

# Conowingo Options and other updates

Gary Shenk CBPO

WQGIT 9/26/2017

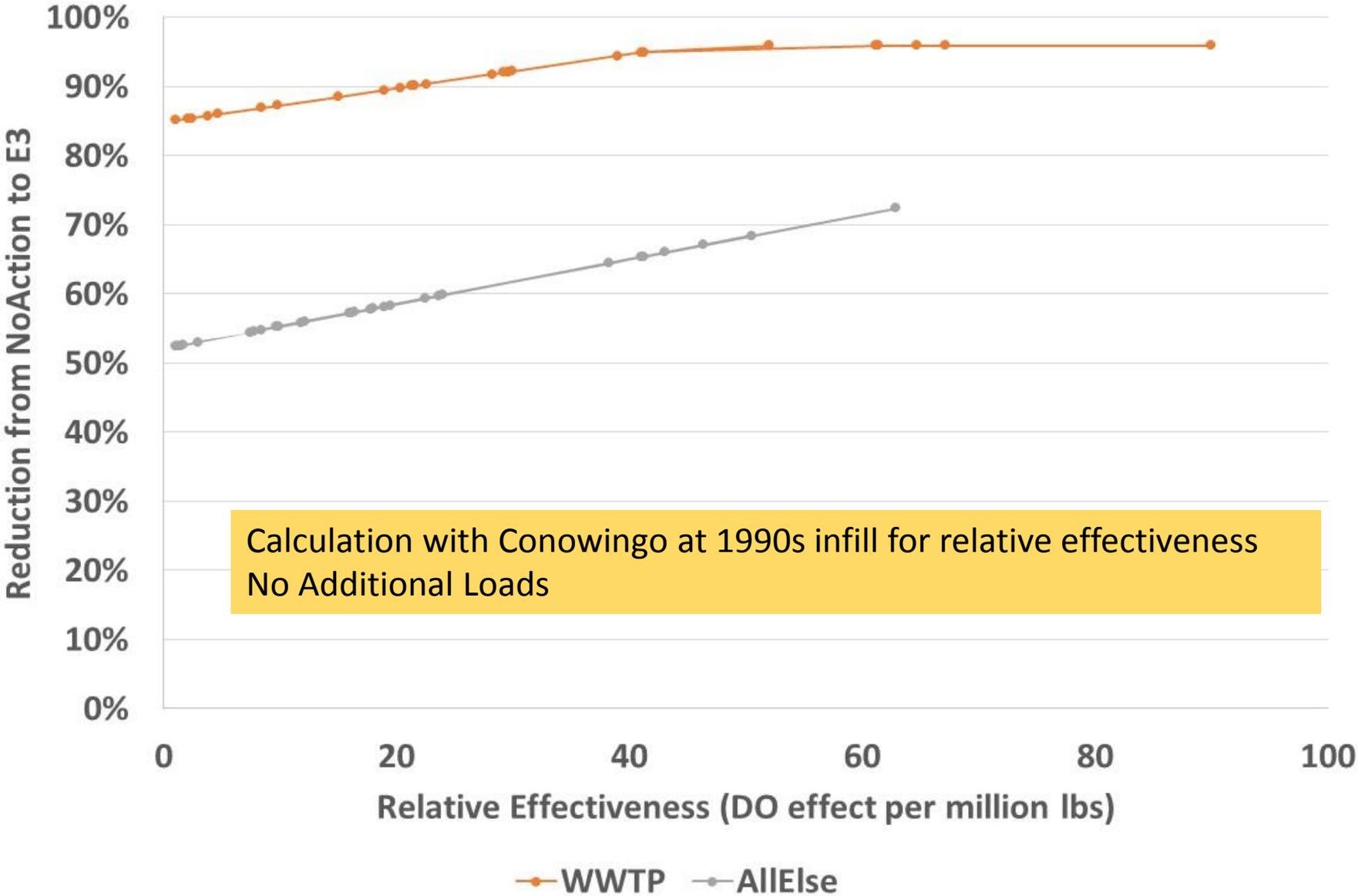
# Conowingo Decisions

- 1990s or Current Effectiveness for base
- All Else line only
- Basins to include
  - Susquehanna Only
  - Effective Basins
    - Susquehanna
    - Upper Eastern Shore MD and PA
    - Middle Eastern Shore MD
    - Western Shore Maryland
    - Patuxent Below Fall Line
  - Susquehanna + MD + VA
  - All
- Base scenario for comparison

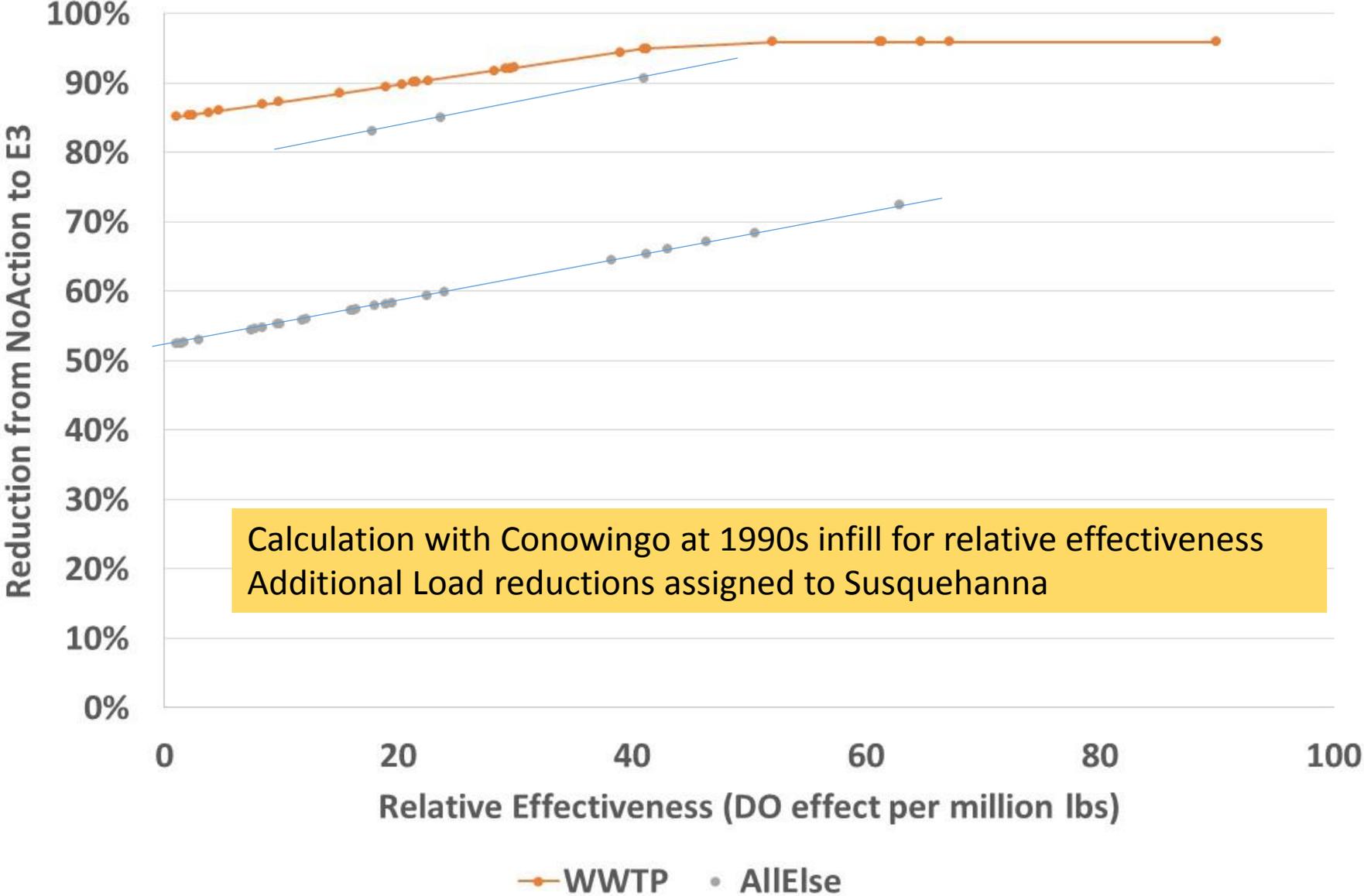
# Method

- Use relative effectiveness to calculate planning targets with Conowingo in 1990s or current state
- Calculate the additional load to be offset
- Create a second AllElse line for the set of basins

