

Alternative Water Source Study

September 11, 2018

Environmental Commission
Meeting

JOLIET
Illinois

Discussion Item

Alternative Water Source
Study Status and Schedule
Update

Study Status and Schedule Update

Month One Deliverables

To be provided to the Environmental Commission one week prior to next Environmental Commission Meeting in September.

- Draft Public Engagement and Communications Strategy
- Draft Request for Qualifications for Public Relations Firm

Discussion Item

Draft Public Engagement and
Communications Strategy

- Three layers of stakeholders
 - Key City Staff, Elected Officials and Environmental Commission
 - Key Influencers
 - General Public
- Educational Outreach for key decision makers (Environmental Commission and Elected Officials)
- Educational Topics outlined

Draft Public Engagement
and Communications
Strategy

- Key Influencers
 - Developing list of stakeholders
 - Need concurrence on extending invitation to Environmental Commission Meeting on 10/9/18
- Not a static document – will evolve through Phase I and into Phase II and will be reviewed quarterly

Any Questions/Comments?

Draft Public Engagement
and Communications
Strategy

Discussion Item

Draft Request for
Qualifications for Public
Relations Firm

- Requesting proposed approach for Phase I and Phase II
- Possible Tasks identified in RFQ
- Proposed Advertisement and Selection Schedule
- Selection Process and Involvement of Environmental Commission

Any Questions/Comments?

Draft Request for
Qualifications for Public
Relations Firm

Discussion Item

Introduction to Water
Demand, Water Source
Reliability and Water Quality

Discussion:

- Water Demand Parameters Defined
 - Minimum Day Demand
 - Average Day Demand
 - Maximum Day Demand
 - Peak Hour Demand
- How much water does the City need?
- How much water does the region need?
- How do conservation efforts impact the projected water demand?

Water Demand

Discussion:

- Different Levels of Reliability/Redundancy
 - Online, Active Source
 - Online, Standby Source
 - Offline, Back-up Source
 - Examples
- What level of reliability and redundancy is required in the alternative water sources?

Water Source
Reliability/Redundancy

Discussion:

- Primary and Secondary Drinking Water Quality Standards established by the Safe Drinking Water Act
 - Primary Regulations for contaminants that cause adverse health effects – Maximum Contaminant Levels (MCLs) established (6 categories - Microorganisms, Disinfectants, Disinfection Byproducts, Inorganic Chemicals, Organic Chemicals, & Radionuclides)
 - Secondary Standards are non-regulatory guidelines for aesthetic characteristics like taste, color and odor

Water Quality

Discussion:

- Examples of Primary Regulated Contaminants
 - Microorganisms – Cryptosporidium, Total Coliform
 - Disinfectants – Chlorine, Chloramines
 - Disinfection Byproducts – HAA5, TTHMs
 - Inorganic Chemicals – Arsenic, Nitrate, Lead, Copper, Chromium, Mercury, Fluoride
 - Organic Chemicals – Atrazine, Benzene, Styrene, Toluene, Xylenes
 - Radionuclides – Radium 226 and Radium 228, Total Alpha

Water Quality

Discussion:

- Examples of Secondary Standards
 - Color, Chloride, Iron, Manganese, Odor, pH, Silver, Sulfate, Total dissolved Solids (TDS), Zinc
- What are the minimum water quality goals for the alternative water sources?

