

Pure Water San Diego Program

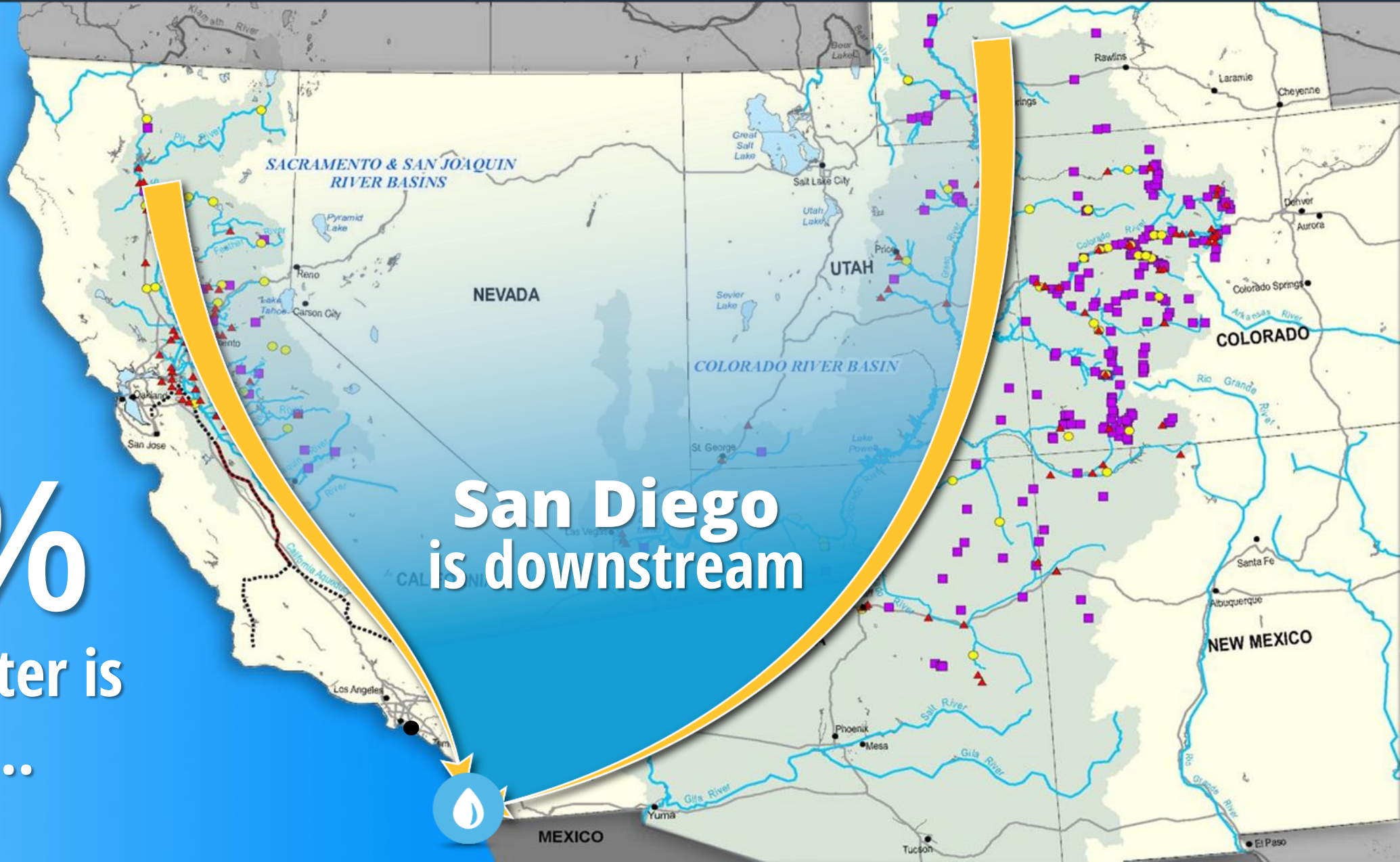
Public Utilities Department



San Diego's Water Supply

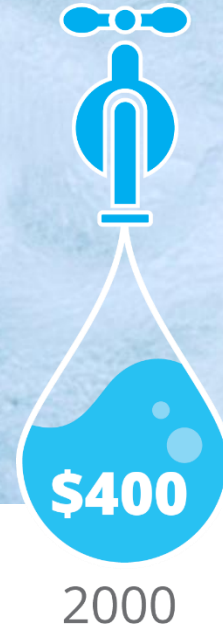
85%
of our water is
imported...

