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National Water Rate Escalation

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Federal Energy Management Program

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The mission of the Federal Energy Management Program is to facilitate the Federal Government's implementation of sound, cost-effective energy management and investment practices to enhance the Nation's energy security and environmental stewardship.

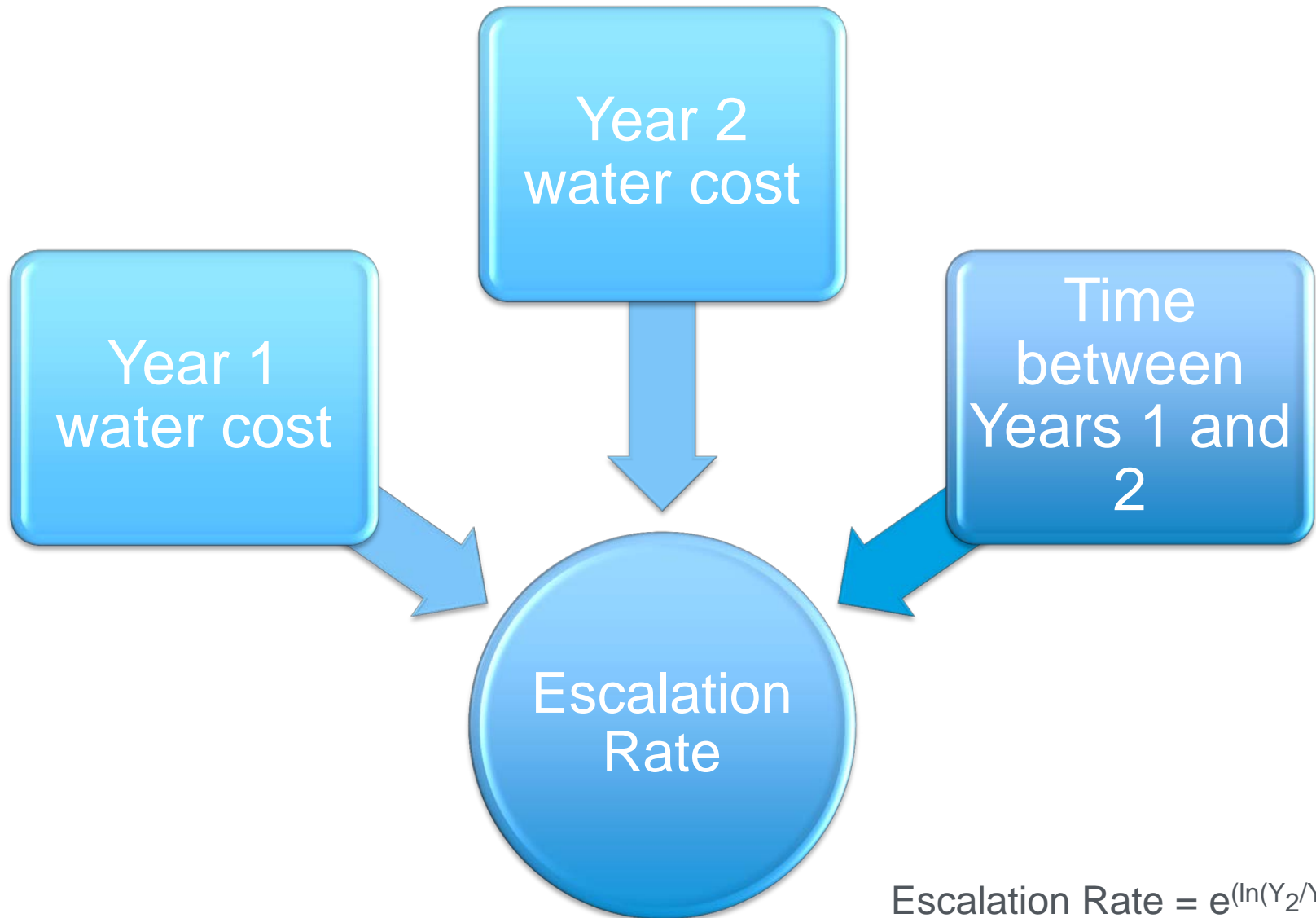


- Increased water rates
 - Escalation rates
 - Example
- Rate increases by region
- Rate increases by water source
- Rate increases by historical drought tendencies

