

Pure Water San Diego Phase 1 Update

UCCA

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June 9, 2021

Point Loma Wastewater Treatment Plant

- Enhanced primary treatment
- Requires modified permits
- Secondary treatment is the national standard
- A very challenging location



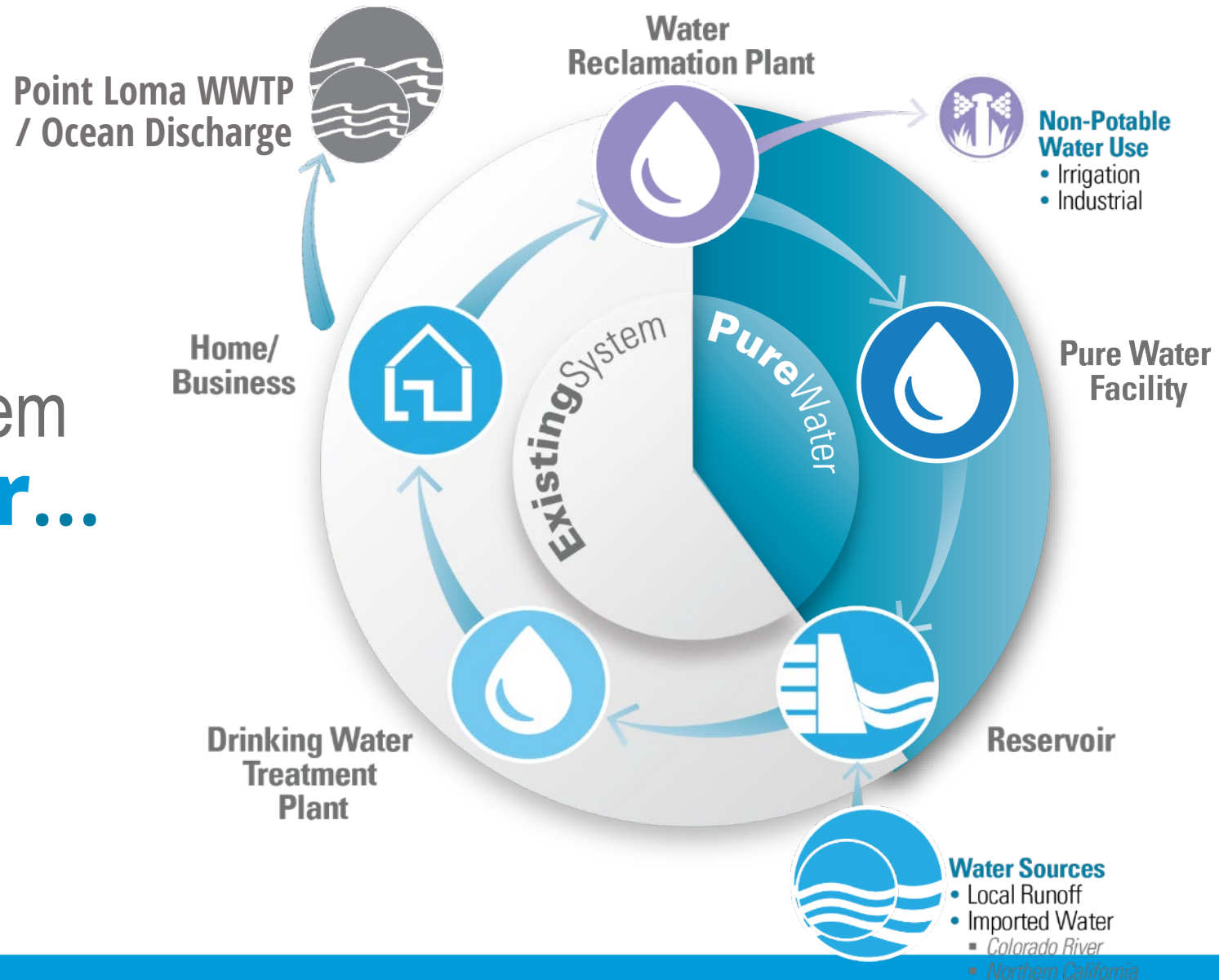
SD San Diego's Water Supply System

Existing System...

Primarily a Single-Use System

Pure Water...

