

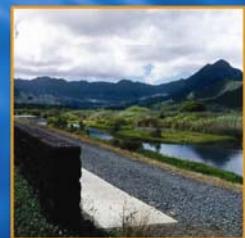
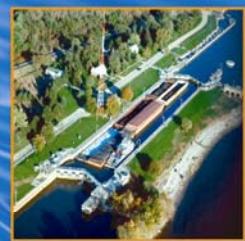


Water Resources Outlook

December 2008

Budget Constraints and the Corps Consideration of Public-Private Partnerships: Where Is the Money Going to Come From?

08-P-1



US Army Corps
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Water Resources Outlook

Water is an essential resource in the U.S. economy. It plays a crucial role in supporting many economic activities and ensuring the quality of human life and the health of ecological systems. Despite this, the value of water may not be widely appreciated because only some water resources and water uses are easily visible or noticed while others are not.

Among the Institute for Water Resources (IWR) Future Directions program activities are the identification of emerging water challenges and opportunities and the tactical engagement of U.S. Army Corps of Engineers (USACE) senior leaders on these issues. Such critical thinking is an essential prerequisite to strategy development and planning.

IWR has developed this series of Water Resources Outlook papers, commissioned utilizing outside experts, to identify emerging issues and implications for the Nation. These issues and implications will be presented in the form of “provocation sessions” with external and internal subject matter experts and stakeholders and will inform the USACE strategic planning process.

Budget Constraints and the Corps Consideration of Public-Private Partnerships Where Is the Money Going to Come From?

Federal, local, and state discretionary funds are constrained and are projected downward over the next 50 years. Corps appropriated funds are hard to come by. The Corps also relies on discretionary and cost-sharing funds with state and local governments. This Water Resources Outlook paper considers the expansion of Public-Private Partnerships (PPPs) as a potential solution to Corps financial constraints and a means to improve overall efficiency.

The Environmental and Recreation programs already work closely with nonprofit organizations. Navigation and Flood Risk Management programs offer great potential to share the risks and rewards of investing in the nation's navigation infrastructure and working to find solutions for communities in flood-prone areas. This paper discusses the impending Corps Civil Works budget crunch and evaluates expanding PPPs and other semi-private partnerships into Corps project delivery and operations.

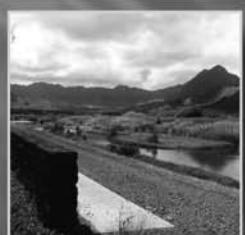


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Executive Summary

A realistic look at the future federal budget shows it will be increasingly consumed by healthcare costs, social security, and interest payments on the national debt. State and local government funds are being similarly squeezed. Clearly, prospects for Federal aid are diminishing, and states cannot run deficits. Over time, the Civil Works Construction Appropriation has decreased in real terms. Operations and maintenance funding has remained constant, but it must be allocated to aging and newly completed projects. ‘No new investigation starts’ is generally the policy. The Corps Civil Works Program has budget challenges.

Corps appropriated dollars are hard to come by. In contrast, private capital appears to be abundant. Both philanthropic and corporate entities are looking for good investments. Additionally, other organizations could provide further relief. This has led to considering Public-Private Partnerships (PPPs) as a potential solution to the Corps financial constraints and a means to improve overall efficiency. PPPs are a mechanism for accomplishing missions through leveraging private resources and expertise. However, healthy competition, full-cost pricing, the right balance along with the appropriate activities are essential.

PPPs are abundant throughout the Corps, but still could be expanded further. Navigation and Flood Risk Management offer the most potential for PPPs. Navigation has an aging infrastructure that private organizations could fix in return for user fees and a share in the economic benefits. Communities in flood-prone areas may be better served through PPPs under various circumstances. The Environmental and Recreation Program are already employing non-profit organizations in an increasing fashion. These programs have different considerations. Status quo tells us that large-scale environmental projects won’t be undertaken by private organizations and smaller recreation projects are less likely to be funded through Corps appropriations.

PPPs in any program will likely have higher financial costs as compared to upfront and timely government appropriations. No one can borrow and insure itself cheaper than the government. However, appropriations are often delayed causing numerous problems. PPPs could complete projects and assume costs associated with aging infrastructure sooner. However, PPPs are not risk free. The Corps would likely have to take a larger regulatory role to ensure public safety and interest, and environmental protection.

