

# ***A New Budget Concept***

## ***Southwest Federal Hydropower Council***

***9 June 2010***

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**Programs Integration Division  
Civil Works Directorate. HQUSACE**

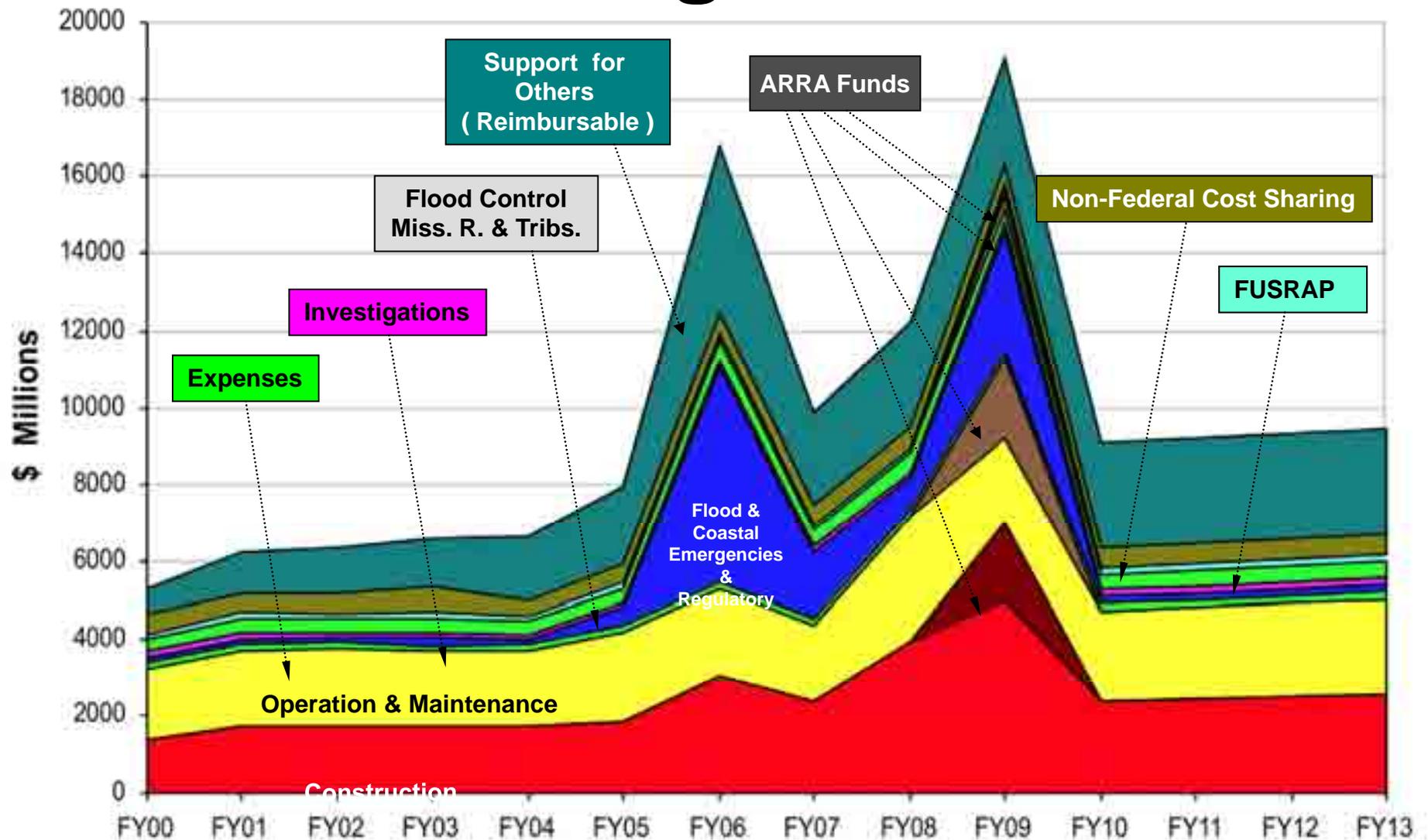


# AGENDA

- **Budgets and Appropriations Trends**
  - Where we are
  - Where we're headed
- **Does our Budget process represent our Mission?**
- **One solution to future funding--Inland Waterways**
  - The Problem
  - Study History and Results
  - Lessons Learned
- **An Alternative Budget Concept**
  - Focus on key infrastructure
  - Focus on delivery key products & services
  - Focus on *system* health, recapitalization, growth
  - Evolving relationships with system users/partners



# Civil Works Program Overview



# Future Appropriations Without Change?

Administration Budget Ceilings	Projected Appropriations	Inflation Adjusted (3%)
•FY 10 - \$5.1	•FY 10 - \$5.4	•FY 10 - \$5.4
•FY 11 - \$4.9	•FY 11 - \$5.4	•FY 11 - \$5.6
•FY 12 - \$4.7	•FY 12 - \$5.3	•FY 12 - \$5.7
•FY 13 - \$4.5	•FY 13 - \$5.3	•FY 13 - \$5.9
•FY 14 - \$4.7	•FY 14 - \$5.4	•FY 14 - \$6.1
•FY 15 - \$4.8	•FY 15 - \$5.4	•FY 15 - \$6.4
<b>** \$2.9 billion lost to inflation in 5 yrs!</b>		



