Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Regional Sewerage Program Technical Committee Meeting

AGENDA
Thursday, September 24, 2015
4:00 p.m.

Location
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Thursday, September 24, 2015

Call to Order and Roll Call

1. **Approval of Minutes**
   A. Minutes of July 30, 2015 Meeting

2. **Action Items**
   A. Recycled Water Policy Principles (Written)

3. **Informational Items**
   A. Service to Unincorporated Area of San Bernardino County (Written/PowerPoint)
   B. Recycled Water Semi-Annual Update (PowerPoint)
   C. Energy Management Program (Written/PowerPoint)
   D. Conservation Program Update (PowerPoint)

4. **Receive and File**
   A. Building Activity Report (YTD)
   B. Recycled Water Distribution - Operations Summary
   C. Long Range Plan – Finance

5. **Other Business**
   A. IEUA General Manager's Update – Regional Contract Extension Negotiations
   B. Committee Member Requested Agenda Items for Next Meeting
   C. Committee Member Comments
   D. Next Meeting – October 29, 2015

6. **Adjournment**

DECLARATION OF POSTING

I, Jill Kiefer, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA on Monday, September 21, 2015.

Jill Kiefer

APPROVAL OF MINUTES

1A

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Regional Sewerage Program
Technical Committee Meeting

MINUTES OF JULY 30, 2015 MEETING

CALL TO ORDER

A regular meeting of the IEUA/Regional Sewerage Program – Technical Committee was held on Thursday, July 30, 2015, at the Inland Empire Utilities Agency located at 6075 Kimball Avenue, Chino, California. Ryan Shaw, City of Ontario, called the meeting to order at 4:05 p.m.

New Hire Introduction: Mr. P. Joseph Grindstaff, General Manager/IEUA, introduced Jill Kiefer, Executive Assistant, who started with the Agency on June 22, 2015.

ATTENDANCE

Committee Members:

Jesus Plasencia	City of Chino
Steve Nix	City of Chino Hills
Tony Mata	City of Fontana
Mike Hudson	City of Montclair
Ryan Shaw	City of Ontario
Rosemary Hoerning	City of Upland
Braden Yu	Cucamonga Valley Water District
P. Joseph Grindstaff	Inland Empire Utilities Agency

Absent Committee Members:

None.

Others Present:

Jill Kiefer	Inland Empire Utilities Agency
Christina Valencia	Inland Empire Utilities Agency
Jesse Pompa	Inland Empire Utilities Agency
Craig Proctor	Inland Empire Utilities Agency
Kathy Besser	Inland Empire Utilities Agency
Lisa Morgan-Perales	Inland Empire Utilities Agency
Sylvie Lee	Inland Empire Utilities Agency
Peter Soelter	Inland Empire Utilities Agency
Sapna Nangia	Inland Empire Utilities Agency
Teresa Velarde (via telephone)	Inland Empire Utilities Agency

1. **APPROVAL OF MINUTES**
   A. **Minutes of April 30, 2015 Meeting**

> **Motion:** By Braden Yu/Cucamonga Valley Water District and seconded by Mike Hudson/City of Montclair to approve the minutes of the April 30, 2015 Technical Committee meeting.
>
> **Motion carried: Unanimously.**

2. **ACTION ITEMS**
   None.

**Jesus Plasencia entered the room at 4:10 p.m.*

3. **INFORMATIONAL ITEMS**
   A. **Regional Pretreatment Program – Local Limits Update**
   Craig Proctor/IEUA gave a presentation on the Agency's Regional Pretreatment Program and the Local Limits limits for Significant Industrial Users (SIUs). In 2013 the Regional Water Quality Control Board (RWQCB) required the Agency to reevaluate its local limits in a formal study as a result of a Pretreatment Compliance Audit. On May 21, 2014, the Agency retained Arcadis U.S. Inc. to provide consulting services to reevaluate and develop local limits that would be applicable to all SIUs within the Agency's service area. Based on screening criteria, data evaluation, and EPA guidance documents, the consultant determined there were 29 potential pollutants of concern (POCs). Pretreatment staff will be submitting the local limits report to the RWQCB. If the proposed local limits are approved by the RWQCB, staff will present to the Regional Technical Committee in November. Upon review with the Committee, staff will recommend the Board adopt a Notice of Intent to revise the local limits and set a public hearing for adoption of the local limits at the December Board meeting.

   B. **Odor Study Update**
   Jesse Pompa/IEUA gave an overview of an Odor Study conducted quarterly over a 12-month period. Strategic sampling was performed, primarily along treatment plant fence lines, by a panel of Agency members and a third-party testing agency. An "odor wheel" was used to identify potential odor descriptors. Future efforts will focus on RP-1 where the level of odors varied each quarter, but was intense where the primary effluent is stored. Chris Berch/IEUA thanked the Agency members for sending their staff to participate on the panel.

   C. **Water Conservation Update**
   Lisa Morgan-Perales/IEUA gave an update on the various conservation programs in place, including the MWD Turf Removal Program and Rebate Programs. Due to the high volume of applications, the MWD's turf removal program has been put on hold and a waiting list is in place. Between May 4 and July 30, IEUA received 1,700 residential applications, 700 which have been approved. 1000 are on hold.

   Ms. Morgan-Perales also discussed OmniEarth, a program used to monitor geographical water usage. Tom Ash/IEUA is working with Chino Hills, Upland, MVWD, and Ontario to execute Non-

Disclosure Agreements so that OmniEarth can establish databases and develop dashboards to look at customers' efficiency standards. This will help when reporting to the State Water Resources Control Board (SWRCB).

Other conservation topics covered by Ms. Morgan-Perales included an agricultural drought assistance program being developed by Tom Ash, and the SAWPA Prop. 84 grant. IEUA's agreement for Prop. 84 funding was executed on July 20, and will go to the Board for adoption/approval in December.

D. Regional Contract Audit Review Update

Teresa Velarde, Manager of Internal Audit/IEUA, via telephone, presented the findings of the Regional Contract Audit. At the podium were Peter Soelter and Sapna Nangia, Senior Internal Auditors with IEUA, assisting with the slide presentation.

Ms. Velarde stated that the purpose of this update is to provide the results of the Regional Contract Review. In early 2014, the IEUA Board requested a comprehensive evaluation to determine how each of the member agencies applied the Regional Contract within their agency.

This review is more comprehensive and detailed than the previously conducted audits, and looks closely at public service facilities, which had not been looked at before. To date, Internal Audit has issued approximately ten audit reports with over twenty (20) recommendations or suggestions for improvements.

In reference to the methodology of the review, Ms. Velarde said that the auditors selected items for review where errors and mistakes were likely to occur. The auditors were looking to see if Connection Fees and Monthly Volumetric Fees were being assessed and reported according to the requirements of the current Regional Contract.

Public service facilities such as hospitals, schools, colleges, government facilities, etc. are required to pay Connection Fees as well as monthly sewer fees. However, there is no consistent process in place to identify and collect from these facilities because they go through a different type of permitting process.

Peter Soelter, Senior Auditor/IEUA, explained how the auditors identified the public facilities in the region. The process consisted of inquiring of the member agencies, physical observation, and researching State websites. Public facilities that had new construction activity during and around the audit period were identified.

Ms. Velarde continued her presentation by explaining that certain facilities were tested to determine if Connection Fees are being charged correctly. The auditors found that there are inconsistencies as to how customers/entities are/should be categorized per Exhibit J of the Regional Contract. As a result, there is a lack of consistency in the assessment and collection of fees among the member agencies.

The next steps of the Internal Audit Department are to finalize the individual audit reports and provide a final comprehensive review with recommendations to assist in the renegotiation of the Regional Contract. Ms. Velarde then concluded her presentation by opening the floor for questions and comments.

Braden Yu/Cucamonga Valley Water District inquired about the facilities that were chosen for review, and whether or not they were chosen randomly. Ms. Velarde responded that, since this study was not for research purposes, some of the businesses/entities selected were intentionally chosen based whether there were likely to be errors. Mr. Yu stated that, since this is a public meeting, the report should not have specifically named each agency. Mr. P. Joseph Grindstaff, General Manager/IEUA, addressed and acknowledged Mr. Yu's concern, and stated that the intent is for the finance officers of each member agency to look at the questioned costs and see what needs to be done. Also, in moving forward with the Regional Contract, the discrepancies between the agencies should be addressed. Again, Mr. Yu stated that the presentation was very pointed. Tony Mata/City of Fontana suggested providing a more generalized report in the future. Ms. Velarde acknowledged the concerns and stated that the results are for their own knowledge and information so that the team understands and addresses the issues, and can begin to move forward.

Mike Hudson/City of Montclair, suggested that IEUA collect the Connection Fees for the region going forward to prevent any discrepancies. He cited the previous EDU audit that highlighted errors made three years ago, and the inability of his agency to collect the additional fees. He stated that his agency does not have the manpower to check work at schools and hospitals on a monthly basis. Also, the fee assessment is a judgment made "at the counter." There is no process to go back and collect if there is an error. Ms. Velarde responded that these items are identified in the audit review, along with ideas and recommendations that will be presented at a future meeting.

There was further extensive discussion among the committee members regarding future meetings with finance executives from the member agencies, nuances among the different agencies, how to deal with errors in the future, and providing common forms and consistent training.

Mr. Grindstaff stated the Board of Directors would like to see staff address all the issues identified during the audit. He said the auditors would come back in 3-6 months with recommendations as to how to move forward. He also expressed the value and importance of internal auditors, and shared his appreciation for Ms. Velarde and her staff.

4. RECEIVE AND FILE ITEMS

A. Draft Minutes of the Pretreatment Committee

The Draft Minutes of the Pretreatment Committee were received and filed by the Committee.

B. Building Activity Report (YTD)

The Building Activity Report (YTD) was received and filed by the Committee.

C. **Recycled Water Operations Summary**
The Recycled Water Operations Summary was received and filed by the Committee.

D. **Draft Special Joint Workshop Agenda**
The Draft Special Joint Workshop Agenda was received and filed by the Committee.

E. **Recycled Water Program Strategy**
The Recycled Water Program Strategy was received and filed by the Committee.

F. **Wastewater Facilities Master Plan**
The Wastewater Facilities Master Plan was received and filed by the Committee.

5. **OTHER BUSINESS**

A. **IEUA General Manager's Update**
Mr. P. Joseph Grindstaff had two issues for comment:

1. The State Board released their conservation review, and the statewide objective for water conservation was met at 27%.

2. There is a great opportunity to obtain recycled water grants. If there are any projects for which you would like a grant, you must submit package by 12/2/15. The grant is for a 35% principal forgiveness along with a 1% loan.

B. **Committee Member Requested Agenda Items for Next Meeting**
None.

C. **Committee Member Comments**
None.

D. **Next Meeting – August 27, 2015**

6. **ADJOURNMENT** - Meeting was adjourned at 5:35 p.m.

Transcribed by: Jill Kiefer

Jill Kiefer
Executive Assistant, IEUA

ACTION
ITEM

2A

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date: September 24, 2015

To: Regional Technical Committee

From: Inland Empire Utilities Agency

Subject: Recycled Water Policy Principles

RECOMMENDATION

It is recommended that the Regional Technical Committee review and provide recommendations for the adoption of the Recycled Water Policy Principles.

BACKGROUND

The Inland Empire Utilities Agency (IEUA) and its contracting agencies have developed a successful regional Recycled Water Program for both direct use and groundwater recharge. In 2000, the region identified that recycled water use was a critical component in drought-proofing and maintaining its economic growth. With imported water rates increasing and long-term imported supply reliability in decline, the region committed to aggressively and proactively develop local water supplies to offset these impacts. This set the path for the development of a regional recycled water distribution system.

While the foundational commitment to beneficial reuse of recycled water have remain unchanged, some fundamental concepts have been questioned over the past few years, which has resulted in the region working together to develop Recycled Water Policy Principles to address the changes since the inception of the program. The region's goal to maximize the beneficial use of recycled water has not changed. However, the commitment to connect additional recycled water users has stagnated over the past few years. At this time, several contracting agencies are struggling with the inherent conflict between use in excess of "base entitlement" (as defined by the Regional Sewage Service Contract) and the prioritization of direct use over groundwater recharge. The struggle has led some contracting agencies to be concerned about their local benefit and perceived inequities.

In order to move forward together as a region, it is appropriate to reevaluate and affirm the regional Recycled Water (RW) Policy Principles prior to implementing any remaining significant system improvements to the Recycled Water Program and to clarify how these principles will govern the future benefits received by all IEUA contracting agencies. The proposed RW Policy Principles are summarized below and provided in the attachment in detail.

Recycled Water Policy Principles

1. **Maximize the beneficial use of recycled water to enhance local water resource availability and reduce reliance on imported water.**
    1. IEUA will continue the development of the Regional Recycled Water infrastructure by providing equitable access for the contracting agencies to achieve reuse of 50,000 AF/year by 2025.
    2. IEUA will pursue the long term acquisition of recycled water from out of service area sources to supplement the regional supply.
2. **Promote efficient application and use of recycled water as a reliable and fundamental component of drought-proofing the IEUA service area.**
    1. Ensure efficient use of recycled water at the point of use, consistent with rules and expectations of responsible potable water use.
3. **The regional recycled water system will be operated based on the following priorities for recycled water deliveries:**
    1. Regional discharge obligations (Santa Ana Judgment, environmental obligations, etc.),
    2. Contracting agency base entitlement use,
    3. Regional groundwater recharge and
    4. Contracting agency use above entitlement.
        i. Acquisition of another contracting agency's unused base entitlement or provide for the reallocation of equivalent value to contracting agencies
4. **Meet peak recycled water direct demands through coordinated demand management of recycled water deliveries.**
    1. Large users will have pressure sustaining valves to ensure that overall regional demands are reliably met.
5. **Maintain a financially viable recycled water program with rates that incentivize use of all available recycled water and that provides funding to achieve full cost-of-service for the recycled water program.**
    1. Set recycled water rates that cover the full cost of Operations & Maintenance (O&M) and Rehabilitation & Replacement (R&R) for the system.
6. **Maximize the use of recycled water capital investments made by IEUA and its contracting agencies with recycled water use within the region.**
    1. Retail contracting agencies shall substantially fulfill prior recycled water connection commitments for all existing infrastructure.
    2. Firm contracting agency commitments for recycled water use will drive new regional investments.

ATTACHMENTS: RW Policy Principles

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

DRAFT RECYCLED WATER POLICY PRINCIPLES

Introduction

The Inland Empire Utilities Agency (IEUA) and its contracting agencies have developed a successful regional Recycled Water Program for both direct use and groundwater recharge. As the Program continues to advance, it is important to summarize the history, operating philosophies, and policy principles on which the Program was founded.

In 2000, the region identified that recycled water use was a critical component in drought-proofing and maintaining its economic growth. With imported water rates increasing and long-term imported supply reliability in decline, the region committed to aggressively and proactively develop local water supplies to offset these impacts. This set the path for the development of a regional recycled water distribution system and a Recycled Water Implementation Plan.

The use of recycled water presented several advantages to the region: it is one of the most significant and underutilized sources of local water supply; it is reliable during drought and climate change conditions; and it requires significantly less energy than imported water to deliver to customers thus reduces greenhouse gas emissions. The development of recycled water is the cornerstone of a larger regional initiative to improve water supply reliability through enhanced local supplies. IEUA, in partnership with its contracting agencies and Chino Basin Watermaster (CBWM), invested over $600 million over the last fifteen years in water recycling, conservation, recharge improvements, the MWD groundwater storage and recovery project, the Chino Desalter, and other water management programs. These programs collectively reduce the region's need for imported water especially during drought or conditions when imported water supplies are not available. In addition to the region switching large potable water users to recycled water, IEUA and CBWM obtained a landmark permit in 2005 for groundwater recharge using IEUA's high-quality recycled water.

By 2007, Southern California was experiencing one of its driest years with the potential for entering an extended drought period. The State of California subsequently made water recycling an important element of California's water supply policy and adopted a statewide goal of achieving 1,000,000 acre-feet (AF) of reuse by 2010. In response, in November 2007 IEUA and its contracting agencies unanimously adopted and committed to implement the Three Year Recycled Water Business Plan which laid out a focused and cost-effective approach to rapidly expand the availability and use of recycled water within IEUA's service area.

By 2014, over $250 million has been invested into the implementation of a robust Recycled Water Program. The region has achieved Program success by leveraging heavily on grant funding and loans. With unanimous regional support, annual recycled water use grew from approximately 5,000 AF in FY 04/05 to over 38,500 AF in FY 13/14. Critical to the economical and efficient operation of the system, each contracting agency made commitments to complete initiatives with the goal to increase direct reuse within their service areas. While some contracting agencies accomplished or far exceeded their local goals, some contracting agencies have not been able to fully achieve their original commitments.

The region's goal to maximize the beneficial use of recycled water has not changed. However, the commitment to connect additional recycled water users has stagnated over the past few years. At this time, several contracting agencies are struggling with the inherent conflict between use in excess of "base entitlement" (as defined by the Regional Sewage Service Contract) and the prioritization of direct use over groundwater recharge. The struggle has led some contracting agencies to be concerned about their local benefit and perceived inequities.

In order to move forward together as a region, it is appropriate that we reevaluate and affirm the regional Recycled Water Policy Principles prior to implementing any remaining significant system improvements to the Recycled Water Program and to clarify how these principles will govern the future benefits received by all IEUA contracting agencies.

Draft Recycled Water Policy Principles

1. **Maximize the beneficial use of recycled water to enhance local water resource availability and reduce reliance on imported water.**
    1. IEUA will continue the development of the Regional Recycled Water infrastructure by providing equitable access for the contracting agencies to achieve reuse of 50,000 AF/year by 2025.
    2. IEUA will pursue the long term acquisition of recycled water from out of service area sources to supplement the regional supply.
2. **Promote efficient application and use of recycled water as a reliable and fundamental component of drought-proofing the IEUA service area.**
    1. Ensure efficient use of recycled water at the point of use, consistent with rules and expectations of responsible potable water use.
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    1. Regional discharge obligations (Santa Ana Judgment, environmental obligations, etc.),
    2. Contracting agency base entitlement use,
    3. Regional groundwater recharge and
    4. Contracting agency use above entitlement.
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4. **Meet peak recycled water direct demands through coordinated demand management of recycled water deliveries.**
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    1. Set recycled water rates that cover the full cost of Operations & Maintenance (O&M) and Rehabilitation & Replacement (R&R) for the system.

6. **Maximize the use of recycled water capital investments made by IEUA and its contracting agencies with recycled water use within the region.**

    1. Retail contracting agencies shall substantially fulfill prior recycled water connection commitments for all existing infrastructure.
    2. Firm contracting agency commitments for recycled water use will drive new regional investments.

INFORMATION
ITEM

3A

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 24, 2015
To:	Regional Technical Committee
From:	Inland Empire Utilities Agency
Subject:	Service to Unincorporated Area of San Bernardino County

RECOMMENDATION

This is an Informational Item for the Regional Technical Committee to review.

BACKGROUND

This item was presented at the IEUA Board of Directors meeting on August 19, 2015.

All referenced agreements and Memorandum of Understanding may be accessed at the IEUA website under the section labeled, "August 19, 2015 Board of Directors Meeting – Part 2."

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	August 19, 2015
To:	The Honorable Board of Directors
Through:	Engineering, Operations, and Biosolids Management Committee *(8/12/15)* Public, Legislative Affairs, and Water Resources Committee *(8/12/15)* Finance, Legal, and Administration Committee *(8/12/15)*
From:	P. Joseph Grindstaff General Manager
Submitted by:	Chris Berch Executive Manager of Engineering/Assistant General Manager Sylvie Lee Manager of Planning and Environmental Resources
Subject:	Service to Unincorporated Area of San Bernardino County

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the agreements with California Steel Industries, Auto Club Speedway, Prologis, City of Fontana and Fontana Water Company to provide wastewater and recycled water services to a portion of the unincorporated area of San Bernardino County; and

2. Authorize the General Manager, subject to non-substantial changes, to execute agreements.

BACKGROUND

Auto Club Speedway (Speedway), California Steel Industries (CSI), and Prologis are located in the unincorporated area of San Bernardino County within the Inland Empire Utilities Agency (IEUA) service area. Domestic sewage generated from Speedway, CSI, Prologis and several surrounding properties is currently treated at the Prologis wastewater treatment plant located adjacent to IEUA's San Bernardino Avenue Lift Station (SBALS). Since the treatment plant is an aging facility that will require significant and costly capital upgrades in the near future, Speedway, CSI and Prologis intend to decommission the wastewater treatment plant and utilize permanent wastewater treatment services through IEUA. The City of Fontana (Fontana) would be the retail service provider to these properties. As the retail service provider, Fontana will collect wastewater fees and provide payment to IEUA in accordance with the Regional Contract.

In addition to the wastewater service, IEUA will provide Speedway and CSI recycled water for irrigation and industrial use through Fontana Water Company. Recycled water use (reduced groundwater pumping) at these sites will provide significant benefit to the Chino Basin Groundwater Management Zone No. 3 (MZ-3)

Project Activities

If approved, within ninety (90) days of the execution of the agreements, IEUA will design, construct and fund a temporary system to divert all flows currently treated at the Prologis wastewater treatment plant to the IEUA's SBALS. IEUA will fund the design and construction of the permanent system through connection fees and reimbursement from Speedway, CSI and Prologis.

The recycled water system will be constructed following the Public Utilities Commission's approval of the proposed recycled water rates for Speedway and CSI. The proposed rate was set at 85% of the Metropolitan Water District of Southern California's untreated Tier 1 rate. Following approval, IEUA will design and construct the recycled water system through reimbursement from Speedway and CSI. Speedway has the option to pay for connection fees, wastewater capital and recycled water capital costs by assigning pumping rights to IEUA. The duration of these agreements is sixty years. Following a detailed review, a categorical exemption from the California Environmental Quality Act (CEQA) has been adopted since the activities related to this agreement do not have any significant effect on the environment.

This project meets the Agency's Environmental Stewardship Goal through the implementation of actions that enhance or promote environmental sustainability, and the Water Reliability Business Goal in maximizing the beneficial reuse of recycled water to enhance reliability and reduce dependence on imported water.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

If approved, the amount required to fund the project is included in the FY2015/16 Recycled Water Capital (WC) Fund budget under Project No. WR15021, "Napa Lateral".

Attachments

1. CSI Agreement
2. Speedway Agreement
3. Prologis Agreement
4. Fontana Water Company Agreement
5. City of Fontana MOU

Service to Unincorporated Area of San Bernardino County

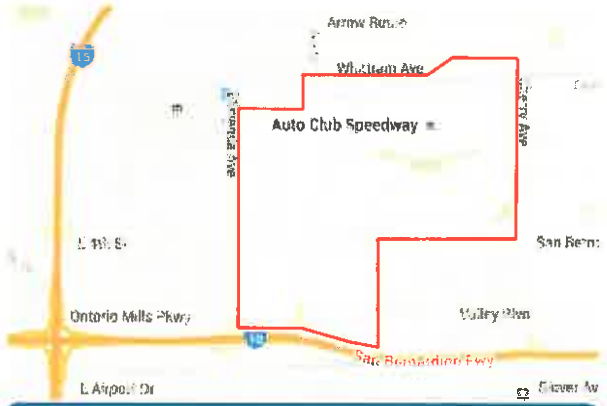
September 2015

Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

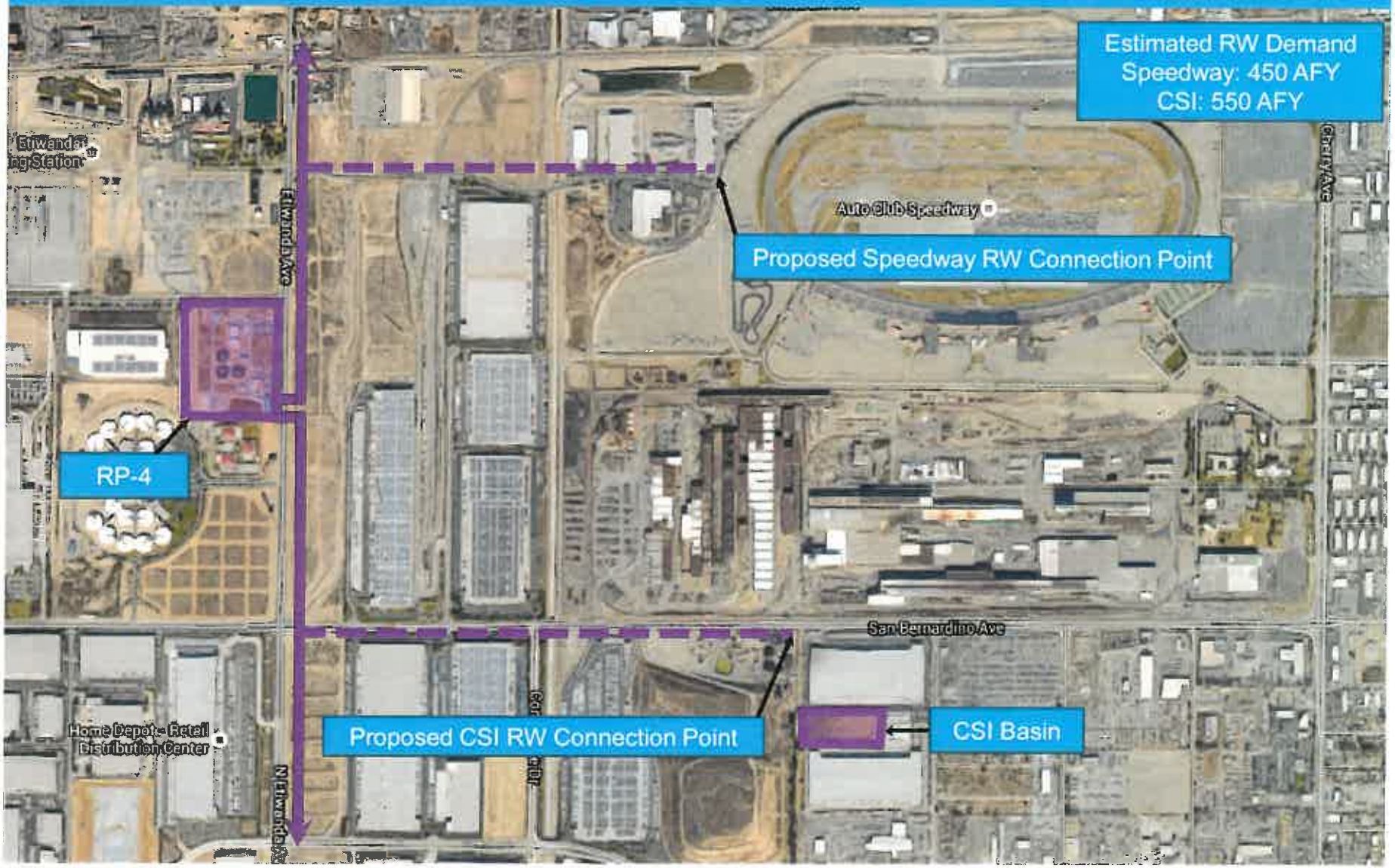
Project Scope

- Connect CSI, Speedway, Prologis, Other Parties to the Regional Sewerage System
  - Address Legacy Sewer Issues
  - Reliable, Cost Effective Wastewater Service
- Connect CSI, Speedway to the Recycled Water System
  - Reduce Groundwater Pumping and Replace with RW
  - Enhance MZ-3
  - Potential Groundwater Recharge



Wastewater Project Location

RW Project Location



Project Activities

Stakeholder	Role
IEUA	- Design and Construction - Wholesale Wastewater and RW Service - RW and Sewer Pipeline O&M - Pretreatment - EDU and Water Connections
CSI, Prologis, Speedway	- Payment: EDU Connection Fees, Capital Costs, Monthly User Fees
Other Parties (Napa, Kaiser)	- Payment: EDU Connection Fees, Monthly User Fees
City of Fontana	- Retail Sewer Service
Fontana Water Company	- Retail Recycled Water Service

Project Budget and Schedule

Description	Funding	Estimated Cost
Temporary Wastewater System	IEUA	$200,000
Wastewater Connection Fees	CSI, Prologis, Speedway (1)	$3,000,000
Permanent Wastewater System	CSI, Prologis, Speedway (1)	$900,000
RW System (San Bernardino Ave)	CSI	$3,500,000
RW System (Napa Ave)	Speedway (1)	$2,500,000

Project Phase	Date
Temporary Wastewater System Completion	November 2015
Permanent Wastewater System Completion	2017
RW System Design Start	2017 (2)

(1) Option to fund the project through pumping rights
(2) Pending PUC RW Rate Approval

Recommendation

Staff recommends the Board authorize the General Manager, subject to non-substantial changes, to execute the agreements with CSI, Speedway, Prologis, City of Fontana, and Fontana Water Company to provide wastewater and recycled water services to a portion of the unincorporated area of San Bernardino County.