This paper reviews current Corps PPPs and the advantages and disadvantages of PPP expansion. Institutional barriers pose potential problems: Corps authorities for expanding PPPs are unclear and would likely require legislative changes. Also, OMB may oppose expansion. The issue is complex; however, funding problems remain and the Corps missions will suffer without change.

The question is raised that if OMB does not allow various activities to meet missions and Congress does not fund them: Does Congress still want the Corps missions met or is this de-authorization by proxy?

Introduction

Federal, local, and state discretionary funds are constrained and are projected downward over the next 50 years. Healthcare and social security costs are becoming an increasing proportion of budgets; thus, creating a squeeze on discretionary funds. The Corps relies on discretionary and cost-sharing funds with state and local governments. This continues to create budget problems for the Corps, sponsors, and the public. Expanding PPPs is one solution to stretch funds. This paper discusses the impending Corps Civil Works budget crunch, evaluates expanding PPPs and other semi-private partnerships into Corps project delivery and operations. The ideas in this paper are not constrained by existing authorities and we recognize there will be challenges to some of these ideas.

Public-Private Partnerships (PPPs) defined:

The *National Council for Public-Private Partnerships* (NCPPP) defines PPPs “as a contractual agreement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public.

In addition to the sharing of resources, each party shares in the risks and rewards potential in the delivery of the service and/or facility” (NCPP 2008).

There are many ways to describe PPPs. This paper defines PPPs as including: profit-seeking enterprises, non-profit organizations, and cooperatives(sometimes called “co-ops”). Contracting is included in our definition of PPPs; however, the Corps legal definition would not consider this to be a ‘partnership’.

Many believe the government’s capacity to meet its missions can be enhanced through PPPs. Corps leaders have heard this message at two recent Castle Forums and at the Transportation Research Board (TRB) in January 2008. In August 2007, Jacques Gansler, the Director of the Center for Public Policy and Private Enterprise, led a discussion on competitive outsourcing of services to save money and improve efficiency. This discussion led to further consider expanding non-Federal roles. In December 2007, G. Tracey Mehan, a former EPA leader, proposed PPPs with private land trusts as a way to harness their wealth for floodplain management and ecosystem restoration—typically considered non-vendible services. The TRB delved into the equity aspects of PPPs. The panel argued that equity should be considered along with effectiveness and efficiency. Others argued that Federal agencies should live within their appropriations.

Some consider PPPs to be a productive and refreshing workplace change. Some consider this a contracting expansion leading to out-sourcing jobs and devolution of governmental roles. However, PPPs cannot be simply characterized. Each PPP has positive and negative impacts. Further PPP expansion may lead to further position out-sourcing, restructuring functions, purposes, and changes in traditional roles, but it could lead to more effective achievement of Corps missions. A healthy public-private balance could

be achievable in various circumstances. The constant factor in all partnerships is that the risk, costs, and benefits are shared.

This paper will discuss the following in this order:

1. *Background*: a brief history of public-private involvement in the Corps
2. *Budget Constraints*: federal, state, and local government spending-- historical, existing, and future budget constraints
3. *Considering PPPs to Meet Constraints*: PPPs have a wide spectrum of possibilities and partners that could help support Corps missions
4. *Potential for Public-Private Partnership in Corps Programs*: This section discussed PPP possibilities in further detail, PPP implications, existing authorities and activities.
5. *Other Considerations*: PPPs need to be considered carefully along with other implications.
6. *The Next Steps*: What should the Corps do next?
7. *Summary*

Background

There has been a natural evolution of the private sector's role in government. Since the 1800s, the private sector has been involved in providing public goods and services. Official contracting legislation began with the Davis Bacon Act of 1931, which set a minimum pay and benefits for contracting construction activities. The Service Contract Act of 1965 expanded these standards to service and other contractors. The Corps currently has millions of dollars in contracts; these contracts generally limit private involvement to a prescribed task. Contracting activities were, and still are considered as a means to efficiently execute tasks. Public-Private Partnerships (PPPs) include contracting, but also go far beyond this.

PPP Potential includes, but is not limited to:

- Contracting (Out-sourcing)
- Operation, Maintenance, and Management Contracts
- Leasing public resources to private entities for operating, developing, maintaining, etc.
- Privately designed, financed, built, operated and transferred assets to the government
- Concessions lease public resources to private resources for operations, maintenance and capital expenditures (15-50 years)
- Divestiture: sale or long-term concession of a public resource (50-99 years)

"Since 1955, the executive branch has encouraged federal agencies to obtain commercially available goods and services from the private sector when the agencies determined that such action was cost-effective. The Office of Management and Budget formalized the policy in Circular A-76, issued in 1966."