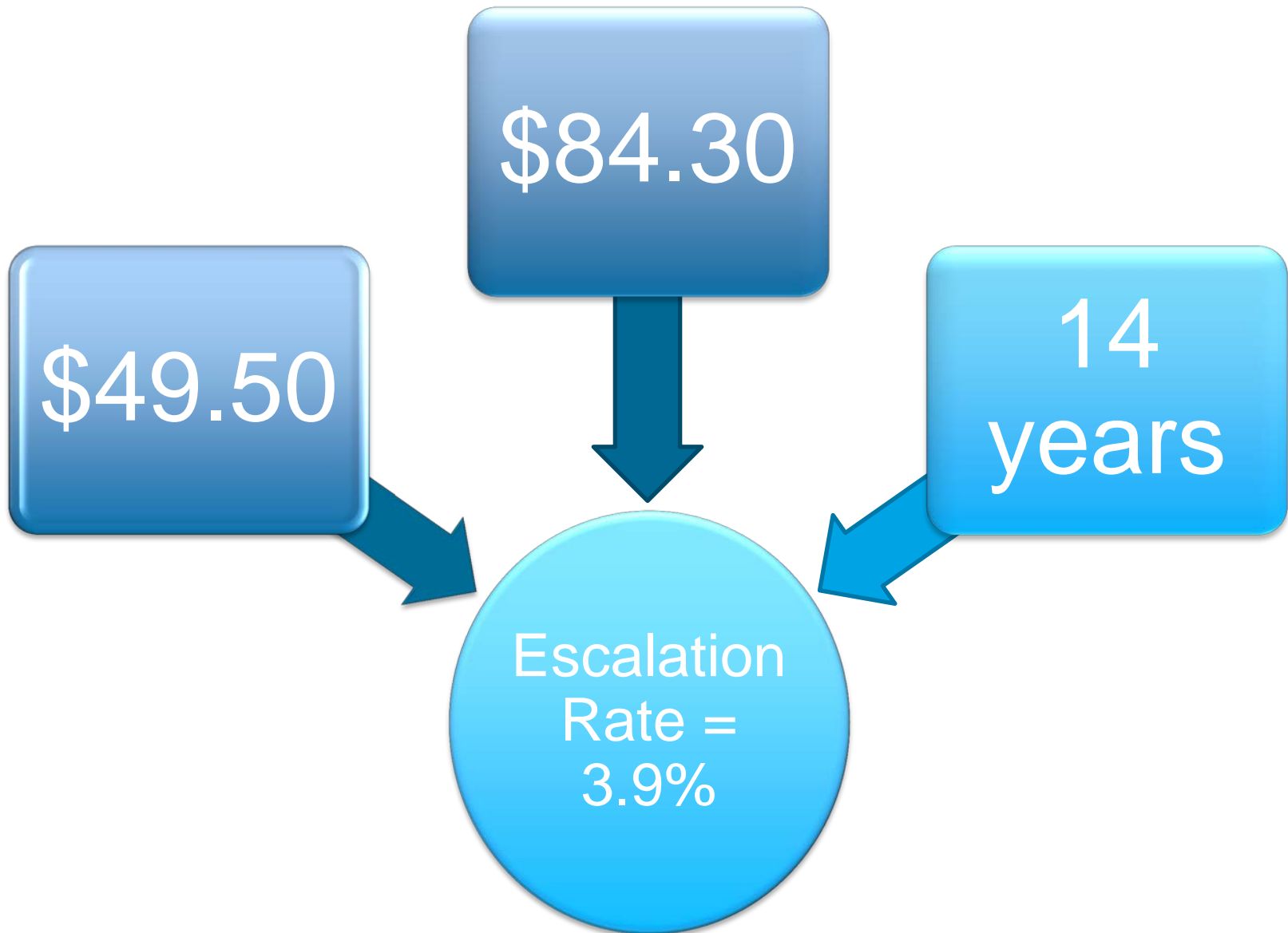
- Selection based on distance to Department of Energy facilities
- Data from voluntary surveys to Ernst & Young, Raftelis Financial Consultants, and American Water Works Association
- Survey years: 1994, 2002, 2008
- Non-manufacturing and industrial rates analyzed

