



# Two Rehabilitation Projects at the Weymouth Water Treatment Plant

Engineering & Operations Committee  
Item 7-2  
July 9, 2012

# Current Action

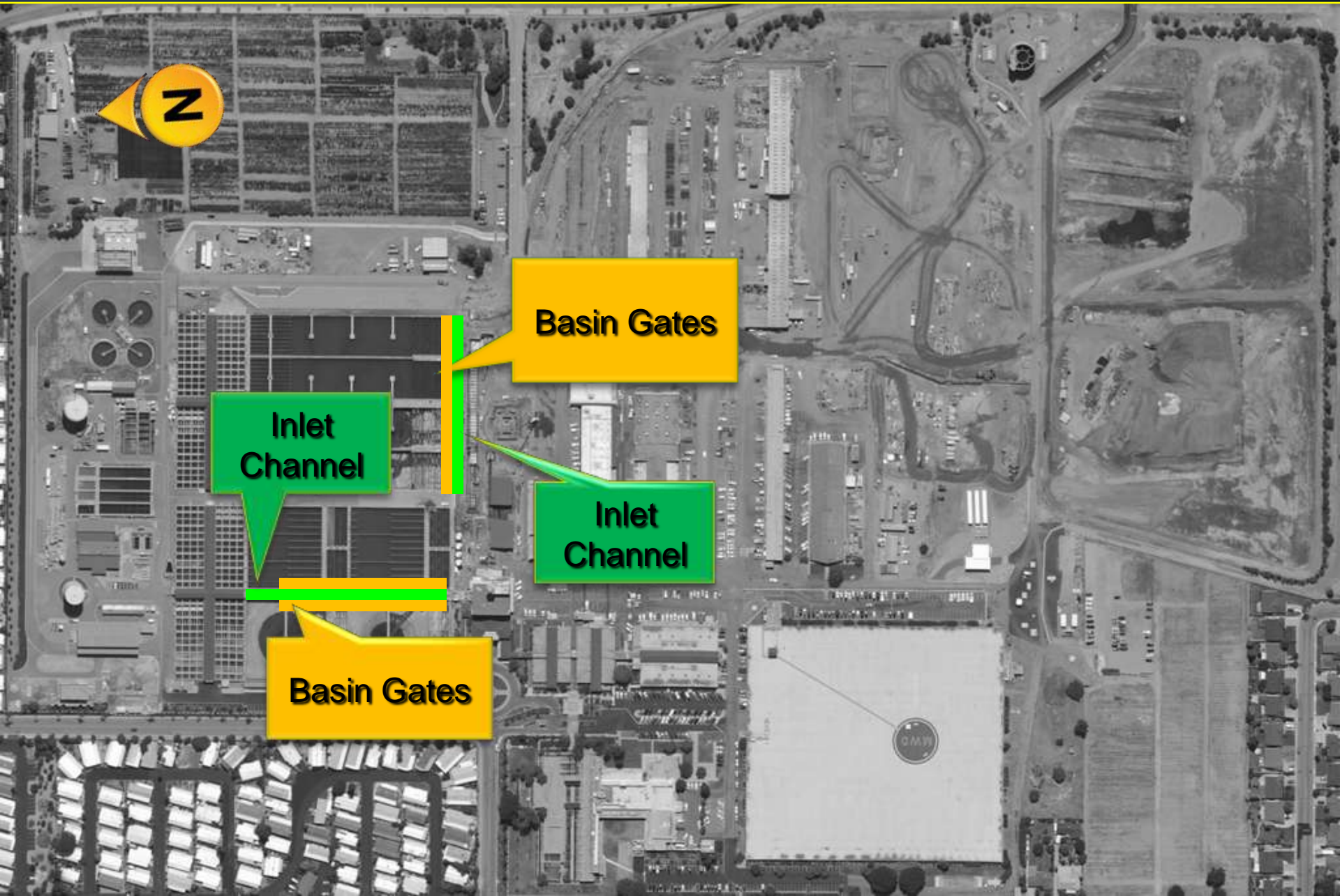
- Appropriate \$380,000
- Authorize 2 rehabilitation projects at the Weymouth plant:
  - Preliminary design to replace treatment basin inlet gates
  - Preliminary design of seismic upgrades to basin inlet channels

# Metropolitan Treatment Plants





# Project Locations



**N**

**Basin Gates**

**Inlet Channel**

**Inlet Channel**

**Basin Gates**

# 1. Basin Inlet Gate Improvements

## ● Existing Conditions

- In service 50-70 years
- Gates & gate guides corroded & leak
- No SCADA indication

## ● Recommendations

- Replace or rehabilitate 32 gates, guides & actuators
- Automate gate control



Leak  
through  
closed gate

# 1. Basin Inlet Gate Improvements

## Preliminary Design Scope

- Evaluate alternatives for rehabilitation or replacement of gates & actuators
- Assess materials of construction
- Survey for hazardous materials
- Preliminary design by Metropolitan

Leak through closed gate





## 2. Basin Inlet Channel Seismic Upgrades

- Background
  - Located 1.5 miles from Sierra Madre Fault
  - Potential 7.0 magnitude earthquake
  - In service 50 -70 years
  - Basin inlet channels need structural upgrade
- Recommendation
  - Strengthen walls of inlet channels



## 2. Basin Inlet Channel Seismic Upgrades

- Preliminary Design Scope
  - Conduct detailed structural analyses
  - Develop rehabilitation concepts
  - Prepare design criteria & estimate construction cost
  - Preliminary design by Metropolitan

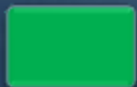


# Requested Funds

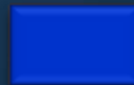
	Basin Gate Improvement	Inlet Channel Seismic Upgrades
Proj Mgt, Haz. Material Survey	\$ 36,000	\$ 19,000
Preliminary Design	139,000	124,000
Remaining Budget	35,000	27,000
Total:	\$ 210,000	\$ 170,000
Total Requested :	\$ 380,000	

# Schedule

Project	2012	2013
Basin Inlet Gate Improvements		
Inlet Channel Seismic Upgrades		



Prelim Design



Final Design



Construction



Board Action

# Board Options

- Option # 1
  - Adopt CEQA determination
  - Appropriate \$380,000
  - Authorize preliminary design to rehabilitate Weymouth basin inlet gates
  - Authorize preliminary design of seismic upgrades to basin inlet channels



# Board Options

- Option # 2
  - Adopt CEQA determination
  - Appropriate \$210,000
  - Authorize preliminary design to rehabilitate Weymouth basin inlet gates
  - Do not authorize preliminary design of seismic upgrades to basin inlet channels
- Option # 3
  - Do not proceed with the 2 rehabilitation projects at this time

# Staff Recommendation

- Option # 1

