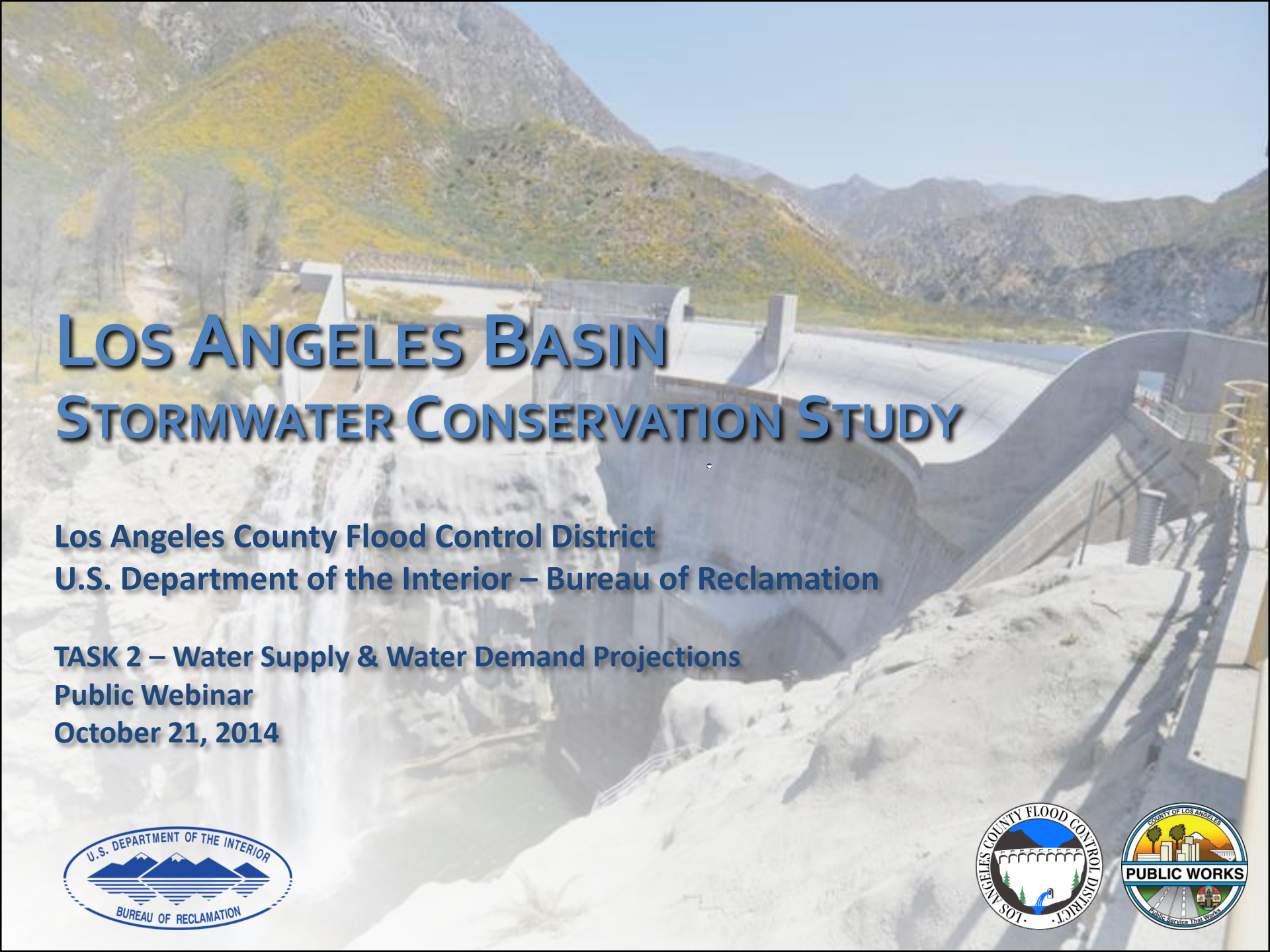


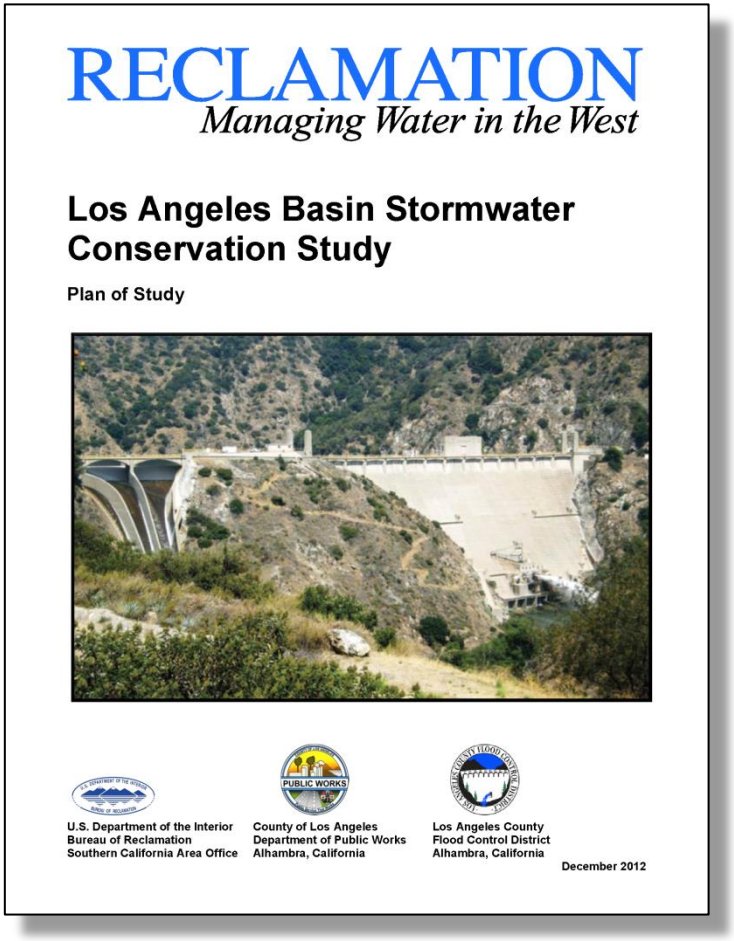
Los Angeles Basin
Stormwater Conservation Study

