Florida's Water Challenge

Sustainable Water Resources Roundtable

By

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“Florida’s environment, economy and quality of life all depend on water. If we want to continue to attract businesses and draw tourists while protecting our environment, we must ensure we have the water supply to meet our needs, not just today, but for our future.”

Commissioner Adam Putnam
Florida First / 2014

Water 2070

- Florida is projected to have 15 million additional residents.
- Sprawl development-related water demand will increase by more than 100% compared to the 2010 Baseline.
- Compact development and a modest 20% increase in water conservation, would save 27% in development-related water demand as compared to sprawl based growth.
- Statewide agriculture irrigation demand in the 2070 Trend is 24% less due to the loss of ag lands to development.
- Given existing water shortages in some areas of the state the increases in total demand are clearly not sustainable.

A Recognized National Crisis:

- **AWWA "Buried No Longer: Confronting America's Infrastructure Crisis" Report**
  - http://www.awwa.org/Portals/0/files/legreg/documents/BuriedNoLonger.pdf
- **National Association of Water Companies (NAWC) and U.S. Chamber of Commerce effort on water infrastructure, "Water is Your Business"**
  - http://waterisyourbusiness.org
- **American Society of Civil Engineers report on the future economic costs of failing to act on infrastructure needs**
  - http://www.asce.org/uploadedFiles/Infrastructure/Failure_to_Act/Failure_to_Act_Report.pdf
- **Congressional Research Service - Water Infrastructure Needs and Investment: Review and Analysis of Key Issues**
  - http://www.fas.org/sgp/crs/homesec/RL31116.pdf
- **Drinking Water Infrastructure Needs Survey and Assessment | Drinking Water Infrastructure Needs Survey | US EPA**
  - http://water.epa.gov/infrastructure/drinkingwater/dwns/index.cfm

States Stepping-up to Challenge

- **The Texas Water Dev. Board has approved nearly $4 Billion in financing for projects to increase water supplies across the state, and to promote conservation.** (Texas Tribune, July 2015)
- **New Jersey provides $5B to future-proof water, wastewater treatment plants against extreme weather.** (NJSpotlight, Aug. 2013)
- **Massachusetts passed a bi-partisan water infrastructure bill that would provide $21.4 billion over the next 20 years.** (CapeCod Today, Oct. 2013)
- **California plans to expend between $800 million and $1 billion annually on recycled water projects over the next decade.** (WateReuse Assoc., Nov. 2013)
- **Illinois Governor marks $2B for statewide clean water and stormwater management projects.** (CleanWater, Illinois, Feb. 2014)

Florida's Water Resources Priorities

Protecting State's economy & quality of life.

- **Restoring our already impacted natural systems.**
  - Safeguarding fragile environments (rivers, wetlands, lakes, springs & estuaries) that drive our tourism and recreational industries.
- **Developing alternative supplies of water to support sustainable economic growth.**
  - Ensuring adequate supplies to support Florida's agriculture & projected population growth.
- **Repairing or replacing aging infrastructure.**

