

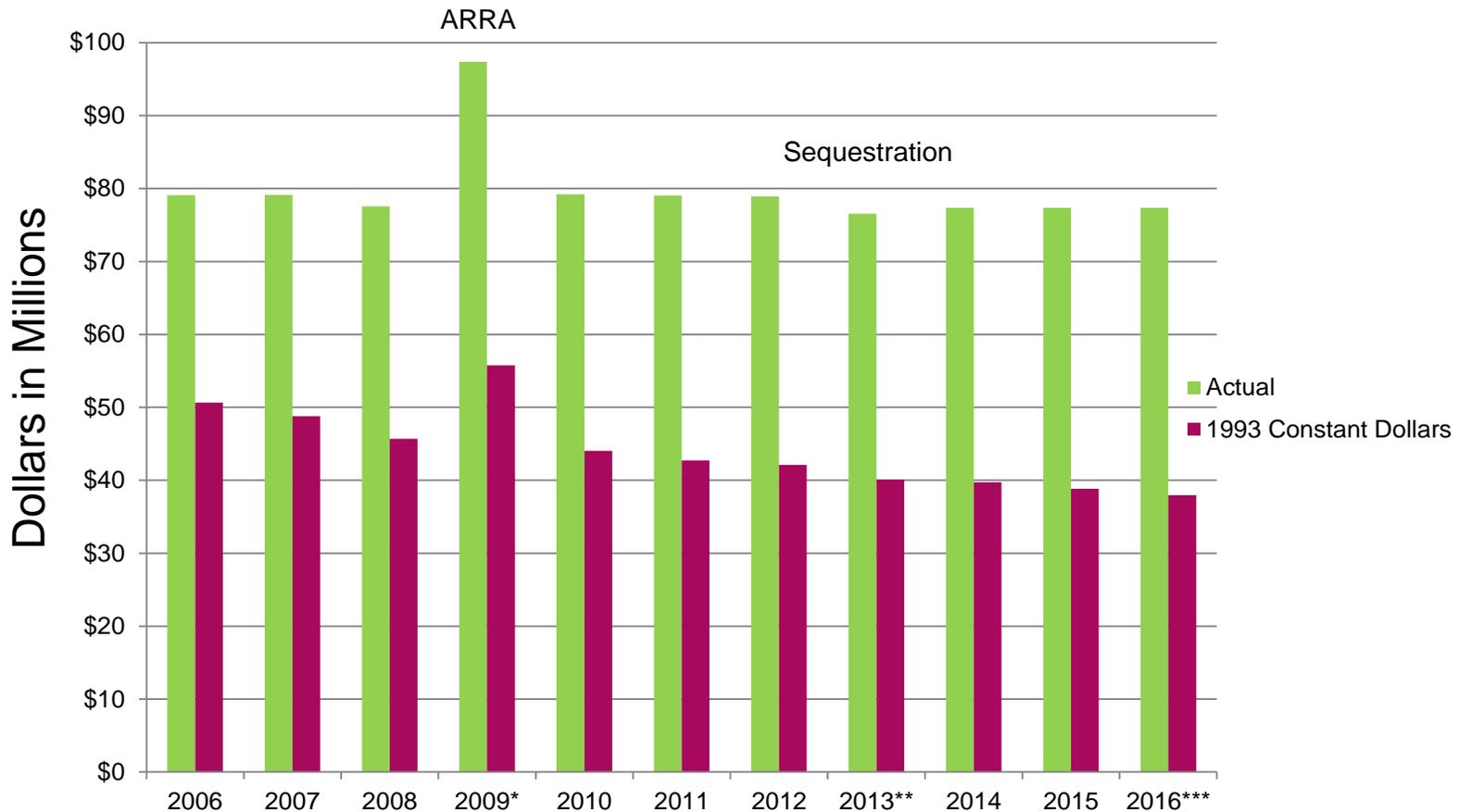
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**Briefing on the NIEHS Superfund Programs
US Senate Appropriations Committee Staff
Subcommittee on Interior, Environment and Related
Agencies**

23 April 2015



NIEHS Superfund Program Interior, Environment, and Related Agencies Appropriations



* FY 2009 includes funds from the American Recovery and Reinvestment Act.