# What Key Leaders are Saying

- “Spending is almost 30% higher than taxes. Total debt held by the public rises from 40% of GDP in 2008 to 90% in 2020.” [CBO, 3/7/10]
- “To avoid...ultimately unsustainable budget deficits, the nation will ultimately have to choose among higher taxes, modifications to entitlement programs such as Social Security and Medicare, *less spending on everything else* from education to defense, or some combination of the above.” (B. Bernanke, 3/29/10)
- “But unless we as a nation demonstrate a strong commitment to fiscal responsibility, in the longer run we will have neither financial stability nor healthy economic growth.” [B. Bernanke, 4/7/10]



# What Key Leaders are Saying

- **CBO**
  - 1962 – Discretionary portion of budget = 75%
  - 2010 – Discretionary portion of budget = 38%
    - Entitlements and Debt Service = 62%
    - Defense and Homeland Security = 21%
    - *Domestic Discretionary* – 17%
- **Earmarks** “All 9,499 FY10 earmarks totaled \$15.9B or 0.045% of the budget
- “Vowed to lead an effort to cut \$15 billion in overhead costs from the Pentagon’s \$550 billion budget. Without the savings the military will not be able to afford its current force...The gusher has been turned off and it will stay off for a good period of time.” (SecDef Gates, 8 May 2010)

# External Trends To Watch

- **Continuing Pressure on Budget**
  - Entitlement Programs  
( Medicare, Medicaid, Social Security)
  - Interest on the National Debt
- **Cost of Infrastructure Recapitalization**
  - Improved Inspection Techniques
  - Modern Design Standards
  - Cost of meeting ESA and other legal requirements
- **Cost of Construction Inflating Faster than CPI**
  - Fuel, Steel, Concrete
  - Expanding worldwide demand



# Latest for FY10 & FY11

- **FY10 Emergency Supplemental:**

- Senate Sup: \$59B; passed 67-28; \$217 for Corps
- House Sup: \$84B; no Full Cmte mark up; \$0 for Corps; \$47M Corps funds rescinded
- \$700M current estimate of damaged projects,
- First time in 5 years Supplemental amount is less than USACE identified need

- **FY11 Appropriation**

- House and Senate are preparing bills
- Expect Committee Report this year; maybe House and Senate Bills, but no appropriation until after mid-term elections ~Nov-Dec 2010
- Have been advised of restricted ceilings; appropriation at/below Admin FY11 Budget

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# THE CIVIL WORKS MISSION

- How do we view our Civil Works Mission?
- How is our view reflected in our budget process?
- How do we Communicate our Mission to Others?
- Should we Rethink how our budget communicates the value of the infrastructure we build and maintain for the nation?



# Program Development and Defense

## How do *others* view our program?

### **ADMINISTRATION** **Performance-Based/ Business Line**

- Flood Risk Management
- Navigation
- Environment
- Hydropower
- Regulation
- Recreation
- Water Supply
- FUSRAP
- Emergency Management
- Expenses

### **CONGRESS** **Account & Project Based [Member-Based]**

- Investigations/Planning
- Construction
- Operations & Maintenance
- Miss River & Tributaries
- +
- Regulatory
- FCCE
- FUSRAP
- Expenses
- Misc



# --Program Development and Defense— How do *you* view our program?

<b>By Project</b>	Stakeholders/Districts/ Members of Congress
<b>By District/Division</b>	Districts/Divisions
<b>By Account</b>	Congressional Appropriations Cmtes
<b>By Business Line</b>	OMB
<b>By Congressional District</b>	Members of Congress



# THE CIVIL WORKS BUDGET

**Our annual budget process is like:**

**“GROUNDHOG DAY”**

**Each budget is considered to be a brand new event with no context (except by project) of what came before or what is expected to happen next**

**We have no long term goals to improve our major infrastructure systems (FRM, Nav, Hydro)**



# THE CIVIL WORKS MISSION

- **TOO MANY VIEWS**
- **NO SHARED,  
COMPREHENSIVE VIEW**
- **NO SENSE OF PURPOSE**



# THE CIVIL WORKS MISSION

--Program Development and Defense--

## What's Not Working?

- There is stakeholder *project ownership*; but not stakeholder program ownership
- We communicate the *cost, benefit and value of projects*; we don't communicate the value of our programs, products or services
- It's about us: "The *Corps*' CW Budget"; it's not about who we serve.
- We don't communicate the purpose or value of *infrastructure systems* to the nation



# THE CIVIL WORKS MISSION

--Program Development and Defense--

## To Summarize

- Future CW budgets are projected to decrease
- Future CW appropriations are projected to decrease relative to inflation
- The cost of the work we do is expected to increase at a rate greater than inflation
- Our budget is about projects
- We have not adjusted our budget process to reflect the new reality of insufficient funds



# What Future Can We Imagine Without Change?

- **Our budgets will decrease relative to our need if we don't do SOMETHING different.**
- **We will not be able to provide quality, responsive service to the nation if we cannot create support for a budget that more closely matches systems requirements.**
- **We will not be able to improve as an agency if we are not funded for efficient project planning, design, construction, operations and maintenance.**



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# **THE CIVIL WORKS MISSION**