-GAO 2001

Since 1986, the federal government has been partnering with local and state governments through cost-sharing agreements to build projects. Many sponsors use private partners for contracting and some use PPPs to a greater extent than the Corps.

The Corps has been evolving in the last decade. Non-profit organizations are now partnering with the Corps along with contractors in some cases. PPPs are used

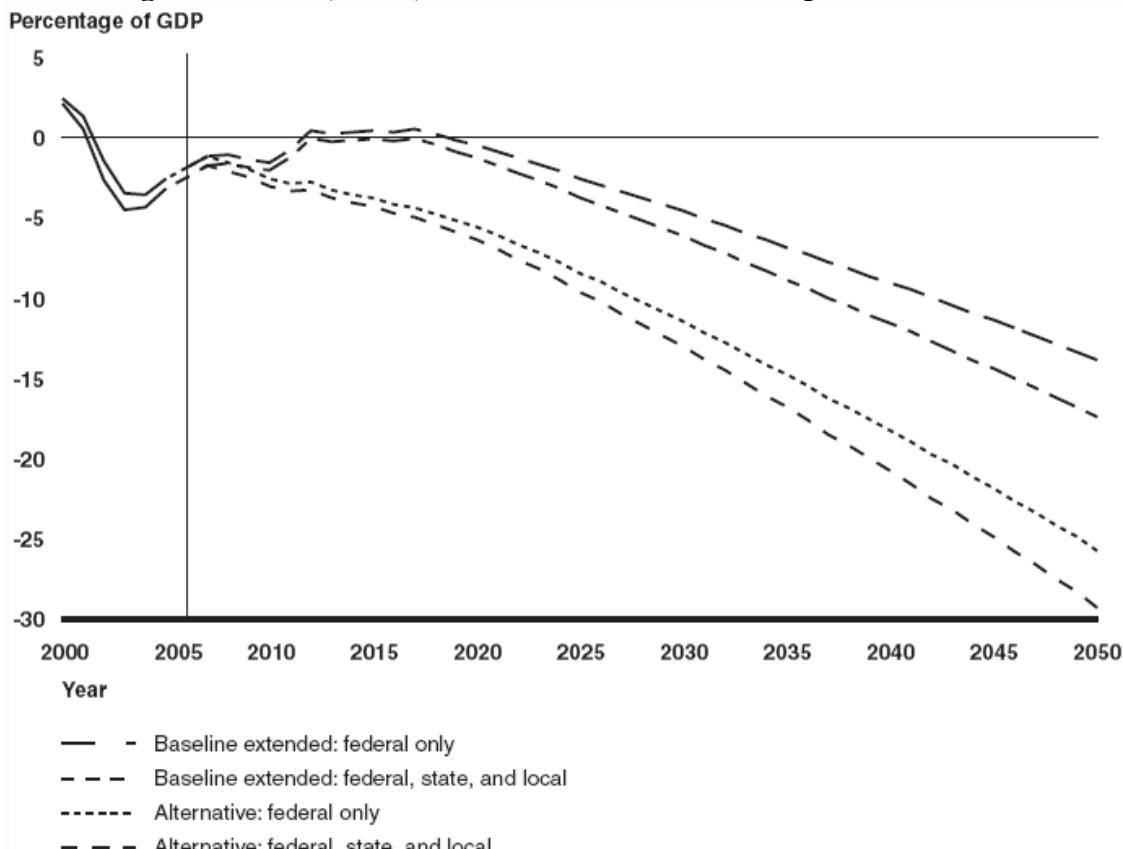
at many recreation and restoration sites. Environmental groups have also assisted on several ecosystem restoration projects through technical support, land donations (to non-federal sponsors), or other activities. Corps planners are reaching out to involve more stakeholders and are using more creative business relationships. Memorandums of Agreement (MOUs) and Understanding (MOAs), other agreements, stakeholder involvement, contracts, and public outreach have expanded partnerships between the public and private sector.

Budget Constraints

Funding is the main motivation for local, state, and government entities to join PPPs because the governments' ability to pay is diminishing (GAO 2008). Governments on all levels are reluctant, or cannot raise taxes/fees to cover expenses nor can they reduce costs easily. Currently, the mortgage crisis has led to a decrease in home values and property tax income for many communities. The aging population is retiring and demanding more care while healthcare costs are increasing for all levels of government. Billions of dollars are being spent on war efforts by Federal government defense, and the deficit continues to grow.

