



Operation NEXT

Water Supply Program



February 2022

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Program Update

Program Phase



Conceptual.

Key Documents In Progress



1. Operation NEXT Master Plan

*Performs **validation of analysis** performed by LADWP*



2. Program Environmental Impact Report (PEIR)

Developed jointly between LADWP & LASAN

*Current Life Cycle Phase For Operation NEXT: Conceptual

Impacts based on "Aggressive Scenario" - class V conceptual estimate

Agenda

1. **Why**
 - **Water Supply Overview**
2. **What**
 - Scope
 - Program Goals & Considerations
3. **How**
 - Cost & Schedule Management
 - Resource Management
 - Outreach
4. Q&A

Water Supply

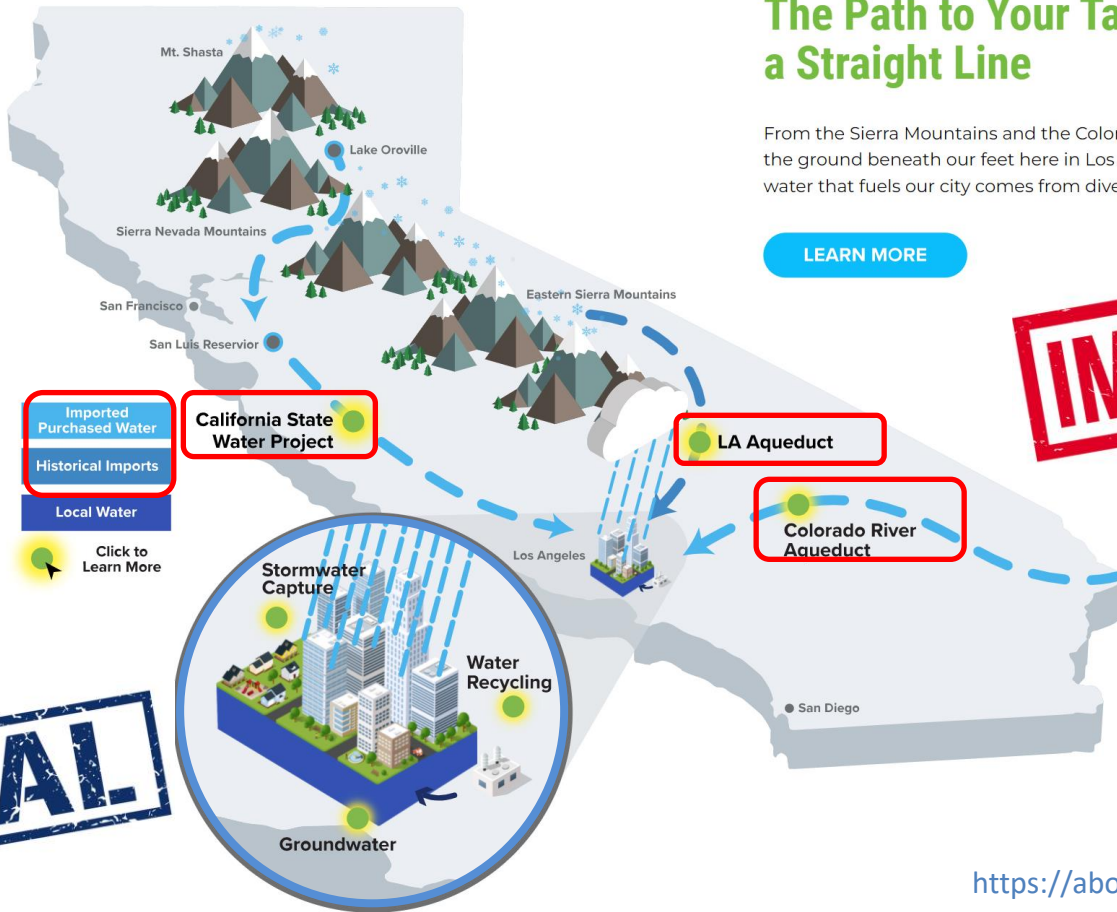
The Path to Your Tap Isn't a Straight Line

From the Sierra Mountains and the Colorado River to the ground beneath our feet here in Los Angeles, the water that fuels our city comes from diverse sources.

