



# Point Loma Wastewater Treatment Plant Permit

Ann Sasaki, Assistant Public Utilities Director

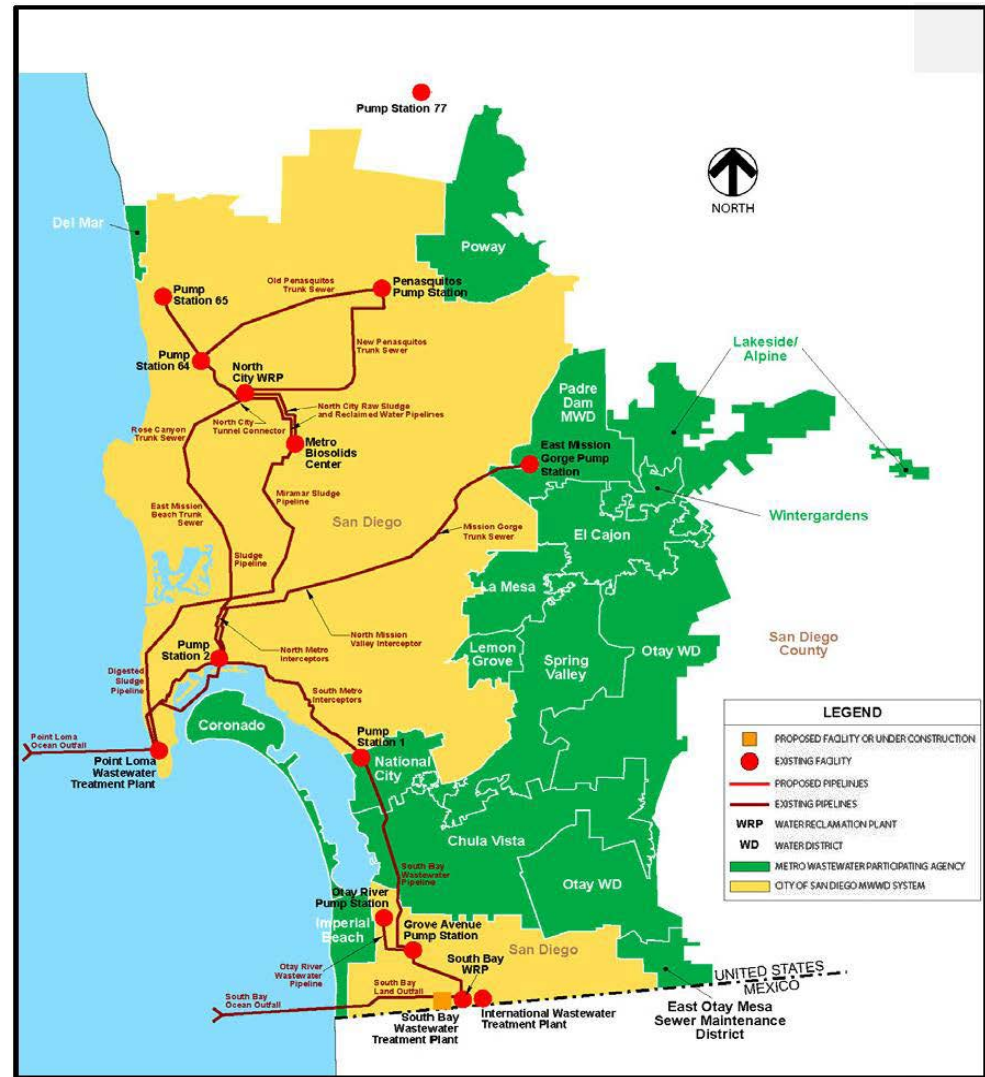
Metro JPA

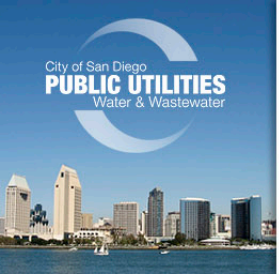
September 11, 2014

# Pt Loma Modified Permit Metropolitan Sewerage System

## Significant Regional Asset:

- 2.5 Million served
- 450 Square miles
- 12 - Participating Agencies
- 4 - Wastewater Facilities
- 8 - Major Pump Station
- Two Ocean Outfalls

