Central Iowa Regional Water Working Group

Regionalization Findings

October 2018

FCS GROUP
Solutions-Oriented Consulting

The Question

Can it Work?

There are $327 million reasons why it could

The Regional Opportunity

1. REDUCES TOTAL COSTS FOR THE REGION

2. REDUCES OPERATIONAL RISKS

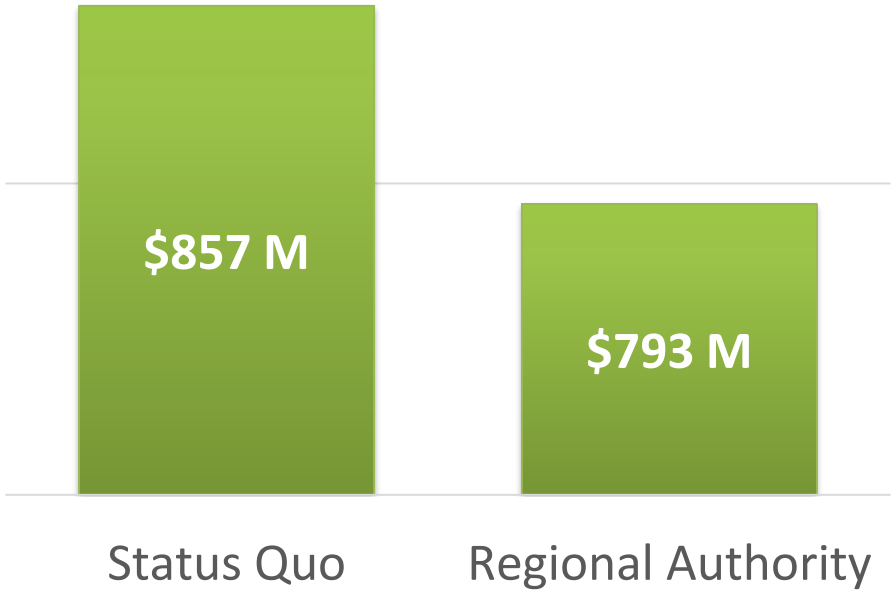
3. IMPROVES THE OWNERSHIP AND GOVERNANCE MODELS

4. PROVIDES NET ECONOMIC BENEFITS

Reduces Total Costs for Region

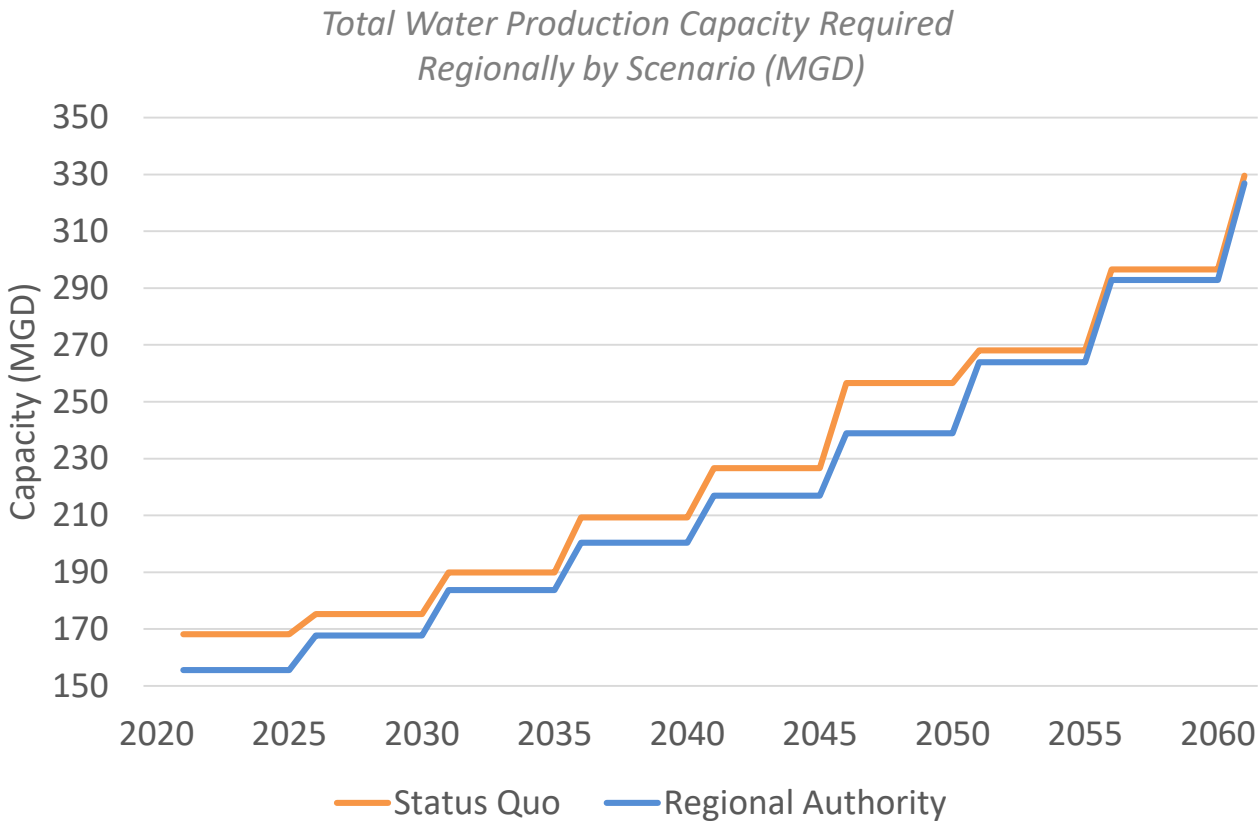
Reduced Capital Investment

Present Value of Dollars Invested in Water Production Capacity Regionally by Scenario ($ M)



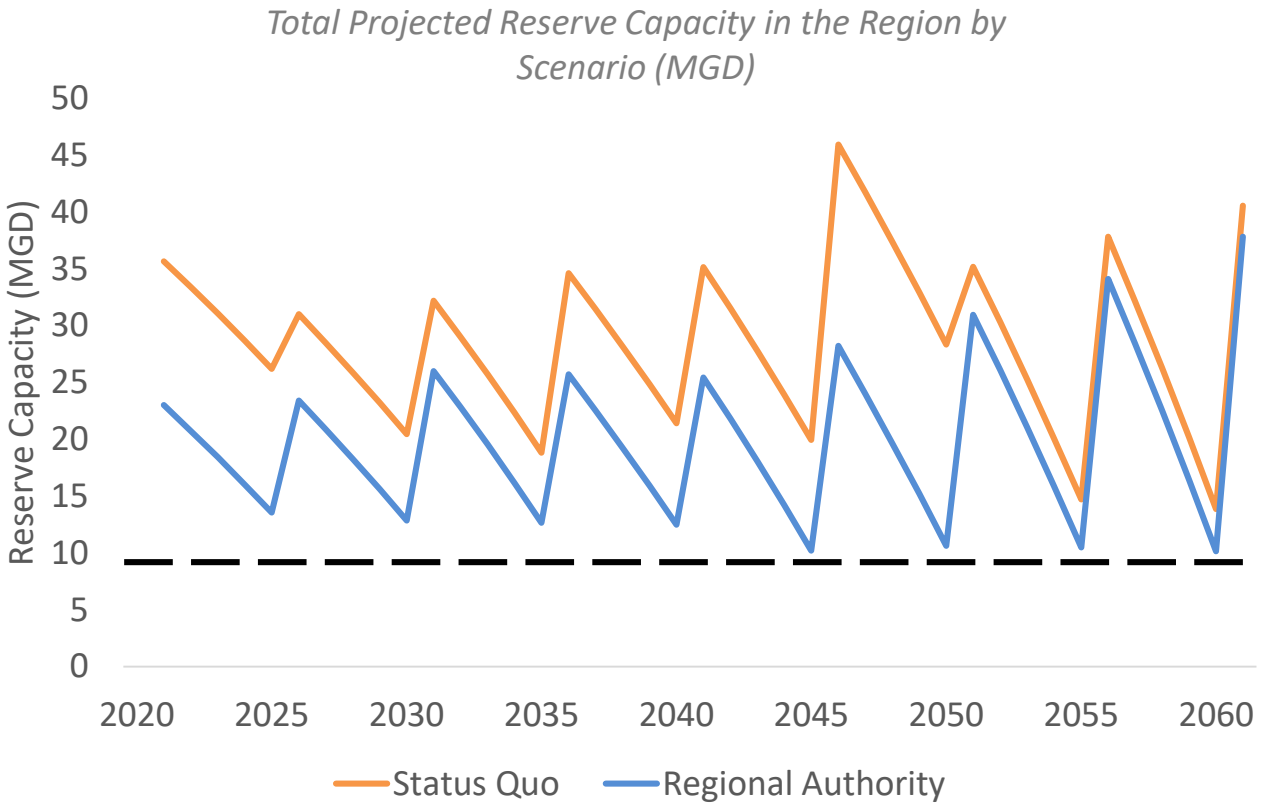
- $64M direct savings
- 4x 2nd-order effects
  - Less fixed O&M
  - Less annual capital cost

Reduces Construction



With coordination, the region can install less capacity at a more moderate pace, and spend less money in total.

Reduces Cost of Idle Capacity



The region spends less money supporting idle capacity resulting in higher utilization rates and lower average costs per unit.

