

Passaic Valley Water Commission



Phase 1-Storage Improvement Project Levine Storage Reservoir Resolution of Effects

Meeting with

Consulting Parties

June 5, 2018





Introductions

USEPA

Steven Ferreira

PVWC

Joseph Bella, Executive Director

Kevin Byrne, Project Manager

James Duprey, Director of Engineering

CH2M (now Jacobs)/ Mott MacDonald- Design Consultants

Linda Wancho, Project Manager

Edward Gajek, Project Manager

E2PM – Historic Preservation Consultants

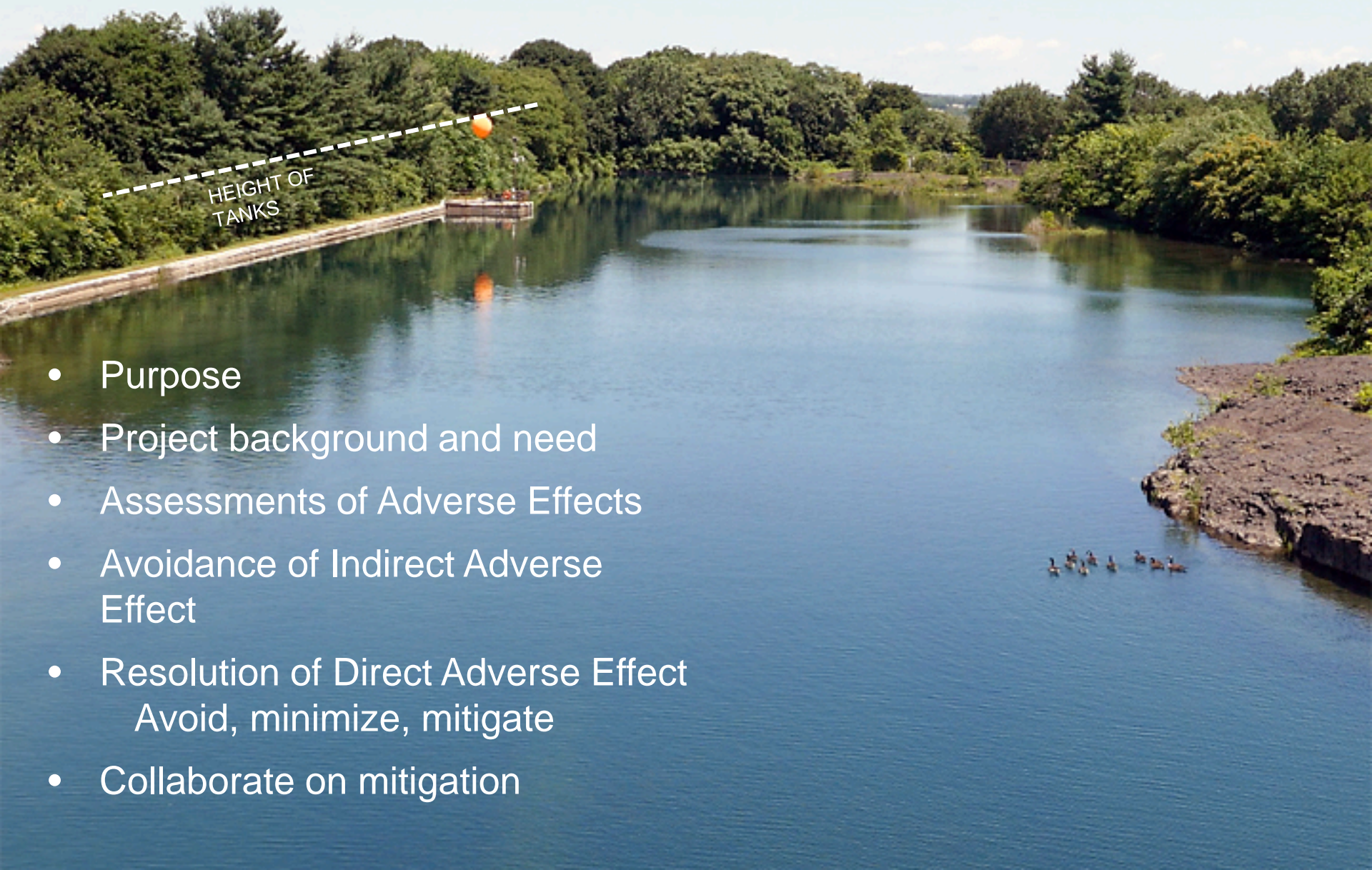
Marianne Walsh

JGSC Group – Outreach Consultant

Joseph Getz

Lendel Jones

Meeting agenda



- Purpose
- Project background and need
- Assessments of Adverse Effects