# Planning Target Calculation - Phosphorus- 9/2017

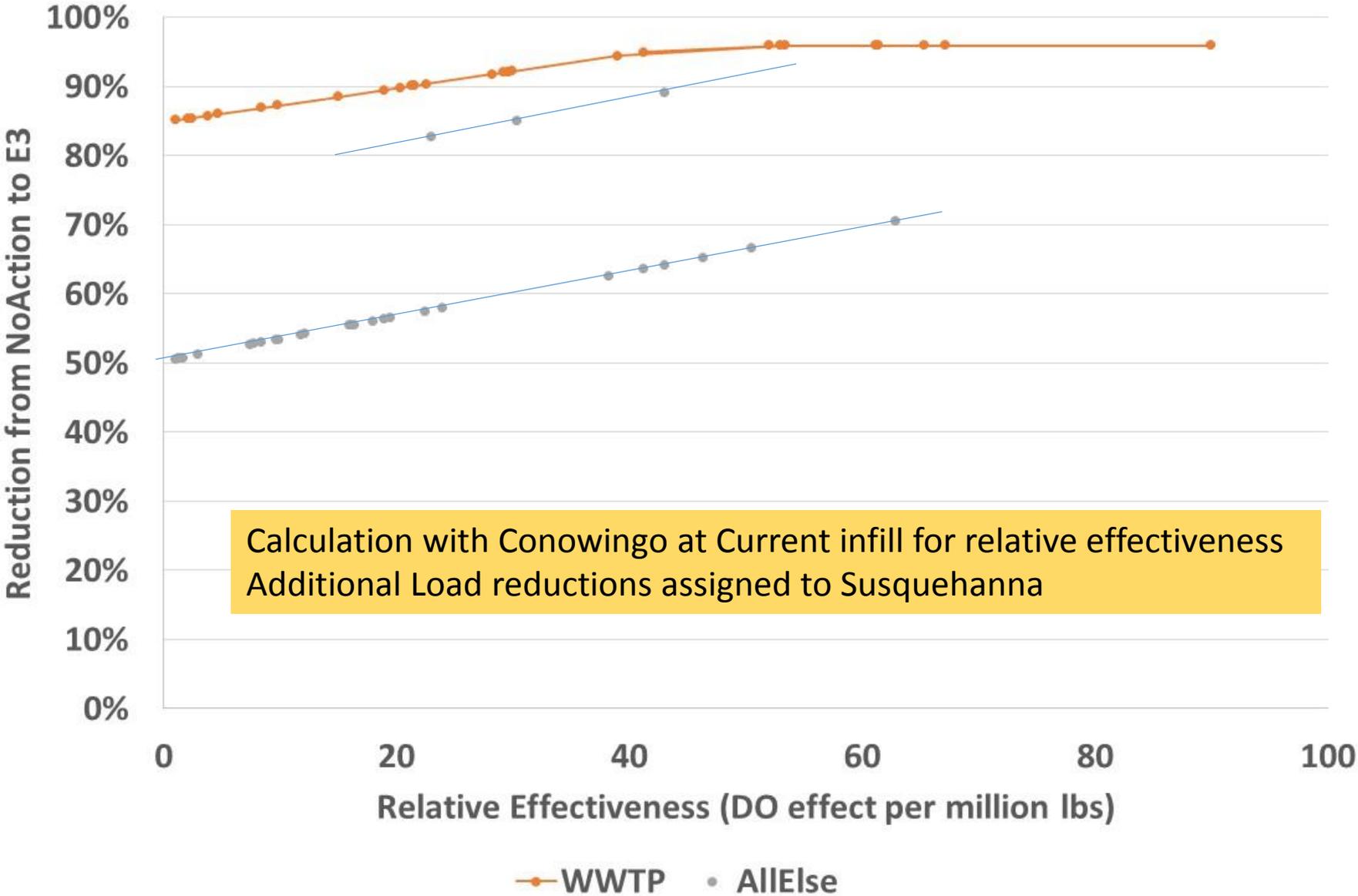


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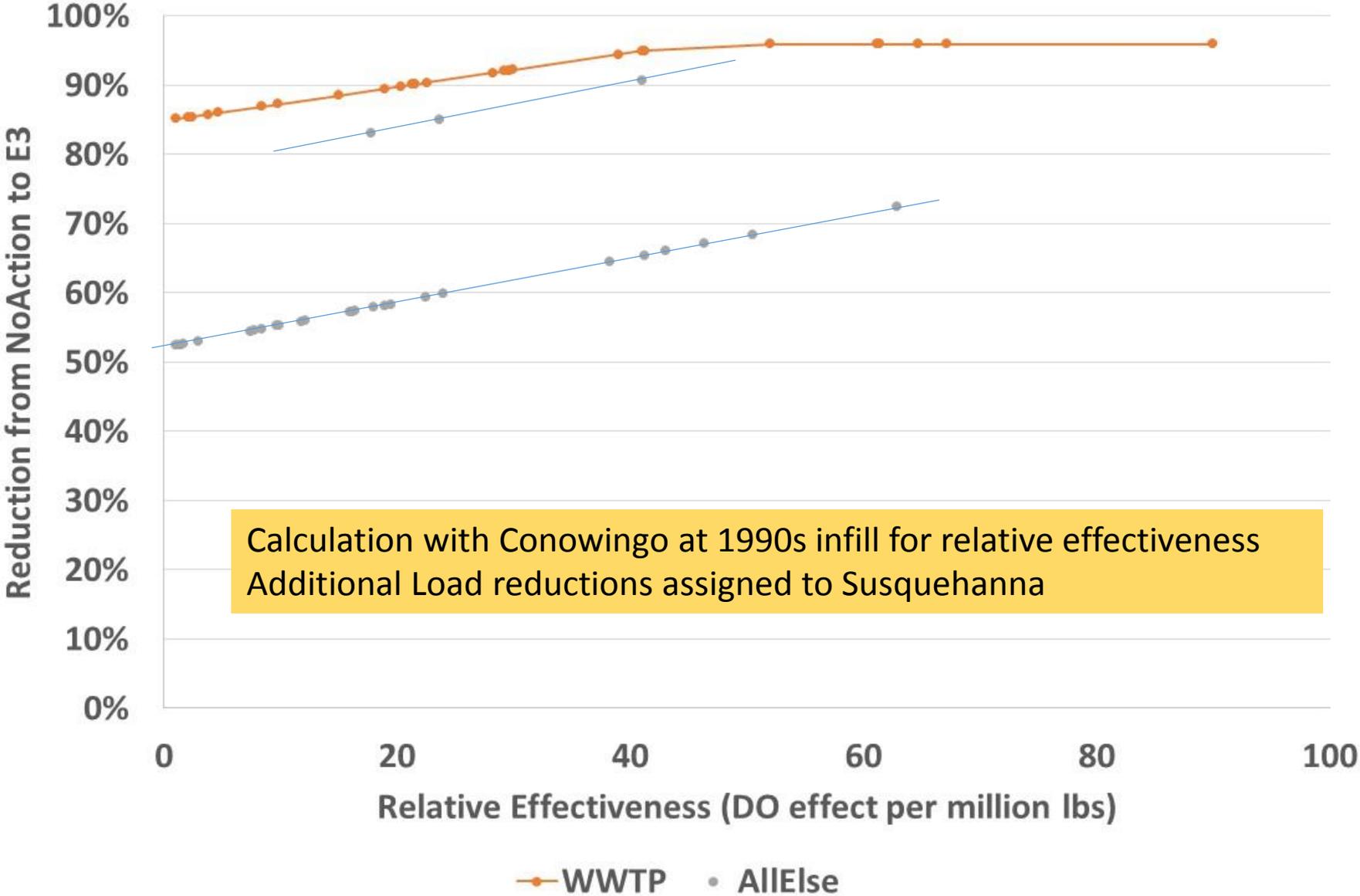


Calculation with Conowingo at 1990s infill for relative effectiveness  
Additional Load reductions assigned to Susquehanna