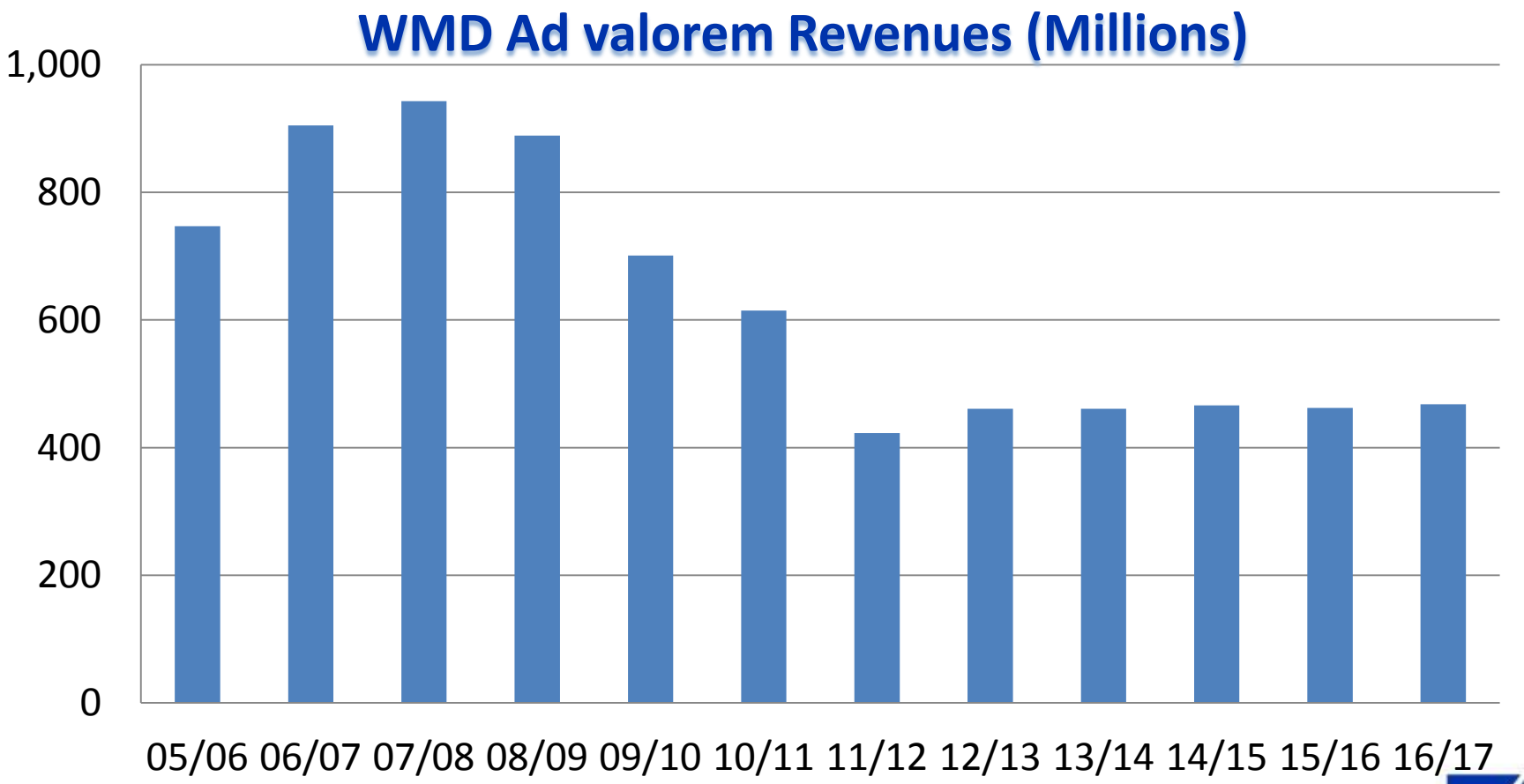
Florida Faces A Daunting Challenge

- **$16.5 Billion over next 20 years in drinking water infrastructure improvements.** (EPA Drinking Water Infrastructure Needs Survey and Assessment - Fifth Report to Congress Sept. 2015)
- **$18.4 Billion in wastewater infrastructure by 2020.** (ASCE: 2013)
- **$2.8 billion dollars are needed by 2025 for capital improvements and long term maintenance programs to support flood control.** (Florida Stormwater Association, 2014 Stormwater Utilities Survey)
- **$50.5 to $149.8 million per year for Numeric Nutrient Criteria Rule compliance.** (FSA & FSU CEFA: 2/2012)