Los Angeles County Flood Control District
U.S. Department of the Interior – Bureau of Reclamation

TASK 2 – Water Supply & Water Demand Projections
Public Webinar
October 21, 2014

Overview

- Study Background
- Progress Update / Schedule
- Task 2 Findings
- Next Steps



Study Partnership

Collaboration Between »

- Los Angeles County Flood Control District
- U.S. Department of the Interior – Bureau of Reclamation

Cost Estimate » $2.4 million

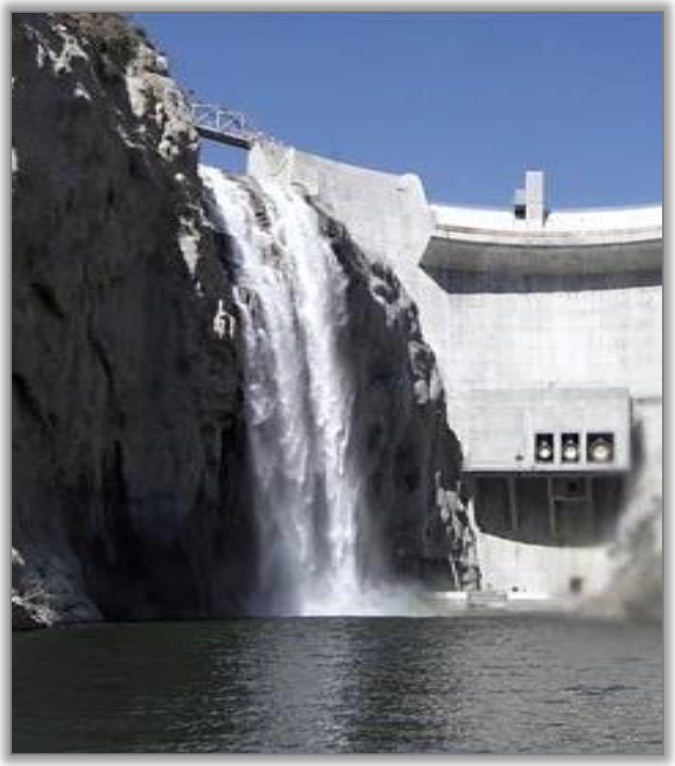
Study Length » 3 Years

- Completion in December 2015
- Task 2 started in March 2014

Study Objectives

1) Evaluate ***existing*** water conservation under ***future*** conditions

2) Evaluate ***potential new*** facilities & operational changes for a future climate