This project meets the Agency's Environmental Stewardship Goal through the implementation of actions that enhance or promote environmental sustainability, and the Water Reliability Business Goal in maximizing the beneficial reuse of recycled water to enhance reliability and reduce dependence on imported water.

Questions?

INFORMATION
ITEM

3B

Recycled Water FY14/15 Update

September 2015

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Andy Campbell
Deputy Manager of Planning
and Environmental Resources

Regional Recycled Water System

Recycled Water Distribution System

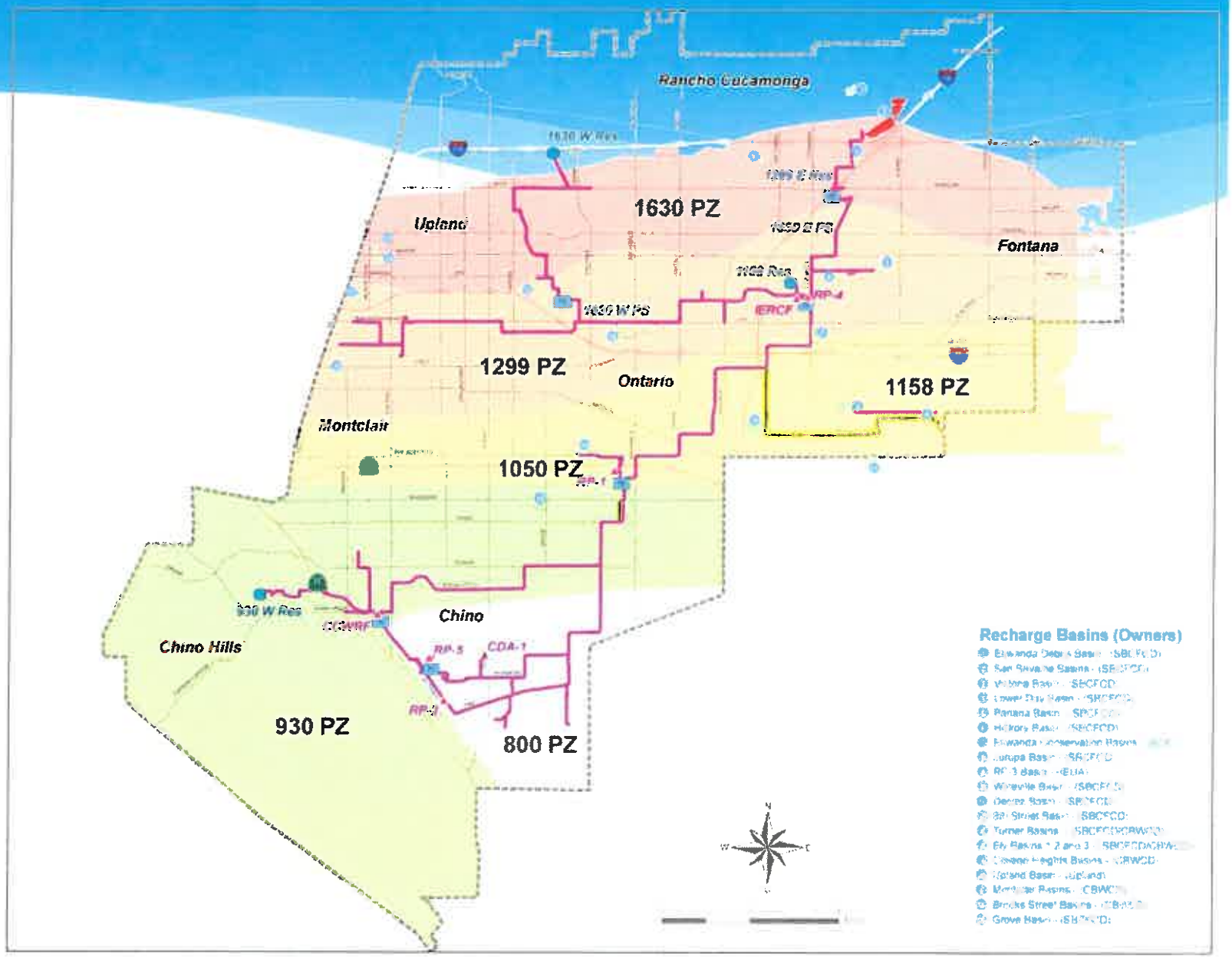
Legend Key

Pipeline Status
- Design
- Bid
- Construction
- Operating

Pump Station Status
- Design
- Bid
- Construction
- Operating

Reservoirs Status
- Design
- Bid
- Construction
- Operating

Recharge Improvement Status
- Design
- Bid
- Construction
- Operating

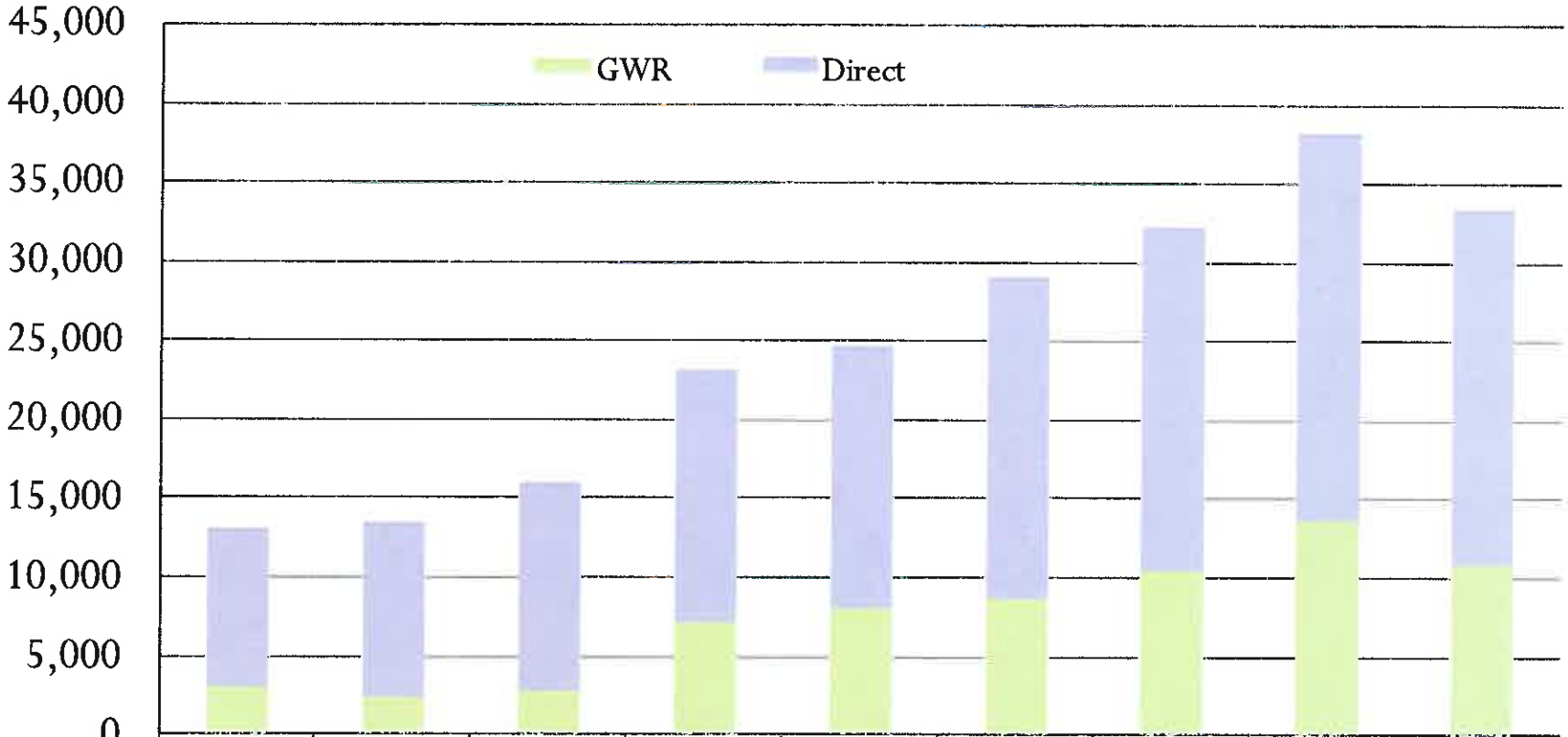


Status Update: Capital Projects

Project	Design	Construction	Project Cost	Status	Demand AFY
Wineville RW Pipeline	Complete	Fall 2015	$28,000,000	Startup	3,500
2015 Drought Relief Prop 1 SRF Funding RW Projects			$30,782,500	Pre-Design	

Project Name	Design	Construction	Project Cost	Status
San Sevaine Basin Improvements	Jul. 2015	Apr. 2017	$ 6,460,000	Design
RP-1 1158 RW PS Upgrades	Jan. 2018	Apr. 2019	$ 4,600,000	Pre-Design
RP-5 RW Pipeline Bottleneck	Feb. 2017	May. 2018	$ 1,380,000	Pre-Design
RP-1 Parallel Outfall Pipeline	Jan. 2018	Oct. 2019	$ 5,750,000	Pre-Design
RW Pressure Sustaining Valve Installation	Jan. 2016	Sep. 2016	$ 977,500	Pre-Design
930 to 800 West CCWRF PRV	Feb. 2017	Dec. 2017	$ 690,000	Pre-Design
Napa Lateral	Dec. 2016	Apr. 2018	$ 6,900,000	Pre-Design
Baseline RW Extension	Sep. 2016	Dec. 2017	$ 4,025,000	Pre-Design

Recycled Water Deliveries



	FY06-07	FY07-08	FY08-09	FY09-10	FY10-11	FY11-12	FY12-13	FY13-14	FY14-15
Direct	10,048	11,153	13,361	16,057	16,656	20,556	21,840	24,659	22,580
GWR	2,981	2,340	2,684	7,208	8,028	8,634	10,479	13,593	10,840

Recycled Water Allocation FY 2014/15

Agency	Pro Rata Share of Regional Flow (%)	Recharge Allocation (Acre-Feet) FY 14/15
Chino	10.74	1,076
Chino Hills	9.11	912
CVWD	24.02	2,405
Fontana	19.24	1,927
Montclair	4.67	468
Ontario	22.18	2,222
Upland	10.05	1,007
Totals	**100.00**	**10,017**
	JCSD's Allocation:	**823**
	Total Amount Recharged:	**10,840**

Questions?

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

INFORMATION
ITEM

3C

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 24/October 1, 2015
To:	Regional Committees
From:	Inland Empire Utilities Agency
Subject:	Energy Management Plan

RECOMMENDATION

This is an Informational Item for the Regional Committee to review.

BACKGROUND

This item will be presented at the IEUA Board of Directors meeting on December 16, 2015.

Energy Management Plan (EMP)

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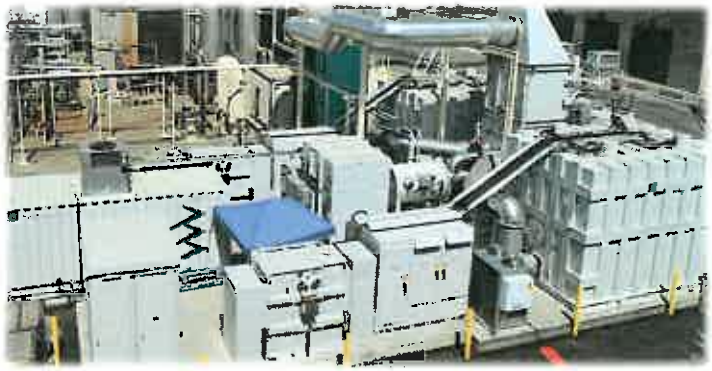
September 2015

EMP Overview

- Benchmark Current Performance
- Peak Power Independence Status
- Optimize Resources
- Improve Demand Side Management
- Forecast Facility Demands
- Mitigate Greenhouse Gas Impacts
- Identify Potential Energy Projects
- Track Energy Regulations
- Qualify for State/Federal Grants



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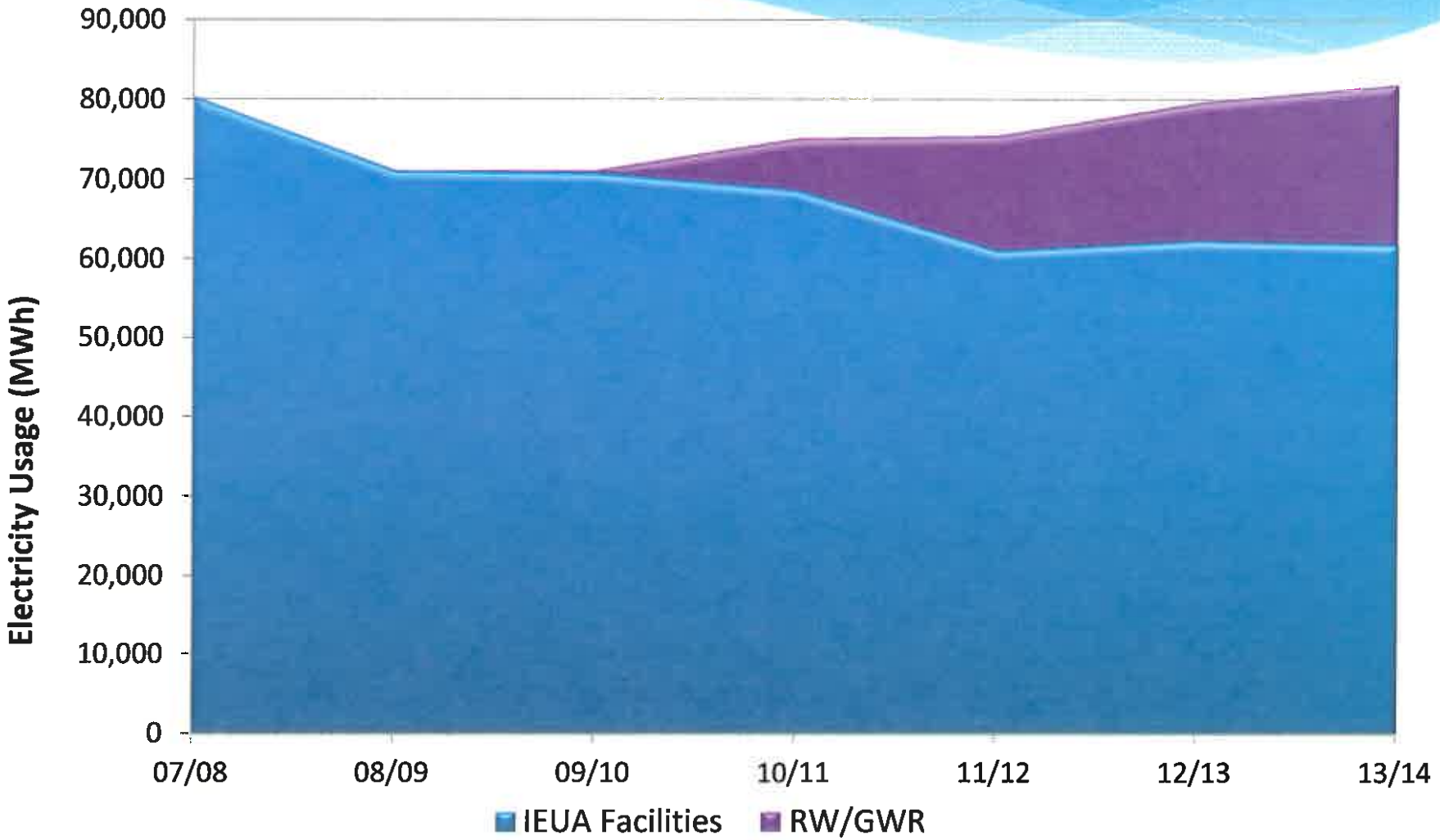
Energy Benchmarking



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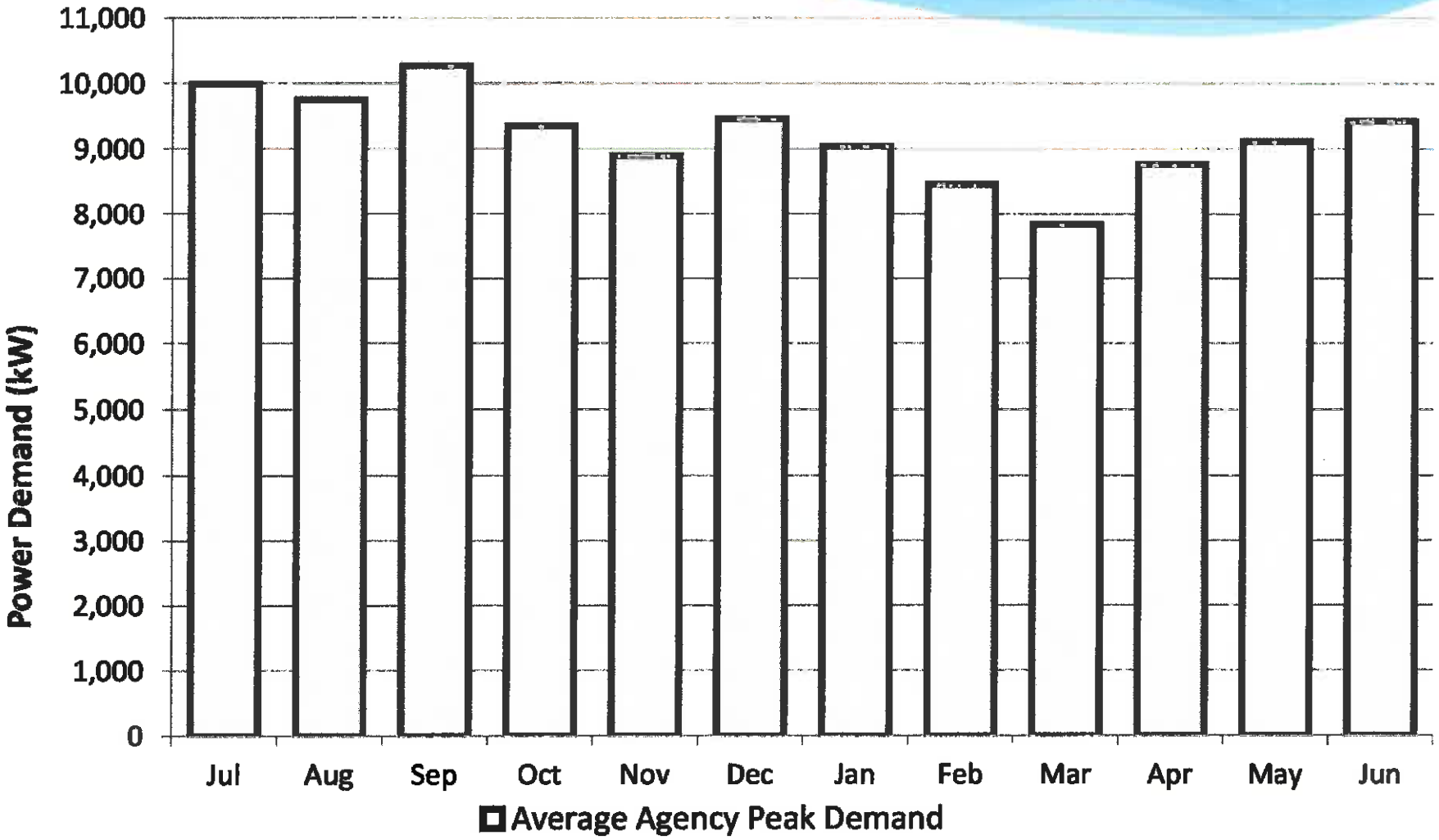
Peak Power Benchmarking



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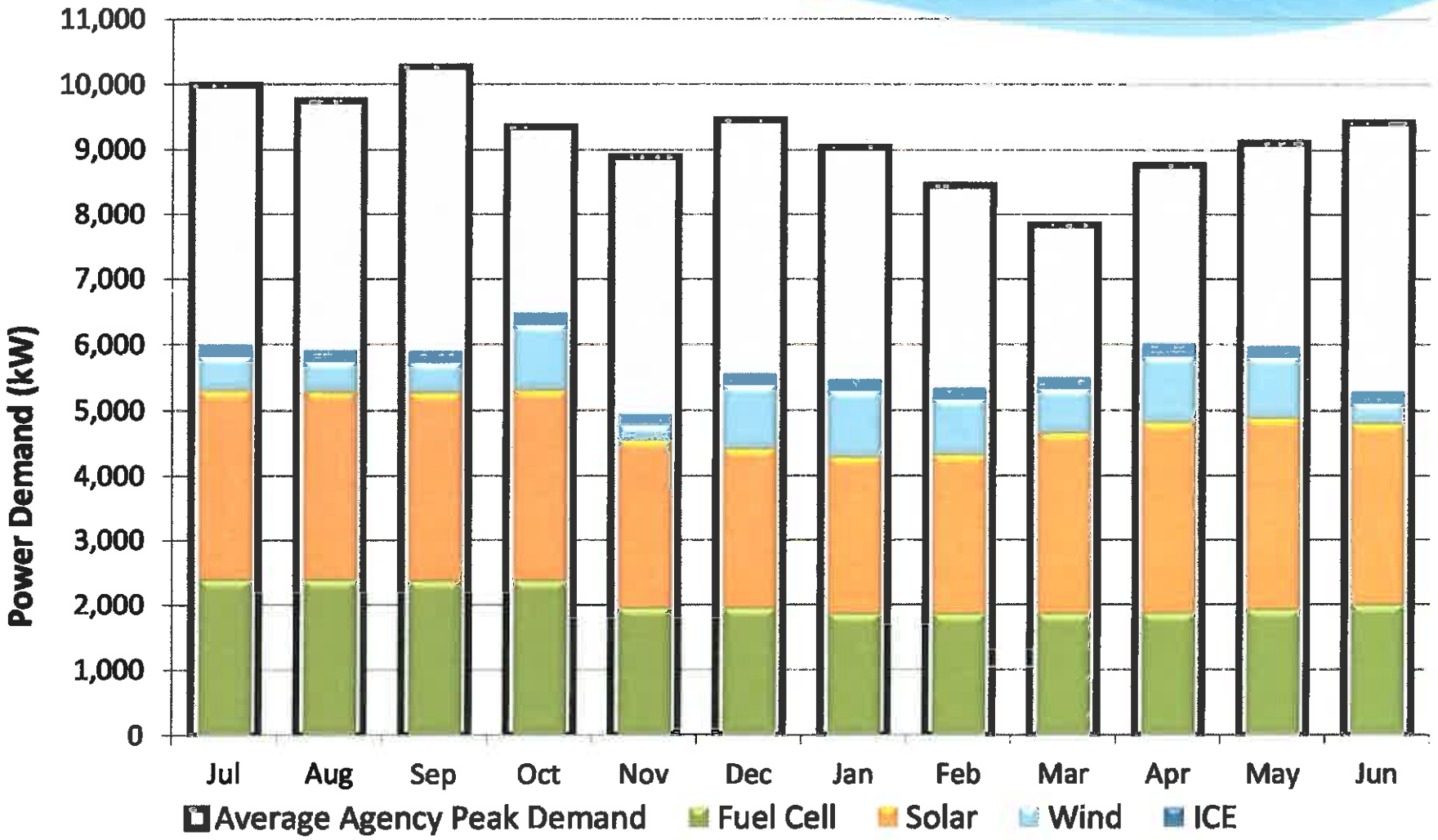
Peak Power Benchmarking