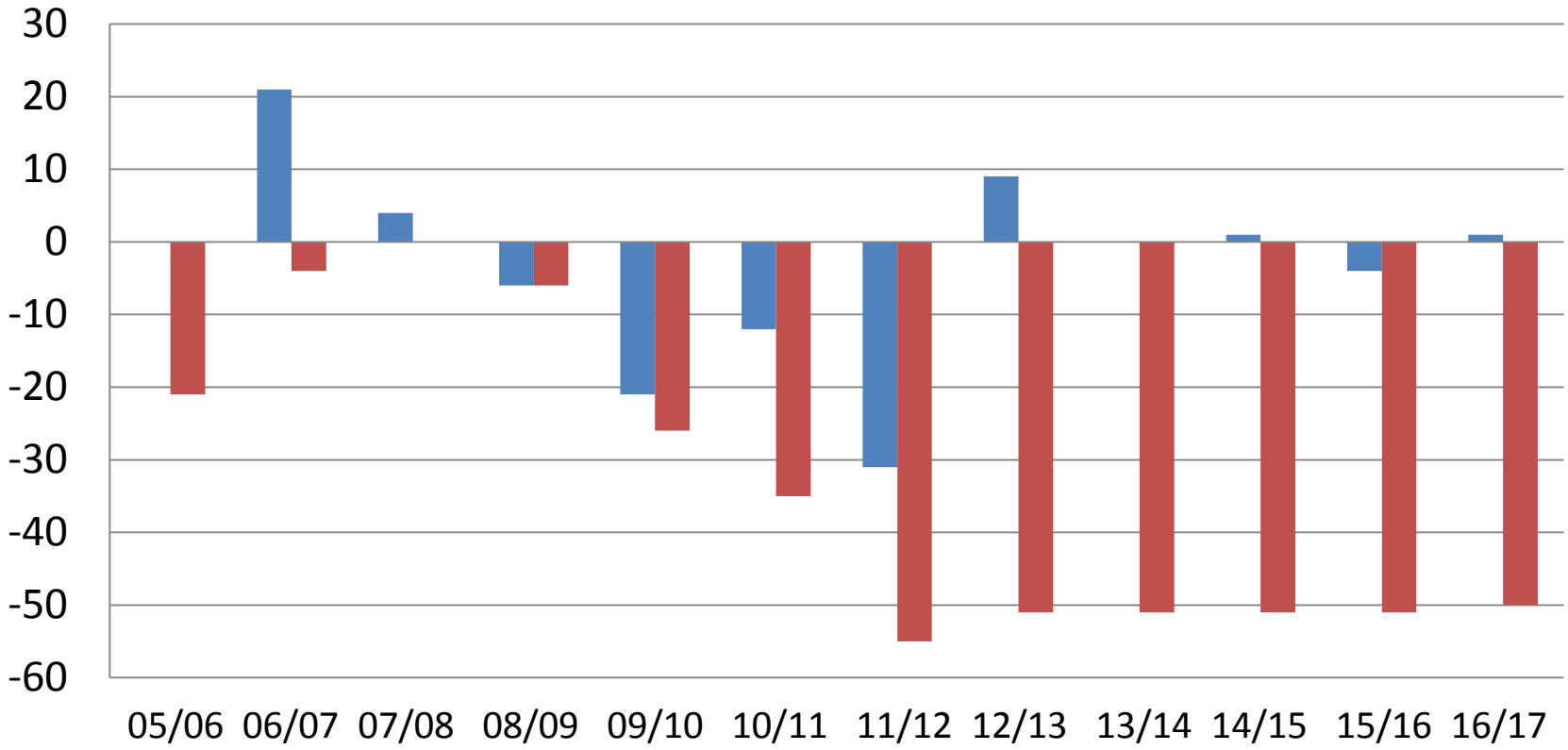
Florida Challenge (Continued)

- **$11.3 Billion ($4.4 B Fla. share) over next 20 years for implementation of the Comprehensive Everglades Restoration Plan (CERP).** (Task Force Working Document: Cross-Cut Budget 2017)
- **$5.6 Billion over the next 20 years for beach erosion and inlet protection projects.** (ASCE: 2016)
- **$3 Trillion coastal infrastructure replacement value by 2030** (Florida Oceans and Coastal Council / 2010 [DEP & FWC Co-chairs] & Climate Works Foundation / 2009)

48.71 Billion over the next 20 years (Excluding SLR)


WMD Ad valorem Revenues (Millions)
1,000
800
600
400
200
0
05/06
06/07
07/08
08/09
09/10
10/11
11/12
12/13
13/14
14/15
15/16
16/17