Cities Included in Rate Study

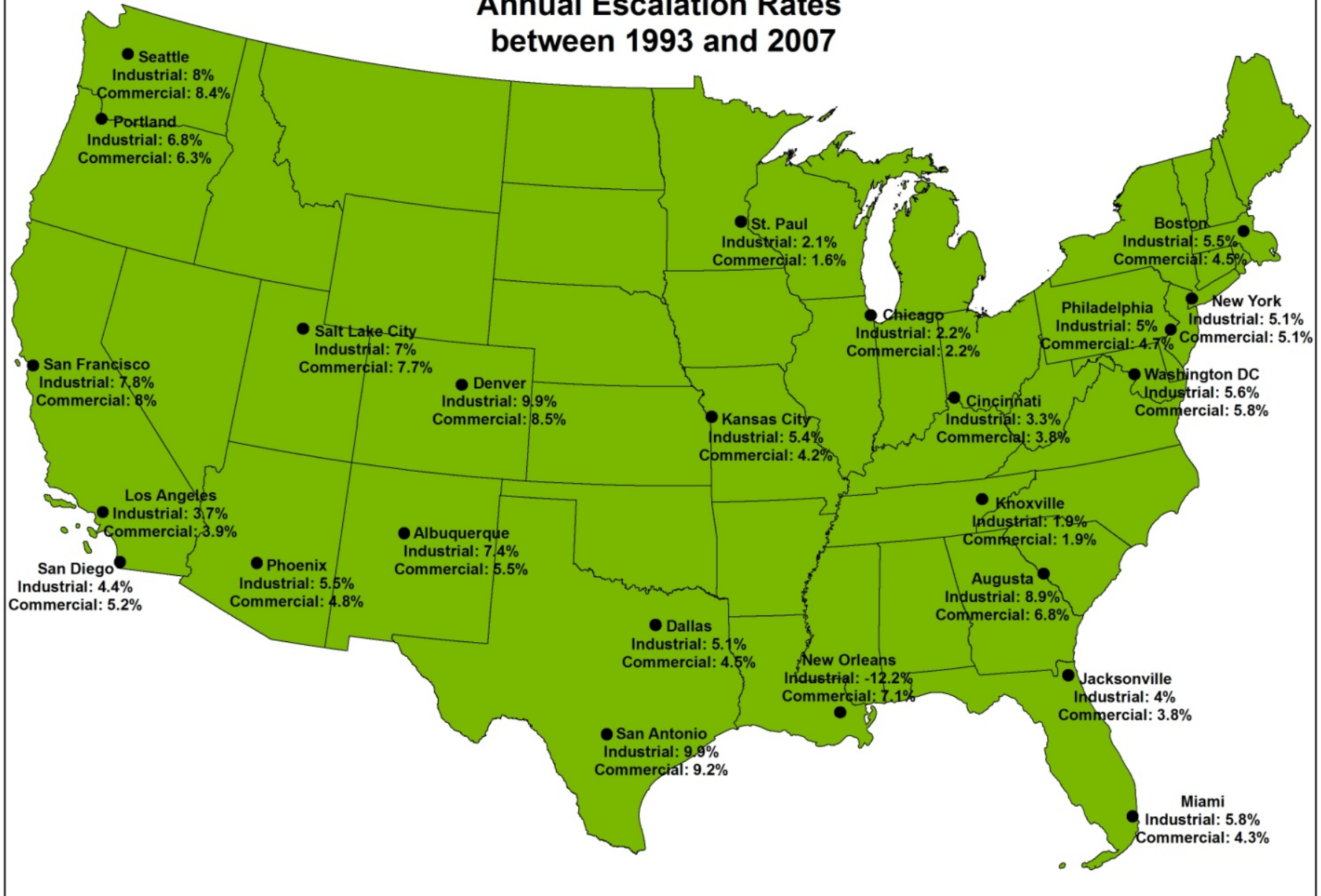




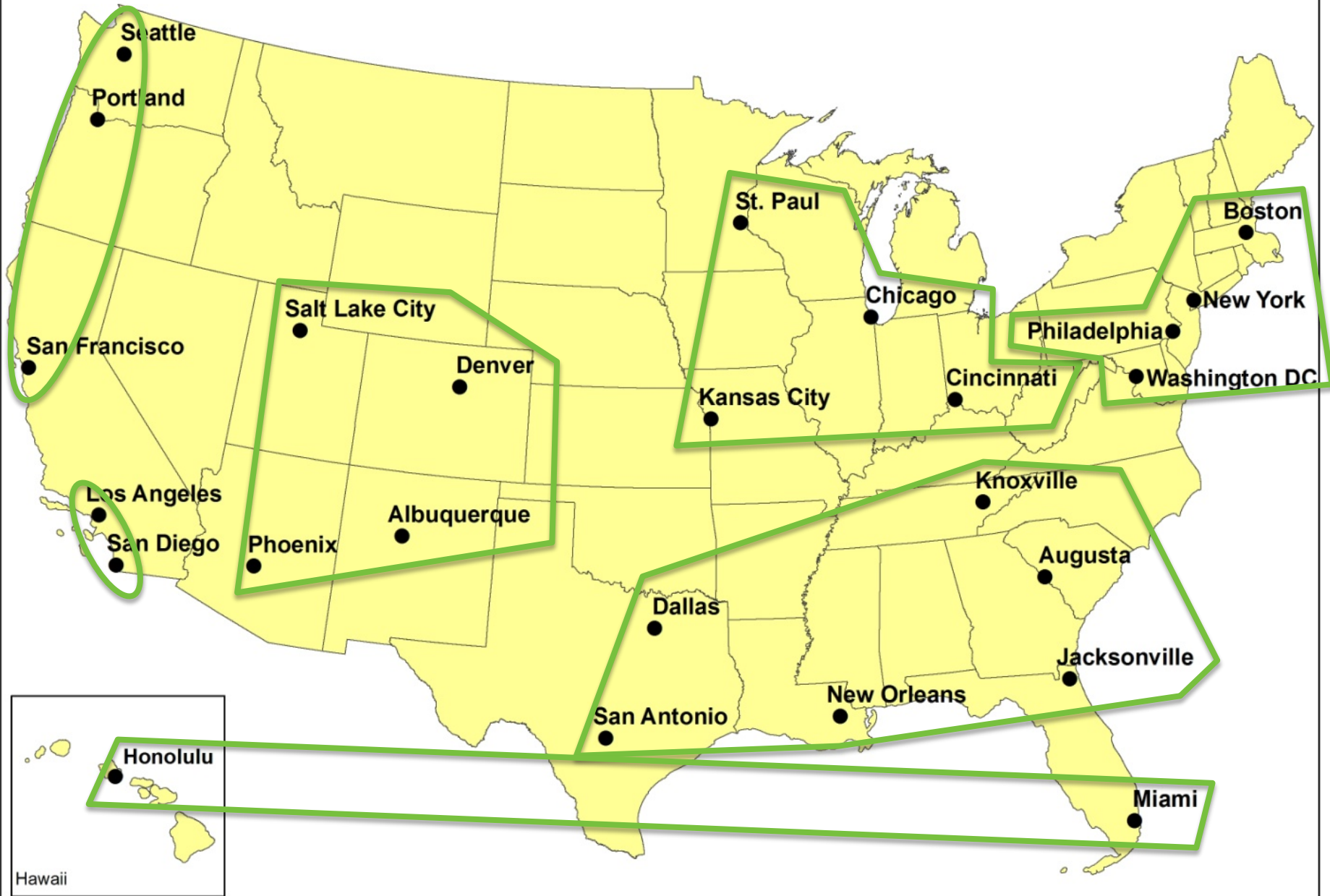
Water Rate Escalation Example