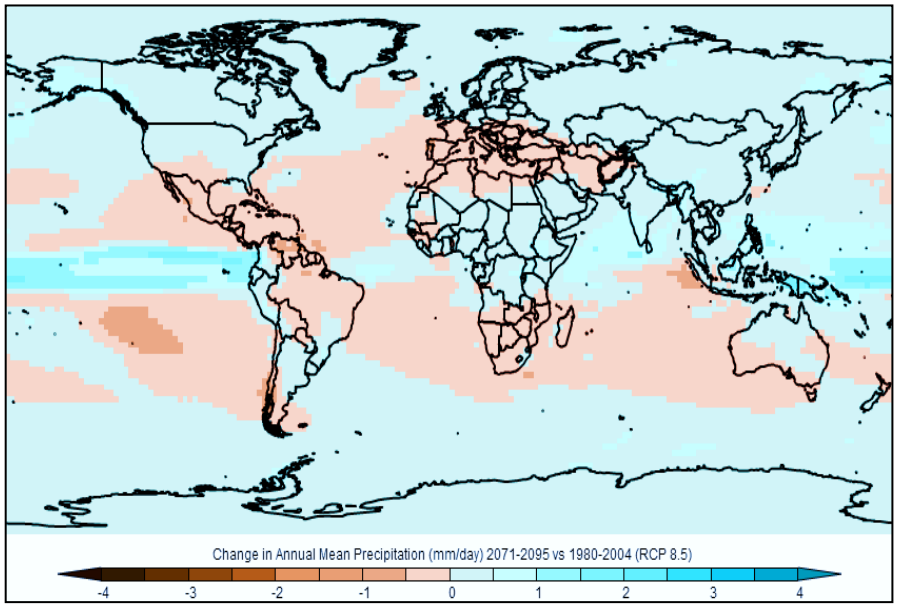


OUTCOME

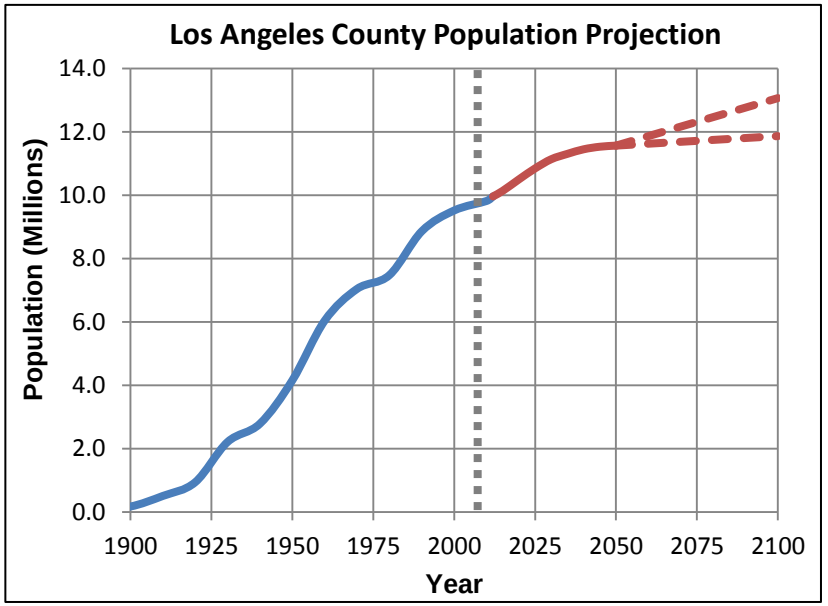
Tool for Future Planning by LACFCD & Other Local Partners