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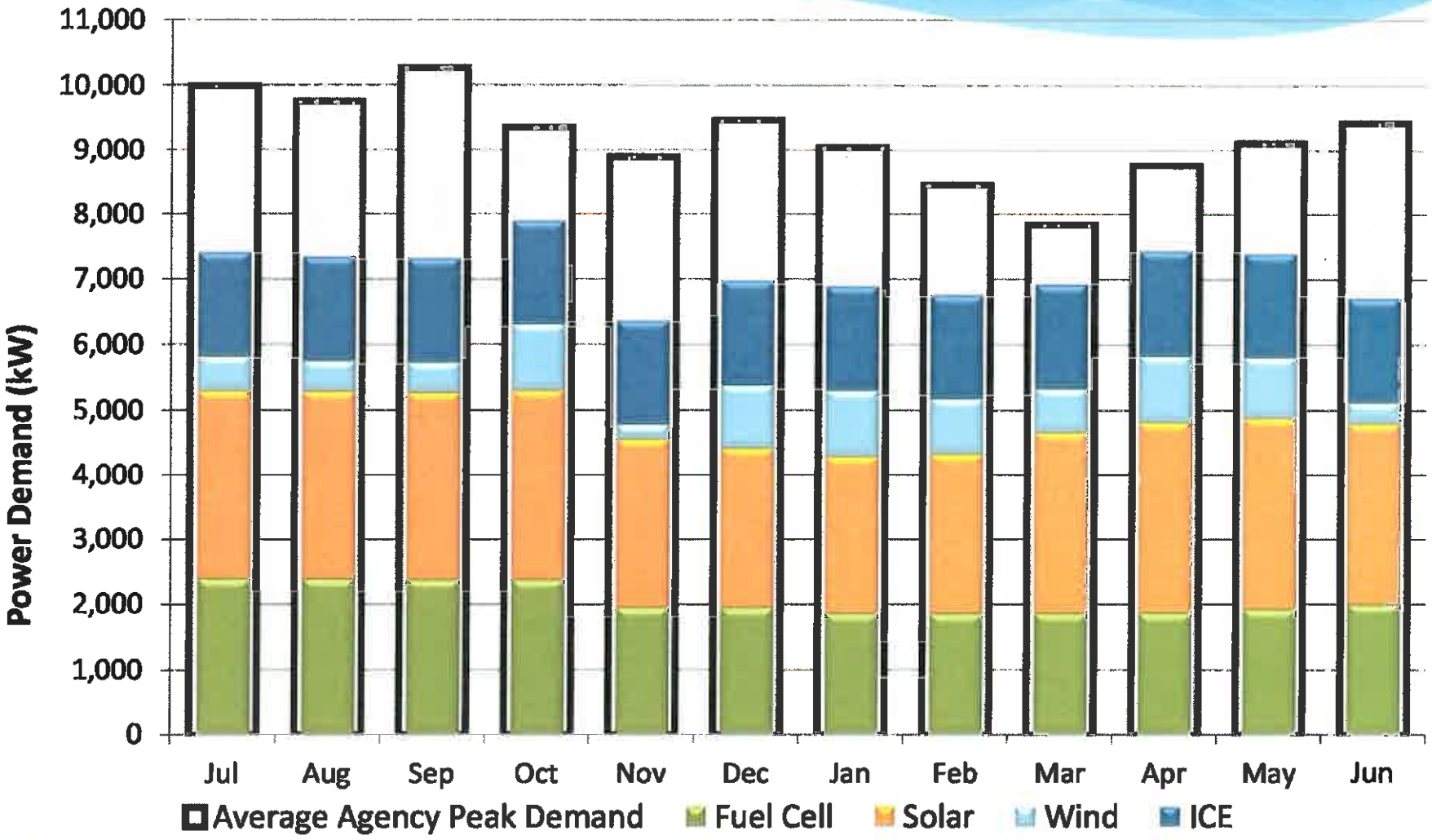
Peak Power Benchmarking



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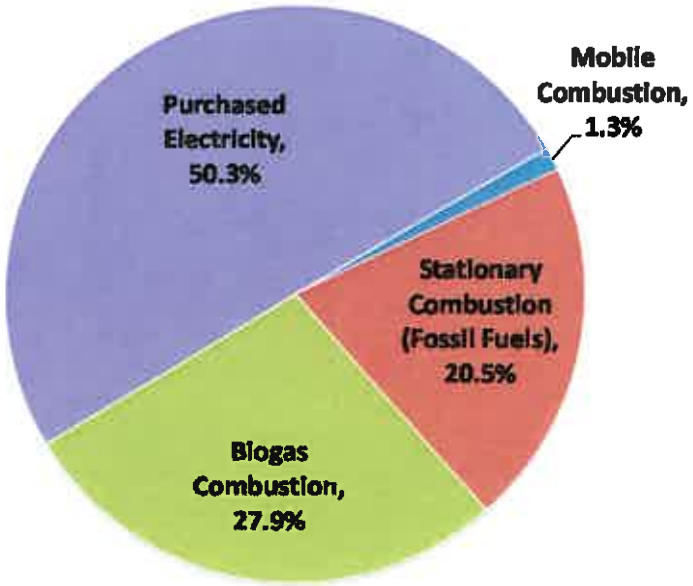
GHG Benchmarking

2008 GHG Emissions (Metric Tons CO_2e)	2013 GHG Emissions (Metric Tons CO_2e)	Percent Reduction
52,400	33,506	**36.1%**

- Registered Member of The Climate Registry
  - Annual voluntary reporting of GHG emissions
  - Verification by end of 2015
    - To qualify for Cap-and Trade funding
  - Establish current carbon footprint and track improvements



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Facility Assessments

- Available Resources
  - On-site renewables
  - Digester gas production
- Facility Load
  - Seasonal variation
- Electricity Procurement Strategy
- Demand Response Capabilities
- 20-Year Energy Forecast
- Project Opportunities

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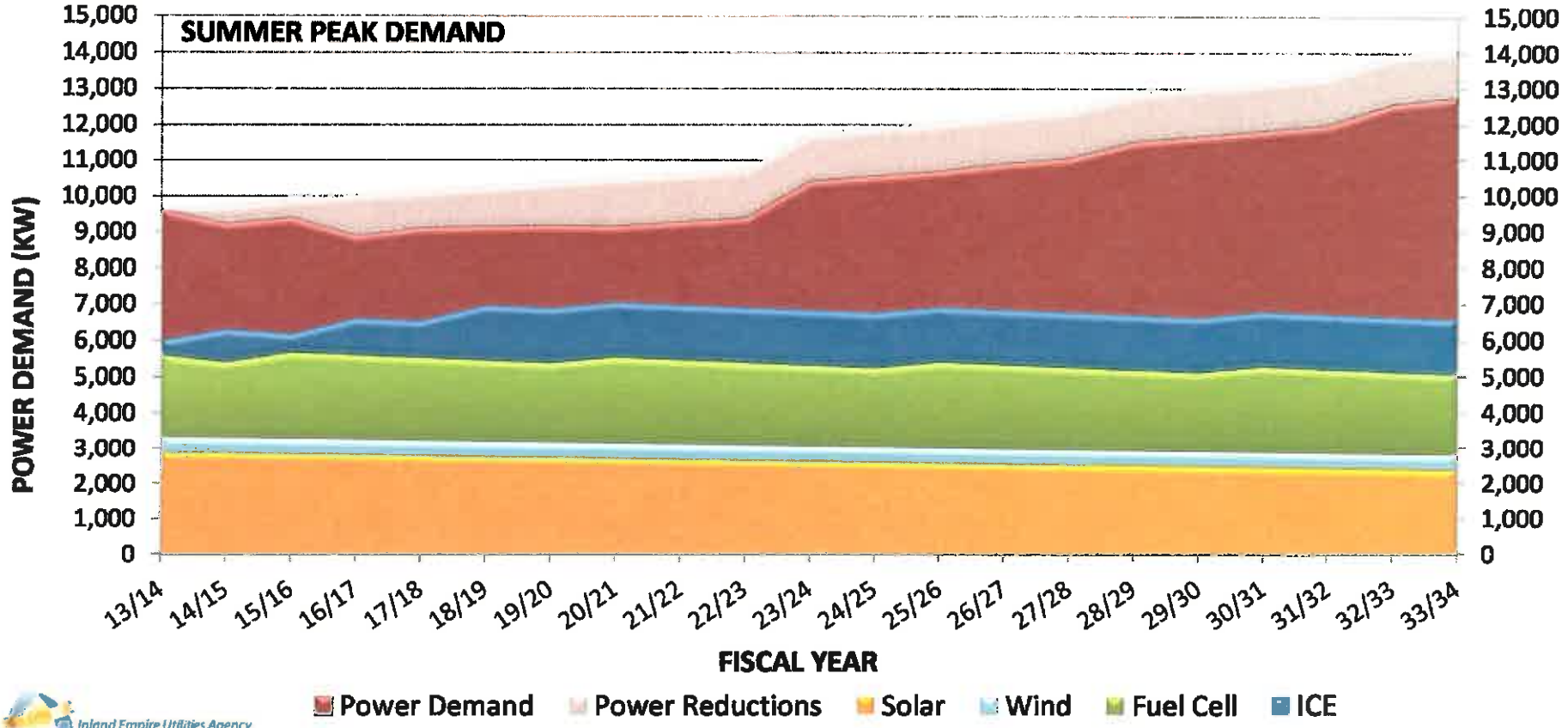
Short-Term Goals

Project	Implementation Timeline	Anticipated Capital	Funding Assistance
Retrofit Lighting at IEUA Facilities	2015	$1,000,000	SCE
Pump Optimization	2015	$1,500,000	SCE
Provide Energy Management Training to Staff	2015	-	-
Incorporate Efficiency and GHG Targets into Project Solicitation	2015	-	-
Install Energy Storage	End of 2016	-	-
Phase I Efficiency Measures at RP-1	2016 – 2017	$200,000	SCE
HVAC Controls and Upgrades	2016 – 2018	$125,000	
Total		**$2,825,000**	

Forecasting Demands

Information from TYCIP, WFMPs, and Short-Term Goals



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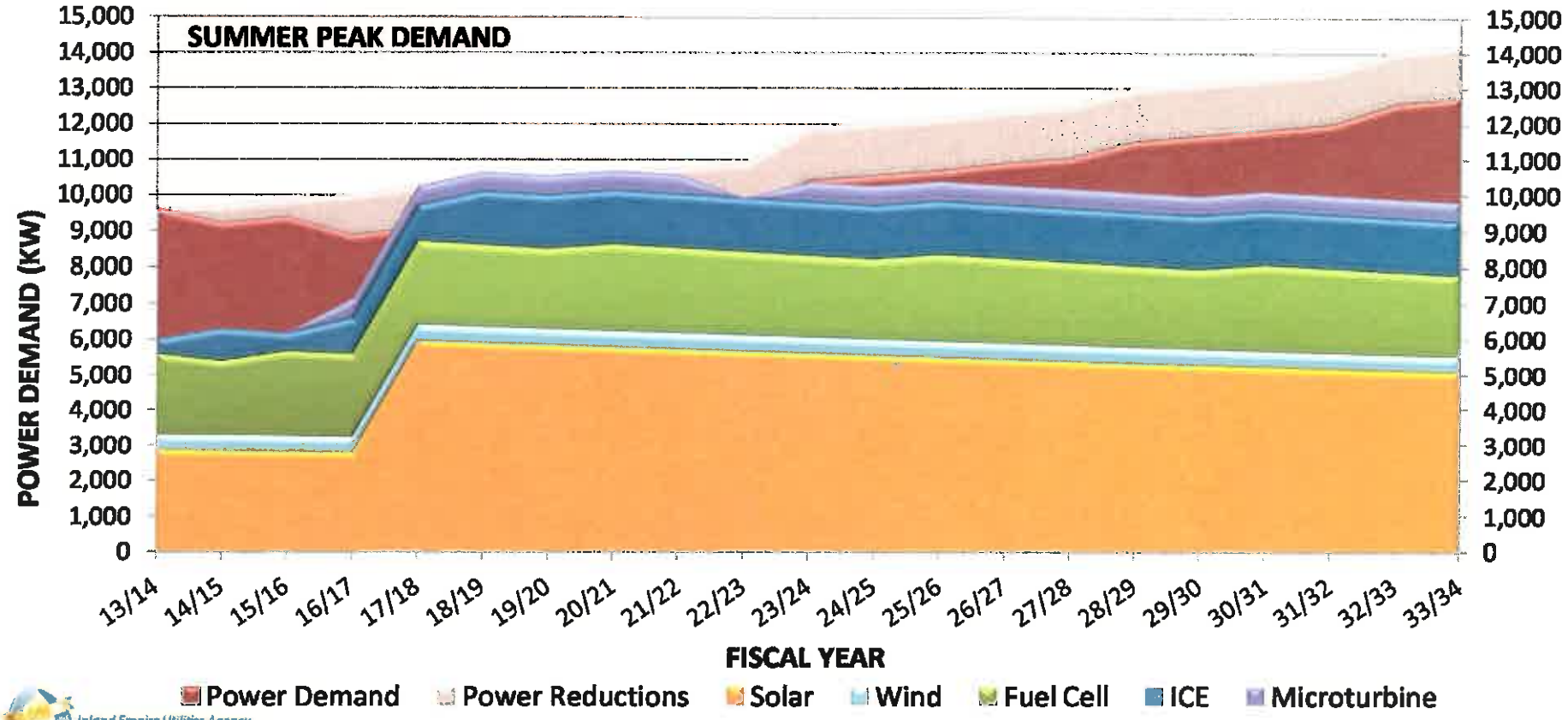
Long-Term Goals

Project	Implementation Timeline	Anticipated Capital	Funding Assistance
Expand Solar at RP-4	2016 – 2017	$4,000,000	PPA Option
Install Microturbine at RP-2	2017	$3,000,000	SGIP
Purchase Existing Solar Installations	2016 – 2019	$7,500,000	-
Digester Gas Mixing at RP-1	2016 – 2020	$1,500,000	SCG
Implement Phase II and III Efficiency Measures from Audits	2017 – 2020	TBD	TBD
Reduce Flaring by 50%	2019	-	-
Install Additional 3 – 5 MW of Solar	2016 – 2020	$20,000,000	PPA Option
Peak Power Independence	2020	TBD	TBD
Carbon Neutral by 2030	2030	TBD	TBD
Total		**$36,000,000**	

Forecasting Demands

Information from TYCIP, WFMPs, Short-Term and Long-Term Goals



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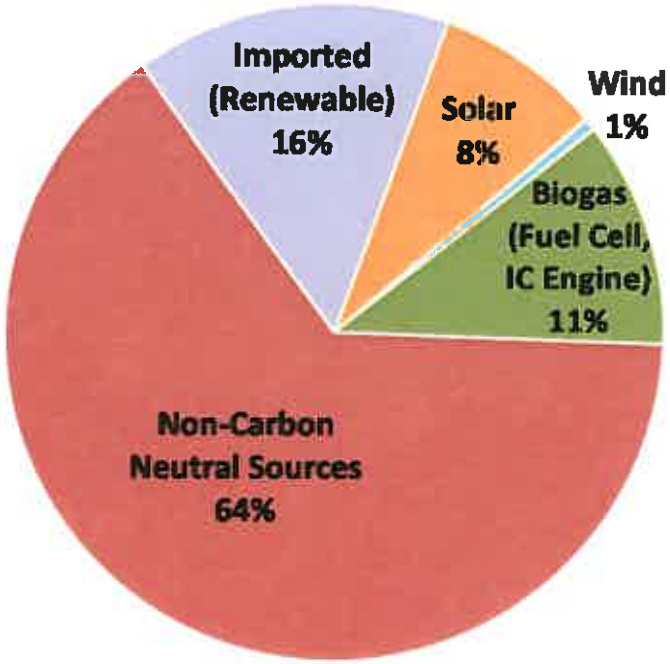
Carbon Neutral by 2030

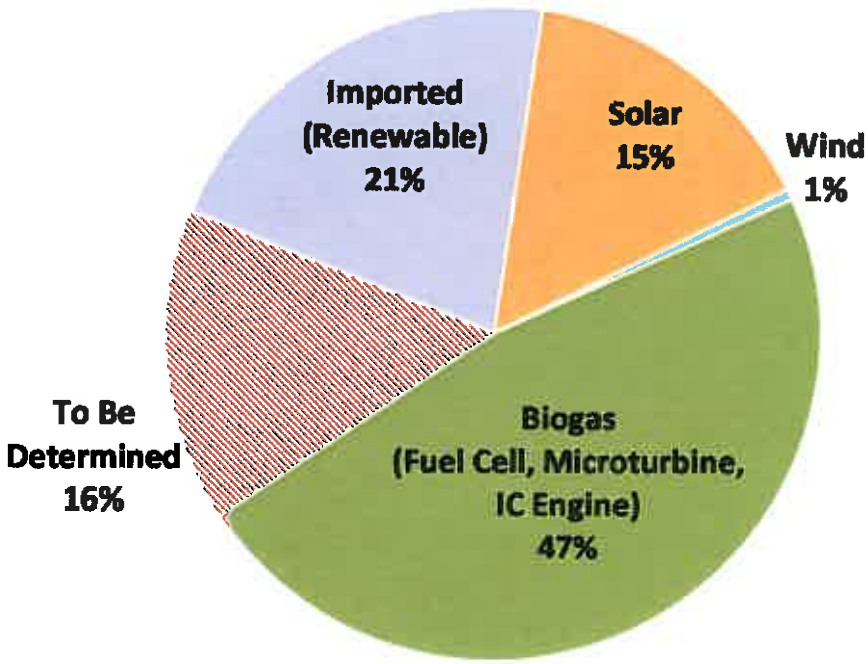
- Current planning efforts expected to achieve 84% neutrality
  - Combination of efficiency measures and new renewable
- Future EMPs to identify opportunities to bridge gap

2013



36% Neutral

2030 Projected



100% Neutral

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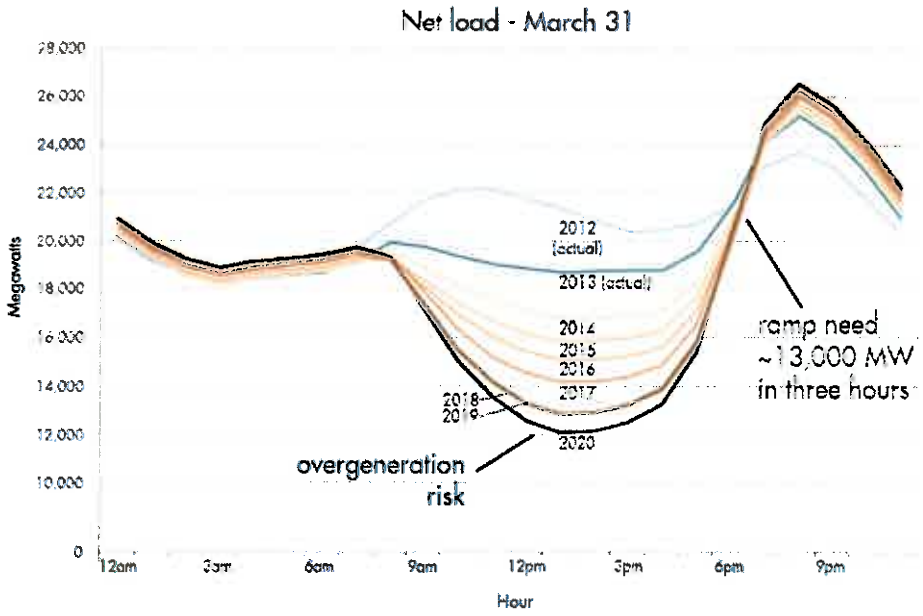
Policy Tracking

- Partner with Organizations that Track, Impact Regulations
- Incorporate Anticipated Policy Changes into Analysis
  - Pavley SB 471
  - Air Resource Board Short Lived Climate Pollutants
  - CPUC Water/Energy Cost Calculator
  - Duck Curve



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Recent Efforts

- Energy Audits Completed and Efficiency Measures Identified
  - Lighting retrofit to begin in Fall 2015
  - Pump optimization to begin in Fall 2015
- Energy Storage Agreement in development
  - RP-5 installation to be completed by end of 2015
- Microturbine Project Under Evaluation

Next Steps

- Implement Goals and Strategies Identified
- Complete Programmatic EIR – Summer 2016
- Update the EMP every two years – 2017

This project meets the Agency's Business Goal of Energy Management and Wastewater Management by optimizing facility energy use and effectively managing renewable resources.

Questions

INFORMATION
ITEM

3D

Water Conservation Updates

September 2015

Inland Empire Utilities Agency

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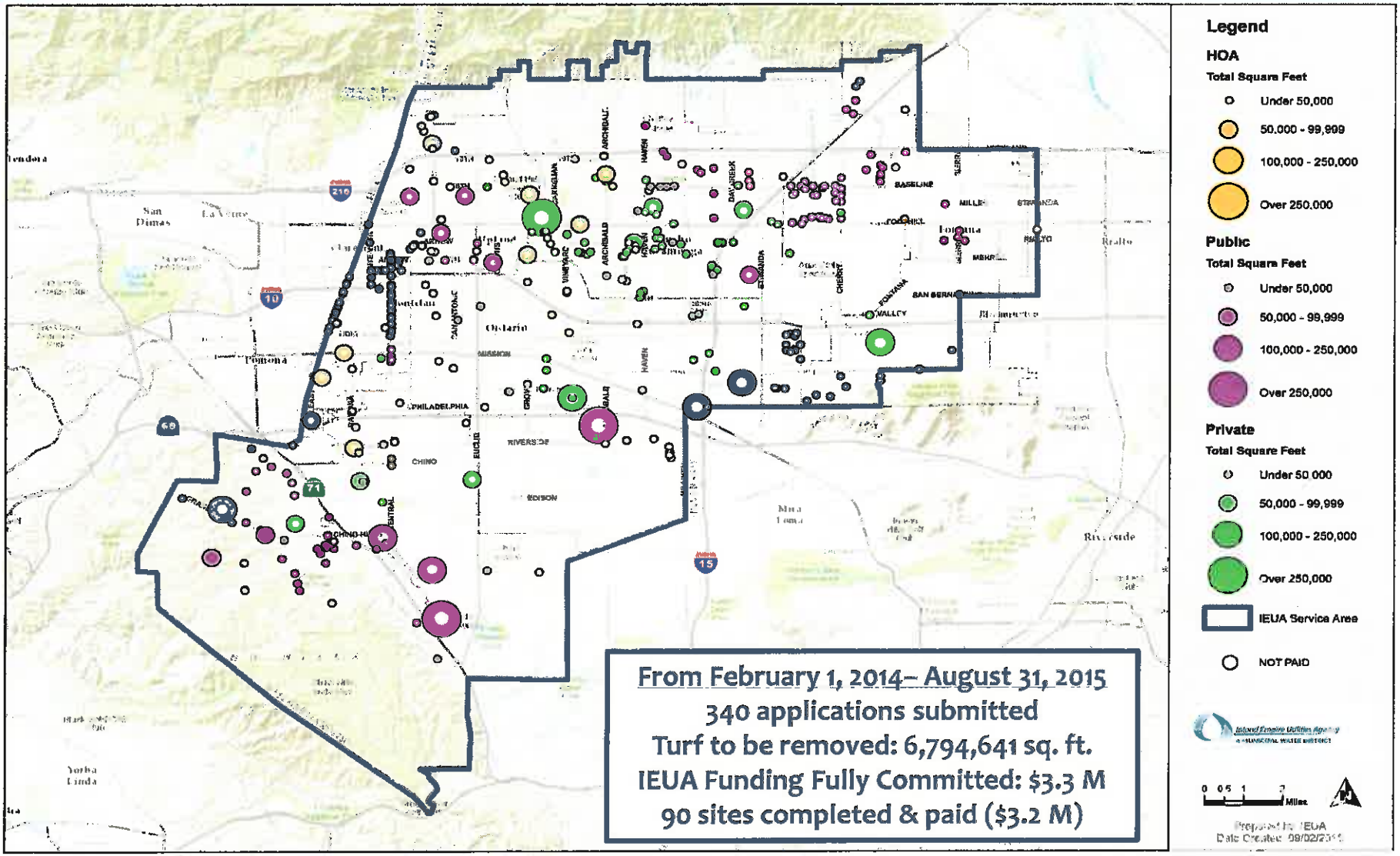
CII Turf Removal Applications Only



From February 1, 2014– August 31, 2015
340 applications submitted
Turf to be removed: 6,794,641 sq. ft.
IEUA Funding Fully Committed: $3.3 M
90 sites completed & paid ($3.2 M)

Freesprinklernozzles.com

- Inter-Agency Partnering Program
- Online Voucher Program launched: FY 2010-11
- Target Market:
  - Residential, Commercial, and Landscape Customers
- Phase VI Program (FY 2015-16)
  - Program Expansion – New nozzles (Toro, Hunter, Rainbird – CII Only)
  - 48,750 High Efficiency Nozzles (Redeemed at $5 per unit)
  - Annual Projected Water Savings: 974 AF
  - Lifetime Water Savings: 4,870 AF (over 5 years)
  - MWD Reimbursement $182,812.50 (75%)
  - Non-Reimbursable: $60,937.50 (25%)

Questions

Consistent with Agency's Business Goal of increasing Water Reliability by promoting water use efficiency and education to enhance water supplies within the region

RECEIVE AND
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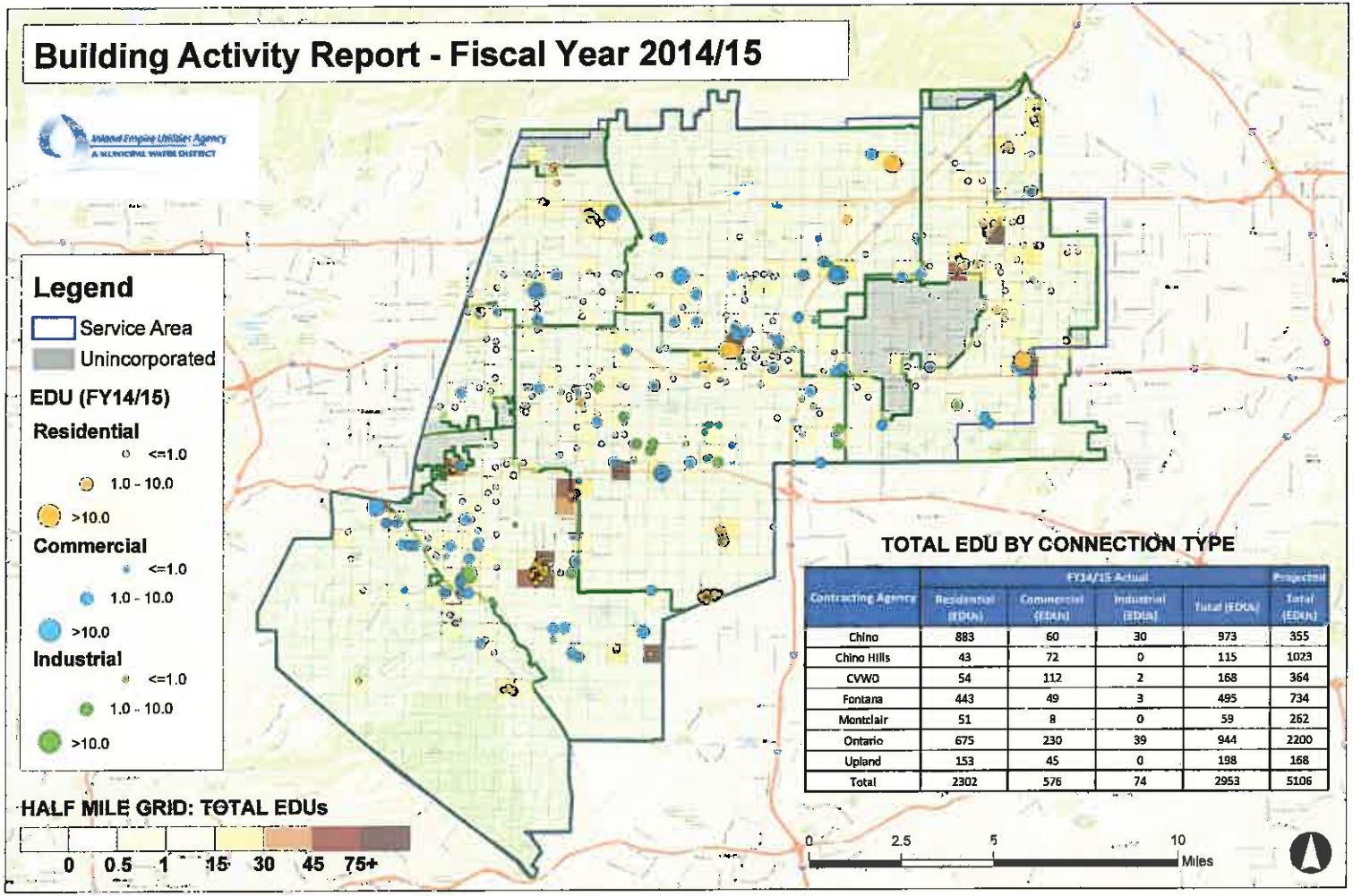
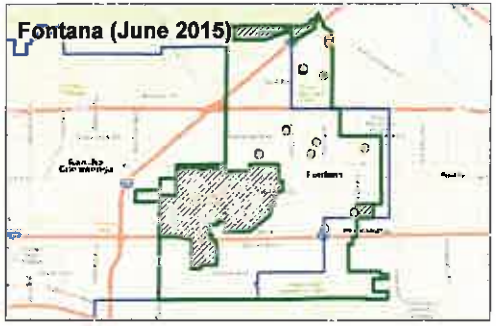
4A

