

## Water Planning and Stewardship Committee

Item #6a

Subject: Integrated Water Resources Plan Update

Purpose: To provide an overview of the upcoming Integrated Resources Plan update process.

Committee Name/Date

## Water Planning and Stewardship Committee

Item #6a

Summary: This report provides an overview of the upcoming IRP update process. This overview includes background on previous IRP's, and descriptions of the proposed process, technical update topics, and timeline.



# Integrated Water Resources Plan Update

Water Planning and Stewardship Committee  
Item 6a  
February 9, 2015

Thank you mr. chairman, members of the committee.

This is item 6a an oral report on the upcoming Integrated Water Resources Plan Update

## IRP Background

- What is the Integrated Water Resources Plan?
  - A comprehensive long-term strategy to identify potential resource development needs, adaptation measures, and implementation pathways
- IRP Objectives
  - Ensure reliability
  - Ensure affordability
  - Ensure water quality
  - Maintain diversity and flexibility
  - Acknowledge constraints

To begin I would like to provide a

The IRP is both a planning framework and the blueprint for resource development and implementation.

It has always been formulated with input from stakeholders: member and retail agencies, other water and wastewater managers, environmental, business and community interests.

**Acknowledging the importance of water to the economic and social health of Southern California.**

**Reliability**

**Affordability**

**Water Quality**

**Diversity**

**Flexibility**

**Constraints – Recognizing the environmental and institutional constraints to resource development**

## IRP History

- 1996 IRP
  - Established MWD's role as a regional water planner
  - Introduced a diversified portfolio approach
  - Established targets for major resource categories
- 2004 IRP Update
  - Placed further emphasis on conservation and local resources development
  - Introduced the concept of a "planning buffer"

### 1996 IRP

- Following drought of the late 80's early 90's Metropolitan embarked on it's first IRP process
- Developed through an extensive multi-year stakeholder process, completed in 1996
- Represented a shift in metropolitan's role from supplemental supplier to regional water planning agency
- Defined reliability objectives for next 20 years
- Established a diversified portfolio approach with a preferred resource mix, and set resource development targets to meet reliability objectives into the future

### 2004 Update

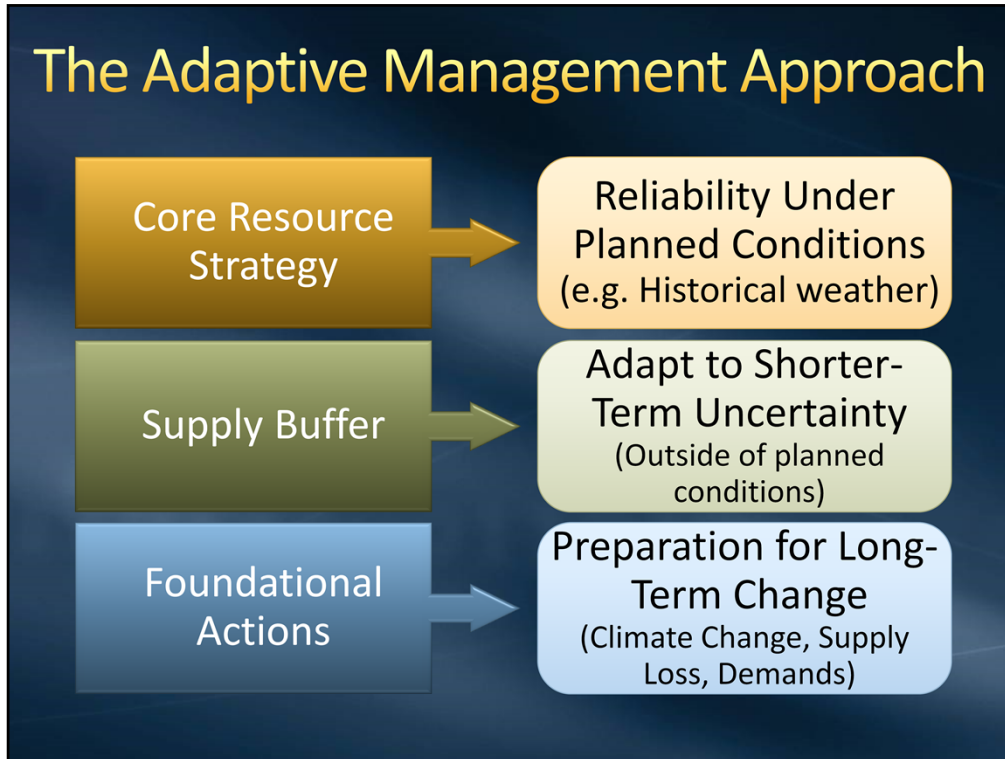
- Reaffirmed objectives of 1996 IRP and adjusted for changed conditions
- Called for additional investments in water conservation, recycling, and storage and transfers
- Established a "Planning Buffer" that identified areas for additional development if needed

## IRP History

- 2010 IRP Update
  - Introduced an adaptive management approach
  - Seeks to stabilize imported supplies and meet growth through water use efficiency and local resources

### 2010 Update

- Introduced an adaptive approach to manage uncertainties, I will go into this in a bit more detail shortly
- Overall approach is to stabilize imported supplies and meet growth in the region through WUE and Local Resources