Key Considerations

- Climate Change
- Population growth

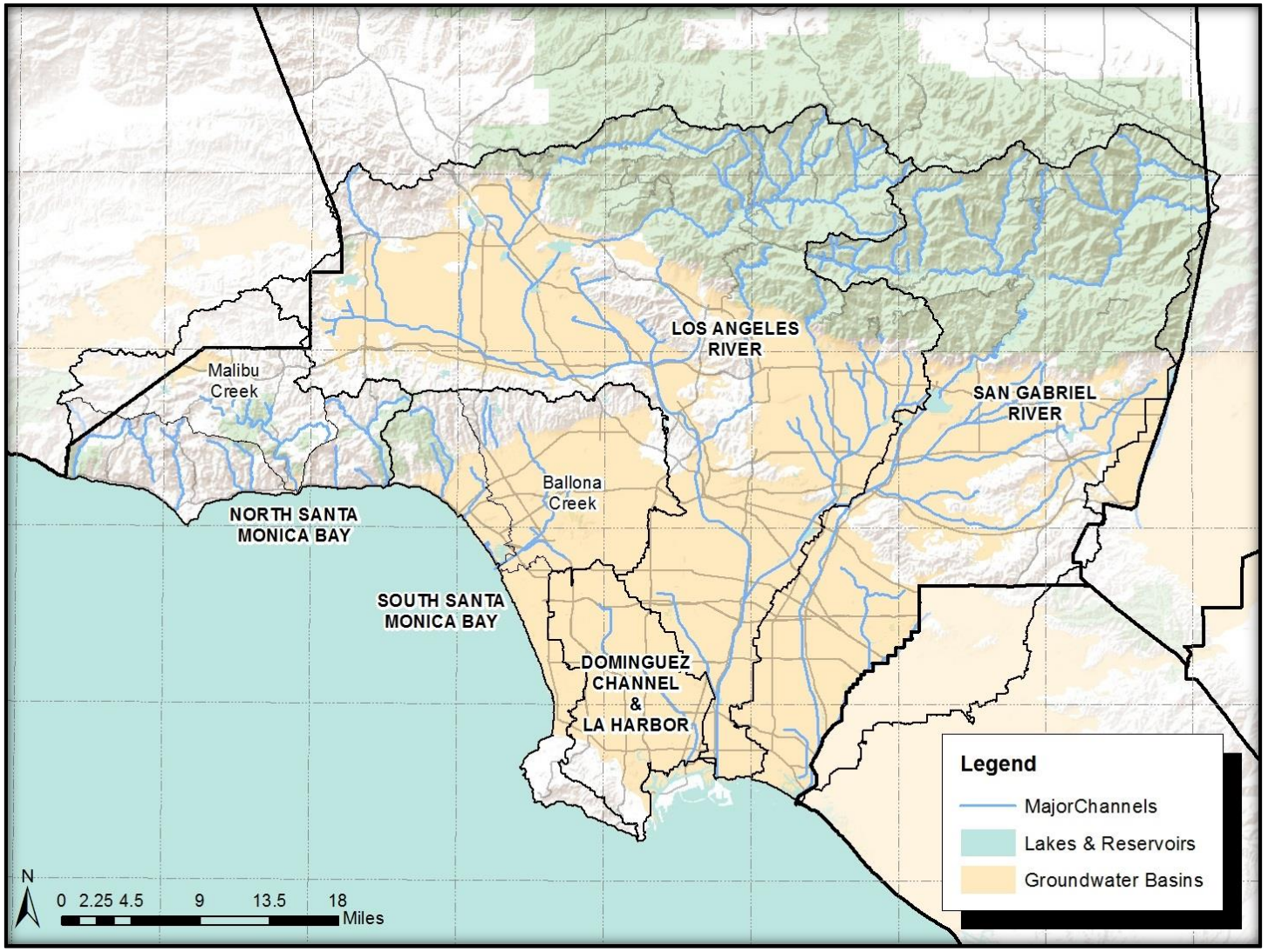


USGS - CMIP5 Global Climate Change Viewer



California Department of Finance, - State and County Population Projections

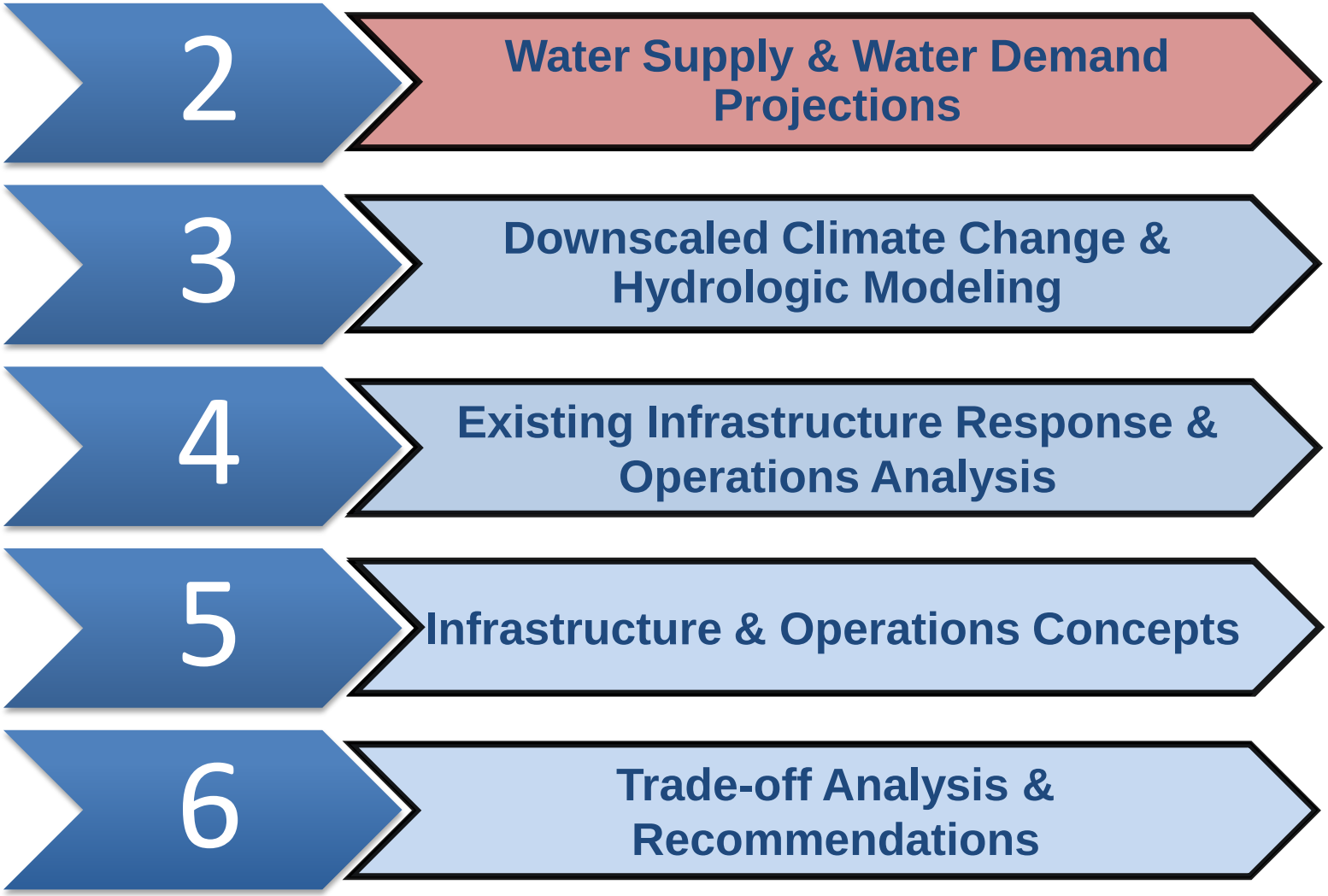
Study Area


LOS ANGELES RIVER
Malibu Creek
SAN GABRIEL RIVER
Ballona Creek
NORTH SANTA MONICA BAY
SOUTH SANTA MONICA BAY
DOMINGUEZ CHANNEL & LA HARBOR
Legend
MajorChannels
Lakes & Reservoirs
Groundwater Basins
N
0 2.25 4.5 9 13.5 18
Miles

Study Tasks

1. Project Management
2. Water Supply & Water Demand Projections
3. Downscaled Climate Change & Hydrologic Modeling
4. Existing Infrastructure Response & Operations Analysis
5. Infrastructure & Operations Concepts
6. Trade-off Analysis & Recommendations
7. Final Report

Major Study Tasks



Study Schedule

ACTION	SCOPE	TARGET
TASK 1 – Study Project Management	• General oversight and project guidance • Study Task Facilitation/Coordination • Study Outreach (***Ongoing***)	**January 2013** to **December 2015**
TASK 2 – Water Supply & Demand Projections	• Water Supply & Demand Literature Review • Supply Analysis • LACFCD Water Conservation System Contributions • Report Review & Publishing (***In Progress***)	**March 2014** to **November 2014**
TASK 3 – Downscaled Climate Change & Hydrologic Modeling	• Downscaled Climate Change [illegible] • Hydrologic [illegible] • Report [illegible] (***Complete***)	**February 2013** to **December 2013**
TASK 4 – Existing Infrastructure Response & Operations Plans Analysis	• Response to Current Climate • Response to Future Climate • Report Review & Publishing (***Review Draft Report***)	**September 2013** to **October 2014**

