Springfield Water Supply Supplemental EIS Project Update

April 11, 2017

Project Overview

- Prior Environmental Impact Statement (EIS) issued 2000
- Letter from U.S. Army Corps of Engineers (2010):
  - Withdrew Section 404 permit application
  - Called for preparation of Supplemental EIS
  - Called for additional requirements:
    - Wetland delineation study
    - Bat survey (Indiana and northern long-eared bat)
    - Updated demand analysis
    - Programmatic Agreement for archaeology
    - Updated Wetland Mitigation Plan
- Supplemental EIS addresses these issues
  - Work Order #001 included Phases I and II (June 9, 2016)

Summary of Work Performed to Date

- Phase I: Scoping and Preliminary Coordination
  - Compilation/Review of Prior Reports/Analyses
  - Agency Coordination/Public Scoping
    - Public Informational Meeting
    - 14 External Meetings
    - Scoping Issues Analysis
  - Preparation of Chapter 1: Purpose and Need

Summary of Work Performed to Date

- Phase II: Alternative Analysis
  - Verification of City's Water Demand Analysis
  - Assessment of "Yield"
  - Alternative development and screening
  - Additional Services
    - Bat Netting Survey and coordination with U.S. Fish and Wildlife
    - Waters of the US Delineation
    - Hydrologic Investigation/Modeling-ongoing

Reports Issued to Date

- Technical Memoranda
  - Data Gap Analysis
  - Gravel Pit Yield Analysis
  - Water Demand Review
  - Cost Analysis Review
  - Summary of Basis For Water Need
  - Basis of Hunter Lake Control Elevation
  - Level 1 Alternative Screening Analysis
- Project Reports
  - Published “Notice of Intent”
  - Public Meeting Scoping Packet
  - Scoping Report
  - Agency Coordination Plan
  - Hunter Lake Bat Survey Report
  - Waters of the US Report
  - Draft Chapter 1: Purpose and Need
  - List of Project Alternatives

Project Challenges

Permitting clarity and direction

- Section 401 Water Quality Certification (IEPA)
- Original Hunter Lake configuration—permittability concerns
- Development of water quality modeling scenarios

Alternative formulation

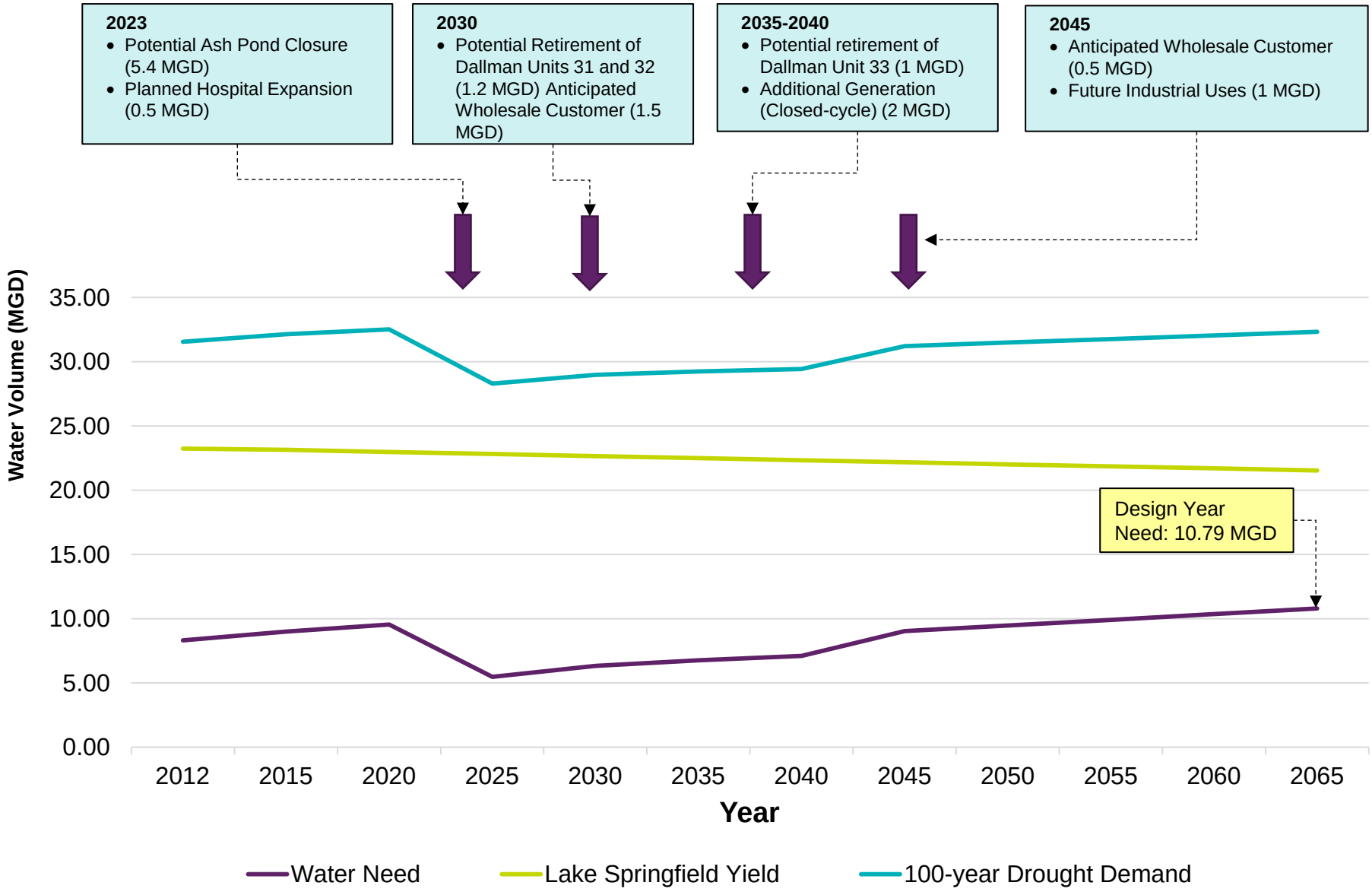
- Revised Hunter Lake alternative
  - Updated engineering: BMP elements, revised spillway, in-lake dams
  - Cost estimates
  - Integrated wetland and stream mitigation plans
- Sangamon Valley Wells and Hybrid alternatives