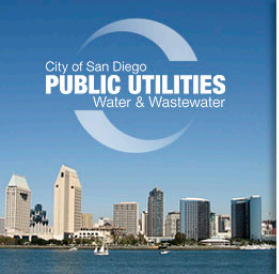




## Pt Loma Modified Permit

# Current Status

- Pt. Loma WWTP is the backbone of the sewerage system
- Pt. Loma WWTP is a chemically enhanced advanced primary treatment plant
- Pt. Loma WWTP has a 4.5 mile long deep ocean outfall (310 feet in depth)
- Outfall provides superior dispersion and a high degree of dilution



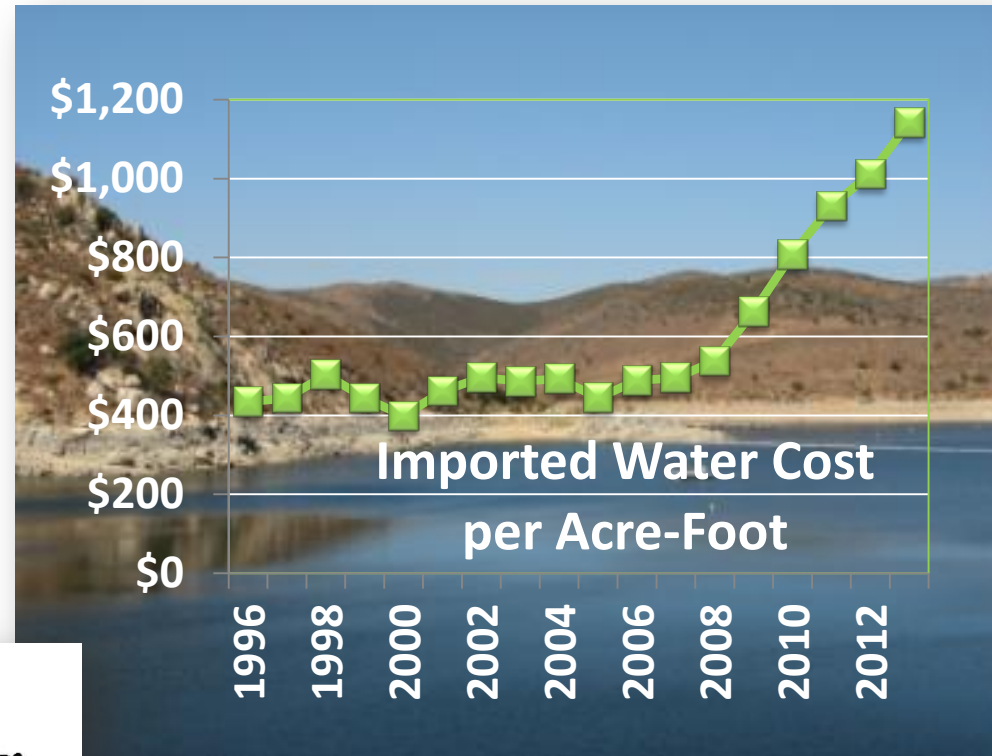
## Pt Loma Modified Permit Current Status

- Extensive ocean monitoring has not identified any negative impact to marine organisms surrounding the outfall
- Operates with a modified 301(h) permit
  - Alternative discharge standards for Total Suspended Solids (TSS) and Biochemical Oxygen Demand (BOD)
- The current permits expires on July 31, 2015

## Pt Loma Modified Permit

# Water Supply Challenges

- Limited local & imported supplies
- Recurring drought
- Population growth
- Bay Delta constraints
- Natural disaster risk
- Rising imported water costs