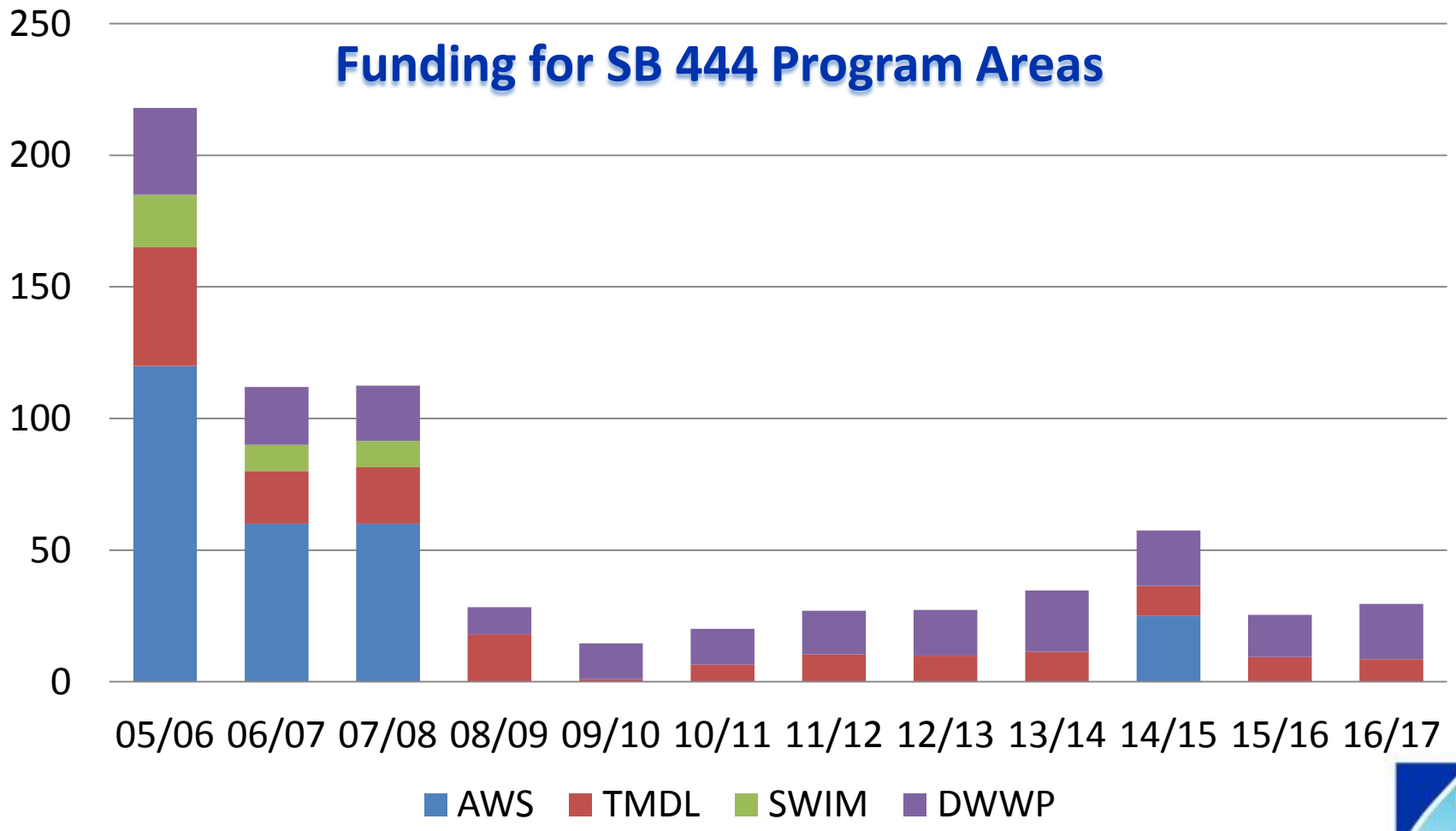
Percent Change in WMD Ad valorem Revenues