COMPLETE

Study Schedule

ACTION	SCOPE	TARGET
TASK 5 – Infrastructure & Operations Concepts	• Develop Concepts • Evaluate and Refine Concepts • Appraisal-Level Planning • Report Review & Publishing (***Kickoffs Soon***)	**July 2014** to **August 2015**
TASK 6 – Trade-Off Analysis & Recommendations	• Conduct Economic Analysis • Conduct Non-Economic Analysis • Develop Trade-off Matrix • Cost Effectiveness • Develop Recommendations • Report Review & Publishing	**November 2014** to **September 2015**
TASK 7 – Final Report	• Prepare Final Report • Final Reviews • Publish and Distribute Final Report	**June 2015** to **December 2015**

Task 2 – Goals for Today

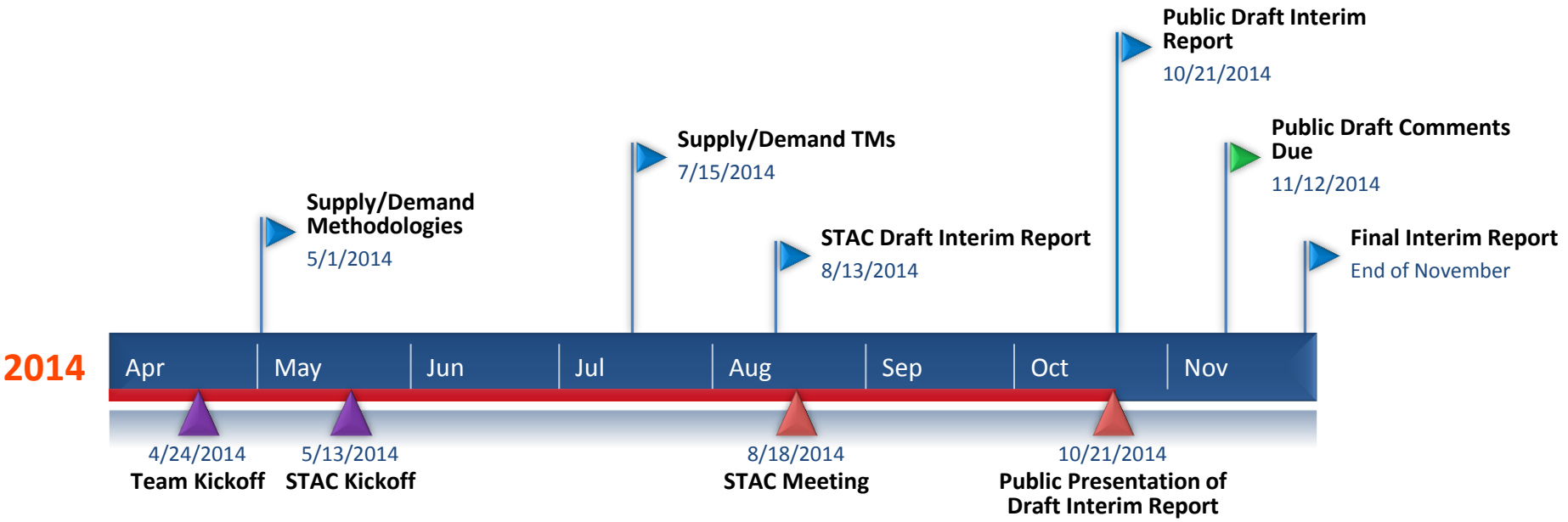
1. Task 2 Overview & Progress
2. Present Findings
3. Discuss “big picture” comments and concerns
4. Questions & Answers

Task 2 – Overview

Purpose is to conduct an analysis that:

- Estimates water demands and available supplies
  - Years 2010, 2035, and 2095
- Uses existing planning documents where available; uses reasonable assumptions where quantifications not available
- Incorporates climate change impacts
- Informs Task 5 which explores concepts to capture stormwater

Task 2 – Progress



Task 2 – Report Overview

- **Provides projected supplies & demands out to 2095**
  - Not intended to determine which available supplies will be implemented
  - Facilities will be needed to implement supplies
  - Factors to consider: environmental, cost, public policy, reliability
  - Gap is projected between available supplies and supplies that are used
    - Stormwater and conservation are likely to be implemented
- **Basis for projections:**
  - 2010 – Existing planning documents
  - 2035 – Existing planning document projections
  - 2095 – Developed assumptions