**Los Angeles Times**

### California's drought getting even worse, experts say

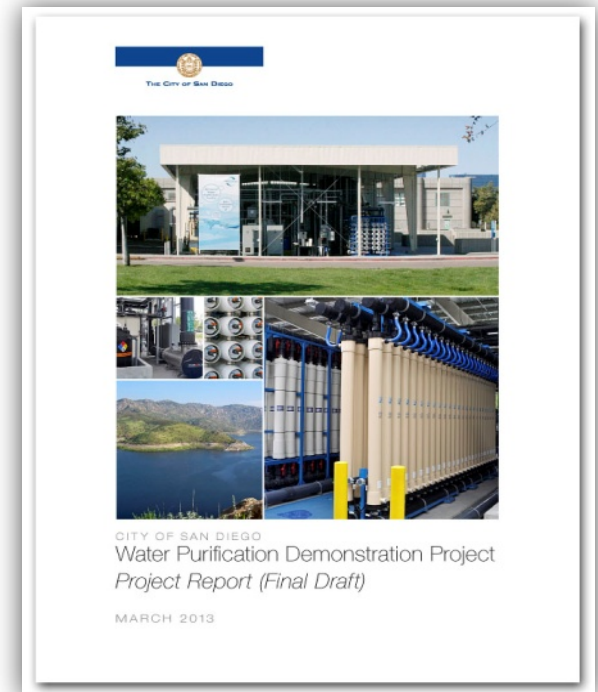
Drought worsens in California since last week; 33% of the state facing exceptional drought conditions

JUNE 19, 2014, 5:30 PM

## Pt Loma Modified Permit

# Integrated Water Wastewater Solution

- 2012 Recycled Water Study
  - Compliance with Cooperative Agreement
  - Identified the feasibility of creating up to 83 mgd of safe, reliable, locally controlled drought proof water
  - Diverts flow upstream of Point Loma, resulting in less ocean discharge