Reduces Operational Risks

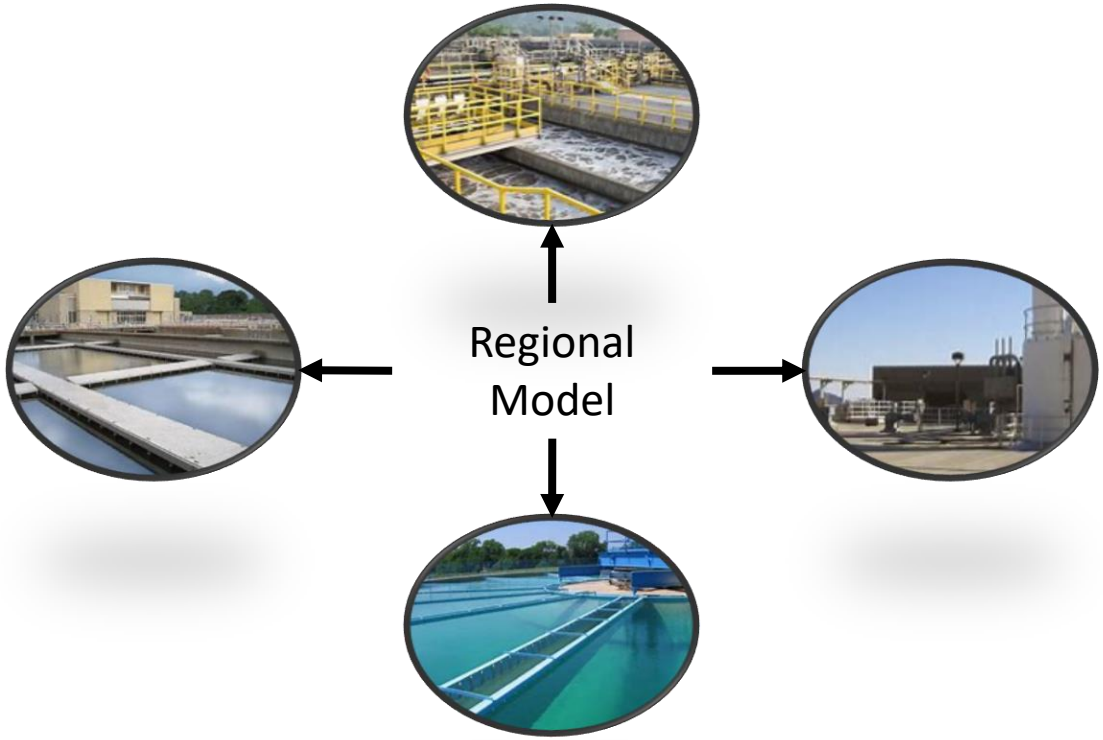
Redundancy Improves Reliability

One plant gives one layer of reliability

When it doesn't work, there is no water

Regional Model Provides Redundancy

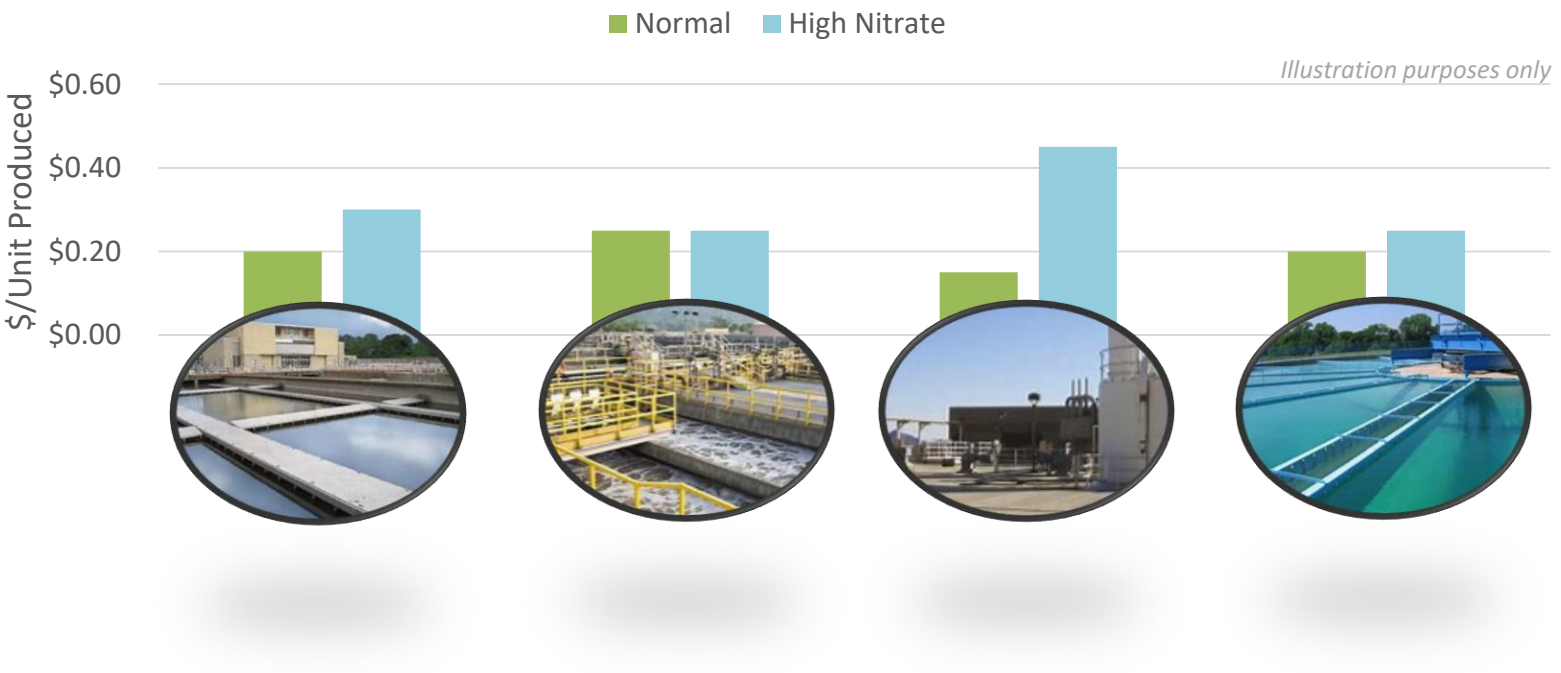
Multiple plants means multiple layers



The regional model provides multiple current and future supply sources shared by all its members

Increases Operational Flexibility

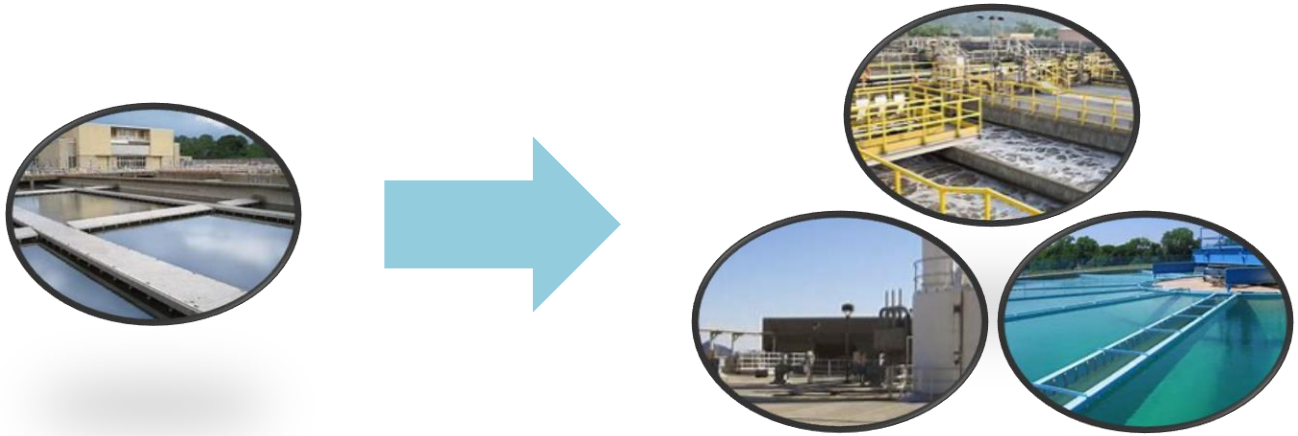
Multiple plants also leads to multiple options to produce at lowest cost



Operational flexibility means the region could change the mix of plants used to produce water cheaper depending on conditions

These are Invisible Benefits

These benefits are real but they won't show up in our analysis directly



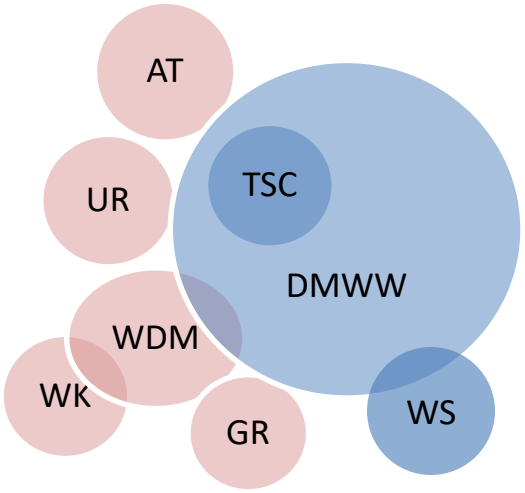
Under the status quo, several members avoid the costs of redundant production – leads to favoring status quo in our analysis

It's important to consider the unquantified benefits in addition to the quantified ones

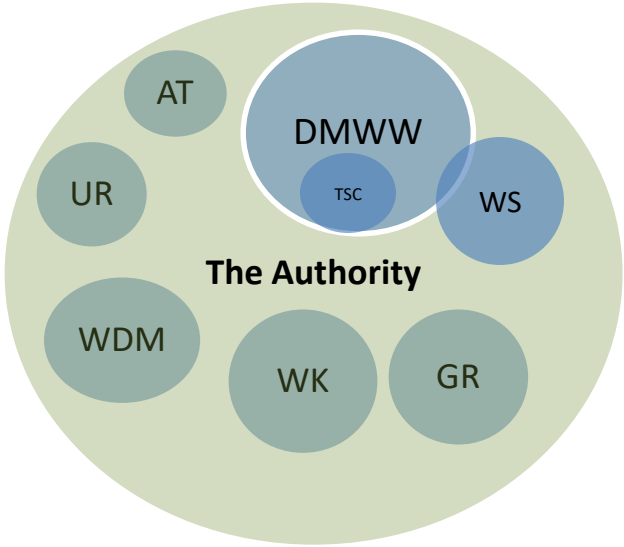
Improves Ownership & Governance Models

Inclusive Membership

STATUS QUO



REGIONAL AUTHORITY



The regional model provides shared ownership and shared governance over the crucial water production assets.