Figure 1 shows the local, state, and federal projected balance of surpluses and deficits as a percentage of Gross Domestic Product (GDP). The outlook shows two scenarios analyzed by the General Accounting Office (GAO). The first is 'base', which assumes all current policies are in place and the 'alternative' is making assumptions that would try to limit negative operating balance. These projections paint a gloomy picture for future budgets.

Figure 1: Local, State, and Federal Balance of Surpluses and Deficits

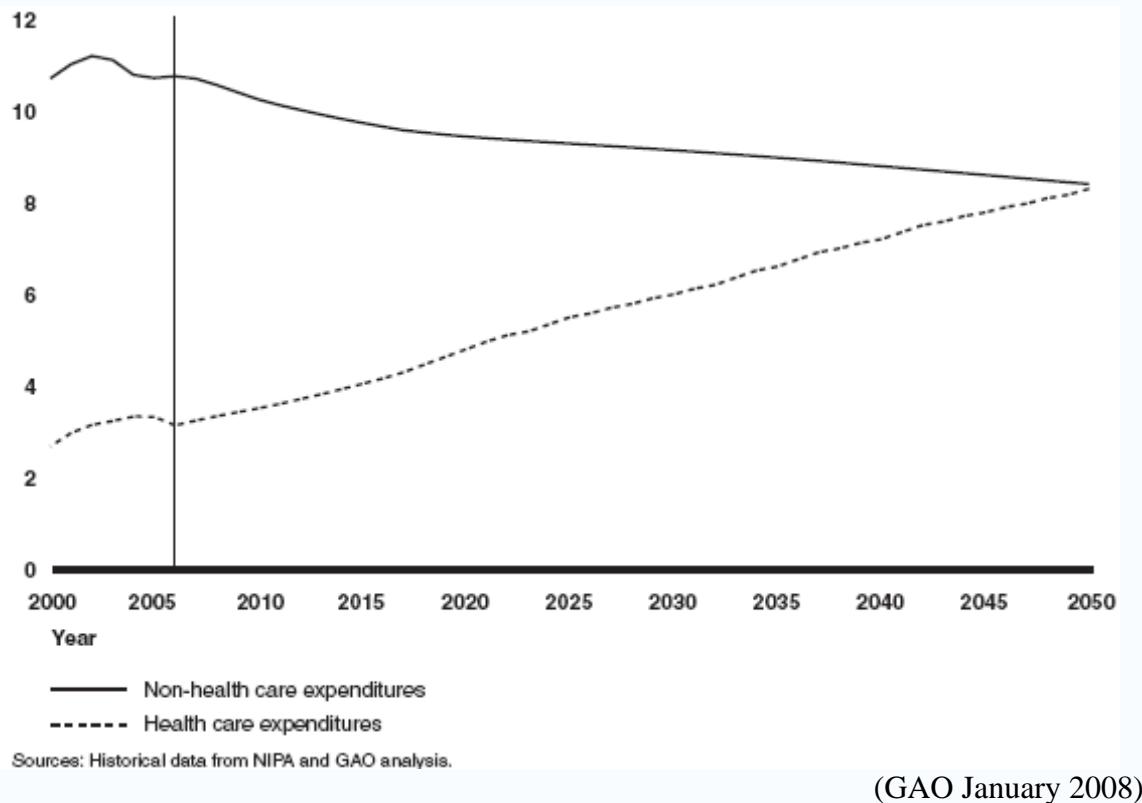


Sources: Historical data from NIPA and GAO analysis.

(GAO January 2008)

Figure 2 shows state and local government healthcare and non-healthcare expenditures such as infrastructure. Healthcare expenditures are projected to increase about 5 percent of Gross Domestic Product (GDP) through the year 2050. Non-health expenditures are expected to drop about 3 percent of GDP. This squeezes the Corps traditional cost-sharing partners.

**Figure 2: Projected State and Local Government Expenditures
As a Percentage of GDP**



Figures 3 and 4 show the historical and future trends for Federal discretionary, mandatory (including healthcare and social security), and deficit spending.