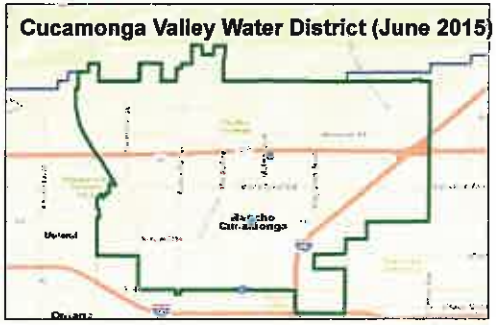
Building Activity Report - Fiscal Year 2014/15

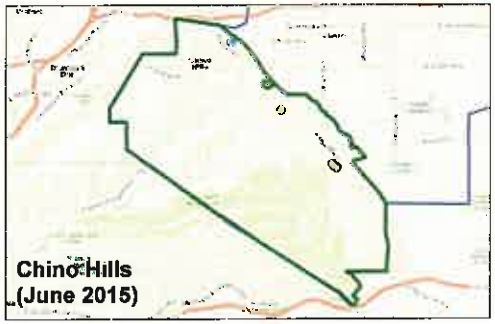


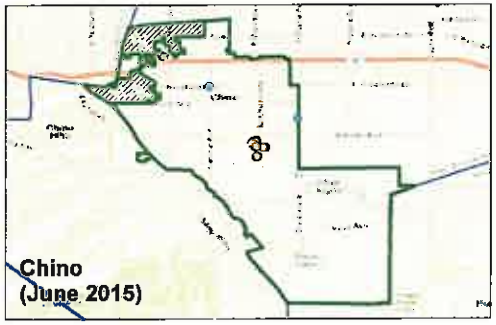
TOTAL EDU BY CONNECTION TYPE

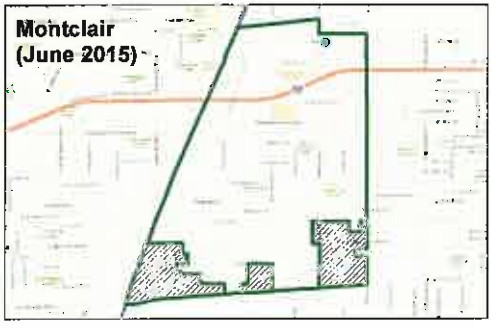
Contracting Agency	FY14/15 Actual				Projected
	Residential (EDUs)	Commercial (EDUs)	Industrial (EDUs)	Total (EDUs)	Total (EDUs)
Chino	883	60	30	973	355
Chino Hills	43	72	0	115	1023
CVWD	54	112	2	168	364
Fontana	443	49	3	495	734
Montclair	51	8	0	59	262
Ontario	675	230	39	944	2200
Upland	153	45	0	198	168
Total	2302	576	74	2953	5106











Building Activity Report - YTD Fiscal Year 2015/16

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Legend

- Service Area
- Unincorporated

EDU (YTD)

Residential
- <=1.0
- 1.0 - 10.0
- >10.0

Commercial
- <=1.0
- 1.0 - 10.0
- >10.0

Industrial
- <=1.0
- 1.0 - 10.0
- >10.0

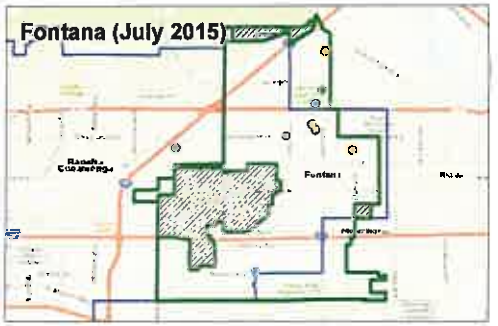
HALF MILE GRID: TOTAL EDU's (YTD)

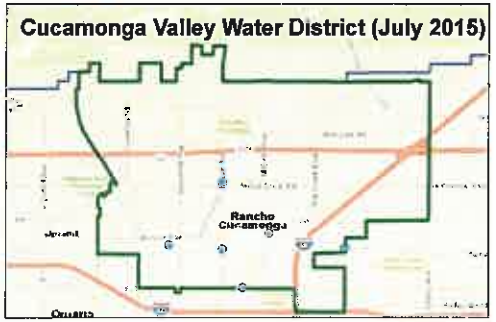
0 0.5 1 15 30 45 75+

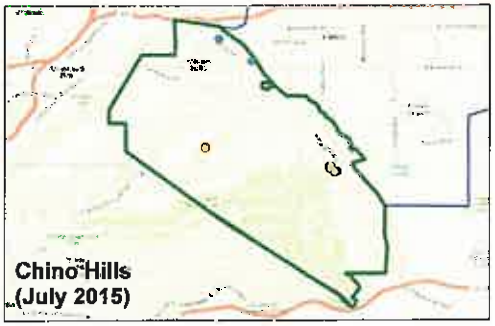
0 2.5 5 10 Miles

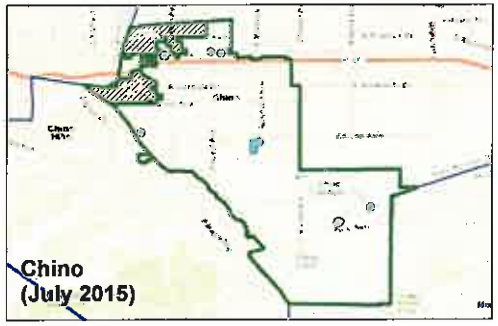
TOTAL EDU BY CONNECTION TYPE (YTD)

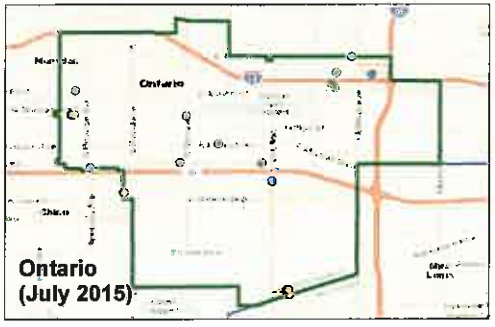
Contracting Agency	YTD Actual				Projected
	Residential (EDUs)	Commercial (EDUs)	Industrial (EDUs)	Total (EDUs)	Total (EDUs)
Chino	42	4	0	46	842
Chino Hills	16	13	0	29	691
CVWD	0	2	0	2	364
Fontana	14	9	0	23	445
Montclair	6	1	0	7	154
Ontario	17	6	12	35	3000
Upland	75	3	0	78	353
Total	170	38	13	220	5849

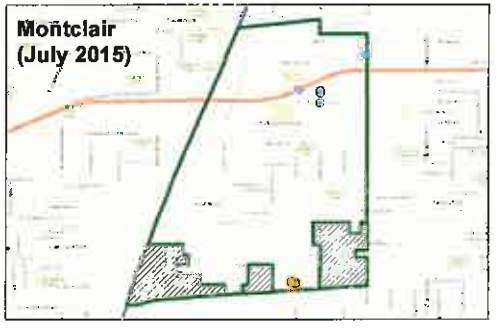












RECEIVE AND
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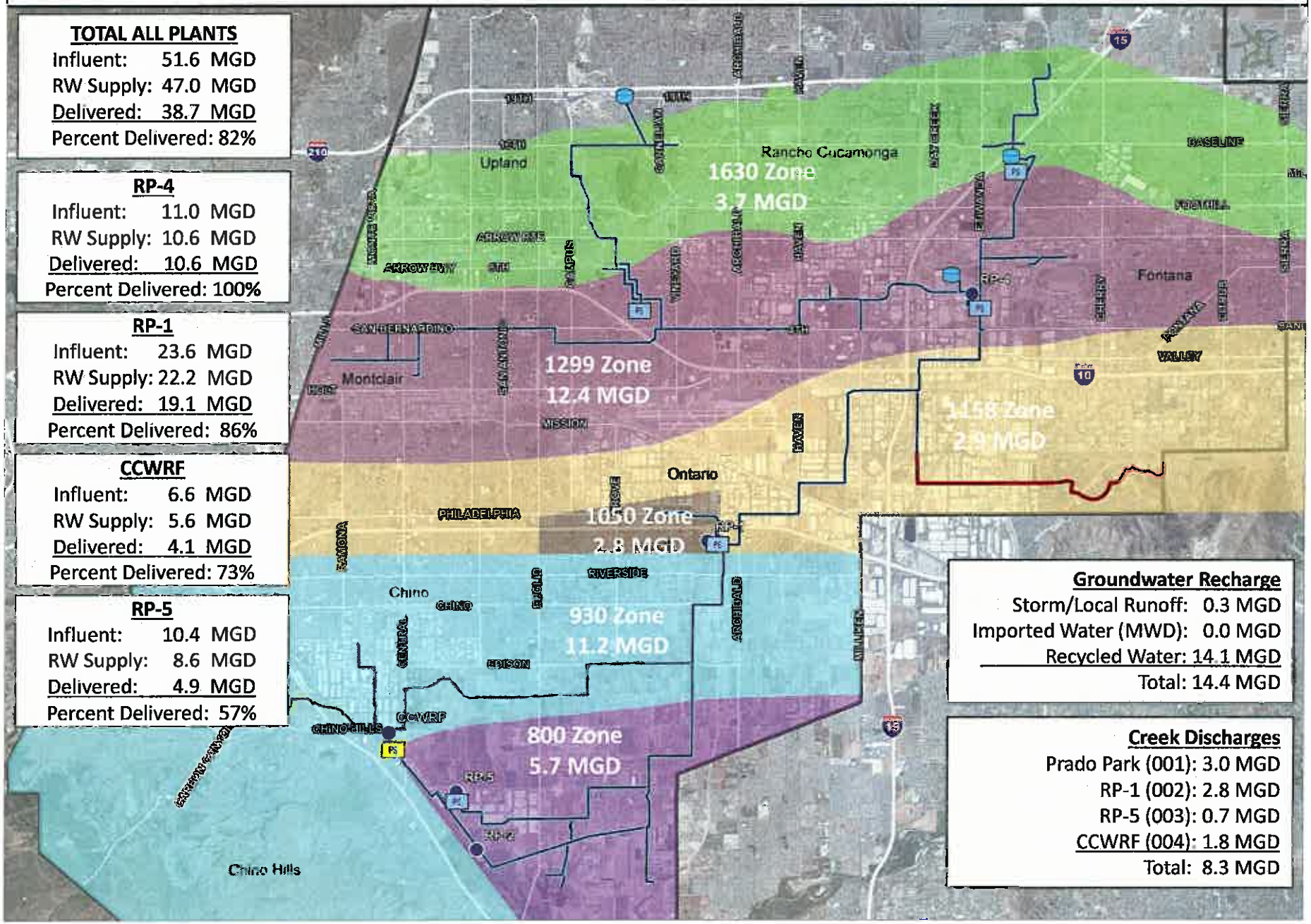
IEUA RECYCLED WATER DISTRIBUTION – JUNE 2015



TOTAL ALL PLANTS
Influent: 51.6 MGD
RW Supply: 47.0 MGD
Delivered: 38.7 MGD
Percent Delivered: 82%

RP-4
Influent: 11.0 MGD
RW Supply: 10.6 MGD
Delivered: 10.6 MGD
Percent Delivered: 100%

RP-1
Influent: 23.6 MGD
RW Supply: 22.2 MGD
Delivered: 19.1 MGD
Percent Delivered: 86%

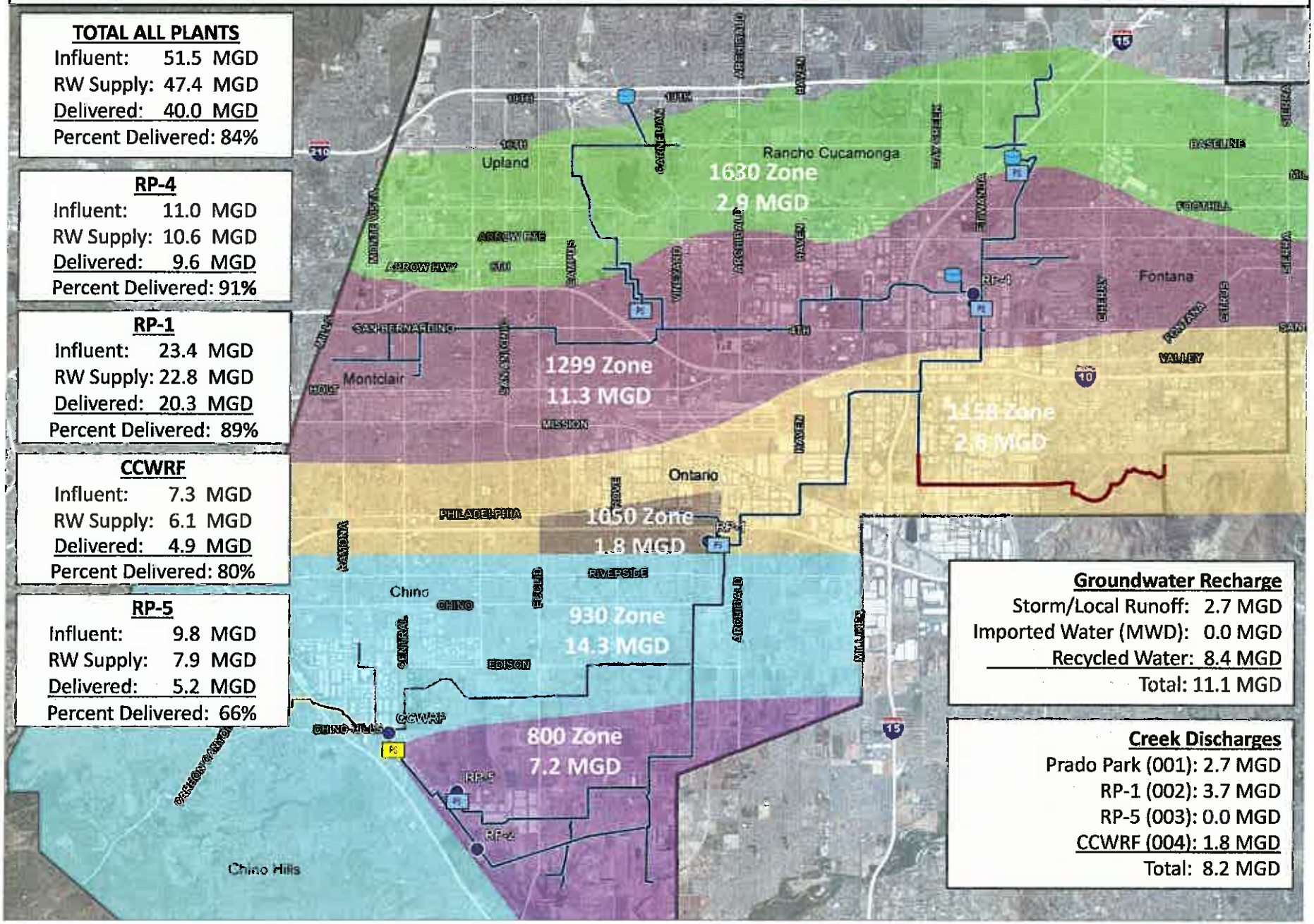
CCWRF
Influent: 6.6 MGD
RW Supply: 5.6 MGD
Delivered: 4.1 MGD
Percent Delivered: 73%

RP-5
Influent: 10.4 MGD
RW Supply: 8.6 MGD
Delivered: 4.9 MGD
Percent Delivered: 57%

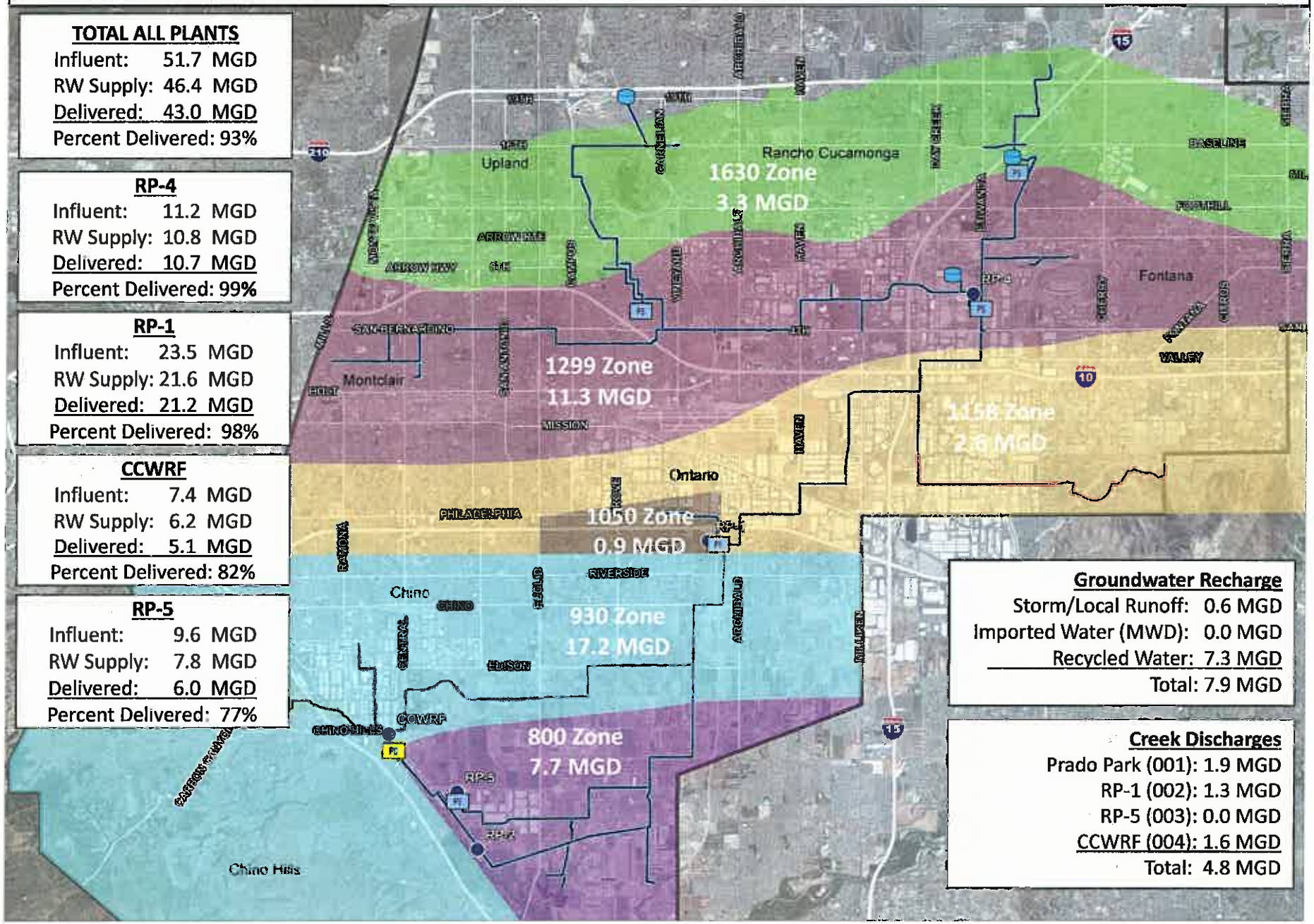
Groundwater Recharge
Storm/Local Runoff: 0.3 MGD
Imported Water (MWD): 0.0 MGD
Recycled Water: 14.1 MGD
Total: 14.4 MGD

Creek Discharges
Prado Park (001): 3.0 MGD
RP-1 (002): 2.8 MGD
RP-5 (003): 0.7 MGD
CCWRF (004): 1.8 MGD
Total: 8.3 MGD

IEUA RECYCLED WATER DISTRIBUTION – JULY 2015



IEUA RECYCLED WATER DISTRIBUTION – AUGUST 2015



TOTAL ALL PLANTS
Influent: 51.7 MGD
RW Supply: 46.4 MGD
Delivered: 43.0 MGD
Percent Delivered: 93%

RP-4
Influent: 11.2 MGD
RW Supply: 10.8 MGD
Delivered: 10.7 MGD
Percent Delivered: 99%

RP-1
Influent: 23.5 MGD
RW Supply: 21.6 MGD
Delivered: 21.2 MGD
Percent Delivered: 98%

CCWRF
Influent: 7.4 MGD
RW Supply: 6.2 MGD
Delivered: 5.1 MGD
Percent Delivered: 82%

RP-5
Influent: 9.6 MGD
RW Supply: 7.8 MGD
Delivered: 6.0 MGD
Percent Delivered: 77%

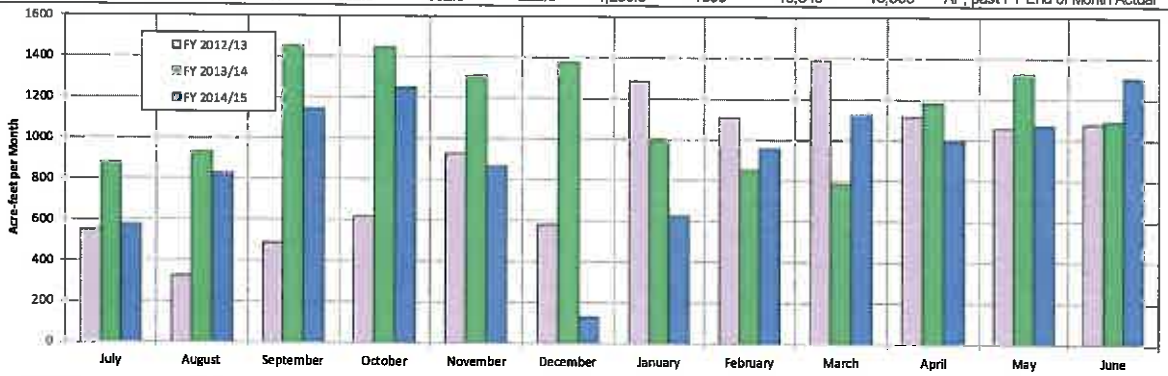
Groundwater Recharge
Storm/Local Runoff: 0.6 MGD
Imported Water (MWD): 0.0 MGD
Recycled Water: 7.3 MGD
Total: 7.9 MGD

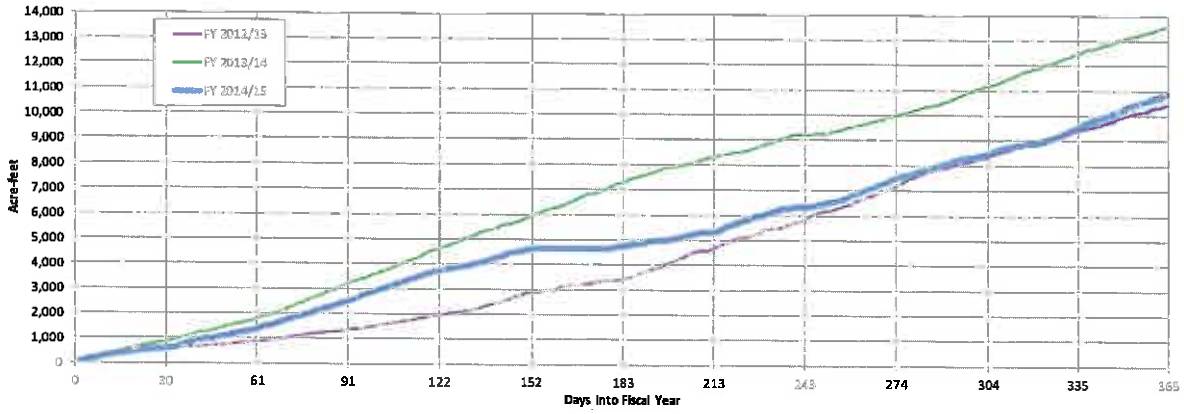
Creek Discharges
Prado Park (001): 1.9 MGD
RP-1 (002): 1.3 MGD
RP-5 (003): 0.0 MGD
CCWRF (004): 1.6 MGD
Total: 4.8 MGD

Recycled Water Recharge Deliveries / Plan - June 2014 (Acre-Feet)

Deliveries are draft until reported as final.