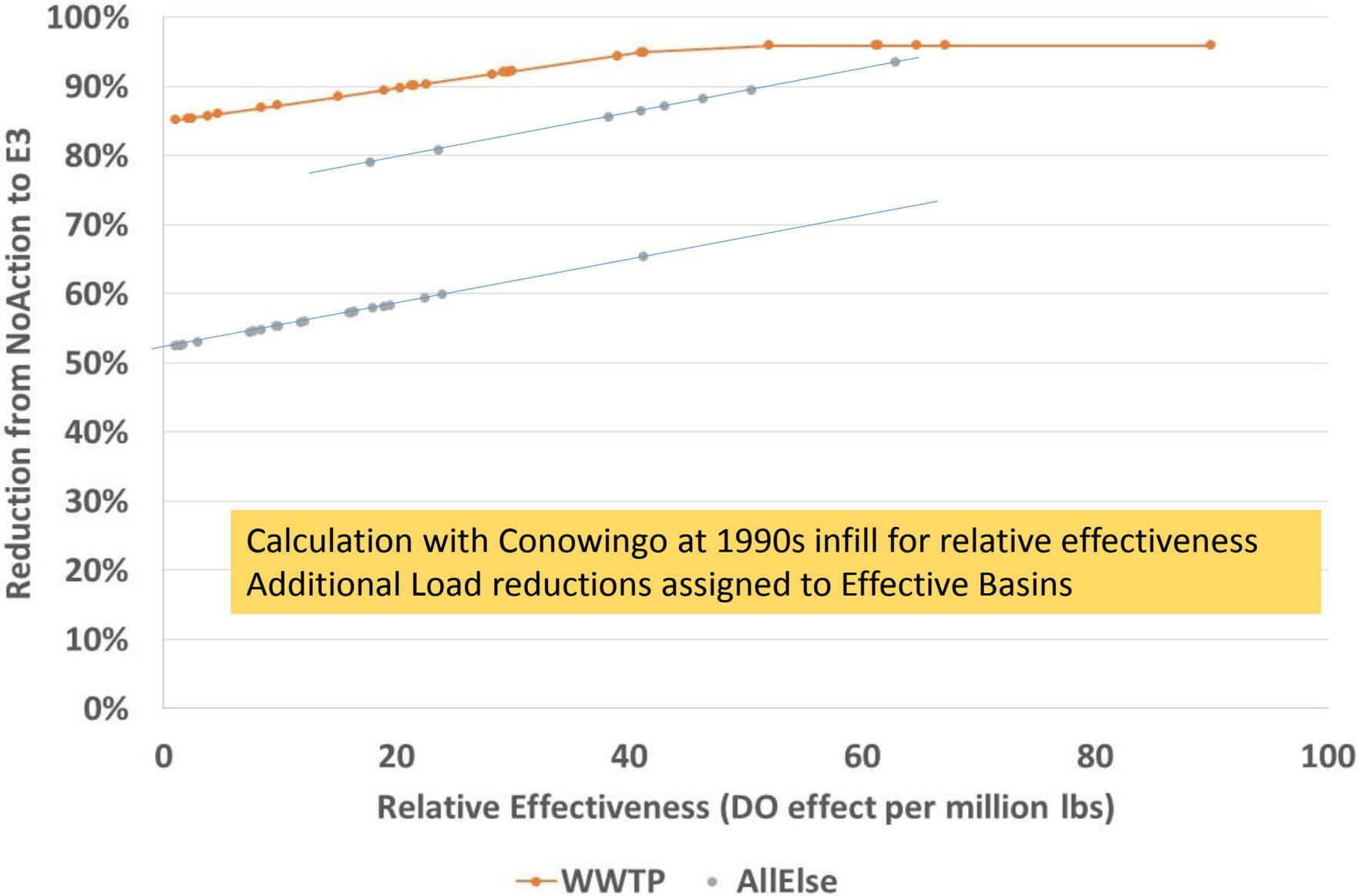
# Planning Target Calculation - Phosphorus- 9/2017



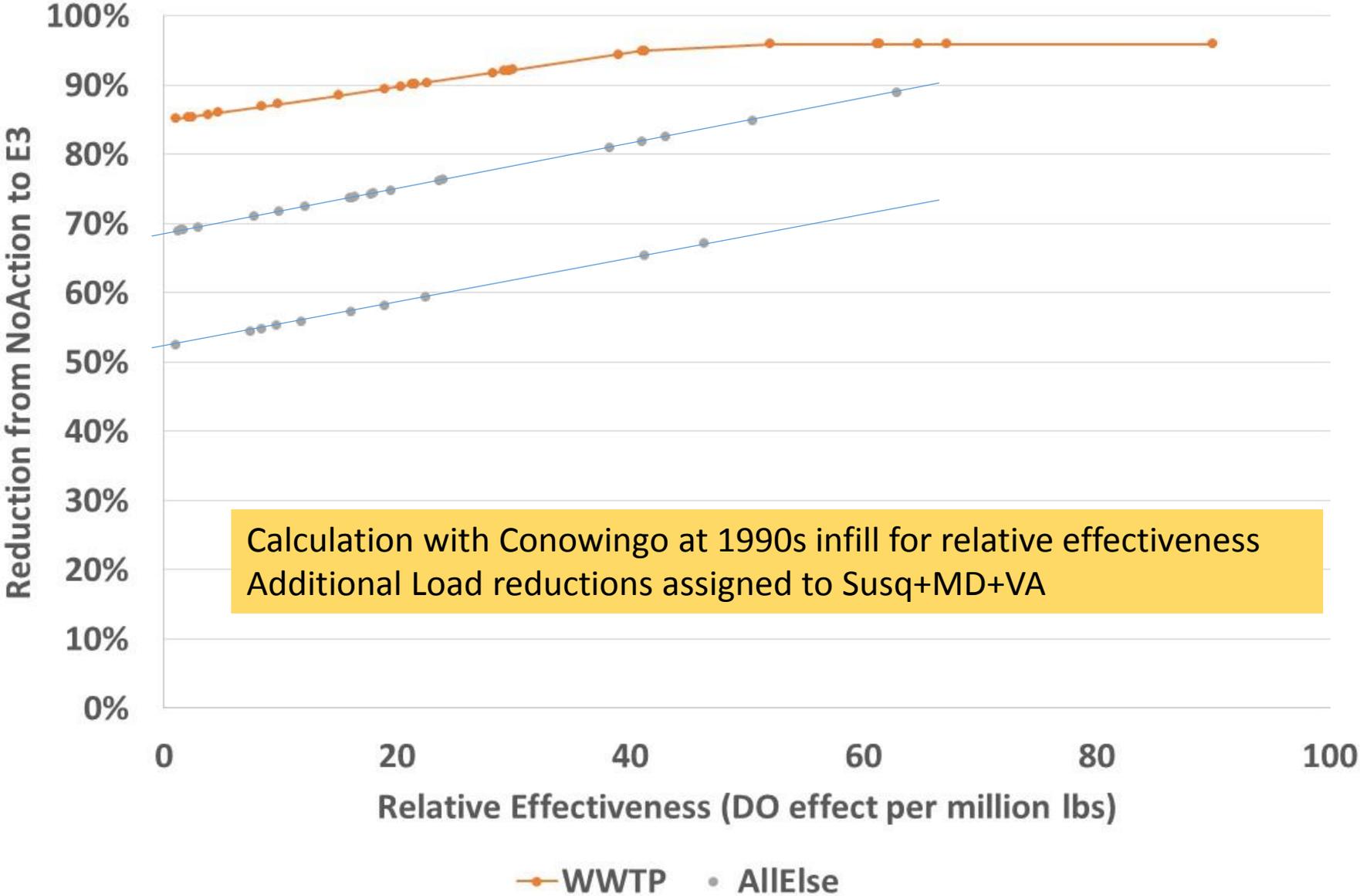
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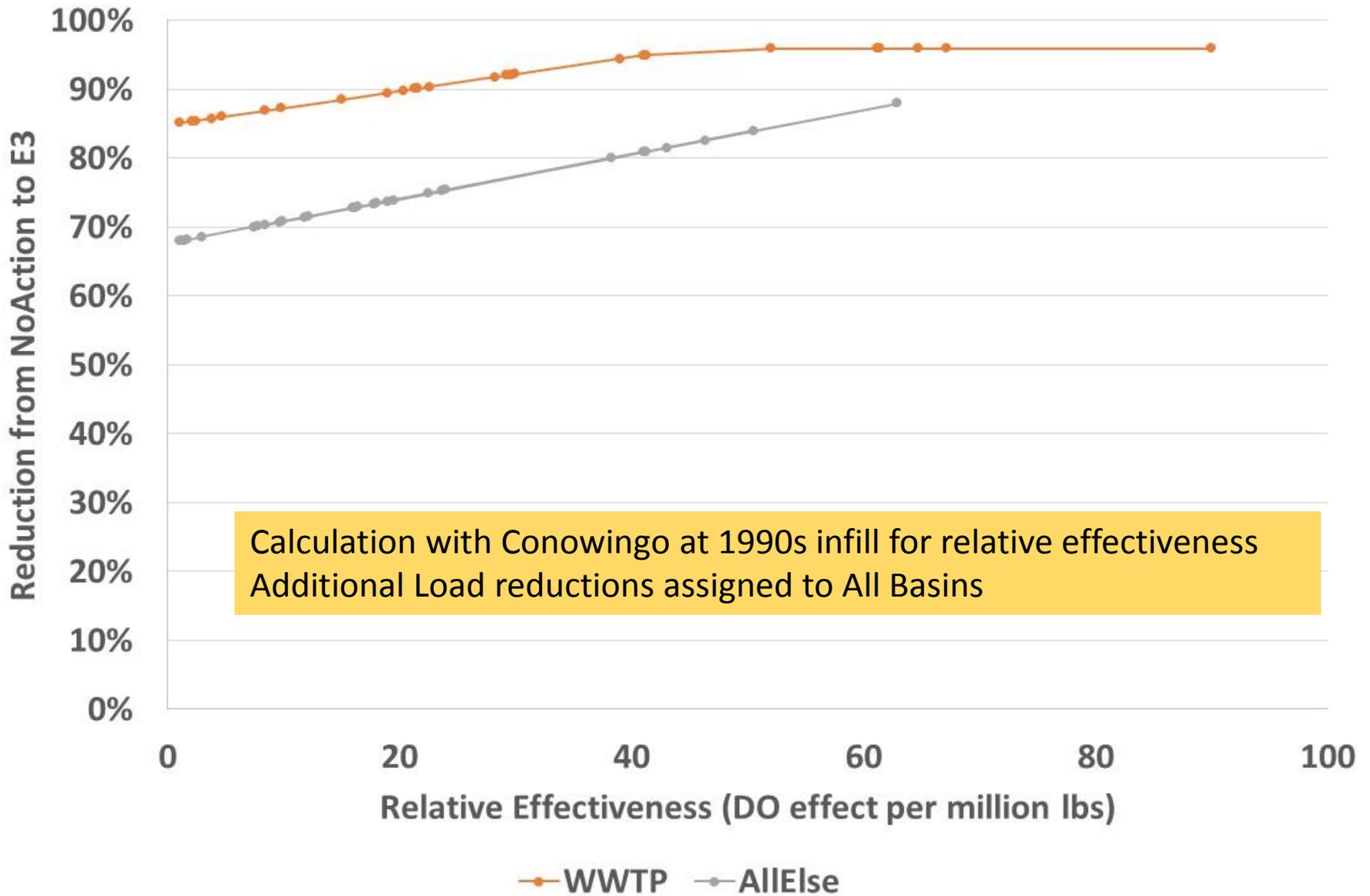