Basis of Water Need

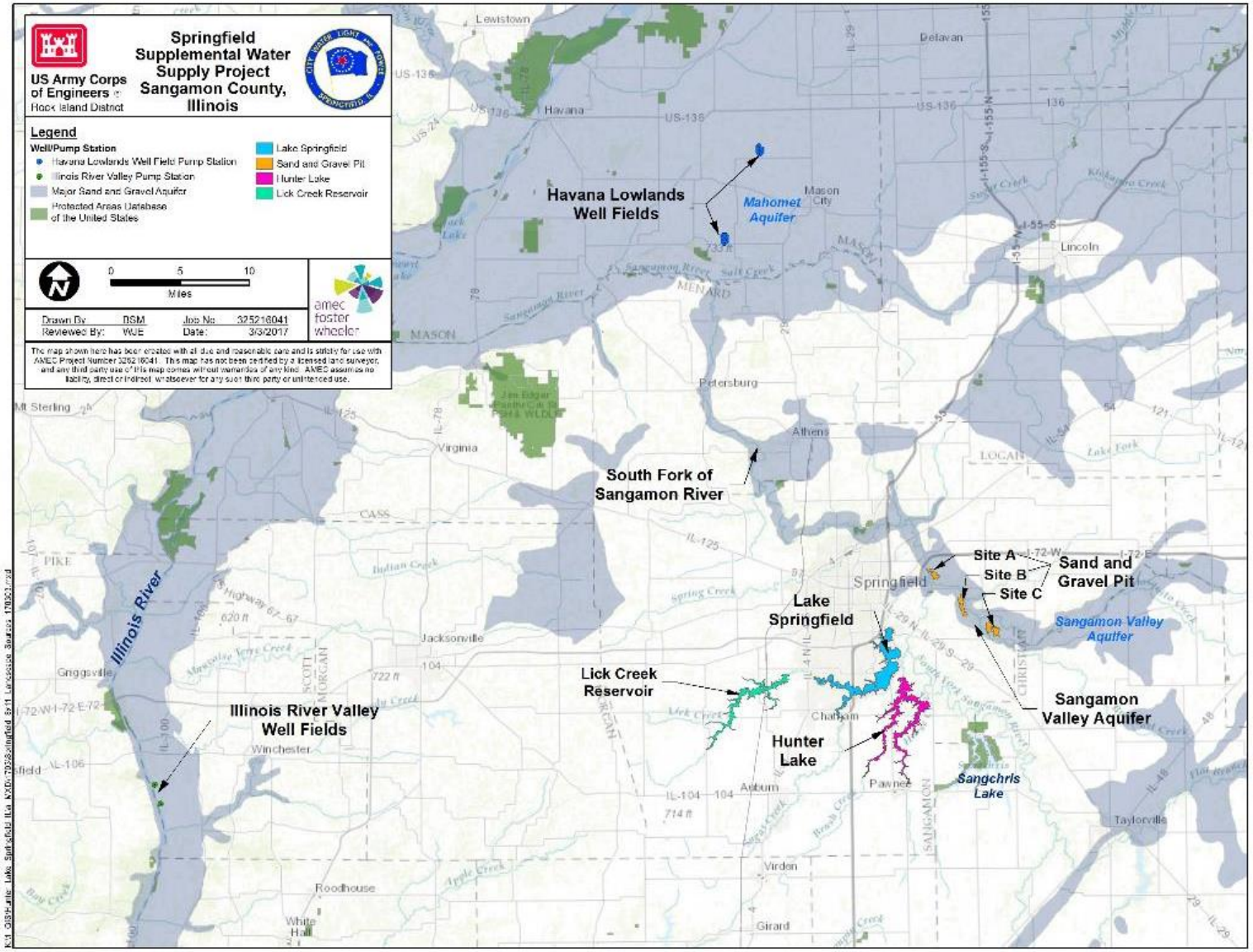
- Critical Element of SEIS and NEPA Requirement
- Re-evaluation of Yield of Existing Supply System
- Analysis of Existing and Future Demands
  - Potable Water
  - Existing Industrial and Large Commercial Users
  - Future industrial Water Demand
  - Contractual Obligations
  - Benefits/Contributions of Conservation Measures
  - Benefits and Contributions of Drought-Induced Water Restrictions
  - Future Wholesale Water Demand