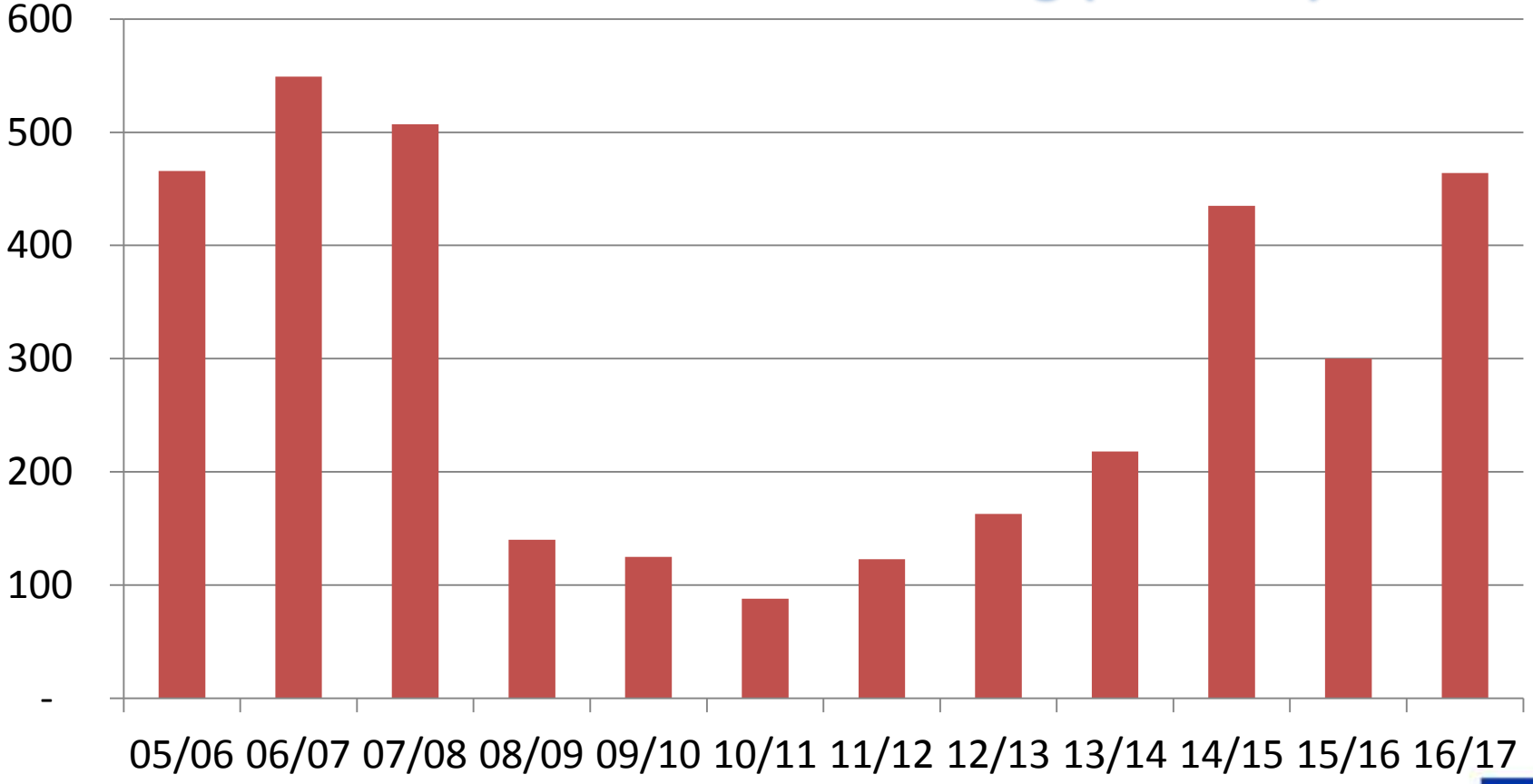
- Change in Ad valorem Revenue from Previous Year
- Change relative to highest Ad valorem Revenue Year (FY07/08)