## **--A Systems View--**

# **The Inland Marine Transportation System (IMTS)**

## **A Case Study**

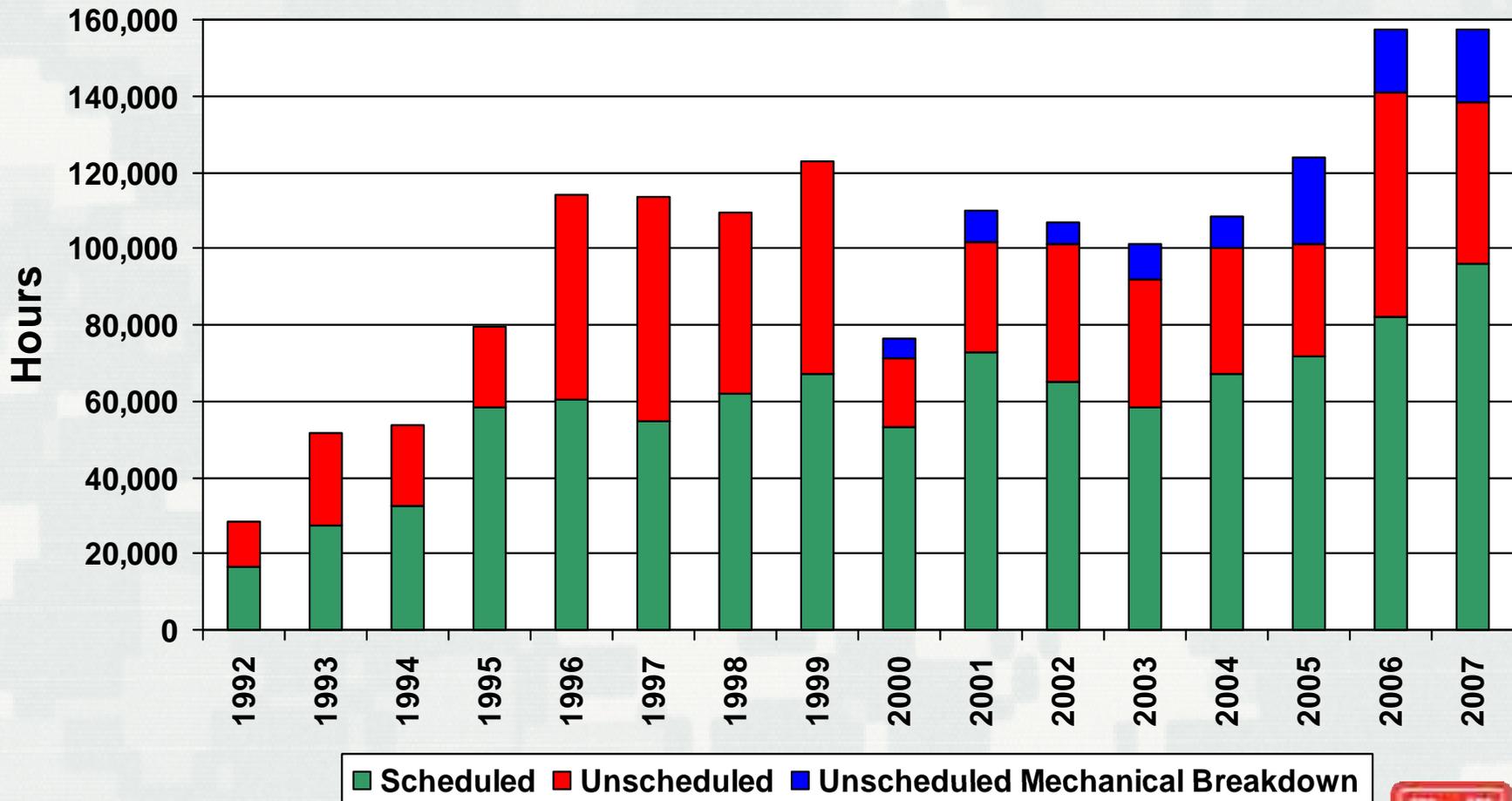


# IMTS History

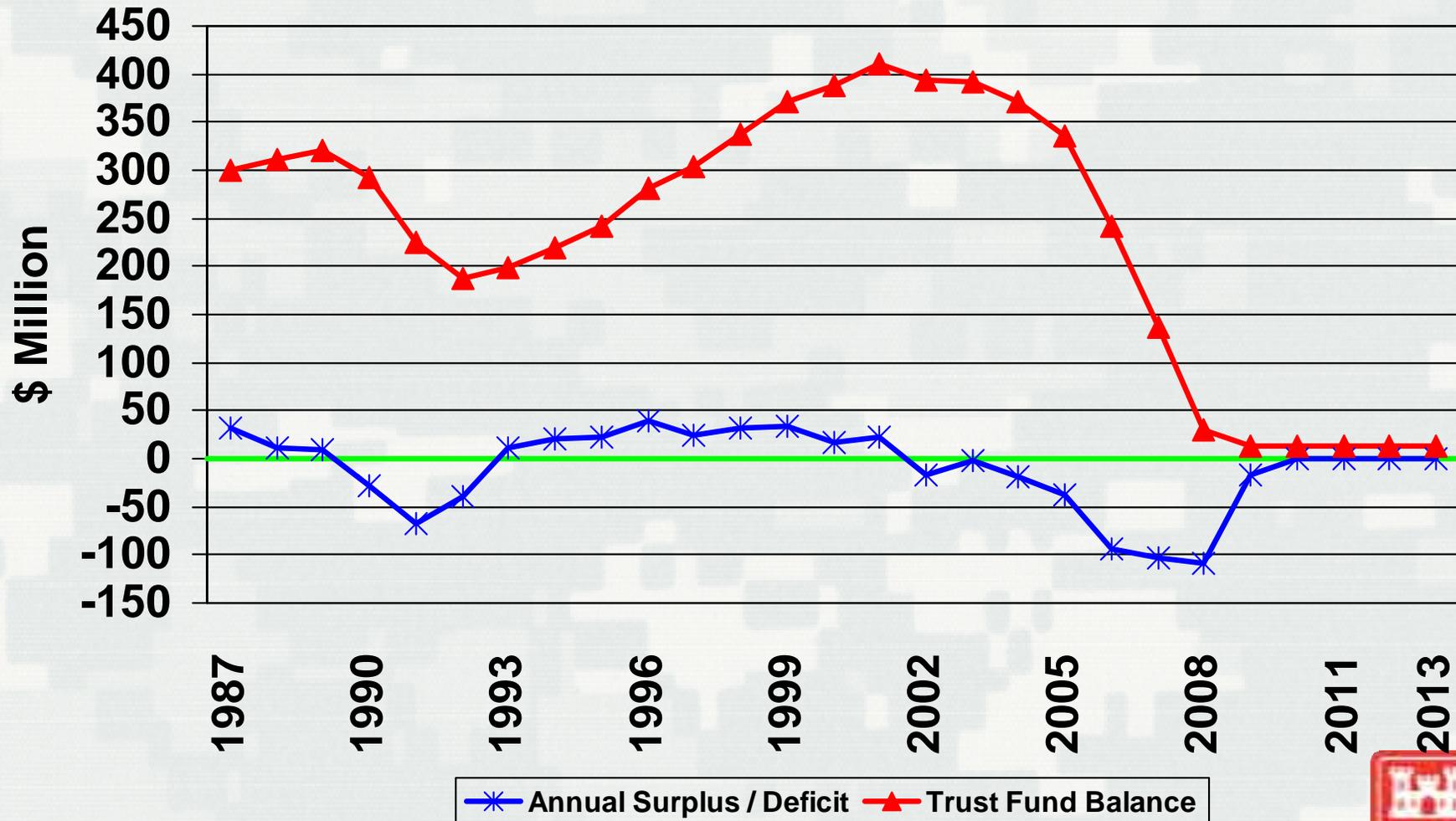
- IWTF and general revenues fund major rehabilitation and new construction on the Inland Waterways
- IWTF revenues are about \$85M/yr
- Total available for new construction \$170M /yr
- Funds committed to too many projects
- Few completions
- Industry was not pleased with Corps performance



# IMTS—Maintenance Hours



# IMTS- Trust Fund History



# IMTS History

- Inland Navigation: Three Selected Case Studies
- IMTS Capital Investment Strategy Team



## Selected Case Studies Olmstead Lock and Dam

- Looked at 3 projects: Marmet, L&D 2,3&4, Olmstead
- Worst Case: Olmstead L&D. Cost increase from \$1B to \$2.1B. Cost growth >100%
- Time increase from 7 to 26 years
- No end in sight (at time of study)
- Reasons:
  - 35% Inaccurate cost and schedule estimates
  - 32% Lack of optimal funding
  - 30% Scope and Design changes
  - 4% Differing site conditions
- Compiled a record of poor PPM, cost and schedule increases, few completions
- Very unhappy industry

## Selected Case Studies

### Lower Monongahela River Locks and Dams 2,3,4

- Authorized in Oct 1991 at **\$556** (\$844M in 2007 \$\$)
- Started in Dec 1994 @ \$750M with 9-year duration (1991 \$\$)
- Current sched is Sep 2016; schedule growth from 9 to 22 years or **244%**
- \$1.1B in lost economic benefits to date
- Most recent cost estimate is **\$1.2B** (2007 \$\$); cost growth of **30%**
- Reasons for Increases:
  - 44% Changes
  - **32% Less than Optimal Funding**
  - 11% Omissions/Re-estimates
  - 6% Differing Site Conditions
  - 7% Continuing Contract Clause



# IMTS Investment Strategy Team Program Management Team



- **Program Manager:** Jeanine Hoey
- **IWUB:** Royce Wilken/Steve Little + about 6-8 other industry members
- **HQ USACE:**
  - **Operations:** Jim Walker, Jeff McKee, Mike Kidby
  - **Programs:** Mark Pointon, Mary Anne Schmid, Sandy Gore
  - **Planning:** TBD (vice Worthington)
  - **Asset Management:** Jose Sanchez

- **Divisions:**
  - **LRD:** Bill Harder
  - **MVD:** Steve Jones
  - **NWD:** Eric Braun
  - **SAD:** Wynne Fuller
  - **SWD:** Glenn Proffitt
- **IWR:** David Grier
- **ERDC:** John Hite
- **Economists:**
  - Wes Walker
  - Keith Hofseth
- **Cost Engineer:** Mike Jacobs



# IMTS Capital Investment Strategy Program Development

- Collaborative Team – US Army Corps of Engineers and Waterways Industry (recommendations reflect those of the team, not necessarily those of the Inland Waterways Users Board, the U.S. Army Corps of Engineers or the Administration)
- Team Objectives
  - Evaluate *the System*
  - Projects funded efficiently
  - Emphasis on finishing projects
- Created project list (103 projects)
- Prioritized, established 20-year system recap program (25 pr)
- Total IMTS Capital Investment Program Target - \$380M/year
  - New construction - \$320M/year
  - Major rehab - \$60M/year
  - \$380M Program includes management reserve of \$30M
  - Additional out-year capacity available
- Program & project mgmt, design, constr, O&M reforms