Figure 3

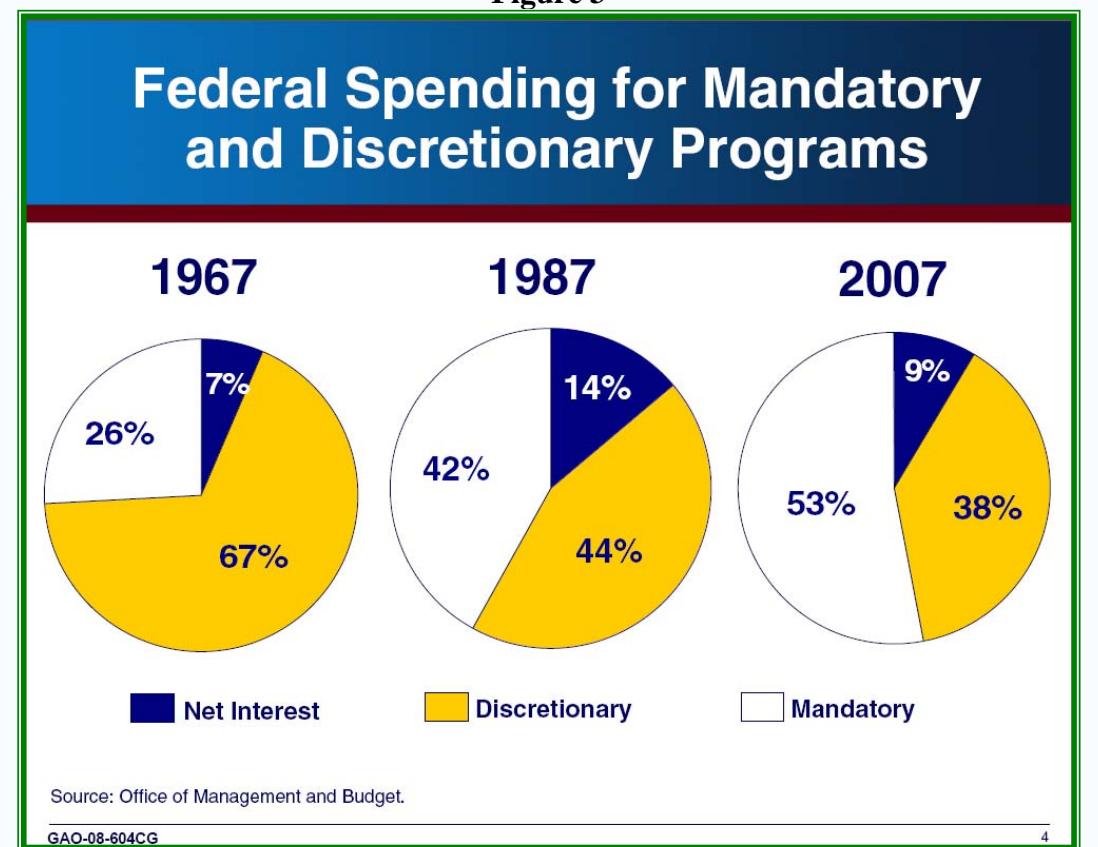
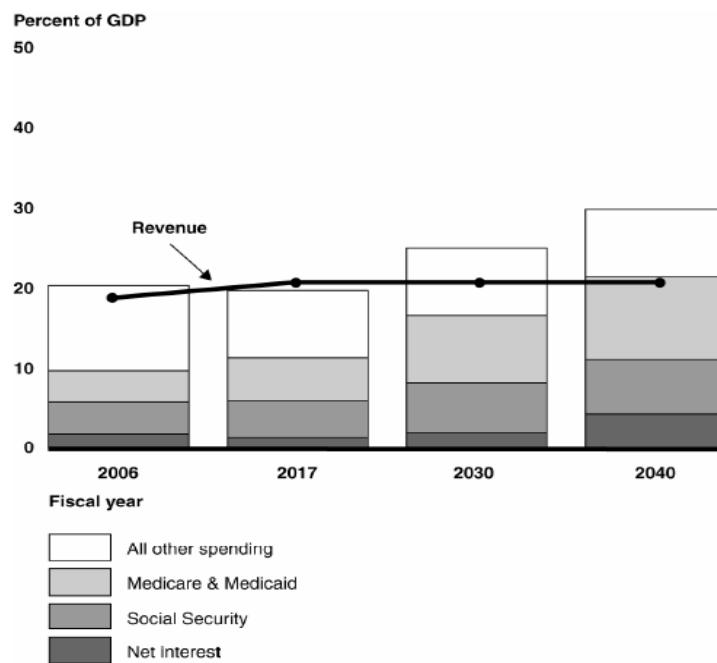