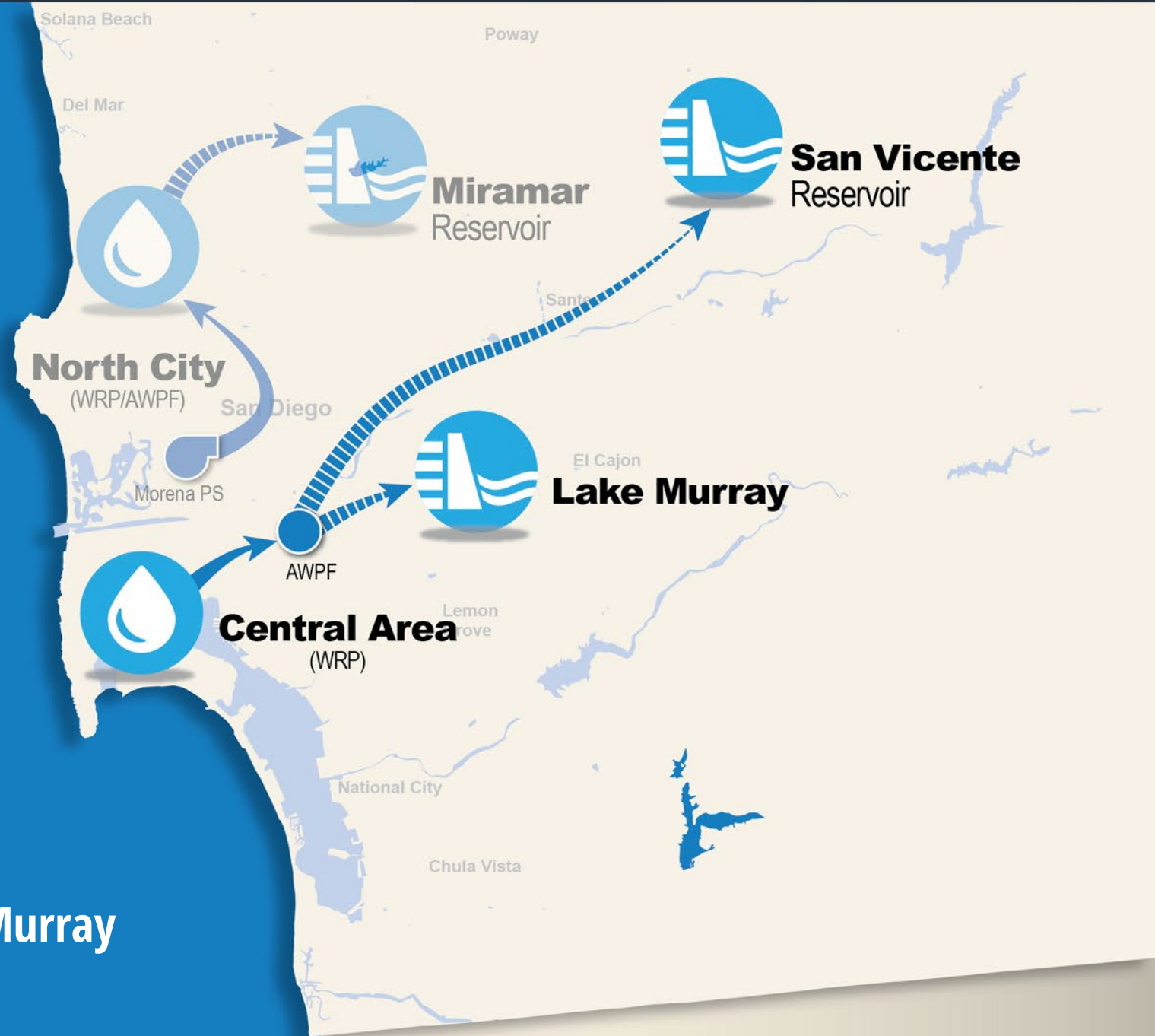
Completes Our Water Cycle



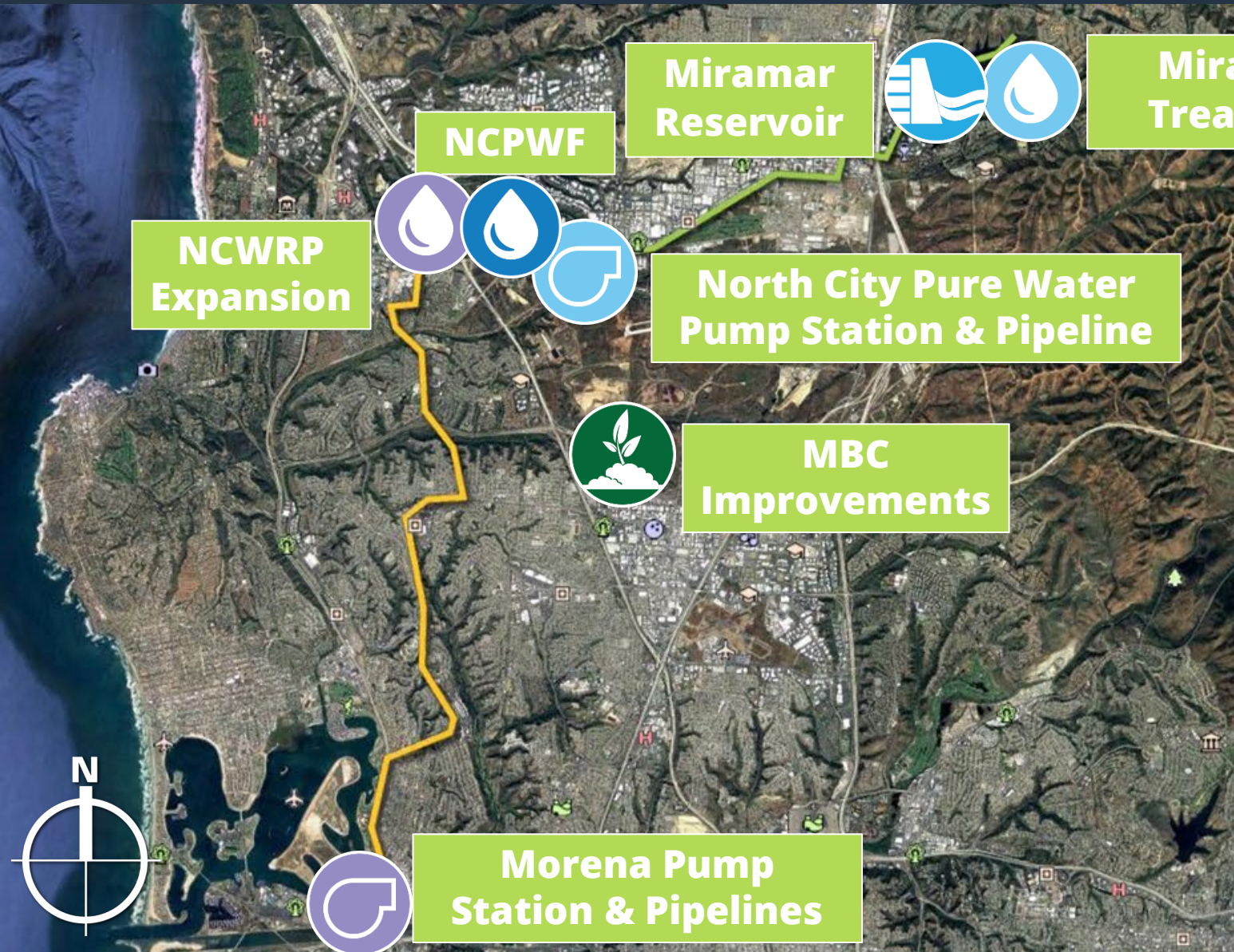
Pure Water
will produce
1/2
of your water
locally

Phase 2

- 2035 Completion
- 53 mgd