# Team Accomplishments

- **Capital Projects Business Model**
- **New USACE P&PM Business Model**
- **Comprehensive List of IWS 20-Year Requirements**
  - **New Construction**
  - **Major Rehabs**
- **Prioritization Criteria**
- **Prioritized Project List**
  - **Draft 20-Yr Capital Improvement Plan [unconstrained]**
  - **Phase I: Projects currently under construction**
  - **Phase II: Authorized projects; not under construction**
  - **Phase III**
- **Revenue Estimate**
- **Funding Model Options**
- **Implementation Timeline**



# Example IMTS Capital Investment Strategy Future Program with Current Revenues

Current Program \$170M/YR - Projects completed with efficient schedule																														
Project	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY																														
EMSWORTH LOCKS AND DAM, OHIO RIVER, PA (Dam Safety)																														
MARKLAND LOCKS AND DAM, KY & IN (MAJOR REHAB)																														
TOTAL Efficient Funding	136	145	136	148	145	134	67	50	28	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Current Program \$170M/YR - Projects completed with constrained schedule																														
LOCKS AND DAMS 2, 3 AND 4 - MONONGAHELA RIVER, PA																														
CHICKAMAUGA LOCK, TN																														
KENTUCKY LOCK ADDITION, TN RIVER, KY																														
INNER HARBOR NAVIGATION CANAL LOCK, LA																														
TOTAL Constrained Funding	8	25	33	21	24	34	102	118	140	166	170	167	169	136	142	147	112	145	95	110	170	170	170	170	170	170	170	170	170	
TOTAL Program	144	170	169	169	169	168	169	168	168	166	170	167	169	136	142	147	112	145	95	110	170	170	170	170	170	170	170	170	170	

**NO NEW STARTS!!**



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# Team Observations

- Performance-Based/Account Based Program Development may result in inefficient funding practices
- We justify each project independently, based on performance metrics. Many are justified. Start too many projects because it is politically expedient. Fund many, esp large projects, inefficiently.
- IWTF and limit IMTS new construction and major maintenance to ~ \$170M /yr vs ~\$380 million required
- Few completions; few benefits realized
- Compiled a history of poor programs mgmt, poor project mgmt, inefficient design, inefficient construction, time growth, cost growth
- Very unhappy industry



# Cost Sharing and Revenue Plan

- Cost share recommendation
  - Lock New Construction and Major Rehab above \$100M: 50% Federal / 50% IWTF
  - Lock Major Rehab less than \$100M and Dams: 100% Federal
  - \$270M/Year Federal
  - \$110M/Year IWTF
    - Requires 30% – 45% increase in fuel tax (\$0.06 – \$0.09 per gal)
- Cost sharing cap
- Revenue Plan – increase in current industry funding mechanism: **\$170M/yr to \$380M/yr**

# IMTS Capital Investment Strategy New Construction Program

PROPOSED NEW CONSTRUCTION PROGRAM																				
Project	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY																				
LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PA																				
CHICKAMAUGA LOCK, TN																				
KENTUCKY LOCK ADDITION, TN RIVER, KY																				
LD 25 UPPER MISSISSIPPI																				
GIWW, HIGH ISLAND TO BRAZOS RIVER, TX																				
LAGRANGE - ILLINOIS WATERWAY																				
INNER HARBOR NAVIGATION CANAL LOCK, LA																				
GREENUP LOCKS AND DAM, OHIO RIVER, KY & OH																				
LD 22 UPPER MISSISSIPPI																				
LD 24 UPPER MISSISSIPPI																				