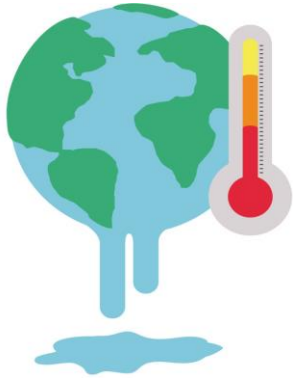
LEARN MORE

IMPORTED

LOCAL



Impacts: Social & Economical Impacts due to Limited Supply

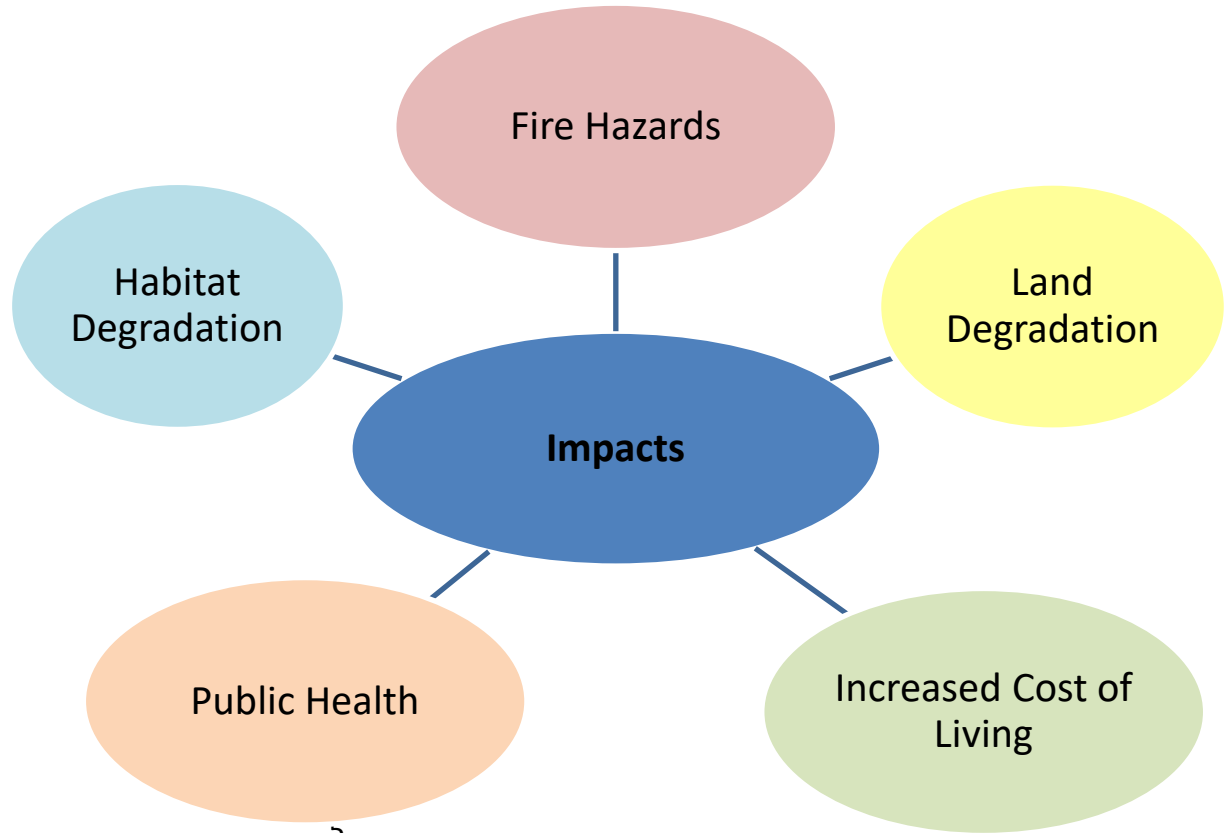


Emergency Drought Proclamations

Metropolitan Declares Drought Emergency

Metropolitan Board of Directors calls for increased conservation and expands water efficiency programs

Nov. 9, 2021



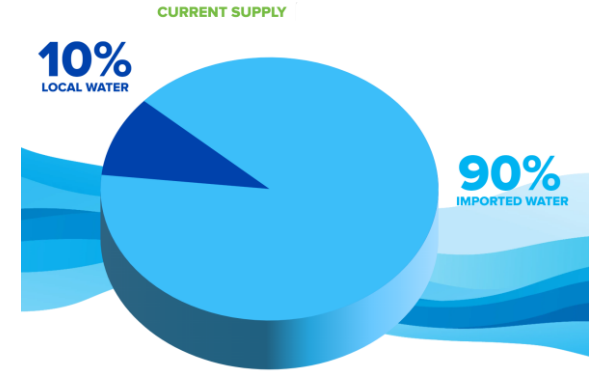
Mitigation: Increase Local Supply (Goals)

OpNEXT as mitigation tool
(supply driven Program)

OpNEXT will provide the
Los Angeles region:

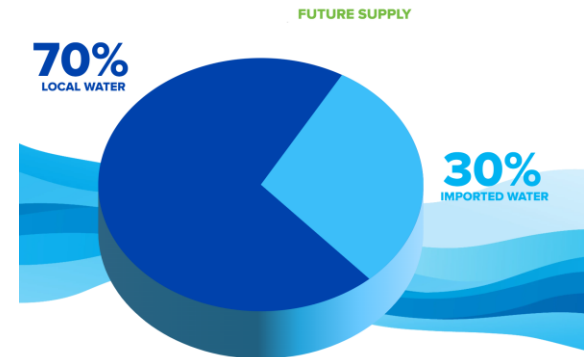
- Reliability
- Sustainability
- Resilience

FY 2016-2020 Avg Supply Portfolio



FUTURE

LA's Future Water Supply Portfolio



*Total amount of water exported from the Eastern Sierra will remain consistent with historical exports.

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Scope

Objective:

Recycle 100% of supply from the Hyperion Water Reclamation Plant for beneficial reuse for the City of Los Angeles.

Estimated new supply:

– 243K AFY- 336 CFS -217 MGD

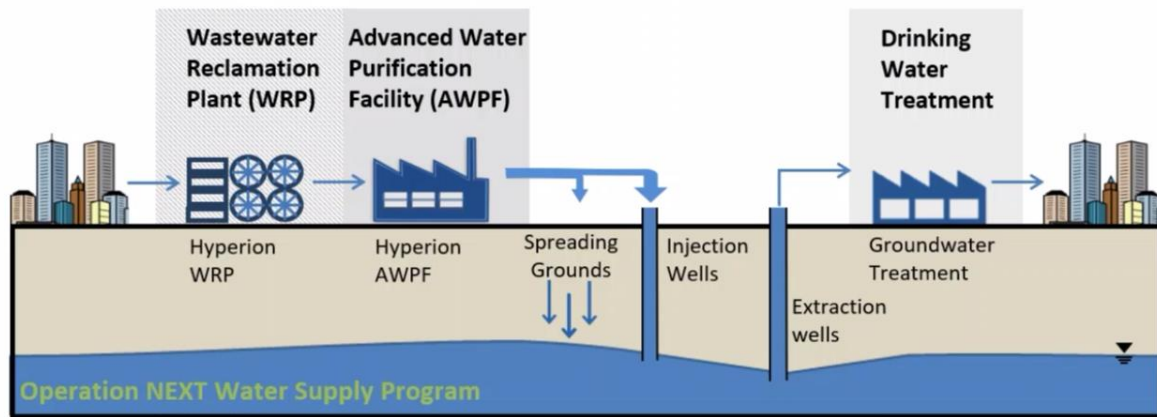
City Demand:

– ~500k AFY

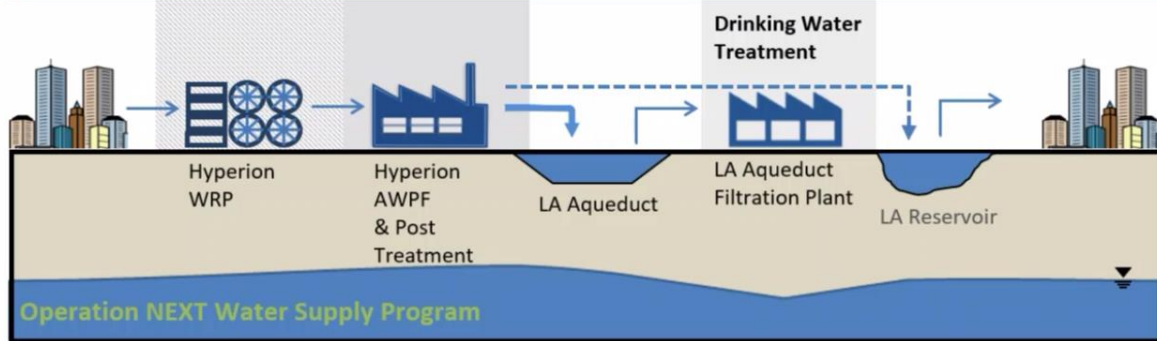


OpNEXT Supply: Strategy & Applications

Proposed OpNEXT Hybrid Applications




IPR - Groundwater Replenishment

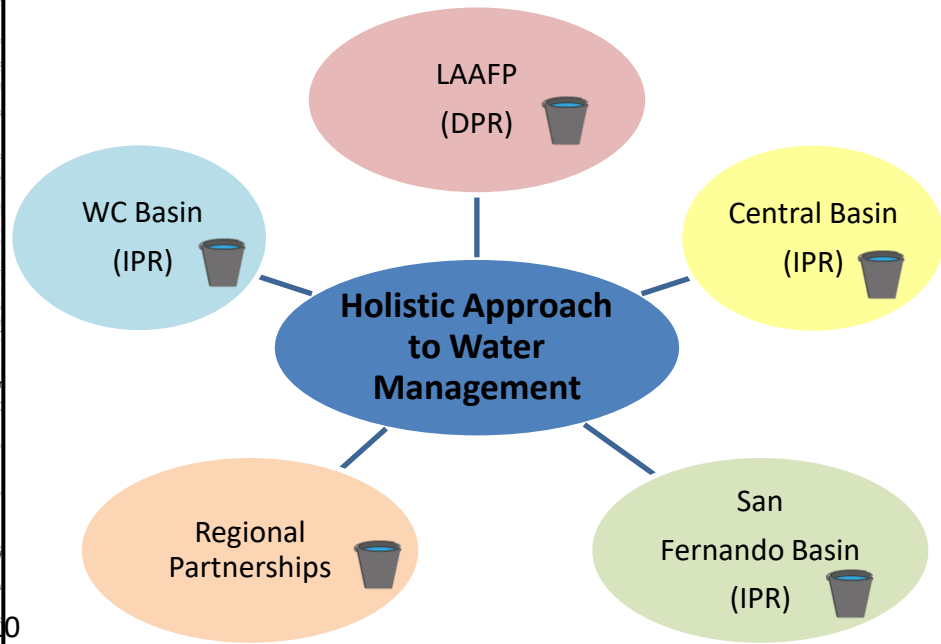
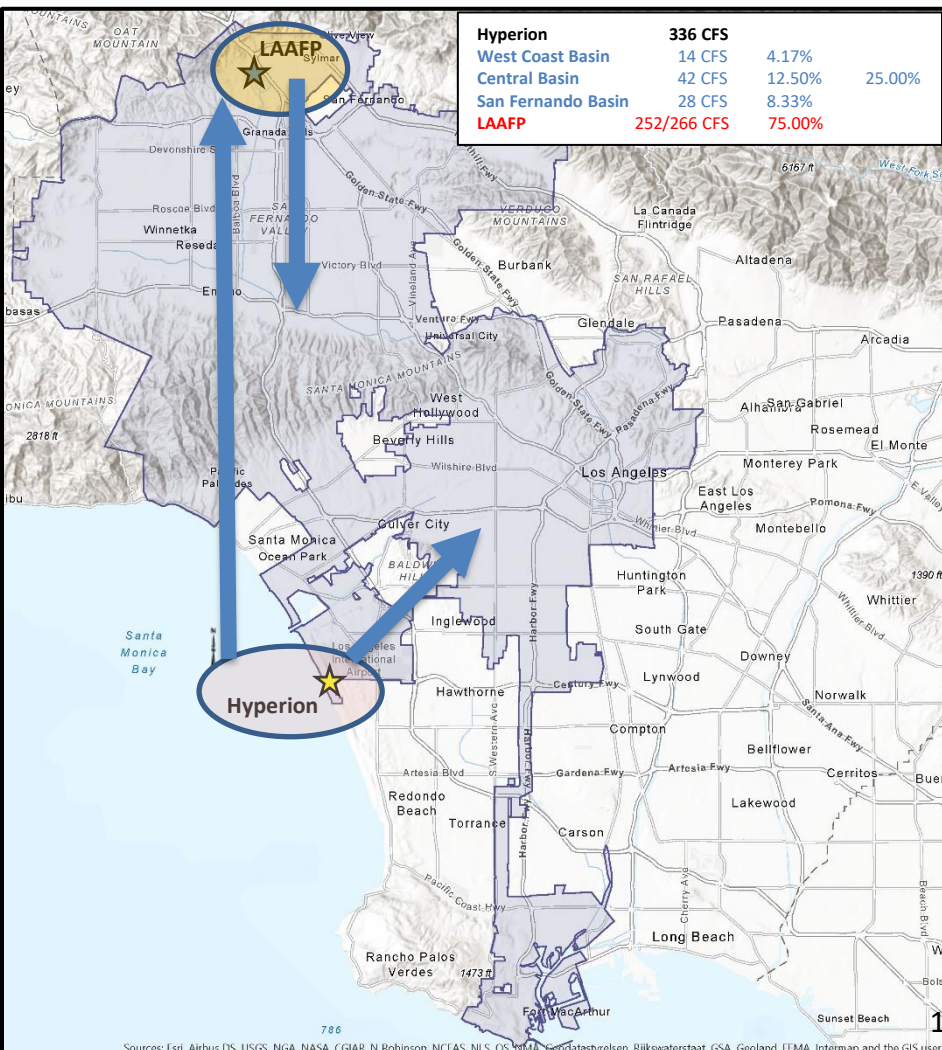


DPR - Raw Water and/or Treated Water Augmentation

OpNEXT: Supply Management

Hyperion	336 CFS		
West Coast Basin	14 CFS	4.17%	25.00%
Central Basin	42 CFS	12.50%	
San Fernando Basin	28 CFS	8.33%	
LAAFP	252/266 CFS	75.00%	

- ✓ **Los Angeles Aqueduct Filtration Plant (LADWP)**
 - ✓ *Origin of most of supply for LA City (70%~).*
- ✓ **Hyperion Water Reclamation Plant (LASAN)**
 - ✓ *Future Advanced Water Purification Facilities* 