- Avoidance of Indirect Adverse Effect
- Resolution of Direct Adverse Effect
Avoid, minimize, mitigate
- Collaborate on mitigation

Why is this Project necessary?



- Protect Public Health (Bacteria, Viruses, and Lead)
- Protect Public Safety (Fire Protection, Emergencies, System Back-up)
- EPA's Safe Drinking Water Requirement (LT2ESWTR)

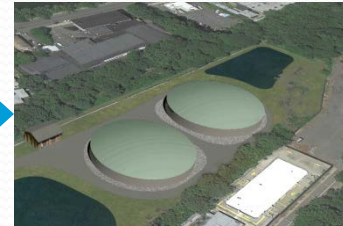
Closed Water System



River Supply



Water Treatment Plant
“water is purified”



Storage Tanks



Closed Pipe System to Customer

Open Finished Water System



River Supply



Water Treatment Plant
“water is purified”

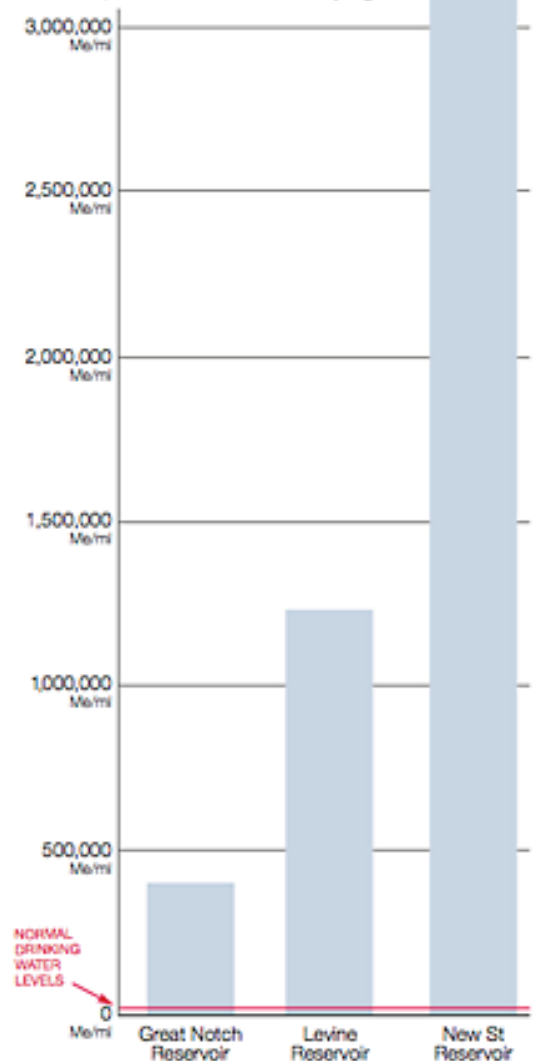
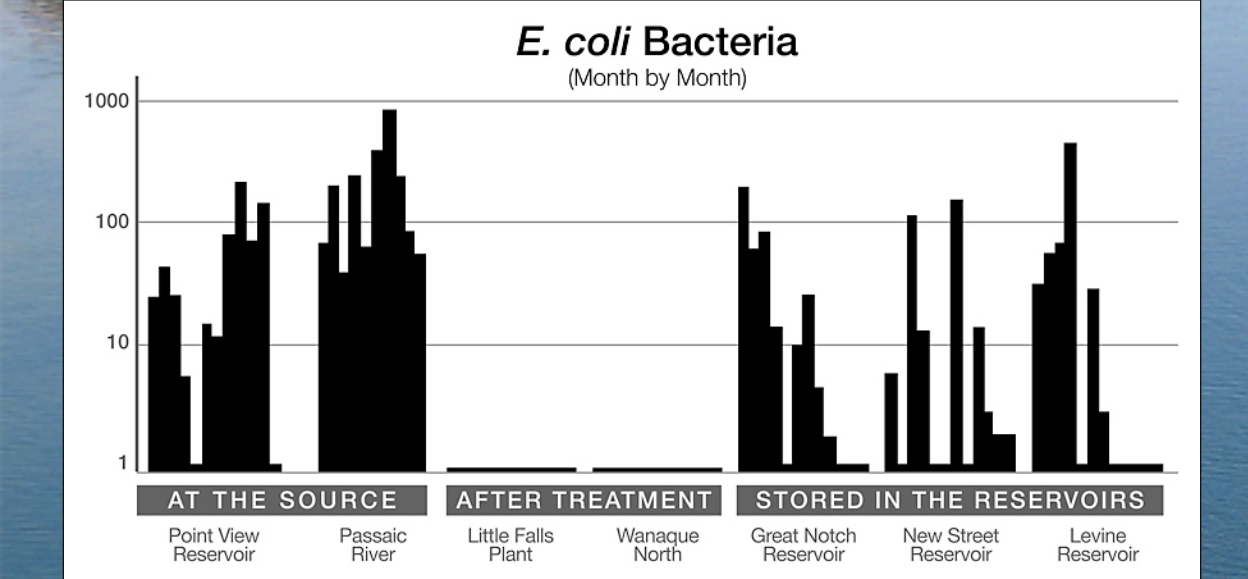