- Planning Year Need: 12 million gallons/day (MGD) in 2065

Springfield Supplemental Water Supply Project SEIS
Water Need Analysis--100-year Drought Condition
90 Percent Confidence Level



Supplemental Water Supply Sources



Alternatives

List of 32 Project Alternatives Developed

- Reservoir
- River Surface Water
- Groundwater
- Hybrids
- Other

Level 1 Screening Analysis

- Factors related to yield, environmental, logistics, cost
- 21 alternatives eliminated
  - Inadequate yield/water source unavailable
  - Excessive environmental impacts
  - Critical permittability issues
  - Excessive cost

Alternatives Retained for Level 2 Analysis

- Hunter Lake--Revised Configuration
- Havana Lowland Well Fields (Well Field A) (12 MGD)
- Havana Lowland Well Fields (Well Field B) + Sangamon River Valley (12.3 MGD)
- Illinois River Well #1 (12 MGD)
- Sangamon River Valley Well Fields (12 MGD)
- Havana Lowland Well Fields (Well Fields A+B) (17.8 MGD)
- Illinois River Valley Wells (Wells #1+2) (17.8 MGD)
- Sangamon River Valley Well Fields (10.6 MGD) + Gravel Pit C (1.4 MGD)(12 MGD total)
- Havana Lowlands Well Fields (Well Field A) + Sangamon Valley Wells (15.3 MGD)
- Illinois River Valley Well #1 + Sangamon Valley Wells (15.3 MGD)

Phase III: Draft SEIS

- Description of “Affected Environment” and assessment of environmental impacts
  - Analysis of 24 environmental resources
  - Detailed impact assessment of final study alternatives
- Cumulative Impact Assessment
- Biological Assessment (endangered species)
- Section 404(b)(1): “Least Environmentally Damaging and Practicable Alternative”
- Distribution of Draft SEIS
- Public Meeting

Phase IV: Final SEIS

- Analysis of Comments Received on Draft SEIS
- Responses to Comments
- Final Supplemental EIS
- Distribution of Final SEIS

Milestone Schedule

Phase/Task	Status/Start	Finish
Phase II: Alternatives Analysis		
Water Quality Modeling	ongoing	June 9, 2017
Revised Hunter Lake Designs	April 18, 2017	June 29, 2017
Complete Chapter 2: Alternatives	June 12, 2017	August 24, 2017
Phase III: Draft SEIS		
Chapter 3: Affected Environment	April 18, 2017	August 14, 2017
Chapter 4: Environmental Consequences	June 30, 2017	September 24, 2017
City/USACE Review	September 24, 2017	
Notice of Availability	November 30, 2017	
Public Hearing	December 14, 2017	
Phase IV: Final SEIS		
Final SEIS	March 15, 2018	
Record of Decision	March 22, 2018	

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