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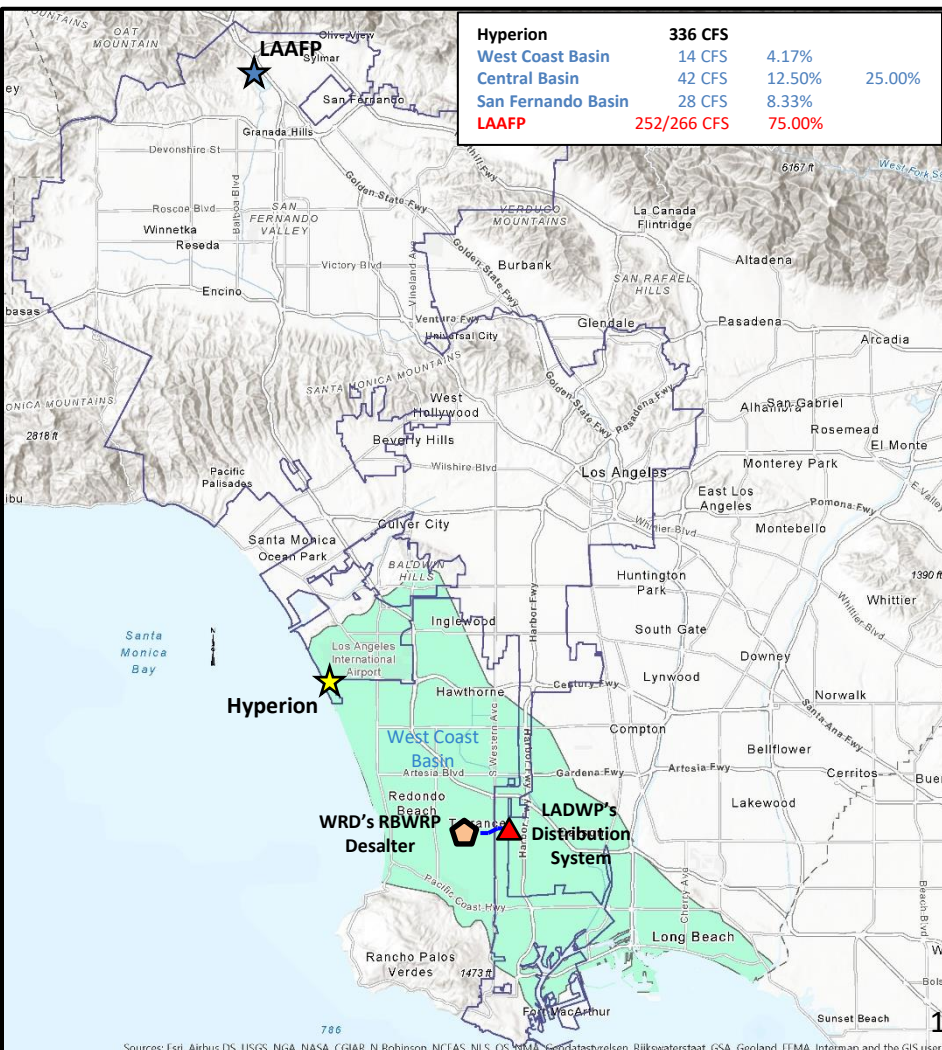
1- West Coast Basin



➤ 120,000 AF of storage potential

Opportunities

- ✓ Replenish Basin and participate in WRD's RBWRP
- ✓ Provide new local supply for Harbor area



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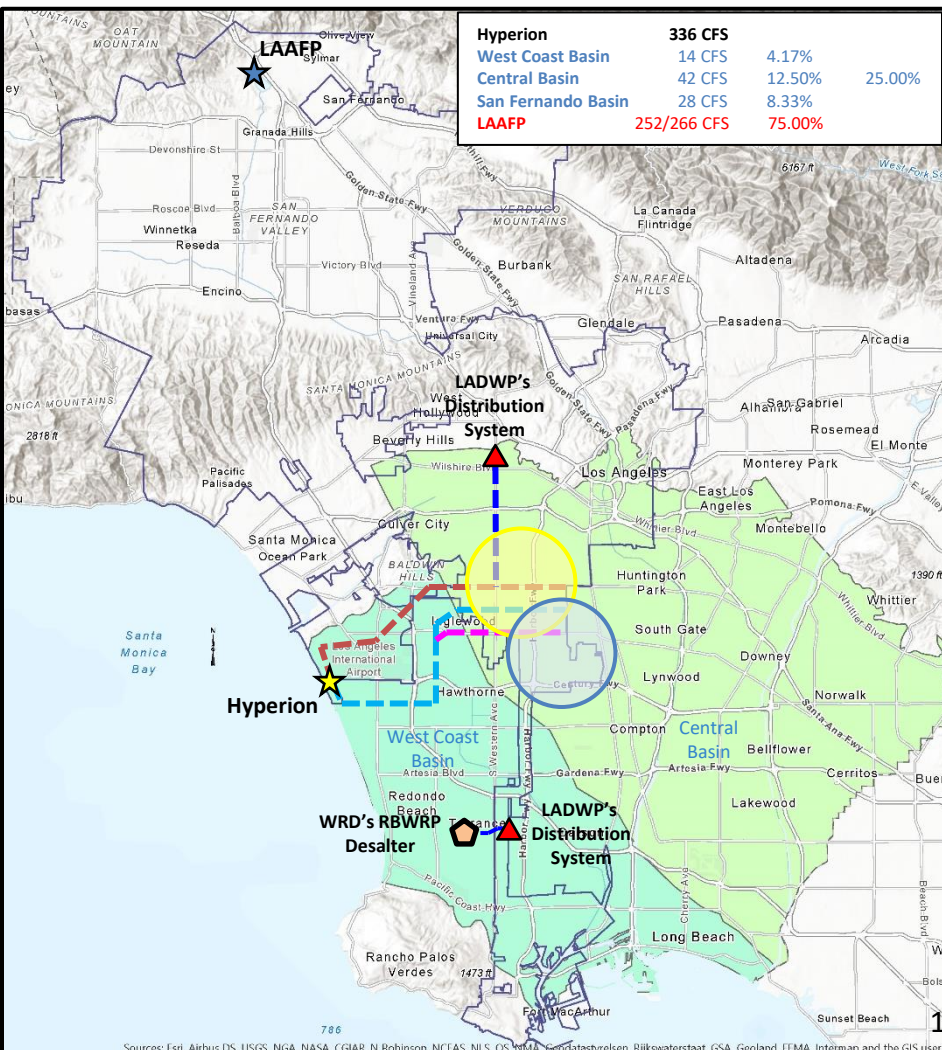
2- Central Basin