Uncovered Reservoir
Water Storage

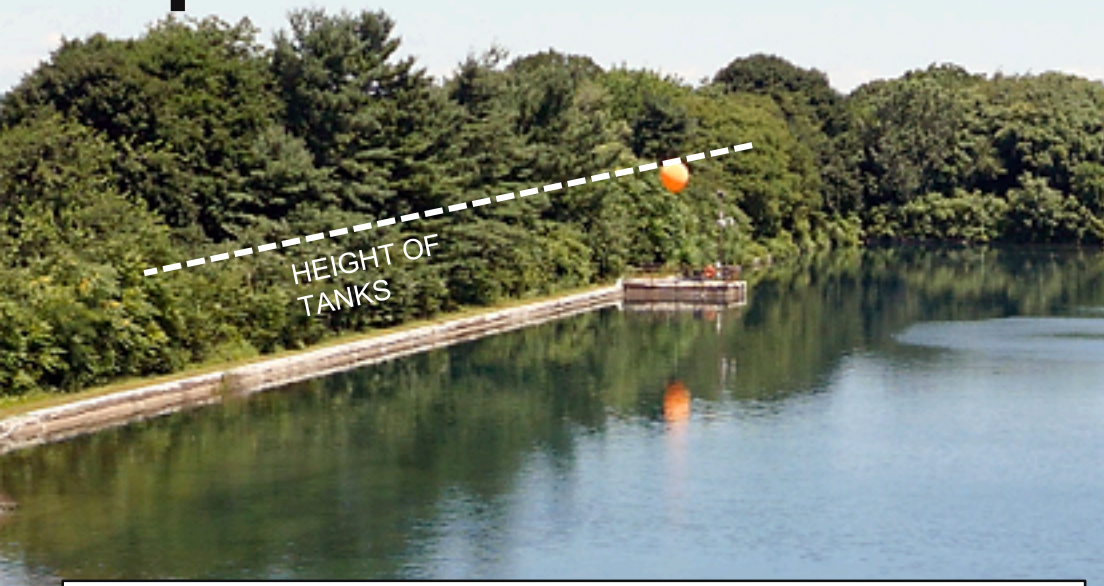


Closed Pipe System to Customer

A photograph of a reservoir with a dam and a forested background. A dashed line connects the water level to the top of the dam structure, with the text "HEIGHT OF TANKS" written next to it. An orange buoy is visible in the water.