Florida Water Protection and Sustainability Program

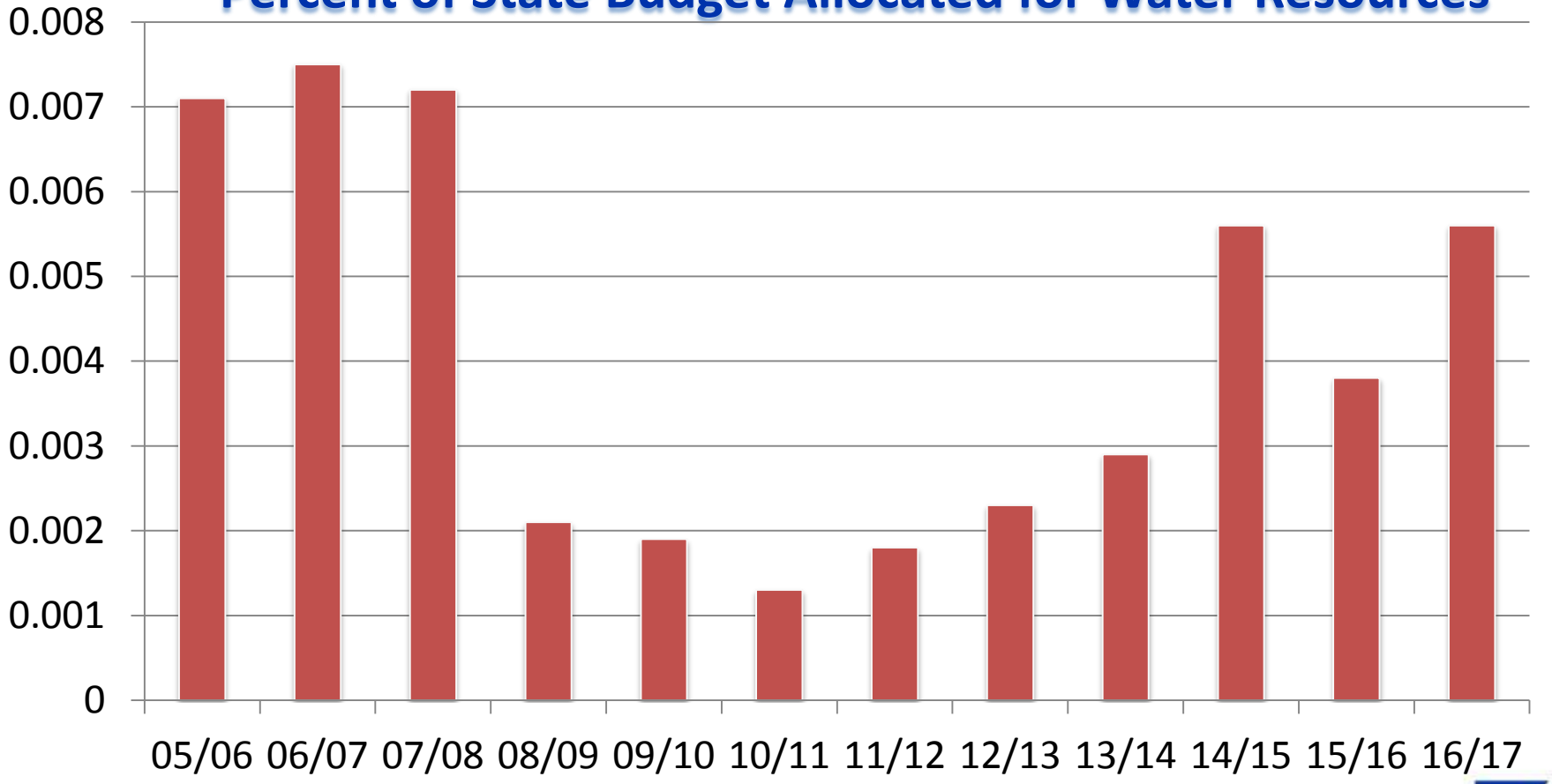
- **Enacted in 2005 (SB 444) with universal support** (Chs. 403.890 & 373.707, f.s.)
- **Recurring $100 Million for:**
  - Alternative Water Supply Development
  - Development and Implementation of TMDLs
  - Surface Water Improvement Project Support
  - Small Disadvantaged Community Wastewater Projects.