# Planning Target Calculation - Phosphorus- 9/2017



Calculation with Conowingo at 1990s infill for relative effectiveness  
Additional Load reductions assigned to Susq+MD+VA

# Planning Target Calculation - Phosphorus- 9/2017

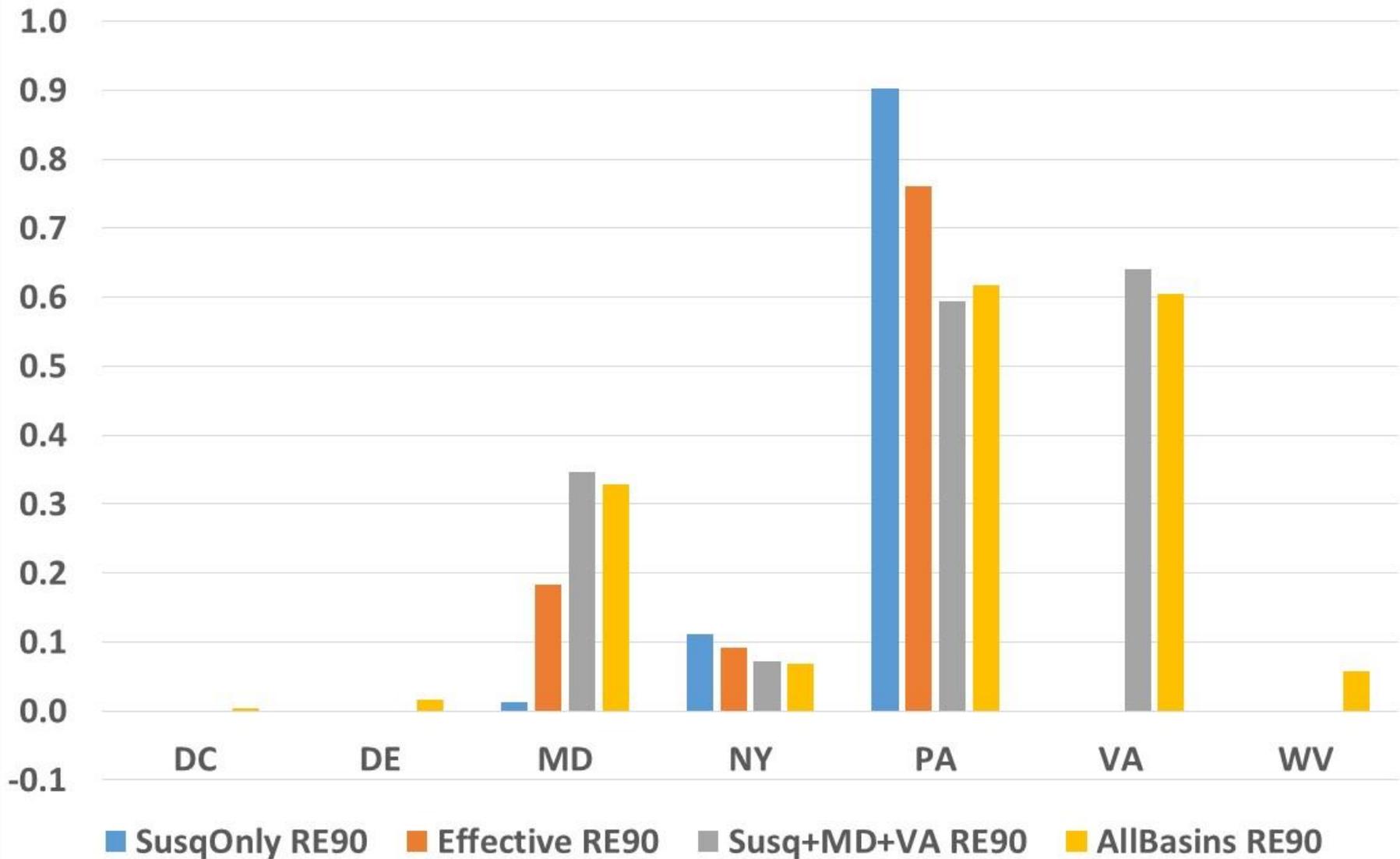


Calculation with Conowingo at 1990s infill for relative effectiveness  
Additional Load reductions assigned to All Basins