- Central Area PWF to San Vicente or Lake Murray



SD Phase 1 Projects



Phase 1 – North City will produce 30 mgd of purified water

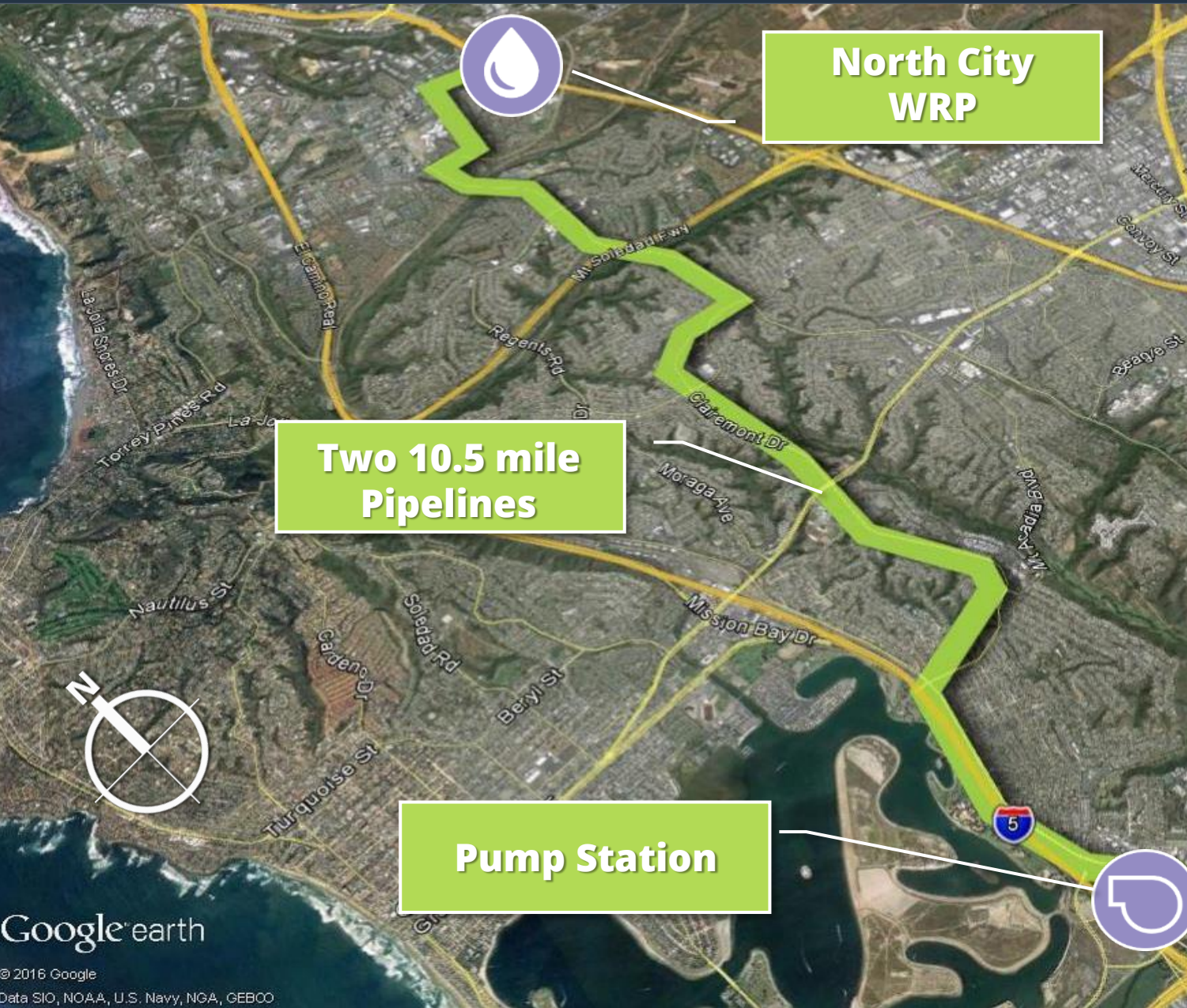
100% Design Completed on all Phase 1 projects