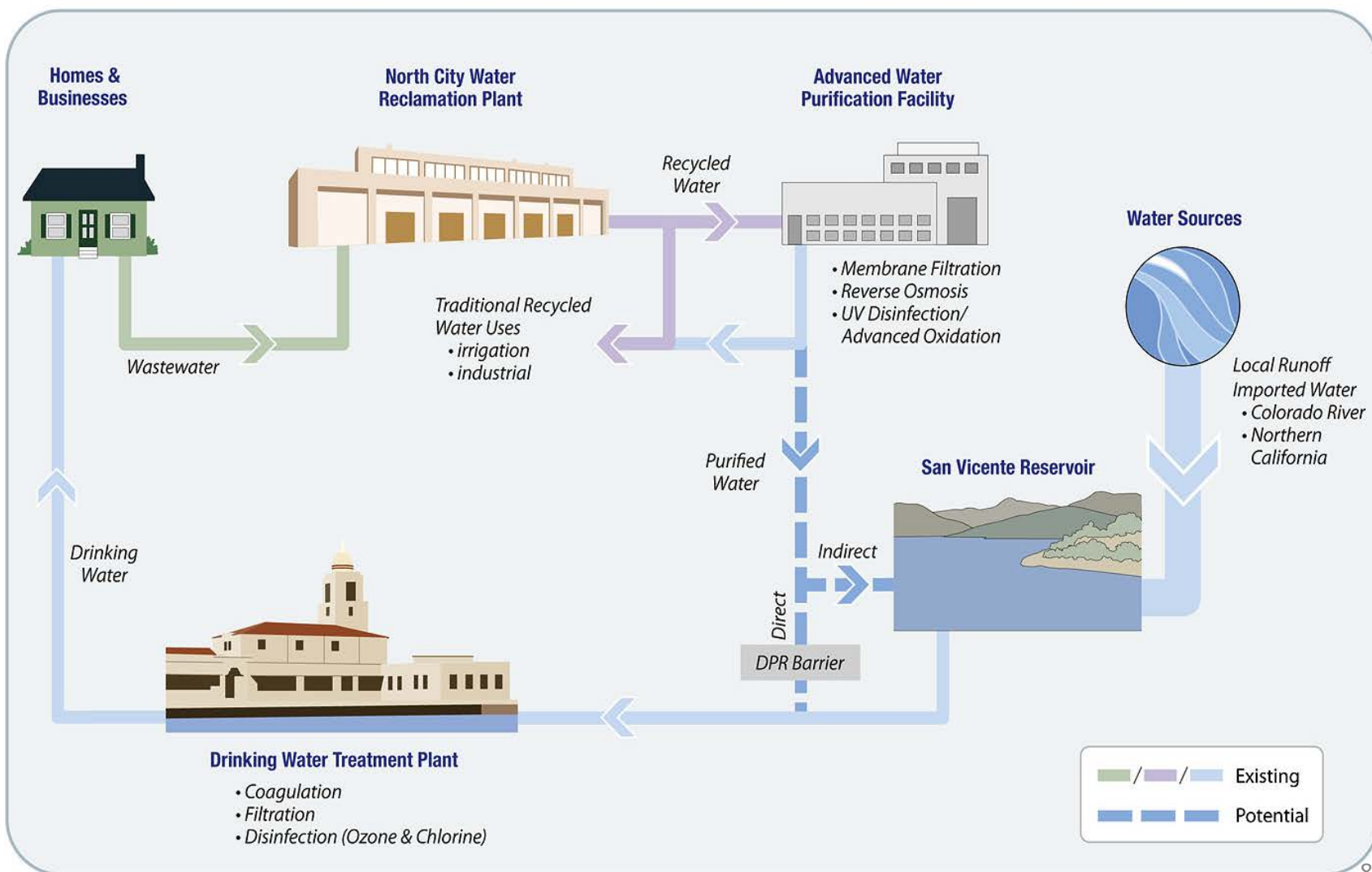
## Pt Loma Modified Permit **Pure Water Program**

- 20 year program to provide a safe, reliable and local drinking water supply for San Diego
- Uses proven water purification technology and is environmentally sustainable
- Is a cost-effective solution, eliminating the need for expensive upgrades to the Point Loma Wastewater Treatment Plant



# Pt Loma Modified Permit

## How does Pure Water Work?



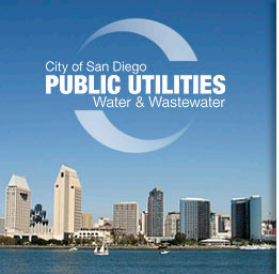


# Pt Loma Modified Permit Pure Water Program Schedule

Committed to invest  
in specific infrastructure to  
off-load Point Loma:

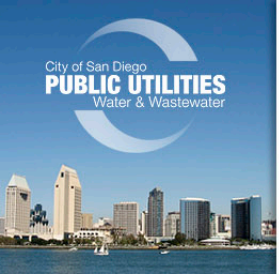
- 15 mgd by 2023
- Additional 15 mgd by 2027
- Additional 53 mgd by 2035





## Pt Loma Modified Permit Options

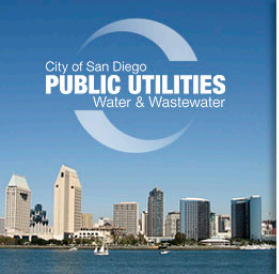
- **Option A** - Convert the Pt. Loma Wastewater Treatment Plant to secondary treatment
- **Option B** - Apply only for a modified permit
- **Option C** - Apply for a modified permit, commit to Pure Water, and seek secondary equivalency