**San Diego
is downstream**



We Face Numerous Water Challenges

Imported water cost per acre-foot



- Limited local & imported supplies
- Population growth
- Bay Delta constraints

- Natural disaster risk
- Rising imported water costs
- Recurring drought

SD Multi-faceted Approach

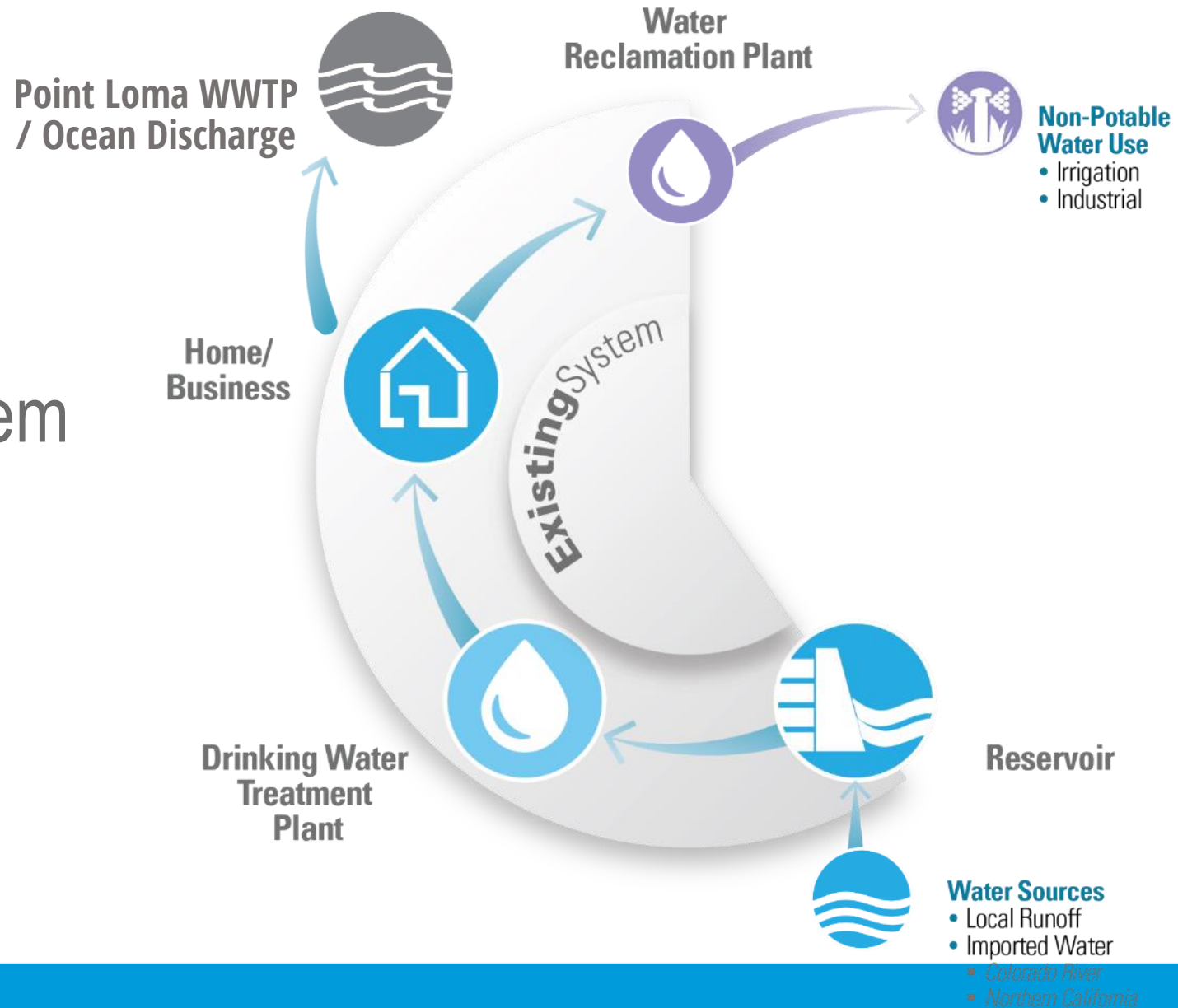


- Conservation
- Desalination
- Groundwater Development
- Recycled Water
- Pure Water Program