Shared Ownership and Responsibility

STATUS QUO

DMWW

Owns the assets and incurs all the costs

↓

Wholesale Customers

Pay for a portion of the costs based on DMWW allocation process

↓

Residual Costs

Whatever is not paid is absorbed by DMWW and its retail and total service customers.

REGIONAL MODEL

Regional Authority

Owns the assets and incurs all the costs

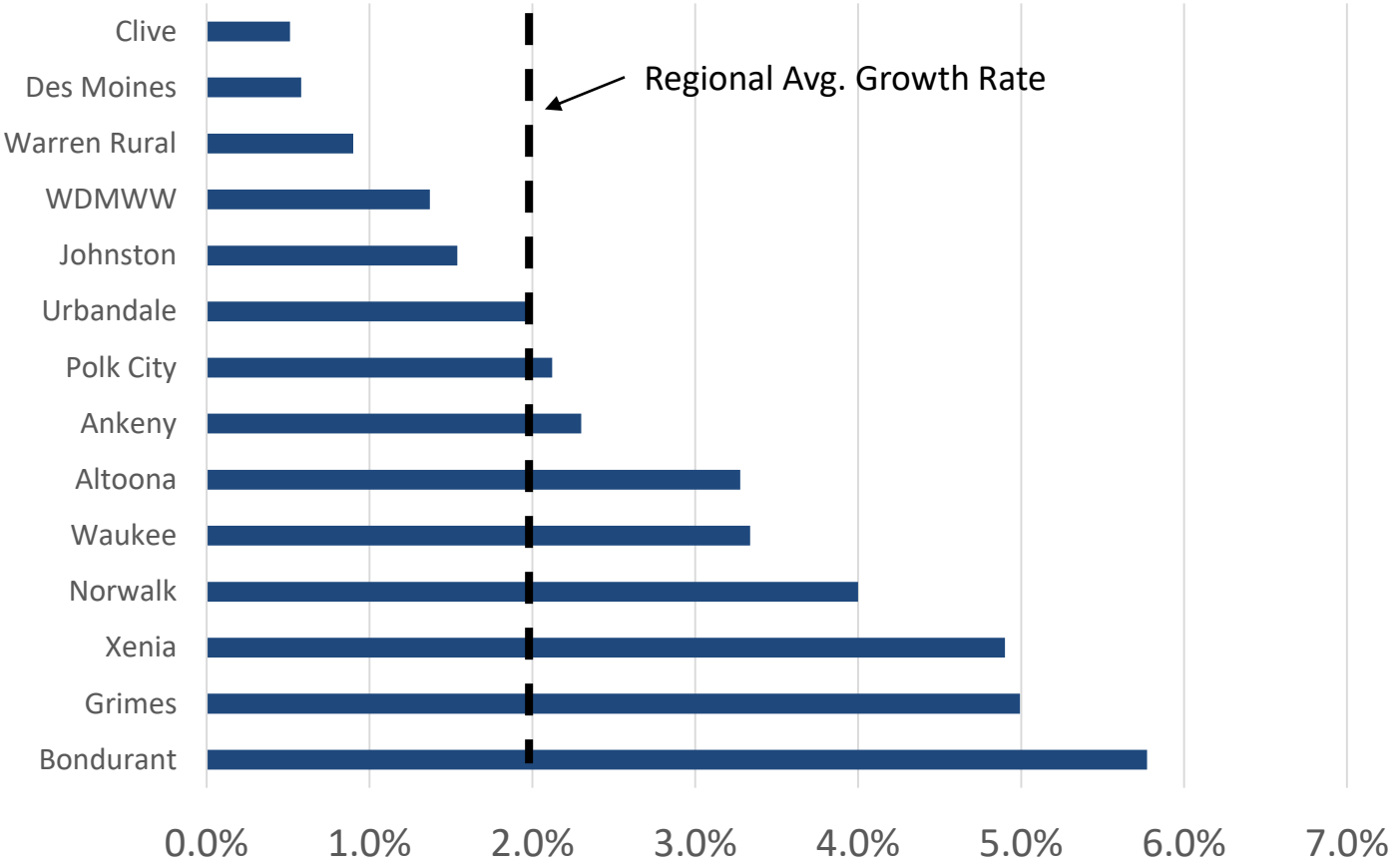
↓

Members

All costs are allocated to members based on Authority's cost allocation processes.

Changing the ownership model shifts responsibility for production costs from a single owner (DMWW) to multiple ones

Growth is a Factor



In the regional model, those with higher growth rates are allocated more of the growth-related costs

