

# Fox River Study Group

Minutes of the meeting on August 23, 2007 in Oswego, IL. The meeting was called to order about 9:35 AM.

## Attendance:

### Directors

Officers Present: P. Anderson, T. Muth, C. Skrukud,

Officers Absent: R. Trueblood

Other Directors Present: K. Anderson, S. Andras, R. Linke

Other Directors Absent: S. McCracken, C. White,

### Advisers

A. Bartosova, P. Moreau, J. Russell, Carrie Carter, S. McConkey, R. Manor

## Topics:

This was a special meeting to review model scenarios.

### ISWS Report

Bartosova coordinated a discussion on modeling scenarios. The four main elements of the presentation were: Evaluating Alternatives, Model Capabilities, Model Structure, and Possible Alternatives.

**Evaluating Alternatives.** Emphasis on water quality in the Fox River. The calibration period is 1990 – 2000.

**Model Capabilities.** Each tributary watershed is divided into subwatersheds, each subwatershed is divided into Hydraulic Response Units (HRUs). Each HRU has a unique combination of characteristics. Each stream is divided into reaches, each reach is modeled as if it has uniform characteristics. Physical locations within a reach do not influence the results. CSOs are modeled in much the same way as point sources. (The model can describe CSOs in more detail, but we don't have enough information to simulate that behavior.) The HSPF model does not have the ability to represent dams as a structure, but it is possible to simulate the effect of dams by changing the characteristics of the reach. The effect of BMPs can be simulated by changing the properties of the HRU.

**Model Structure.** The model has 31 tributary watersheds. Each watershed has a unique HSPF model. The main stem of the Fox River is divided into segments based on criteria such as tributary junctions, dams, change in slope, and NPDES discharges.

**Land Use Categories.** The model has 13 major land use categories. There are also four soil groups and three slope categories for a total of 156 combinations. These 156 unique HRUs do not include any BMP information at this time. For example, although urban high density HRUs in two different sections of the watershed could have different BMPs in place, those differences are not represented in the model.

**Watershed Management Alternatives.** The model can be used to, for example, assess the effects of point source waste treatment or changes in land use. There was some discussion about

what scenarios should be examined, how represent future changes in the watershed, and who would/how to communicate that information to stakeholders.

**QUAL2 Model.** This model would be used to simulate steady-state, low flow conditions in the main stem of the Fox River. Where HSPF is defined in terms of segments, QUAL2 is defined in terms of reaches that have uniform physical characteristics. Each reach can be divided into segments; the model can simulate different chemical properties in each segment.

### **Schedule of Next Meeting**

The next regular FRSG meeting is scheduled for 9:00 AM on September 5, 2007, also in Oswego.

### **Adjourned**

The meeting adjourned about 11:50 AM. Minutes prepared by P. Anderson