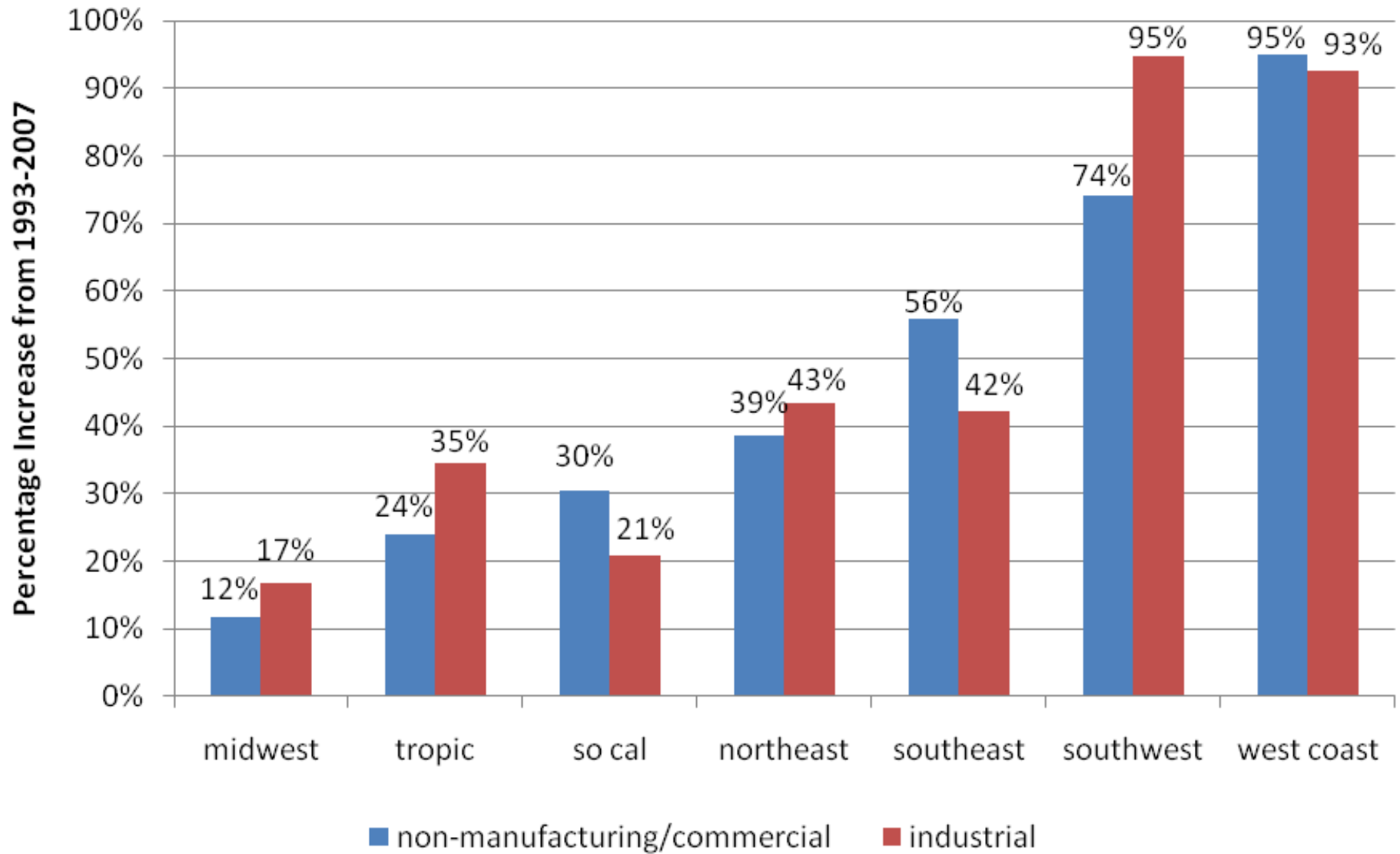
Industrial and Non-manufacturing/Commercial Annual Escalation Rates between 1993 and 2007