- 330,000 AF of storage potential

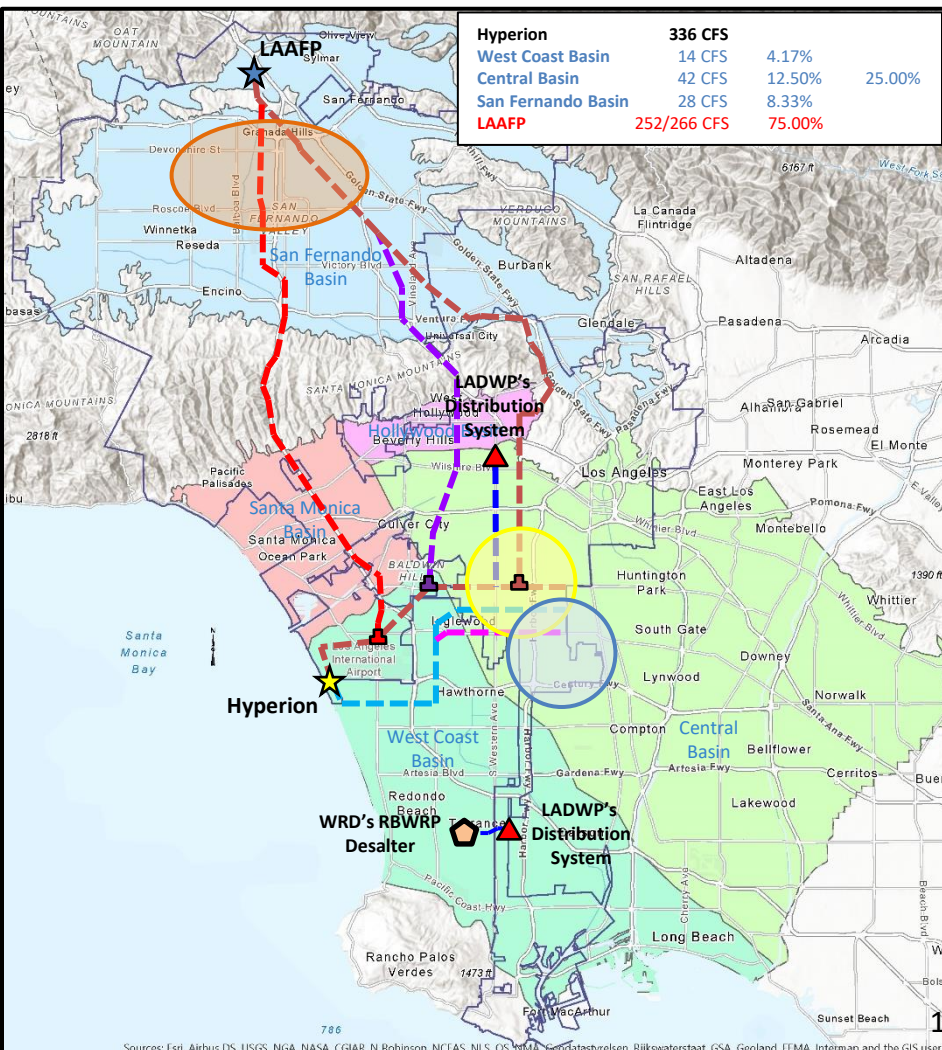
❑ Opportunities

- ✓ Replenish Basin via new injection wells (yellow)
- ✓ Extract groundwater (blue) for conveyance to LADWP's distribution system



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3- San Fernando Basin



- 550,000 AF of storage potential

❑ Opportunities

- ✓ Replenish Basin via injection/spreading & extraction (**orange**)

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❑ Opportunities

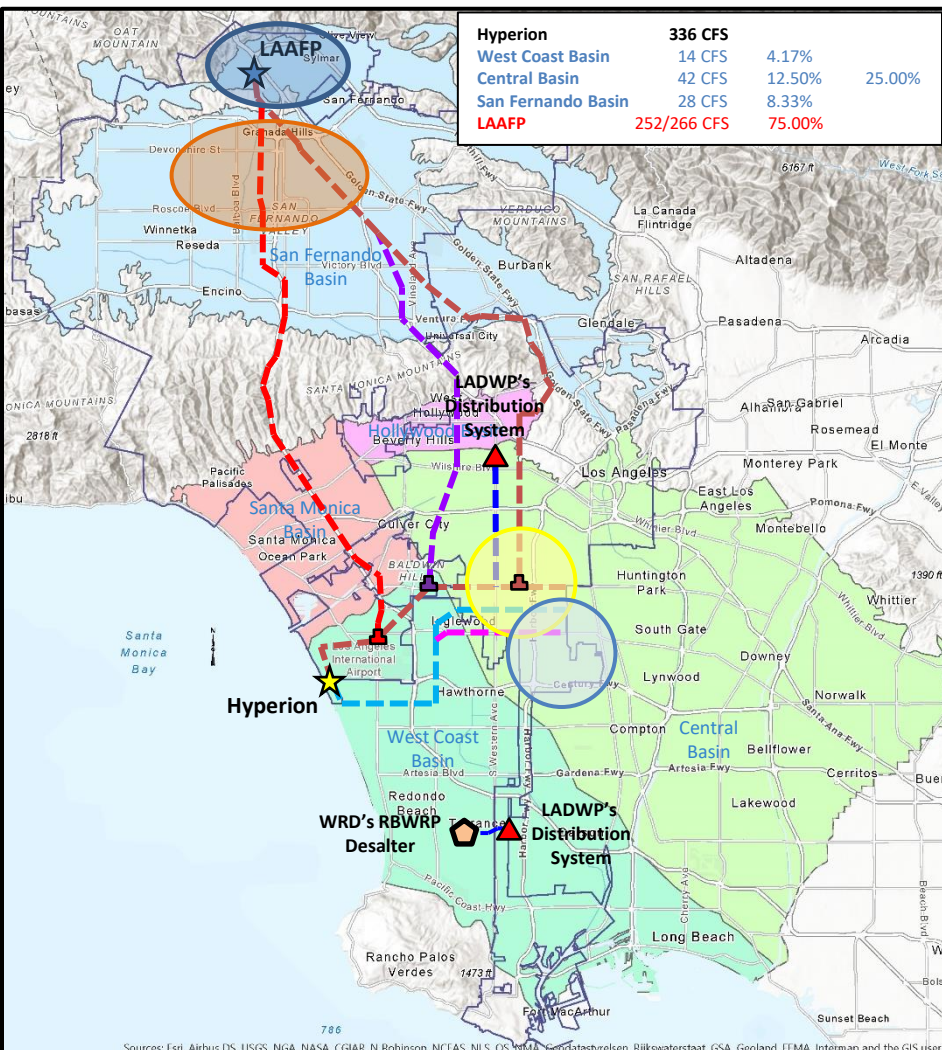
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3- San Fernando Basin

- 550,000 AF of storage potential

❑ Opportunities

- ✓ Replenish Basin via injection/spreading
- ✓ **(4) Implement DPR applications at the LAAFP**



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCIAS, NLS, CS, WMA, Solutia/velson, Bijkwaterstaat, GSA, Goeland, ITMA, Intermap and the GIS user