Open Reservoirs and Impact on Lead Treatment



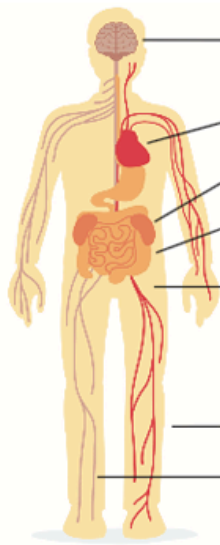
Some of the damaging effects of lead exposure

There is no safe level of lead in children or adults. Symptoms of lead exposure may not appear, but damage can still occur. Lead poisoning can cause a coma, seizure or death, although that is rare.



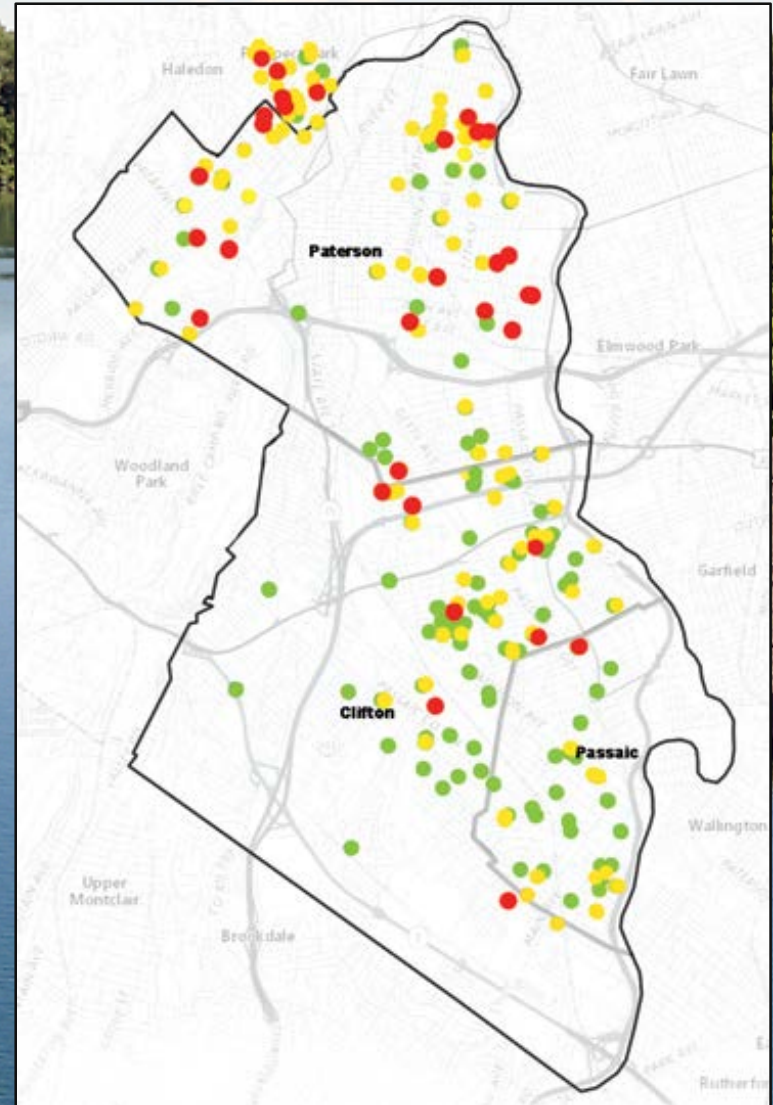
EFFECTS ON CHILDREN

- Brain:** Behavior problems, lower IQ, hearing loss, learning disabilities
- Blood:** Anemia
- Kidneys:** Damage to the kidneys
- Nervous system:** Damage to the nervous system
- Body:** Decreased bone and muscle growth



EFFECTS ON ADULTS

- Brain:** Memory loss, lack of concentration, headaches, irritability, depression
- Cardiovascular:** High blood pressure
- Kidneys:** Abnormal function and damage
- Digestive system:** Constipation, nausea and poor appetite
- Reproductive system**
 - Men: Decreased sex drive and sperm count, sperm abnormalities
 - Woman: Spontaneous miscarriage
- Body:** Fatigue, joint and muscle pain
- Nervous system:** Damage including numbness and pain in the extremities



Tank Alternatives?

