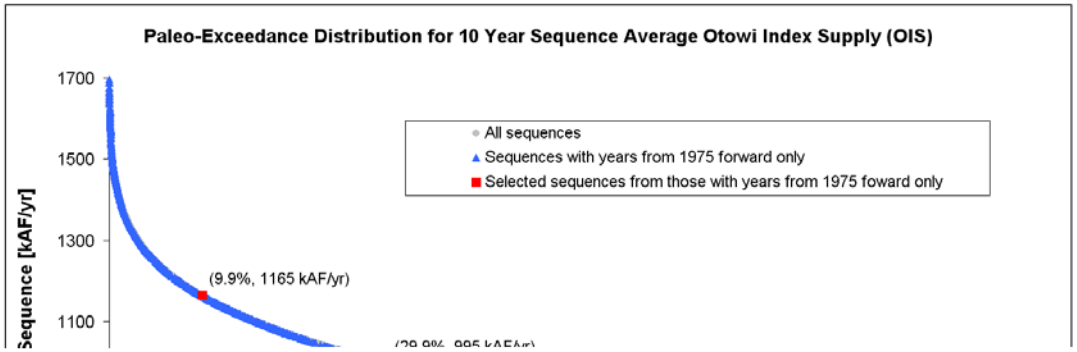
Development of Synthetic Flow Sequences for URGSIM and URGWOM Planning Model Runs



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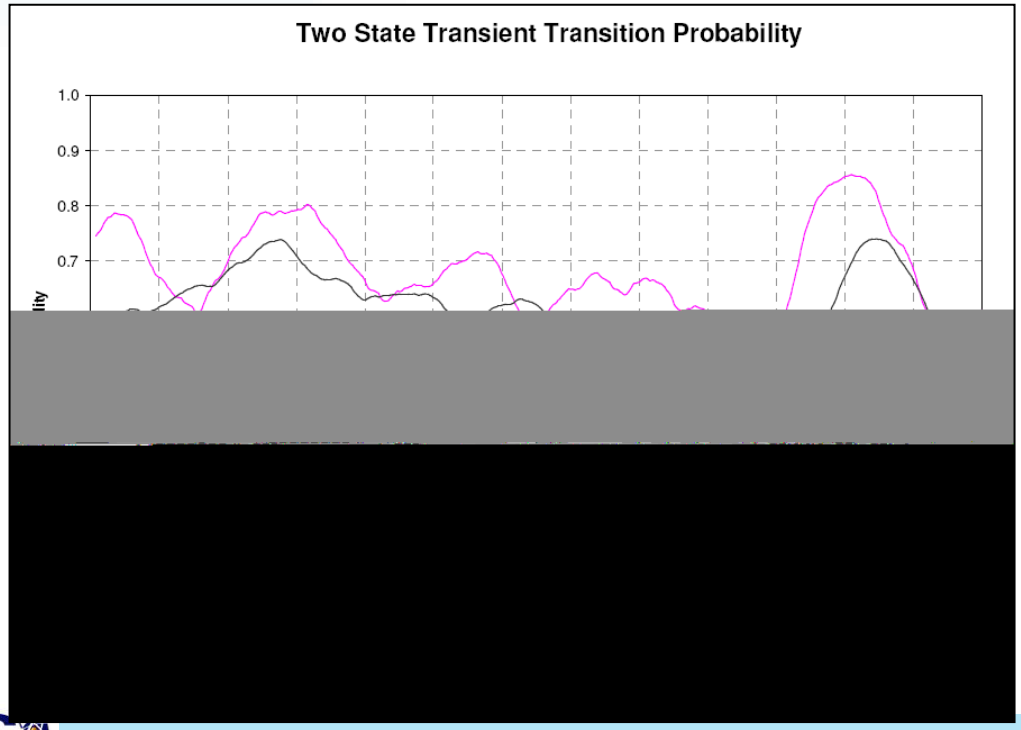
Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under Contract DE-AC04-94AL85000.