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Central Basin

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❑ Opportunities

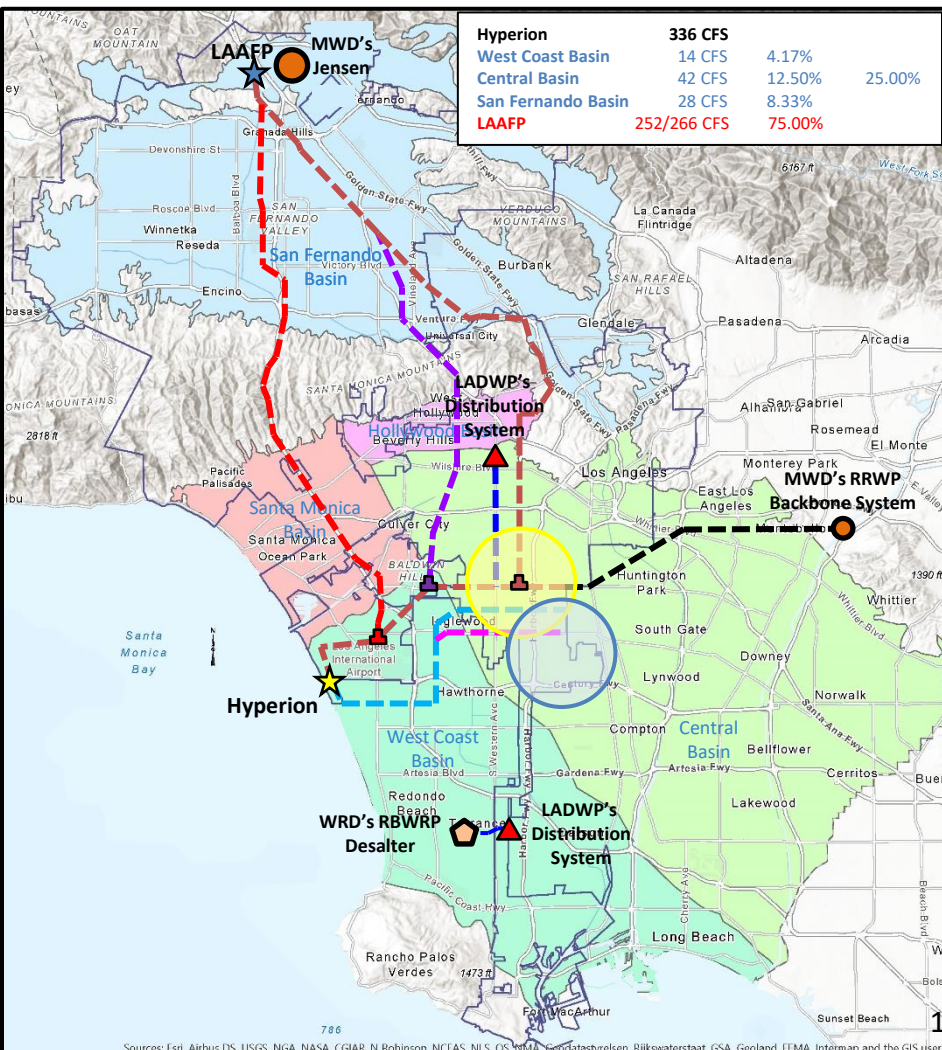
- ✓ Replenish Basin via new injection wells (yellow)
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- & (5) Regional Partnership** 

San Fernando Basin

- 550,000 AF of storage potential

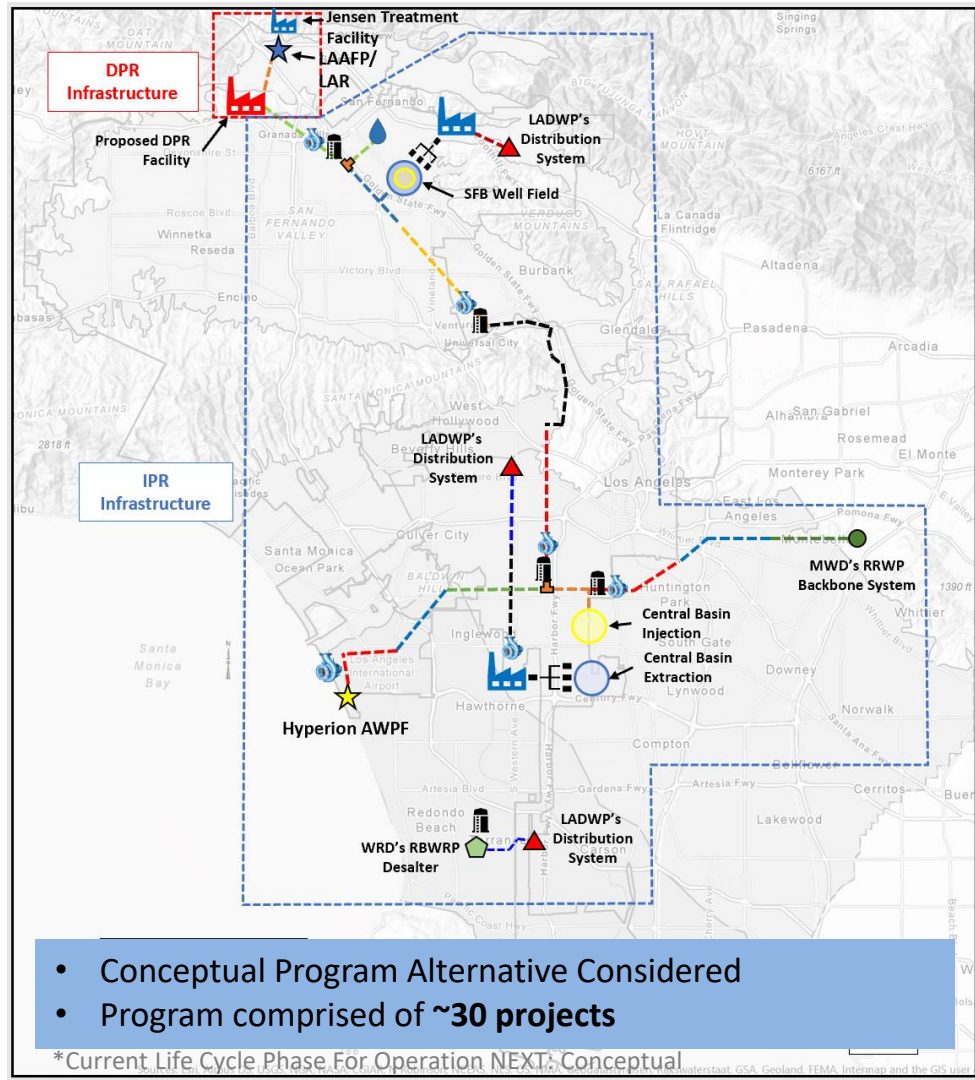
❑ Opportunities

- ✓ Replenish Basin via injection/spreading & extraction (orange)
- ✓ Implement DPR applications at the LAAFP



Infrastructure

1. **AWPF at Hyperion (LASAN Program)**
2. **Pump Stations**
 - 4 to 5 facilities
3. **Storage**
 - 4 to 5 storage forebays for pumping infrastructure
4. **Trunklines**
 - 62 miles ranging from 54"-108"
5. **Well Fields**
 - 1 to 2 well fields in CB; 15-45 cfs production each
 - 1 well field in SFB; ~28 cfs production
6. **Treatment Facilities**
 - 2 to 3 facilities associated with new well fields & DPR Treatment
7. **System Improvements**