Produces Net Economic Benefits

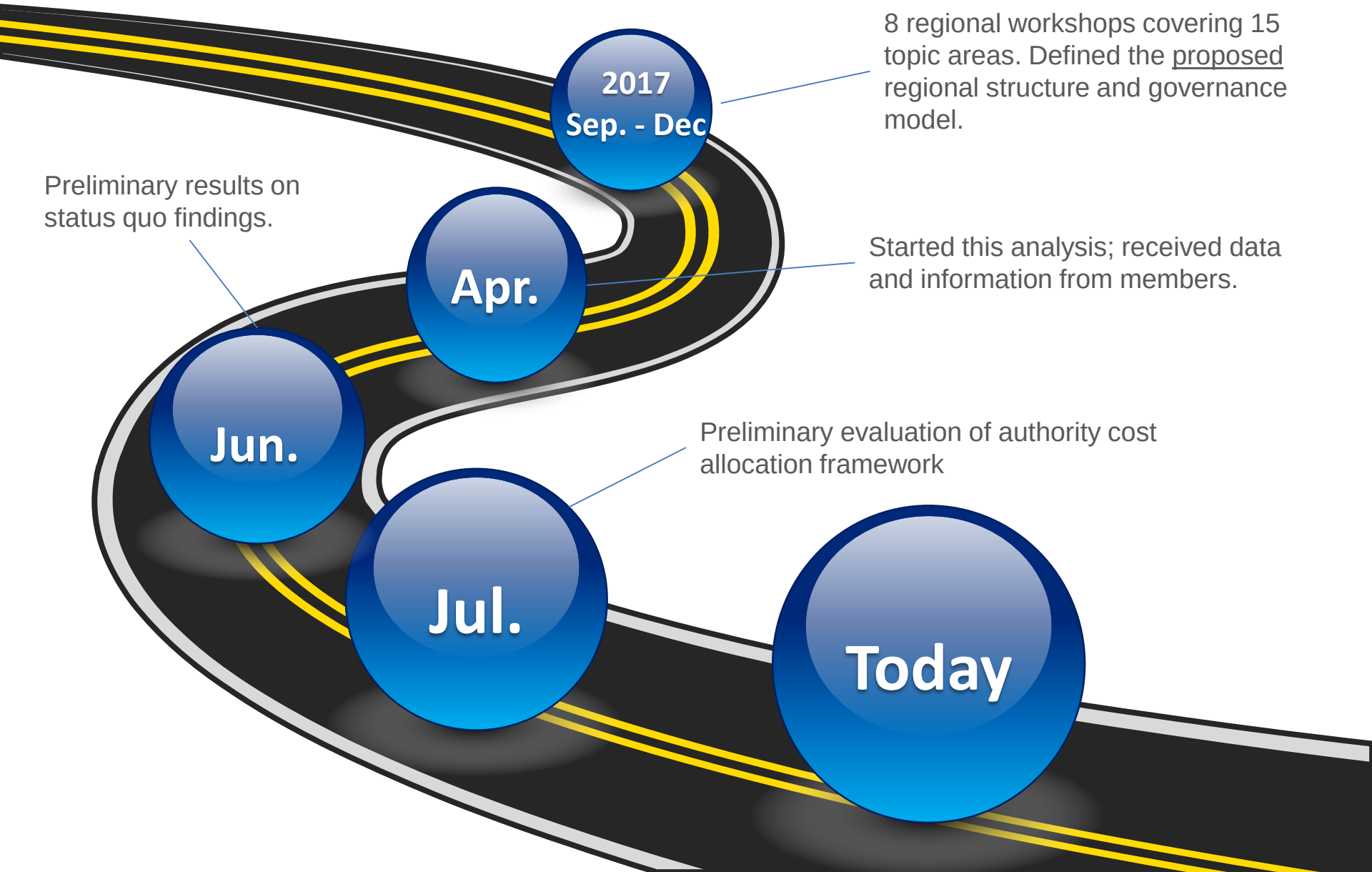
Big-Picture Benefits

BIG PICTURE

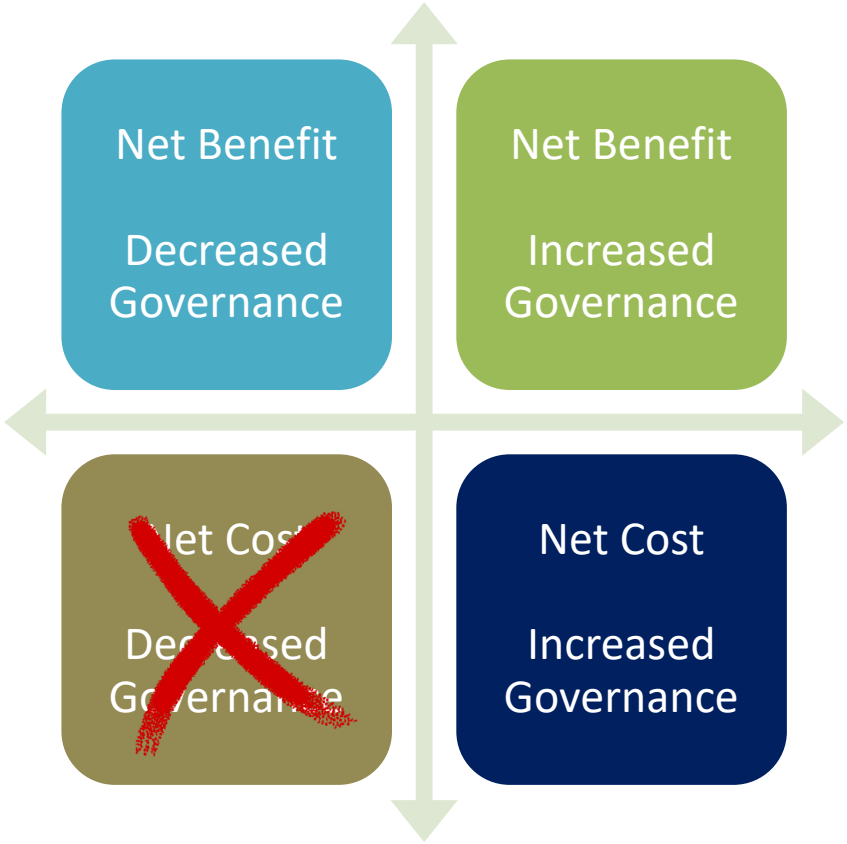
NET BENEFITS EXCEED NET COSTS REGIONALLY BY $327 MILLION

- $544M in benefits
- ($217M) in costs
- $327M in net benefits

How We Got Here



Benefits are Unevenly Distributed



- Increased/Decreased Governance

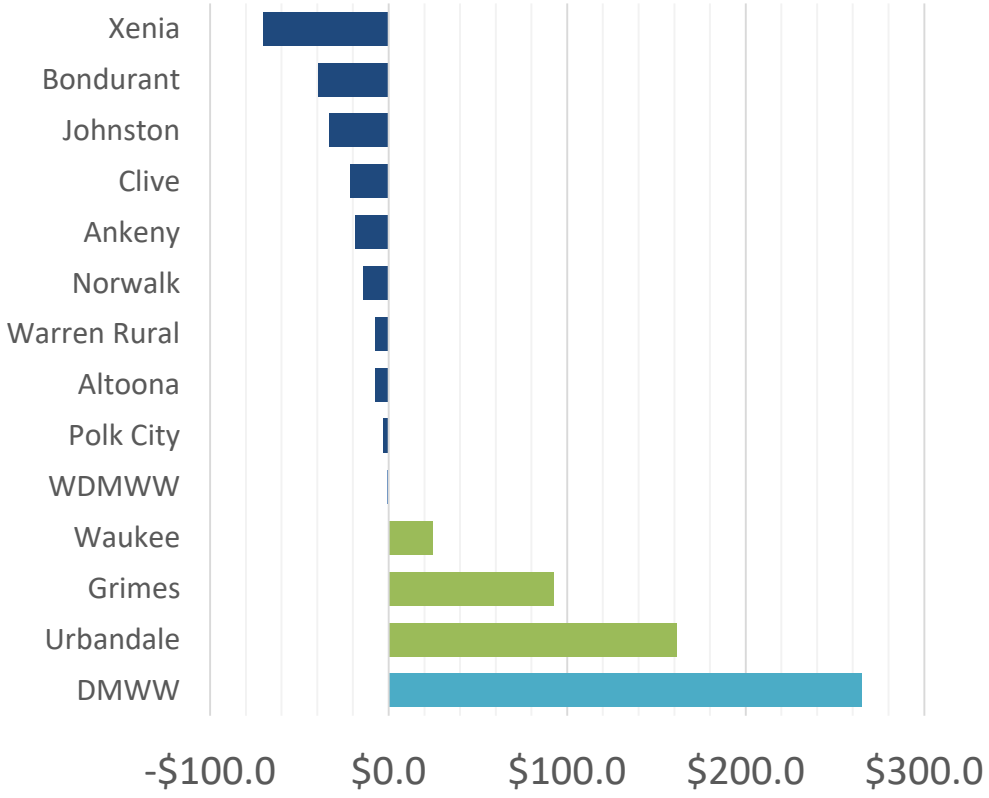
  With respect to the governance of the crucial regional infrastructure and decisions.

- Net Benefit / Cost

  As compared to each member's status quo scenario.

Costs and Benefits Mixed

Net Present Value Benefits and Costs by Regional Member ($M 2020)



- Mixed results were <u>expected</u>
- Each member starts from a different point
- Each member has different future circumstances
- Changes in regional structure produce different outcomes

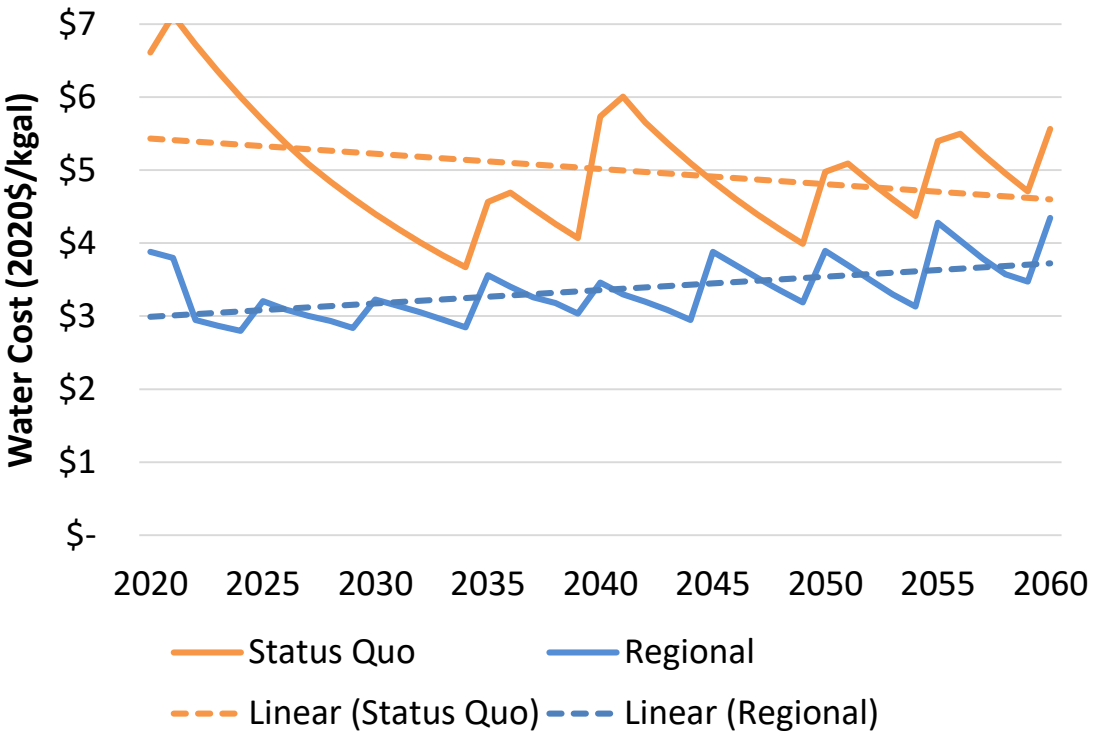
Increased Governance at Net Benefit

THE MEMBERS	BIGGEST REASONS WHY
Grimes	▪ Benefit from improved scale and cheaper production input costs
Urbandale	▪ The regional model is just less expensive overall
Waukee	