### Core Resources Strategy

- Meet full-service demands at the retail level under all foreseeable hydrologic conditions
- Essentially this portion is what the 1996 IRP set out to do

### Supply Buffer

- Went beyond the “Planning Buffer” introduced in the 2004 IRP Update
- Called for development of WUE and Local Projects to mitigate shorter term risk
- Shorter-term uncertainties include
  - Loss or reduction of existing supplies due to environmental or legal challenges
  - Fluctuations in demands due to economy

### Foundational Actions

- Low regret planning and mitigation actions that present a minimal cost and risk
- Projects can be implemented more quickly when needed to help adapt to long-term change
- New supply options to help manage longer-term uncertainties
  - Permanent losses of existing and planned supplies
  - Changes in water treatment regulations
  - Changes in growth and development patterns
  - Climate Change

## 2010 IRP Update Targets

### Water Use Efficiency

- Achieve a 20% reduction in GPCD as a region by 2020

### Local Resources

- Develop ~100 TAF through incentives and partnerships

### SWP

- Seek short, mid, and long-term Delta improvements

### CRA

- Develop Dry-Year supply programs to fill the aqueduct when needed

#### Water Use Efficiency

Conservation and recycling to achieve a 20% reduction at the regional level  
Commitment is above and beyond 20x2020 legislation

#### Local Resources

Sought to develop just over 100 TAF of additional local supplies through groundwater recovery, seawater desalination, and recycling

#### State Water Project

Pursue short, mid, and long-term improvements to help stabilize delta supplies

Short-term examples: emergency preparedness actions, Complete BDCDP

Mid-term examples: Implement BDCP, implement flood control protection

Long-term examples: Water supply conveyance, ecosystem restoration

#### Colorado River

Continue to develop dry-year supply programs on the Colorado River System

Provide flexibility in conjunction with Lake Mead ICS to provide a full CRA as needed



## Key Drivers for Updating the IRP

- Incorporate changed conditions impacting supplies and demands
- Respond to new challenges
- Refine long-term storage management strategy
- Overcome barriers to implementation

**Drivers**

## Proposed IRP Update Process

- The IRP Update would be split into a two-part process
- Technical update
  - Metropolitan staff and member agencies
- Resource policy issues discussion
  - Board process
- Both efforts will have extensive interaction with the Board through an IRP Subcommittee

Staff is proposing that IRP Update be completed in a two phase process

The first phase will be a Technical Update of the IRP

- This effort would largely involve metropolitan staff and member agencies
- I will show you a proposed schedule at the end of the presentation

The second phase of the update would begin following completion of the Technical Update

- This effort would largely be a board process to discuss policy issues
- And would be fed by discussions raised in the technical process

Both phases will have extensive interaction through the IRP subcommittee

- ???

## IRP Technical Update Goals

- Review and update IRP resource targets
- Assess strategy for managing short and long term uncertainty
  - Supply Buffer
  - Foundational Actions
- Work with the IRP Subcommittee to effectively communicate technical findings and identify policy needs

So let's focus in more detail on the Technical Update portion of the IRP Update

Our goals for the IRP Technical Update process include:

- Completing a full review and update of all of the resource targets from the 2010 IRP Update
- Working with the IRP subcommittee to identify policy issues to feed the subsequent board process

## IRP Technical Update Topics

- Retail Demands
- Water Use Efficiency
- Local Supplies
- Foundational Actions
- Imported Supplies
- Long-term Uncertainty

Next I will go into a little bit more detail on each of these items as to what the Technical Update will look like

## Retail Demand Highlights

- Underpinning of other IRP targets
- Update factors and relationships that drive water demand
- Incorporate new regional demographic forecasts

### Demands

- While not a target in their own right underlie all other assumptions...
- Before we start making decisions about supplies, we need to have a picture of how much water the region will in the future
- **Census impacts history and forecast of population, households, income etc.**
- **Update to latest forecasts produced by regional transportation planning agencies**

## Water Use Efficiency Highlights

- Conservation and recycling
- Update modeled conservation savings
- Evaluate status of existing and under construction recycling projects
- Review of progress towards regional target
- Identify potential beyond 20x2020

### Water Use Efficiency

#### Conservation and Recycling

Review and update conservation device savings factors

## Local Supply Highlights

- Groundwater, recovery, recycling, surface production, transfer & exchange supplies, LAA, and seawater desalination
- Evaluate status of existing and under construction projects
- Determine progress toward target for new local development

Why existing and under construction?

## Foundational Actions Highlights

- Review Foundational Actions Funding Program
- Review advances in stormwater, seawater desalination, and recycling
- Discuss barriers and resource areas requiring further development



## Imported Supply Highlights

- Review status of delta improvements and interim operations
- Review status of CRA dry-year programs
- Update forecasts to reflect most recent modeling from DWR and USBR

## Long-term Uncertainty Highlights

- Receive an update on current status of climate science
- Receive expert review of adaptive management approach developed in support of 2010 IRP
- Discuss new challenges and uncertainties

# IRP Technical Update Proposed Schedule



- 1 – Now:
- 2 – Technical review and update:
- 3 – Member agency technical process: interaction
- 4 – Establish IRP subcommittee:
- 5 – Updates to IRP subcommittee: interaction
- 6 – Analysis:
- 7 – Consider adoption:

This time line feeds

Policy process would follow based on interactions with IRP subcommittee

RUWMP process