SD San Diego's Water Supply System

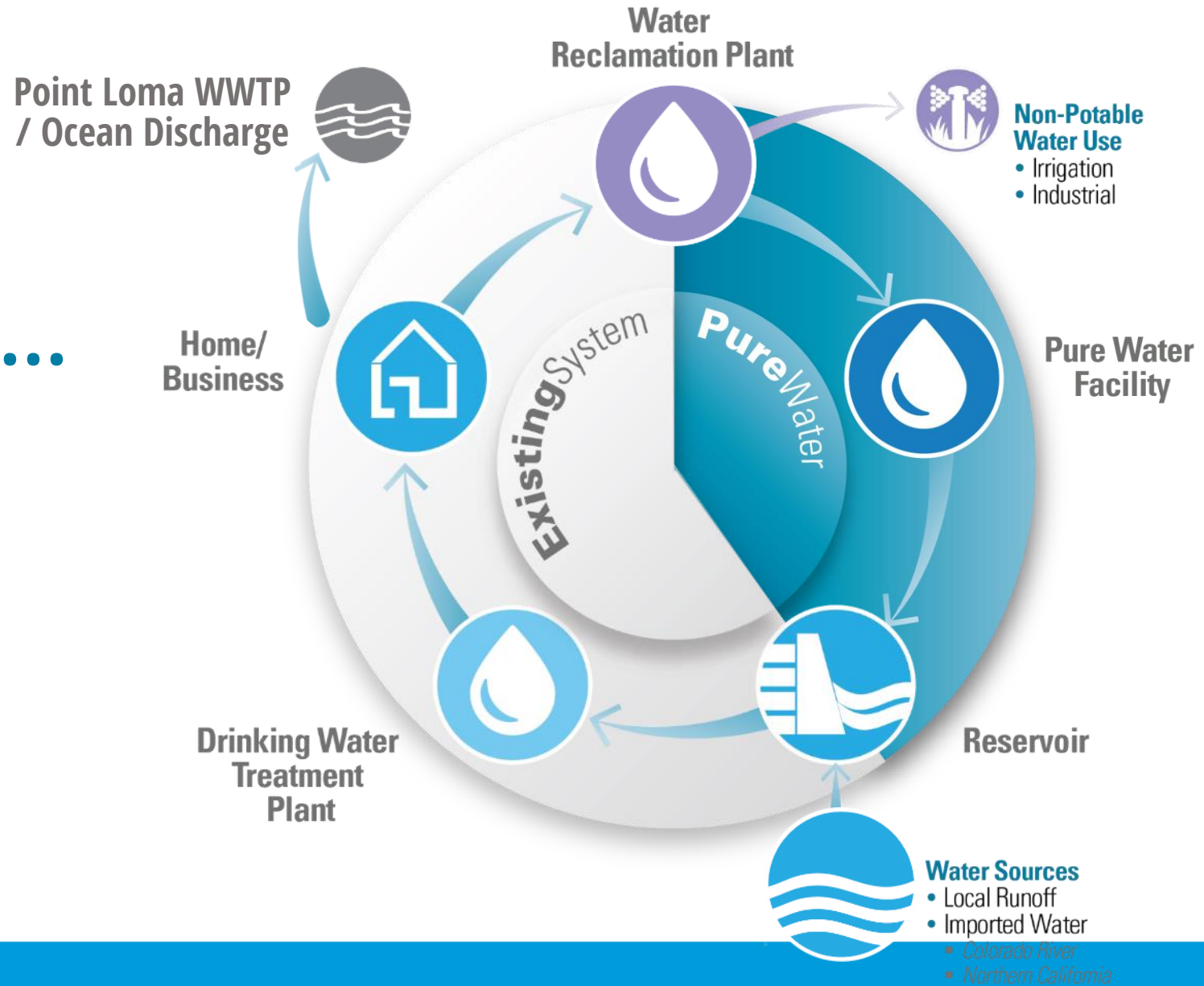
Existing System...

