



Authorize Staff to Proceed with an Option to Enhance Solids Handling Capability of the Jensen Plant

Engineering & Operations Committee

Item 8-5

July 9, 2012

Metropolitan Water Treatment Plants



Background

- Jensen water treatment plant
 - 750 mgd, 2nd largest in U.S.
 - Critical facility serving L.A., Ventura, & Orange Counties
- Solids handling constraint
 - No on-site solids dewatering facilities
 - Currently uses 2 LADWP lagoons
 - Sewer discharge permit prohibitively expensive
 - Plant must operate under lower sustained flows & favorable water quality

Recent Board Activities

- 2010 & 2011 (Discussion & Oral Reports)
 - Need for increased solids handling capacity
 - On-line 2016 or sooner
- January 2011
 - E&O sub-committee established
- February 2012 (Action)
 - Staged approach on Jensen property
 - Lagoons & mechanical dewatering (500 mgd)
 - Mechanical dewatering (up to 750 mgd)
 - Deferred action to explore use of LADWP property

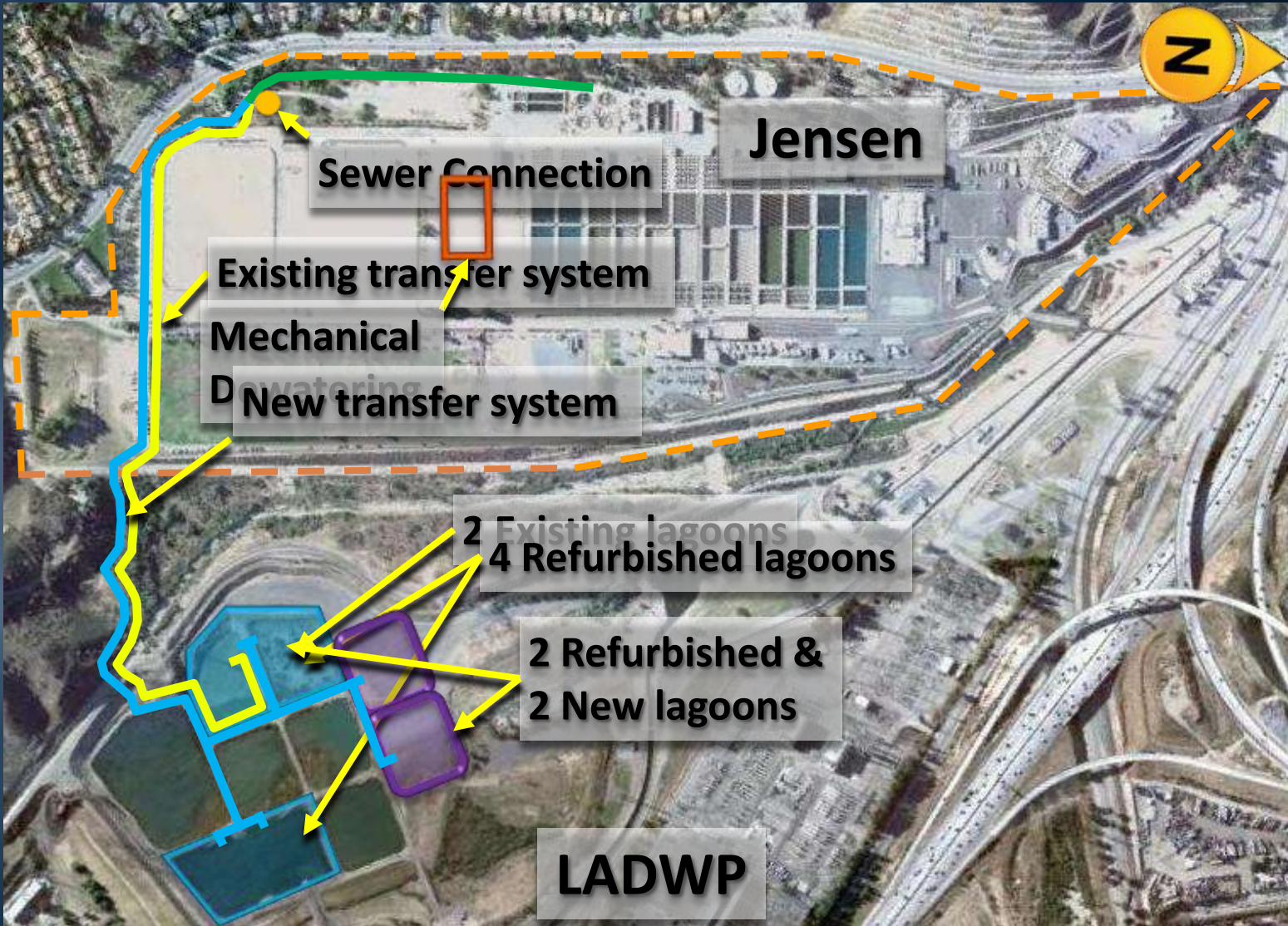
Recent Board Activities

- May 2012 (Oral Report)
 - 50-year use agreement
 - Use existing & build new lagoons
 - Future construction of mechanical dewatering
- June 2012 (Information Letter)
- June & July 2012
 - E&O Committee directors' site visits