- Signed ACO March 31, 2009
- Feasibility Study (TY Lin and Carollo Engineers)
- Alternatives Evaluated (Treatment, Covers and Liners, Shade Balls, Decommissioning)
- Public Hearings
- Survey of 135,000 Customers
- Alternate Site Evaluations
- Value Engineering (CH2M and Mott McDonald)
- No Viable Alternative

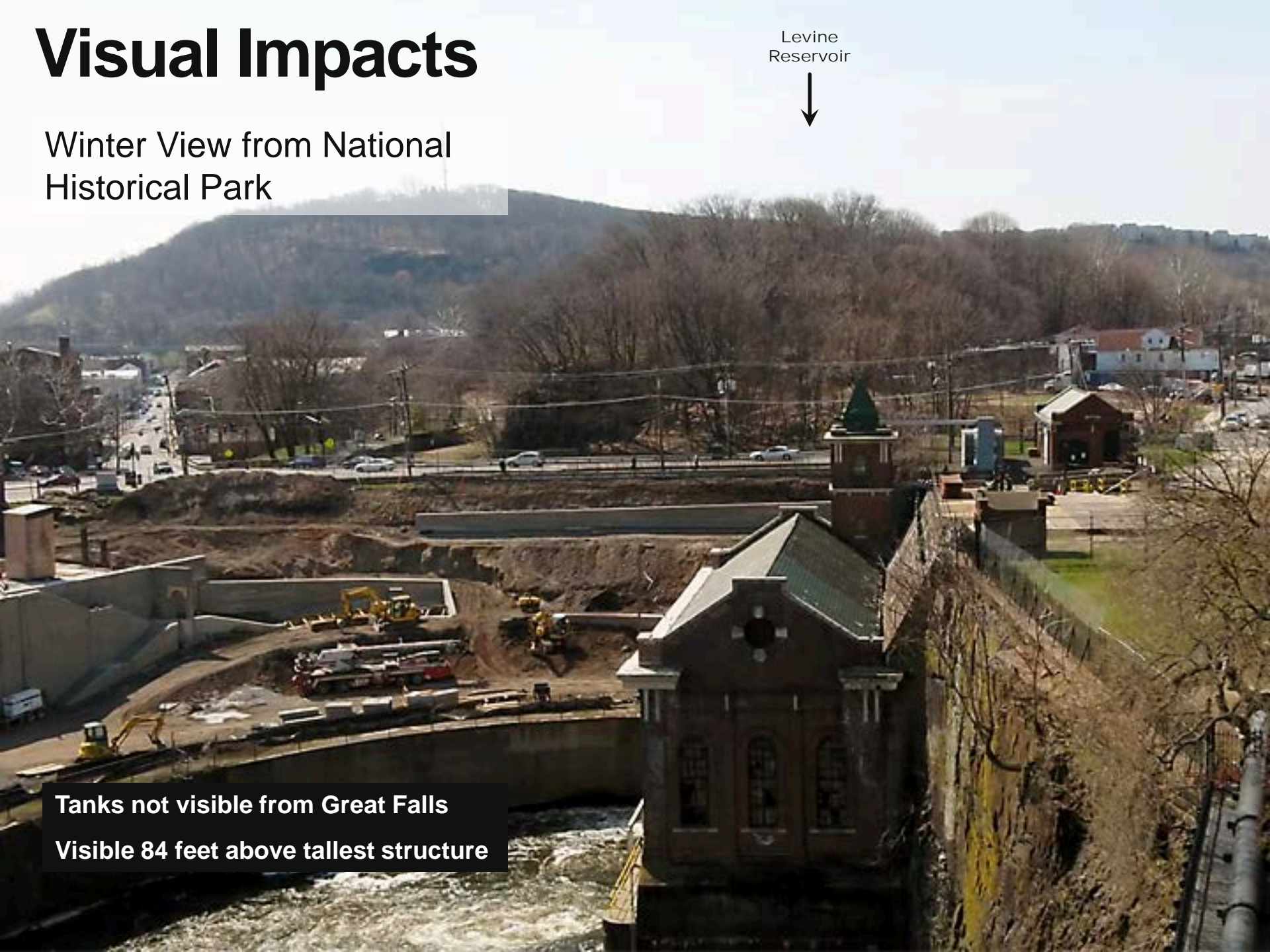
Visual Impacts

Winter View from National
Historical Park

Levine
Reservoir

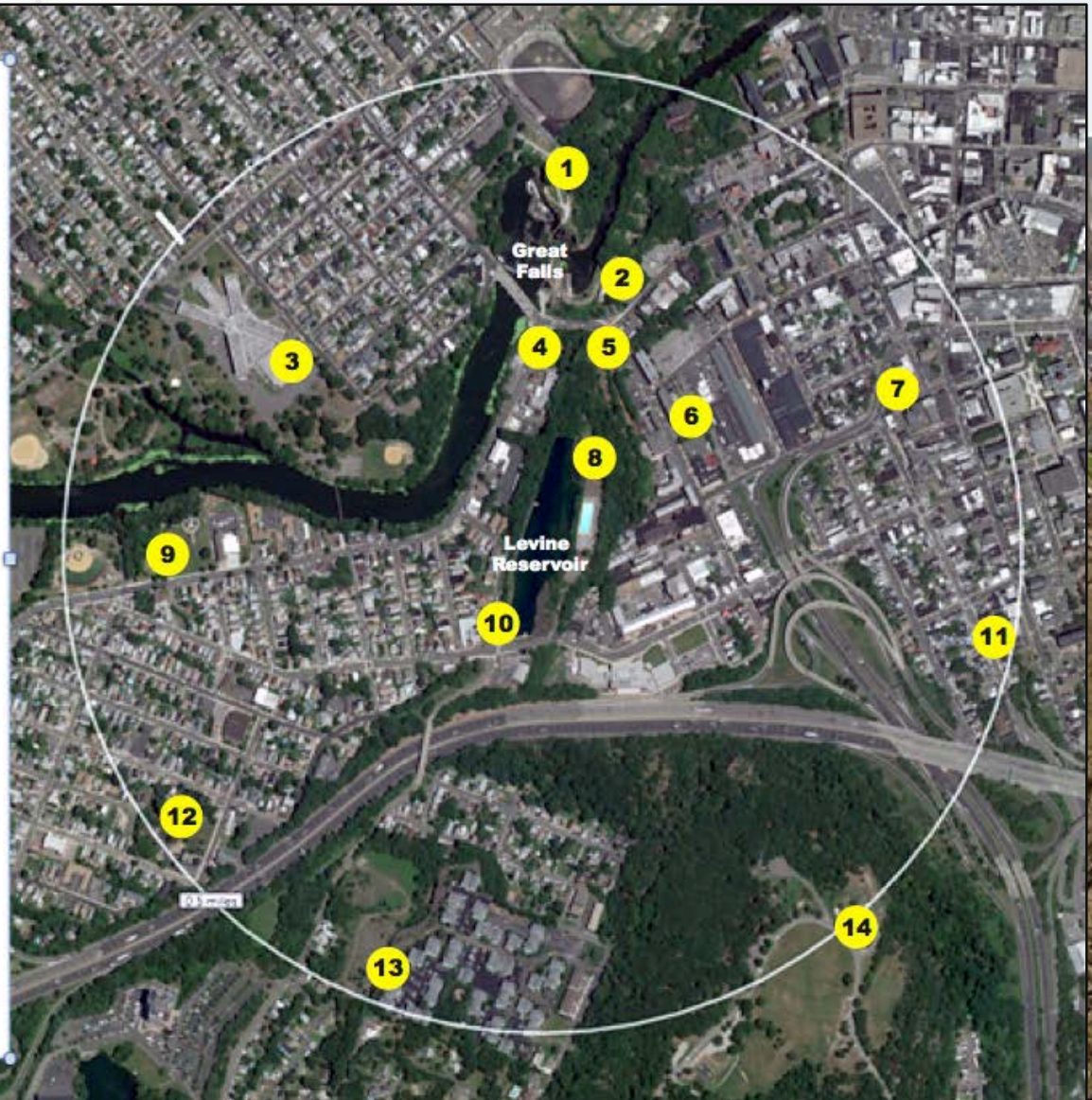


Tanks not visible from Great Falls
Visible 84 feet above tallest structure



Visual Impacts from Aerials

- 1 Mary Ellen Kramer Park
Not visible at 200' above park
- 2 Great Falls parking lot
91' above tallest structure
- 3 JF Kennedy High School
Visible from rooftop of school
- 4 McBride & Wayne Avenues
100' above tallest structure
- 5 McBride Ave & Spruce Street
50' above tallest structure
- 6 Paterson Museum
101' above tallest structure
- 7 Oliver St at County Jail