Primarily a Single-Use System



SD San Diego's Water Supply System

Pure Water...
Completes Our
Water Cycle



SD Pure Water Runs a Successful Demonstration Facility



- 50,000 lab tests: **Met all standards**
- Water quality: **Exceptional**

Pure Water
will produce
1/3
of your water
locally

Phase 1

- 30 mgd
- North City PWF to Miramar



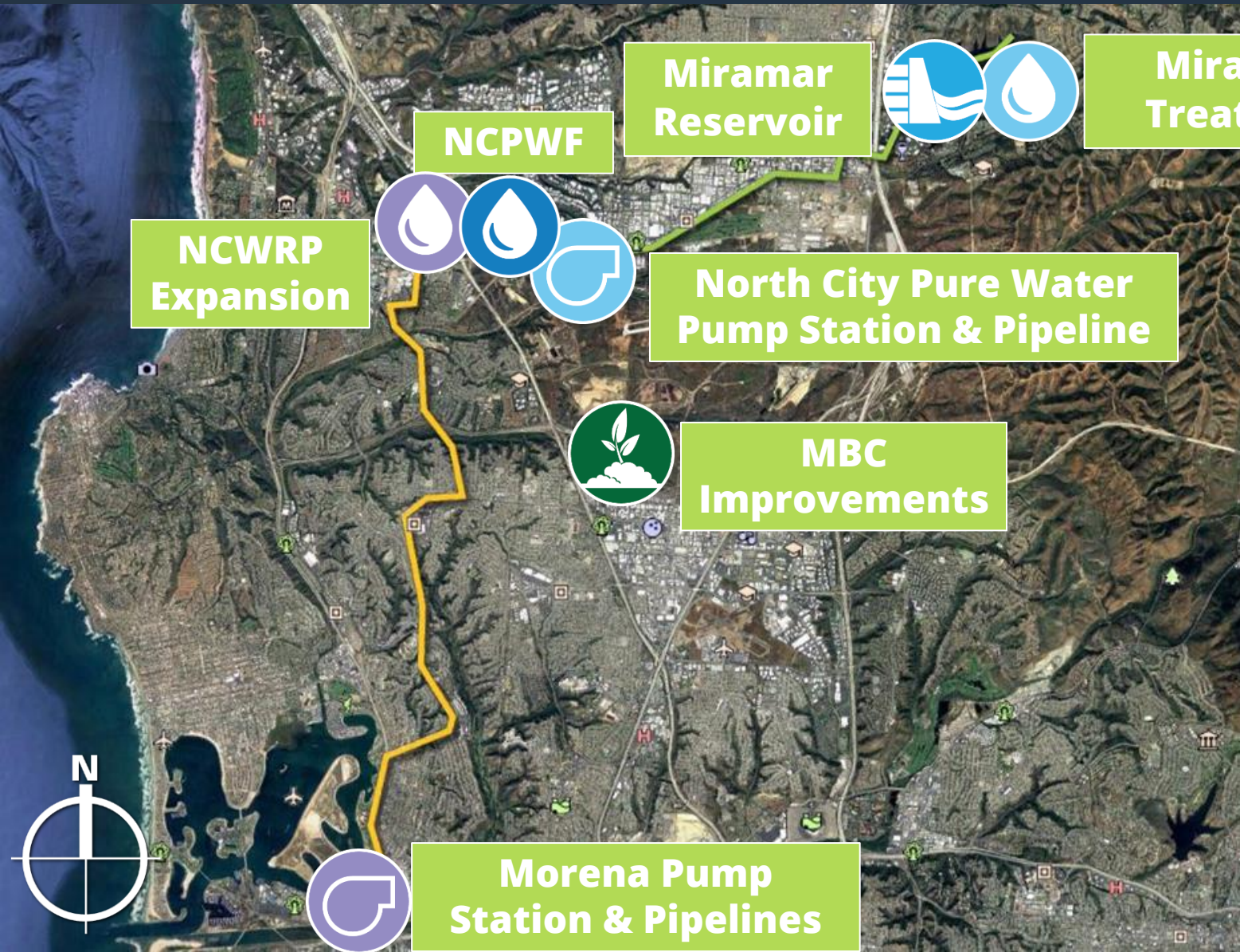
Pure Water
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1/3
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locally