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Program Goals

2021

Short-Term

- Budget & Schedule Mgmt – Baselineing
- Integration Mgmt – Charter, Concept Report, Matrix 
- **Master Plan**
- Environmental Mgmt – NOP released

Mid-Term

- PgMP (2023) – guides execution – RFP
- **Project Planning Support - RFP**
- Institutional Agreements (MOA/NOCs)
- Programmatic EIR (2022)

Long-Term

- Deliver Projects (WETS Project Delivery Process): **Contractors/Consultants/LADWP**



SUSTAINABILITY



RELIABILITY

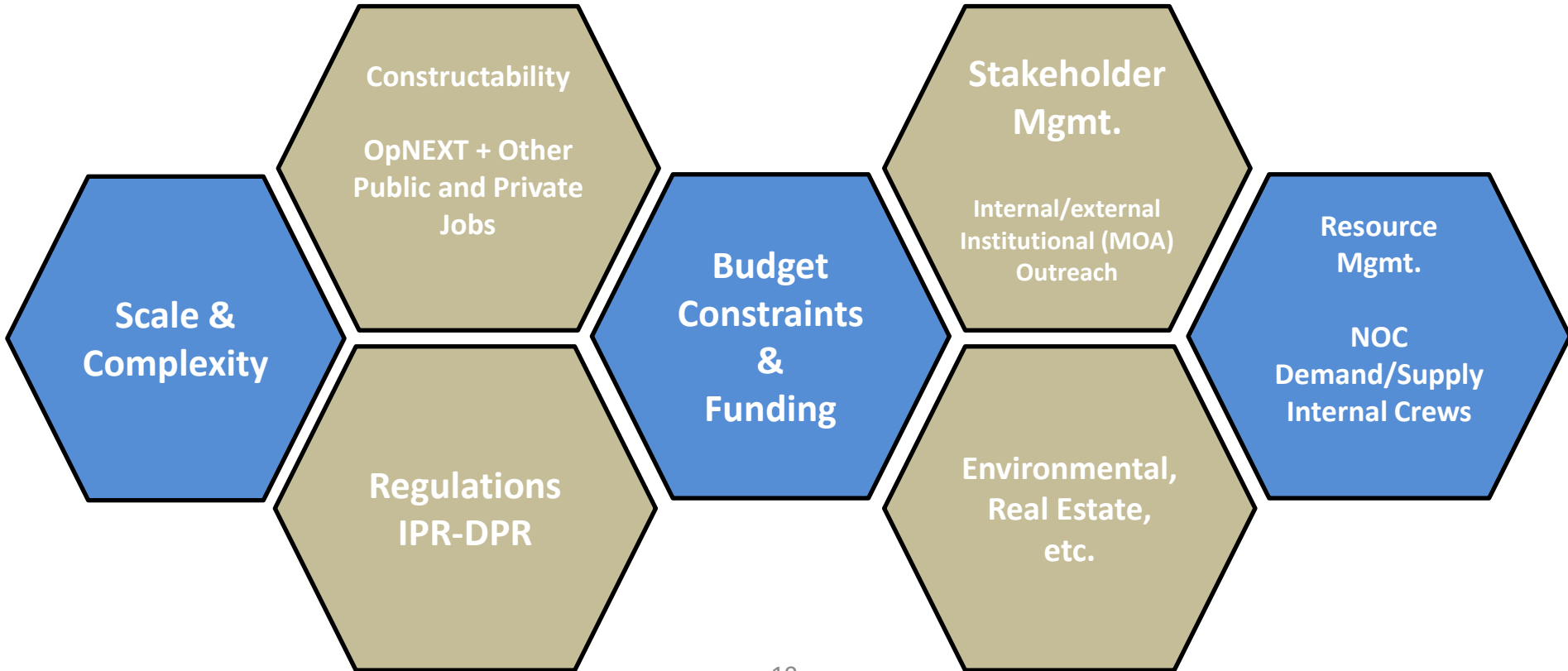


RESILIENCE

Program Goals

20XX

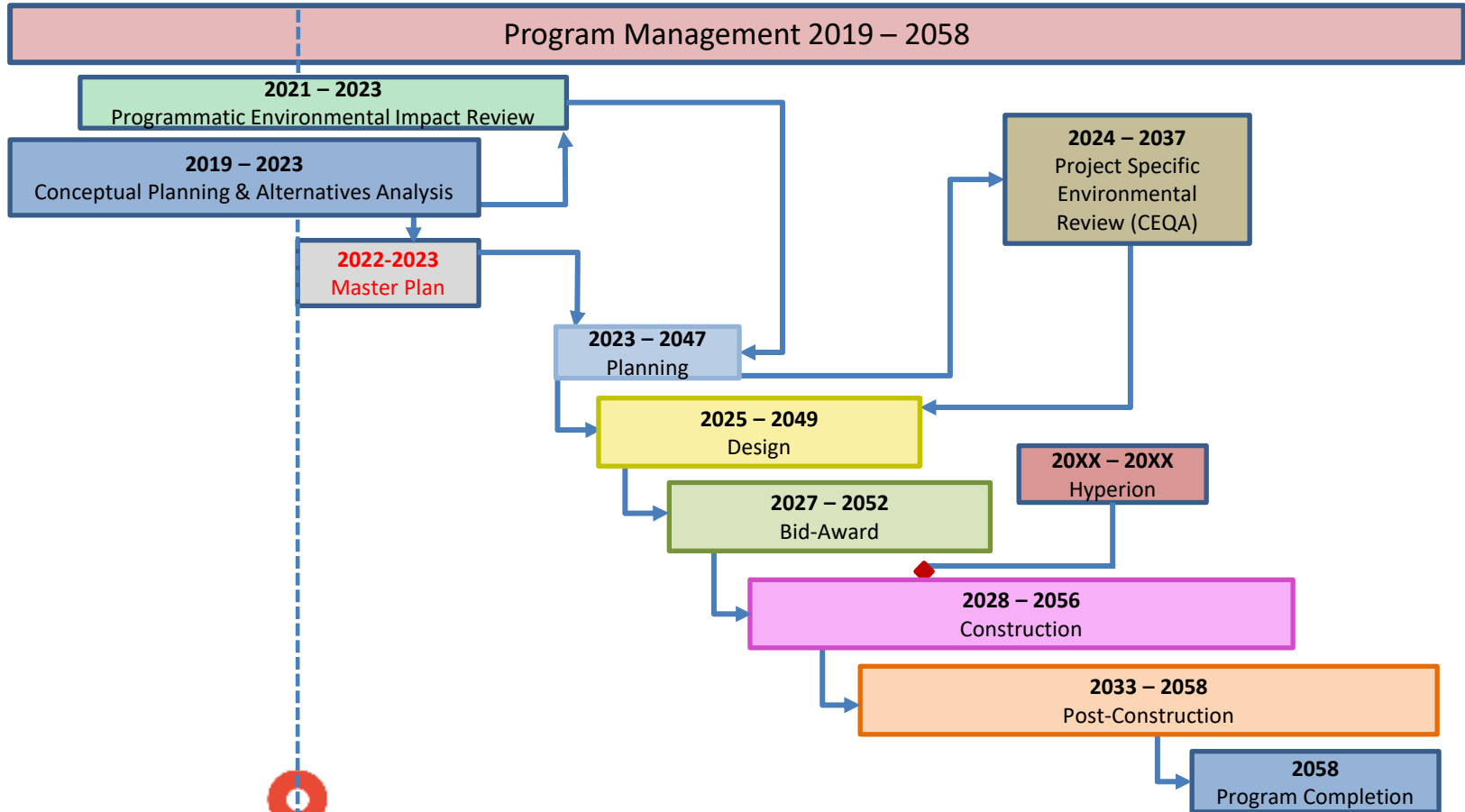
OpNEXT Program Considerations



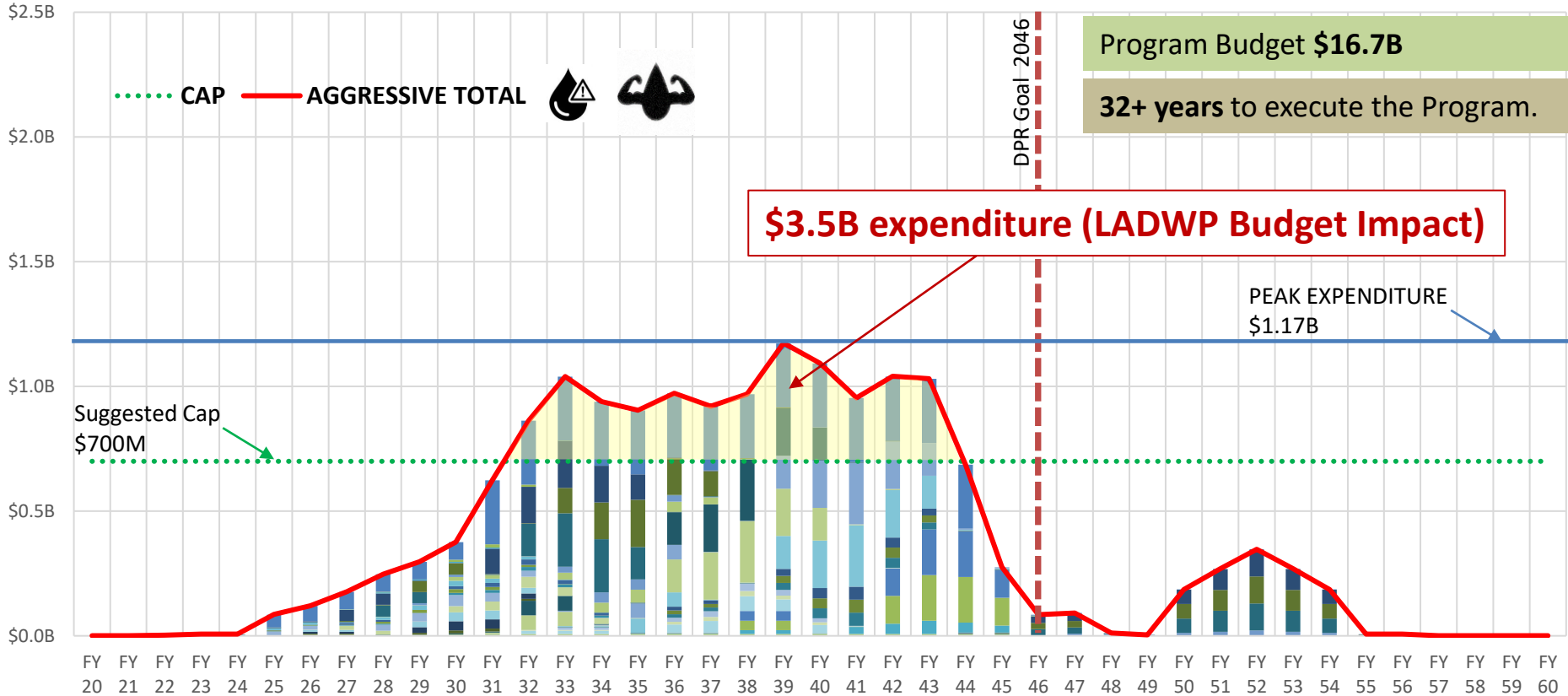
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Program Schedule –Aggressive–



Program Budget – Aggressive Scenario



*Current Life Cycle Phase For Operation NEXT: Conceptual Impacts based on "Aggressive Scenario" - class V conceptual estimate

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Impacts to Resources

Estimated Water System Impacts (Compared to Historical)

Construction Support	FY Impacts
Int Construction (CE20)	2 x
Const. Contracts (CE30)	3 x
City Services (CE39)	9 x
