background

The City of Franklin has undertaken the development of an IWRP to provide for near and long term recommendations related to operations, maintenance, policies and capital investments for the water, sanitary sewer and surface water systems. The planning process, in part, produced a portfolio of projects to meet system objectives over a planning horizon of 30 years. These objectives include:

- 1. Meet current and future demands for water and wastewater reliably
- 2. Provide safety and security of water resources systems
- 3. Maximize efficiency of water use and value of water resources
- 4. Improve water quality and ecological health of Harpeth River
- 5. Provide improved access and aesthetics of Harpeth River
- 6. Minimize carbon footprint of water resources operations
- 7. Achieve sustainable biosolids management
- 8. Achieve regional acceptance
- 9. Provide excellent level of water/wastewater utility services at reasonable cost

Resolution 2012-18 presents the priority projects in Alternative 1 of the IWRP for consideration by the BOMA that are compelled by regulatory compliance, growth and capacity, and/or operational efficiencies. These projects include:

- PROJECT 1: WATER TREATMENT PLANT IMPROVEMENTS (LT2ESWTR),
- PROJECT 2: DISTRIBUTION WATER QUALITY IMPROVEMENTS (D/DBP),
- PROJECT 3: BIOSOLIDS FACILITIES FOR 16 MGD,
- PROJECT 4: EXISTING WWTP EXPANSION TO 16 MGD,
- PROJECT 5: SCADA WATER AND WASTEWATER, and
- PROJECT 6: AUTOMATED METERING INFRASTRUCTURE



MEMORANDUM

Attachment 1 presents a summary of the project components, costs and proposed schedules.

Financial Impact

Attachment 1 presents the costs associated with each of the priority projects. Projects that contain components that are not strictly driven by regulatory compliance, growth and capacity, and/or operational efficiencies have been presented in more detail.

Recommendation

Staff recommends approval to proceed with the priority projects that partially comprise Alternative 1 of the Integrated Water Resources Plan, as recommended by the Stakeholder and Steering Committees. Approval of Resolution 2012-18 allows staff to begin work on the most pressing water resources issues the City of Franklin faces. It is understood that additional efforts are necessary to further address the varying perspectives of the BOMA and citizens of Franklin.

ATTACHMENT 1 Integrated Water Resources Plan Priority Projects

| PROJECT NUMBER | ITEM DESCRIPTION | ESTIMATED PROJECT START | ESTIMATED EST PROJECT FINISH | ESTIMATED COST (\$) | % GROWTH FUNDED | ACCESS FEE FUNDED (\$) * | RATE / SDF FU | RATE AND/OR SDF FUNDED * |
|----------------|---|----------------------------|---------------------------------|------------------------|--------------------|-----------------------------|------------------|-----------------------------|
| PROJECT 1 | WATER TREATMENT PLANT IMPROVEMENTS (LTZESWTR) | | \$ | 9,848,600 | Similar Shareki | \$ 5,240,550 | \$ 4 | 4,608,050 |
| 14 | UV Disinfection | 11/1/2012 | 4/1/2015 \$ | 786,600 | 20% | \$ 393,300 | \$ | 393,300 |
| 18 | Repairs/Upgrades to Existing 2.1 MGD WTP | 11/1/2012 | 4/1/2015 \$ | 3,783,500 | %0 | · \$ | | 3,783,500 |
| 10 | Upgrade to 4.0 MGD WTP | 11/1/2012 | 4/1/2015 \$ | 4,416,000 | 100% | \$ 4,416,000 | ❖ | ı |
| 1D | Advanced Oxidation (AOP) Addition | 11/1/2012 | 4/1/2015 \$ | 862,500 | 20% | \$ 431,250 | ب | 431,250 |
| PROJECT 2 | DISTRIBUTION WATER QUALITY IMPROVEMENTS (D/DBP): Various modifications to the distribution system to reduce water age and improve overall water quality | 1/1/2013 | 1/1/2014 \$ | 2,100,000 | %0 | \$ | \$ 2 | 2,100,000 |
| PROJECT.3 | BIOSOLIDS FACILITIES FOR 16 MGD | | 100 Comments | 000'568'59 | | \$ 16,473,750 | \$ 49 | 49,421,250 |
| 3A | Rotary Drum Thickeners | 7/1/2012 | 1/1/2015 \$ | 5,439,000 | 25% | \$ 1,359,750 | \$ | 4,079,250 |
| 38 | Mesophilic Anaerobic Digestion | 7/1/2012 | 1/1/2015 \$ | 16,472,000 | 25% | \$ 4,118,000 | \$ 12 | 12,354,000 |
| 30 | Screw Press | 7/1/2012 | 1/1/2015 \$ | 20,478,000 | 25% | \$ 5,119,500 | \$ 15 | 15,358,500 |
| 3D | Solar Dryer | 7/1/2012 | 1/1/2015 \$ | 23,506,000 | 25% | \$ 5,876,500 | \$ 17 | 17,629,500 |
| PROJECT 4 | EXISTING WWTP EXPANSION TO 16 MGD | 7/1/2012 | 1/1/2015 \$ | 18,600,000 | 75% | \$ 4,650,000 | \$ 13 | 13,950,000 |
| PROJECTS | SCADA WATER AND WASTEWATER | - Auditoria (1975) | | 5,630,000 | | | \$ | 5,630,000 |
| 5A | Water Treatment and Distribution | 12/30/2013 | \$ | 830,000 | %0 | · \$ | \$ | 830,000 |
| 58 | Wastewater Collection and Treatment | 12/30/2013 | \$ | 4,800,000 | %0 | , • | \$ | 4,800,000 |
| PROJECT 6 | AUTOMATED METERING INFRASTRUCTURE: Installation of AMI transmitters and receivers | 12/30/2012 | 5/30/2014 \$ | 3,500,000 | %0 | | \$ | 3,500,000 |