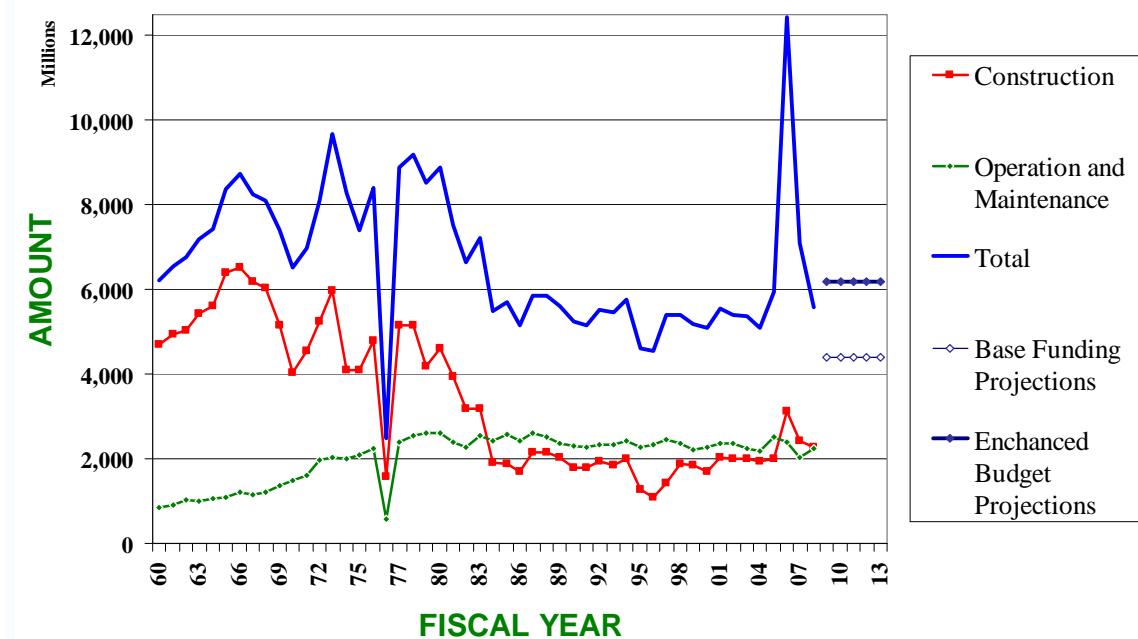
Figure 4: Potential Fiscal Outcomes under Baseline Extended, Revenues and Composition of Spending as a Share of GDP



The Corps, along with other Federal agencies funded by discretionary funds, faces budgetary challenges. Programs are difficult to sustain as shown in the Fiscal Year 2009 Corps Civil Works Five-Year Development Plan. Within the next five years, the Corps Base Budget is expected to be flat or decreasing after inflation. Corps projects are also facing challenges that increase costs: aging infrastructure, construction price increases, stringent guidelines and reviews, long timeframes and delays, etc. The aging infrastructure will increase maintenance needs and squeeze studies, construction, and other activities further. The ability to keep up with technology and ensure general efficiency is diminished. Projects are delayed, modified, or cut which affects the Corps' fulfillment of its missions and hurts the public. Additionally, many Corps projects use local and state government cost-sharing funds, which are constrained. This creates a two-part problem when both partners cannot afford projects, but demand remains.