Continuing construction  
 Construction new start



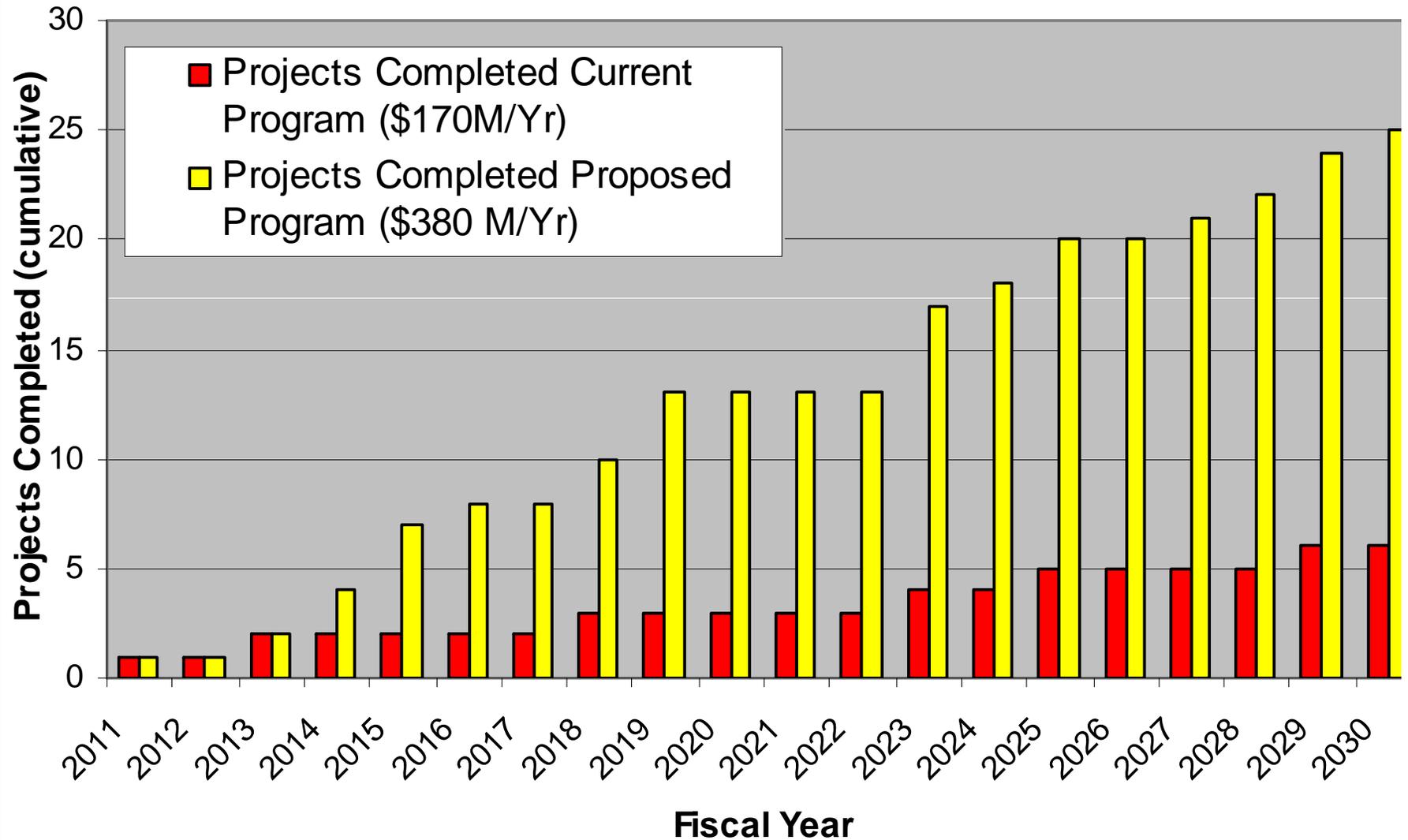
# IMTS Capital Investment Strategy Major Rehabilitation Program

PROPOSED MAJOR REHABILITATION PROGRAM																				
Project	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
EMSWORTH LOCKS AND DAM, OHIO RIVER, PA (Dam Safety)	■	■	■																	
MARKLAND LOCKS AND DAM, KY & IN (MAJOR REHAB)	■																			
LOCK AND DAM 25, MISSISSIPPI RIVER, IL & MO		■	■	■																
LAGRANGE LOCK & DAM, IL*																				
LOWER MONUMENTAL LOCK AND DAM, WA	■	■	■																	
ILL WW THOMAS O'BRIEN LOCK & DAM			■	■	■	■														
GREENUP DAM, OHIO RIVER, KY & OH			■	■	■	■	■	■												
JOHN T. MYERS DAM MAJOR REHAB				■	■	■														
GREENUP LOCKS, OHIO RIVER, KY & OH*																				
MELDAHL DAM, OHIO RIVER, OH & KY					■	■	■	■	■											
MONTGOMERY DAM SAFETY PROJECT (MAJOR REHAB)					■	■	■	■	■	■	■	■	■							
UM Mel Price													■	■						
UM LD25*																				
UM LD24*																				
NO. 2 LOCK, AR														■	■	■				
JOE HARDIN LOCK, AR														■	■					
WILLOW ISLAND LOCKS AND DAM, OHIO RIVER, OH & WV															■	■	■	■	■	■
MARMET LOCKS AND DAM, KANAWHA RIVER, WV																■	■	■	■	■
UM LD22																				■

Continuing construction  
 Construction new start



# Comparison of Completed Projects



# Benefits of Proposed IMTS Capital Investment Program

- *Cost efficiencies - \$0.5 - \$2.1B in avoided cost growth on navigation projects*
- *Avoiding more than \$2.8B additional benefits foregone*
  - Looking only at projects that could be completed under the current scenario (reference slide 3)
  - Benefits foregone to date at Olmsted and Lower Mon alone are \$5.2B
- Improved reliability and efficiency of IMTS
  - 5 - DSAC 1 dams
  - 3 – DSAC 2 dams
  - 1 – lock rated as an F condition
  - 6 – locks rated as a D condition
- Additional benefits of achieving IMTS improvements over shorter timeframe
  - Environmental
  - Societal benefits
  - Safety
  - Energy

# IMTS Capital Investment Strategy

## Project Delivery Process Recommendations

- **Implemented Recommendations**
  - Risk-based cost estimates
  - Independent External Peer Reviews
  - Project Management Certification
- **Proposed Improvements**
  - IMTS Capital Investment Program Regulation
  - IWUB representative PDT members
  - Project Management Plan – IWUB Chairman and representative as signatories
  - Adopt applicable concepts of Milcon Model
  - Acquisition – Early Contractor Involvement
  - IWUB concurrence on new starts
  - IWUB status briefings
  - Measure and monitor results of recommended process improvements
- **Recommendations forwarded for consideration**
  - Design/Review Center(s) of Expertise
  - Standardized Designs
  - Continuing Contracts Clause
  - Emphasis on reduced O&M expenditures