Grimes

$92.6M

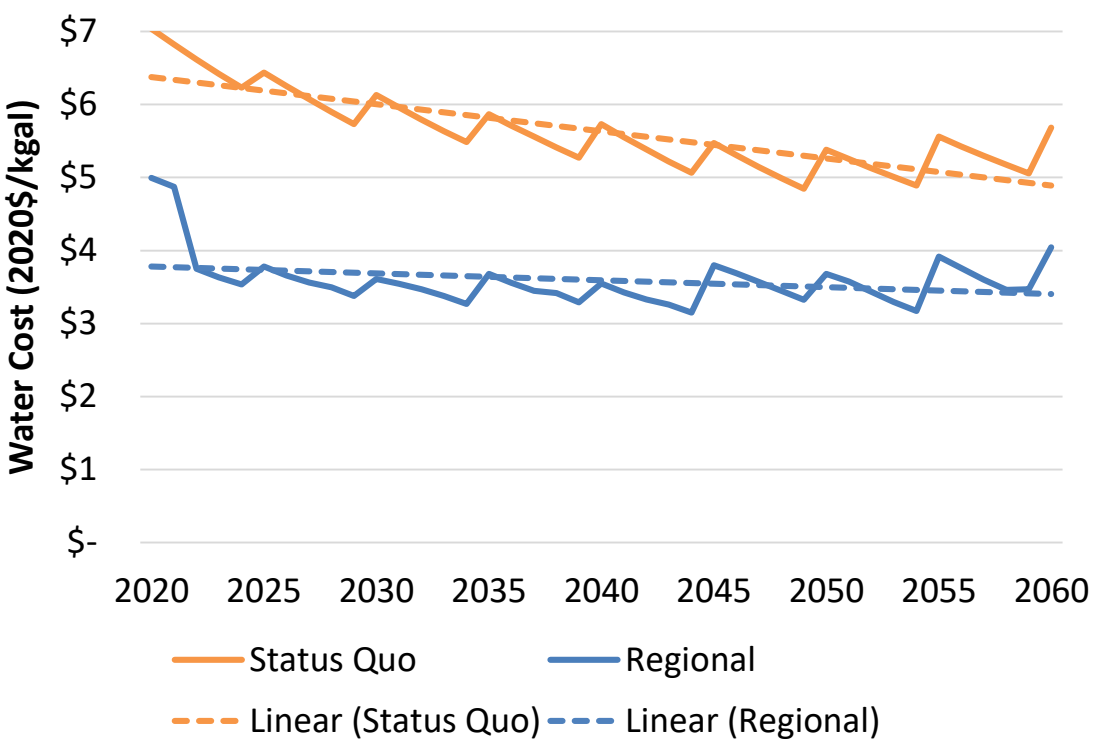
- Cost of producing is much cheaper with regional model
- Region provides much greater economies of scale for Grimes
- Grimes' fast growth is cheaper under regional model



Urbandale

$161.2M

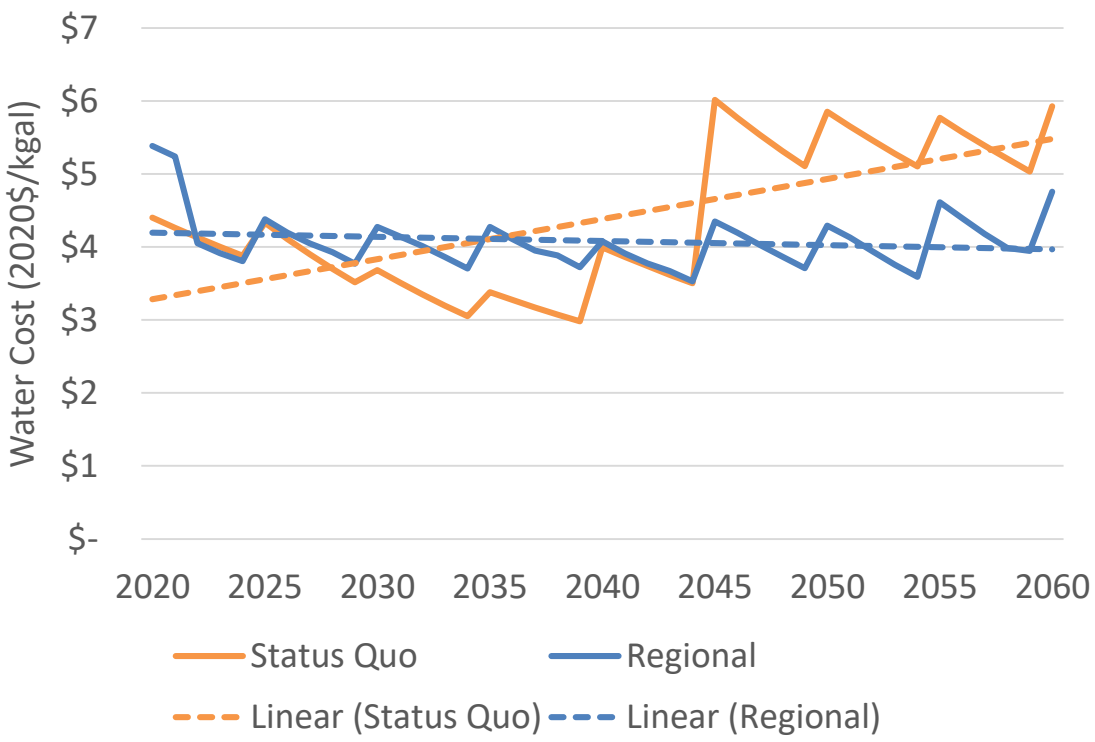
- Status quo assumes construction of own facilities at higher cost
- Use their own facility instead of purchased capacity



Waukee

$24.7M

- Short term cost from regionalization due to cheaper joint facility with WDMWW.
- Long-term cost savings from regionalization due to lower levels of unused capacity.



Increased Governance at Net Cost

THE MEMBERS
WDMWW
Polk City
Altoona
Warren Rural
Ankeny
Norwalk
Clive
Johnston
Bondurant
Xenia

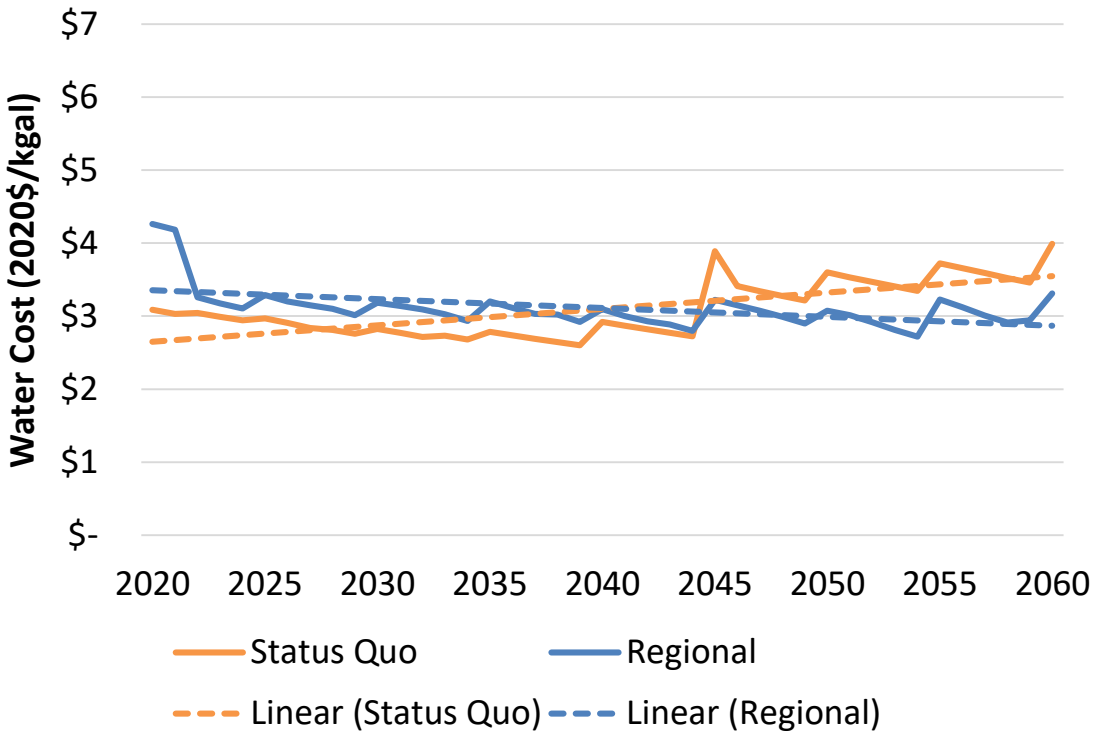
BIGGEST REASONS WHY

- Change to ownership model shifts more ownership costs to these members
- Those communities growing fastest see largest shift, due to regional allocation
- Communities with high peak demand see large shift as well
- Those who made past contributions see lower impacts
- The “invisible” benefits should be a consideration for these members

West Des Moines Water Works

($1.0)M

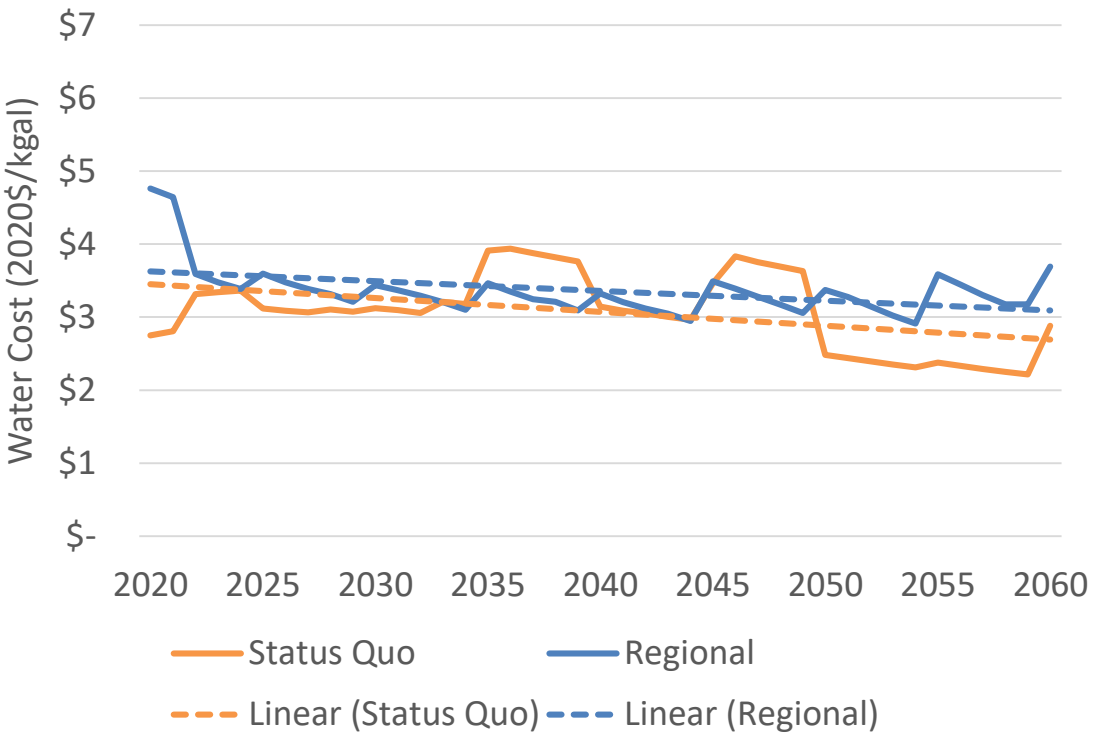
- Status quo costs less due to joint plant with Waukee and AC Ward
- Added capacity in later periods leads to underutilized capacity, higher avg. costs