Cities by Region



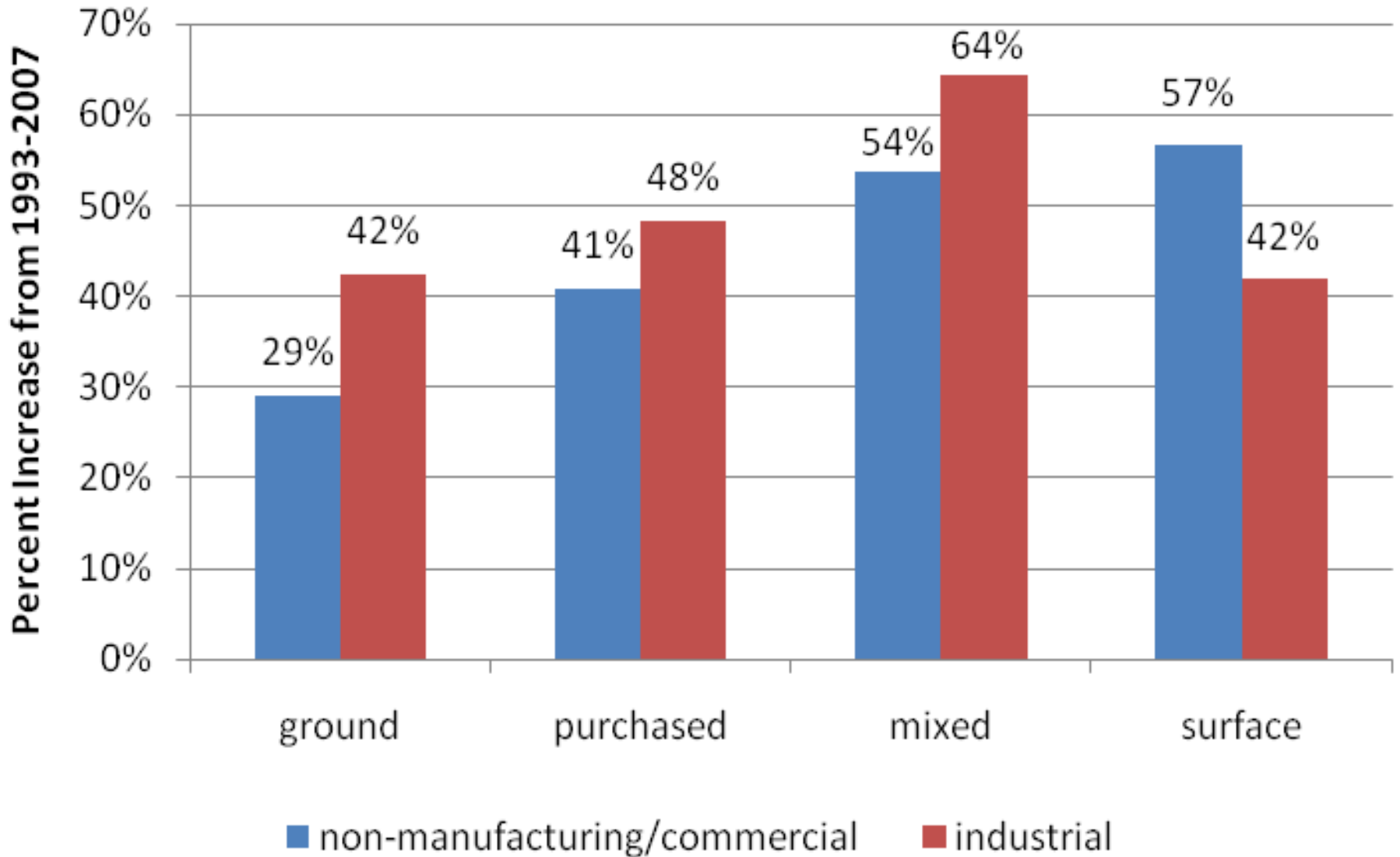
Regional Trends



Cities by Water Source



Water Source Trends



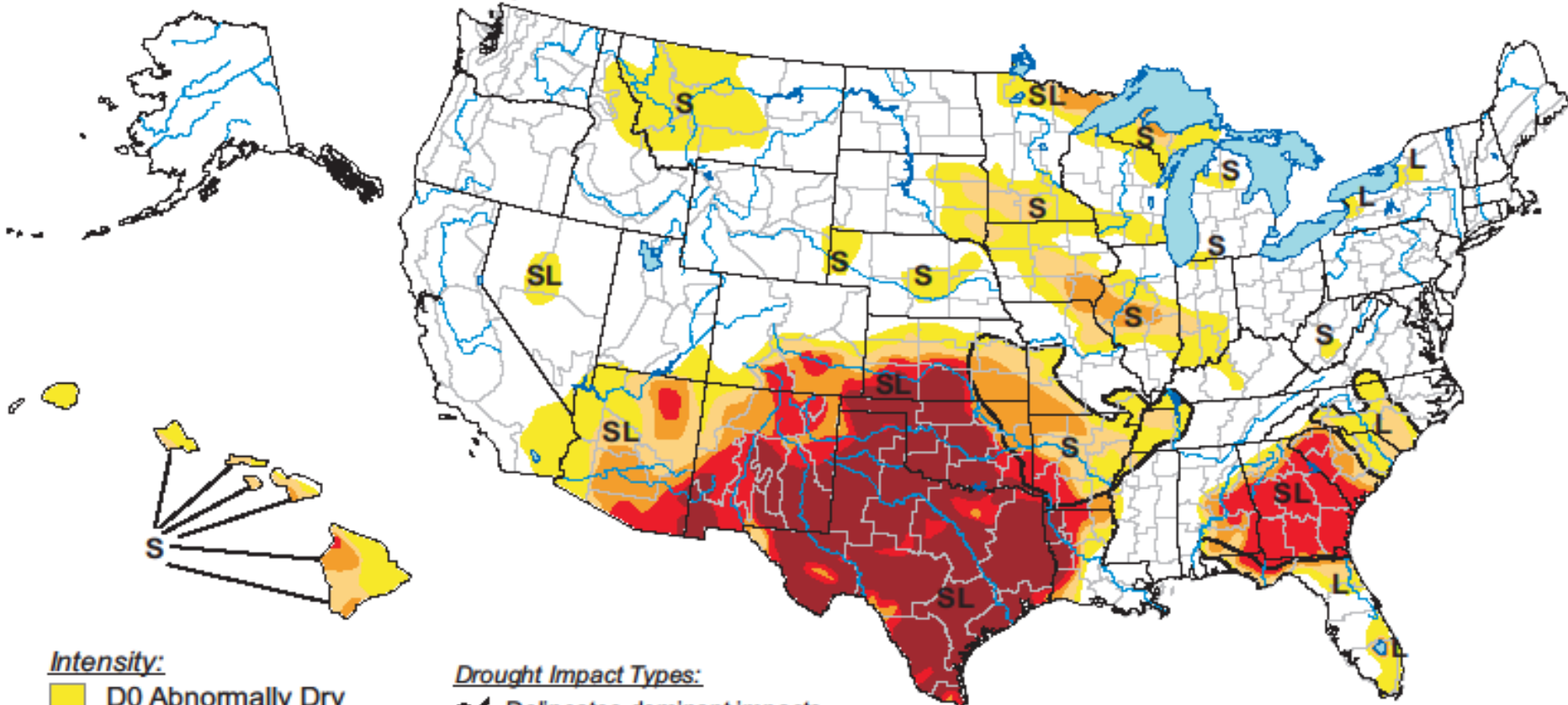
- Palmer Drought Severity Index
- 1895-1995 long range historical drought conditions
- 1996-2010 short range historical drought conditions
- 3 month forecast drought conditions

