

**The Peace River  
Manasota Regional  
Water Supply  
Authority –  
*Climate Change  
Concerns*  
5/10/2012**

**Peace River  
Facility**









**The Peace River near  
Arcadia - flow often  
ranges 2 orders of  
magnitude in any given  
year from 30 million to 3  
billion gallons per day**



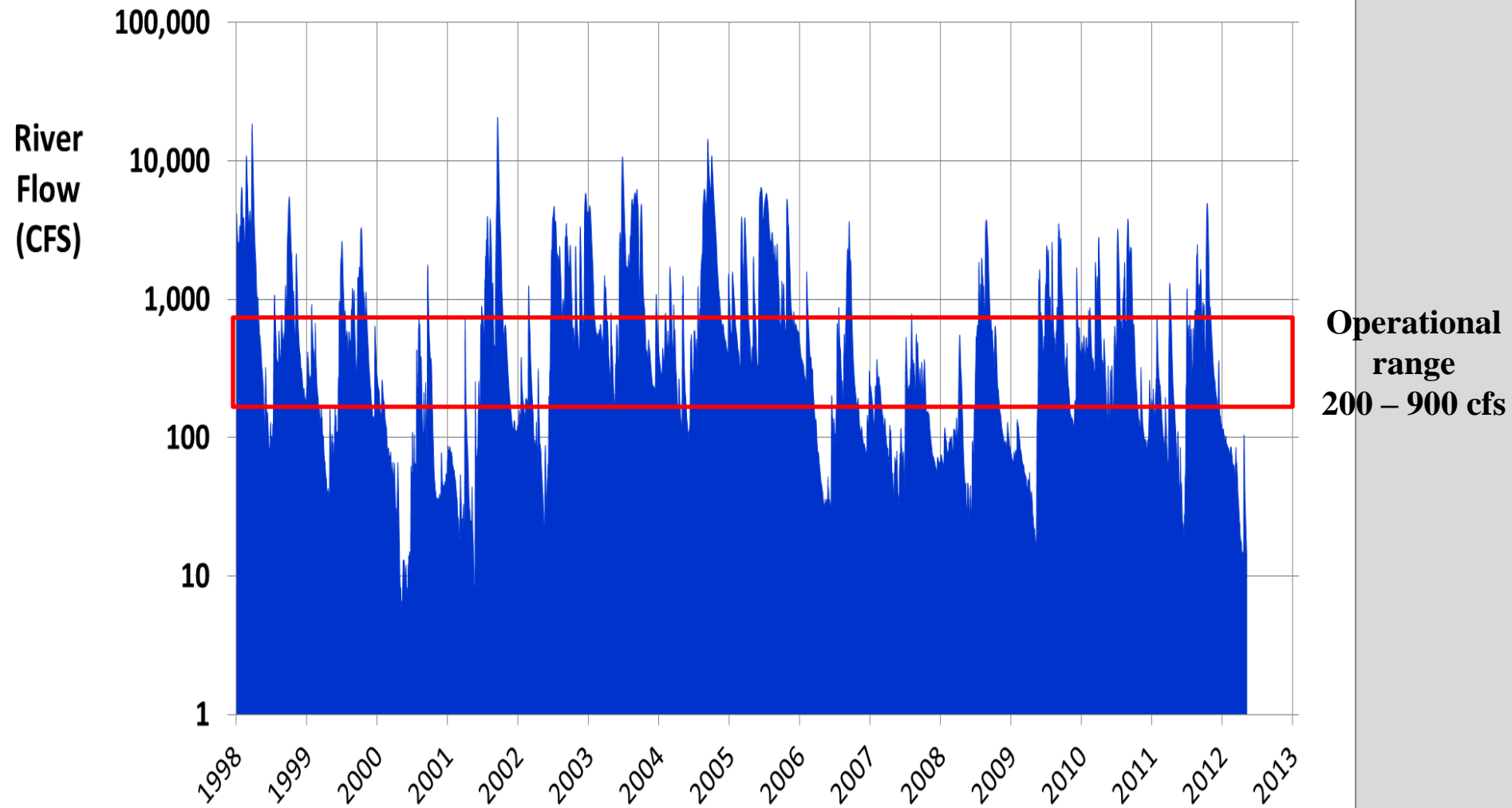
*Cue system movie clip from 2003 showing  
dynamic interplay between River, Reservoir,  
WTP and ASR*





