

# Central Iowa Regional Water Workgroup



## Workshop #7

Options Analysis Part 2

December 6, 2017



# Where did we leave off on Tuesday?

- ◆ **Continued support for Existing and Future Capacity Option**
  - Expanded DMWW Board has less support

## BEFORE

## AFTER

1st

Option 1: Existing & Future Capacity

Option 1: Existing & Future Capacity

2nd

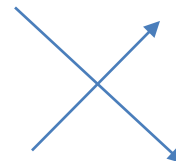
Option 3: Expanded Board

Option 2: Future Capacity Only

3rd

Option 2: Future Capacity Only

Option 3: Expanded Board



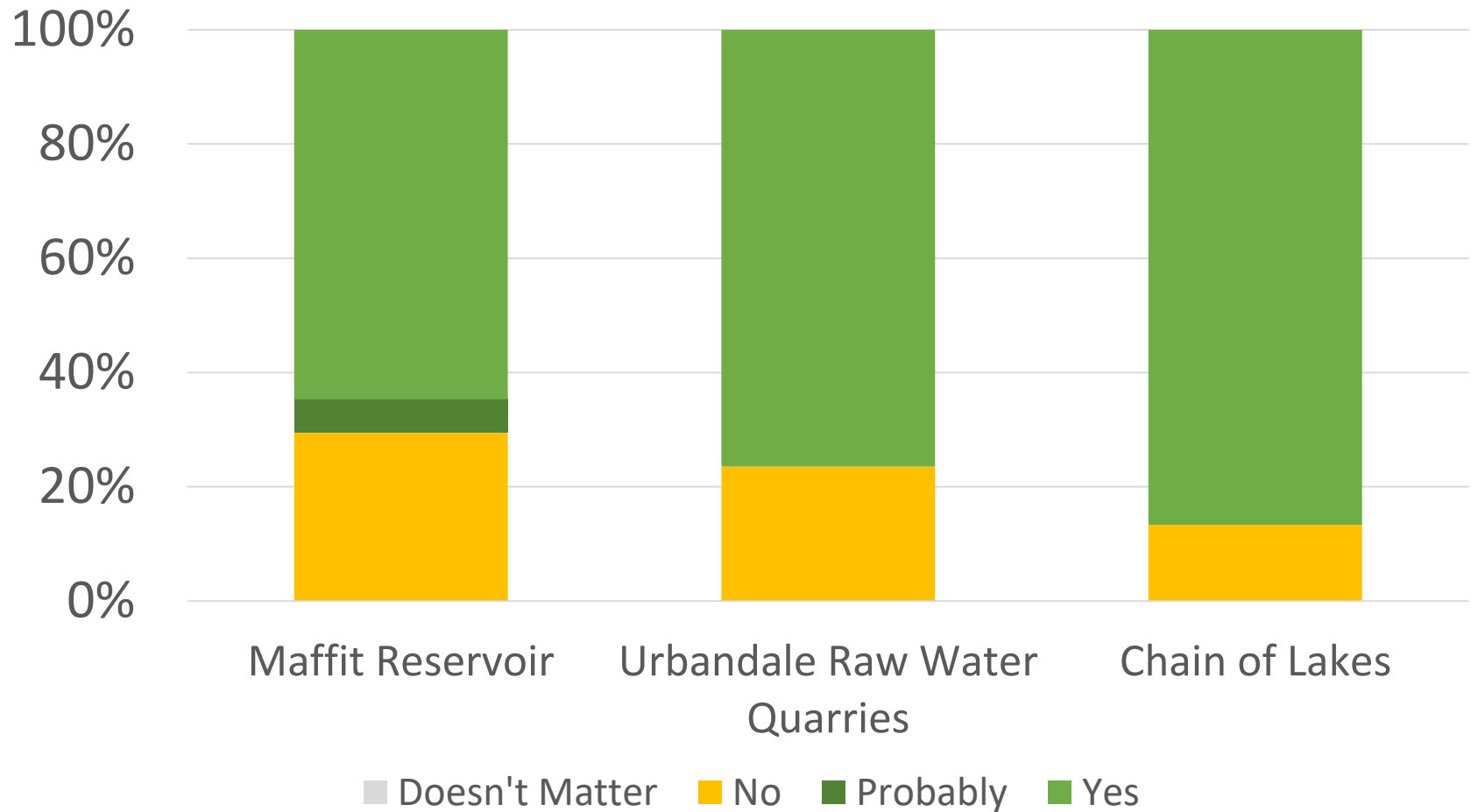


# Where did we leave off on Tuesday?

- ◆ **Existing and Future Capacity – Used and Useful Assets**
  - We do not have consensus on all assets
  - But there is a strong indication that people are willing to consider adding all assets