## CASE Study—IMTS

### What Changed with the Systems View?

- Created a single USACE-Industry Management Purpose: *System Recapitalization*
- Agreed on essential system requirements
- Prioritized Construction
- Developed a Funding Plan
- Together, Seeking Cost-Shared Legislation to ‘Right Size’ Funding for the long term (~\$380 million/yr)
- Agreed on a partnering plan to manage system recapitalization
- Agreed to seek a cost-shared solution to the funding shortage
- Identified a number of Program and Project Mgmt reforms



## **Some Lessons Learned**

- **We have a history of poor programs and project mgmt; inefficient planning, design and construction; time and cost growth on large IWTS projects**
- **Many Stakeholders are not happy with USACE.**
- **Our Divisions, our Districts and our Stakeholders identify with ‘projects’ and not ‘programs’**
- **We view our mission as a collection of ‘projects’.**
- **We promote ‘projects’, not ‘programs’**
- **We have not adjusted our budget process or our program STRATCOM to a changing world.**



# More Lessons Learned

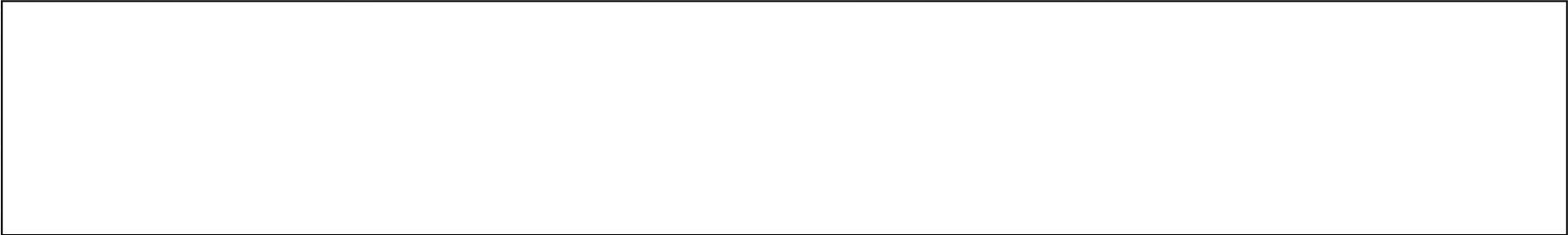
- **Stakeholders will join us to support a system**
  - They will pay their share.
  - They will support and lobby for the funding
  - They will discipline themselves to achieve system efficiency when they can participate fully in all aspects of budget development and program management.
- **WE must view and approach our work differently**
- **Viewing our work as a system causes us to reconsider how we approach project planning, design and construction.**



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**\$00000 —  
WHAT'S NEXT?**



# **IMAGINE**

- **No GI, CG, O&M**
- **No Business Lines**
- **INSTEAD**
- **Six National Infrastructure Accounts**
  - **2 Nav, 2 Flood Risk Mgmt, Environ, Hydro**
  - **Goals, priorities, success measures for each**
  - **Develop, defend 6 multi-year programs**
  - **Focus on delivering, maintaining 6 systems**
  - **The Nation sees what is delivered . . . or not!**



# THE CIVIL WORKS MISSION

USACE is the Nation's Steward for  
*Four Infrastructure Systems*  
*that support 6 Communities of Interest*

## 1. Flood Risk Management

- Coastal
- Inland

## 2. Navigation

- Coastal
- Inland

## 3. Environment

## 4. Hydropower



# Six 20-Yr Infrastructure Budgets

## CAMPAIGN PLAN

## LIFE CYCLE

INFRASTRUCTURE

PLANNING & FUNDING

NAV → Coastal (\$)

→ Inland (\$)

FRM → Coastal

→ Inland

ENVIRONMENT

HYDROPOWER

← R&D

← Planning

← Design

← Construction

← O&M



# ‘SYSTEM’ PROPONENTS

## WRDA Focus

SYSTEM	STAKEHOLDER
<b>Navigation-Coastal</b>	Port Associations, DCA, NWA, ... <b>HMTF</b>
<b>Navigation-Inland</b>	IWUB, WCI,... <b>IWTF</b>
<b>Flood Risk Mgmt-Coastal</b>	ASBPA, Cities, Ports, ...
<b>Flood Risk Mgmt-Inland</b>	ASFPM, ASCE States, Regions, Cities, NWC, ....
<b>Environment</b>	CEQ, TNC, ...
<b>Hydropower</b>	Power Marketing Agencies <b>DIRECT FUNDING</b>



# Next Steps

- **Redefine our business model around 6 *systems***
- **Create proactive, focused *system* stakeholders**
- **In partnership with stakeholder groups develop long term systems plans & priorities**
- **Defend ‘*systems*’ funding needs.**
- **Adjust our STRATCOM**
- **Sell the concept**
- **Be transparent and collaborative.**
- **Listen, Learn, Adapt**

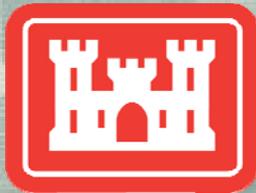


# Next Steps

- **Determine Administration Support**
- **Determine Congressional Cmte Interest**
- **WRDA**
  - **HMTF Legislation**
  - **IWTF**
  - **Hydropower**
  - **Deauthorization**
- **For FY12 – Modify FYDP**



# Discussion



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# For the Out Years ...