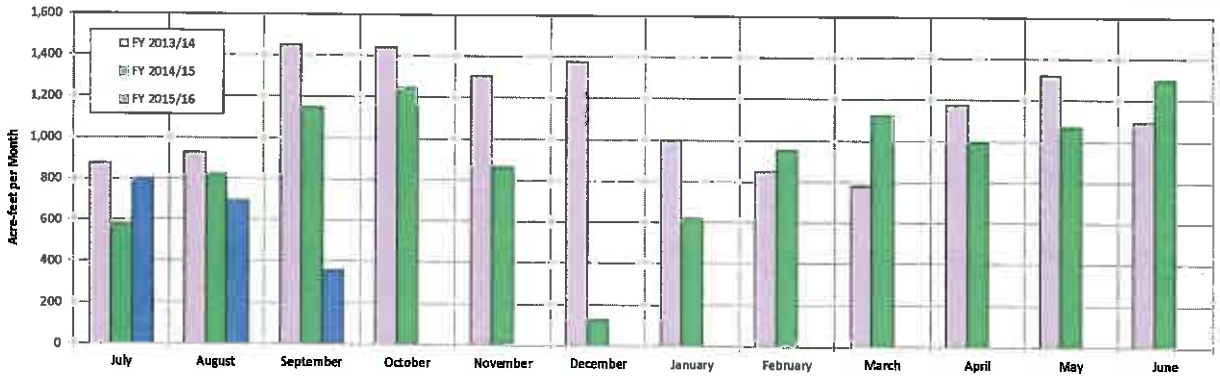
Basin	6/1-6/3	6/4-6/10	6/11-6/17	6/18-6/24	6/25-6/30	Month Actual	Month Plan	Year To Date Actual	Status as of 7/7/2015
Ely	32.1	75.5	84.1	74.3	6.8	272.9	200	1751	On Maintaining Basin Level
Banana	26.3	0.0	0.0	0.0	0.0	26.3	50	1148	Limited deliveries
Hickory	0.0	55.8	25.8	60.5	55.1	197.2	150	2034	Off Reducing Basin Level
Turner 1 & 2	0.0	0.0	0.0	0.0	0.0	0.0	0	948	Off, basin cleaning
Turner 3 & 4	0.0	35.8	21.3	22.5	1.7	81.3	50		Off, drying out basin
8th Street	0.0	0.0	0.0	0.0	0.0	0.0	0	48	Off, basin cleaning
Brooks	17.3	42.3	36.7	18.7	40.9	155.9	150	1011	On Maintaining Basin Level
RP3	68.6	83.1	134.6	128.9	118.1	531.3	250	2968	On Maintaining Basin Level
Declez	0.0	0.0	0.0	0.0	0.0	0.0	0	0	No RW delivery mechanism
Victoria	17.7	14.3	0.0	0.0	0.0	32.0	150	931	On Maintaining Basin Level
San Sevaine	0.0	0.0	0.0	0.0	0.0	0.0	0	1	Off
Total	162.0	306.9	302.5	302.9	222.6	1,296.8	1000	10,840	13,593 AF, past FY End of Month Actual

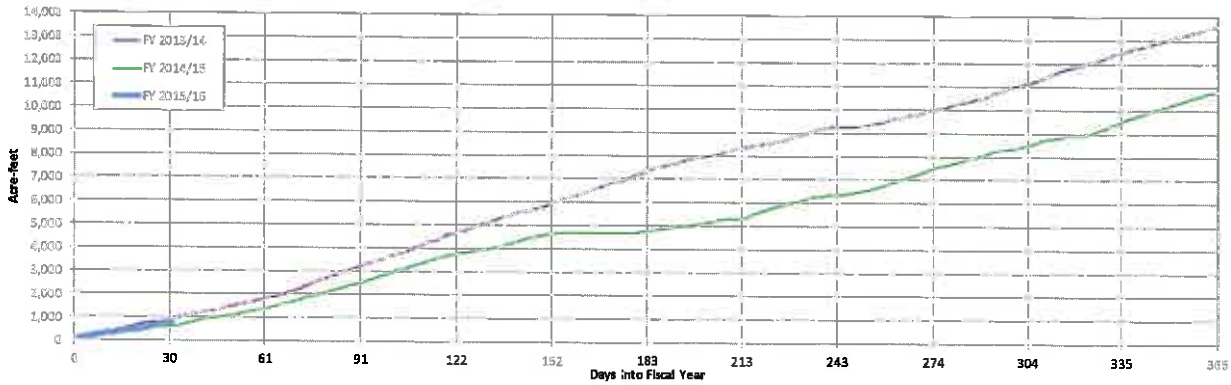




Recycled Water Recharge Actuals / Plan - July 2015 (Acre-Feet) — **Deliveries are draft until reported as final.**

Basin	7/1-7/8	7/9-7/15	7/16-7/22	7/23-7/31	Month Actual	Month Plan	FY To Date Actual	Fc
Ely	71.7	10.8	0.0	19.6	102.1	150	102	On as peak demand allows
Banana	0.0	6.1	6.9	40.6	53.6	0	54	Off due to RWC schedule, permit change late-July
Hickory	4.0	5.3	3.7	26.3	39.3	150	39	On as peak demand allows
Turner 1 & 2	0.0	0.0	0.0	0.0	0.0	0	85	Off for maintenance through September
Turner 3 & 4	0.0	0.0	11.8	73.1	84.9	0		On 3 cfs as peak demand allows
8th Street	0.0	0.1	0.0	0.0	0.1	50	0	Off for maintenance through September
Brooks	36.2	10.5	8.9	0.0	55.6	150	92	Off to dry for maintenance in September through Oct.
RP3	90.9	59.9	59.3	77.9	288.0	200	288	On 5 cfs, as peak demands allow
Declez	0.0	0.0	0.0	0.0	0.0	0	0	Not permitted
Victoria	30.6	25.8	24.7	58.4	139.5	150	139	On 5 cfs, as peak demands allow
San Sevaine	0.0	0.0	0.0	0.0	0.0	0	0	Off for demand management
Total	233.4	118.5	115.3	295.8	763.0	850	799	574 AF, Previous FY End of Month Actual





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Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 24, 2015
To:	Regional Technical Committee
From:	Inland Empire Utilities Agency
Subject:	Long Range Plan of Finance (LRPF)

RECOMMENDATION

This is an information item for the Regional Technical Committee to review.

BACKGROUND

The item was presented as an informational item at the IEUA Board of Directors meeting on September 2, 2015.

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date: September 2, 2015

To: The Honorable Board of Directors

From: P. Joseph Grindstaff
General Manager

Submitted by: Christina Valencia
Chief Financial Officer/Assistant General Manager

Javier Chagoyen-Lazaro
Manager of Finance and Accounting

Subject: 2016 Long Range Plan of Finance Workshop #1

RECOMMENDATION

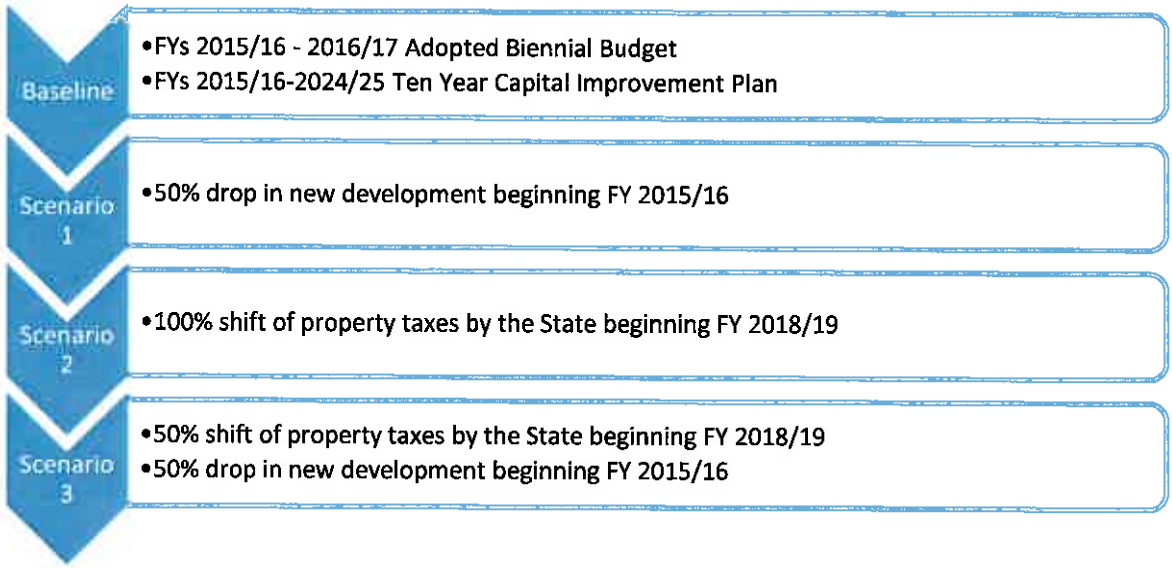
This is an informational item for the Board of Directors to review.

BACKGROUND

An important element of long term financial planning is identifying and planning for potential changes in economic or environmental conditions that may negatively impact the Agency's financial stability. The focus of this workshop is to "stress test" the Agency's financial strength against various scenarios over the next ten fiscal years (FYs) 2015/16 through 2024/25.

The following sections present the stress testing of the Agency's long term financial plan with different scenarios and assumptions. The adopted Biennial Budget and Ten Year Capital Improvement Plan (TYCIP) serves as the "Baseline" for comparing three different scenarios that highlight significant changes in some of the Agency's major funding sources. For each scenario, the fiscal impact on the Agency's program fund reserves and total debt coverage ratio is identified, along with some of the potential remedies for recovering the projected funding shortfalls.

The key objective of the remedies is to bring fund reserves to the Baseline level by FY 2024/25. Restoring reserve levels is essential to ensure adequate funding is available for the rehabilitation of Regional Recycling Water Plant No. 1 (RP-1) and the future decommission of the Regional Plan No. 2 (RP-2). Preliminary estimates indicate costs for these two projects to be over $200 million.



Baseline: FY 2015/16-2016/17 Biennial Budget and FYs 2016-2025 TYCIP

The adopted FYs 2015/16 & 2016/17 Biennial Budget and the FYs 2015/16 – 2024/25 TYCIP demonstrates the IEUA Board and staff's steadfastness to deliver high quality and reliable services to its customers in a regionally planned, cost-effective manner, consistent with the IEUA Business Goals. The adoption of five-year rates that achieve full cost of service for the Agency's Regional Wastewater and Recycled Water programs and implementation of a new water connection fee provide the Agency and its member agencies a stable financial plan to more effectively meet the committed level of service.

The Baseline scenario supports the following key Agency business goals of Fiscal Responsibility and Strategic Plan:

- Full Cost Recovery - Achieve full cost of service recovery as demonstrated in the adoption of five year rates for monthly volumetric EDUs, Wastewater and new Water Connection Fees, and Recycled Water rates. The approved 5 year rates and the estimated rates for to build the ten year forecast are included in Appendix A.
- Financing Strategy - Leveraging the low interest rate state loans and grants to support the TYCIP and early retirement of the 2008A Revenue Bonds (2008A Bonds) beginning FY 2017/18 to leverage savings of approximately $60 million in avoided interest costs.

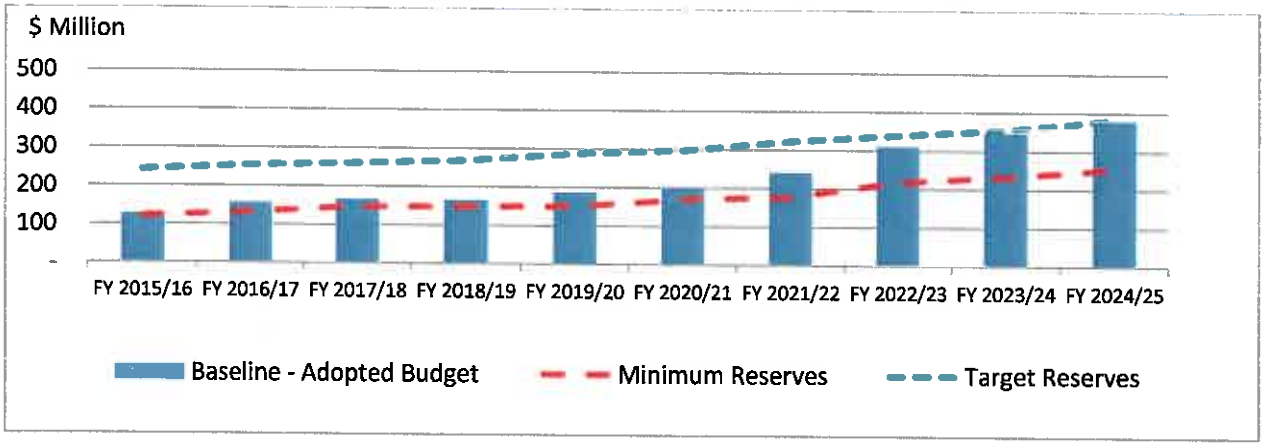
A summary of the major funding sources and uses of funds included in the Baseline scenario are listed in Table 1:

Table 1: Baseline Major Funding Sources and Uses of Funds FYs 2016-2025

Major Funding Sources	($Million)	Major Uses of Funds	($Million)
Service charges Recycled water sales Potable water sales	$883 223 444	O&M expenses and non-capital project costs	$1,588
Wastewater and water connection fees	245	Ten Year Capital Improvement Plan	581
SRF loan proceeds Grant receipts	314 39	Debt service costs (includes early retirement of 2008A Bonds)	385
Property tax receipts	458	Support TYCIP & debt service costs	
Other revenues (JPA reimbursements for O&M and capital, interest revenue)	204		
Total	**$2,810**	**Total**	**$2,554**

Over the next ten years, a combination of multi-year rates, continual steady growth in property tax receipts, and stronger pace in new development resulting in a higher number of new wastewater and water connections, help to improve the Agency's reserve balances and debt coverage ratios (DCR), as indicated in Figure 1 and Table 2 below.

Figure 1: Baseline Projected Reserve Balance



Included in the Baseline is the early retirement of the 2008A Bonds beginning in FY 2017/18 through FY2021/22. Reserve balances start to ramp up starting in FY 2022/23 and DCR remains favorably above the Fitch AA credit rating medium of 1.90x. In August 2015 Standard and Poor's upgraded the Agency's long term credit rating from AA- to AA. The enhanced credit rating will help the Agency secure lower cost financing in the future.

Table 2: Baseline DCR Trend

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Baseline DCR	**2.35**	**3.27**	**3.40**	**3.35**	**3.55**	**3.58**	**3.63**	**4.25**	**2.63**	**2.36**

O&M and TYCIP Costs

In the following three scenario analysis, no changes in either operations and maintenance (O&M) expenses or TYCIP expenditures are assumed as part of the potential remedies. As indicated in the adopted Biennial Budget, the Agency has been effectively adhering to a Cost Containment Plan since FY 2008/09 in response to the economic downturn of 2008. Through the deferral of non-critical projects, diligent budget monitoring, and maintaining an assertive vacancy factor well above the budgeted rate; the Agency has achieved estimated cumulative cost savings of $245 million through FY 2012/13. This reduced O&M expense level is the basis for the adopted Biennial Budget.

Projects included in the TYCIP align with the facility and infrastructure rehabilitation needs as identified in the Agency's Asset Management Plan (AMP), as well as expansion projects needed to meet anticipated growth, primarily in the southern sector of Agency's the service area, as identified in the recently updated Wastewater Facilities Master Plan.

Nevertheless, in the event the Agency is faced with a significant loss of revenue, a more comprehensive analysis will be undertaken to examine all potential remedies to safeguard the Agency's financial viability, including deferral of non-critical projects and additional temporary reductions in O&M costs.

Scenario 1: 50% reduction in growth beginning FY 2015/16

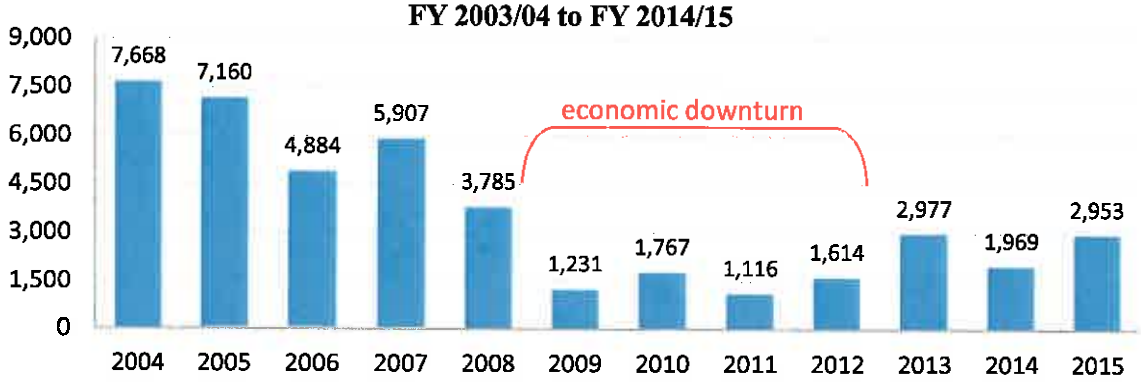
In recent years, improvement in the economy has begun to revitalize new development across IEUA's service area, as exemplified by the member agencies' projection of 40,523 new connections over the next 10 fiscal years. Based on actual historical trends, the Agency's ten year forecast is more conservative at 30,000 new connections through FY 2024/25.

Scenario 1 assumes an economic downturn which results in a slowdown in new development and a reduction of 50% in the number of new connections for both wastewater and water over the Agency's ten year forecast.

As we recall, the great recession of 2008 significantly impacted the Inland Empire region, bringing new development to almost a complete halt. The number of new wastewater connections tumbled to a low of 1,116 units in 2011. Property values also fell by over 6% in 2010 and 2011, decreasing the Agency's property tax receipts from $36 million in 2009 to $32 million in 2012. As illustrated in Figure 2, the number of new connections declined to a very

low level for four years after 2008. Average annual connection fees revenue between FY 2003/04 to FY 2006/07 of $25 million significantly dropped to $7 million annual average between FY 2008/09 to FY 2011/12.

Figure 2 : Historical Actual EDU Connection FY 2003/04 to FY 2014/15



Fiscal Impact

A 50% reduction in the number of new connections (total drop of 15,000 EDUs for wastewater connections and 12,118 MEUs for water connections over the ten year period) equals a loss of approximately $123 million in new wastewater and water connection fees based on the current multi-year adopted rates and future projected rates increasing by inflation (Baseline rates). The loss of connection fee revenue will adversely impact all of the Agency's program funds reserves, including minor funds such as, the Non-Reclaimable Wastewater (NRW), Administrative Service (GG), and the Water Resources (WW) funds which also receive a portion of wastewater connection fees from Regional Wastewater Capital (RC) fund and water connection fees from the Recycled Water (WC) fund. Under this scenario the allocation of connection fees will be cut in half, as reported in Table 3.

Table 3: Scenario 1 Estimated Impact on Program Fund Balances by FY 2024/25

($Millions)	Regional Wastewater Programs	Recycled Water and Groundwater	Water Resources	Other Minor Funds	TOTAL
Baseline ending fund balance	$267	$40	$17	$57	$381
50% reduction in connection fees	(101)	(18)	(1)	(3)	(123)
Adjusted ending fund balance	**$166**	**$23**	**$16**	**$54**	**$259**
Minimum fund balance	$186	$20	$28	$20	$254

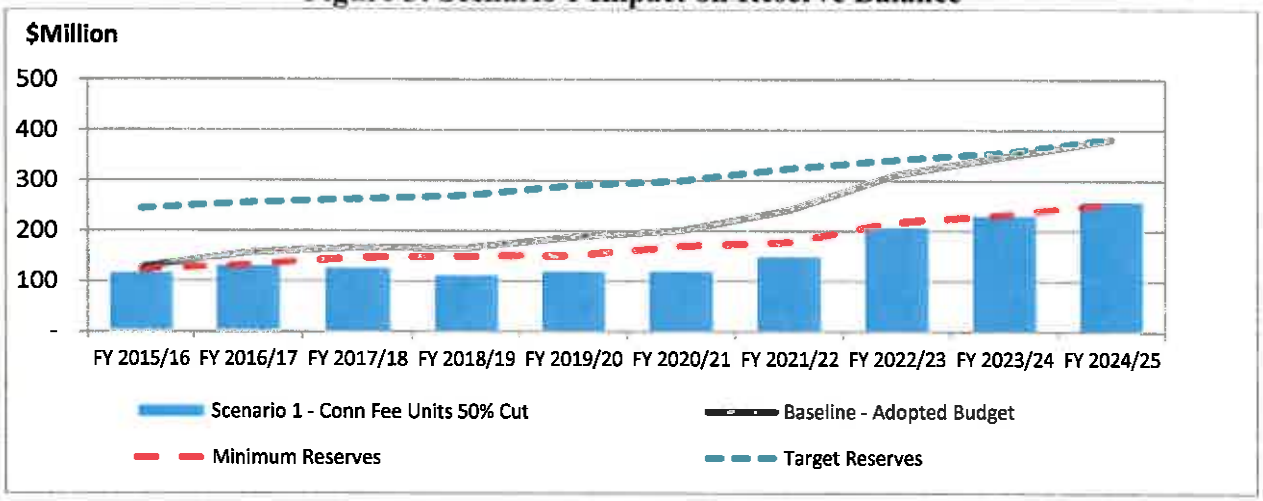
**Other minor funds include Non-Reclaimable Wastewater (NRW) and Administrative Service (GG) funds.*

As reported in Table 4, the most significant impact to total DCR is projected in FY 2015/16. Thereafter, the total DCR is projected to trend upward as revenues from service charges and recycled water sales increase due to a combination of higher volumes and the adopted multi-year rates.

Table 4: Scenario 1 DCR Trend (without Remedies)

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Baseline DCR	2.35	3.27	3.40	3.35	3.55	3.58	3.63	4.25	2.63	2.36
Scenario 1 DCR	1.82	2.60	2.78	2.80	2.99	3.07	3.15	3.67	2.28	2.19

Figure 3: Scenario 1 Impact on Reserve Balance



Potential remedies

As aforementioned, no reduction in the adopted TYCIP or O&M costs is assumed. Since, rehabilitation and replacement (R&R) and expansion and improvement are the key drivers for the majority of the projects, deferral of some of these critical projects may not be feasible. For example, with pre-design of the RP-5 expansion already underway, even if the pace of new development is slower than anticipated, halting the project may not be possible (e.g. construction is in progress), or make economic sense if construction costs also decline, as seen in prior economic downturns.

Also included in this scenario is the early retirement of the 2008A Bonds beginning FY 2017/18 through FY 2021/22. Annual payments of $25 million over this five year period will effectively retire $125 million in high interest (5%) outstanding debt resulting in approximately $60 million in avoided interest costs. Assuming no changes to the adopted TYCIP or O&M budget, to mitigate the 50% reduction in the number of new connections, the following remedies, or some combination, may be considered to recover the estimated shortfall in connection fees;

- Grant receipts – only $39 million in grant receipts over the next ten years is included in the adopted Biennial Budget and ensuring year forecasts; a very conservative estimate. The Agency will actively pursue all grant opportunities available to support projects included in the TYCIP. Any grant receipts above the budgeted amount of $39 million will help to offset the impact to additional rate increases or demand deficit capital calls.

- Higher wastewater connection fees – additional annual rate increase of $6,000 to $9,000 per EDU beginning FY 2017/18 to recover approximately $75 million to support critical expansion of the system. Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 5: Scenario 1 Wastewater Connection Fees Additional Rate Increase

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Wastewater Connection units	2,165	2,290	1,868	1,655	1,648	1,368	1,225	1,130	1,133	520	15,000
Estimated additional fees $/EDU			6,002	6,300	6,617	7,279	7,895	8,132	8,379	8,626	
Estimated additional revenue ($Million)			**11.21**	**10.43**	**10.90**	**9.95**	**9.67**	**9.19**	**9.49**	**4.49**	**75.32**

- Higher water connection fees - additional annual rate increase of $1,900 to $2,400 per MEU starting in FY 2017/18 to recover approximately $20 million to support planned enhancement and expansion of the distribution and groundwater recharge facilities. Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 6: Scenario 1 Water Connection Fees Additional Rate Increase

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Water Connection units	985	2,083	1,699	1,506	1,500	1,231	1,101	1,017	1,018	469	12,611
Estimated additional fees $/EDU			1,905	1,984	2,067	2,118	2,172	2,228	2,284	2,343	
Estimated additional revenue ($Million)			**3.24**	**2.99**	**3.10**	**2.61**	**2.39**	**2.26**	**2.33**	**1.10**	**20.02**

- Surcharge on the monthly volumetric EDU rate –a surcharge of approximately $2 per EDU will be added to recover approximately $19 million in reduced connections fees. The surcharge will fund the relocation of the RP-2 solids handling facility to the RP-5 site, and rehabilitation of the RP-1 facility. Grant receipts above the $39 million forecast will reduce the estimated surcharge.

Table 7: Scenario 1 Volumetric EDU Surcharges

	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Wastewater annual EDUs	3,218,034	3,226,060	3,234,145	3,242,230	3,250,336	3,258,462	3,266,608	-
Estimated additional fees $/EDU	-	-	0.40	0.80	1.20	1.58	1.96	
Estimated additional revenue ($Million)	**-**	**-**	**1.29**	**2.59**	**3.90**	**5.15**	**6.40**	**19.34**

- Demand deficit call – possible capital call from member agencies to support critical construction projects. Under the Regional Sewage Service Contract (Section E6 Capital Capacity Reimbursement Account (CCRA) and Allocation of Supplemental Capital Outlay Fund Shortages), if CCRA funds are not sufficient to support capital requirements, the Agency can demand member agencies pay the full amount required based on the proportionate share of CCRA balances. Use of a demand deficit will reduce the increase to new wastewater connections and lessen the impact on new development. Grant receipts above the $39 million forecast will reduce the estimated call.

Under Scenario 1, both the fund reserve level and total DCR are restored to Baseline levels, as shown in Table 8 and 9.

Table 8: Scenario 1: Impact of Potential Remedies by FY 2024/25

($Millions)	Regional Wastewater Programs	Recycled Water and Groundwater	Water Resources	Other Minor Funds	TOTAL
Baseline ending fund balance	$267	$40	$17	$57	$381
50% Reduction in connection fees	(101)	(18)	(1)	(3)	(123)
Adjusted ending balance	**$166**	**$23**	**$16**	**$54**	**$259**
POTENTIAL REMEDIES:					
Higher connection fees and/or demand deficit	75	20	-	-	95
EDU volumetric rate surcharge	19	-	-	-	19
Total adjustments	$95	$20	-	-	$115
Ending balance with remedies	$261	$43	$16	$53	$373
Minimum reserve balance	**$186**	**$20**	**$28**	**$20**	**$254**

**Other minor funds include Non-Reclaimable Wastewater (NRW) and Administrative Service (GG) funds.*

Table 9: Scenario 1 DCR Trend (with Remedies)

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Baseline DCR	2.35	3.27	3.40	3.35	3.55	3.58	3.63	4.25	2.63	2.36
Scenario 2 DCR (with remedies)	1.82	2.74	3.38	3.33	3.53	3.61	3.72	4.42	2.77	2.54

Scenario 2: 100% shift of property taxes by the State beginning FY 2018/19

Property tax receipts are one of the Agency's key revenue sources supporting the Agency's capital improvement plan (CIP) and debt service costs. However, property taxes can also be the most uncertain given the State's past actions in shifting property taxes and other local agency revenue to meet budget deficits. Although the State's current financial position has greatly improved and legislation is now in place to safeguard local agency revenues; property tax allocations to enterprise special districts remain vulnerable.

Under this scenario a shift of 100% property taxes is assumed beginning FY 2018/19 when the temporary state tax increases approved under Proposition 30 are set to expire and the next cyclical economic downturn may possibly occur. Together, these can negatively impact the State's fiscal position. This scenario only considers the loss of approximately $331 million in property taxes through FY 2024/25and not the compounding impact of an economic downturn to other major funding sources, such as new connection fees. No changes to the Agency's adopted TYCIP and O&M budget are also included. The only exception is the early retirement of the $125 million 2008A Bonds that will be included as one of the potential remedies to mitigate the estimated loss.

Fiscal Impact

As reported in Table 10, the Agency funds with the highest allocation of property taxes are the hardest hit under this scenario.

Table 10: Estimated Loss of Property Taxes by Fund through FY 2014/15

Fund	Allocation Percentage	Total Estimated Loss ($Millions)
Regional Wastewater Capital Improvement (RC)	65%	$215
Regional Wastewater O&M (RO)	22%	$73
Recycled Water (WC)	5%	$17
Water Resources (WW)	3%	$11
Other Minor Funds*	5%	$15
Total	**100%**	**$331**

**Other minor funds include Non-Reclaimable Wastewater (NRW) and Administrative Service (GG) funds.*

Due to the loss of property taxes, Regional Wastewater and Water Programs are not projected to meet their respective minimum reserve balances established by Agency's Reserve Policy. Table 11 indicates the reserve position by program as of FY2025/25.