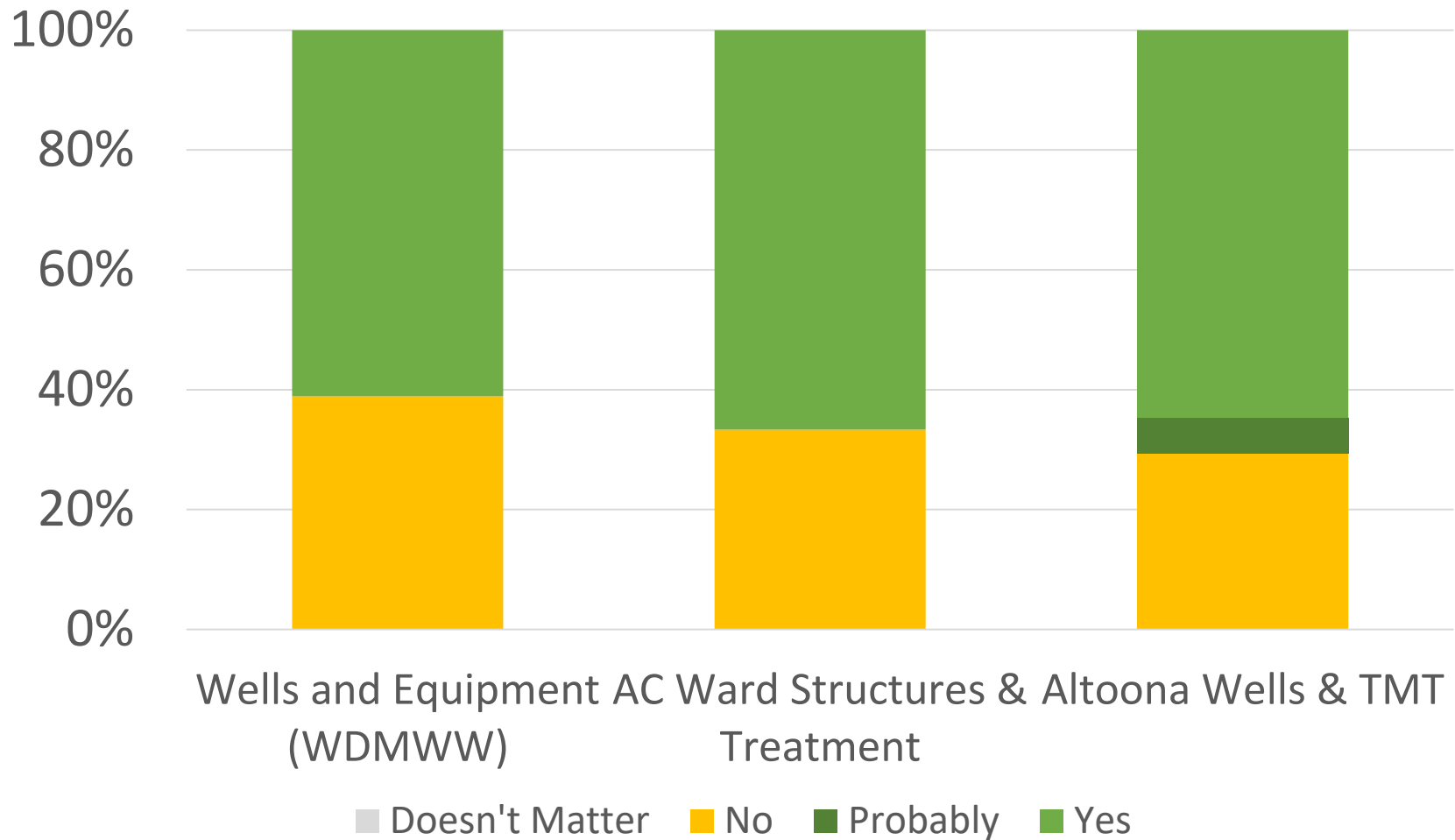


## Poll Results: Source of Supply Assets



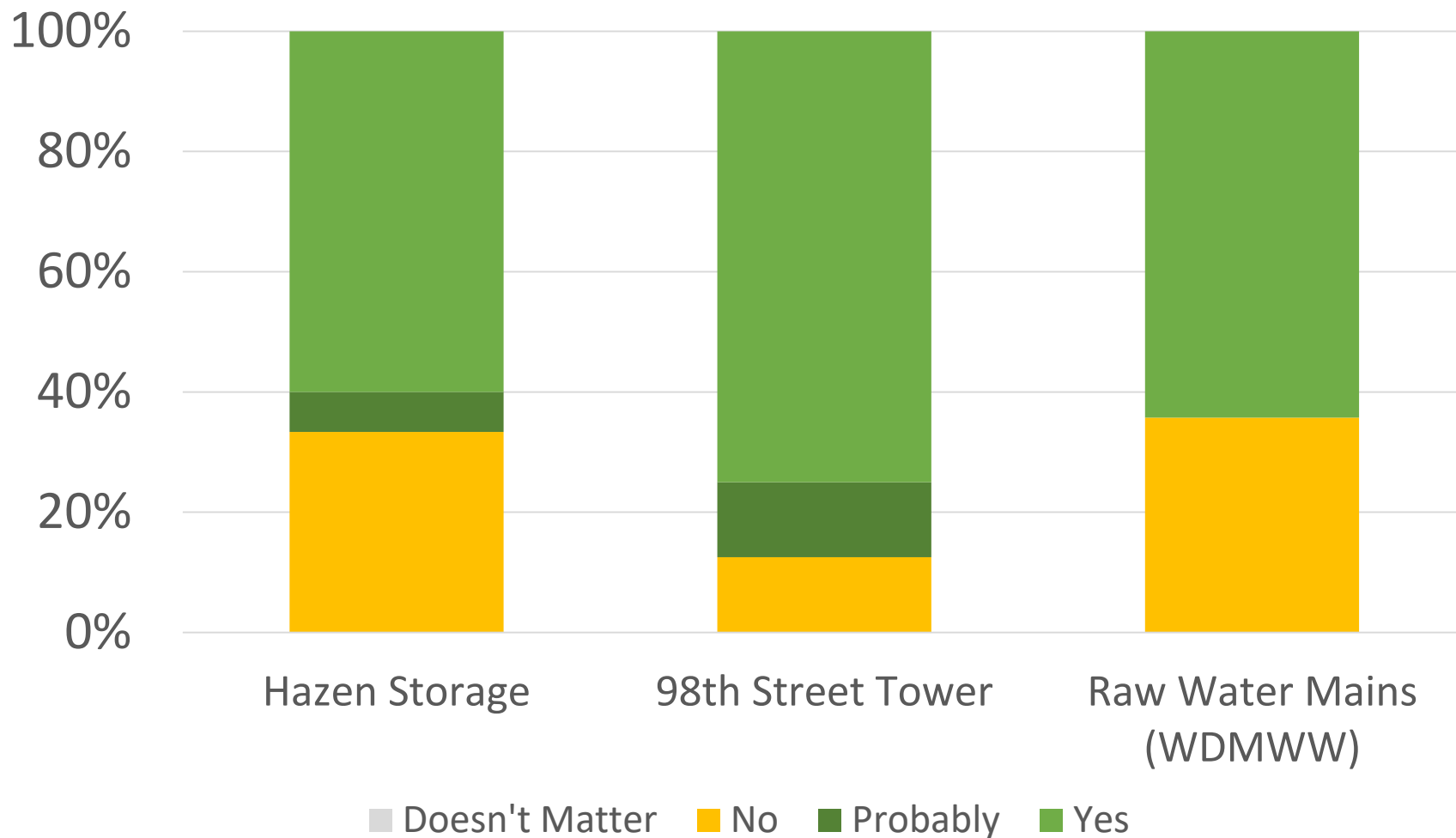


## Poll Results: Wells & Treatment





## Poll Results: Storage, Transmission & Meters





# **Agenda for Today**

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- ◆ **Present “Existing and Future Capacity” Deal Option**
- ◆ **Discuss Board Composition**
- ◆ **Discuss Agenda Items for Next Week**



# A Brief Review

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- ◆ **We have reviewed three potential models for creating a regional entity**
  - Existing and Future Capacity
  - Future Capacity Only
  - Expanded DMWW Board
  
- ◆ **Existing and Future Capacity option continues to have the most support**
  - But there are significant challenges to overcome still
  - Particularly, questions remain over asset transfer, payments for reserve capacity, and board representation
  
- ◆ **We will present an option for Existing and Future Capacity today**





# **Five Components of a Deal**

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- ◆ **Asset Inclusion**
- ◆ **Governance and Representation (Board Composition)**
- ◆ **Measuring and Paying for Reserve Capacity**