^{*} The City is in the process of seeking various opportunities to fund projects. The mechanisms being explored include revenue bonds, State Revolving Fund loans, and grant opportunities.

ATTACHMENT 1

| Project | Schedule | Total | | Growth Funded (\$) | R | ate and/or SDF Funded (\$) |
|--|----------|--------------|-------|--------------------|----|-------------------------------|
| PROJECT 1: WATER TREATMENT PLANT IMPROVEMENTS (LT2ESWTR) | | \$ 9,848,6 | | 5,240,550 | \$ | 4,608,050 |
| PROJECT 2: DISTRIBUTION WATER QUALITY IMPROVEMENTS (D/DBP) | : | \$ 2,100,0 | 00 \$ | - | \$ | 2,100,000 |
| PROJECT 3: BIOSOLIDS FACILITIES FOR 16 MGD | | \$ 65,895,00 | 00 \$ | 16,473,750 | \$ | 49,421,250 |
| PROJECT 4: EXISTING WWTP EXPANSION TO 16 MGD | : | \$ | - \$ | - | \$ | - |
| PROJECT 5: SCADA WATER AND WASTEWATER | | \$ | - \$ | - | \$ | - |
| PROJECT 6: AUTOMATED METERING INFRASTRUCTURE | | 3,500,0 | 00 \$ | - | \$ | 3,500,000 |
| | TOTALS | \$ 81,343,60 | 00 \$ | 21,714,300 | \$ | 59,629,300 |

RESOLUTION 2012-18

A RESOLUTION TO ADOPT THE INTEGRATED WATER RESOURCES PLAN'S (IWRP) SIX (6) PRIORITY PROJECTS AND ASSOCIATED FUNDING PLAN

WHEREAS, the Board of Mayor and Aldermen (BOMA) in 2009 determined that an Integrated Water Resources Plan (IWRP) was needed to provide for near and long term recommendations related to the operations, maintenance, policies, and capital investments for the City's water, sanitary sewer, reclaimed water and stormwater systems; and

WHEREAS, the Board of Mayor and Aldermen on October 10, 2009, entered into a contract with CDM Smith for the development of an Integrated Water Resources Plan for Franklin and Franklin's Urban Growth Boundary; and

WHEREAS, CDM Smith has through a Stakeholders and Steering Committee process developed an IWRP which produced a portfolio of projects to meet the City's systems objectives over a planning horizon of thirty (30) years. Said objectives were developed, ranked and agreed upon by the IWRP Stakeholders' group through consensus votes; and

WHEREAS, the Stakeholders and Steering Committee have approved a Preferred Plan (Alternative 1) that provides a list of projects and/or policies needed to implement the intent of the IWRP;

WHEREAS, the Alternative 1 listing of projects and/or policies has been prioritized to provide a listing of six (6) high priority projects compelled by regulatory compliance, growth and capacity, and/or operational efficiencies (see Attachment 1 for list of projects, estimated costs and possible funding source).

NOW THEREFORE, BE IT RESOLVED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee, that the six (6) projects as listed in Attachment 1 (dated April 3, 2012) that are a part of the IWRP Preferred Plan (Alternative 1) are hereby adopted for use in determining those near term capital projects that the City of Franklin desires to pursue.

BE IT FURTHER RESOLVED by the Board of Mayor and Aldermen that those capital projects designated as the six (6) priority projects included in Attachment 1 will be considered for funding and completion as funds and time allows.

BE IT FURTHER RESOLVED, by the Board of Mayor and Aldermen that those capital and/or policy projects listed in the IWRP Preferred Plan (Alternative 1) not designated approved or funded by this Resolution will be continually evaluated on a case-by-case basis and for approval and funding should additional funds become available or those approved projects slated for funding are delayed and the designated funding not be needed at the time.

IT IS SO RESOLVED AND DONE on this 24th day of April, 2012

| ATTEST: | CITY OF FRANKLIN, TENNESSE |
|-----------------------|----------------------------|
| By: | By: |
| ERIC S. STUCKEY | Dr. Ken Moore |
| City Administrator | Mayor |
| Approved as to Form | |
| By: | |
| Shauna R. Billingsley | - |
| City Attorney | |