Engineering Support	FY Impacts
Labor (CE10)	2 x
Prof. Services (CE37)	5 x

Labor Relations/Union Agreements required

Benefits



	Direct Impact	Direct & Indirect Impact
Labor/Construction Jobs	±28k	±75k

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Outreach

On-going Outreach

- All City Council Districts briefed
- Over 100 presentations given since Program inception (Dec 2018)

Program Webpage

- www.ladwp.com/OperationNEXT



Doing Business with LADWP

- LABAVN website at: www.labavn.org
 - Free to register and they will have access to bids for all City Departments.

References

- 18-month look-ahead “Supply Line” w/ the anticipated schedule for the next 18 months of contracts
www.ladwp.com/SupplyLine
- SupplierRelationsOffice@ladwp.com
- purchbids@ladwp.com
- www.abala.org/wp-content/uploads/2020/06/How-to-do-business-LADWP.pdf

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Thank You



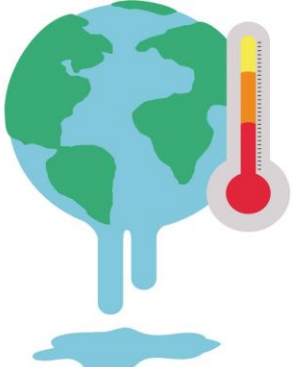
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Impacts: Social & Economical Impacts due to Limited Supply

Factors Impacting Supply



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↑ Prices

Impacts



↑ Wildfires



↓ Habitat
Hydropower
Recreation