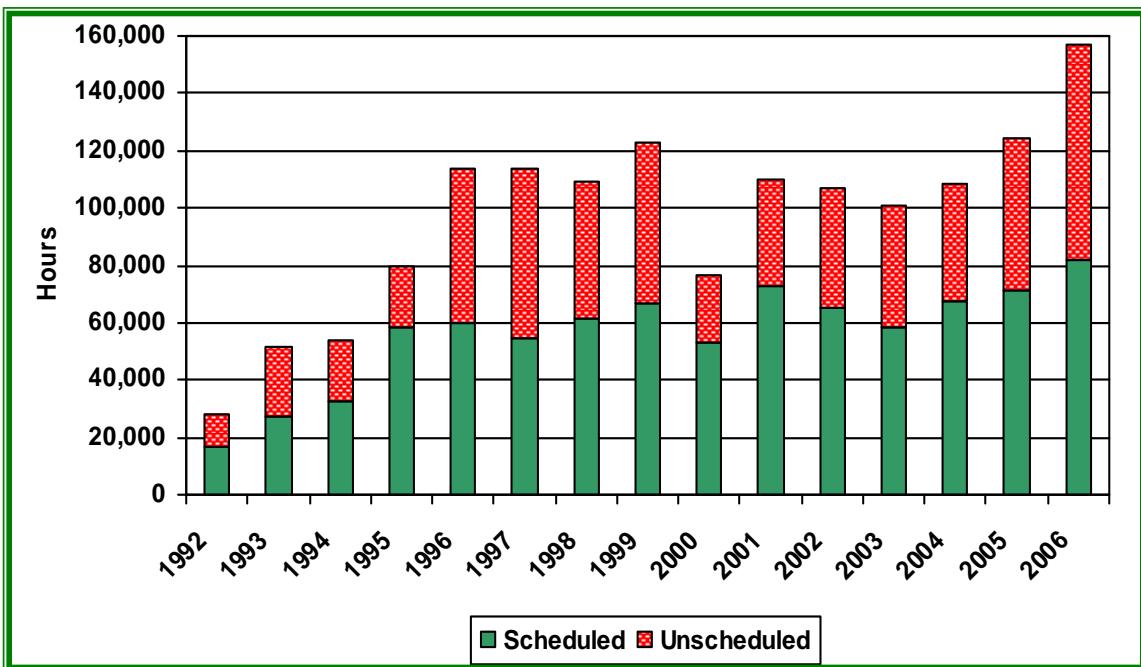
Figure 5 shows the Corps Appropriation History and the projected Fiscal Year 2009 to 2013 Budgets. These are estimated between \$4.4 billion to \$6.2 billion dollars, not including any proposed Fiscal Year 2009 supplements. The money spike in 2005 is a response from Hurricane Katrina.

Figure 5: Corps Appropriations History (In 2008 Dollars)



Reduced funding impacts are already apparent in many Corps business programs. The problem is best illustrated in the table below. Figure 6 shows the increase in lock unavailability along the inland navigation system. Unscheduled closures have been increasing since 2000 and scheduled closures since 2003 due to aging infrastructure, and flat operation and maintenance funding. Closures in 2006 were nearly twice as much as in 1995, and are expected to increase through 2008.

**Figure 6: Navigation Lock Unavailability,
Total Hours Schedule vs. Unscheduled for All Reasons**



Considering PPPs to Meet Constraints

All programs are looking for a means to fulfill their missions. One of three options is bound to occur provided this outlook for the nation:

- Option 1) Taxes or user fees will increase to meet services, and reduce deficit spending
- Option 2) Services will have to be reduced, delayed, or cut
- Option 3) Public-private partnerships and private services will increase.

Option 1 means increasing local, state, federal taxes or user fees to pay for services and to manage debt, which has proven difficult and highly unpopular. In an effort to increase investment without raising taxes, communities like the District of Columbia, Maryland, and Virginia, chose to use auction-based securities to fund projects. Similar to the sub-prime mortgages, these loans were efficient until the credit crisis occurred. These loans are now costing taxpayers 4.75 to 14 percent interest during any given week (Cho et al. 2008). On the federal level, the rising federal debt prompted a “Fiscal Wake-Up Tour” by the GAO along with leading research institutes, prominent national organizations, and others out of desperation to educate the public, and “stop our fiscal bleeding” (GAO 2008).

Option 2 has already been occurring in the Corps and is likely to continue. The Corps has been forced to prioritize, delay, and cut operations, maintenance, construction, planning, and other activities. Project delays impact quality, stakeholder relations, public safety and benefits.

Option 3 is currently being used by other federal agencies, states, sponsors, and throughout the Corps in various fashions. PPPs have been popping up more frequently, but have been around for many years. One of the largest publicized PPPs was on the Skyway Bridge in Chicago. The city leased the bridge to a private company for \$1.83 billion dollars in return for the right to operate, maintain, and collect tolls and concession revenue for 99 years (www.chicagoskyway.org). Also, the Indiana Toll Road was auctioned off for \$3.8 billion dollars to an international investment company, who has become the new road operator (Guinane 2006).