Polk City

($3.1)M

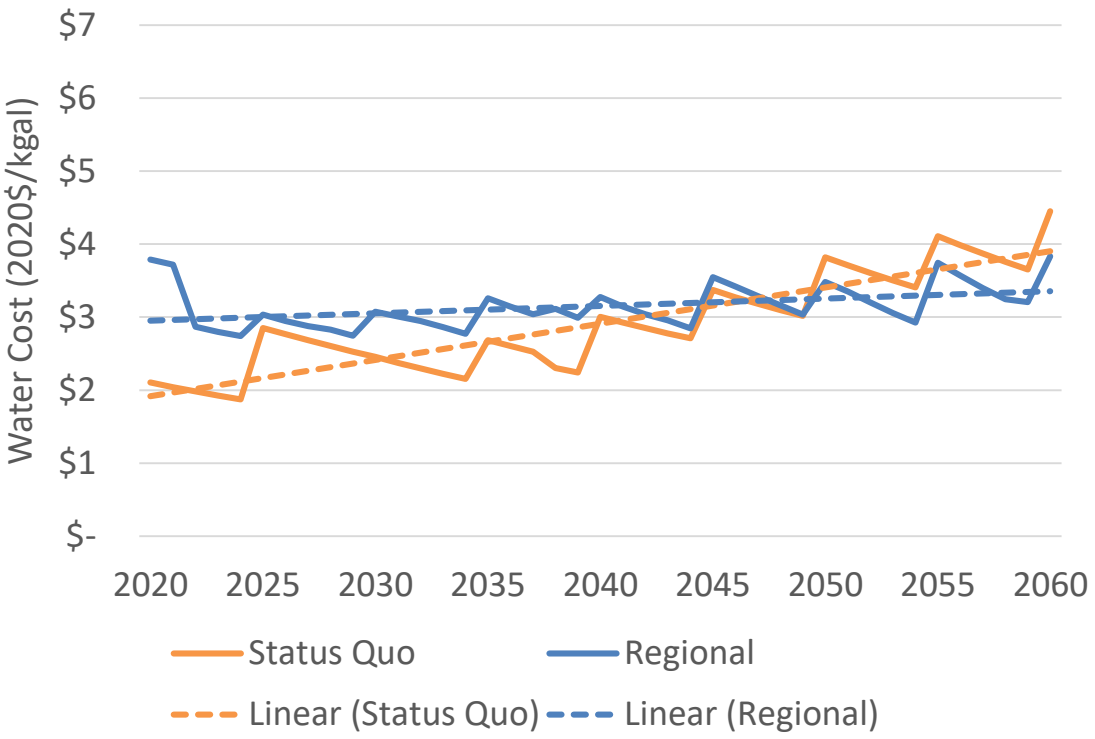
- Regional and status quo are about the same
- In later periods, there is a built-in benefit due to capacity timing issues



Altoona

($7.3)M

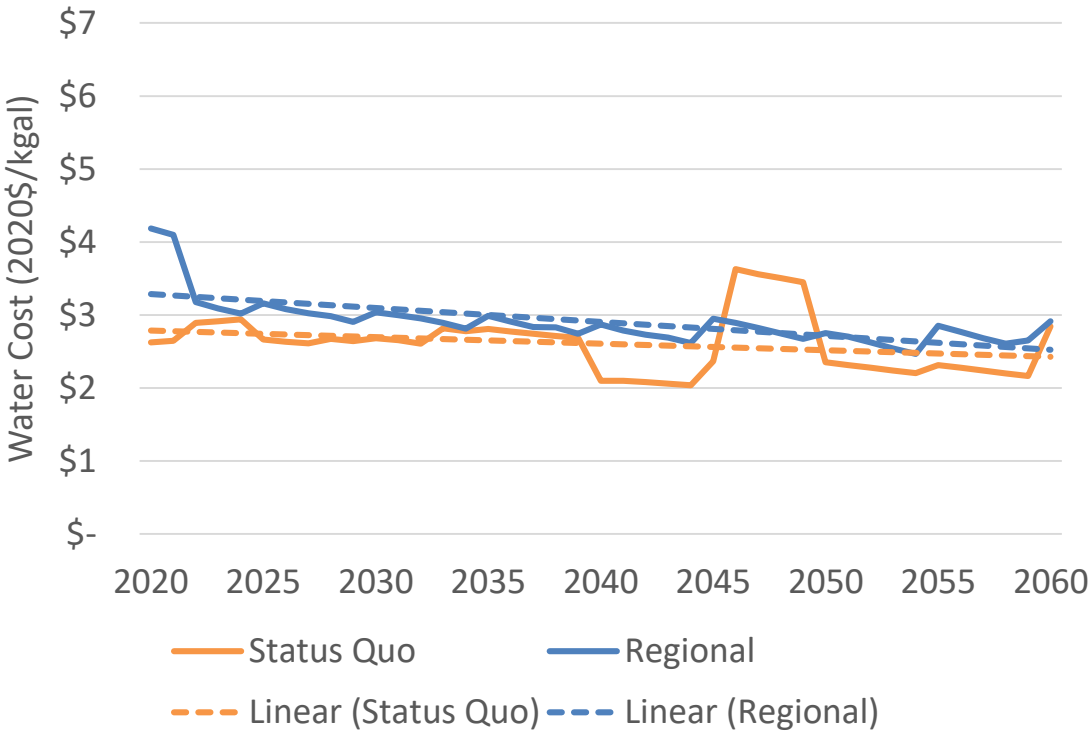
- Regional cost is more expensive initially due to shift of ownership costs
- Altoona constructs its own capacity in status quo, at lower cost
- Status quo costs become more expensive due to low economies of scale



Warren Rural

($7.3)M

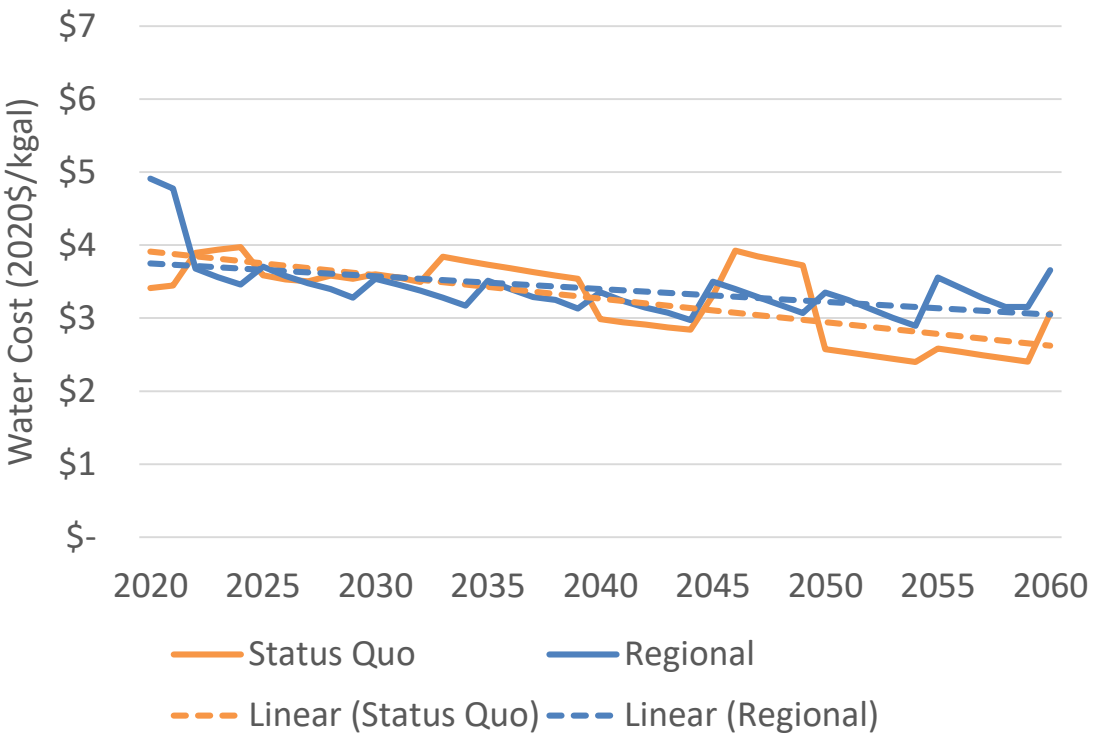
- Regional costs driven by shift in ownership model and increased share of costs
- Past contributions help moderate results



