## Memorandum

To:	WSAC
From:	Stratus Consulting Inc.
Date:	10/15/2014
Subject:	Links to relevant documents

Below are links to research that may be of interest to you. Please let us know if you would like us to present information related to these studies at a future WSAC meeting, or if you would like us to research other areas and provide you with the links to relevant documents. Feel free to reach out with questions concerning any of this material.

- Water reliability (this document is available for purchase at the site below)
  - <u>https://www.watereuse.org/product/08-09-1</u>

## • Stakeholder process

- http://www.sca.nsw.gov.au/\_\_data/assets/pdf\_file/0007/36898/Climate-Change-Impact-Assessment-2010.pdf
- <u>http://www.cap-az.com/index.php/departments/planning/service-area-planning/wheeling</u>
- <u>http://www.austintexas.gov/department/city-austin-lcra-water-partnership</u>
- <u>http://cfwiwater.com/</u>
- <u>https://www.cityofmadison.com/water/documents/ENG-0101-080702-</u> <u>WUFacilitiesPublicParticipationProcess.pdf</u>
- <u>http://water.epa.gov/infrastructure/sustain/upload/EPA-s-Planning-for-Sustainability-Handbook.pdf</u>
- Demand forecasting
  - The Water Research Foundation published this study led by University of Louisville Kentucky researchers to document changes in water use over time since 1992 (when the National Energy Policy Act required low-flow toilets and showerheads). This report documents reduced sales of water by water utilities over time, has a good discussion of possible causes in the background and literature review.

http://www.waterrf.org/PublicReportLibrary/4031.pdf

 Orange Water and Sewer Authority in North Carolina produced it's 2010 Long-Ranger Water Supply Plan, which contains demand projections over time with some discussions of the reasons why.

http://www.owasa.org/Data/Sites/1/media/whatwedo/appendix%20ii%20complete %20090211.pdf

 See page 78 of the PDF (page 5-6 of the document) for a graphic of forecasts over time from Washington DC Metro Area water providers

http://www.potomacriver.org/publicationspdf/ICPRB05-6.pdf

The same thing has been happening with electric utility industry forecasting. See this page from the book *Experts in Uncertainty: Opinion and Subjective Probability in Science*.

http://books.google.com/books?id=4taZBr\_nvBgC&pg=PA45&lpg=PA45&dq=oi l+prices+in+1985+dollars+and+projected+prices+from+Dutch+experts.+(Kok,+p rivate+communication)&source=bl&ots=k8ocl0H69&sig=tLJkoNY918FJ6yz2dwuuBEO\_ysc&hl=en&sa=X&ei=S405VJUBi 6vIBIv8gZgC&ved=0CB4Q6AEwAA#v=onepage&q=oil%20prices%20in%2019 85%20dollars%20and%20projected%20prices%20from%20Dutch%20experts.%2 0(Kok%2C%20private%20communication)&f=false

The Seattle area also has a classic graphic of forecasts being wrong over time.
This document has a brief section on the history of demand forecasts in Seattle.

http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=books&cd=1&ved= 0CCsQFjAA&url=http%3A%2F%2Fwww.ecs.umass.edu%2Fwaterresources%2F projects%2FKingCounty%2FKCReviewSeattleDemand\_9-8-06.doc&ei=7Y05VNT-NsqqyASn74GgDw&usg=AFQjCNGwXL6UuFp-EuPxx2QfJ9svryezXQ&sig2=NJku\_-