62' above tallest structure
- 8 Lou Costello swimming pool
Visible through fencing
- 9 Pennington Park
36' above tallest structure
- 10 Reservoir Road
Visible through fencing
- 11 Marshall St at I-80 overpass
105' above tallest structure
- 12 Danforth Ave at Ramset St
36' above church steeple
- 13 Garrett Mountain condos
Visible to condos at north
- 14 Garrett Mountain Reservation
173' above parking lot



Historic Properties Affected

Historic Properties are any prehistoric or historic district, site, building, structure, or object that are listed in or eligible for listing in the National Register of Historic Places.

- Great Falls of the Passaic / Society for Establishing Useful Manufactures (SUM) National Landmark Historic District
- Great Falls of Paterson / Society for Establishing Useful Manufactures (SUM) Historic District Addendum Extension (Grand Street Pumping Station)
- Paterson Great Falls National Historical Park.

Assessment of Adverse Effects for Area of Potential Effect (APE)

Direct Effect Indirect Effect

- Great Falls of the Passaic/
Society for Useful Manufactures
(SUM) National Landmark
Historic District
- Great Falls of Paterson/
SUM Historic District
Addendum Extension
(Grand Street Pumping Station)
- Paterson Great Falls
National Historical Park



Resolution of Adverse Effects

- Avoid
- Minimize
- Mitigate

Minimizing adverse effects

- Evergreen plantings help screen the tanks from view from nearby areas
- Tank finish neutral, light grey color to minimize tank appearance from nearby areas



Minimizing adverse effects



Retain and Repair Perimeter Fencing

stabilize and repair
sympathetically; retention
of historic material
essential

Minimizing adverse effects

- Repoint and repair Grand Street retaining wall



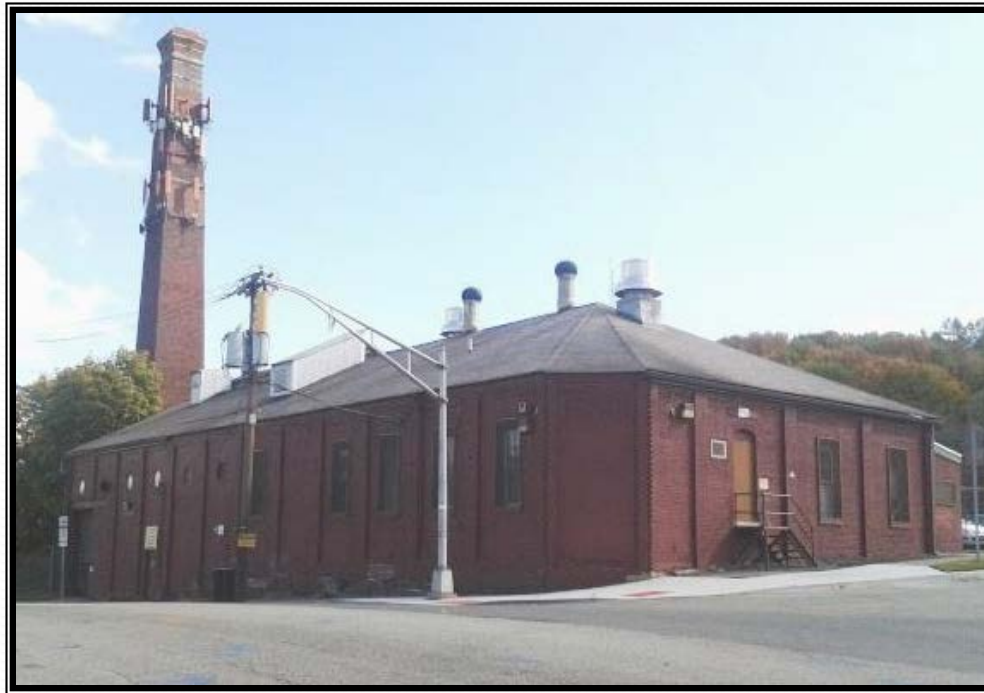
Mitigating Measures: HAER – Quality Documentation for the Stanley M. Levine Reservoir