- *We expect* budget “cuts”. Note: Pres Obama ordered in FY10 \$100M in “economies”. This is equivalent to \$13 minutes or 0.0029% of expenditures
- *We expect* a major debate on Federal funding priorities to commence with the FY 11 budget and continue beyond
- *We must* seek to improve our budget ‘defense’ of the value to the nation of the water resources infrastructure for which we are responsible
- *We must* continue to place a high priority on execution of all that is appropriated

# IMTS Capital Investment Strategy Team

- Collaborative Team – US Army Corps of Engineers and Waterways Industry (recommendations reflect those of the team, not necessarily those of the Inland Waterways Users Board, the U.S. Army Corps of Engineers or the Administration)
- Premise
  - Projects are funded efficiently
  - Emphasis on finishing projects
  - System evaluation
- Prioritized list used to establish program
- Total IMTS Capital Investment Program Target - \$380M/year
  - New construction - \$320M/year
  - Major rehab - \$60M/year
  - \$380M Program includes management reserve of \$30M
  - Additional out-year capacity available



# ACCOMPLISHMENTS SINCE 2002

PROJECT	ACCOMPLISHMENT
London Lock & Dam, Kanawha River, WV	Completed in FY 04
Lock and Dam 12, Mississippi River, IA (Major Rehab)	Completed in FY 05
Winfield Lock and Dam, Kanawha River, WV	Completed in FY 09
Lock and Dam 19, Mississippi River, IA (Major Rehab)	Complete in FY 09
Marmet Lock, Kanawha River, WV	Complete in FY 09
Robert C. Byrd Locks and Dam, Ohio River, WV & OH	Complete in FY 09
McAlpine Locks and Dam, Ohio River, KY & IN	Complete in FY 09
Grays Landing Lock and Dam, Monongahela River, PA	Complete in FY 09
Port Marion, Lock and Dam 8, Monongahela River, PA	Complete in FY 09
Lock and Dam 3, Mississippi River, MN (Major Rehab)	Complete construction in FY 11 - funded to completion in FY 09.
Lock and Dam 11, Mississippi River, IA (Major Rehab)	Complete construction in FY 11 - funded to completion in FY 09.
Lock and Dam 27, Mississippi River, IL (Major Rehab)	Complete construction in FY 12 - funded to completion in FY 09.
Illinois Waterway, Lockport L & D, IL (Replacement)	Complete construction in FY 12 - funded to completion in FY 09.
Olmsted Locks and Dams, Ohio River, IL & KY	Twin Locks completed in 2005. Initiate and continue dam construction since 2004.
Emsworth Locks and Dam, Ohio River, PA	Initiate and continue construction of rehab items since 2006
L & D 2, 3 and 4, Monongahela River, PA & WV	Construct Charleroi L&D since 2002.
Chickamauga Lock, Tennessee River, TN	Initiate and continue Cofferdam construction since 2006.
Kentucky Lock and Dam, Tennessee River, KY	Initiate and continue work on Highway and Bridges since 2002.
Inner Harbor Navigation Canal Lock, LA	Continue demolitions and relocations.



# Budgets & Appropriations

FY06      FY07      FY08      FY09      FY 10

\$ Millions

Investigations	95	94	90	91	100
Operations & Maintenance	1,979	2,258	2,471	2,475	2,504
Construction	1,637	1,555	1,523	1,402	1,718
Miss. River & Tributaries	270	278	260	240	248
Regulatory Program	160	173	180	180	190
Flood & Coastal Emergencies	70	81	40	40	41
F.U.S.R.A.P.	140	140	140	140	134
Expenses	162	164	177	177	184
ASA(CW)	0	0	0	6	6
<b><u>Total Budget Request</u></b>	<b><u>4,513</u></b>	<b><u>4,743</u></b>	<b><u>4,881</u></b>	<b><u>4,751</u></b>	<b><u>5,125</u></b>
<b>Appropriation</b>	<b>5,329</b>	<b>5,340</b>	<b>5,592</b>	<b>5,403</b>	<b>5,445</b>
<b>Increase from Budget</b>	<b>816</b>	<b>597</b>	<b>711</b>	<b>652</b>	<b>320</b>

**87%**



# **FY11 CIVIL WORKS PROGRAM** **By BUSINESS LINE (\$ Millions )**

	<u><b>FY 10 Budget</b></u>	<u><b>FY 10 APPROPS</b></u>	<u><b>FY 11 BUDGET</b></u>
<b>Navigation</b>	1,766	1,796	<b>65%</b> } <span style="font-size: 2em;">}</span>
<b>Flood</b>	1,628	1,865	
<b>Aquatic Restoration</b>	546	568	582
<b>FUSRAP</b>	134	134	130
<b>Stewardship</b>	99	99	108
<b>Hydropower</b>	230	211	207
<b>Recreation</b>	283	284	280
<b>Water Supply</b>	4	5	4
<b>Emergency Mgt</b>	55	14	43
<b>Regulatory</b>	190	190	193
<b>Exec Dir &amp; Mgt</b>	184	185	185
<b>ASA(CW)</b>	6	5	6
<b>TOTAL</b>	<b>5,125</b>	<b>5,445*</b>	<b>4,939</b>

\*\$140 million for Environmental Infrastructure