- ◆ **Handling of Operations**
- ◆ **Timeframe for implementation and Rates**



# **“All – In” Concept**

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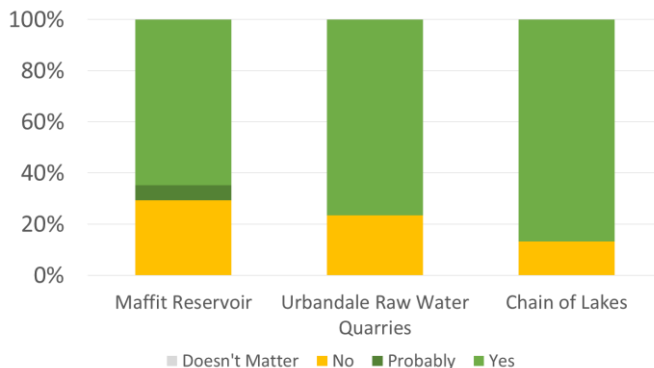
<b>Component</b>	<b>High Level Summary</b>
<b>Asset Inclusion</b>	<i>All regional production assets are included</i>
<b>Governance and Representation</b>	We have 3 alternatives to examine later in the workshop
<b>Measuring and Paying for Reserve Capacity</b>	Verifiable max-day demand compared to verifiable owned and purchased capacity at uniform value \$/MGD
<b>Handling of Operations</b>	Initial operating agreements with existing producers.
<b>Implementation &amp; Rates</b>	All aspects implemented immediately, except for payment to members for reserve capacity (later).

# **Step by step walk through of “All-In” Model**



# Asset Inclusion

- ◆ **All assets considered at the previous workshop are included**
  - With appropriate consideration for split between production and distribution pieces where applicable
  - But, this means *all production assets*



*Opinion from our last workshop seems to suggest there is more support for “all-in” than not*



# Board and Governance

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- ◆ **Regional, independent, board of directors**
  - Separate from all other boards
  
- ◆ **Governance includes:**
  - All water production decisions
    - Approval and payment of O&M costs
    - Determination and financing of capital projects
    - Determining wholesale rates (for water production)
    - Personnel decisions
  - *Does not* include
    - Local board / council decisions on water distribution and local rate setting
  
- ◆ **Board configuration alternatives to be discussed later in this workshop**



# Measuring Reserve Capacity

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## ♦ Calculating Reserve Capacity:

Total Purchased Capacity  
+ Owned Capacity

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Total Capacity

(Less) Max-Day Demand

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Reserve Capacity

- Reserve value < 0 means there is no reserve for that member
- Capacity values from operational capacity levels
- Max-day demand from verified data



# Challenges to Max-Day Measurements

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## ◆ **Concerns**

- Choosing from any given year could overstate or understate
- Resulting in misleading indication of reserve capacity