- Documentation will provide permanent record of the building, deeper understanding of its history and significance



Mitigating Measures: HABS-Quality Documentation for the Grand Street Pumping Station

- Documentation will provide permanent record of the building, deeper understanding of its history and significance





Mitigating Measures: Great Falls Pumping Station Rehabilitation – Paterson Great Falls National Historical Park

- Sympathetically restore/repair building's slate roof and repair and restore both buildings' interiors and exteriors as appropriate





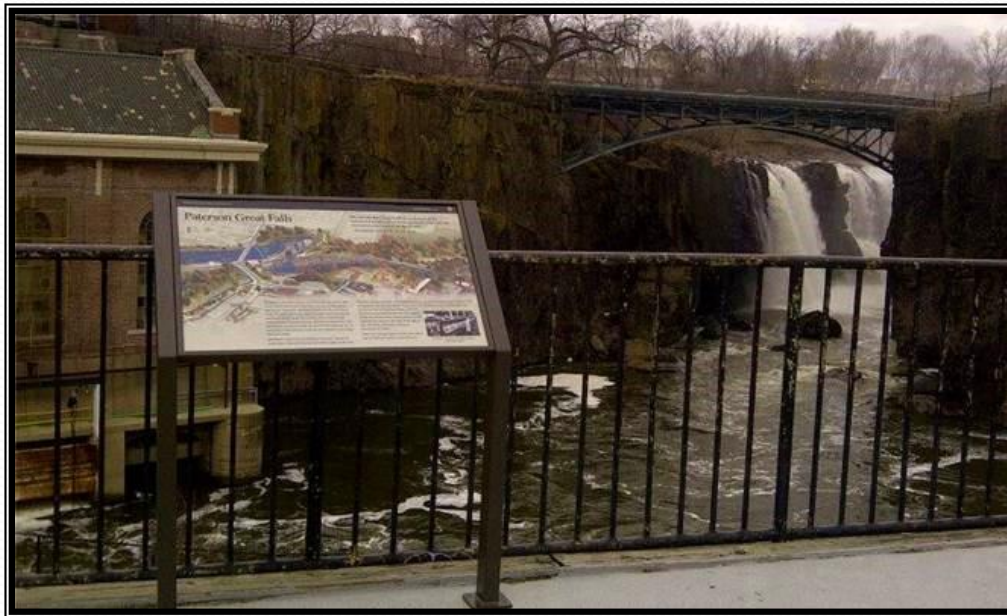
Mitigating Measures: Great Falls Development Corporation Building Rehabilitation— Paterson Great Falls National Historical Park

- Sympathetically restore/repair building's slate roof and repair and restore building's interiors and exteriors as appropriate



Mitigating Measures: Wayside Signage for Levine Reservoir- Paterson Great Falls National Historical Park

- Document history and appearance of the reservoir with signage consistent with existing Park signage appearance and materials



Discussion and Input on Minimization and Mitigation Measures

**Protecting
people,
preserving
history.**