MBC = Metro Biosolids Center

NCWRP = North City Water Reclamation Plant

NCPWF = North City Pure Water Facility

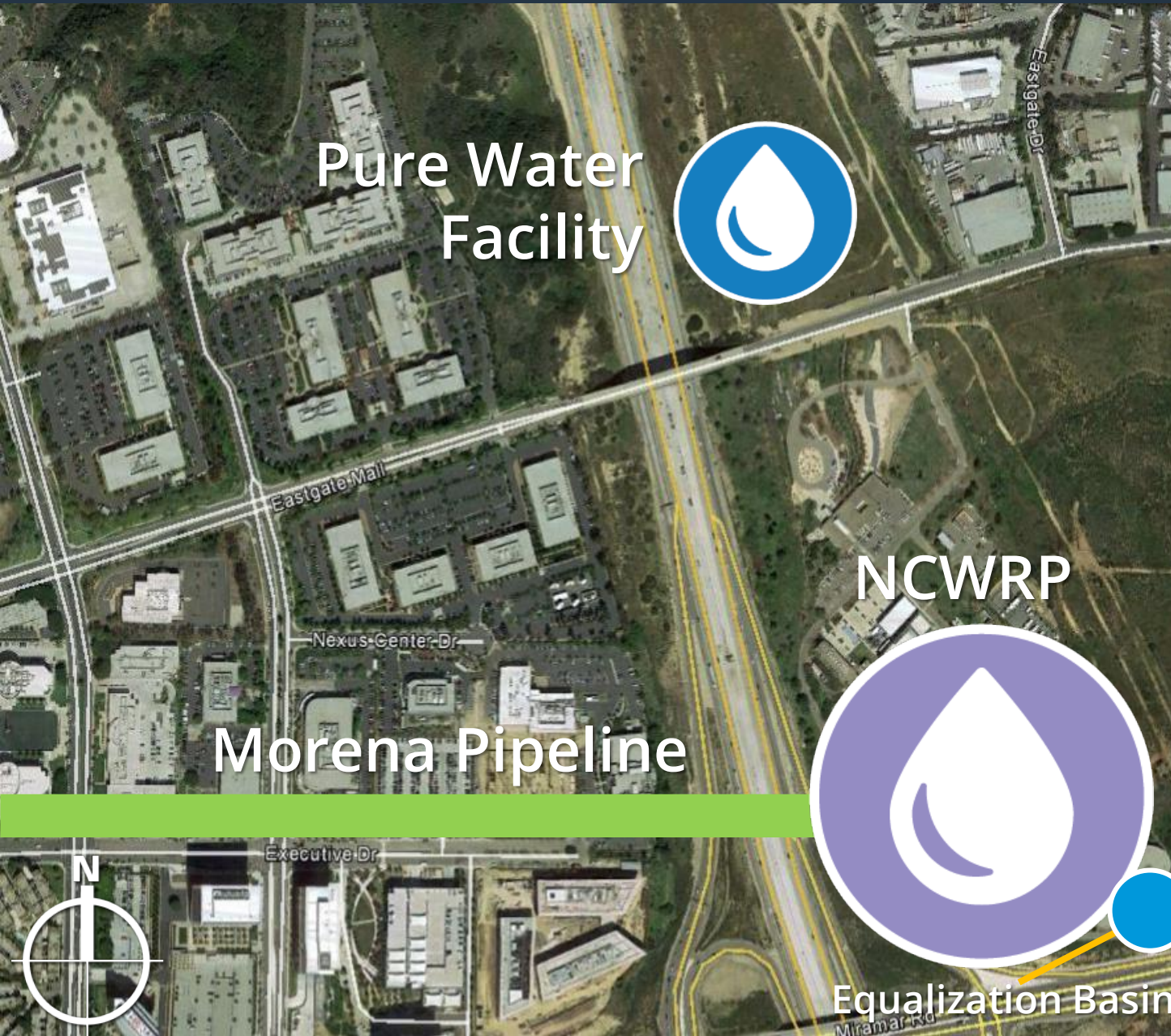
SD Morena Pump Station and Pipelines



- Conveys wastewater to North City Water Reclamation Plant (WRP)
- Supports Phase 1 purified water and recycled water production
- Trenchless construction will be used to avoid:
 - *environmentally sensitive areas*
 - *freeway crossings*
- Construction begins in mid 2021



North City Water Reclamation Plant Expansion



- Treats wastewater to recycled water standards
- Expansion nearly doubles the amount of recycled water produced to meet needs of:
 - *Pure Water Facility*
 - *Recycled Water System*
- Early site work is being completed
- Construction begins in summer 2021



North City Pure Water Facility & Pump Station

Pure Water
Facility



Pump
Station



NCWRP



- Treats recycled water to produce 30 mgd of purified water
- Includes a proven 5-step advanced water purification treatment process
- Construction began in April 2021