## Pt Loma Modified Permit Option - A

- Convert the Pt. Loma WWTP to secondary treatment
  - Very costly, \$1.8 Billion
  - Site constraints
  - Unnecessary, no negative impacts to ocean environment
  - No new water is created; a resource is discharged into the ocean

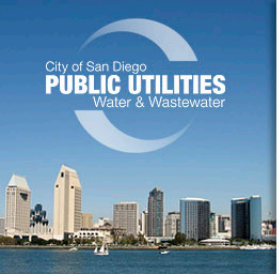
**Not Recommended**



## Pt Loma Modified Permit Option - B

- Apply only for a modified permit
  - City continues to meets all regulatory requirements
  - No negative impacts to ocean environment
  - No new water is created; a resource is discharged into the ocean
  - Environmental and Coastal Commission Opposition

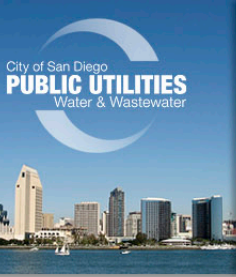
**Not Recommended**



## Pt Loma Modified Permit

# Option C – Recommended Option

- Apply for a modified permit, commit to Pure Water, and seek secondary equivalency
  - City continues to meets all regulatory requirements
  - No negative impacts to ocean environment
  - Creates locally controlled, drought- proof source of water; reuses a resource that would otherwise be wasted
  - Environmental Community support
  - Resolves uncertainty surrounding future Pt. Loma permits

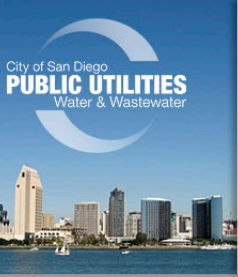


## Pt Loma Modified Permit

# Option C - Commitment to Pure Water

- Permit Application Would Include:
  - Commitment to start Environmental review and Design work for at least 15 mgd of Pure Water with specific milestones
  - Goal to produce:
    - at least 15 mgd of water by 2023
    - an additional 15 mgd of water by 2027
    - an additional 53 mgd of water by 2035
  - \* Subject to approval of secondary equivalency



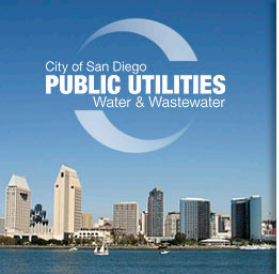


## Pt Loma Modified Permit

# Option C - Secondary Equivalency

- Seek Federal approval to comply with the Clean Water Act by defining secondary equivalency standards:
  - Minimum Removal Rates for TSS and BOD
  - Cap on annual TSS mass emissions
  - Concentration-based limit on TSS in effluent
  - Commitment to current enhanced ocean monitoring
  - Production of at least 83 mgd of potable reuse by 2035