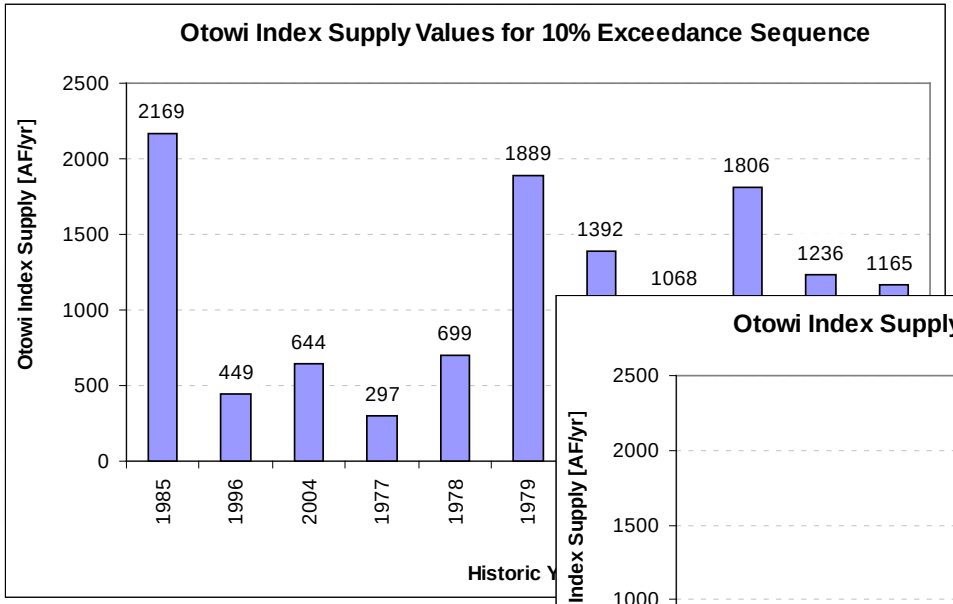
Development of transient transition probability matrix

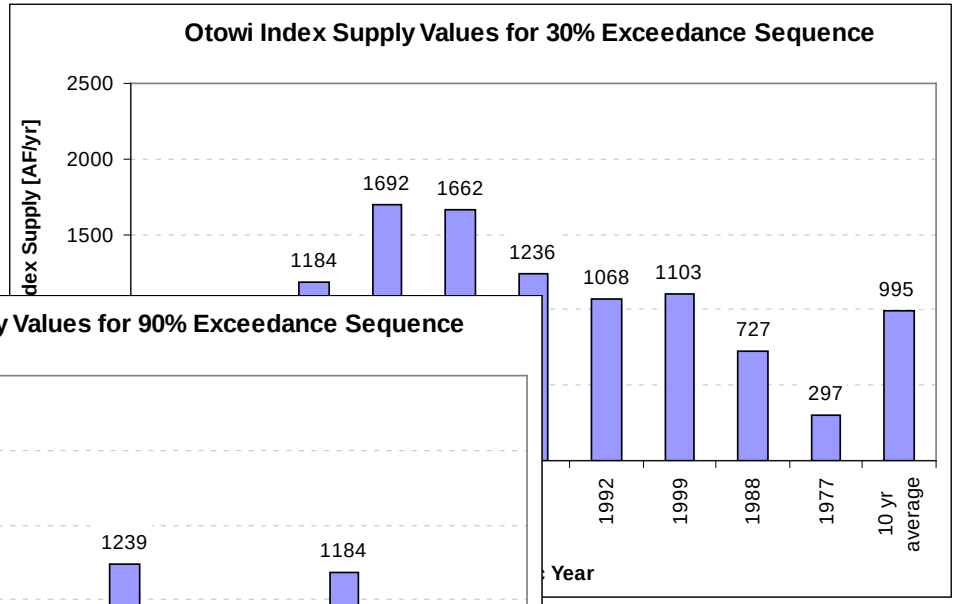
1. Selection of a Palmer Drought Severity Index (PDSI) reconstruction representative of flows at Otowi
2. Development of a transient transition probability matrix
   a) Define all PDSI <= 0 as “dry”, >0 as “wet”
   b) Develop transient transitions (probabilities of wet to wet or wet to dry, or dry to wet or dry to dry from 1400-2003)

