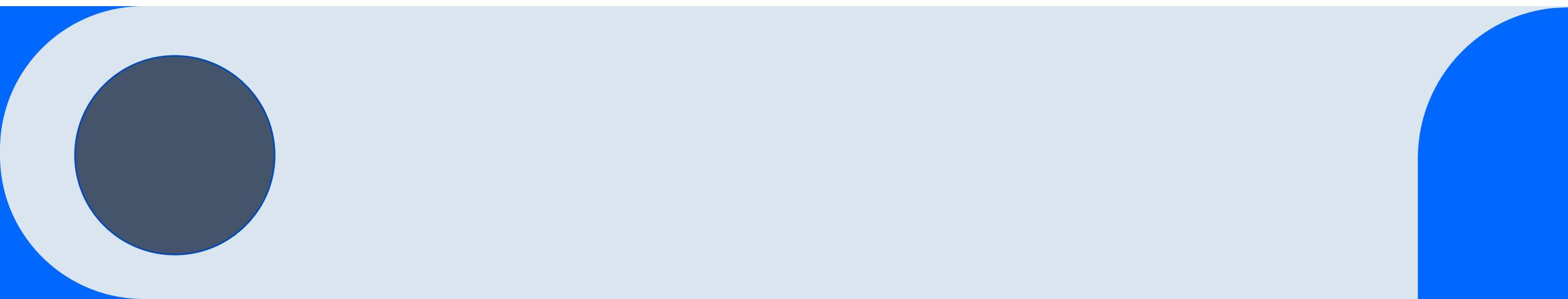




Plan for Water

Stage 6: Basis for the plan for water



Agenda

Planning Horizon Determination

Frequency of Update

Use of Plan

Responsibility for Plan

Facts and Assumptions

Planning Horizon

- The length of time the Plan for Water will look ahead to plan for future water supply needs and infrastructure.
 - Longer the period the more inaccuracy can be introduced into assumptions.
 - Too short of a period does not allow for systematic planning of infrastructure needs



Planning Horizon Considerations

- Infrastructure projects can be costly. Need to save and understand needs in advance.
- Creates rate certainty.
- How quickly is the environment changing?
- How well do we understand data that we currently have?

Other Plans

UWMP and AWMP

20-year planning horizon

Integrated Water Resources Management Plan (IRWMP)

Raw Water Master Plan

Treated Water Master Plan

Watershed Master Plan

General Plans – Designate land use and density

Range from 20 to 50 years

Planning Horizon Options

Short Term – 10 years

- Does not create a basis for long-term financial planning
- Would have the most accurate assumptions

Mid Range – 20 years

- Better suited for financial planning
- Less accurate assumptions

Long Term – 50 year

- Least accurate assumptions
- Best well suited for financial planning

Frequency of Update

Modelling

- Updated as new data is collected
- Updated as climate change models are updated
- Updated to reflect actual water use and new develop absorption

Frequency of Update

Recommend at a minimum every five years

- Allows for refinement of assumptions
- Allows for data to be updated
- Use for capital planning and rate setting
- Allows for validation of assumptions

Use of Plan for Water

- Basis for master planning
- Basis for 5 year and annual CIP
- Data used for UWMP and AWMP updates
- Informs long-term financial planning
- Informs operations

Responsibility for Plan

- Board
- Staff
- Board Policy?

Assumptions Vs. Facts

Assumptions (model inputs)

Physical processes such as runoff & hydroclimatic variability

Future demand

Future operating criteria (FERC, VAs)

Reservoir conditions

Storage management (surplus)

Assumptions

Book-end values

Multiple scenario simulation

Board and public input

Understand how changing assumption inputs impacts model outputs

Summary

Develop Board Policy to Guide Ongoing use of Plan and Updates