



Lessons from Scenario Planning

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Presentation to the IBCC
May 31, 2012

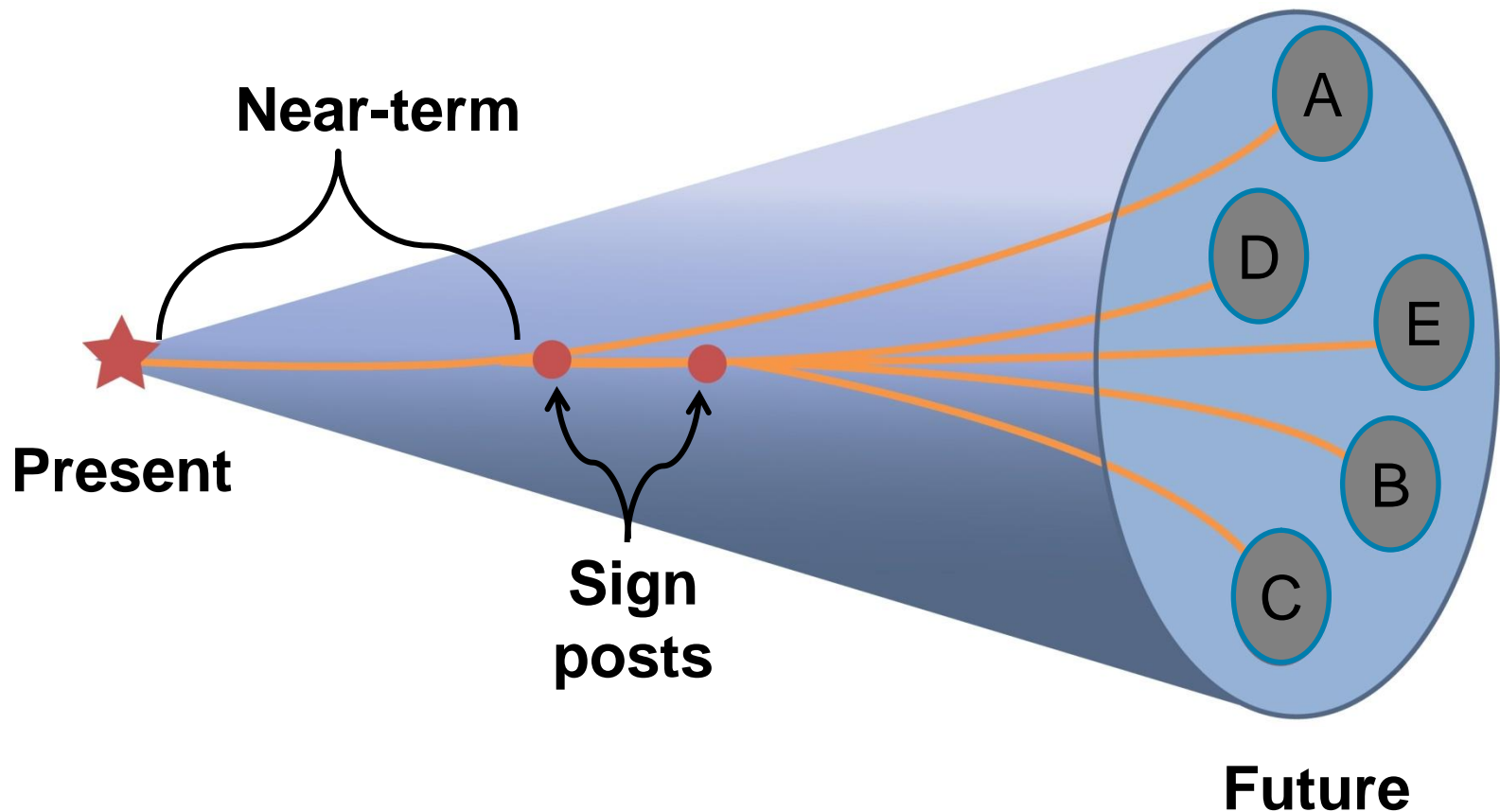


Scenario Planning Benefits

- Fairly simple and understandable method of planning for multiple outcomes.
- Focuses on drivers of change and uncertainties.
- Prepares for more than current trends and business as usual approaches.
- Distinguishes between controllable and uncontrollable events and actions.
- Results in forward looking, flexible and adaptable planning.

Scenario Planning

The Cone of Uncertainty



Planning Futures

- **Traditional Future** - The future is extrapolated from past trends, few other unanticipated major changes occur.
- **Water Quality Rules** - The public demands the highest practical quality of drinking water. Contaminant removal and other drinking water requirements are extremely stringent.
- **Hot Water** - A warmer climate accompanied by more frequent and more severe droughts.
- **Economic Woes** - An ongoing energy crisis accompanied by a prolonged, deep economic downturn.
- **Green Revolution** - Environmental values and sustainable living become dominant social norms.

Population Density

2000 Census	People per Sq. Mile
New York	26,000
	25,000
	24,000
	23,000
	22,000
	21,000
	20,000
	19,000
	18,000
	17,000
San Francisco	16,000
	15,000
	14,000
	13,000
Chicago	12,000
	11,000
	10,000
Providence	9,000
	8,000
DW 2050 Grn. Rev.	7,000
DW 2050 Trad.	6,000
St. Louis	5,000
	4,000
DW 2000	3,000
	2,000
Kansas City	1,000



Lessons

- Our supply gap could be much bigger than we planned for in the past.
- The potential range of the supply gap is too wide to be solved with a common near-term planning path.
- Key to our preparation for the long-term is creating and preserving options.
- We now plan for low regrets instead of no regrets.

Lessons

- **Our qualitative approach to metrics avoided having policy decisions made by models, math or subject experts.**
- **The process worked well in a Board directed planning effort.**
- **We have a better understanding of uncertainties and how to prepare for them.**
- **We have the framework for an adaptive management approach.**

Considerations for the IBCC

- You may not find a common path or a true no regrets solution.
- You may not find clear triggers for decision making.
- Focus on things within our control - near term actions and preserving long term options.
- Keep options open for future generations to decide whether to develop new supply.
- Consider the potential to have high population growth and a warmer and/or drier climate.