** FY 2013 includes across-the-board rescission, sequestration reduction and Sandy Supplemental addition.

*** FY 2016 is the President's Budget Request.



NIEHS Superfund Research Program

- Mission: Provide practical science to solutions to protect human health
- NIH peer-reviewed, competitively awarded grants
- Unique approach to research
 - Brings together diverse disciplines: health researchers, engineers, biologists, ecologists, earth scientists, and social scientists
- Works closely with partners to deliver solutions

NIEHS Superfund Research Program

- In FY 14
 - Supported work of over 1,400 researchers
 - Funded work at 211 institutions and small businesses
- Since SRP began:
 - Educated over 1,660 academic trainees
 - Produced over 9,000 peer-reviewed publications
 - Patented over 100 inventions



SRP: Recent Scientific Discoveries

- **Linking arsenic and IQ:** High levels of arsenic in home well water decreases children's IQ
- **Studying preterm birth:** High phthalate exposures during pregnancy increase odds of preterm birth
- **Testing for safer chemicals:** New tools make screening chemicals for cancer risk simpler and cheaper
- **Exposing triclosan's health effects:** TCC exposure is linked to liver tumors
- **Finding new implications of obesity:** In combination with toxicants, obesity accelerates the rate of liver disease



Children in the arsenic and IQ study in Maine

SRP: New Tools to Solve Problems

- **Lead in soil:** Idaho small business uses bacteria to trap lead in soil – keeping it out of the air
- **TCE in water:** Researchers developed a tracer technology to follow TCE contamination through complex subsurface systems
- **DDT and dioxins in fish:** Researchers use a novel detection tool to update decision makers about progress of clean-up efforts



Testing a new detection tool
(Palos Verdes, CA)

SRP: Tackling PCB Problems from Multiple Angles

- **Health:** Identified how PCBs cause neurotoxicity in children
- **Monitoring:** Discovered a new PCB contaminant in urban air
- **Risk:** Uncovered biological indicators of PCB exposure in urine for health monitoring
- **Clean-up:** Tested the use of trees to remove PCBs in a wetland
- **Prevention:** Discovered how nutrition reverses cardiovascular toxicity of PCBs
- **Outreach:** Teach citizens which foods protect against PCB toxicity



Students show concern about PCB exposures in schools (Malibu, CA)



Citizens learn about foods that prevent PCB toxicity (Dayhoit, KY)

Solutions for Constituents

- **Underserved urban community:** Using expertise in plant-contaminant interactions to ensure a brownfield site is safe for a community garden
- **Native Americans:** Providing information and monitoring polycyclic aromatic hydrocarbons (PAHs) produced during traditional smoking of salmon.
- **Agricultural communities:** Applying new technologies to measure and cleanup triclosan in Kern County, CA where sewage is deposited on farms near residential areas

Brownfields safely
converted to urban
gardens in San Diego, CA.



NIEHS Superfund Worker Training Program

- **Mission:** To prevent work-related harm by providing training programs for hazardous materials handlers, chemical emergency responders, and waste cleanup workers
- **National Network:** Over 100 non-profit safety and health training organizations combined into 20 training consortia
- **Where:** Training conducted in all fifty states and U.S. territories.
- **How Many:** In FY2014, 161,000 workers trained in 9,500 courses, over 2.6 million trained since program began in 1987



WTP: Saving lives, preventing injury everyday



- The goal is the worker who comes home safely every day.
- Workers trained include:
 - firefighter and emergency medical technicians
 - law enforcement officers
 - hospital first receivers
 - crane and bulldozer operators
 - laborers
 - public utility employees
 - chemical factory workers

Funding Opportunity Announcement Competition Under Review

- Every five years, the WTP holds an open competition for program funding for existing and potential grantees.
- Result: a mix of new and current grantees
- Currently applications are under review and funding decisions will be made by August 2015.



The WTP Network Responds!

- **Past Responses:** World Trade Centers, Hurricanes Katrina and Rita, Super Storm Sandy, the Gulf Oil Spill, Midwest Floods, and Far West Wildfires.



- **Super Storm Sandy Update:** On-going training in New York and New Jersey
- **Mental Health Resiliency Project:** training to ease post disaster traumatic stress
- **Ebola Exposure Prevention Training** for hospital employees, emergency first responders, and other worker populations with potential exposure.



Learning from Disasters is key in preparing for Disasters.

