0.1-MG Storage at Bottom of Murray Basin

N

0 250' 500' 750' 1,000'

Approximate Scale: 1" = 500'

Beach Dr. SW

48th Ave. SW

Murray Ave. SW

Lincoln Park Way SW

10' 20' 30' 40' 50' 60' 70' 80' 90' 100' 200' 300' 400'

0 125' 250

1.25-MG Storage Tank at Lincoln Park Lower Parking Lot

Electrical, Odor Control and Generator

Diversion to Storage Tank

New 600' Long 24" - 36" Diameter Force Mains

Webster Street

Fauntleroy

Existing Dual 24" Force Mains

See Enlarged Detail

SW Thistle Street

Existing Barton P.S.

SW Director Street

45th Avenue SW

SW Wildwood Place

SW Brace Point Drive

SW Barton Street

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King County
Department of Natural Resources and Parks
Wastewater Treatment Division

COMMUNITY-SUGGESTED ALTERNATIVE 2-a
STORAGE AT LINCOLN PARK LOWER PARKING LOT
October 29, 2010

ALTERNATIVE TITLE		COMMUNITY-SUGGESTED ALTERNATIVE #2a – STORAGE IN LINCOLN PARK LOWER PARKING LOT
TECHNICAL SUMMARY		
LOCATION		LINCOLN PARKING LOT LOWER PARKING LOT
CSO BASIN(S) SERVED		BARTON & MURRAY
CAG SUGGESTION		Install storage in Lincoln Park lower parking lot.
TECHNICAL FEATURES		• Locate a 1.25 MG buried storage tank in Lincoln Park's lower parking lot. • Divert all flows from the Barton Pump Station (33MGD) to the storage tank once the conveyance capacity of the Murray Pump Station exceeds its conveyance capacity (31.5 MGD). • In order to provide control in the Murray Basin (no more than 1-overflow event per year), some flow would need to be diverted from the Murray Pump Station to storage at the bottom of the basin. This would require a 0.10 MG storage facility at the bottom of the basin adjacent to the existing Murray Pump Station. • Electrical and odor control facilities will be provided for both the 1.25 MG and 0.10 MG storage tanks. • This alternative assumes upstream storage or GSI is implemented in the Barton Basin and flows from the Barton Pump Station do not exceed 33 MGD. • The size of the Lincoln Park parking lot storage facility may increase due to the additional time required to close valves and divert flow to storage.
EVALUATION NOTES		
LAND USE	Zoning	Approval by Parks required, conditional use permit required, shoreline permit required, re-zone or code amendment required.
	Ownership/acquisition	Easement required
	Critical Areas	Yes, valve/pipeline construction near shoreline. Requires shoreline permit and Parks approval.
ENVIRONMENT	Endangered Species	TBD
TECHNICAL	Operational Complexity	High - The system would be highly dependent upon telemetry for operation and control. A telemetry signal between Barton and Murray Pump Stations would be required to indicate when flows from Barton need to be diverted to storage. A telemetry signal at the storage facility would monitor water level and filling rate. This signal would also indicate when to stop filling once storage capacity is reached (or indicate that an overflow to the local sewer is occurring). A telemetry system would be required to monitor draining of the storage facilities. Vehicle access through Lincoln Park would be required for maintenance of the force main connections near the shoreline.
	Compatibility w/WW System	A signalized control valve or gate would divert flow to storage.
	Constructability	Would require construction of two storage facilities and force main connections near the shoreline. Would impact some use and access to Lincoln Park and Lowman Beach Park during construction. Would impact ferry traffic along Fauntleroy Way during construction.

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