Funding for SB 444 Program Areas
250
200
150
100
50
0
05/06
06/07
07/08
08/09
09/10
10/11
11/12
12/13
13/14
14/15
15/16
16/17
AWS
TMDL
SWIM
DWWP

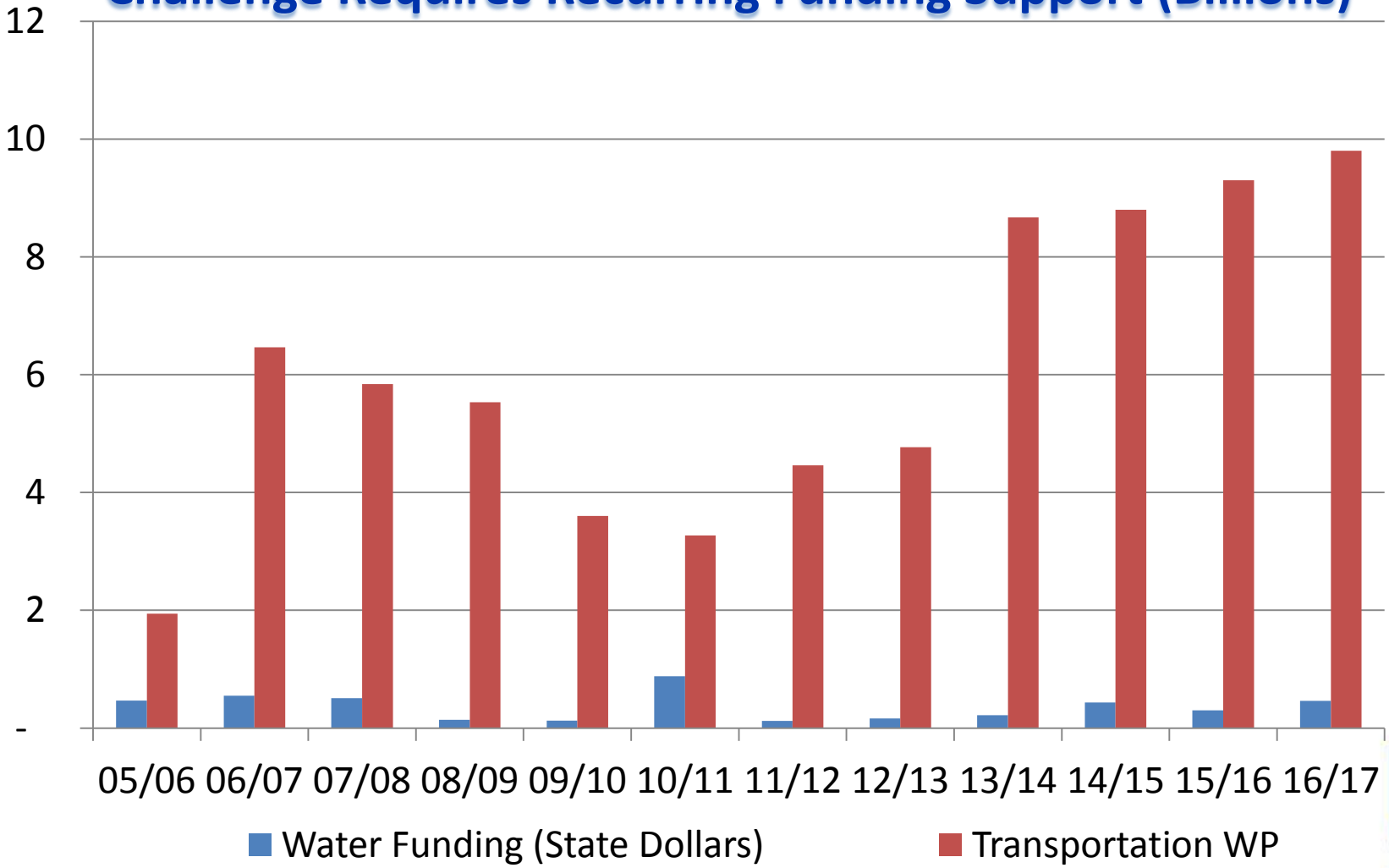
Florida Water Resource Funding (Millions)