North City Pure Water Facility



Ozonation



Biological
Activated
Carbon
Filters



Membrane
Filtration



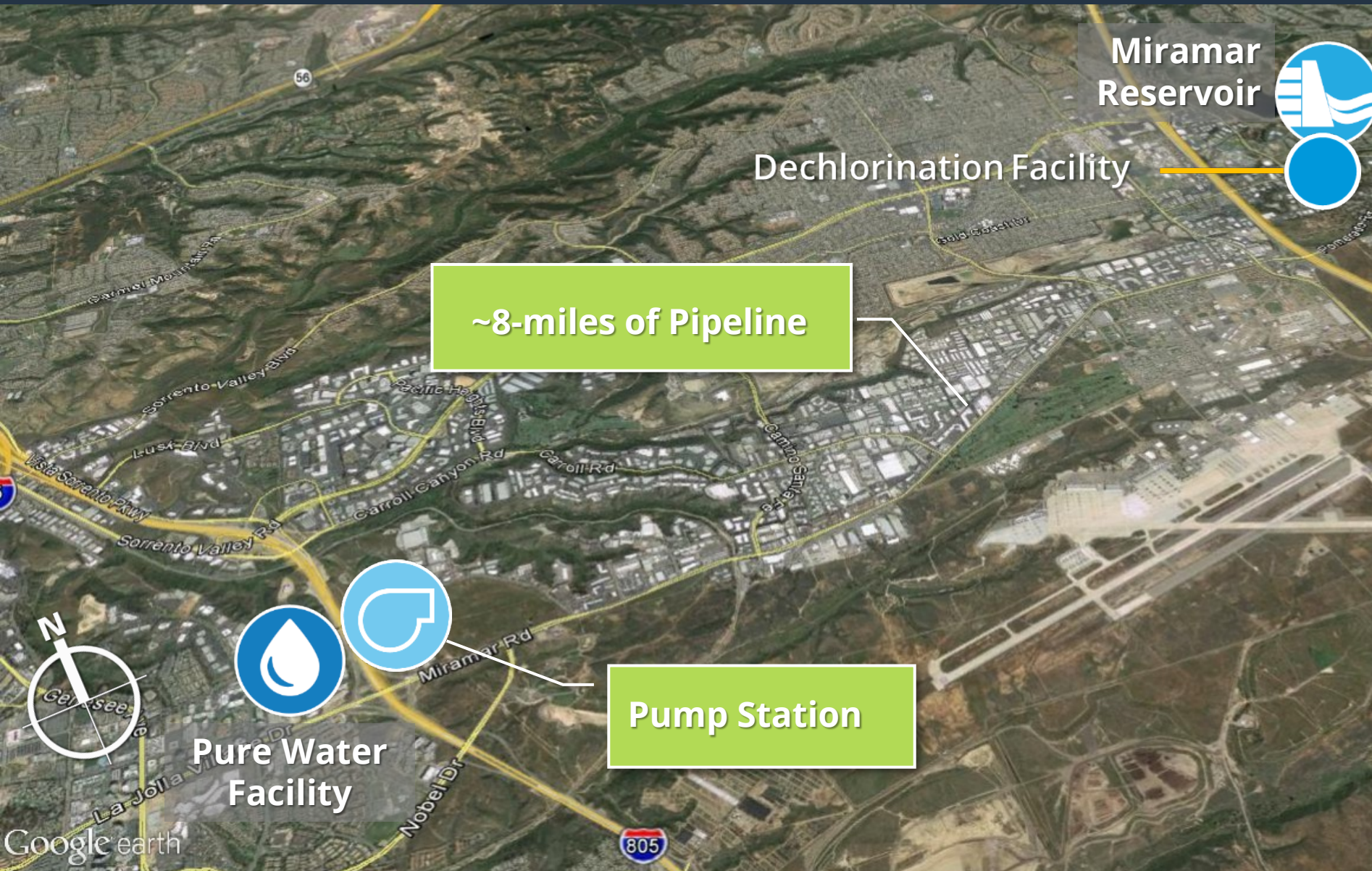
Reverse
Osmosis



Ultraviolet
Disinfection
/Advanced
Oxidation