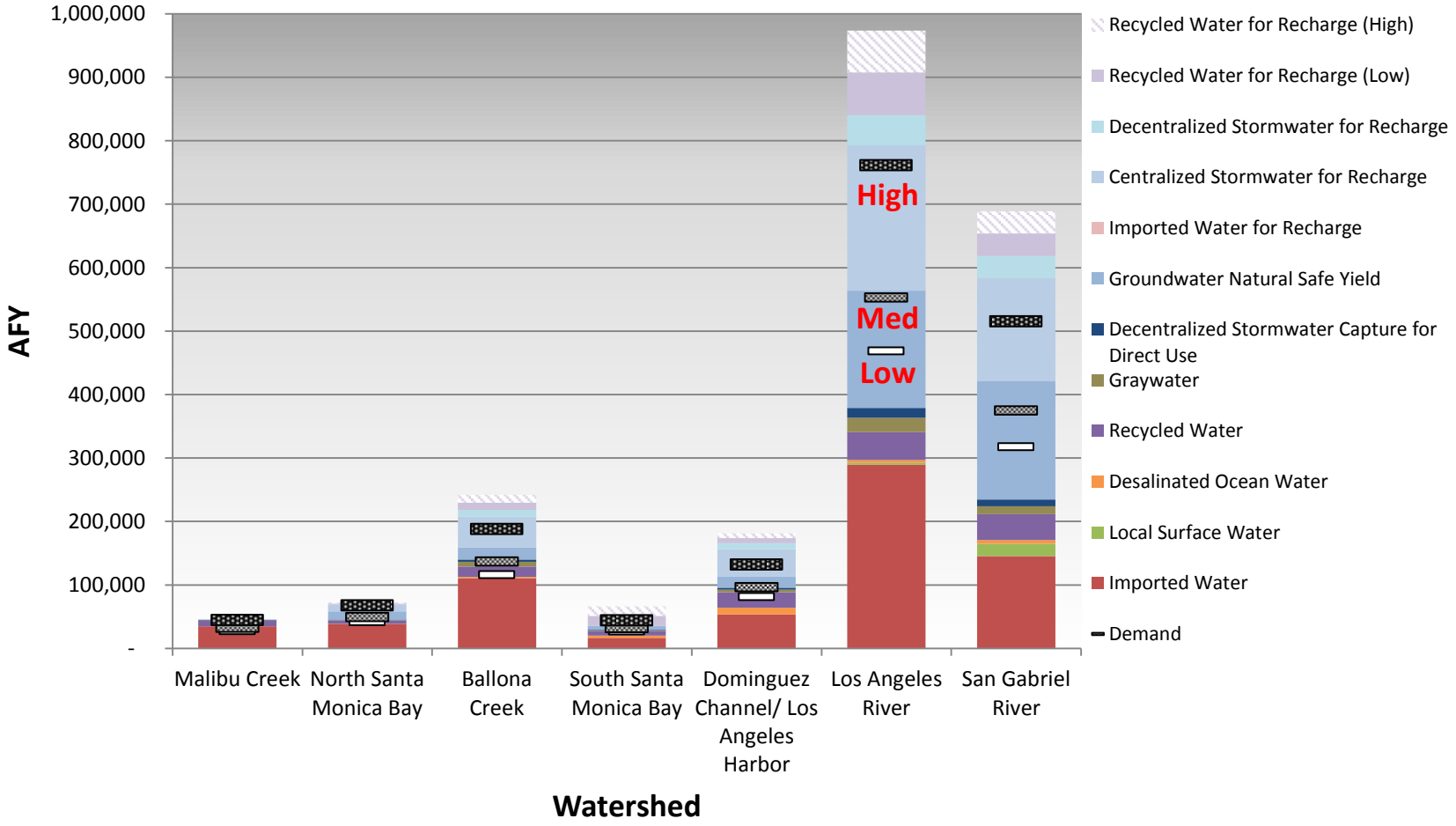
Task 2 – Considerations for 2095

- **Organization**
  - By watershed
  - Re-apportionment for demand and supply distributions
- **Demand**
  - "Low" (Australia), "Medium" (Long Beach), and "High" gpcd assumptions
- **Available Supplies**
  - "Available supplies" vs. "available supplies not used"
  - Direct Use vs. Replenishment/Recharge
  - "High" and "Low" Recycled Water Recharge scenarios
  - Stormwater supply divided into 3 categories
  - Imported water for recharge replaced with recycled water and stormwater

