

Integrated Water Resources Plan Steering Committee Meeting

Meeting Minutes March 2, 2011 - 2:00 PM Traffic Operations Conference Room, Franklin City Hall

Attendees:

David Parker, City of Franklin Eric Stuckey, City of Franklin Eric Gardner, City of Franklin Mark Hilty, City of Franklin Bo Butler, SSR Andrew Johnson, SSR Andrew Lynn, CDM
Kati Bell, CDM
Zack Daniel, CDM
Leeann Williams, CDM
Kirk Westphal, CDM (by phone)
Jamie Lefkowitz, CDM (by phone)

I. Subtask Status Reports

The meeting provided an update of each subtask related to Phase II of the IWRP as follows:

A. Stormwater Analysis

Discussions will be held with the key staff from the Parks Department and Stormwater staff from the Engineering Department regarding stormwater improvements, stream restoration, river access, ecological impacts and potential stormwater harvesting plans. These discussions will allow the information developed through the IWRP to be integrated with existing master plans that have been developed and are being implemented currently.

B. Water Treatment Plant Analysis

The Long-Term Stage 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) requires additional treatment for Cryptosporidium in cases where the source water concentrations exceed certain thresholds; source water testing places the City of Franklin in "Bin 2" under the LT2ESWTR. The CTE/AECOM report assumed that the Franklin would be in "Bin 1," with no additional treatment required, though the report does talk about potentially pursuing the membrane option if more Cryptosporidium is found than they assumed. Because of the limited analysis of alternatives in the previous report for "Bin 2," CDM has collected water samples to allow a high-level cost evaluation of UV disinfection which could meet the "Bin 2" treatment requirements at potentially a lower cost than implementing membrane treatment.



Integrated Water Resources Plan Steering Committee Meeting

C. Water Distribution System Analysis

CDM has completed review of the existing distribution model and updated the model to reflect the most recent system improvements. Currently, a technical memorandum is being developed and will be reviewed by senior technical specialists before it is delivered to the Steering Committee for review.

D. Water Conservation Analysis

Currently, a technical memorandum is being developed summarizing the expected impacts that could be realized from various conservation measures. This information will be coordinated with Jackson Thornton to evaluate the potential effects on the existing rate structure.

E. Wastewater Treatment Plants Analysis

Existing WWTP

The biological treatment capacity has been evaluated; a hydraulics evaluation is being conducted to determine if the existing plant can pass the flow to match the calculated biological capacity. During the hydraulic evaluation inspection, discrepancies were identified in the plants record drawings. To rectify these issues, CDM is proposing to stress test the plant to determine the actual hydraulic capacity of the plant.

2. New WWTP

Process flow diagrams have been developed for the three treatment options identified in the WWTP Workshop, held on February 4. Each process train has been developed to meet EPA Class 1 reliability standards for providing 6 mgd average treatment capacity; additionally, each process layout will be modular such that process equipment can be added as flows to the facility increase throughout the project life. The following processes are being evaluated:

- a. Traditional plug flow,
- b. Oxidation ditch (similar to the existing plant), and
- c. Membrane bioreactor with flow equalization

F. Wastewater Collection System Analysis

Flow monitors have been installed in the collection system; information collected during this study will be used to evaluate the system inflow/infiltration (I/I), as well as be used to



Integrated Water Resources Plan Steering Committee Meeting

develop peaking factors that will be applied to the flow estimates that will be used in estimating the flow split between the existing and potential new WWTP.

G. Ecological Restoration Analysis

Information on ecological restoration projects was discussed with the on-going stormwater analysis. The projects proposed under this category will be evaluated and integrated into the stormwater analysis technical memorandum.

H. Reclaimed Water Analysis

Currently, SSR is updating the 2009 reclaimed water master plan; while there is great potential to increase reuse, there have been some sites recommended for storage lost since completion of the original master plan. Franklin has contracts with several golf courses to deliver reclaimed water, but these contracts have some room for negotiations in future rates, etc. The primary issue that must be addressed through the IWRP is the storage of reclaimed water which is the primary limitation to maximizing reuse. Currently, the peak pumping capacity of system is 6 mgd with the ability to be expanded to provide additional pumping that would deliver reuse of up to 12 mgd if the demands required it.

I. Biosolids Analysis

The biosolids technical analysis is proceeding on schedule with the first technical memorandum currently under review. Discussion among the Steering Committee on this topic covered questions including project scheduling once a process was selected. The estimated time frame for the design, permitting and construction of a project of this magnitude would be on the order of 24 months, minimum; however, a more conservative schedule could take approximately 6 months longer to implement.

Additionally, the question was raised regarding whether a pilot test would be recommended for the selected process. Historical concerns regarding odor control issues with a previous solids handling system are an issue that must be fully addressed in the process selection and design. Therefore pilot testing, particularly to determine the amount and strength of odors generated would be prudent.

J. River Model Development

The purpose of this modeling task is to use available tools to help quantify the likely impacts of the Franklin IWRP on water quality and flow in the Harpeth River. While the model will not provide a definitive statement about whether or not the IWRP will achieve water quality standards, the tool will be adapted as needed and used to compare the IWRP alternatives with respect to their impacts on water quality and river flow. TDEC has been involved in continuing discussions on the selection of the most appropriate



Integrated Water Resources Plan Steering Committee Meeting

model for this purpose and the inclusion of their technical staff throughout this process will aide in streamlining the permitting process for any of the IWRP projects that would require environmental permits. The modeling plan is complete and currently under CDM senior technical review before it is finalized and presented to the Steering Committee.

II. Drought Management Plan Update

The Franklin Water Management Department (WMD) is required to develop and implement a drought management plan, under the approval of the TDEC Division of Water Supply. A draft of the Drought Management Plan (DMP) was distributed by email for review to the Steering committee prior to the March meeting. A brief presentation that would be used to discuss the DMP with BOMA was presented to the Steering Committee for comments and feedback. Scheduling of the BOMA presentation was also discussed.

III. Scheduling and Upcoming Meetings

- **A.** BOMA Drought Management Plan Presentation Tentatively scheduled March 8th, 2011, however, this may need to be adjusted because the Work session agenda is full and adequate time may not be available for discussion.
- **B.** BOMA DMP Plan Vote March 22nd for March 31st implementation
- C. Next Steering Committee Meeting April 6th, 2011
- **D.** IWRP Phase II Stakeholder Workshop I The date is to be determined, but is anticipated to be held in late May or early June