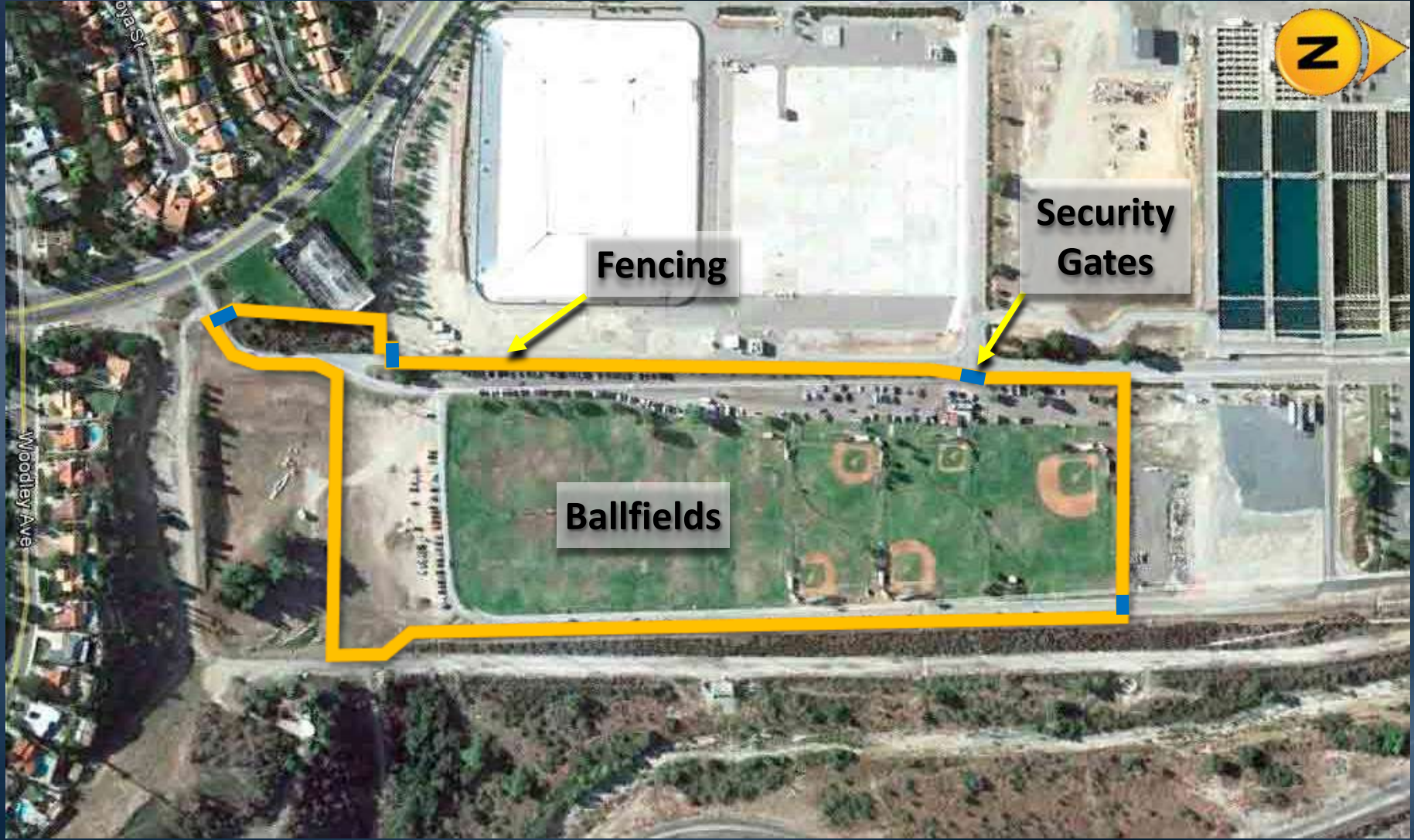
Options Under Consideration

- Option No. 1 – Negotiation for Long-Term Use of LADWP Lagoons
- Option No. 2 – Authorization of Jensen Solids Dewatering Facility & Lagoons, Stage 1 – Final Design Phase

Option 1: Use of LADWP Lagoons



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- Changes Since February 2012

February 2012	July 2012