- Established to compare meteorological moisture conditions of climate regions
- Positive Palmer numbers indicate excess moisture – flooding
- Negative Palmer number indicate lack of moisture – drought






U.S. Drought Monitor

September 27, 2011


Valid 8 a.m. EDT



Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically <6 months
(e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months
(e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu/>



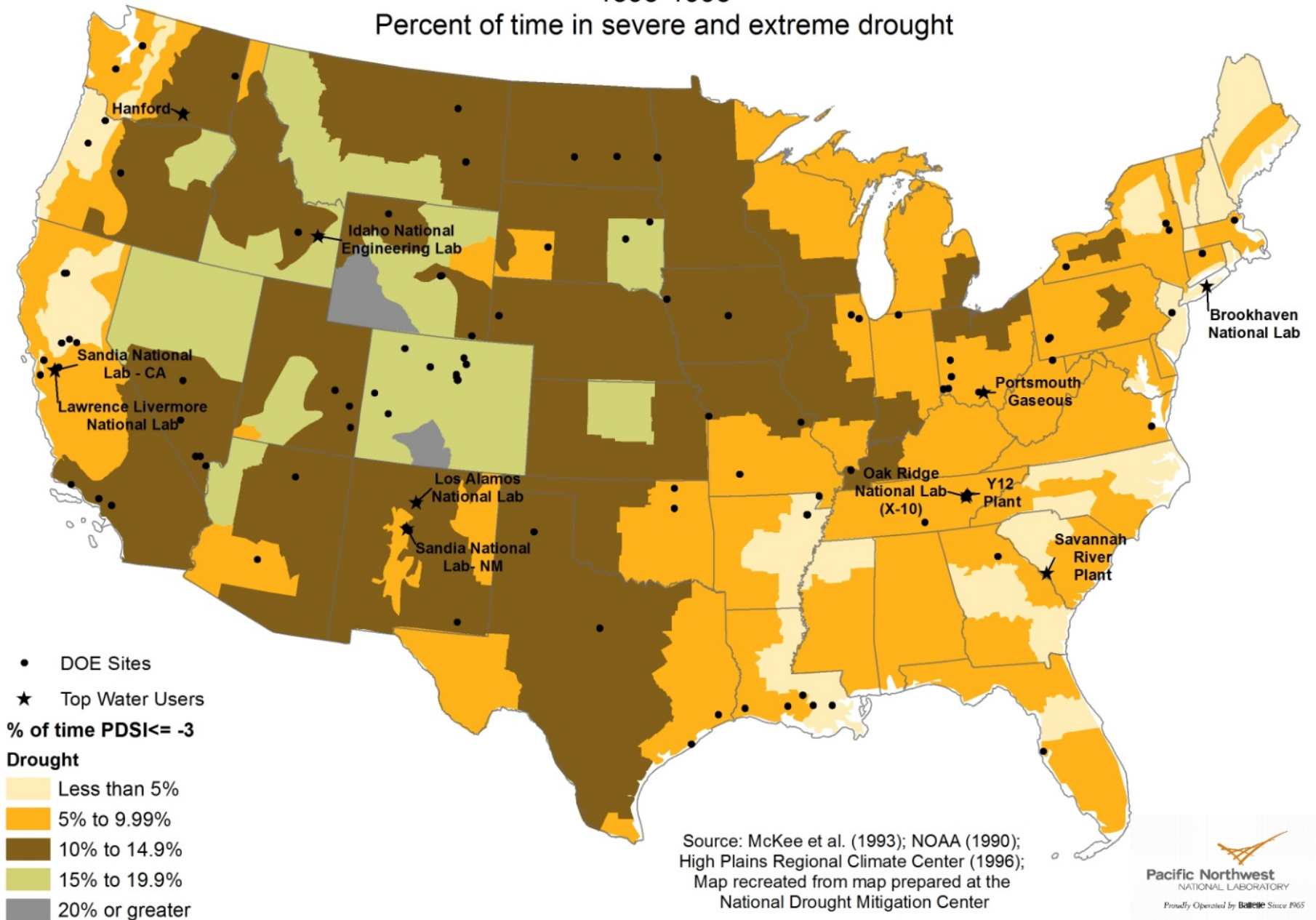
Released Thursday, September 29, 2011

Author: Michael Brewer/Liz Love-Brotak, NOAA/NESDIS/NCDC

Palmer Drought Severity Index

1895-1995

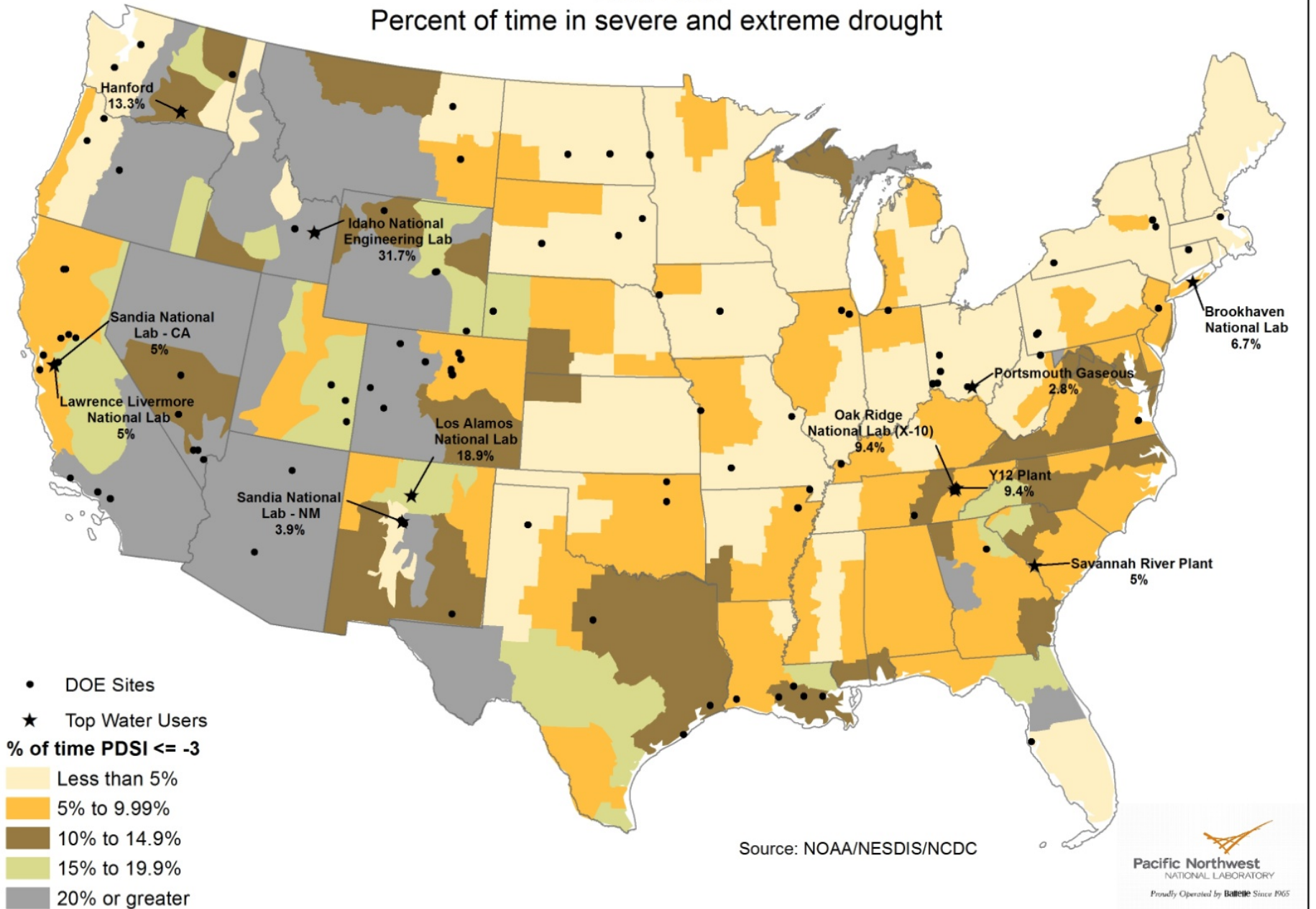
Percent of time in severe and extreme drought

