Portfolio Considerations

- Portfolio theory
- Adaptive Management
- Timing
- Communication

Moving on to simplified scenarios

- This is an exercise designed to help you identify the problems of the future

- The numbers are not accurate!!

Simplified Scenarios
An exercise – not an agreement

- What did the 2014 WSAC group do well?
- What did they forget that really matters now!

Simplified Scenarios
A exercise – not an agreement

Agreement on numbers that will be used in the Real Deal

Today's Objectives

- Discuss the Simplified Scenario analysis and develop agreement that you want to engage further in this activity in the future
- Discuss why these 2 futures are suggested– and agreement on the set of future conditions to use in this exercise
- Agreement on numbers to use
  - Orders of magnitude – not numbers to argue about
  - Extremes – not the easy futures
- Agreement on what else is important

	Moderate increases in temperature and decreases in precipitation	Much Hotter and Drier
Tier 3/2 fish requirements	A	B
High flows committed to fishery	C	D

Simplified Scenarios

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Suspend Disbelief!
Today is October 23, 2040

- **What problems are occurring that you wish the WSAC members had tried to solve in 2014 – or – are incredibly grateful that they did address?**

Simplified Scenarios

2040	**Moderate increases in temperature and decreases in precipitation**	**Much Hotter and Drier**
Tier 3/2 fish requirements	**A**	**B**
High flows committed to fishery	**C**	**D**

What is the problem?

- Supply demand gap – how uncertain?
- What else?

Supply – Demand Alignment

- Scenario A

  Supply(X) = 1200

  Peak Demand(Y) = 1850

Problem Statement A:

Supply(X) – PeakDemand(Y) = (650)

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What else are you worried about?

- Think about the problem yourself
- Talk about the problem with your neighbor
- Report back

Simplified Scenarios

Year 2060	Moderate increases in temperature and decreases in precipitation	Much Hotter and Drier
Tier 3/2 fish requirements	A	B
High flows committed to fishery	C	D

More information:

Amount of current flow available

Climate Change

Month	2010	2020	2040	2060	2080
April	1	0.79	0.77	0.76	0.74
July	1	0.66	0.55	0.44	0.33

More information:

Amount of current flow available

Fish Flows

2010	2020	2040	2060	2080
1	0.45	0.35	0.35	0.35

Supply – Demand Alignment for Scenario in box D

- Scenario D - High Fish Flows, High CC - 2060

Supply(X) = 1200 – CC flow reduction + FF flow reductior

((1200* 0.77(CC) - (1200*0.35))

924 +43 = 967

Supply = 1200 – 967 = 233

Peak Demand(Y) = 1850 Unchanged?

Supply(X) – Peak Demand(Y) =

233 - 1850 = (1617)

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	Moderate increases in temperature and decreases in precipitation	Much Hotter and Drier
Tier 3/2 fish requirements	A	B
High flows committed to fishery	C	D

Suspend Disbelief!
Today is October 23, 2060

- **What problems are occurring that you wish the WSAC members had tried to solve in 2014 – or – are incredibly grateful that they did address?**

Simplified Scenarios

Year 2060	Moderate increases in temperature and decreases in precipitation	Much Hotter and Drier
Tier 3/2 fish requirements	A	B
High flows committed to fishery	C	D

Break into groups

- What is the problem?
- What are the special concerns?
- What problems are occurring today, October, 24, 2060), that WSAC forgot to deal with or dealt with beautifully in 2014?

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