- **Disaster Research Responder Project**
- **Tsunami Catastrophic Event Exercise, Los Angeles**
- **Hurricane Disaster in Houston Ship Channel, Houston**



WTP creates new opportunities



- **WTP Environmental Careers Program** was formerly the Minority Worker Training Program
- **Success:** Since beginning, 10,000 workers have trained under this program with nearly 70 % employed
- **Success:** 90% job placement in New Orleans, LA; East Palo Alto, CA; and in St. Paul MN
- **Program Economic Impact Analysis:** millions of dollars in return on investment each year.



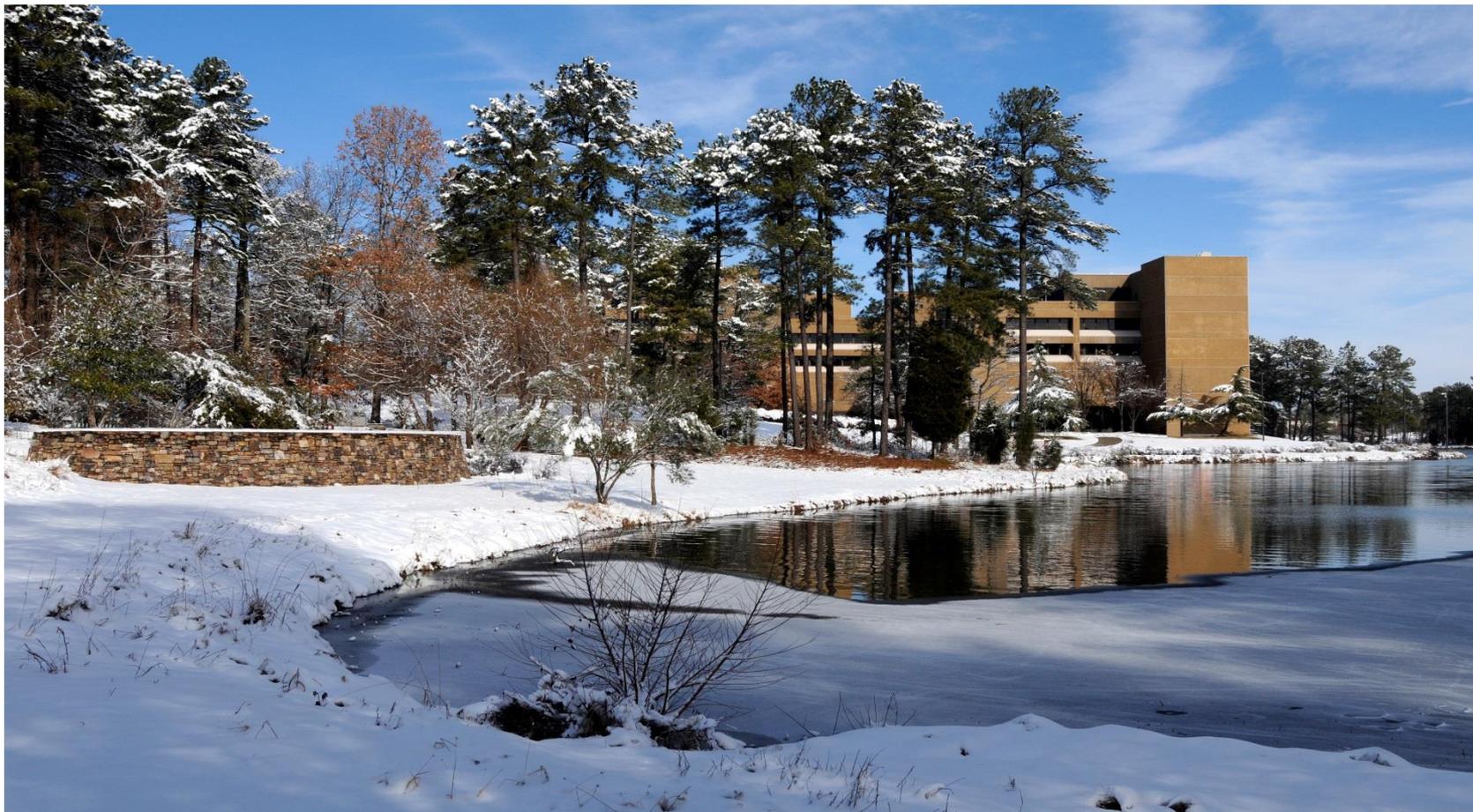
WTP works where the need is often greatest



WTP's national network helps identify at risk populations and respond to their training needs.

- **Spanish-speaking Workers Initiative**
- **Native American Training Initiative**





Thank You!