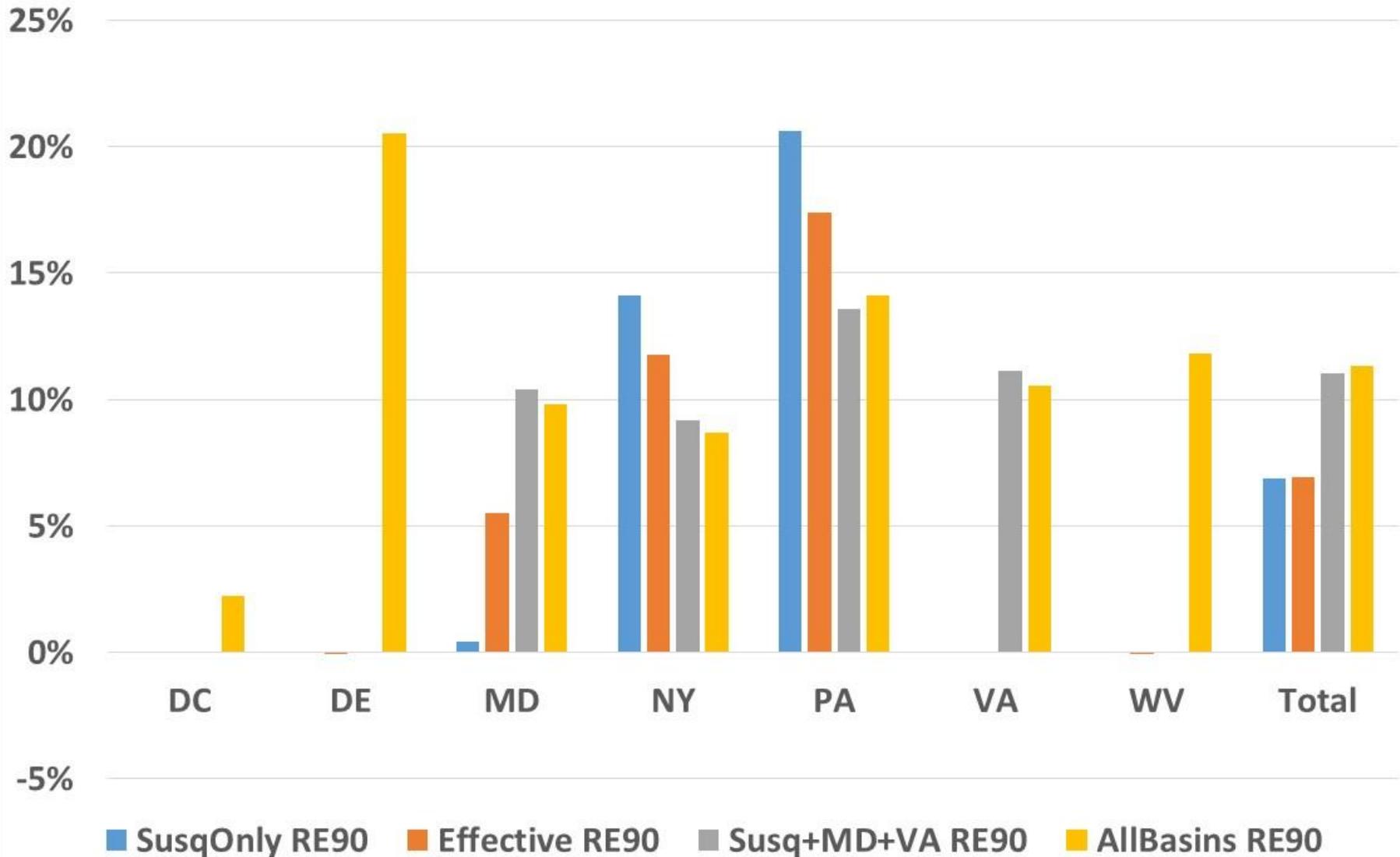
# Susquehanna Options

Million lbs P	SusqOnly RE 1990s	Effective RE 1990s	Susq+MD+VA RE 1990s	AllBasins RE 1990s	Million lbs P	SusqOnly Dynamic Eq.	Effective Dynamic Eq.	Susq+MD+VA Dynamic Eq.	AllBasins Dynamic Eq.
	SusqOnly RE90	Effective RE90	Susq+MD+VA RE90	AllBasins RE90		SusqOnly REDE	Effective REDE	Susq+MD+VA REDE	AllBasins REDE
DC	0.000	0.000	0.000	0.003	DC	0.000	0.000	0.000	0.003
DE	0.000	0.000	0.000	0.017	DE	-0.002	-0.002	-0.002	0.015
MD	0.013	0.184	0.347	0.328	MD	-0.025	0.143	0.304	0.285
NY	0.111	0.093	0.072	0.068	NY	0.117	0.099	0.079	0.075
PA	0.902	0.761	0.594	0.617	PA	0.936	0.797	0.633	0.655
VA	0.000	0.000	0.641	0.605	VA	-0.072	-0.072	0.561	0.525
WV	0.000	0.000	0.000	0.058	WV	-0.007	-0.007	-0.007	0.051
Total	1.026	1.038	1.655	1.697	Total	0.947	0.958	1.567	1.608
Percent change to PT	SusqOnly RE 1990s	Effective RE 1990s	Susq+MD+VA RE 1990s	AllBasins RE 1990s	Percent change to PT	SusqOnly Dynamic Eq.	Effective Dynamic Eq.	Susq+MD+VA Dynamic Eq.	AllBasins Dynamic Eq.
	SusqOnly RE90	Effective RE90	Susq+MD+VA RE90	AllBasins RE90		SusqOnly REDE	Effective REDE	Susq+MD+VA REDE	AllBasins REDE
DC	0%	0%	0%	2%	DC	0%	0%	0%	2%
DE	0%	0%	0%	21%	DE	-2%	-2%	-2%	18%
MD	0%	6%	10%	10%	MD	-1%	4%	9%	9%
NY	14%	12%	9%	9%	NY	15%	13%	10%	10%
PA	21%	17%	14%	14%	PA	21%	18%	14%	15%
VA	0%	0%	11%	11%	VA	-1%	-1%	10%	9%
WV	0%	0%	0%	12%	WV	-1%	-1%	-1%	10%
Total	7%	7%	11%	11%	Total	6%	6%	10%	11%

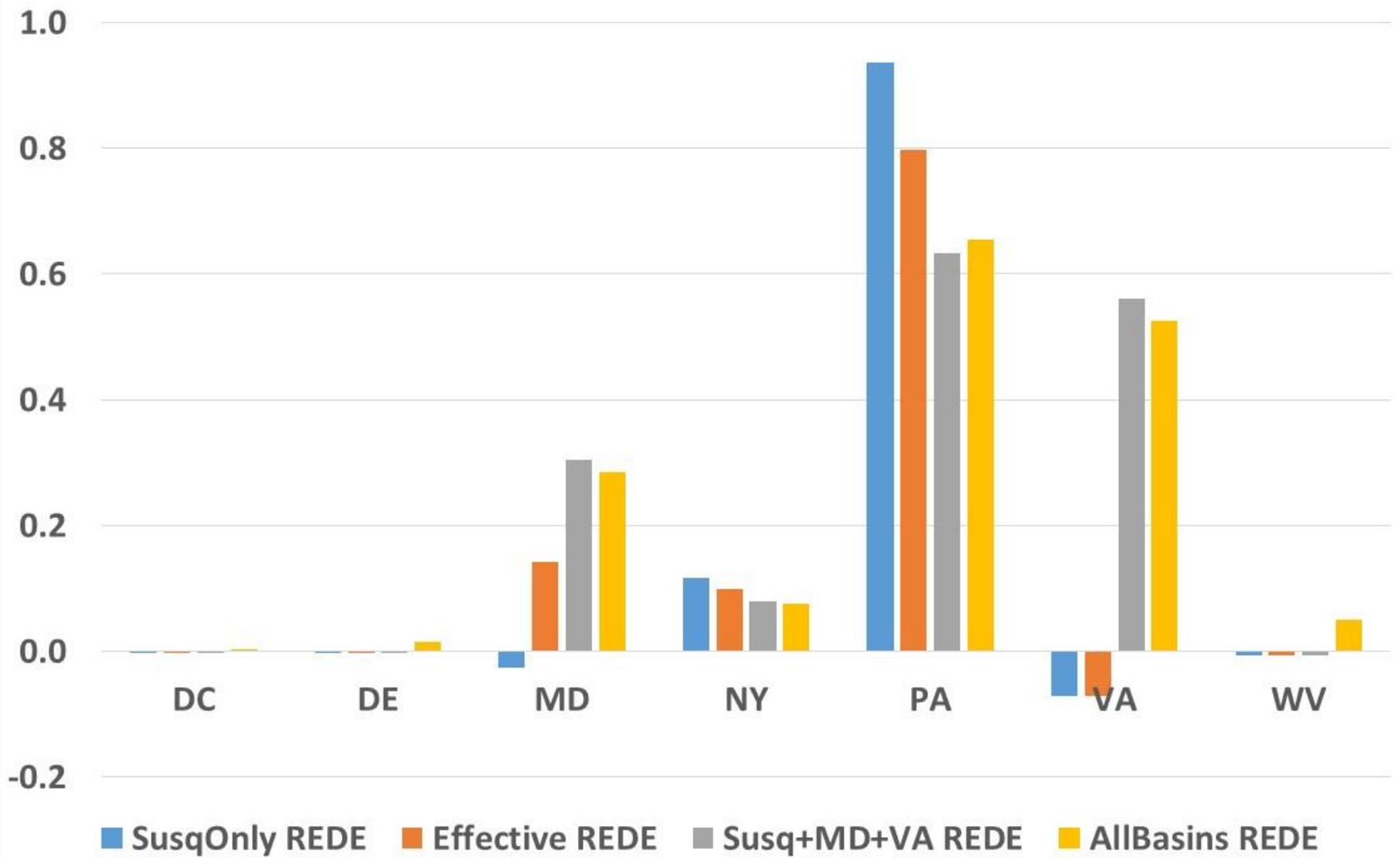
## Additional P Load Reduction Due to Conowingo Filling 1990s Relative Effectiveness - Million lbs P



