# Recent Trends in Environmental Research Funding

Matt Hourihan December 13, 2012

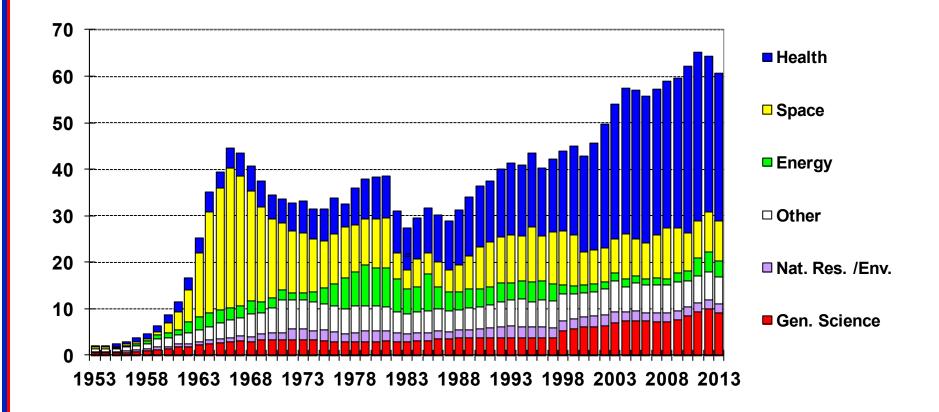
For the Congress on Sustaining Natural Resources and Conservation Science



AAAS R&D Budget and Policy Program http://www.aaas.org/spp/rd

#### **Trends in Nondefense R&D by Function**

outlays for the conduct of R&D, billions of constant FY 2012 dollars



Source: AAAS, based on OMB Historical Tables in *Budget of the United States Government FY 2013*. FY 2013 is the President's request.

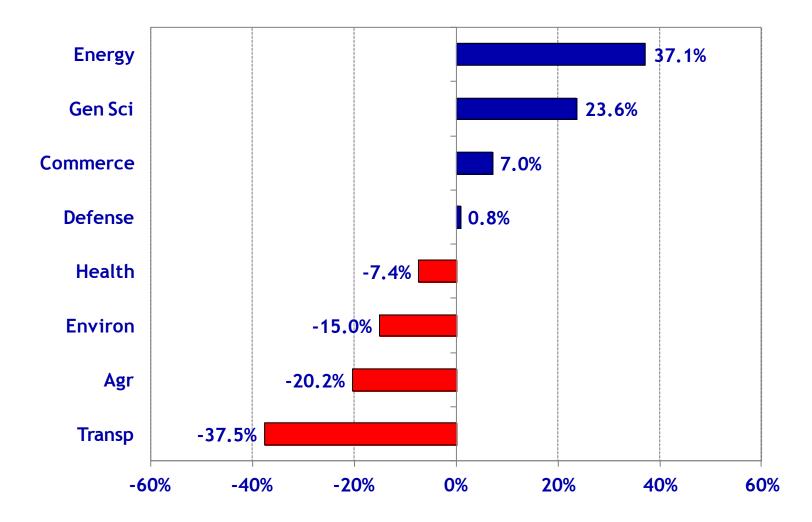
Note: Some Energy programs shifted to General Science beginning in FY 1998.

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#### **R&D Changes by Function Since 2003**

percent change from FY 2003 to FY 2012, in constant FY 2012 dollars

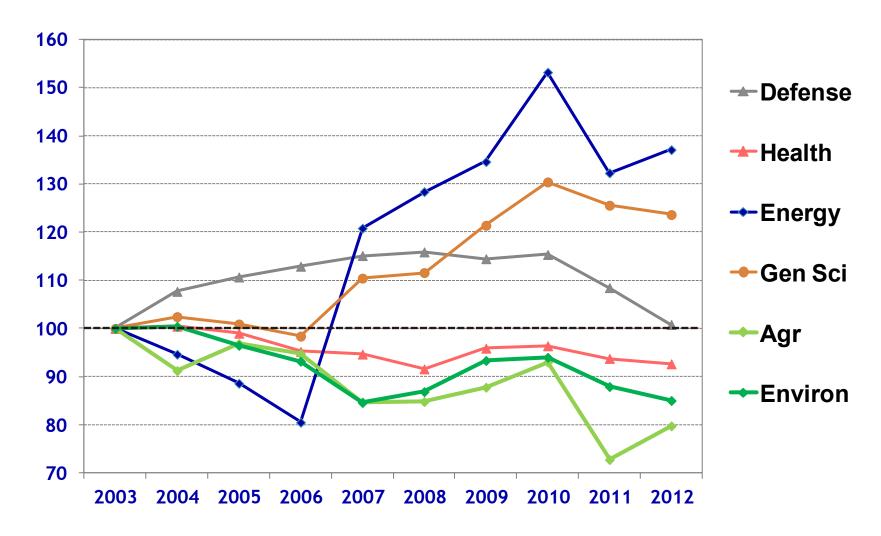


Source: OMB R&D data, agency budget justifications, and agency budget documents. Environment includes natural resources R&D.