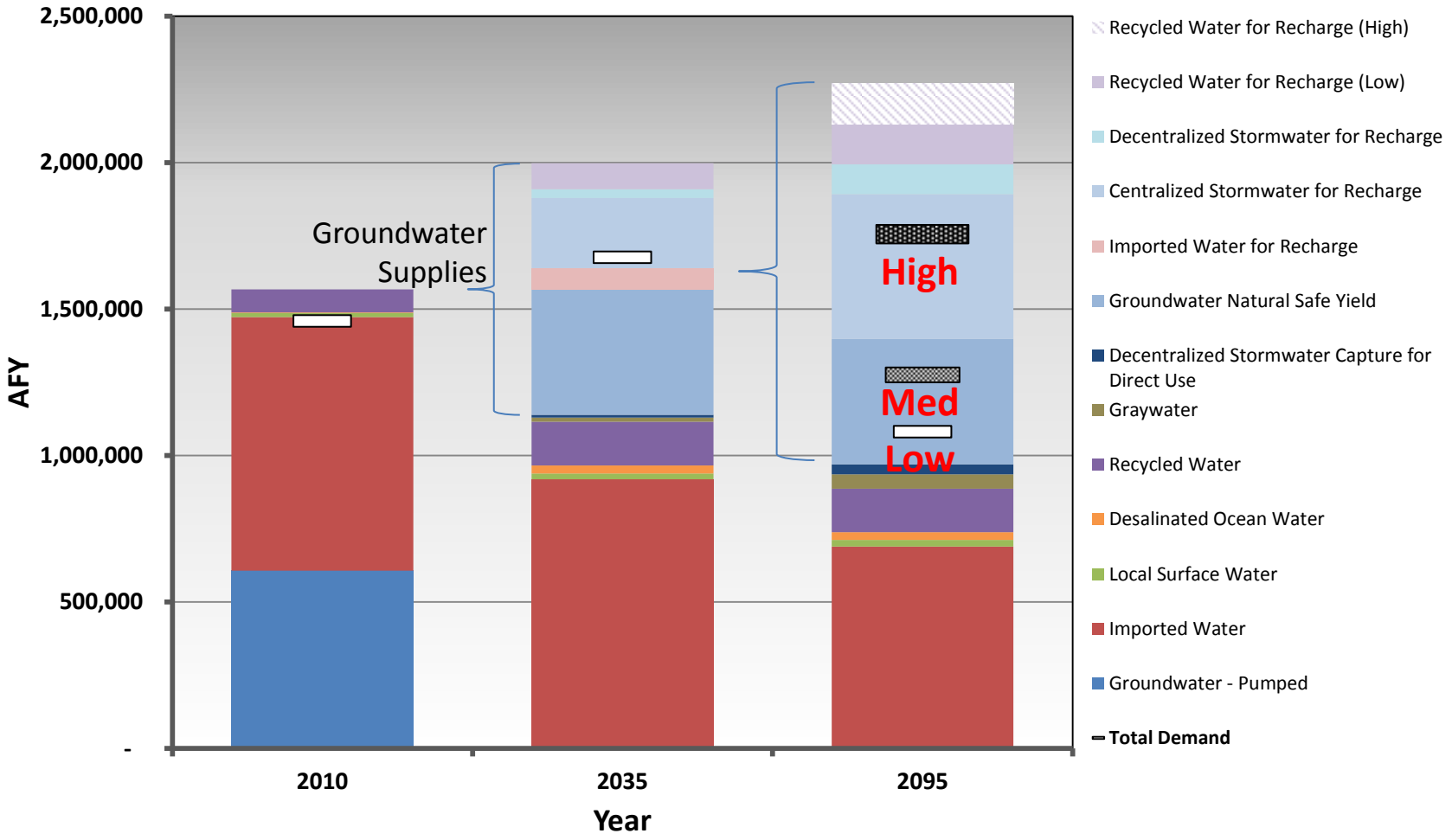
Task 2 – Summary of Findings

- **Available supplies exceed projected demands for 2095 in LA Basin**
  - All three demand scenarios
  - Both recycled water replenishment/recharge scenarios
- **Significantly higher supply availability and demands in some watersheds**
  - Los Angeles River watershed
  - San Gabriel River watershed
  - Larger geographic areas, populations, and groundwater basins