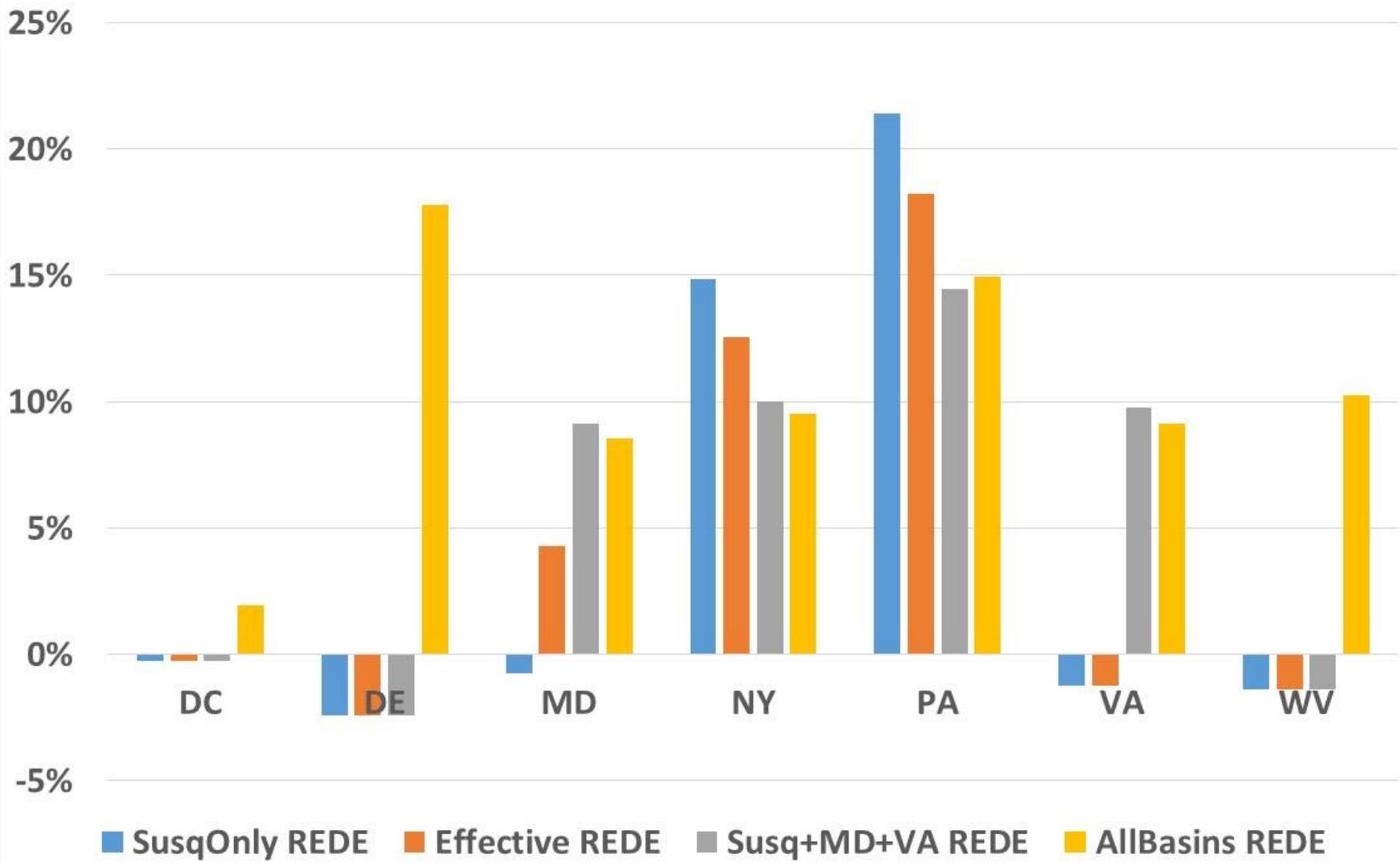
## Additional P Load Reduction Due to Conowingo Filling 1990s Relative Effectiveness - Percent of WIP



## Additional P Load Reduction Due to Conowingo Filling Current Relative Effectiveness - Million lbs P



## Additional P Load Reduction Due to Conowingo Filling Current Relative Effectiveness - Percent of WIP



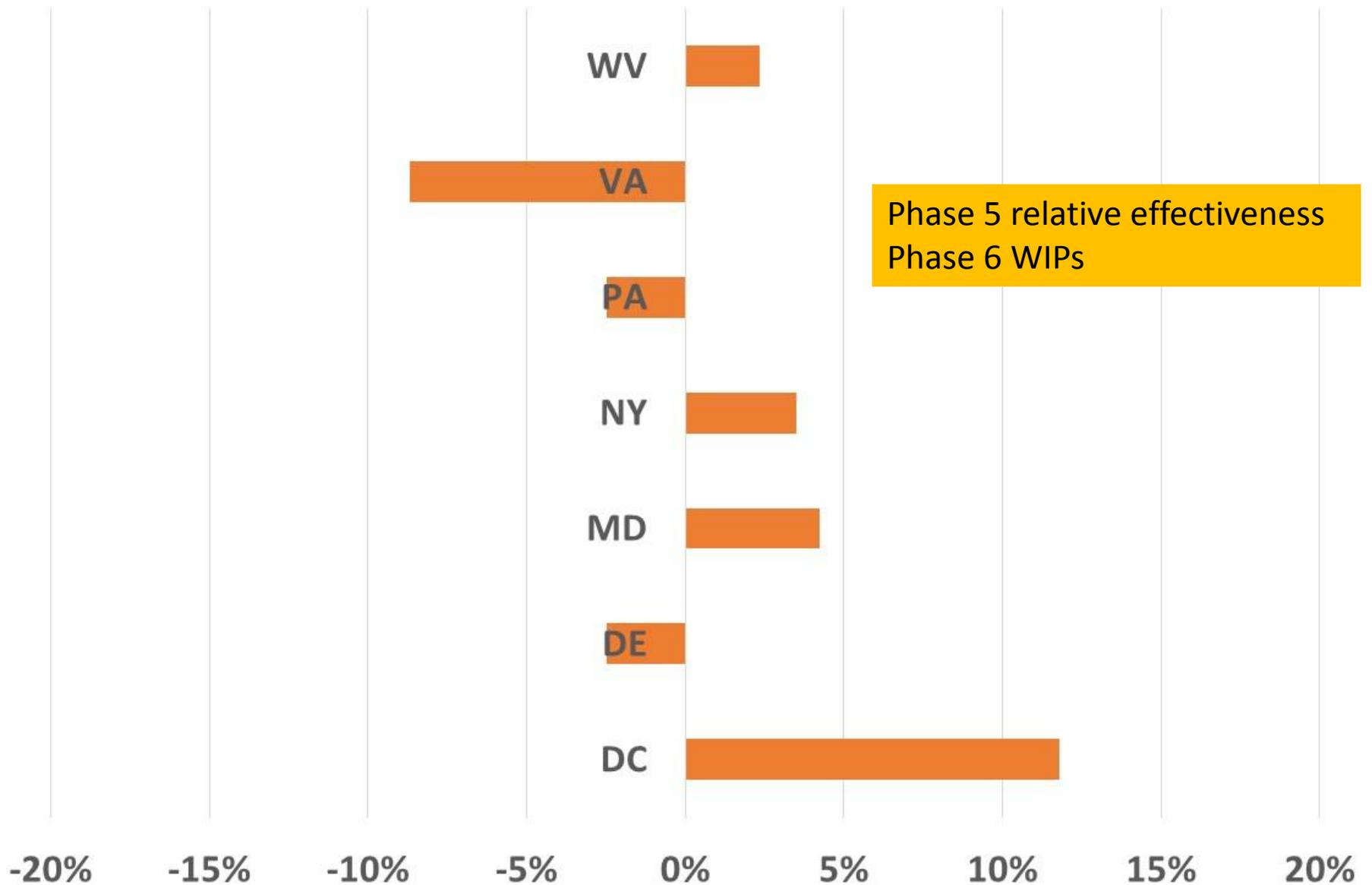
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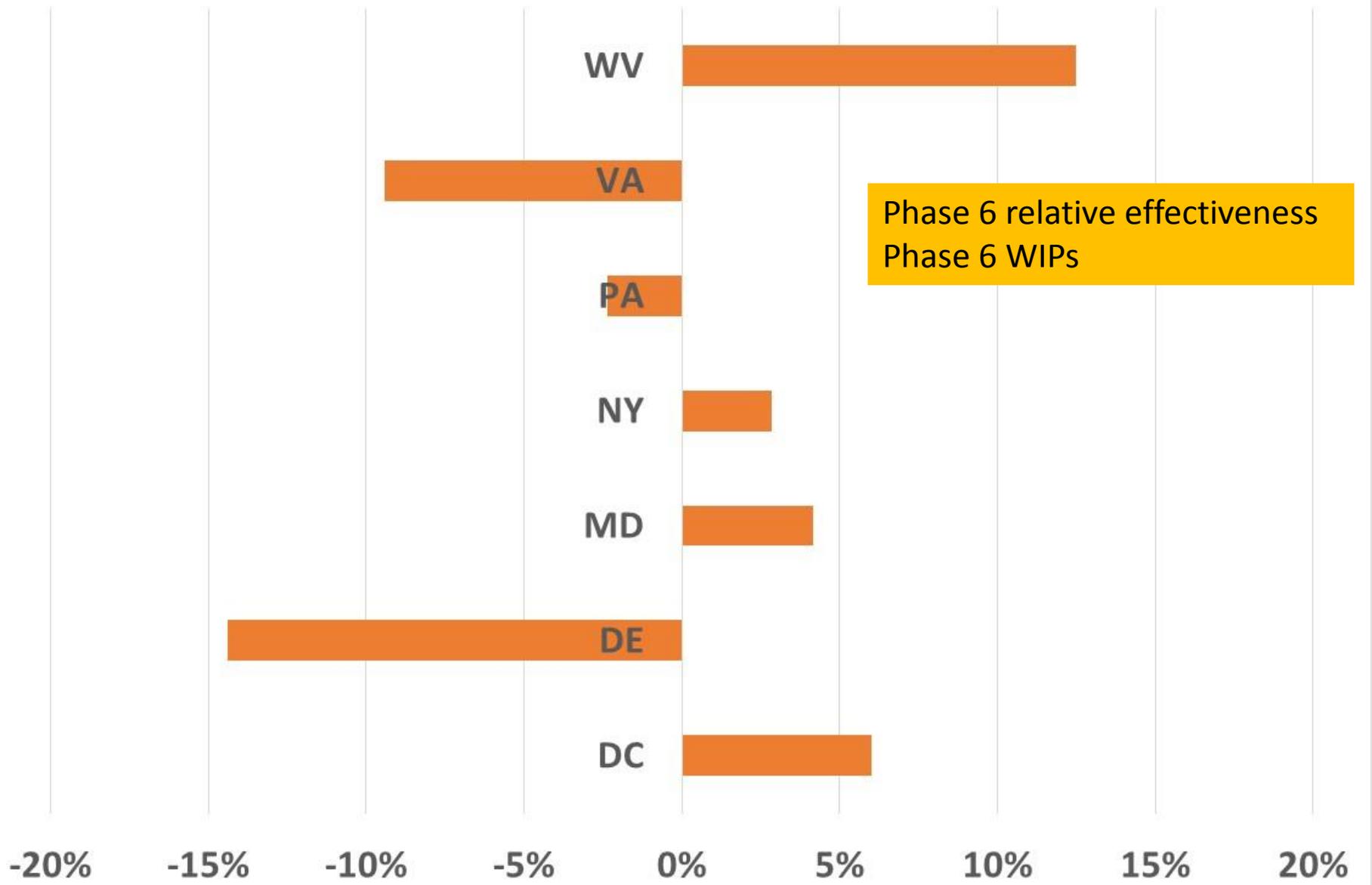
# Issue with Scenarios