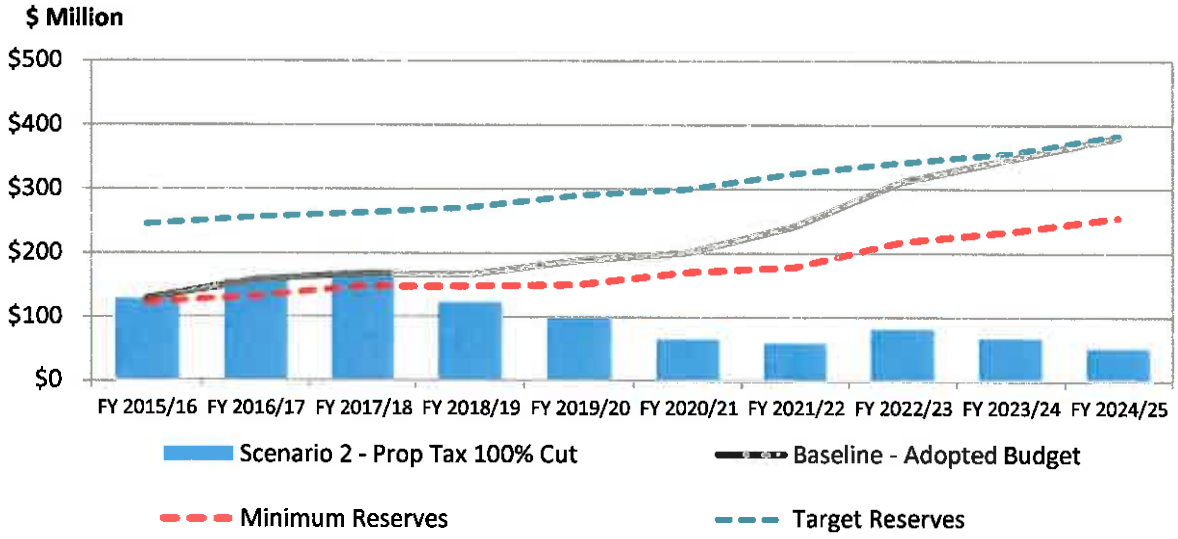
Table 11: Scenario 2 Estimated Impact on Fund Balances by FY 2024/25

($Millions)	Regional Wastewater Programs	Recycled Water and Groundwater	Water Resources	Other Minor Funds*	TOTAL
Baseline ending balance	$267	$40	$17	$57	$381
Property tax loss (7 years)	(288)	(17)	(11)	(15)	(331)
Adjusted ending balance	**($21)**	**$24**	**$7**	**$40**	**$50**
Minimum reserve balance	**$186**	**$20**	**$28**	**$21**	**$254**

**Other minor funds include Non-Reclaimable Wastewater (NRW) and Administrative Service (GG) funds.*

Shortfall in property tax receipts will disrupt the financial strategy of the Regional Wastewater program aimed at building reserves to fund future major capital projects not supported by connections fees, including the rehabilitation the Agency's oldest facility (RP-1) scheduled to begin around 2025, and the ultimate decommissioning of the RP-2 solids handling facility prior the expiration of the site lease in 2035.

Figure 4: Scenario 2 Impact on Reserve Balance (without remedies)



The assumed property tax shift also propels the total DCR downward to a low of 0.90x in FY 2024/25; significantly below the minimum requirement, as illustrated on Table 12.

Table 12: Scenario 2 DCR Trend

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Baseline DCR	2.35	3.27	3.40	3.35	3.55	3.58	3.63	4.25	2.63	2.36
Scenario 1 DCR	**2.35**	**3.27**	**3.40**	**1.51**	**1.74**	**1.73**	**1.75**	**1.83**	**1.21**	**0.90**

Potential remedies

To recover the estimated loss of $331 million in property taxes, a few alternatives can be explored to remedy the negative impact to the Regional Wastewater and Recycled water programs:

- Grant receipts – only $39 million in grant receipts over the next ten years is included in the adopted Biennial Budget and ensuring year forecasts; a very conservative estimate. The Agency will actively pursue all grant opportunities available to support projects included in the TYCIP. Any grant receipts above the budgeted amount of $39 million will help to offset the impact to additional rate increases or demand deficit capital calls.

- No early repayment of the $125 million 2008A Bonds will provide favorable cash flow of approximately $88 (net of ongoing annual debt service costs). Grant receipts above the $39 million forecast may allow for the early retirement of a portion of the outstanding amount.

- Higher wastewater connection fees –additional annual rate increase of $4,500 to $8,000 per EDU beginning FY 2018/19 to recover approximately $103 million to support critical expansion capital projects. Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 13: Scenario 2 Wastewater Connection Fees Additional Rate Increase

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Wastewater Connection units	4,330	4,580	3,735	3,310	3,295	2,735	2,450	2,260	2,265	1,040	30,000
Estimated additional fees $/EDU				4,479	4,840	5,737	6,542	7,026	7,763	8,424	
Estimated additional revenue ($Million)			-	**14.83**	**15.95**	**15.69**	**16.03**	**15.88**	**17.58**	**8.68**	**102.64**

- Demand deficit call – possible capital call from member agencies to support critical construction projects. Under the Regional Sewage Service Contract (Section E6 Capital Capacity Reimbursement Account (CCRA) and Allocation of Supplemental Capital Outlay Fund Shortages), if CCRA funds are not sufficient to support capital requirements, the Agency can demand member agencies pay the full amount required based on the proportionate share of CCRA balances. Use of a demand deficit will reduce the increase to new wastewater connections and lessen the impact on new development. Grant receipts above the $39 million forecast will reduce the estimated call.

- Increase the Monthly Volumetric EDU rate –additional rate from $0.81 to $9.16 per EDU annually starting in FY 2018/19 to recover approximately $122 million to support capital R&R requirements. Assuming no change in the volumetric EDU based on conservative growth forecast, estimated surcharge rate reaches $31.00 per EDU by FY 2024/25 (Table 11). Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 14: Scenario 2 Volumetric EDU Surcharges

	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Wastewater annual EDUs	3,218,034	3,226,080	3,234,145	3,242,230	3,250,336	3,258,462	3,266,608	
Estimated additional fees $/EDU	0.81	2.41	4.00	5.60	7.20	8.38	9.16	
Estimated additional revenue ($Million)	**2.61**	**7.77**	**12.94**	**18.16**	**23.40**	**27.31**	**29.92**	**122.10**

- Increase the Water (meter unit equivalent) rates - an additional increase of $0.50 per meter unit equivalent (MEU) will help to generate $23 million for recovering the loss of $11 million in property tax shift while maintaining the minimum reserve balance. Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 15: Scenario 2 Volumetric MEU Surcharges

	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Volumetric Annual MEUs	4,893,912	4,929,912	4,965,912	5,002,175	5,038,703	5,075,497	5,112,560	
Estimated additional fees $/MEU	0.50	0.50	0.50	0.50	0.50	1.00	1.00	
Estimated additional revenue ($Million)	**2.45**	**2.46**	**2.48**	**2.50**	**2.52**	**5.07**	**5.10**	**22.58**

By applying the above remedies, the reserve balances for all program funds and the DCR improve and recover to the level close to the Baseline scenarios as indicated in Table 16 and Table 17.

Table 16: Scenario 2: Impact of Potential Remedies by FY 2024/25

(In Millions)	Regional Wastewater Programs	Recycled Water and Groundwater	Water Resources	Other Minor Funds	TOTAL
Baseline ending balance	$267	$40	$17	$57	$381
Property tax loss (7 years)	(288)	(17)	(11)	(15)	(331)
Adjusted ending balance	**(21)**	**24**	**7**	**40**	**50**
POTENTIAL REMEDIES:					
No early repayment 2008A Bonds	63	21	-	4	88
Connection fees/Demand deficit	153	-	-	-	153
EDU rate surcharge	71	-	-	-	71
MEU rate surcharge	-	-	23	-	23
Total adjustments	286	21	23	5	335
Ending balance with remedies	**$265**	**$45**	**$30**	**$45**	**$385**
Minimum reserve balance	$186	$20	$28	$21	$254

**Other minor funds include Non-Reclaimable Wastewater (NRW) and Administrative Service (GG) funds.*

By eliminating the early retirement of the 2008A Bonds, the DCR shows a steady favorable trend above 3.0x from FY 2016/17. The DCR begins to drop in FY 2023/24 when principal payments for the 2008 Bonds and repayment of future SRF loans begin.

Table 17: Scenario 2 DCR Trend (with remedies)

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Baseline DCR	2.35	3.27	3.40	3.35	3.55	3.58	3.63	4.25	2.63	2.36
Scenario 2 DCR (with remedies)	2.35	3.27	3.40	2.33	2.78	2.97	3.21	3.92	2.65	2.11

Scenario 3: 50% reduction in growth and 50% reduction in property taxes

Assumptions

As aforementioned, the 2008 economic downturn negatively impacted the Agency's property tax receipts and new wastewater connection fees. Under this scenario we stress test the potential reduction of these two major revenue sources should another economic downturn occur during the next decade.

A 50% shift in property tax receipts by State is assumed beginning in FY 2018/19. This aligns with the expiration of the temporary state tax increases approved under Proposition 30. Additionally, a 50% reduction in the number of new connections for both wastewater and water

is assumed from the slowdown in new development as a result of an economic downturn. The result is a combined shortfall of approximately $289 million; $166 million in property taxes and $123 million connection fees.

Table 18: Scenario 3 Estimated Impact on Program Fund Balances by FY 2024/25

($Millions)	Regional Wastewater Programs	Recycled Water and Groundwater	Water Resources	Other Minor Funds	TOTAL
Baseline ending balance	$267	$40	$17	$57	$381
50% Property tax loss, starting in FY 2018/19	(144)	(8)	(5)	(9)	(166)
50% Reduction in connection fees, starting in FY 15/16	(101)	(18)	(1)	(3)	(123)
Adjusted ending balance	**$22**	**$14**	**$11**	**$46**	**$93**
Minimum reserve balance	$186	$20	$28	$20	$254

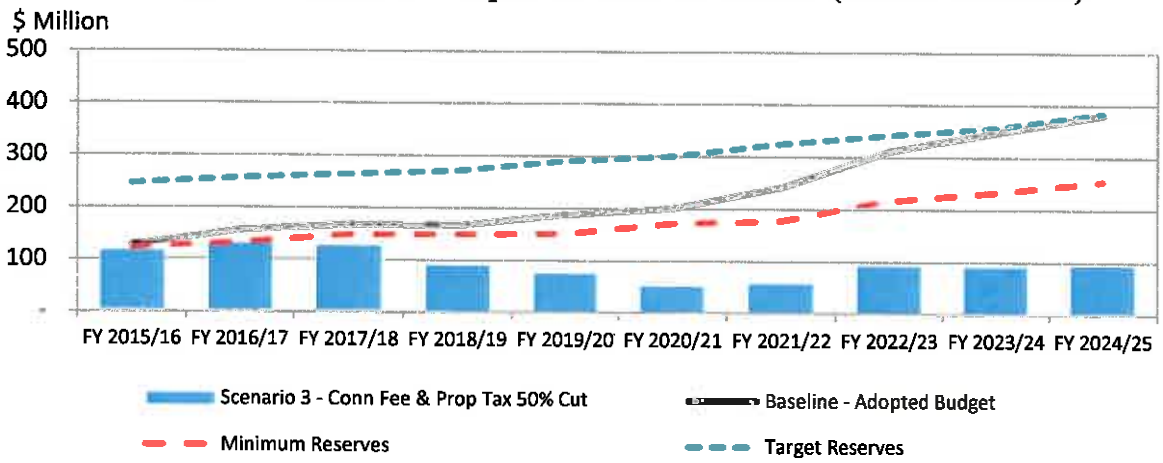
**Other minor funds include Non-Reclaimable Wastewater (NRW) and Administrative Service (GG) funds.*

Due to the estimated loss of $289 million in revenue, one of the potential remedies included in this scenario is the cancellation of early repayment of the 2008A Bonds. Under this scenario annual debt service costs for the 2008A Bonds will be limited to only interest payments of $6.25 million until principal payments begin in FY 2023/24. Elimination of the early repayment option will result in higher estimated fund balances of approximately $88 million by FY 204/25. However, approximately $60 million in avoided interest costs will not be realized. As principal payments begin in 2024, fund balances will be reduced along with total DCR. As indicated in Table 19, the DCR under this scenario begins to decline in FY 2023/24 when repayment of future debt borrowings are scheduled to begin, and principal payments against the 2008A Bonds continue through 2039.

Table 19: Scenario 3 DCR Trend (without remedies)

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Baseline DCR	2.35	3.27	3.40	3.35	3.55	3.58	3.63	4.25	2.63	2.36
Scenario 3 DCR	1.82	2.60	2.78	1.88	2.09	2.15	2.21	2.46	1.57	1.46

Figure 5: Scenario 3 Impact on Reserve Balance (without remedies)



Potential remedies

Since the assumed revenue loss is primarily in property taxes and connection fees, the most probable remedies include;

- Grant receipts – only $39 million in grant receipts over the next ten years is included in the adopted Biennial Budget and ensuring year forecasts; a very conservative estimate. The Agency will actively pursue all grant opportunities available to support projects included in the TYCIP. Any grant receipts above the budgeted amount of $39 million will help to offset the impact to additional rate increases or demand deficit capital calls.

- No early repayment of the $125 million 2008A Bonds will provide favorable cash flow of approximately $88 (net of ongoing annual debt service costs). Grant receipts above the $39 million forecast may allow for the early retirement of a portion of the outstanding amount.

- Higher wastewater connection fees –additional annual rate increase of $6,500 to $8,000 per EDU beginning FY 2017/18 to recover approximately $59 million to support future expansion of the system. Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 20: Scenario 3 Wastewater Connection Fees Additional Rate Increase

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Wastewater Connection units	2,165	2,290	1,868	1,655	1,648	1,368	1,225	1,130	1,133	520	15,000
Estimated additional fees $/EDU			-	7,166	6,534	6,552	8,099	7,524	8,013	86	
Estimated additional revenue ($Million)			-	**11.86**	**10.76**	**8.96**	**9.92**	**8.50**	**9.07**	**0.04**	**59.13**

- Demand deficit call – possible capital call from member agencies to support critical construction projects. Under the Regional Sewage Service Contract (Section E6 Capital Capacity Reimbursement Account (CCRA) and Allocation of Supplemental Capital Outlay Fund Shortages), if CCRA funds are not sufficient to support capital

requirements, the Agency can demand member agencies pay the full amount required based on the proportionate share of CCRA balances. Use of a demand deficit will reduce the increase to new wastewater connections and lessen the impact on new development. Grant receipts above the $39 million forecast will reduce the estimated call.

- Monthly Volumetric EDU rate –additional increase of $0.81 to $9.16 per EDU each year from FY 2020/21 to FY 2024/25 will be necessary and the rate will reach $31.2 per EDU by FY 2024/25 (Table 21) to recover approximately $122 million from the 50% loss in property taxes. Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 21: Scenario 3 Volumetric EDU Surcharges

	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Wastewater annual EDUs	3,218,034	3,226,080	3,234,145	3,242,230	3,250,336	3,258,462	3,266,608	
Estimated additional fees $/EDU	0.81	2.41	4.00	5.60	7.20	8.38	9.16	
Estimated additional revenue ($Million)	**2.61**	**7.77**	**12.94**	**18.16**	**23.40**	**27.31**	**29.92**	**122.10**

- Higher recycled water rates – additional annual increase of $20 per acre foot starting in FY 2018/19 to recover approximately $6.5 million from the loss of 50% in water connection fees. Grant receipts above the $39 million forecast will reduce the estimated increase.

Table 22: Scenario 3 Recycled Water Surcharges

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	TOTAL
Estimated Recycled Water Annual AF	35,150	37,100	37,300	42,950	45,770	45,970	46,170	46,370	46,570	51,070	434,420
Estimated additional fees $/AF			-	20	20	20	20	20	20	20	
Estimated additional revenue ($Million)			-	**0.86**	**0.92**	**0.92**	**0.92**	**0.93**	**0.93**	**1.02**	**6.50**

These potential remedies help bring total fund balance and DCR close to the Baseline level as illustrated in Tables 23 and 24:

Table 23: Scenario 3: Impact of Potential Remedies by FY 2024/25

($Millions)	Regional Wastewater Programs	Recycled Water and Groundwater	Water Resources	Other Minor Funds	TOTAL
Baseline ending fund balance	$267	$40	$17	$57	$381
50% Property tax loss starting in FY 2018/19	(144)	(8)	(5)	(9)	(166)
50% Reduction in connection fees starting in FY 2015/16	(101)	(18)	(1)	(3)	(123)
Adjusted ending fund balance	**$22**	**$14**	**$11**	**$46**	**$93**
POTENTIAL REMEDIES:					
No early repayment of 2008A Bonds ($125 million)	63	21	-	4	88
Connection fees/Demand deficit	122	6	-	1	129
EDU rate additional surcharge	54	-	-	-	54
MEU rate additional surcharge	-	-	16	-	16
Total adjustments	$239	$27	$16	$6	$288
Estimated ending fund balance with remedies	**$262**	**$42**	**$27**	**$50**	**$381**
Minimum reserve balance	$186	$20	$28	$20	$254

**Other minor funds include Non-Reclaimable Wastewater (NRW) and Administrative Service (GG) funds.*

Table 24: Scenario 3 Projected DCR (with remedies)

	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Baseline DCR	2.35	3.27	3.40	3.35	3.55	3.58	3.63	4.25	2.63	2.36
Scenario 3 DCR (with remedies)	1.82	2.60	2.78	2.56	2.91	3.11	3.41	4.17	2.69	2.40

The early repayment of the $125 million high interest (5%) 2008 Revenue Bonds is one of the key drivers for the estimated fund balance and total DCR in scenario 2 and 3. However, changes in this debt financing strategy warrant more in-depth analysis and discussion to ensure all of the factors are carefully considered, including the loss of $60 million in avoided interest costs and future debt capacity to secure low cost borrowing for the expansion of the RP-5 and RP-2 facilities.

Another alternative to be considered is refinancing the 2008A Bonds to take advantage of a lower interest rate. Although the savings are estimated to be significantly less, between $7 million to $8 million over ten years, compared to the $60 million earned from early retirement; the net cash outlay of $88 million would be avoided over the next 10 years. Staff will continue to work with the Agency's financial advisor to evaluate the most appropriate strategy given the planned capital investment over the next 20 years.

Closing

A key emphasis of this budget workshop is the evaluation of the adverse scenarios that would impact the Agency's financial sustainability to support various programs expenditures, operating costs, CIP and debt service costs. The remedies highlighted in the various scenarios are intended only as a "broad brush stroke" approach. Should any of these adverse conditions arise, or other unexpected changes that may negatively impact the Agency's fiscal health, a more comprehensive analysis and discussion will be conducted to ensure all of the risks and benefits are carefully considered.

The Agency is currently working with member agencies and water stakeholders to complete the Integrated Water Resources Plan (IRP). This plan is a major step in defining the components to build a more resilient and sustainable regional water supply. In addition, development of an Energy Management Plan (EMP) is underway and the restructuring of potable water rates is also in progress. Upon the completion of the initiatives, staff will incorporate cost projections, funding options and respective timelines into the long range financial plan analysis. A workshop will be facilitated in early 2016 to present an update of long term funding and commitments, along with a re-evaluation of the Agency's financial policies.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

Appendix A

Rates used to calculate Baseline forecast

	Approved					Estimated				
Baseline rates and fees	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Wastewater connection fee,s $/EDU	5,261	5,712	6,309	6,624	6,955	7,651	8,301	8,550	8,807	9,071
Water connection fee, $/MEU	693	1,455	1,527	1,604	1,684	1,735	1,787	1,841	1,896	1,953
Volumetric EDU, $/EDU	15.89	17.14	18.39	19.59	20.00	20.40	20.80	21.20	21.62	22.04
Recycled water Direct sales, $/AF	350	410	470	480	490	500	510	520	530	540
Recycled water Groundwatr sales, $/AF	410	470	530	540	550	560	570	580	590	600

	Estimated								
	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Volumetric MEU, $/MEU	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90

Long Range Plan of Finance Workshop #1




September 2015

Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

Baseline

Based on the Adopted Biennial Budget and TYCIP

Major Funding Sources

- Adopted multi-year rates
- Continued receipt of property taxes
- Higher number of new wastewater connections
- New water connection fee
- SRF loans and grants

Major Uses of Funds

- TYCIP
  - Relocation of RP-2
  - Expansion of RP-5
  - Begin rehabilitation of RP-1
- Early repayment of 2008A Revenue Bonds

Stress Test Assumptions
(2015 – 2025)

SCENARIOS ASSUMPTIONS

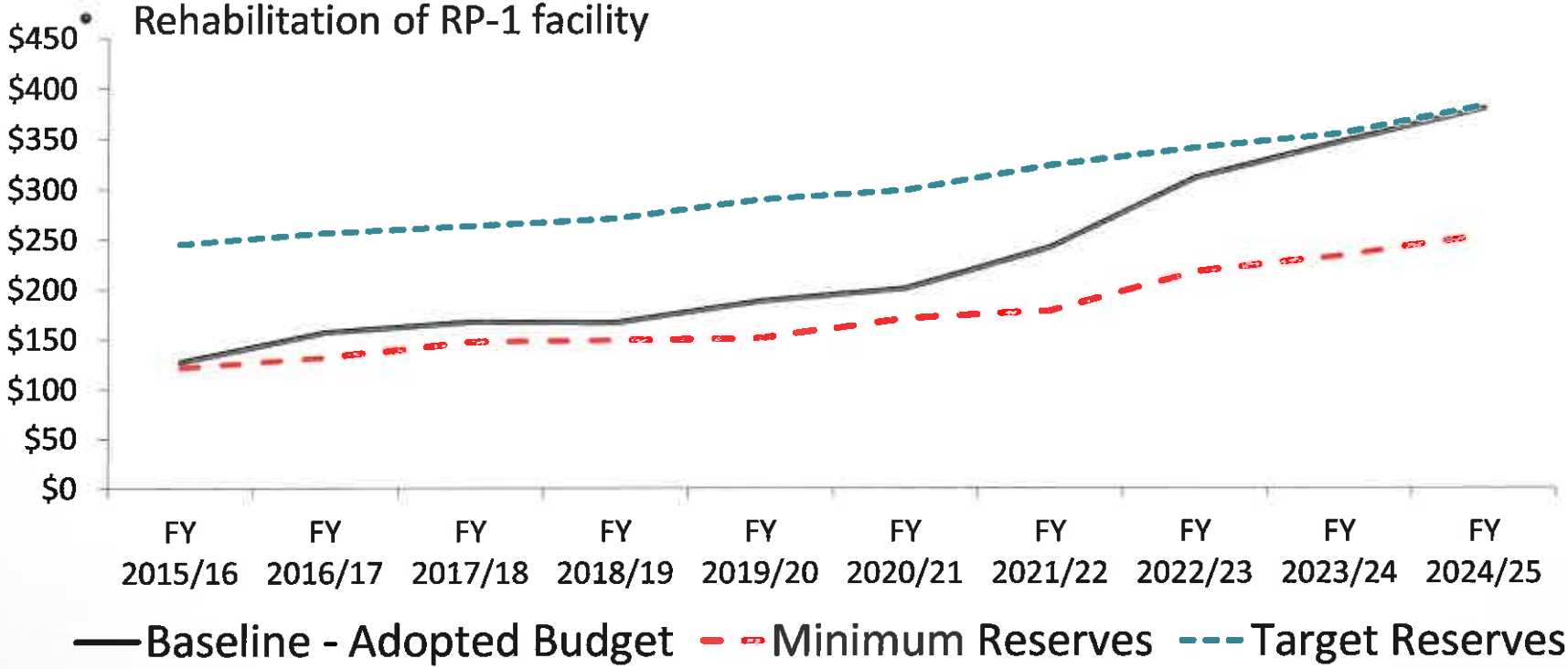
VARIABLES	Scenario 1 50% reduction in growth	Scenario 2 100% shift of property taxes	Scenario 3 50% reduction in growth AND 50% shift of property taxes
IMPACTED REVENUES:			
Wastewater Connection Fees	x	x	x
Water Connection Fees	x		
Monthly EDU Volumetric Rate	x	x	x
Monthly MEU Rate		x	
Recycled Water Rates			x
IMPACTED EXPENSES:			
2008A Bond Early Retirement		x	x
O&M Expense	---------- No Change ----------		
TYCIP	---------- No Change ----------		

Baseline

Comparison of Estimated Ending Fund Balance to Minimum and Target Reserve Levels

Gradual building of reserves to support capital requirements not funded by connection fees:

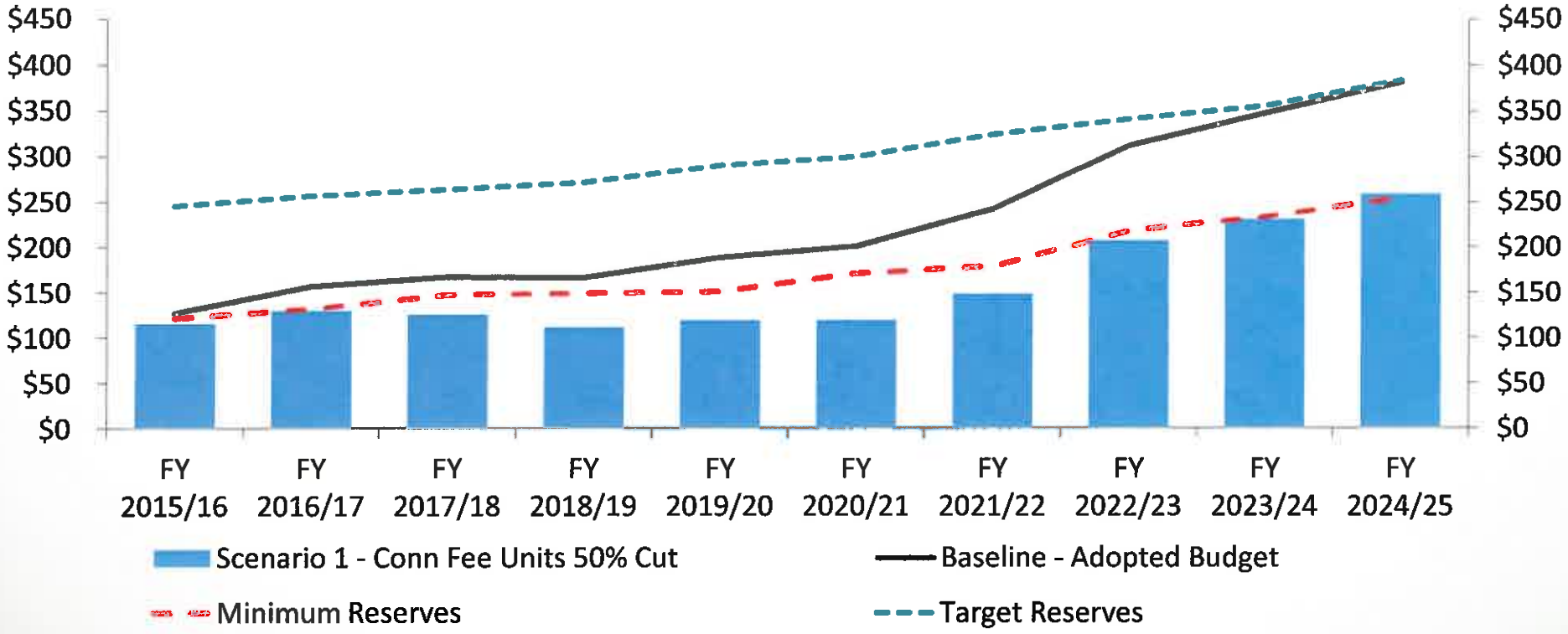
- Relocation of RP-2 solids handling to RP-5
- Rehabilitation of RP-1 facility