Channelized  
nature of river  
helps protect the  
intake from  
salinity  
incursions  
which become  
prevalent just 2  
miles further  
downstream

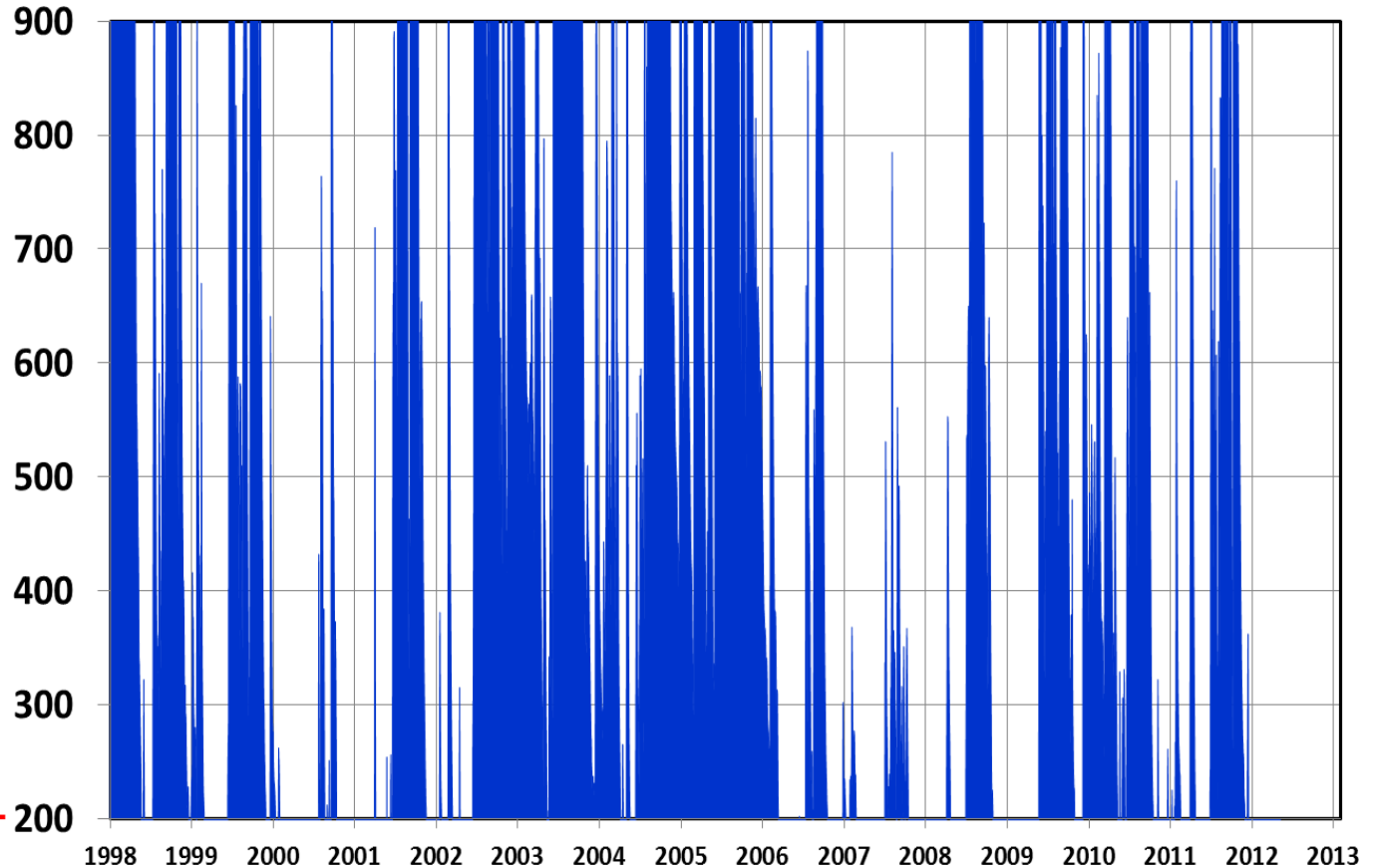
## Flow Measured at Arcadia Gage Station