- Missing Shoreline loads in No Action scenarios
- Raising No Action Loads means higher percentage effort across the board
- States with Shoreline better off relative to yesterday's presentation

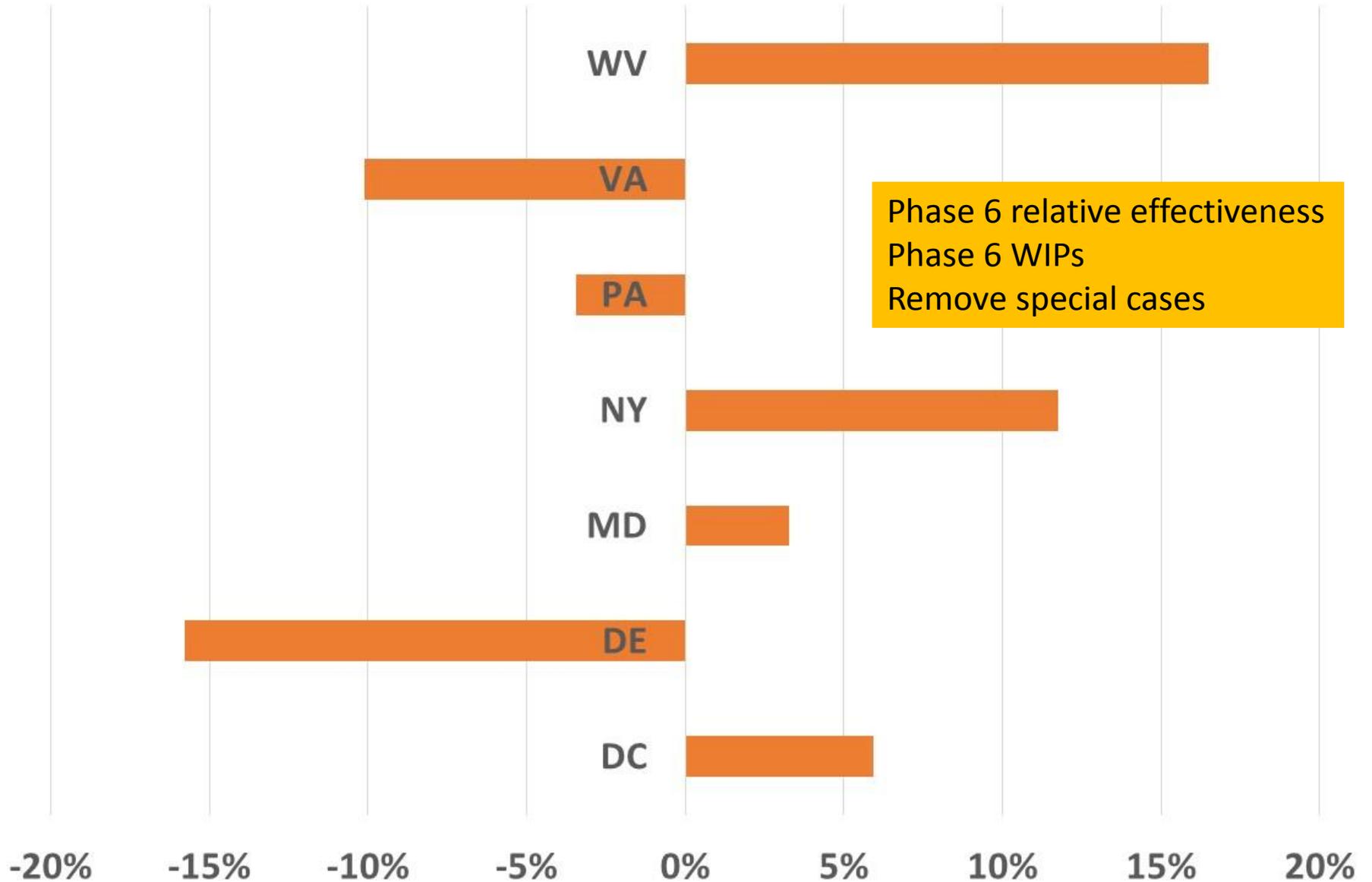
## TN equivalents load reduction beyond WIPs