Baseline vs. Scenario 1

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- **50% reduction in growth beginning in FY 2015/16**
- **$123 million estimated loss in connection fees**



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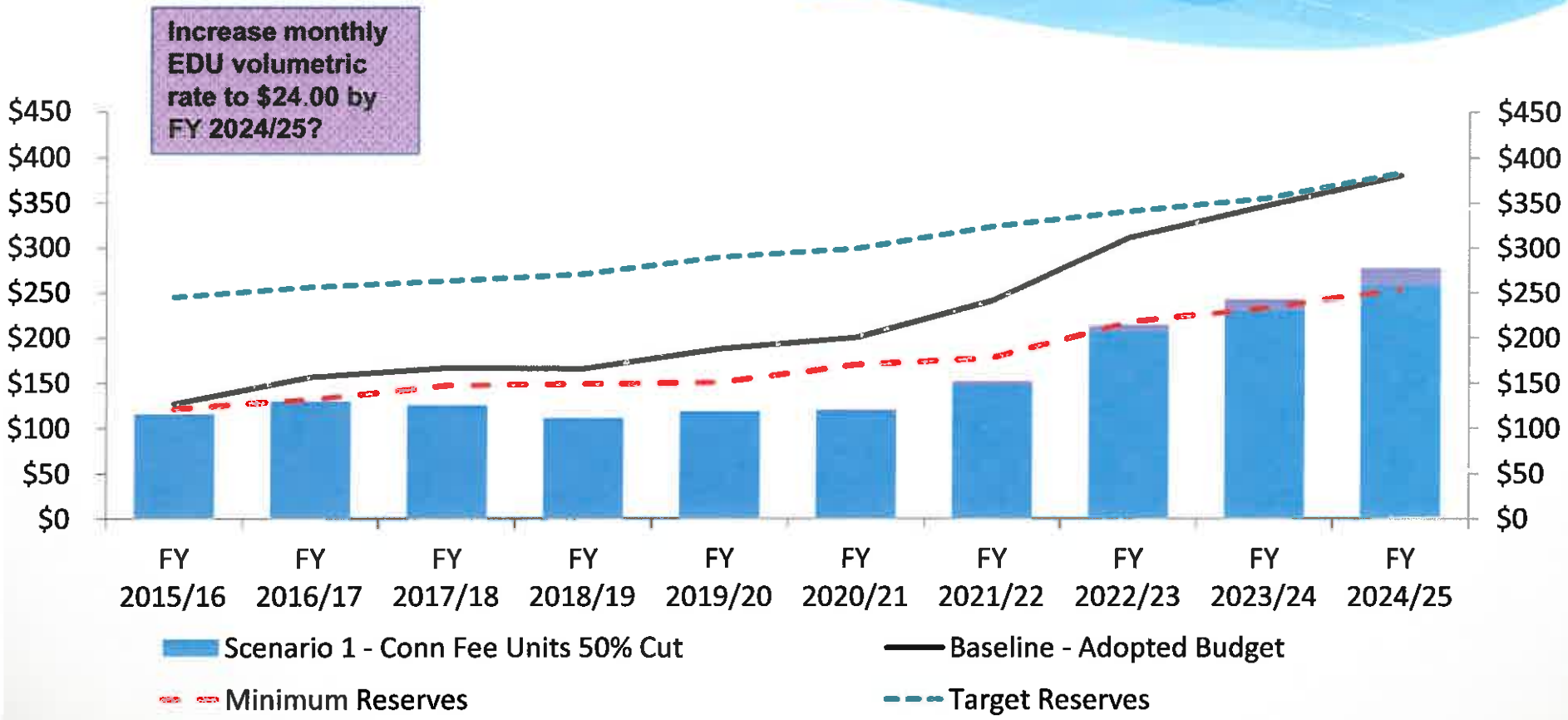

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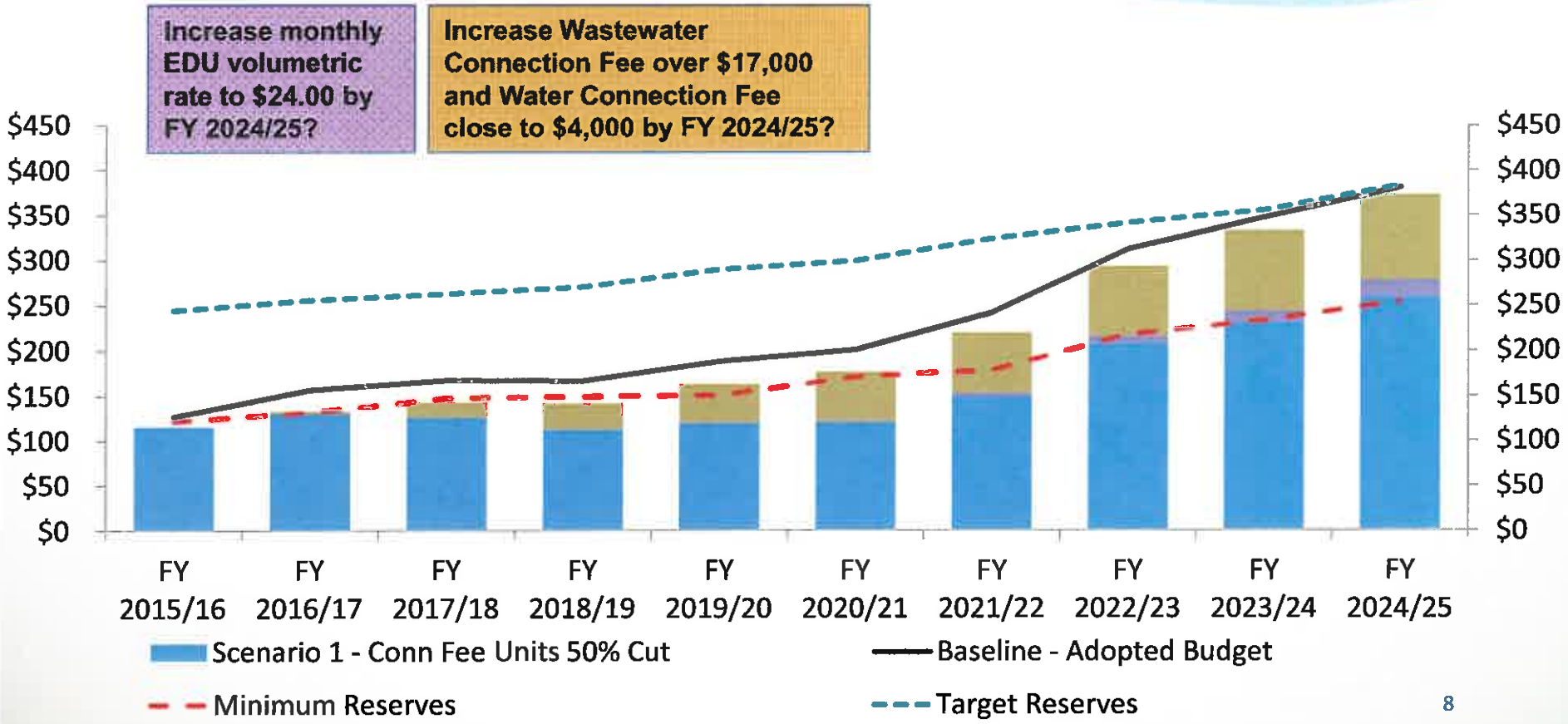


Baseline vs. Scenario 1

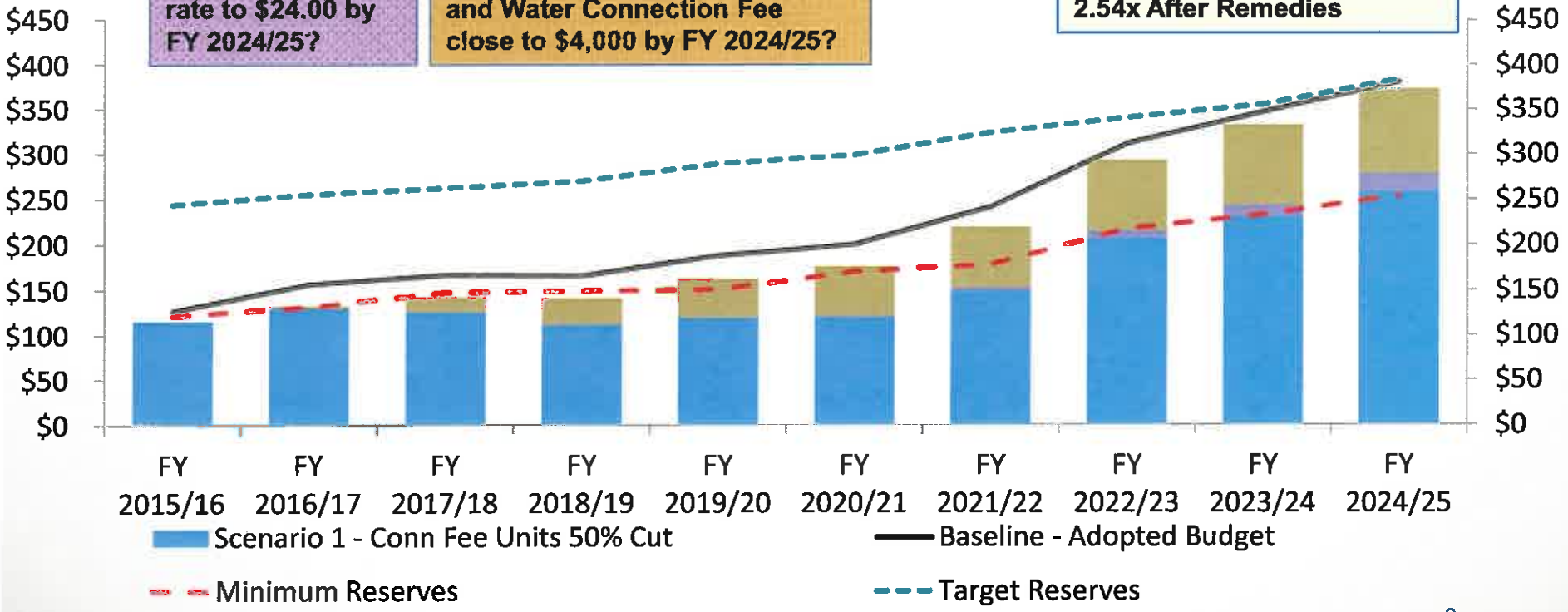
Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- 50% reduction in growth beginning in FY 2015/16
- $123 million estimated loss in connection fees

Increase monthly EDU volumetric rate to $24.00 by FY 2024/25?

Increase Wastewater Connection Fee over $17,000 and Water Connection Fee close to $4,000 by FY 2024/25?

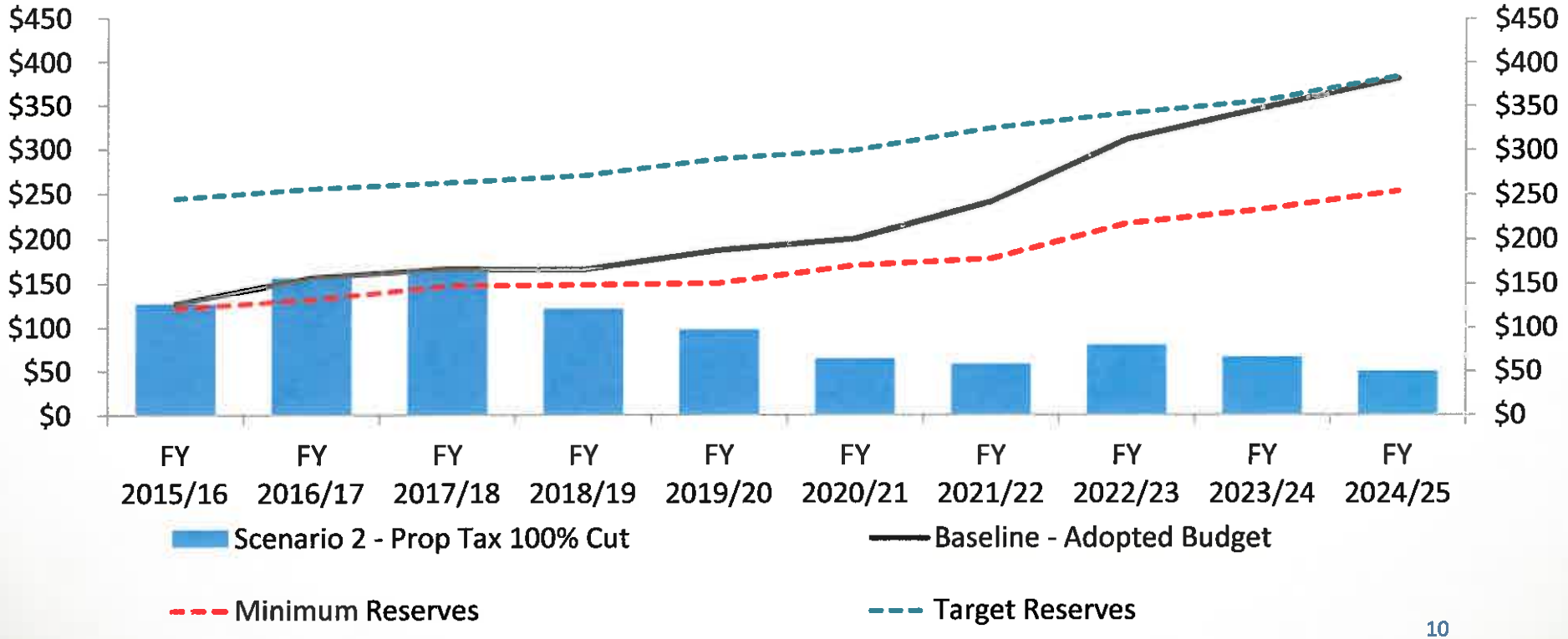
FY 2024/25 Projected DCR:
2.19x Before Remedies
2.54x After Remedies



Baseline vs. Scenario 2

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- **100% shift of property tax receipts beginning in FY 2018/19**
- **$331 million estimated revenue loss**



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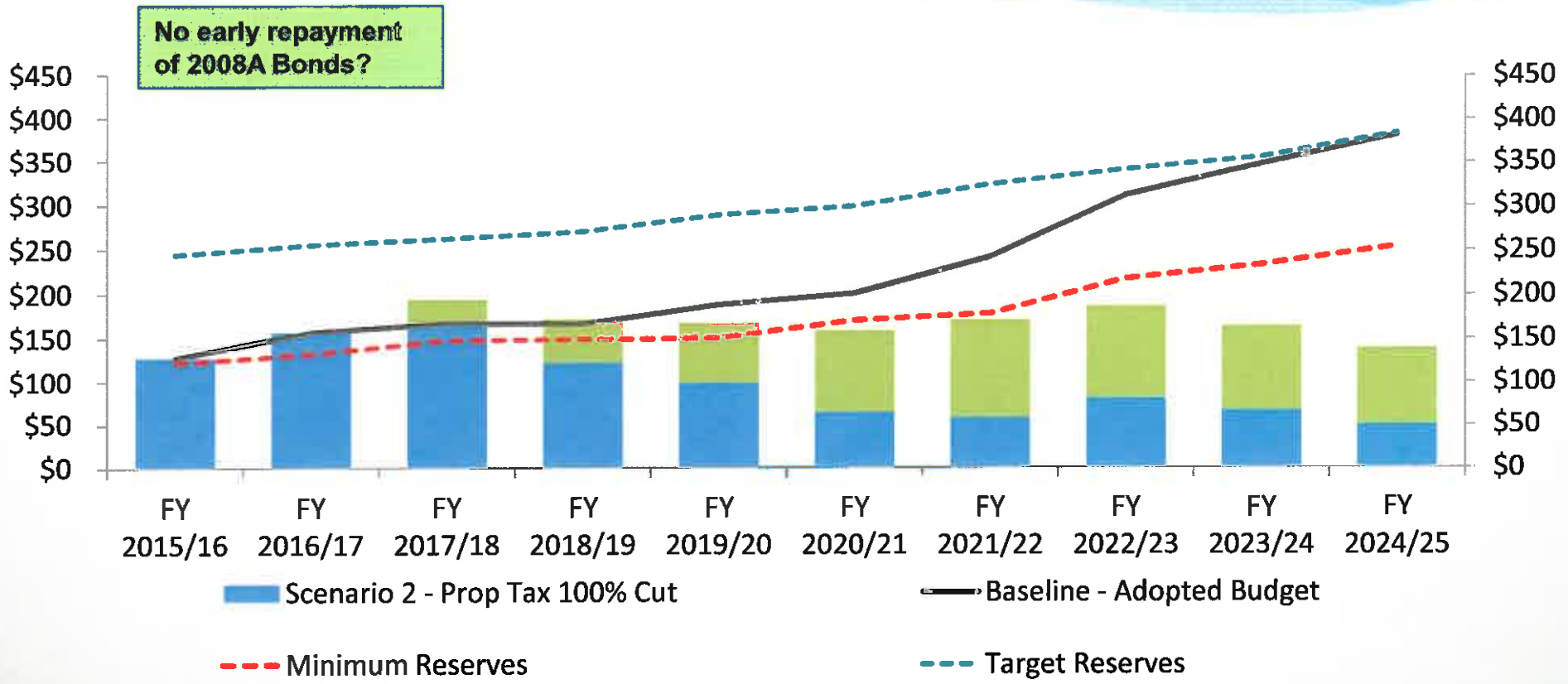


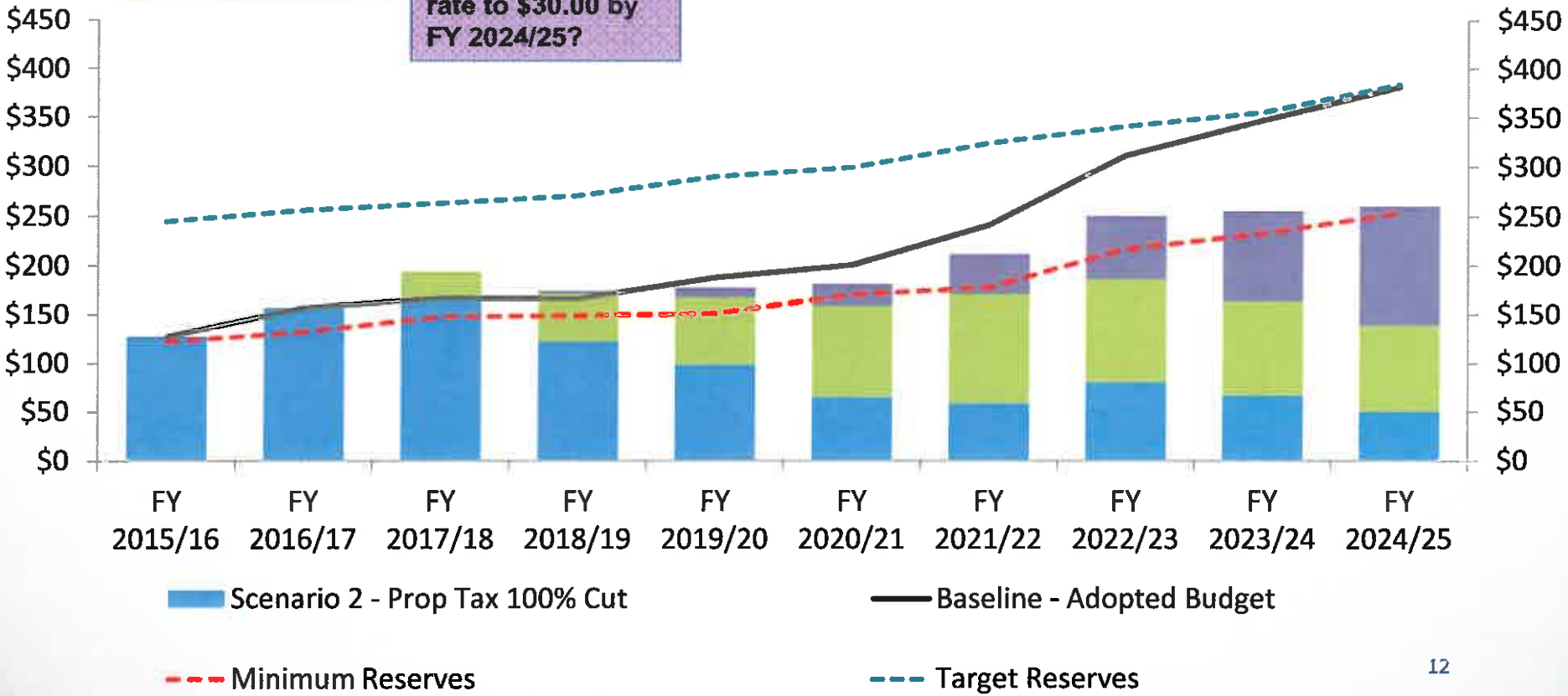
Baseline vs. Scenario 2

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- 100% shift of property tax receipts beginning in FY 2018/19
- **$331 million estimated revenue loss**

No early paydown of 2008A bond?

Increase monthly EDU volumetric rate to $30.00 by FY 2024/25?



Baseline vs. Scenario 2

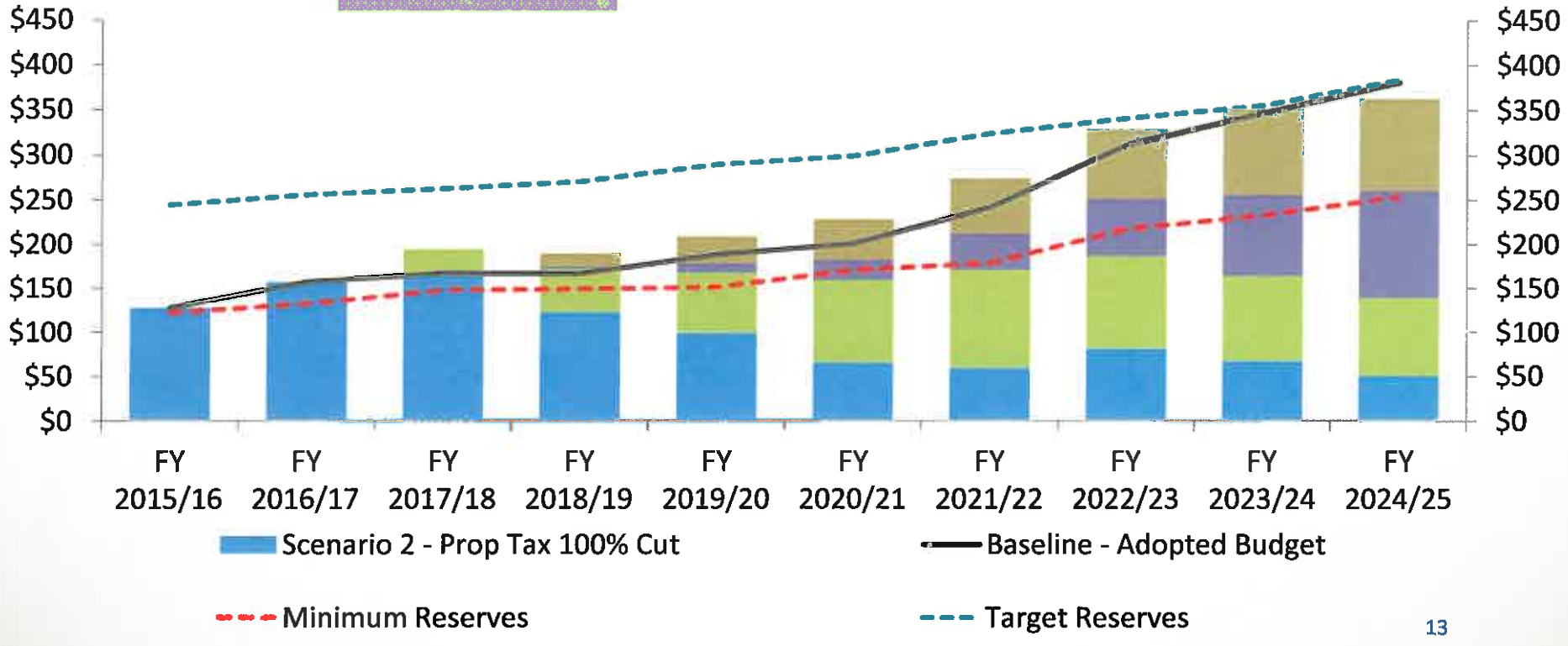
Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- 100% shift of property tax receipts beginning in FY 2018/19
- $331 million estimated revenue loss

No early retirement of 2008A Bonds?

Increase monthly EDU volumetric rate to $30.00 by FY 2024/25?

Increase Wastewater Connection Fee over $16,000 by FY 2024/25?