Watershed Snapshot – 2095



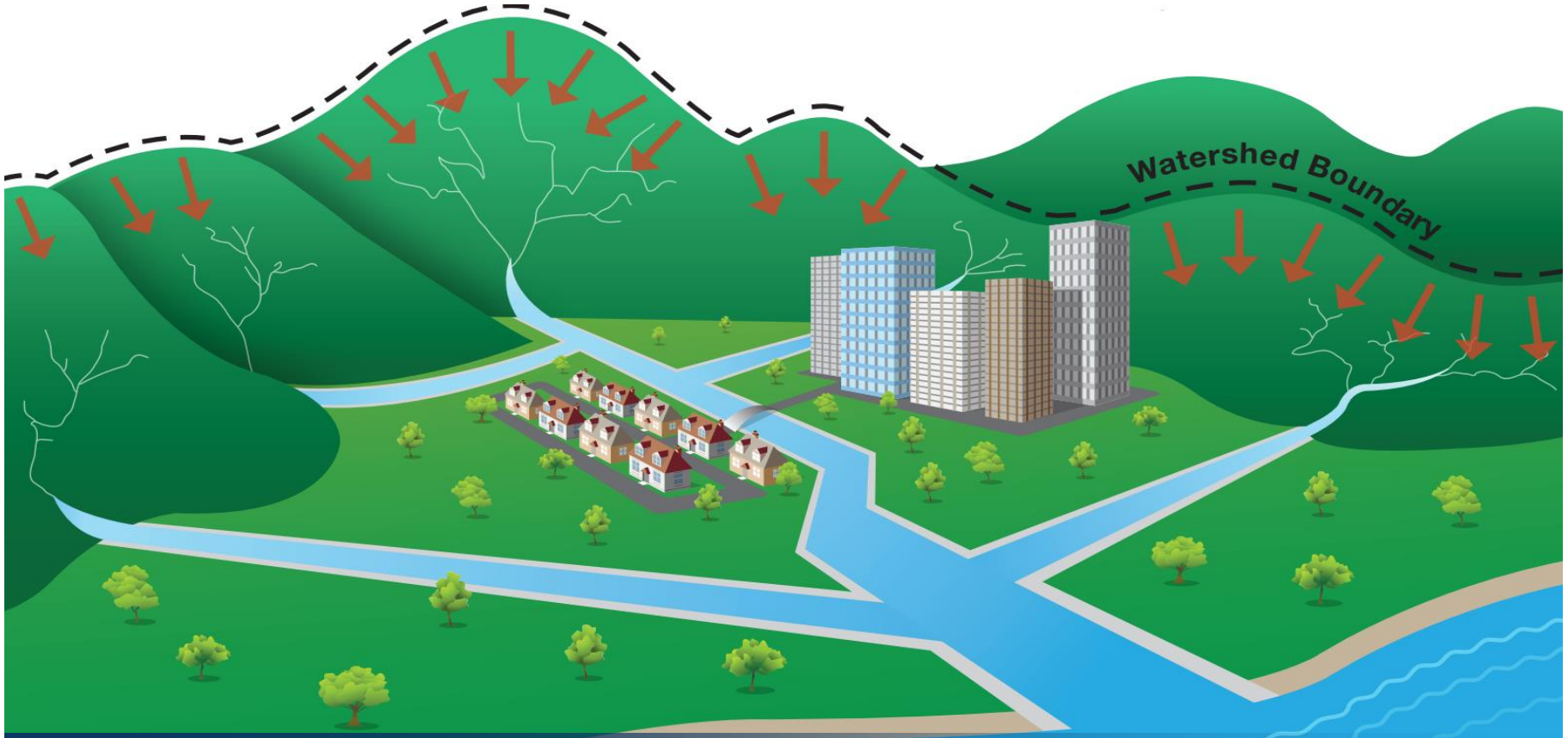
LA Basin Progression to 2095



Task 2 Q&A

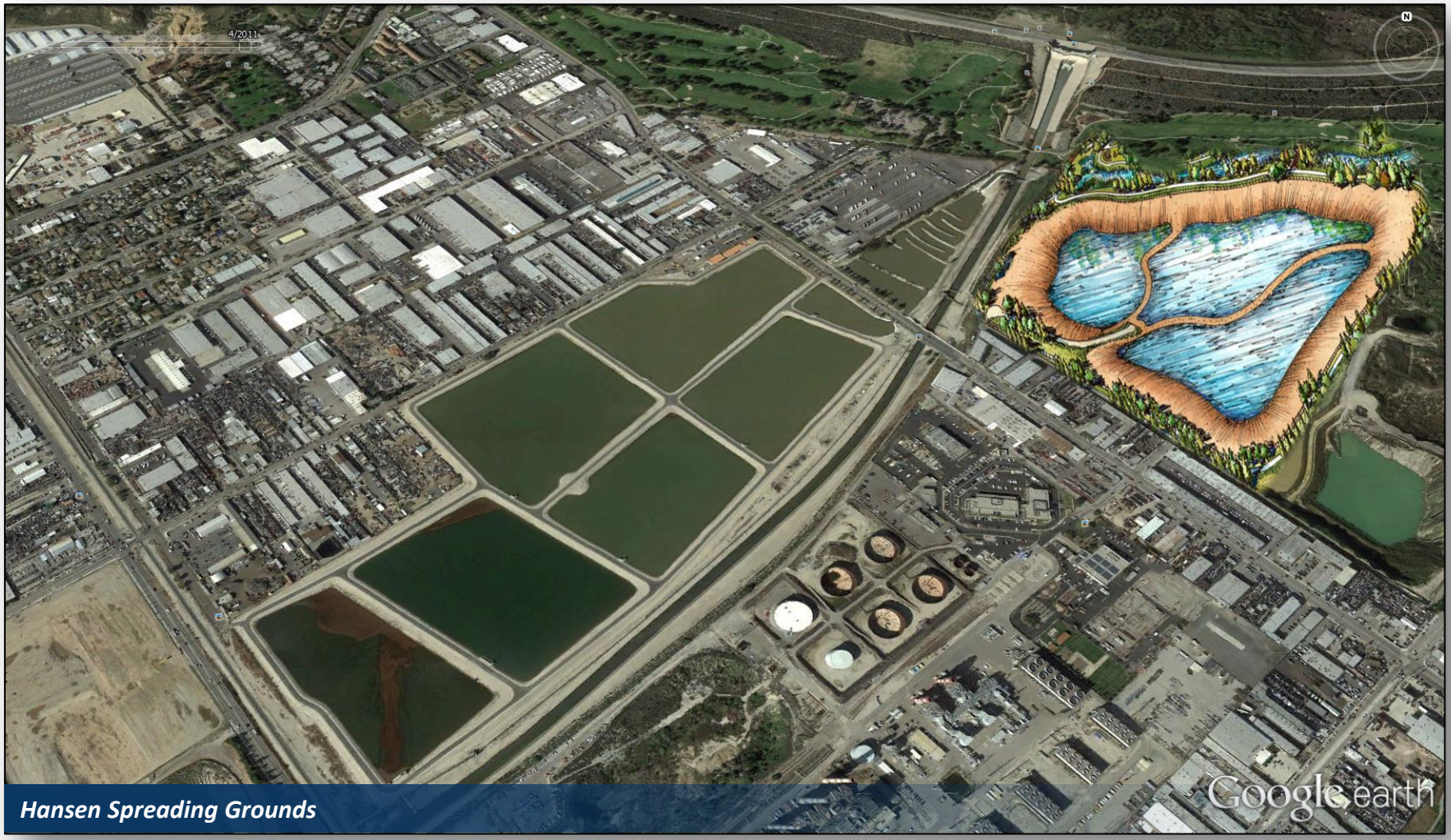
Morris Dam

Next Steps » Concepts & Recommendations



Enhancing the Water Conservation System to Address Future Conditions

Next Steps » Concepts & Recommendations



Hansen Spreading Grounds

Upcoming Study Items

- **Task 5 Scoping Sessions / Design Charettes – Fall 2014**
  - Develop facility enhancements and/or new concepts

- **Next Task**
  - Task 6 – Trade-off Analysis & Recommendations

Contact Information

Los Angeles Basin Stormwater Conservation Study

http://www.usbr.gov/lc/socal/basinstudies/LABasin.html

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