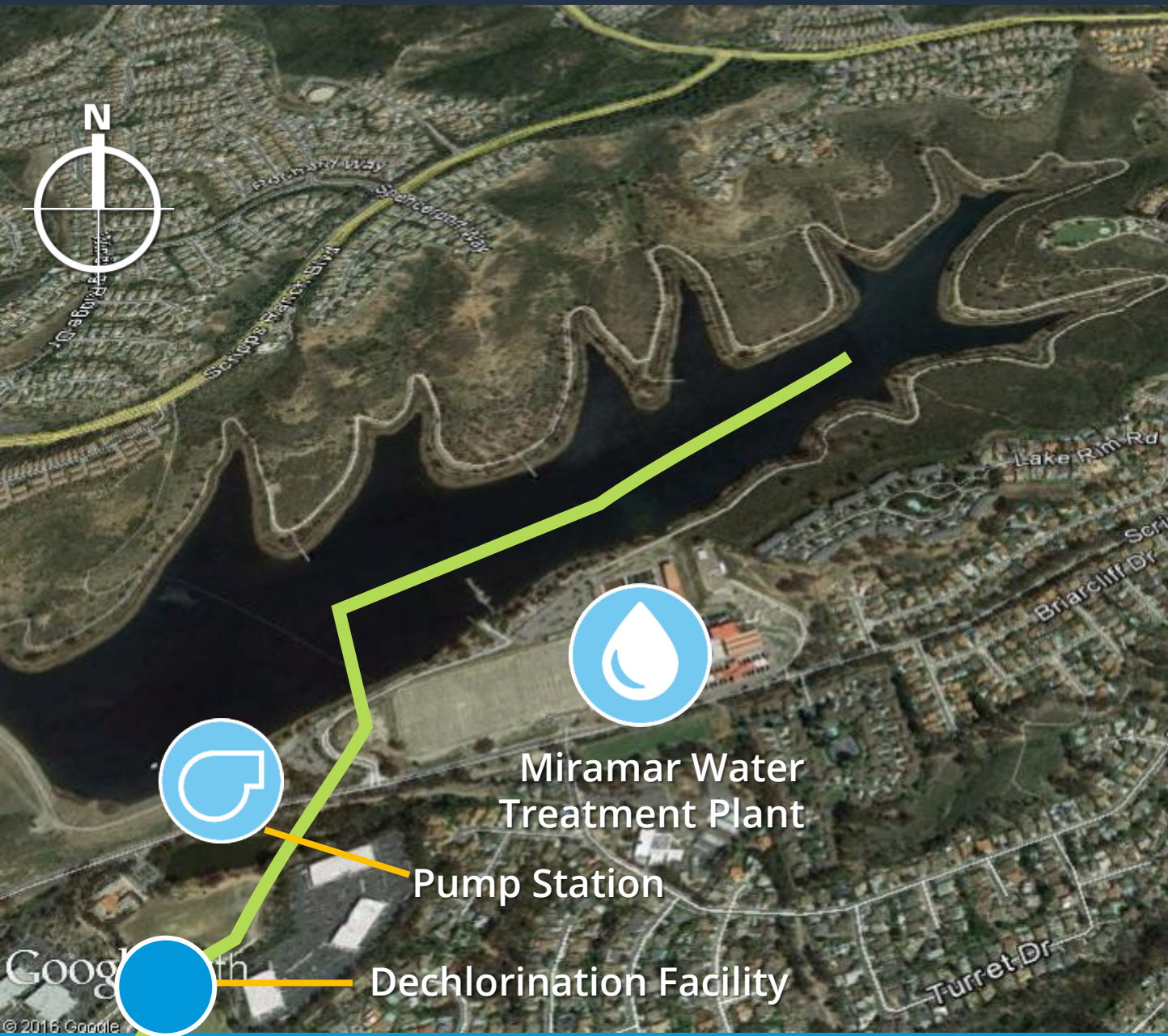


North City Pure Water Pipeline



- Pure Water to Miramar Reservoir via:
 - Pump Station
 - Pipeline
- Water will be dechlorinated before release to reservoir
- Construction begins in summer 2021