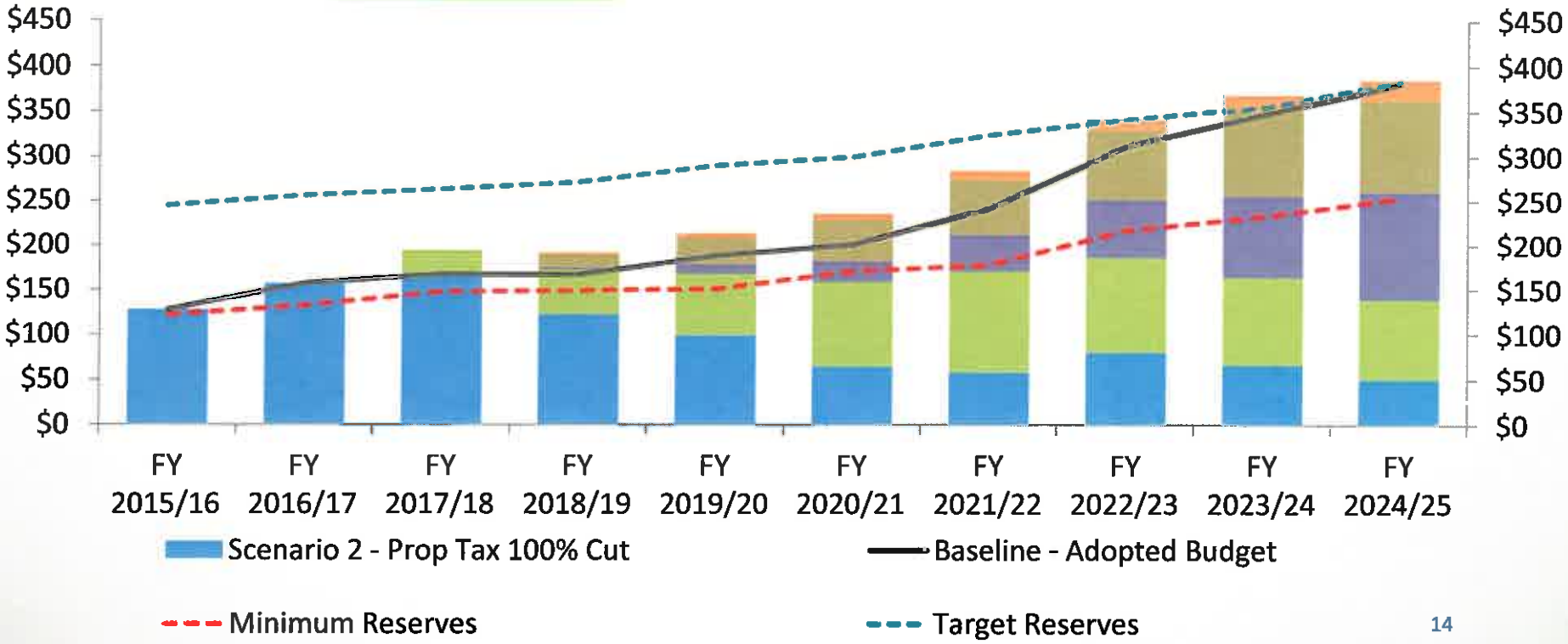


Baseline vs. Scenario 2

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- 100% shift of property tax receipts beginning in FY 2018/19
- $331 million estimated revenue loss

No early prepayment of 2008A Bonds?	Increase monthly EDU volumetric rate to $30.00 by FY 2024/25?	Increase Wastewater Connection Fee over $16,000 by FY 2024/25?	Increase MEU Rate to $2.90 by FY 2024/25?



Baseline vs. Scenario 2

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- 100% shift of property tax receipts beginning in FY 2018/19
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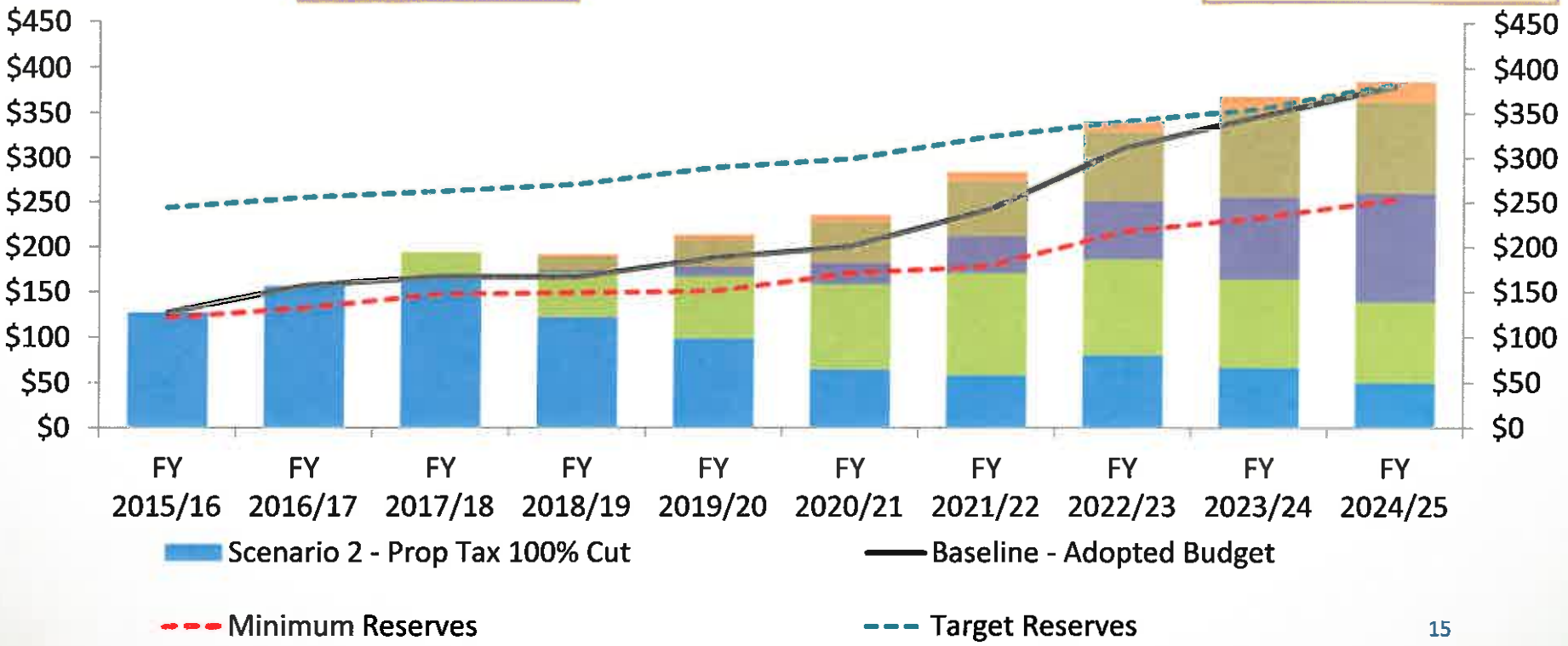
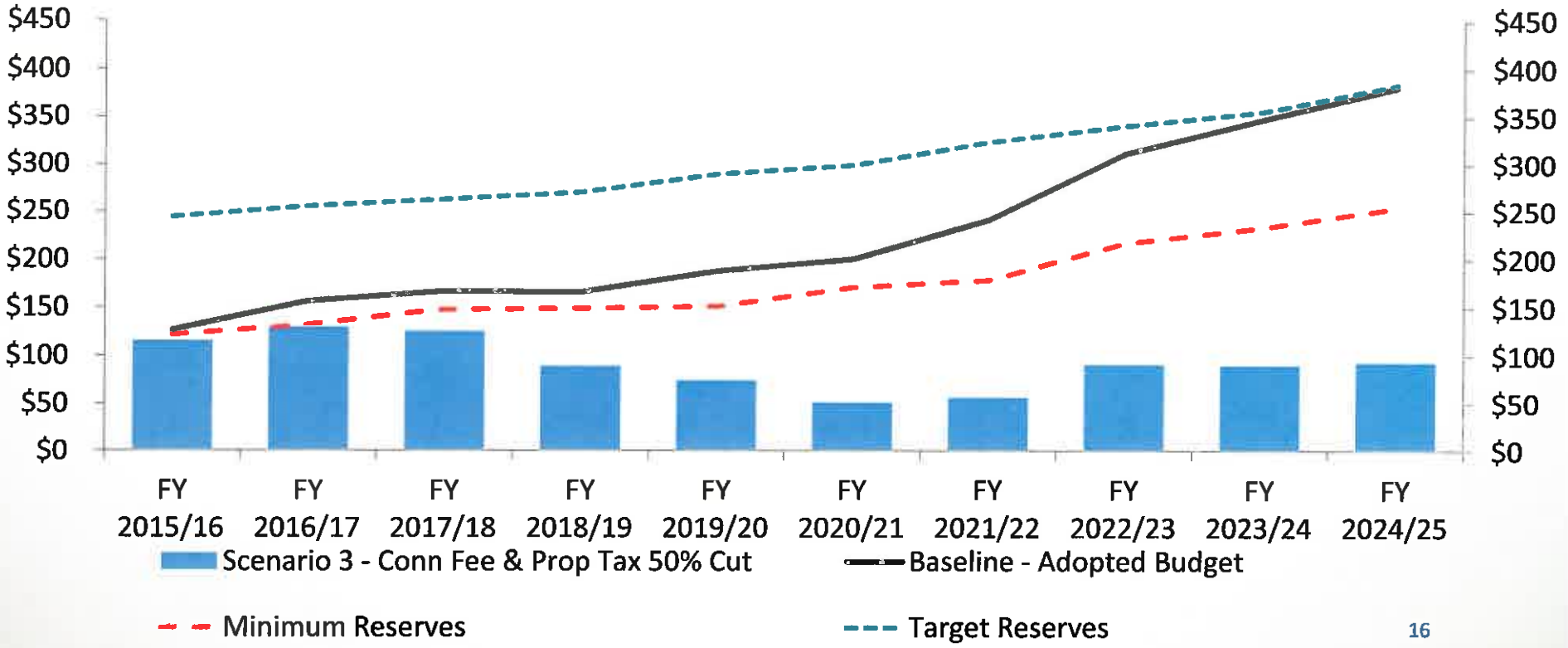
No early prepayment of 2008A Bonds?	Increase monthly EDU volumetric rate to $30.00 by FY 2024/25?	Increase Wastewater Connection Fee over $16,000 by FY 2024/25?	Increase MEU Rate to $2.90 by FY 2024/25?	FY 2024/25 Projected DCR: .90x Before Remedies 2.11x After Remedies



Baseline vs. Scenario 3

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

- 50% growth reduction beginning FY 2015/16 AND
- 50% shift of property taxes beginning FY 2018/19
- $290 million estimated revenue loss



Baseline vs. Scenario 3

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

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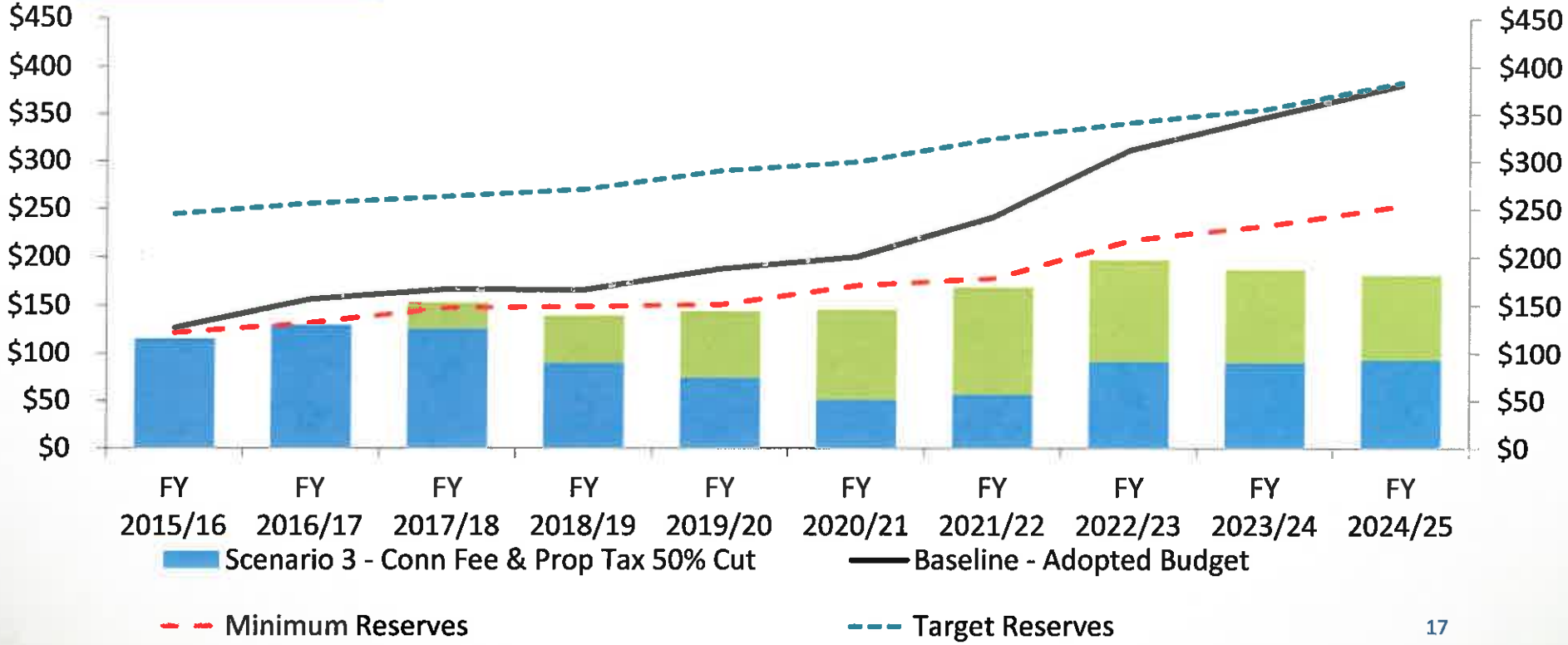
No early retirement of 2008A Bonds?



Baseline vs. Scenario 3

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

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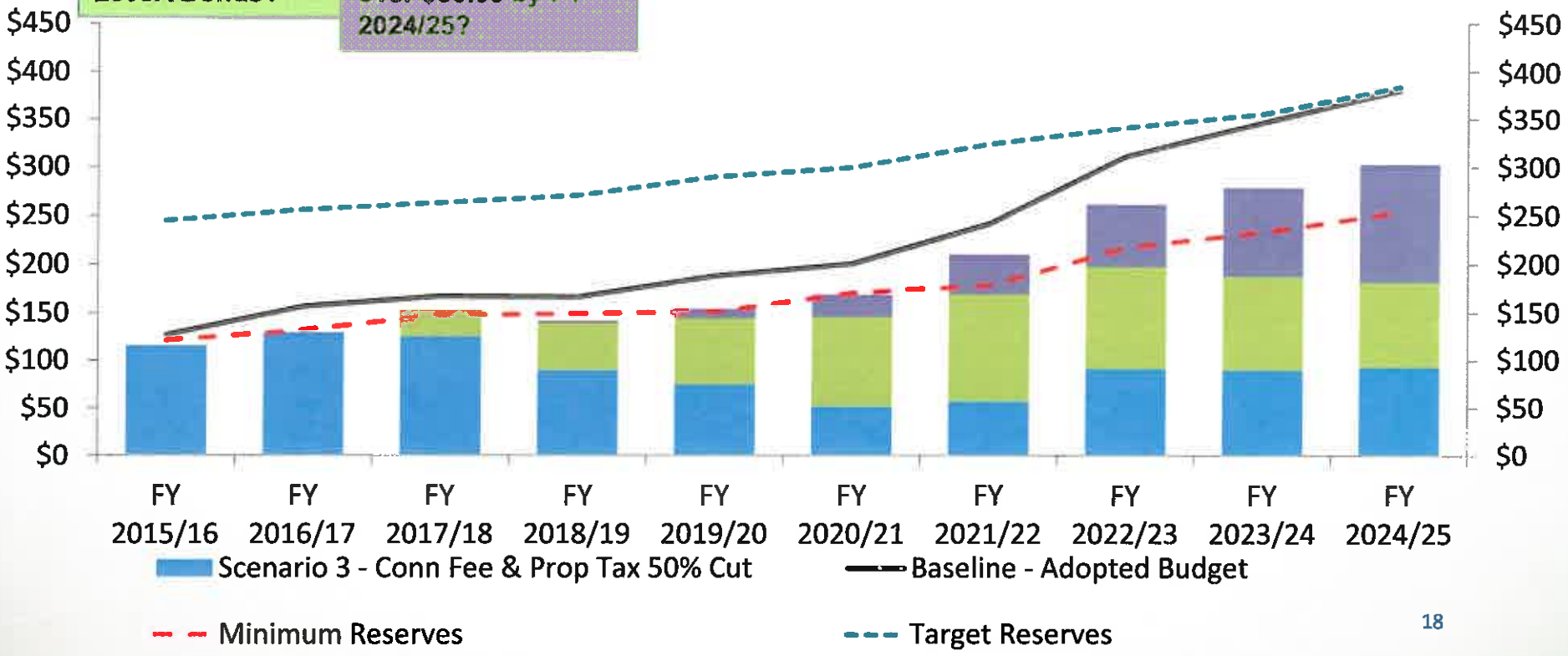
No early retirement of 2008A Bonds?

Increase monthly EDU volumetric rate over $30.00 by FY 2024/25?



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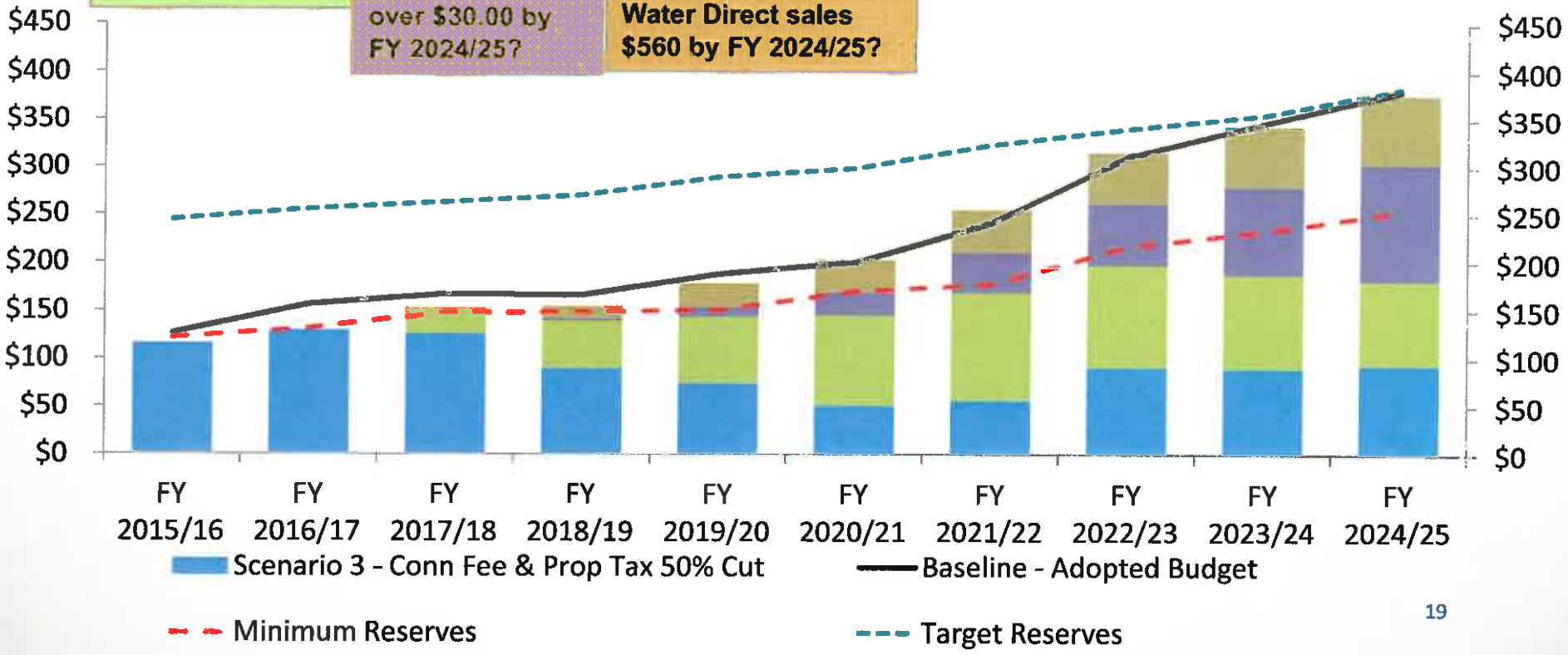
No early retirement of 2008A Bonds?

Increase monthly EDU volumetric rate over $30.00 by FY 2024/25?

Increase Wastewater Connection fee over $17,000 and Recycled Water Direct sales $560 by FY 2024/25?



Baseline vs. Scenario 3

Comparison of Estimated Ending Fund Balance and Debt Coverage Ratio

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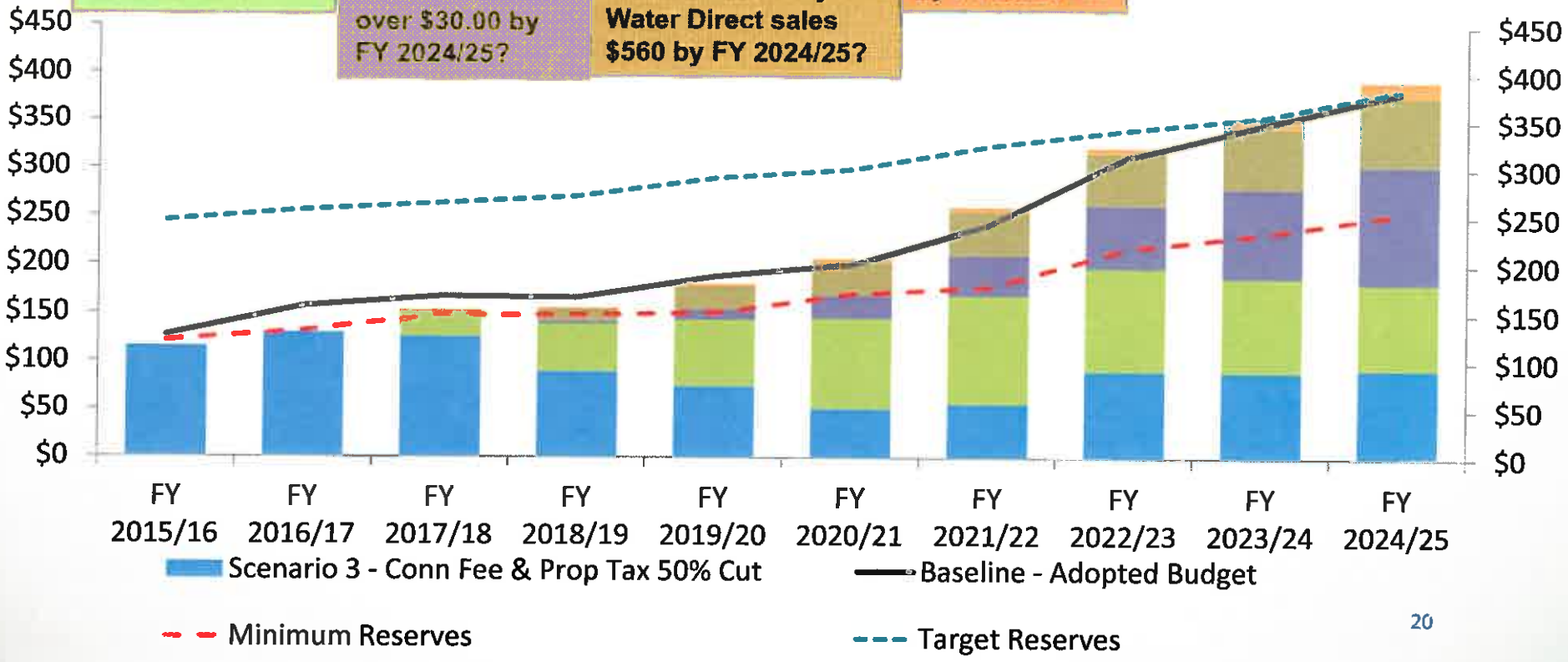
- **50% shift of property taxes beginning FY 2018/19**
- **$290 million estimated revenue loss**

No early retirement of 2008A Bonds?

Increase monthly EDU volumetric rate over $30.00 by FY 2024/25?

Increase Wastewater Connection fee over $17,000 and Recycled Water Direct sales $560 by FY 2024/25?

Increase MEU Rate to $2.20 by FY 2024/25?



Baseline vs. Scenario 3

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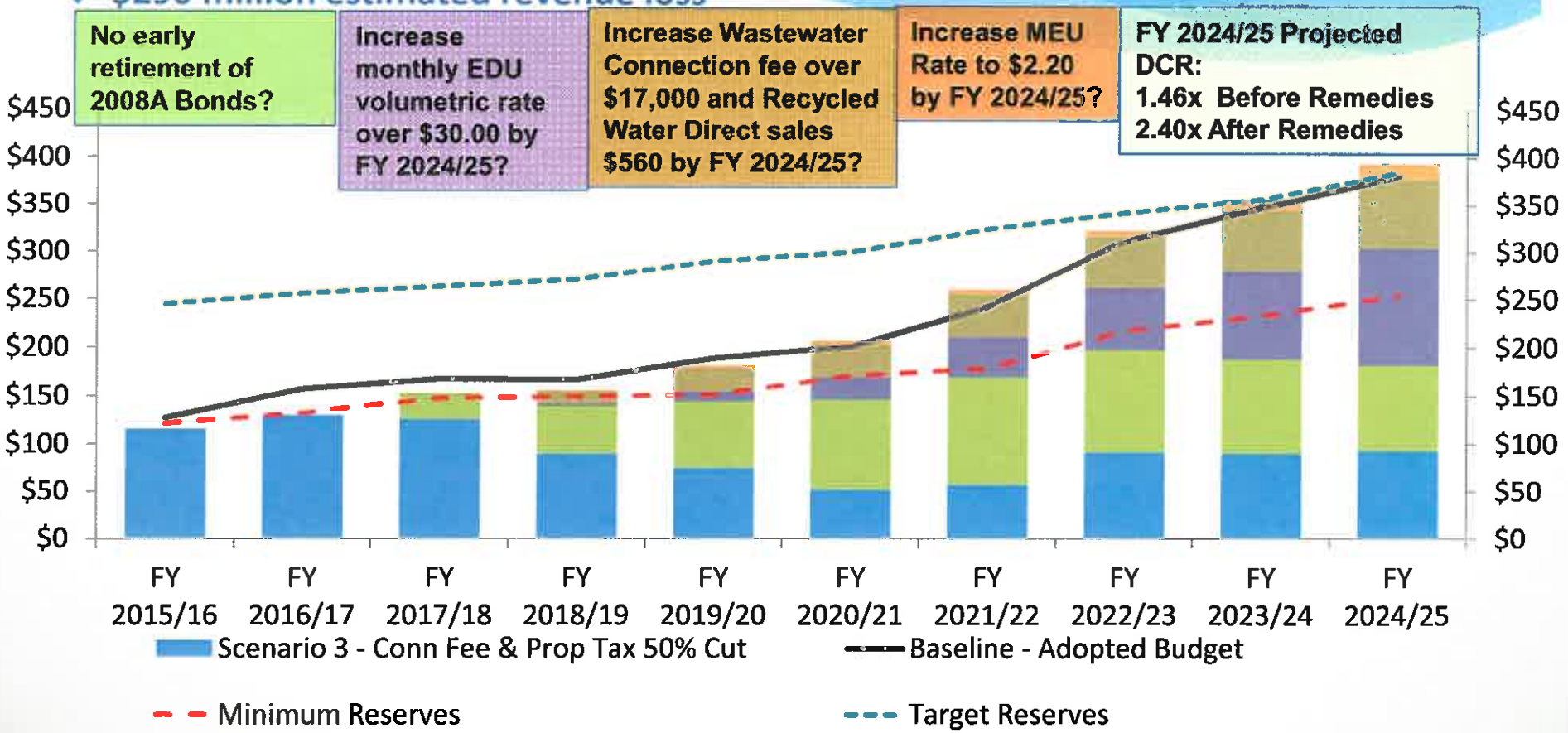

Next Steps…

- Water Rates
- Energy Management Plan
- Integrated Resources Planning (IRP)
- Grants and Property Tax Workshop in November
- Follow up LRPF workshop January-February 2016