## ◆ **Suggestion:**

- Use a weighted average of past 5-10 years; latest year has highest weight
- Balances
  - Increasing demand levels from growth
  - Water-use efficiencies
  - Off-year results



# **Payment for Reserve Capacity**

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- ◆ **Regional entity compensates members with reserve capacity**
  - \$ / MGD to be determined
  - Lower \$ / MGD cost will mean a lower uniform wholesale rate
- ◆ **Compensation can take form of cash payment or future rate considerations**
- ◆ **Suggestion: delay the payment for reserve to a later date. Why?**
  - Allow the regional entity to get established
  - Gain credit worthiness so it can finance the payments with bonds
  - Pay all members with reserves at one time on financing





# Operations

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- ◆ **Initially contracts operations of existing production facilities with existing producers**
  - E.g. Fleur, Saylorville, McMullin and Transmission network contracted to DMWW
  - AC Ward contracted to WDMWW
  - Altoona production to City of Altoona
  - Etc...



## **Timeframe and Rates**

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- ◆ **All aspects of the structure would be implemented immediately EXCEPT for suggested delay for compensation of existing reserve capacity**
  
- ◆ **Wholesale rate will be implemented immediately**
  - Will help establish financial capacity for regional entity
  - Allows the regional entity itself to finance the payments (and other CIP)
  - Allows time to execute the implementation plan well