Phase 2

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



SD Phase 1 Projects

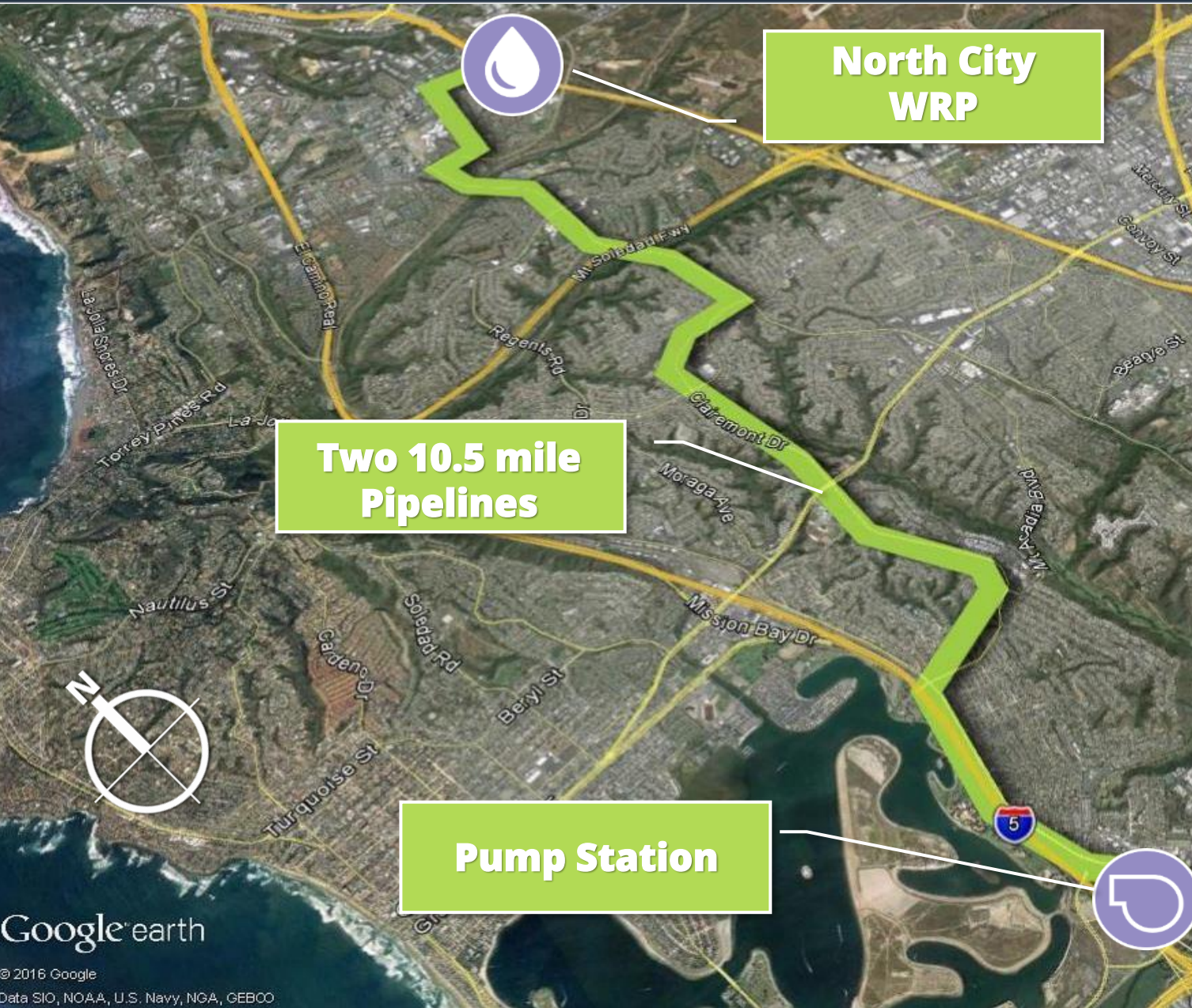


Phase 1 – North City will produce 30 mgd of purified water

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 early 2021

SD North City Water Reclamation Plant

Expansion