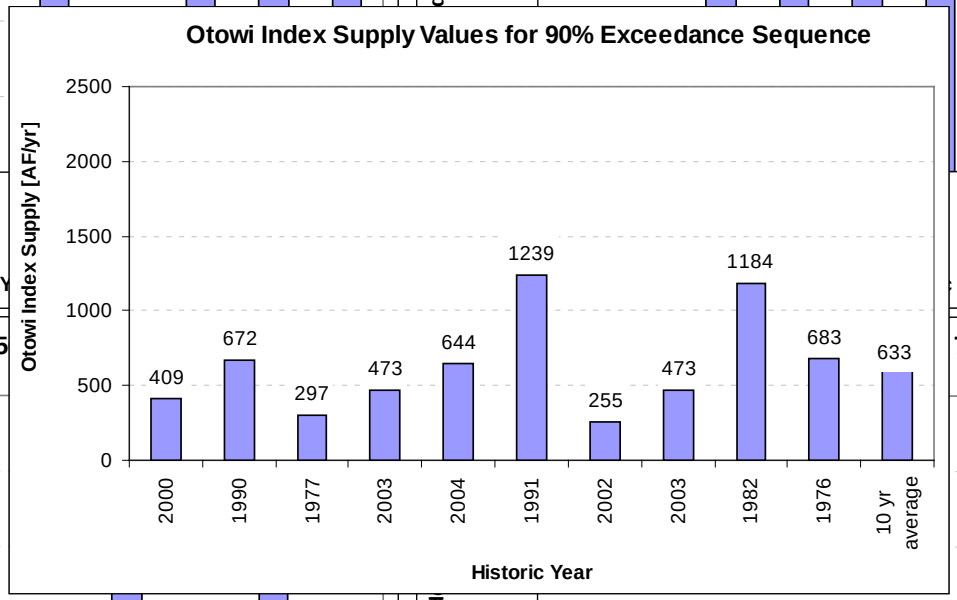


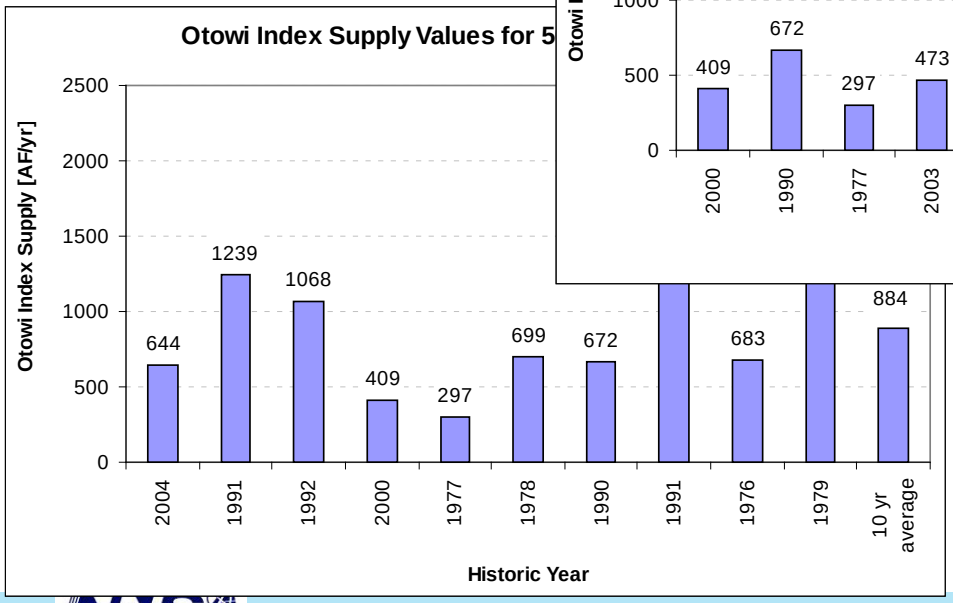
From Gangopadhyay & Harding, technical memo to Nabil Shafike, June 24, 2008

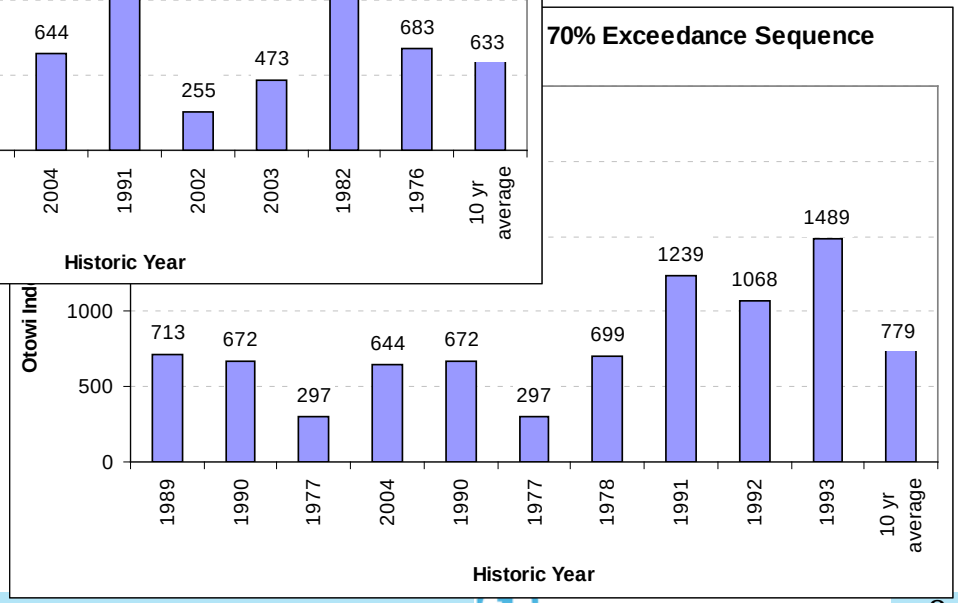
URGWOM Planning Model Sequences











Questions?

1. Selection of a Palmer Drought Severity Index (PDSI) reconstruction representative of flows at Otowi
2. Development of a transient transition probability matrix
3. Sample 1950-2004 data to develop 1000, 100 year sequences

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4. Select 5 ten year sequences from 1000, 100 year sequences for analysis by URGWOM

URGWOM Tech Team