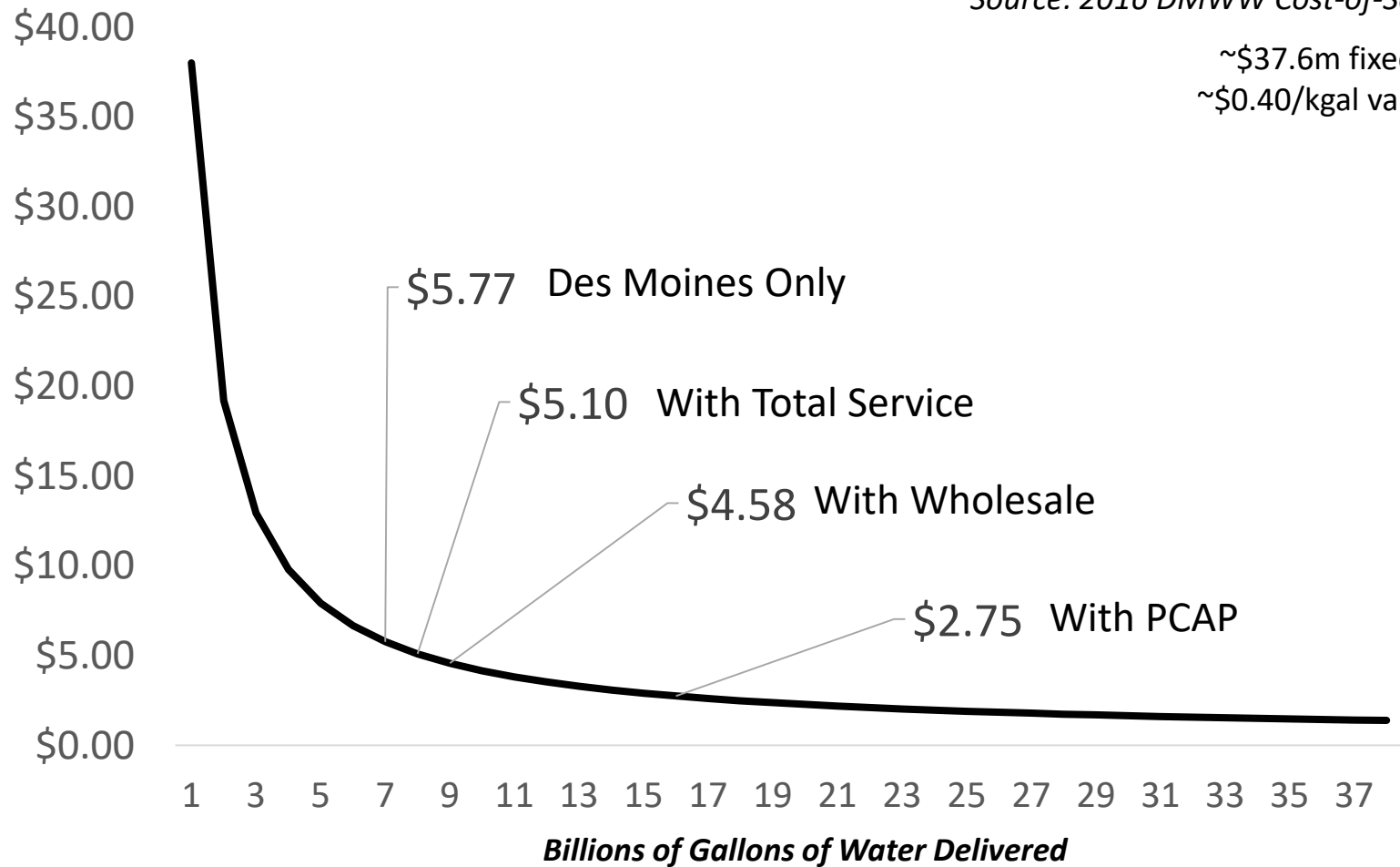
# Total System Average Cost per Unit

Based on total "Shared System Costs" for 2016

Source: 2016 DMWW Cost-of-Service

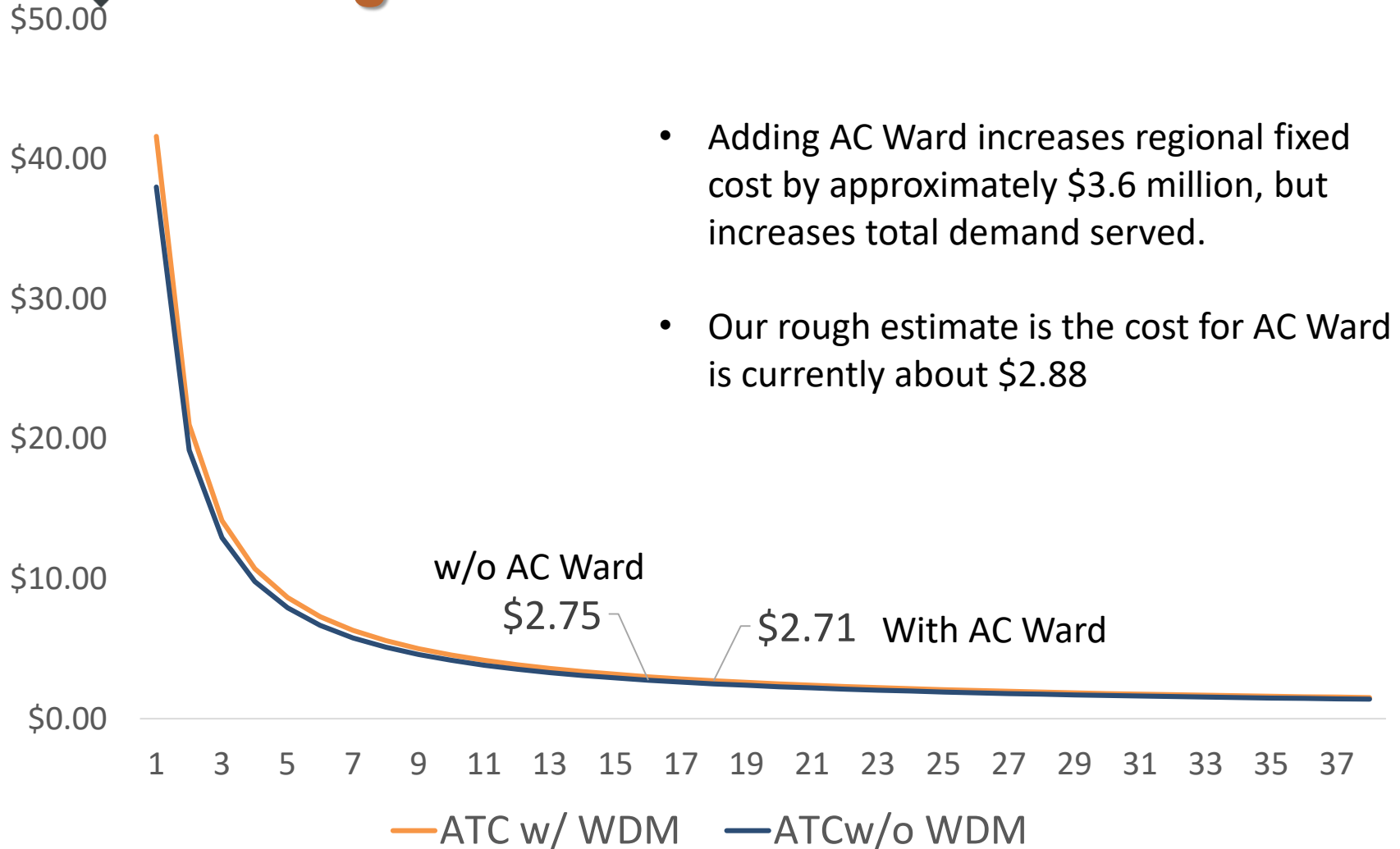
~\$37.6m fixed cost

~\$0.40/kgal var. cost





# Average Cost w/ AC Ward





# Region will Need more Capacity

## Production Facility Requirements

<i>Description</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>	<i>2035</i>	<i>2040</i>
Total Maximum Day Demand	116.0	134.8	146.7	160.2	175.0	189.1
Production Buffer	10.0	10.0	10.0	10.0	10.0	10.0
Production of Connected Wholesale Customers	16.7	17.8	17.8	17.8	18.2	19.0
ASR Production Capacity (Firm)	4.1 to 7.1	13.1 to 16.1	15.7 to 18.7	15.7 to 18.7	18.5 to 21.5	21.5 to 24.5
DMWW Production Capacity Required	102.2 to 105.2	110.9 to 113.9	119.7 to 122.7	133.2 to 136.2	144.8 to 147.8	155.6 to 158.6
Existing DMWW Production Capacity	110.0	110.0	110.0	110.0	110.0	110.0
<b>Additional DMWW Production Capacity Required</b>	<b>0.0</b>	<b>0.9 to 3.9</b>	<b>10.2 to 13.2</b>	<b>23.7 to 26.7</b>	<b>35.3 to 38.3</b>	<b>45.6 to 48.6</b>