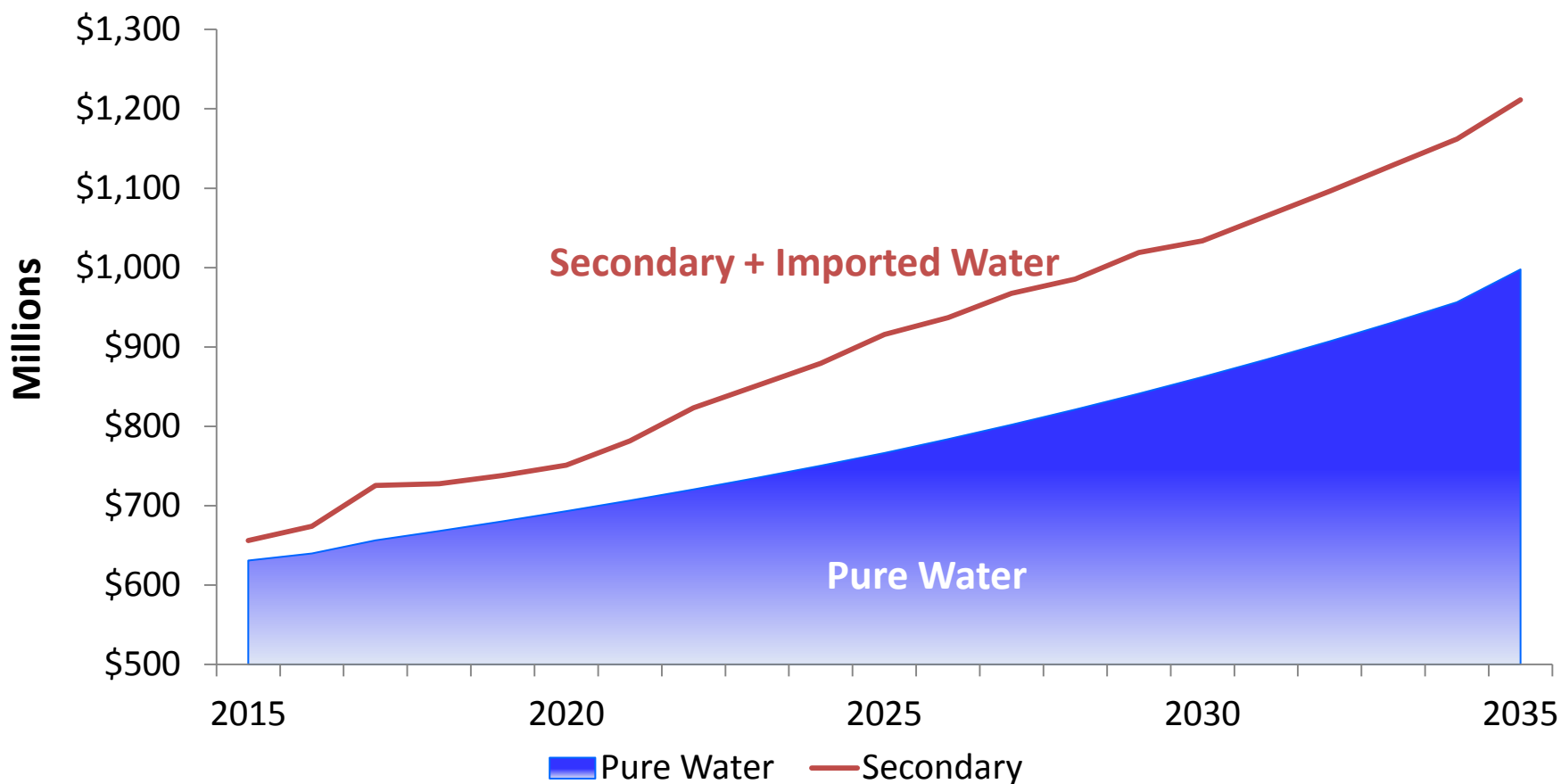




## Pt Loma Modified Permit

# Option C - The Cost Effective Alternative

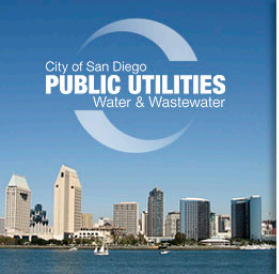
Total revenue Water and Wastewater requirements



## Pt Loma Modified Permit **Benefits of Option C**

- Meets all regulatory requirements
- Provides a local, sustainable drought-proof supply of high-quality drinking water for San Diego
- Reduces ocean discharges and sets a cap on mass emissions from the Point Loma Wastewater Treatment Plant
- Is the most cost-effective option





# Pt Loma Modified Permit Schedule

Date	Meeting
September 8-10, 2014	Meetings in Washington DC with EPA and Congressional Delegation
September 11, 2014	Metro JPA
September 15, 2014	IROC
October 2, 2014	Metro JPA
October 7, 2014	City Council Closed Session
October 28, 2014	City Council Approval
January 30, 2015	Submit Permit Application
December 2015	Secondary Equivalency Approved

# Questions?