Pure Water
Facility



NCWRP



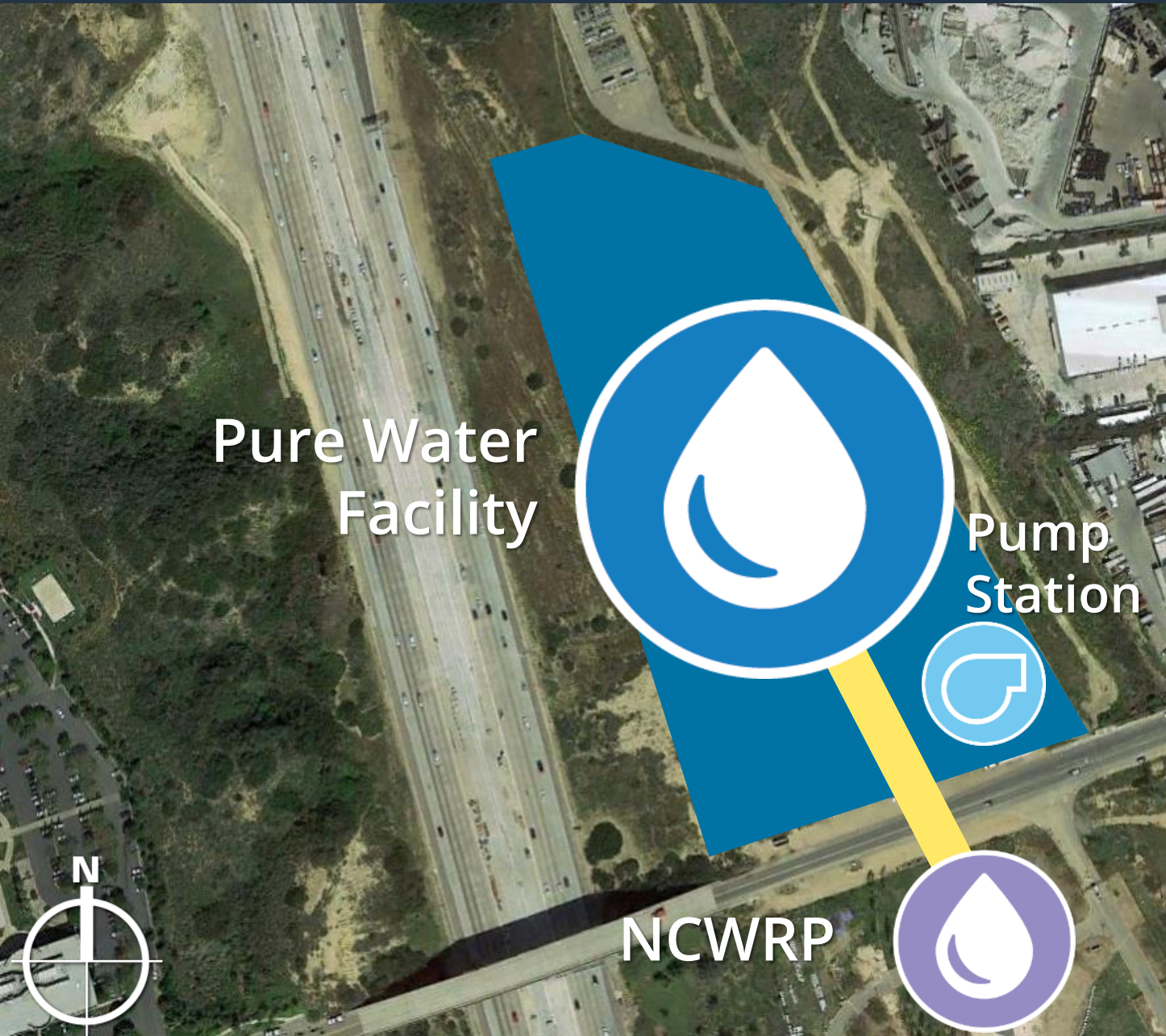
Morena Pipeline

- 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
- Expansion begins in fall 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
- Early site work is being completed
- Construction begins in early 2021