30 Year Agreement	50 Year Agreement
Use of 2 Existing LADWP Lagoons	Use of 4 Refurbished LADWP Lagoons
Site Management Responsibilities Under Discussion	Responsibility for Groundwater & Site Management by LADWP
Sewer Discharge Paid by MWD	Sewer Discharge Paid by LADWP
No Indemnification Discussion	Indemnification by LADWP

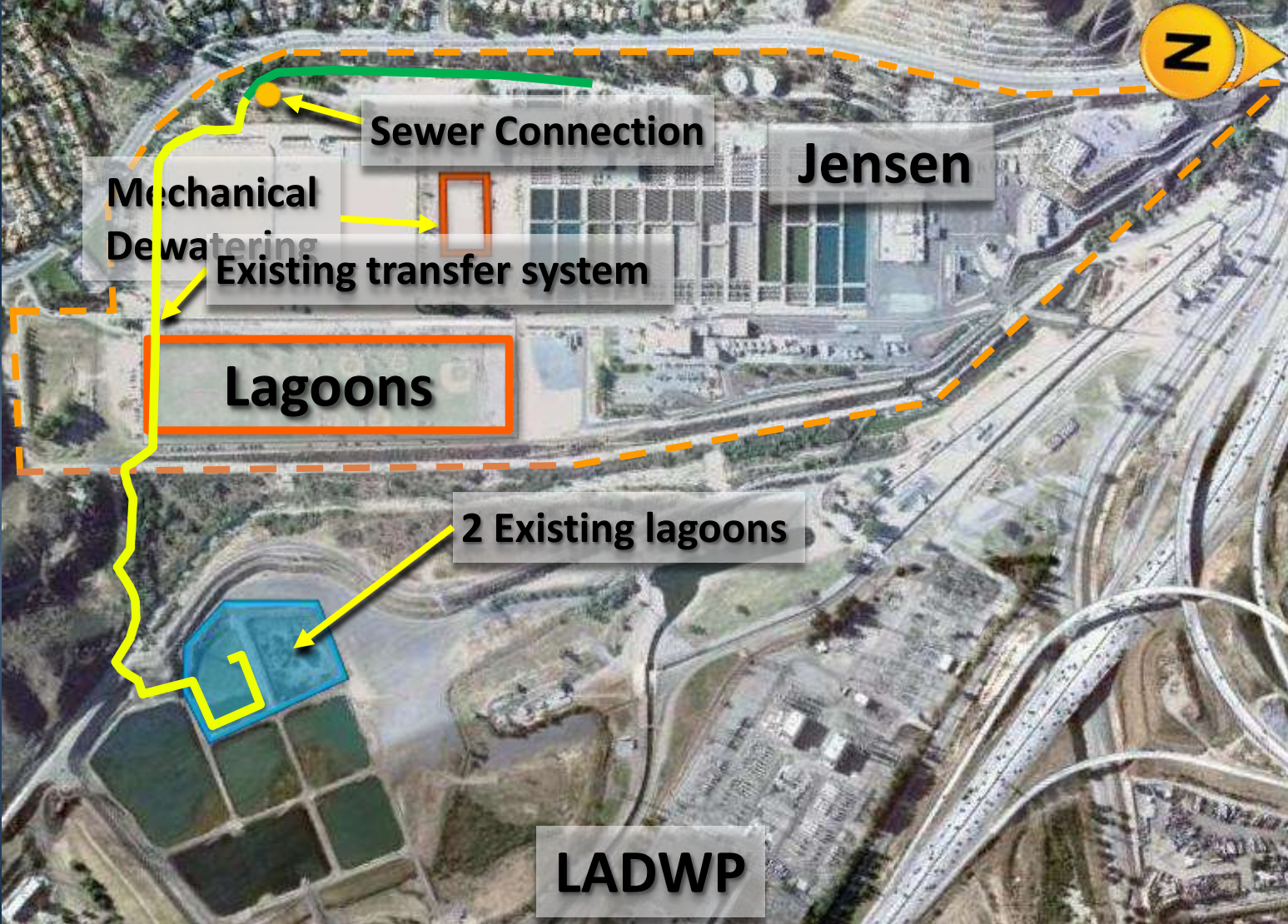
Option 1: Lagoon Use Agreement Objectives