SD Miramar Reservoir



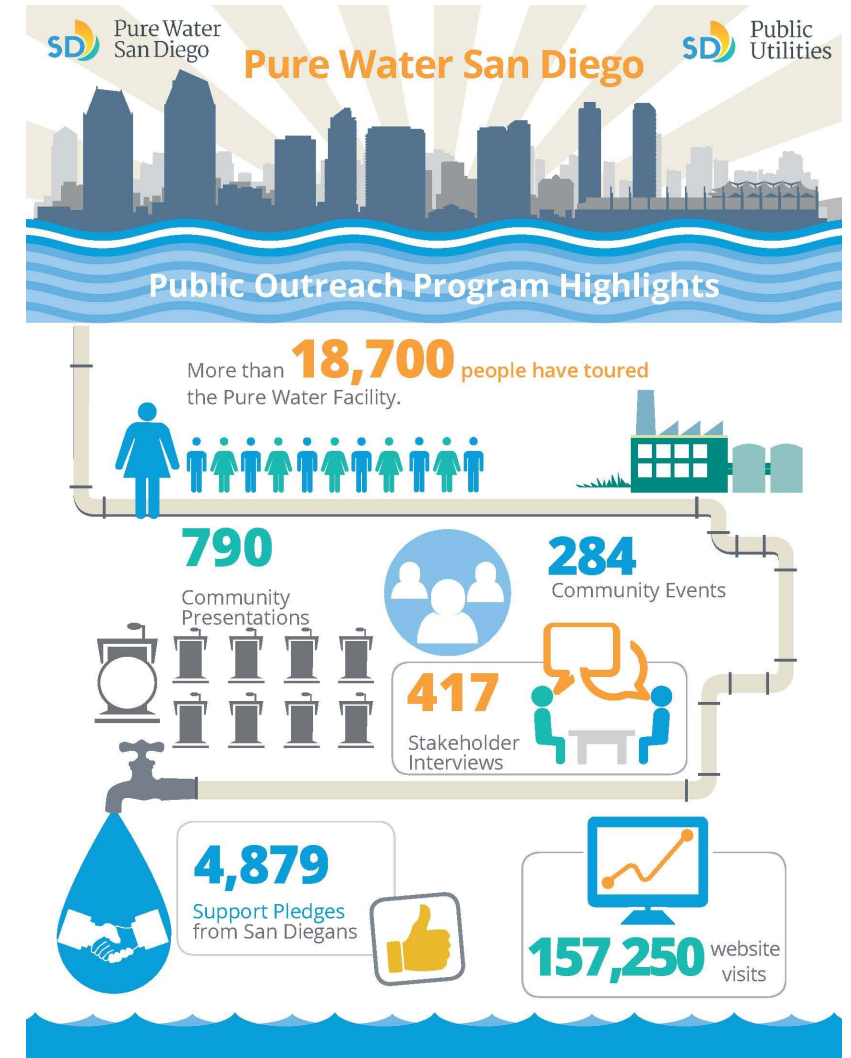
- The purified water:
 - Is released via underwater pipeline in the reservoir
 - Will blend with imported and local water supplies
- The Miramar Reservoir Pump Station is being upgraded

Phase 1 Construction – UC Community

Project/Construction Package	Anticipated Contractor Notice to Proceed	Anticipated Project Completion
North City Pure Water Facility & Pump Station	Issued in April 2021	2025
Morena Northern Pipeline & Tunnels	June 2021	2024
NCWRP Expansion, Influent Pump Station & Pipeline	August 2021	2025
Metro Biosolids Center Improvements	August 2021	2025
NCWRP Equalization Basin	Fall 2021	2023

SD Project and Community Coordination

- **Robust regional outreach and education program**
 - *Commitment to keeping community informed*
 - *Variety of communication methods (in person, virtual, web, print) and structured notification process (meetings, mailers, doorhangers, etc.)*
 - *Multicultural and multilingual audience engagement*
- **University City outreach**
 - *Briefings to elected officials and community groups*
 - *Formation of UC Phase 1 Working Group (adopted 20+ recommendations)*
 - *Community specific e-blasts, local media articles and other advisories*
 - *Business and residential field outreach*
 - *Community liaison specifically for UC*



SD Morena Northern Pipeline & Tunnels

- Two pipelines will start at Genesee/SR-52 and continue through UC to the NCWRP
 - *One transports wastewater to the NCWRP (N)*
 - *One transports brine from the NCPWF to PLWTP (S)*
- Three short tunnels (approx. 1,000 ft. long) at SR-52, Rose Canyon (Genesee), and I-805
- Morena alignment will also go through Clairemont and Bay Park/Morena communities



University City High School


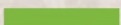
Governor Drive

Nobel Athletic Area and Library

Standley Middle School



Genesee Avenue

-  Pipeline
-  Tunnel

Morena Pipeline - Northern Alignment and Tunnels

Genesee/State Route 52 to Governor Drive

Construction Project Components:

- 4 miles of 48-inch force main
- 4 miles of 30-inch brine/centrate pipeline
- Tunnel crossing of Interstate 805
- Tunnel crossing at Rose Creek Canyon
- Tunnel crossing at the San Clemente Creek

Construction Segment Details:

- Night work, 9 p.m. to 5 a.m. (Sun. - Thurs.)
- Governor and Genesee intersection done in stages
- One lane of southbound traffic maintained
- No impacts to northbound Genesee



Westfield UTC

The Villas of Renaissance
Apartment Homes

Costa Verde Shopping Center

Towne Centre Drive

Nobel Drive

Valentia Apartments

Doyle Elementary School

University City High School

Rose Canyon

Genesee Avenue

Governor Drive

Standley Middle School

Pipeline

Tunnel

Morena Pipeline - Northern Alignment and Tunnels

Governor Drive to Nobel Drive (Genesee)

Construction Project Components:

- 4 miles of 48-inch force main
- 4 miles of 30-inch brine/centrate pipeline
- Tunnel crossing of Interstate 805
- Tunnel crossing at Rose Creek Canyon
- Tunnel crossing at the San Clemente Creek

Construction Segment Details:

- Night work on Governor Drive, 9 p.m. to 5 a.m. (Sun. - Thurs.)
- 24/7 tunnel work (with adherence to noise requirements)
- Access and terrain maintained for Rose Canyon trail
- One week of no work between switching from night work to day work

North City Water
Reclamation Plant

Executive Drive

La Jolla Village Drive

La Jolla Crossroads



Westfield UTC

The Villas of Renaissance
Apartment Homes

Costa Verde Shopping Center

Nobel Drive

Valentia Apartments

Nobel Athletic
Area and Library

Doyle Elementary School

Genesee Avenue

University City High School

— Pipeline
— Tunnel

Morena Pipeline - Northern Alignment and Tunnels

Nobel Drive & Towne Centre Drive
to La Jolla Village Drive

Construction Project Components:

- 4 miles of 48-inch force main
- 4 miles of 30-inch brine/centrate pipeline
- Tunnel crossing of Interstate 805
- Tunnel crossing at Rose Creek Canyon

Construction Segment Details:

- Day work, 8:30 a.m. to 3:30 p.m. (weekdays)
- One way westbound traffic on Nobel during construction hours
- Nobel intersection constructed in stages
- One week of no work between switching from night work to day work

Genesee Avenue

Towne Centre Drive

Embassy Suites

La Jolla Village Drive

La Jolla Crossroads

La Jolla Gateway

Westfield UTC

Executive Drive



Morena Pipeline - Northern Alignment and Tunnels

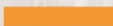
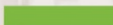
Towne Centre Drive (north of La Jolla Village Drive)

Construction Project Components:

- 4 miles of 48-inch force main
- 4 miles of 30-inch brine/centrate pipeline
- Tunnel crossing of Interstate 805

Construction Segment Details:

- Night work, 9 p.m. to 5 a.m. (Sun. - Thurs.)
- One lane in each direction open on Towne Centre Drive
- Access to Excalibur Way maintained throughout construction
- Stages of work on La Jolla Village Drive intersection

 Pipeline
 Tunnel

Pipeline
Tunnel

Future
North City
Pure Water Facility

The City of
SAN DIEGO

SD Pure Water
San Diego



North City Water
Reclamation Plant

Executive Drive

Judicial Drive

Towne Centre Drive

La Jolla Village Drive

Morena Pipeline - Northern Alignment and Tunnels

Executive Drive

Construction Project Components:

- 4 miles of 48-inch force main
- 4 miles of 30-inch brine/centrate pipeline
- Tunnel crossing of Interstate 805

Construction Segment Details:

- Night work, 9 p.m. to 5 a.m. (Sun. - Thurs.)
- Before Judicial Drive: work on westbound side
- After Judicial Drive: work on eastbound side
- Tunnel staging will be in landscaped median

SD What You Can Expect

- “Block by block” road closures to through traffic; detours will be posted
 - *Access for residents, businesses and emergency vehicles will be maintained; some delays expected*
- Construction equipment and material staging areas along the alignment; staging areas will move along with construction
- Possible intersection closures due to weekend work
- Posted detours for bike lanes, sidewalks and trails
- No parking in construction zones
- Impacts such as noise, dust, bright lights and construction vehicle traffic during work hours



Who Supports Pure Water?



Want to take a guided tour of the Pure Water Demonstration Facility? Learn all about the five-step process from members of the Pure Water team by viewing the Pure Water Virtual Tour at one of the links below.

virtualtour.purewatersd.org
YouTube.com/PureWaterSD



City of San Diego Pure Water Demonstration Facility Virtual Tour

295 views • May 7, 2020

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phase1.purewatersd.org



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Sign up for **construction updates** and take the **virtual tour**