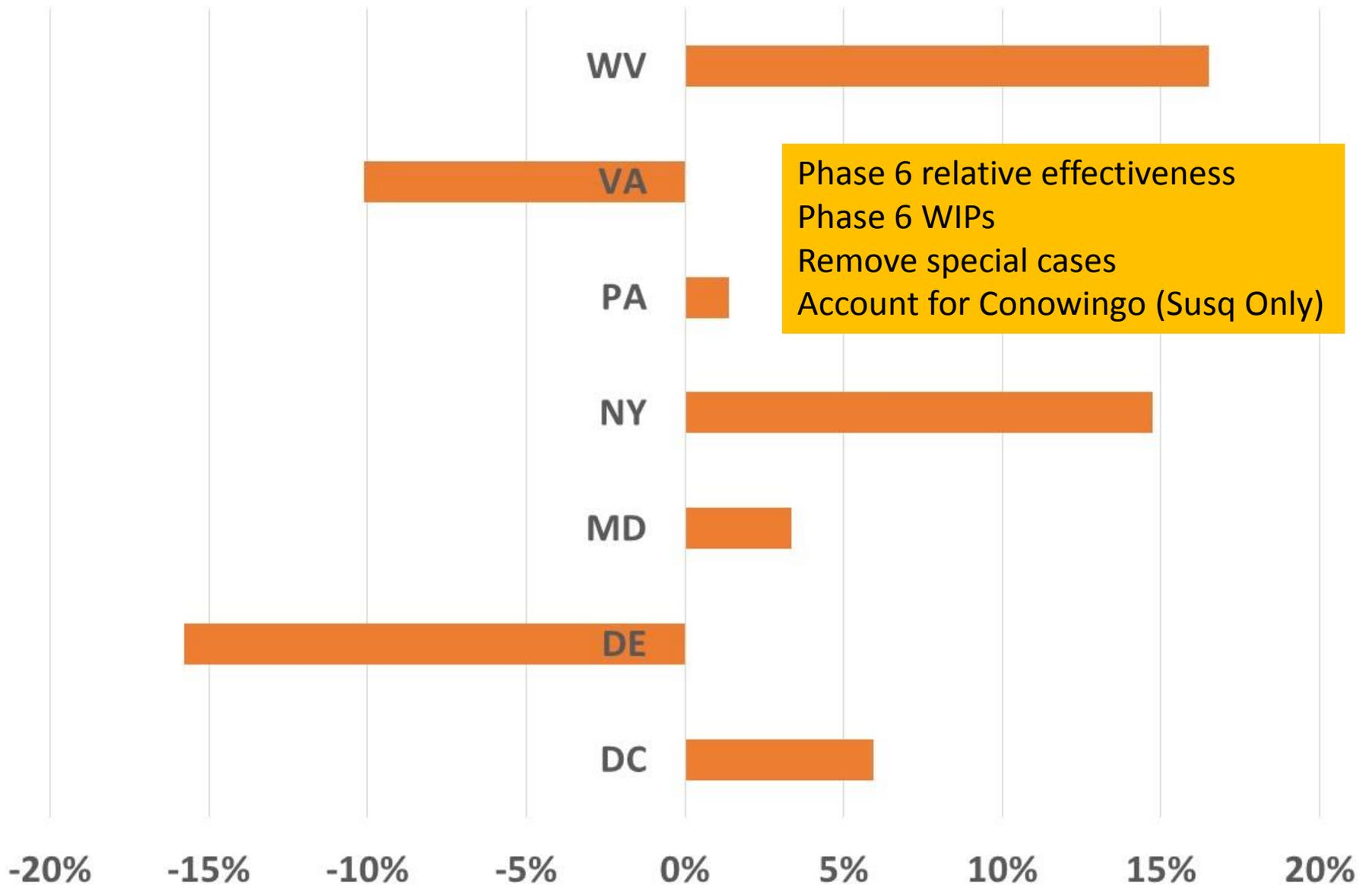
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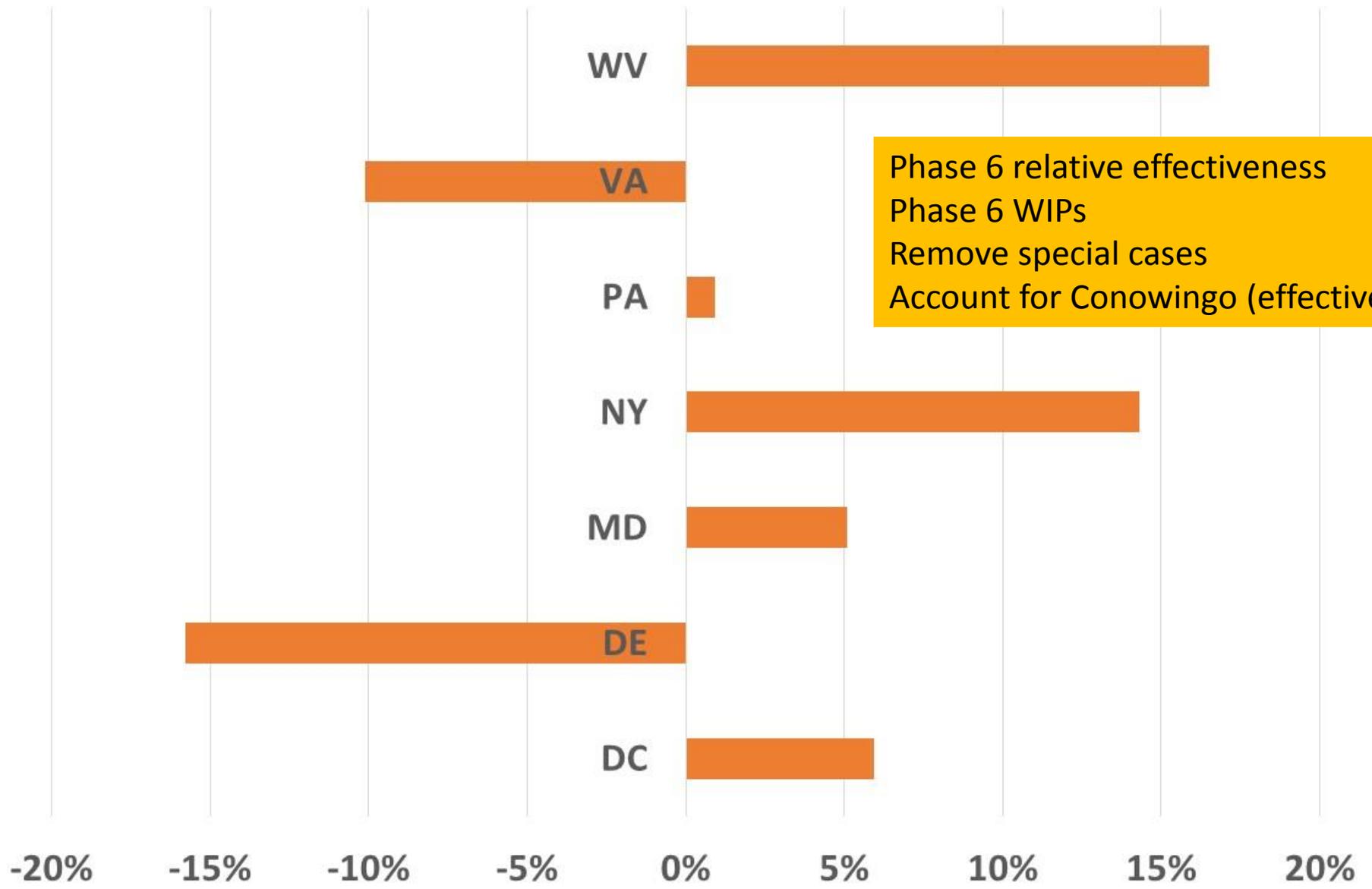
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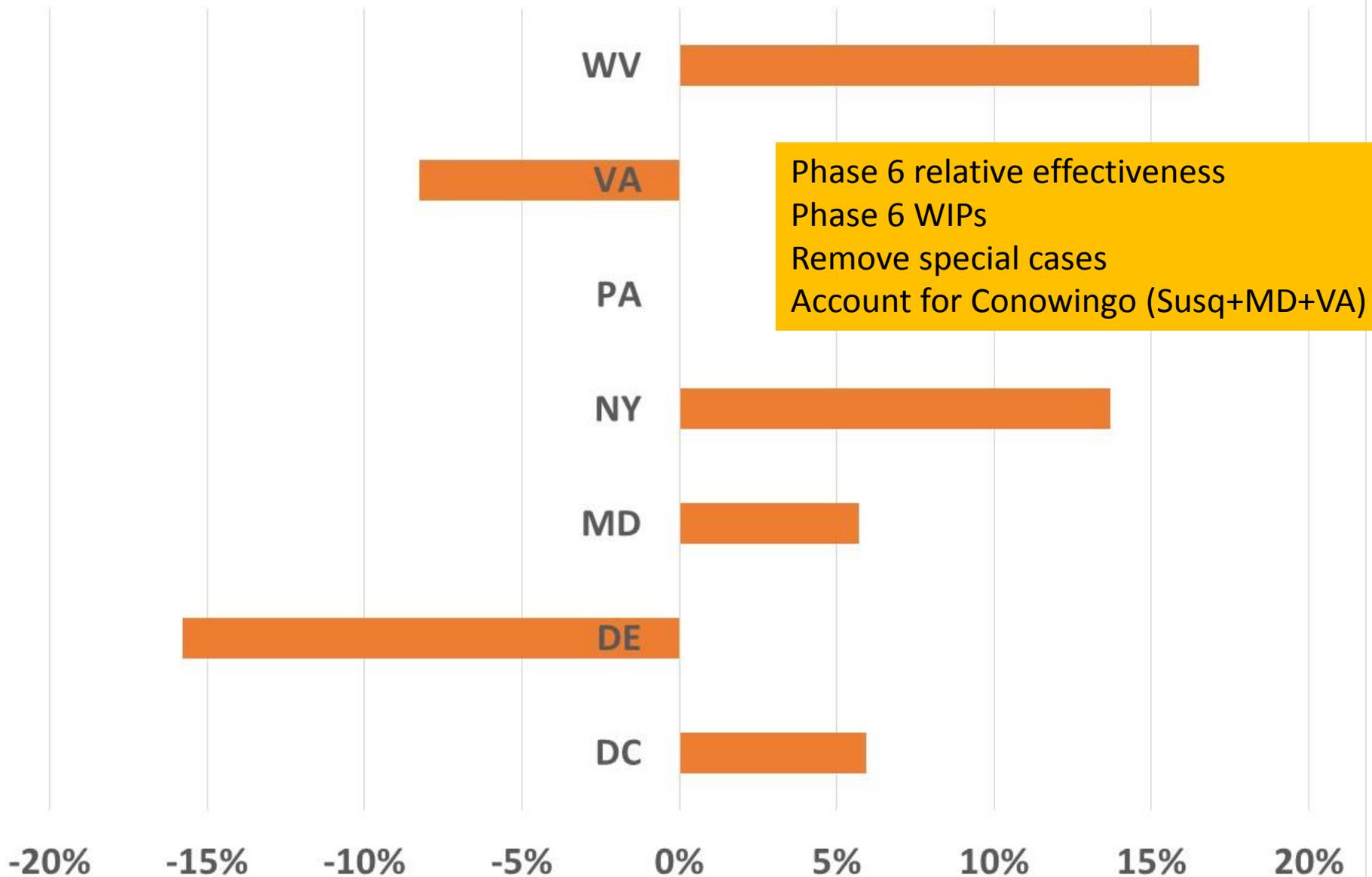
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