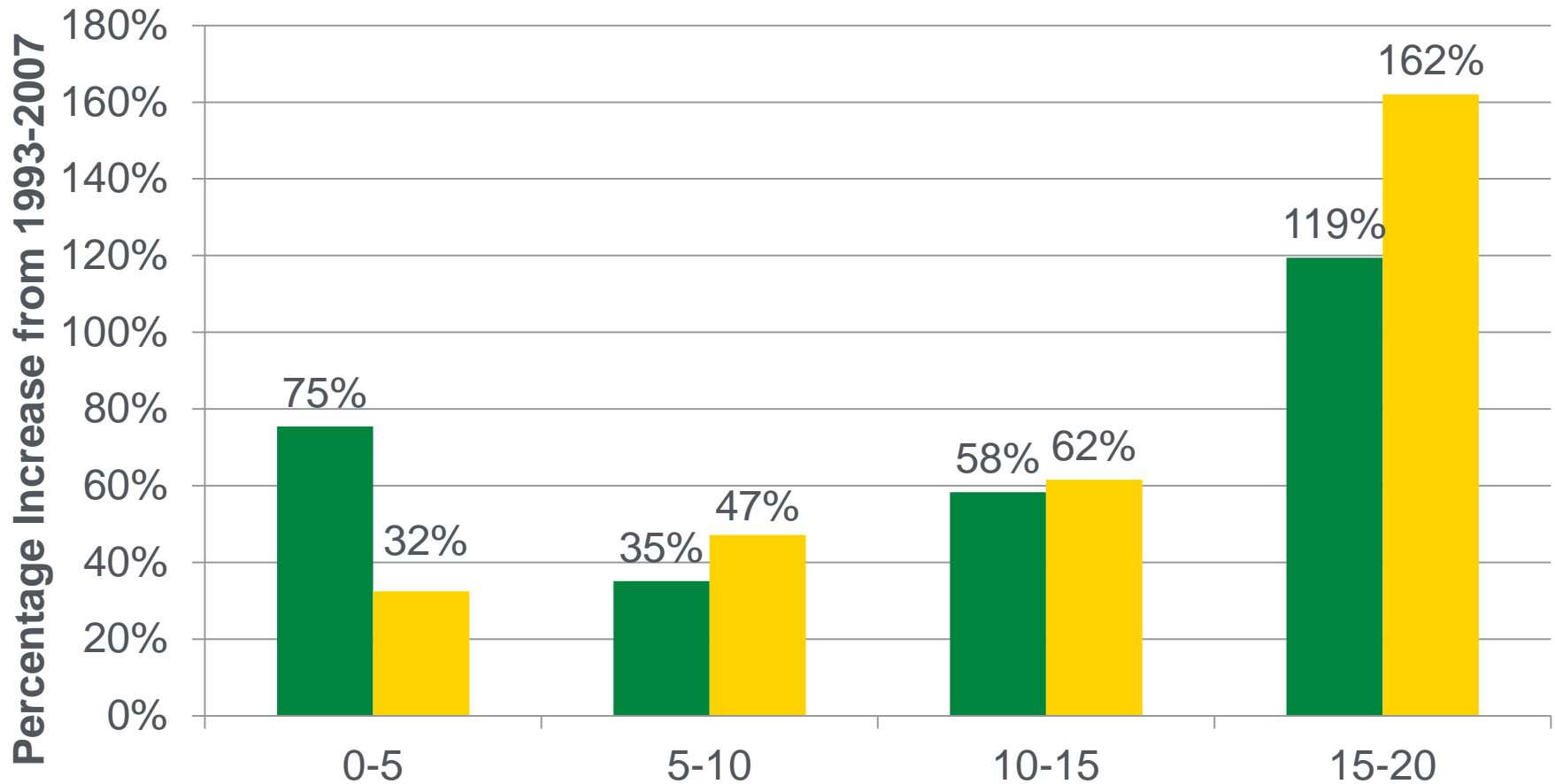


Palmer Drought Severity Index

1996-2010

Percent of time in severe and extreme drought

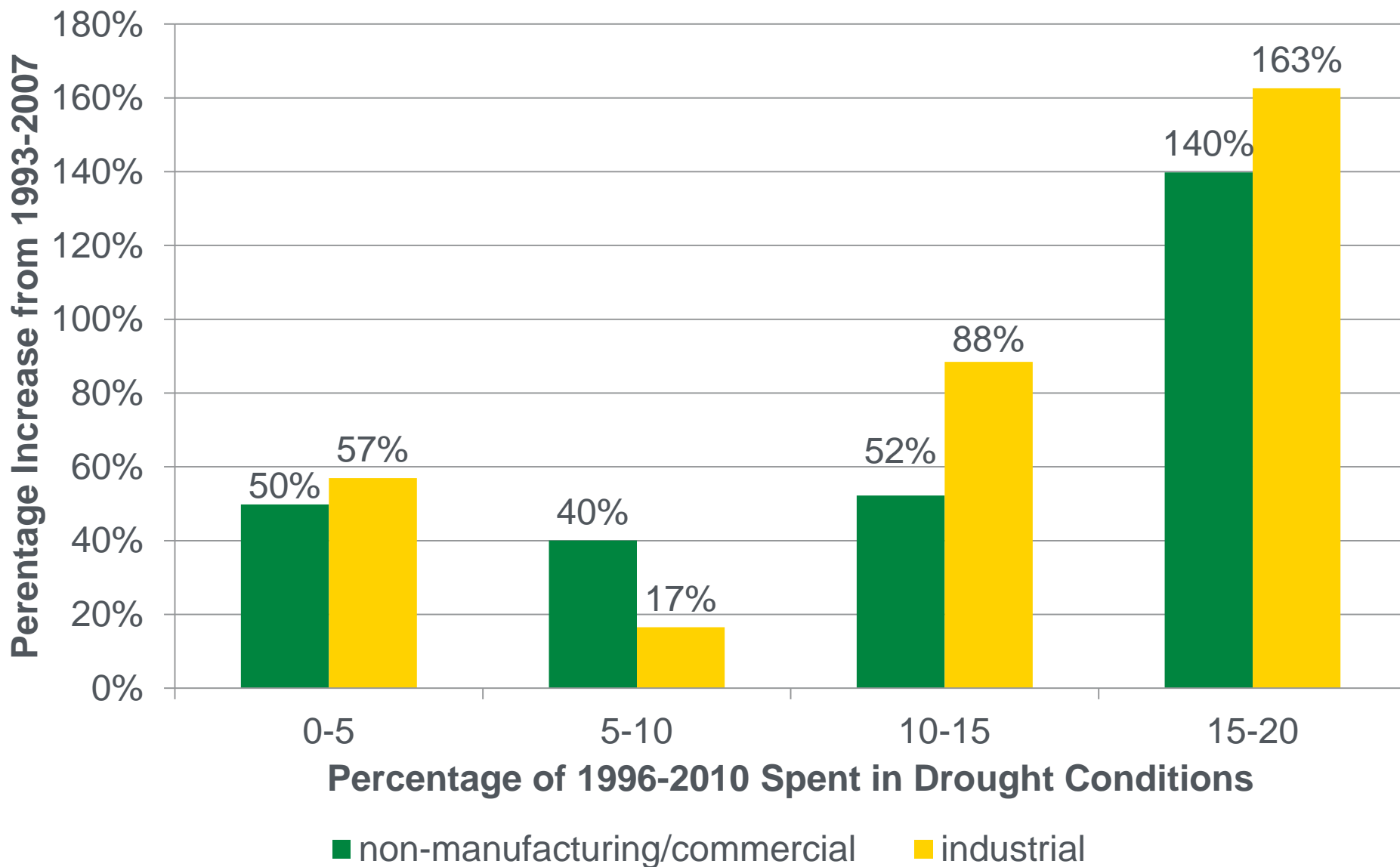




Percentage of 1895-1995 Spent in Drought Conditions

■ non-manufacturing/commercial ■ industrial

Drought Tendency Trends 1996-2010



Questions?

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FEMP Water Efficiency Program

<http://www1.eere.energy.gov/femp/program/waterefficiency.html>