SD North City Pure Water Facility



Ozonation



Biological
Activated
Carbon
Filters



Membrane
Filtration



Reverse
Osmosis

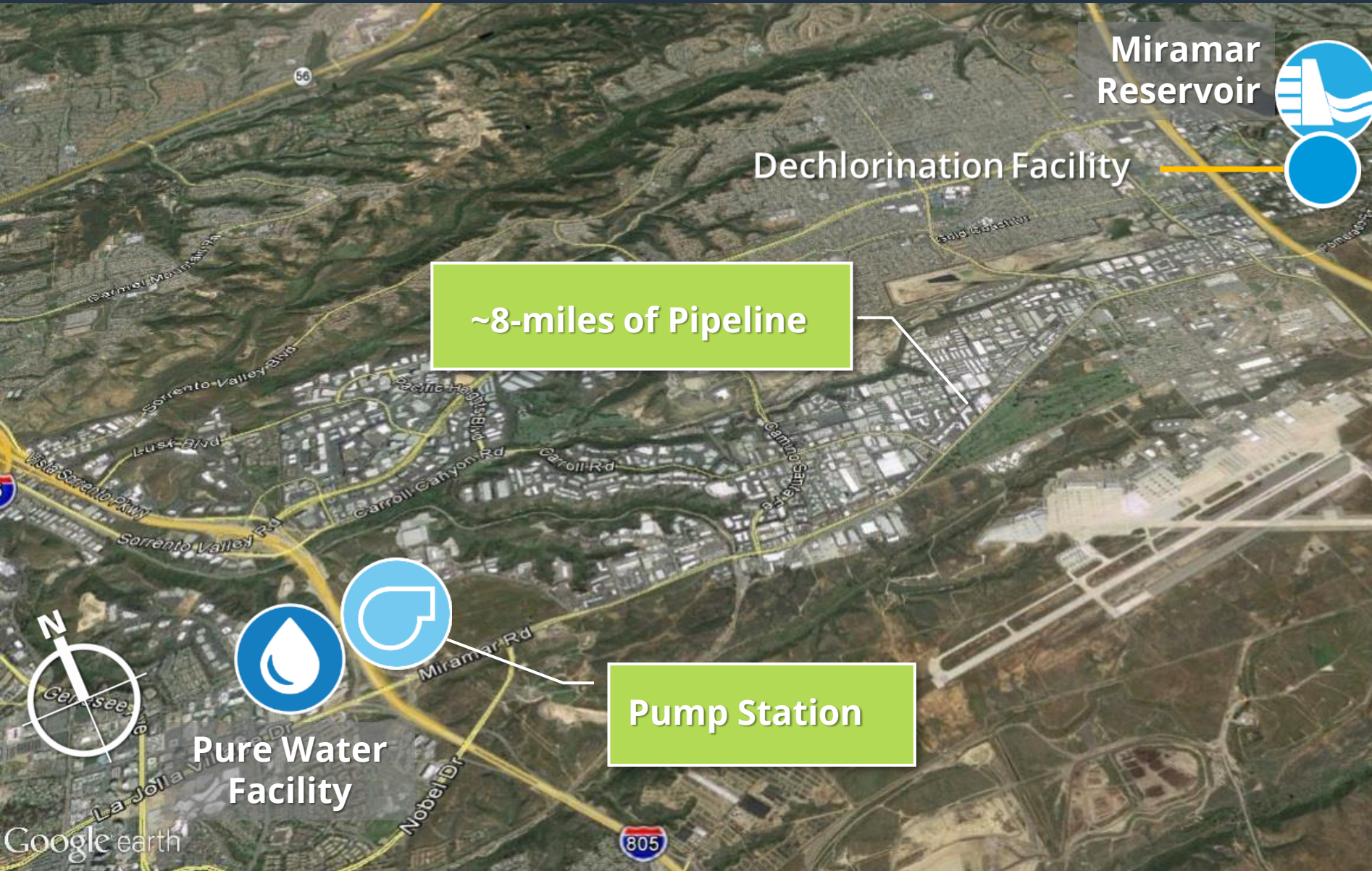


Ultraviolet
Disinfection
/Advanced
Oxidation



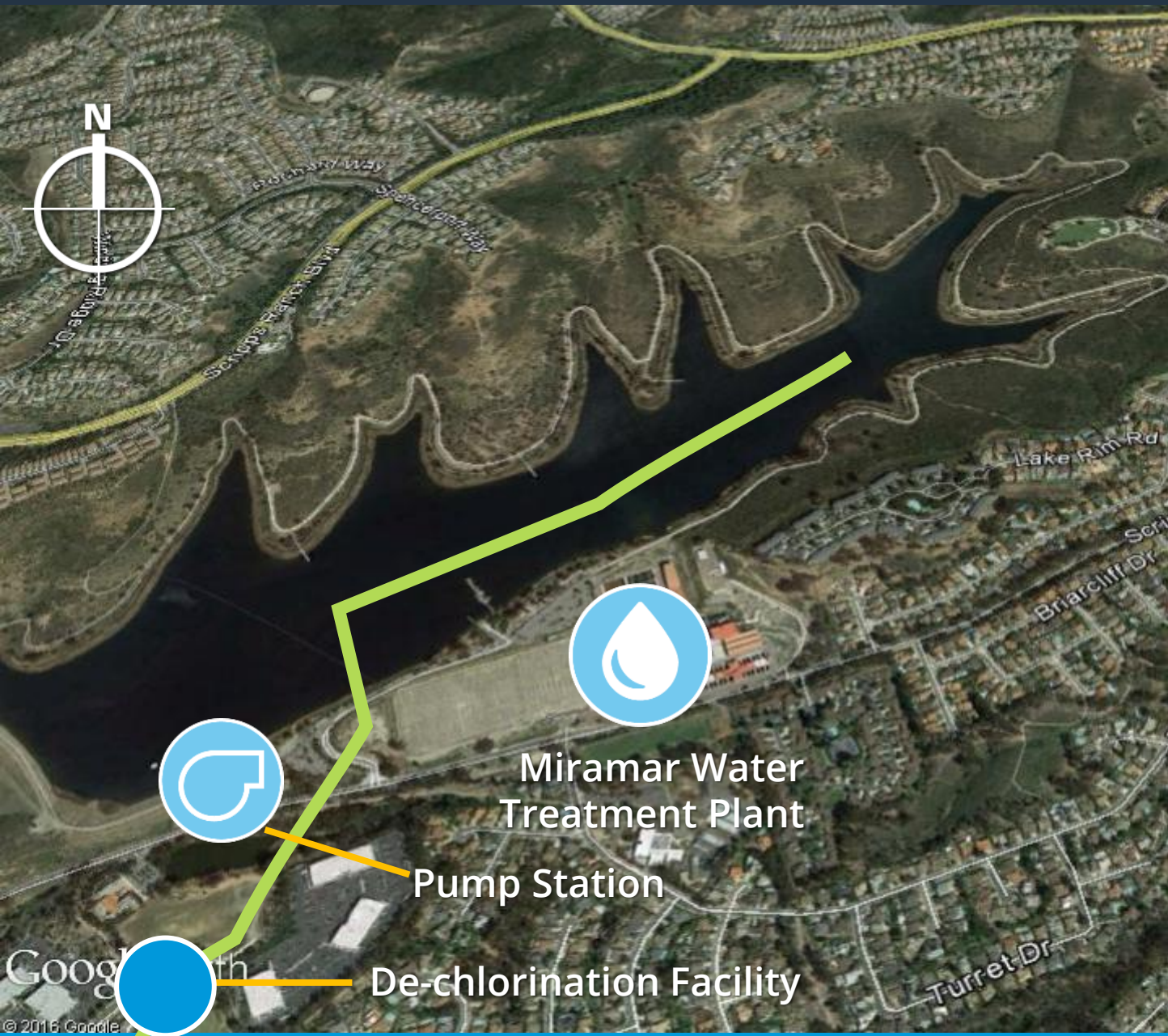


North City Pure Water Pipeline



- 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



Pure Water provides the City with a safe, reliable and sustainable water supply.

SD Who Supports Pure Water?





www.purewatersd.org

Sign up for a tour of the
Pure Water Demonstration Facility!



PureWaterSD



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PureWaterSD

Join our **mailing list** and **sign a support card**

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.



City of San Diego Pure Water Demonstration Facility Virtual Tour

295 views • May 7, 2020

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Pure Water San Diego Website Video Link: virtualtour.purewatersd.org
Pure Water San Diego YouTube Video Link: YouTube.com/PureWaterSD