- Long-term solution
 - 50-year use agreement
- Operational reliability
 - 500 mgd solids handling capacity
 - Use of 4 refurbished LADWP lagoons
 - Construction of 2 lagoons by MWD
 - Use of sewer discharge for peak conditions
- Acceptable site conditions
 - LADWP responsible for groundwater controls & site conditions

Option 1: Lagoon Use Agreement Objectives (cont.)

- Financial benefit
 - Deferral of \$30 million in capital for at least 7 years
 - No-cost for MWD use of LADWP property for 50-year term
 - No-cost for LA's use of Jensen site for 45-year term
 - No sewer fees until new facilities are constructed
- Assured performance & risk management
 - 1-, 2-, & 5-year milestones
 - Termination of both leases for non-performance
 - Indemnification

Option 2: On-Site Jensen Facilities



Option 2: On-Site Jensen Facilities

- Project Scope
 - 5 lagoons & decant pump station
 - Modification of dry polymer building & solids thickening system
 - Mechanical dewatering facility for 500 mgd

Considerations for Options

- Duration
 - Both options are long-term solutions
 - Option 1 Use Agreement: 50-year term
 - Option 2 On-Site Facilities: Permanent

Considerations for Options (cont.)

- Risk Management
 - Both options have performance assurances
 - Option 1 Use Agreement:
 - Contractual provisions for non-performance & indemnification
 - MWD is a tenant
 - Option 2 On-Site Facilities:
 - Certainty on MWD property

Considerations for Options (cont.)

- Operational Reliability
 - Both options provide 500-mgd solids handling capability (2/3 of total plant capacity)
 - Option 1 Use Agreement:
 - Earlier improvement in operational reliability
 - Starting in Year 1, 40% solids handling capacity through use of 2 existing LADWP lagoons and sewer discharge at no cost to MWD

Considerations for Options (cont.)

- Operational Reliability (cont.)
 - Option 2 On-Site Facilities:
 - Greater operational risk in immediate years
 - Remains at 15% solids handling capability until MWD constructs new facilities
 - Greater risk of sewer discharges at MWD cost

Considerations for Options (cont.)

- Finance

- Both options have equivalent total construction costs in current dollars
- Option 1 Use Agreement:
 - Immediate increase in solids handling capability at no cost to MWD
 - Deferral of \$30 million in capital for at least 7 years
 - Potential for savings in construction cost due to reduced mechanical dewatering requirements
- Option 2 On-Site Facilities:
 - Greater risk of sewer discharges at MWD cost in near-term
 - Full capital costs incurred over the next 4 years

Board Options

- **Option # 1**
 - Adopt CEQA determination
 - Authorize negotiations with LADWP to develop a 50-yr use agreement for MWD use of LADWP solids lagoons

Board Options

- **Option # 2**

- Adopt CEQA determination
- Appropriate \$6,900,000
- Authorize final design of Stage 1 of Jensen Solids Dewatering Facility & Lagoons
- Authorize agreement with MWH Americas for NTE amount of \$1,025,000
- Authorize increase of \$135,000 to existing agreement with Environmental Science Associates, for new NTE total of \$465,000

Board Options

- **Option # 3**
 - Do not authorize either Jensen solids handling project at this time

Staff Recommendation

- Option # 1