Ankeny

($18.9)M

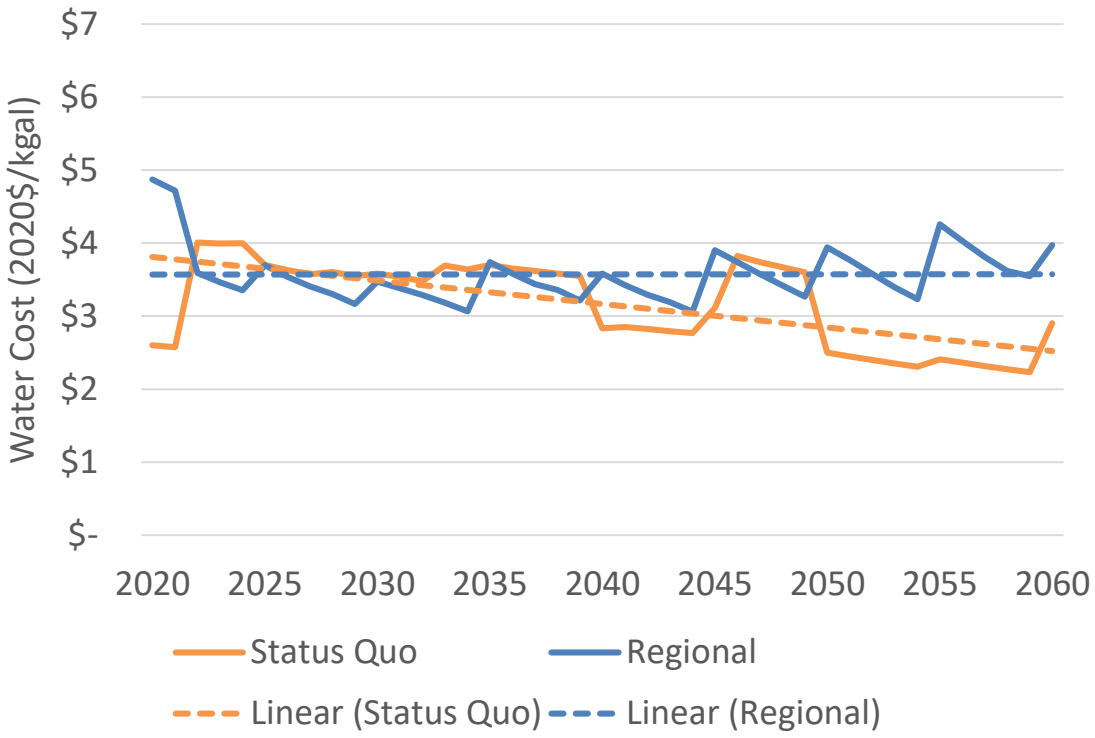
- Costs are about the same until later years
- Built-in benefit in later years due to differences in timing of capacity investments
- Most of the “cost” comes from those later years



Norwalk

($14.3)M

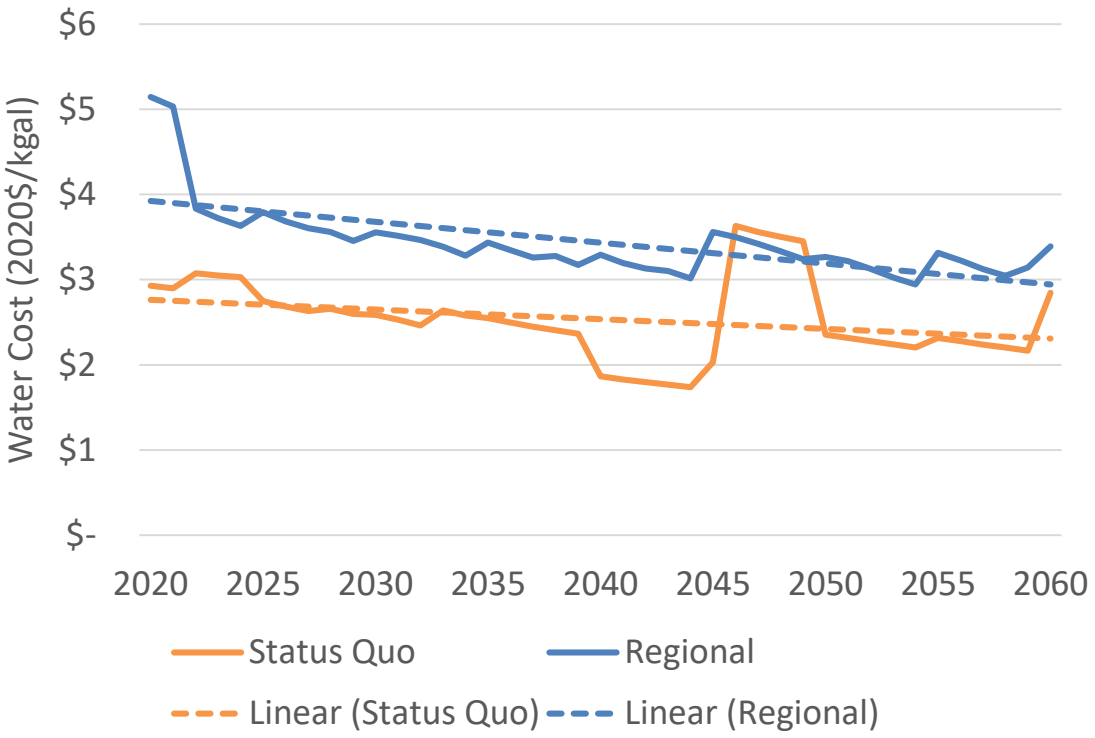
- Costs are about the same until later years
- Built-in benefit in later years due to differences in timing of capacity investments
- Most of the “cost” comes from those later years



Clive

($21.5)M

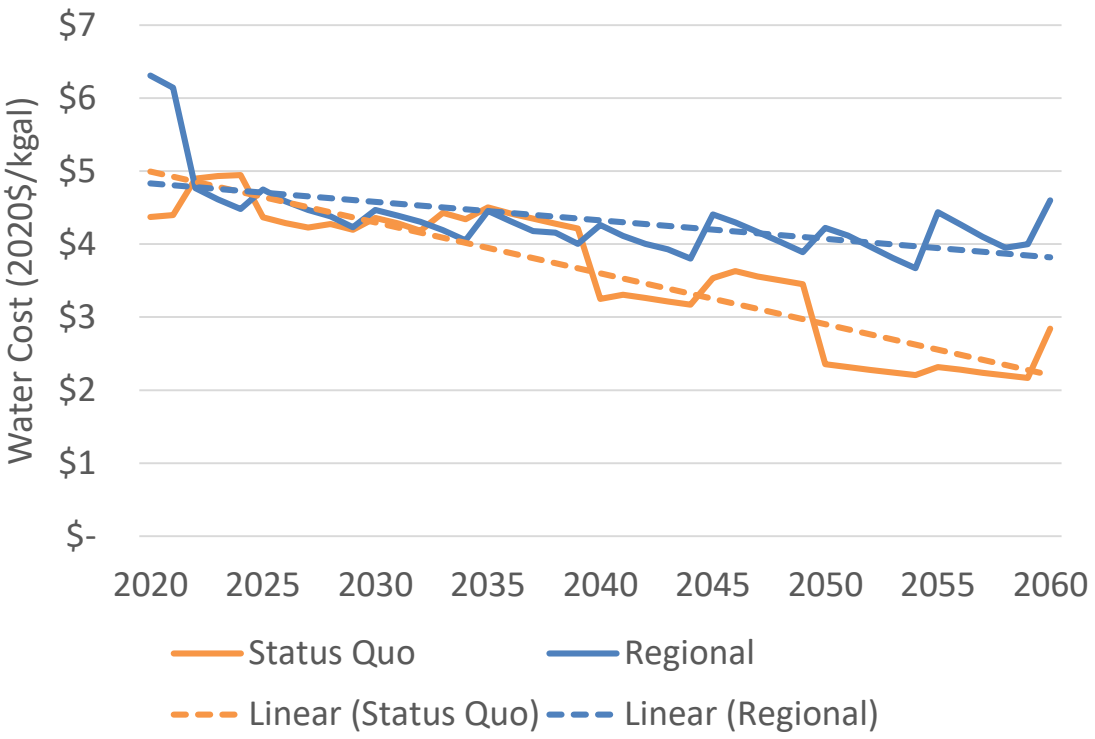
- Regional costs driven by Clive's high peak demand; shifting more costs to them
- 100% of status quo costs from favorable purchased capacity rate