## Flow Measured at Arcadia Gage Station

above this level  
maximizes our  
diversion

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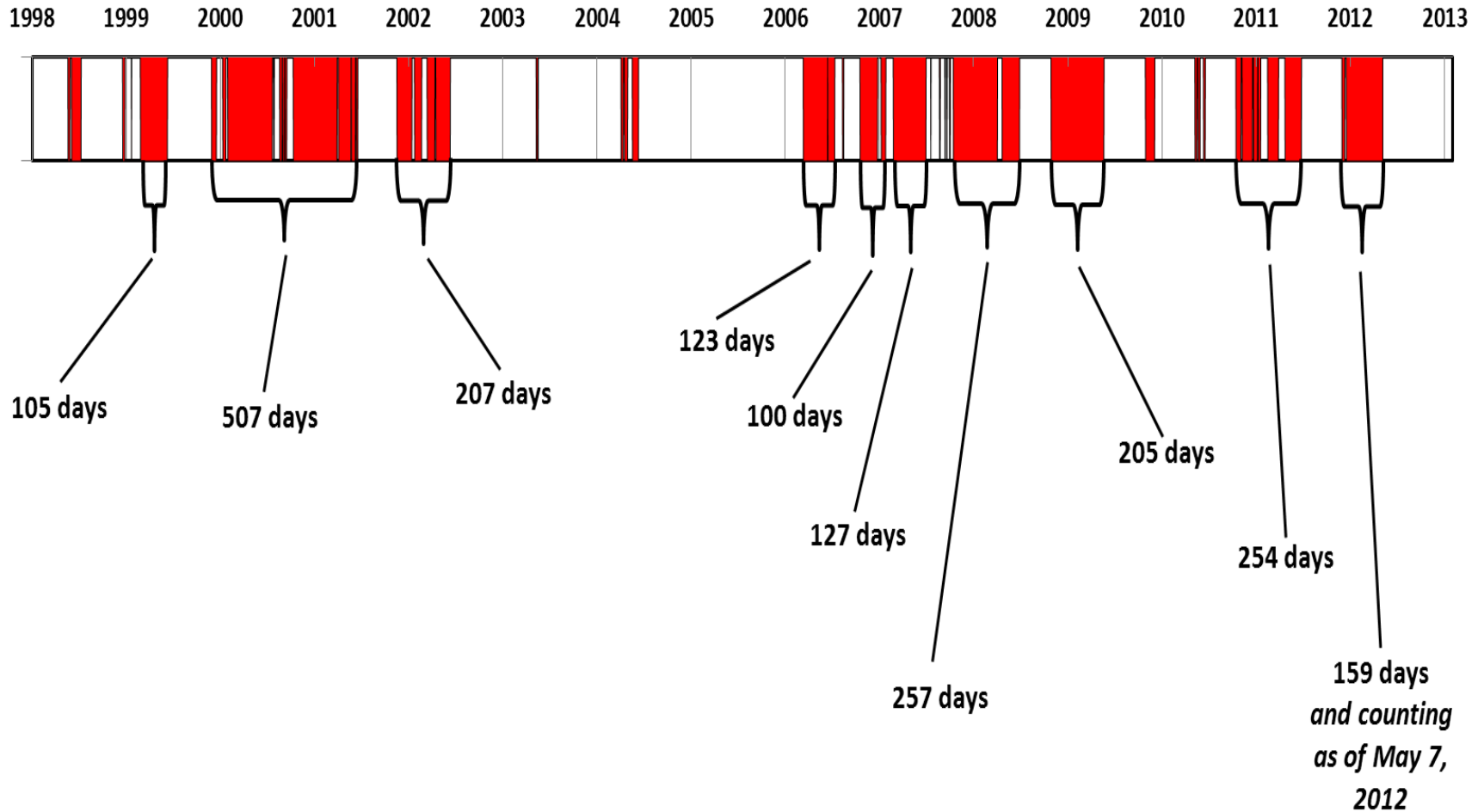


below this level  
water quality  
becomes  
questionable

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Note: Our water use permit determines diversion as a progressive, seasonal schedule based on the sum of 3 gages; Arcadia is used in this example as an approximation because it has the longest history.

# Drought Periods in Red (flow @ Arcadia <200 cfs)



Drought periods, as defined by bounding them with 30 consecutive days of river flow > 200 cfs, measured at Arcadia



# PRMRWSA Concerns Relative to Climate Impact

- Sea Level Rise - will impact river pumping
- Increasing likelihood of drought duration/intensity or return period:
  - affect our ability to Recharge ASR and Fill Reservoirs
  - drives up demand
  - increases evaporative losses