Percent of State Budget Allocated for Water Resources



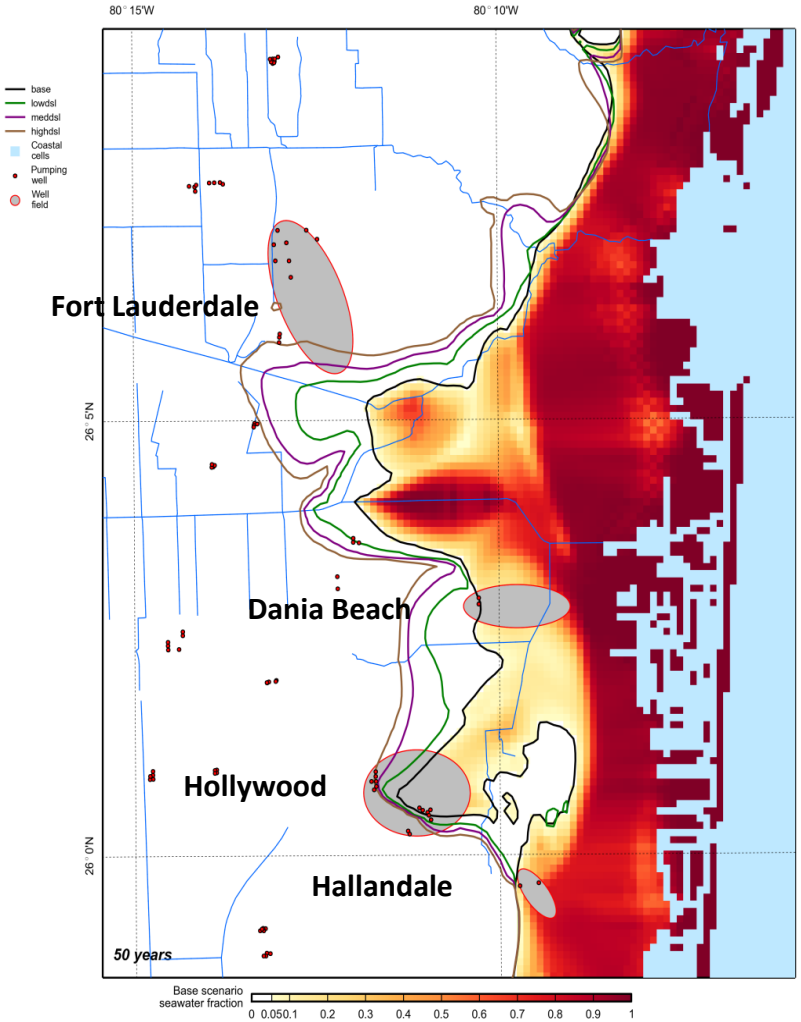
Challenge Requires Recurring Funding Support (Billions)



- Next Steps
  - Work with EDR to provide an accurate assessment of the State's needs.
  - Collaborate with the Florida Association of Counties and League of Cities to ensure that counties and cities to help local State legislative delegations understand the regional needs.
  - Begin to develop a long term strategy to address weather resiliency / Sea Level Rise.

Influence of SLR

- 35 MGD in predicted loss of water supply wells
- 40% coastal wellfield capacity
- 16% total wellfield capacity



Resiliency Florida

- Promote greater understanding of how and when critical infrastructure (including transportation, flood control, water supply, and other public facilities), as well as medical emergency services, throughout Florida will be impacted.
- Promote the development of state and regional strategies and action plans to adapt to SLR.
- Promote a re-dedication to the original flood control mission of the state's WMDs that accounts for future flood risk and includes technical and financial assistance to local governments.
- Create statewide information sharing network.
- Maintain an online grant program database to keep local governments informed of funding opportunities/grant programs.

Questions?