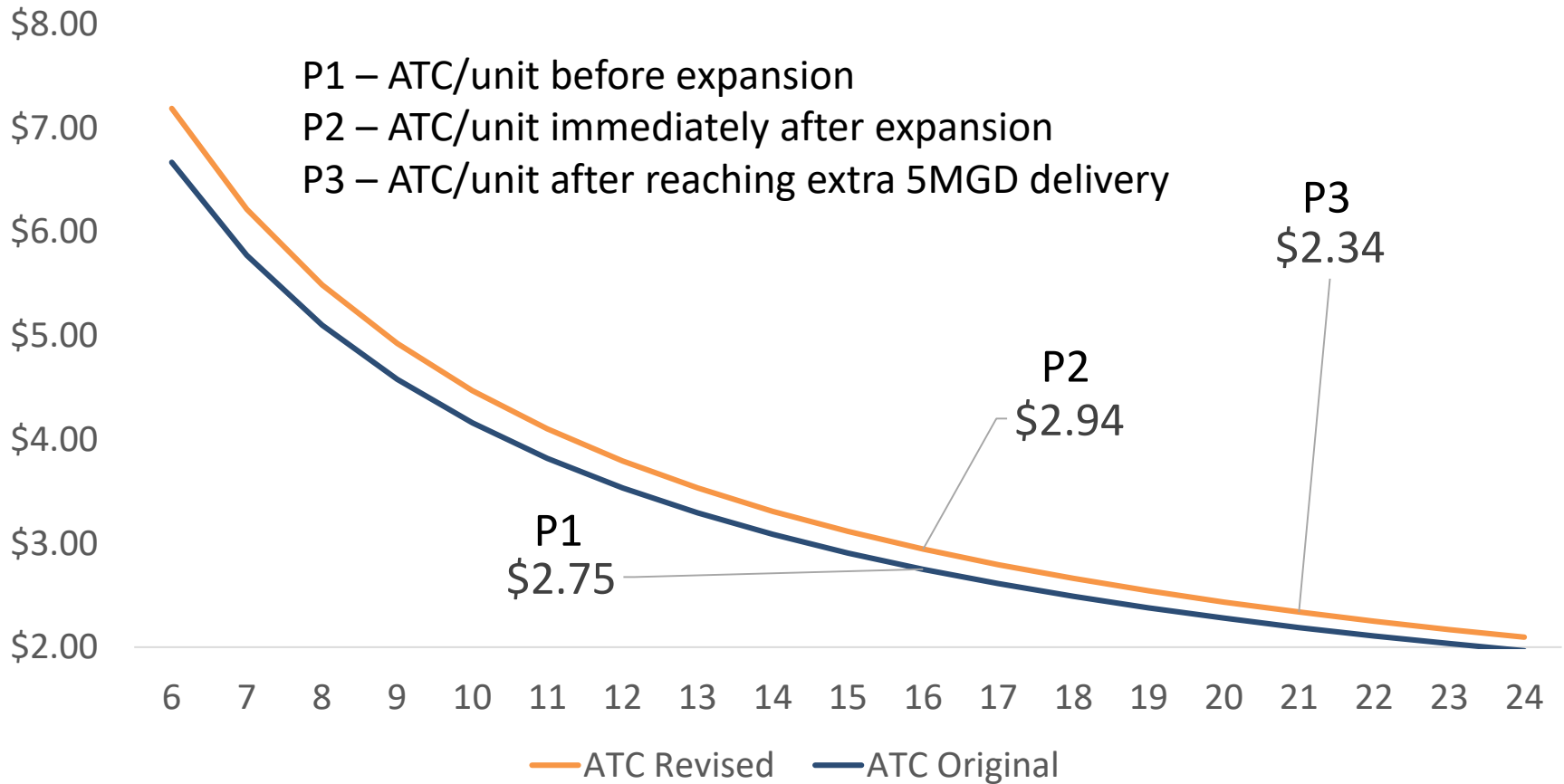
*Source: Long-range plan*

47.5 mgd



# New Average Cost with Expansion

*Assume we added 10MGD at \$40 million to deliver an addition 5MGD in average-day demand.*





Do you like this idea in general?



Yes

No



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Which element of the option do you like the least?



Asset Inclusion

Governance and  
Representation


Measuring and Paying  
for Reserve Capacity

Handling of  
Operations

Implementation &  
Rates

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# What, if anything, have we missed?



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# **Board Configuration Options**



## **Some important considerations...**

- ◆ **Should balance representation across the array of regional interests**
  - Need to protect and honor minority interests
  
- ◆ **Board size**
  - Should provide for representation of smaller communities without making a board “too large”
  
- ◆ **Different basis can determine representation**
  - Population, Demand, etc.



# Some ideas

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## ◆ Local Example #1: WRA

- One member per entity
- Additional weighting per 25,000 of population for any vote if desired
  - Seat or weighted vote

## ◆ Local Example #2: DART

- One member per entity
- 3 types of decisions have weighted votes per population
  - Changing rules and regulations
  - Changing service area
  - Changing Budget



## **Some other ideas: Alt #3**

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- ◆ **Size:**
  - Fixed number of members (possibly up to 11)
  
- ◆ **Representation and Voting:**
  - Some communities have a specific number of seats based on criteria
  - Some members would be pooled together in to one seat
  - Instead of weighting, use supermajority requirement for key decisions
  
- ◆ **Possible basis for seat allocation:**
  - Population
  - Maximum Daily Demand
  - Average Day Demand
  - Purchased and Contributed Capacity
  - Some variation of all of the above

## **Discussion and Lingerin Questions**



# How do you feel about the presented option?



5 -Very  
Comfortable

4- Somewhat  
Comfortable



3 - Neutral

2 - Somewhat  
Uncomfortable

1 -  
Uncomfortable

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**Remaining questions**



**Agenda items for next week**