#### **R&D Changes by Function Since 2003**

change from FY 2003 to FY 2012, FY 2003 = 100

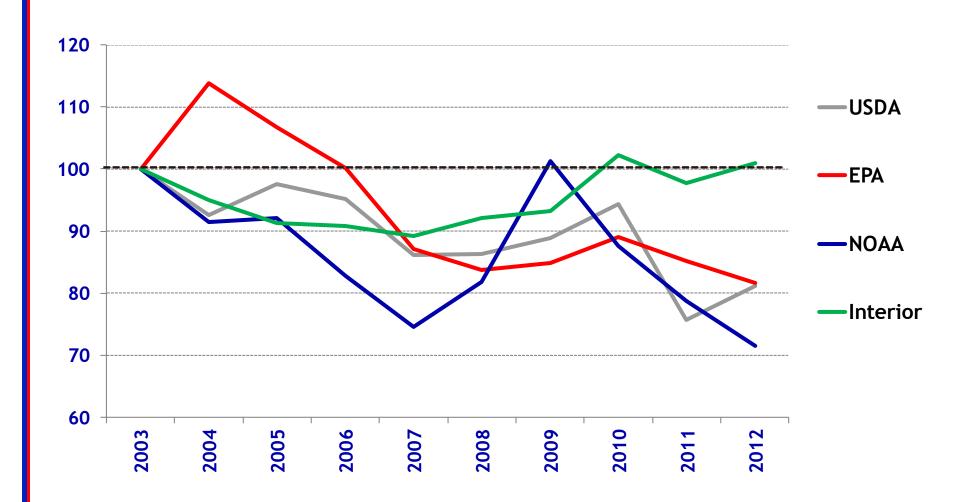


Source: OMB R&D data, agency budget justifications, and agency budget documents. FY 2012 is the latest estimate. Environment includes natural resources R&D.



#### **Trends in Environmental R&D Agencies**

Changes from FY03 to FY12, FY03 = 100



Source: AAAS Research & Developments and agency budget documents. FY 2012 is the latest estimate.

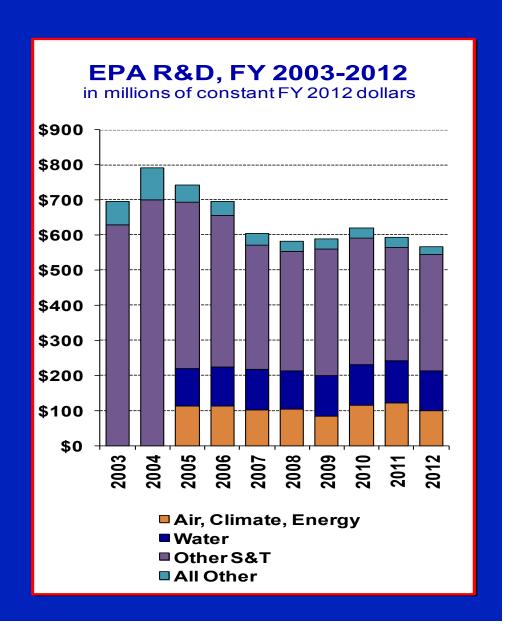






#### **EPA**

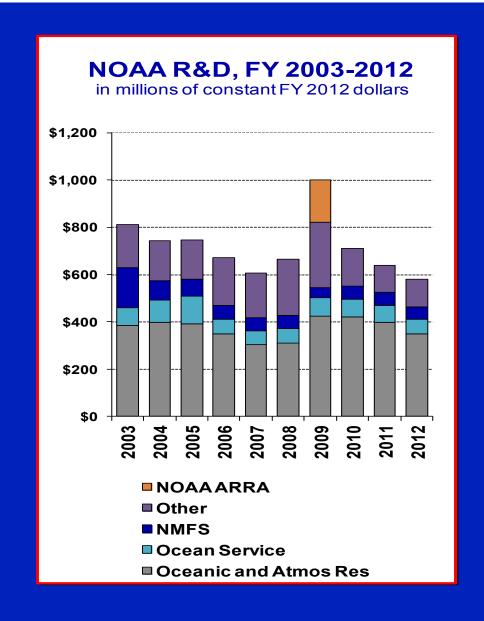
- Down 18% since 2003
  - Air + water research generally holding steady?
- Target for House in FY 2013 Appropriations
  - "Making up" for Recovery Act, previous boosts
- Controversies: fracking study, CAA enforcement
- Non-research funding hit harder
  - STAG (clean water revolving funds); EPM
  - Superfund OK





#### NOAA

- Down 29% since 2003
  - OAR smallest relative decline, NMFS largest
- No Climate Service
- Reasonable support for R&D in House in FY 2013 appropriations
  - Limited cuts to NOS and NMFS; support for OAR
- Senate: Satellites (i.e. JPSS) draining resources?





### **USGS**

- Fluctuations, but flat since FY 2003
- Most recent request:
  - Eliminate Water Research Resources Act (Funding for landgrants), shift to other water-related activities
  - New Energy Frontier initiative
  - Climate science
  - Alternatives to Landsat?
- Broadly targeted by House in FY2013
  - Climate change, lack of authorizations key
  - Water, core science spared
- Senate generally friendlier



## Select Other Agencies

Agency	Change from FY 2003	Notes
Forest Service R&D	-10%	Congress concerned about research station costs, local needs research
DOE Science - BER	+1%	Major recent target for House appropriators
NSF - BIO	+2%	Slowest-growing directorate
NASA Earth Science	+4%	Rough estimate
NSF - GEO	+4%	
BLM (approps)	-45%	
Fish & Wildlife (approps)	-3%	

Note: The above is in constant FY 2012 dollars



#### **Bottom Lines**

- Environmental R&D showing long-term declines/stagnation across-the-board
  - Most R&D is receding since overall peak in 2010
- Not the same level of priority as general science, defense, manufacturing, energy R&D
- A victim of the climate wars
  - Though USGCRP funding has increased
- Note sequestration: nearly \$1 billion R&D cuts at EPA, NOAA, Interior, Forest Service through 2017



For more info...

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Intersociety Working Group