Johnston

($33.3)M

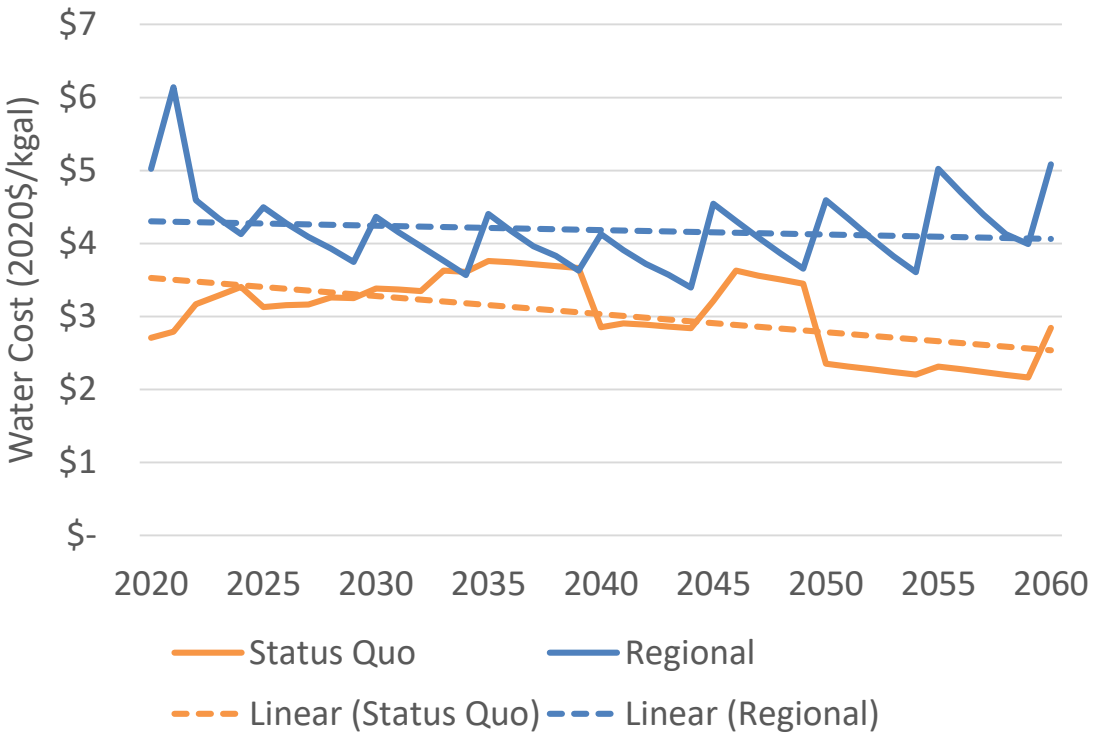
- Regional costs eventually overtake status quo due to Johnston's high peak demand.
- Johnston's status quo is 100% w/ storage rate
- Status quo costs trend lower due to a number of factors related to timing of capacity investments and scale



Bondurant

($39.5)M

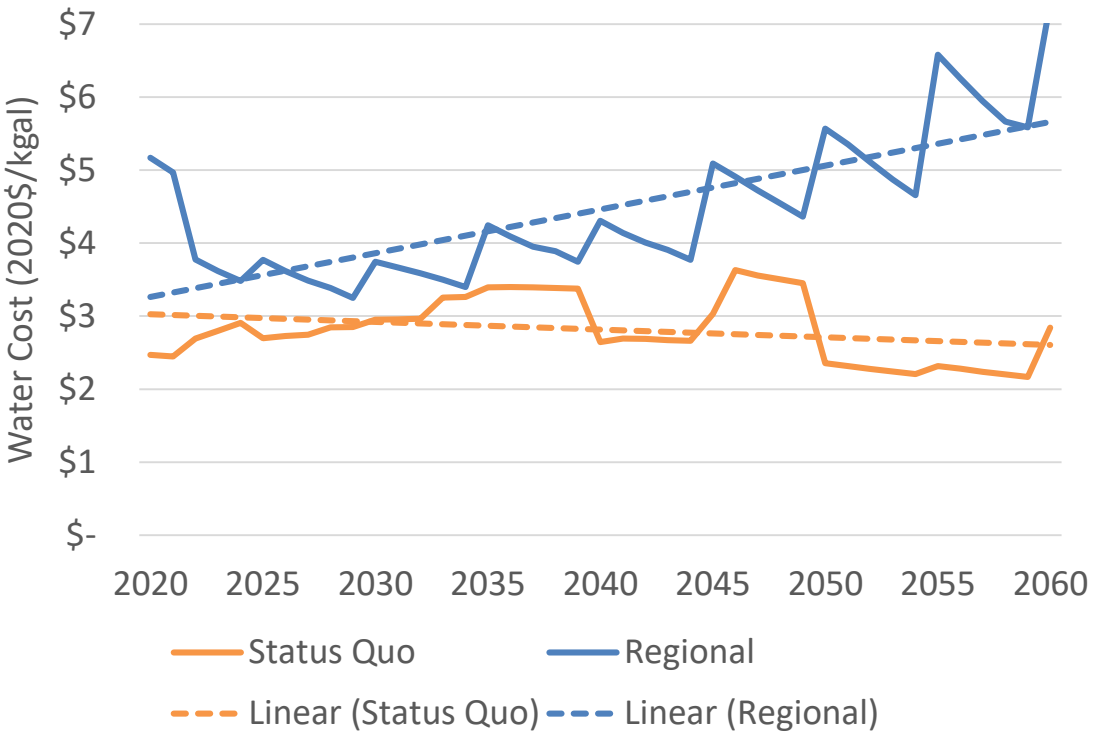
- Regional model shifts costs to Bondurant, especially growth-related costs
- Status quo costs driven by increasing reliance on w/storage rate



Xenia

($70.1)M

- Regional costs driven heavily by growth in avg. and peak demands



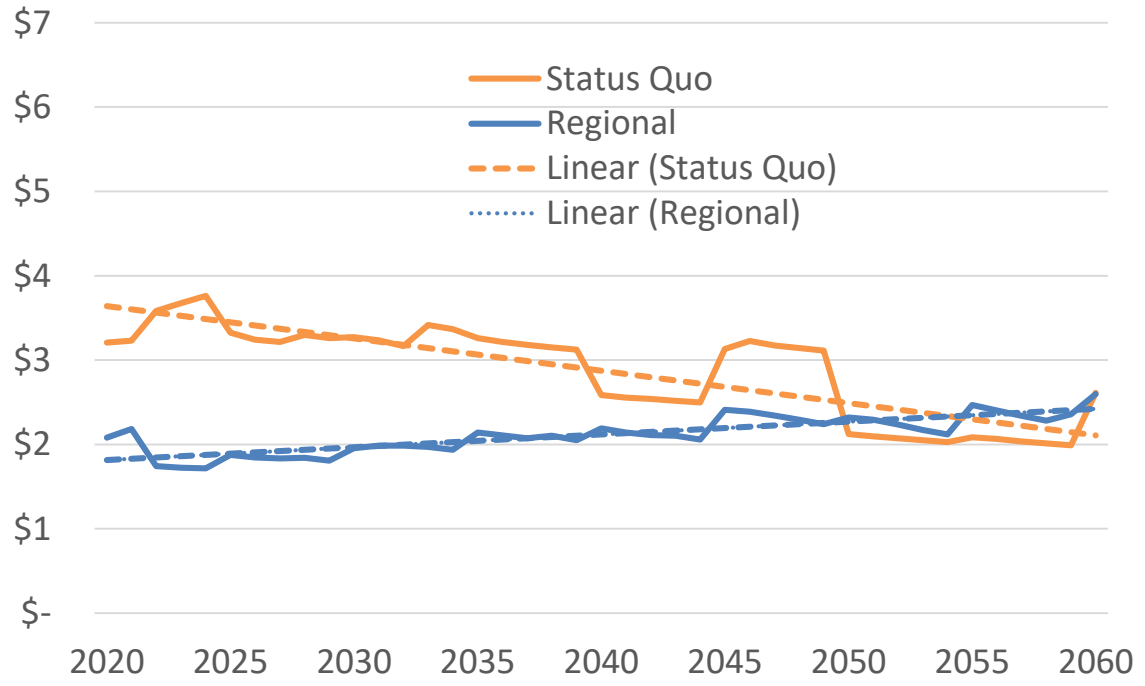
Decreased Governance at Net Benefit

THE MEMBERS	BIGGEST REASONS WHY
DMWW	▪ Shifts current ownership costs and responsibilities to more members ▪ Monetizes cost and value of production assets ▪ From “sole owner” to “partner”

Des Moines Water Works

$265M

Major cost savings come from its asset contributions to the Authority, which are credits against its cost for many years into the future. More costs shared to the region reduces DMWW cost burdens.



Summary Results

$543.5M

Concentrated among 4 member communities

Vs.

$216.5M

Spread among 10 member communities

Making the regional approach work for you will mean finding a way to share the benefits more widely

Ways it Can Work

$543.5

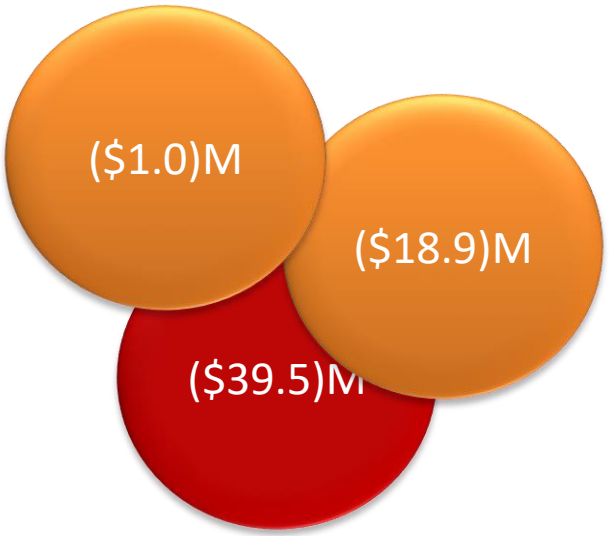
(216.5)

$327.1

- It will entail sharing benefits for the sake of keeping the region viable
- 4 members would give up some of the benefit so that the others can at least break even
- Those 4 members still come out ahead in doing so
- It could be accomplished with some simple rate adjustments

The 4 member communities who benefit most need regionalization in order to realize those benefits

One More Consideration



Consider the unseen benefits in addition to these analyses.

An appropriate question to ask is “how much is it worth to get things like redundancy and shared governance?”

The Path Ahead

The Big Things Left to Do

Legal	Financial	Technical
• Gain wider consensus • Forming a 28E/F (or other) • Form the Authority	• Establish Authority's financial systems • 1st –round financing • Formation transactions	• System assessment • Capital planning & execution • Operating agreements

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