Water Quality

Discussion Item

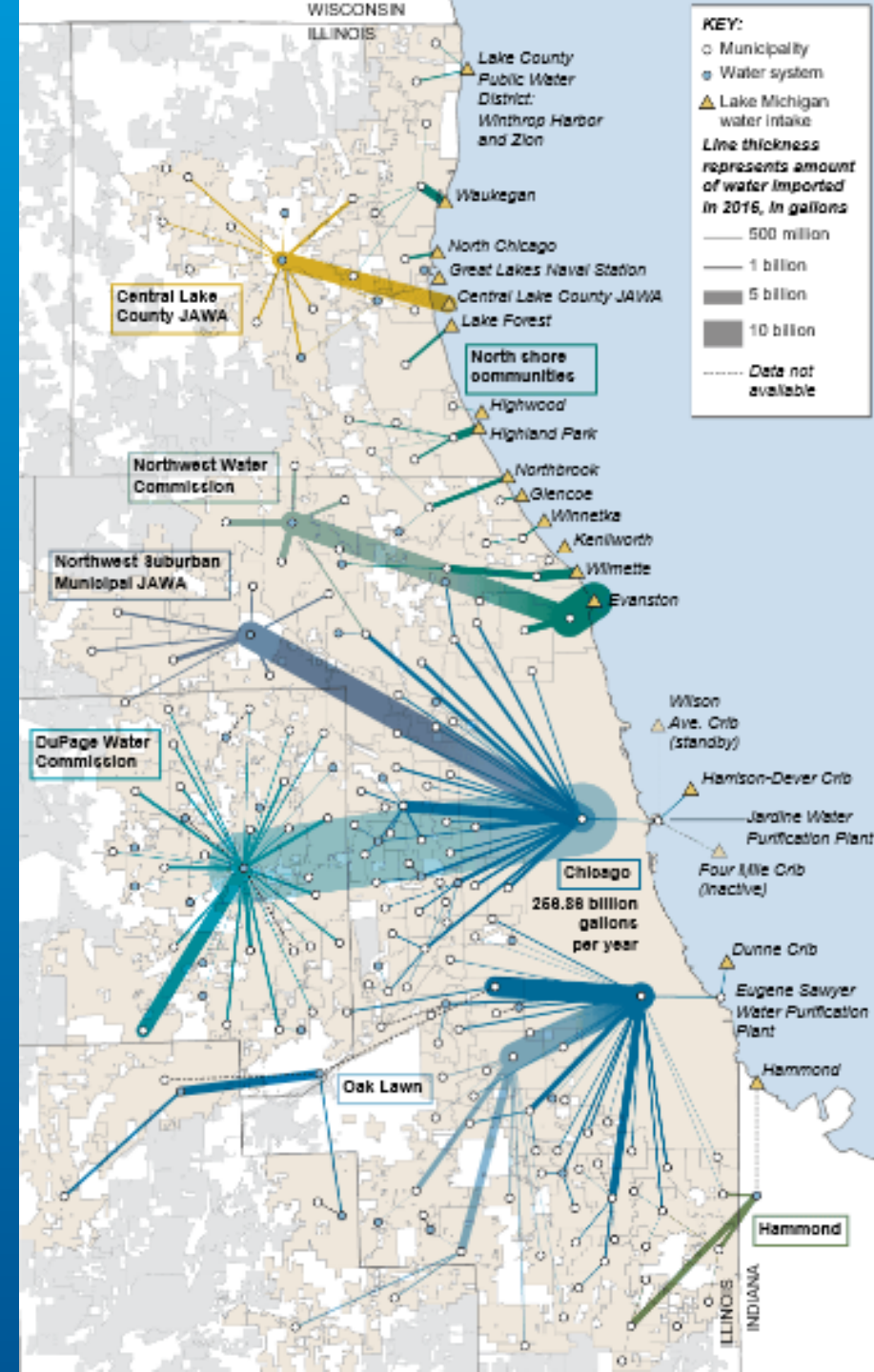
Regional Water Planning
Efforts

Discussion:

• Existing NE Illinois Regional Supplies:

- DuPage Water Commission
- Central Lake County JAWA
- Northwest Water Commission
- North Suburban Municipal JAWA
- City of Chicago
- Village of Oak Lawn
- City of Hammond, Indiana

Map from Chicago Tribune article titled “Same Lake, Unequal Rates” published 10/25/17



Discussion:

- Future NE Illinois Regional Supplies:

- Public Water Commission (Frankfort, Joliet, Lockport, New Lenox, Rockdale, Romeoville)
- Southland Water Commission (Calumet Park, Hazel Crest, Country Club Hills, Homewood, East Hazel Crest, Markham, Flossmoor, Matteson, South Holland, Thornton and Olympia Fields)
- Kankakee River Valley Water Planning Alliance (Godley, Diamond, Coal City and Braidwood)

Regional Water
Planning Efforts

Discussion:

- What role could Joliet play in a regional water source solution?
- What role should Joliet play in a regional water source solution?

Regional Water
Planning Efforts

Look Ahead

Month Two Deliverable

To be provided to the Environmental Commission approximately one week prior to next Environmental Commission Meeting in September.

- Draft Technical Memorandum (including water demand, and water loss audit)

Look Ahead

Month Three (October 9, 2018)

DISCUSSION ITEMS: Introduction to the concept of water source sustainability; Review of existing water usage and impacts to existing groundwater source utilizing ISWS updates to groundwater model; Discussion of timetable for need for long-term water source solution and short-term emergency planning; Review of regional groundwater users, including industry and their impact on projected aquifer depletion as well as potential short-term solutions; Update on Public Relations RFQ Efforts

- How much time does the City have until aquifer depletion impacts the Joliet well system?
- What are short-term solutions to prevent a quicker depletion timeframe and/or delay the current predicted depletion time frame?
- What are the minimum requirements for a water source to be considered sustainable?
- How will other water users impact Joliet's existing water source and future water source?

Look Ahead

Month Three (October 9, 2018)

ACTION ITEM: Obtain comments and concurrence on deliverable from month two, Draft Technical Memorandum

END-OF-MONTH DELIVERABLE: UPDATED TECHNICAL MEMORANDUM

Questions?

JOLIET