Two main reasons for PPPs are typically cited:

- 1) Shifting Costs from Public to Private: Lowering spending, cutting taxes, or at least holding the line on taxes will continue to be a priority. There are plenty of projects, but too little funding. PPPs offer access to private resources and substitution for local, state, and federal government funds. Costs and responsibilities absorbed by private entities may include: planning, construction, operation and maintenance (O&M), and others. Private companies can raise user fees easier than the public sector.
- 2) Efficiency: The private entity may have more skills or motivation for completing the task in a timely fashion and managing it more efficiently. This could lead to ideas, technologies, and methods that the government did not consider leading to lower

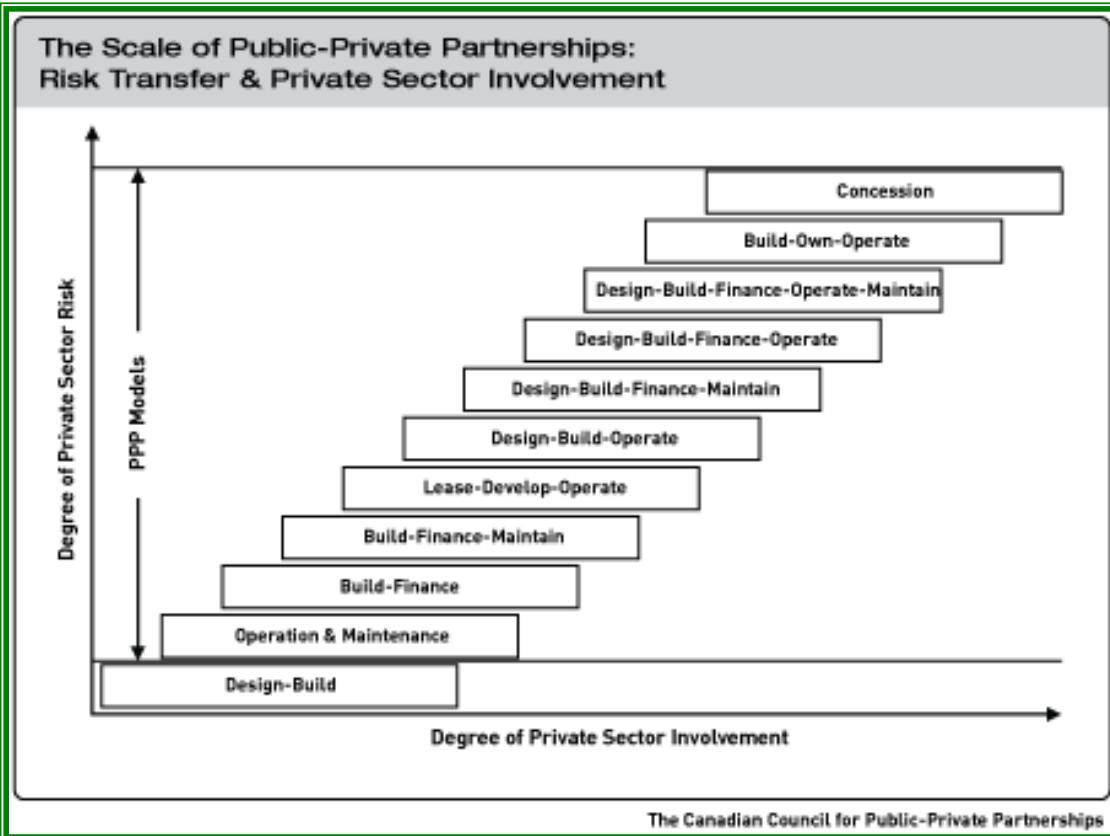
costs and better service. Private companies are thought to be the most efficient partner because they compete often in the marketplace.

Other Potential Benefits, of which all will not be discussed in this paper:

- Leverage money quickly; less/minimal government investment
- Greater Efficiency, entrepreneurship; quicker results
- Less government responsibility; less bureaucracy; leaner government
- Engaging other stakeholders
- Full-Cost pricing, appropriate user fees easier to collect
- New, innovative ideas, services, and technologies
- Additional expertise
- Market Driven Demand: fund efficient projects; don't fund inefficient projects
- Shared outcomes increases quality
- Expanded public outreach

Figure 7 shows a general degree of private sector involvement and risk for different PPPs. The private sector risk increases vertically and the degree of public sector involvement increases horizontally. Any partner could fulfill these functions for various programs and to varying levels.

Figure 7: Risk Sharing Among Any Private or Semi-Private Organization



Finding the right partner and arrangement is essential. Each partnership can offer something different, and arrangements are from contracting to divesture of public assets. Below are just three partner possibilities out of many. The right partner will enhance projects, supplement Corps shortfalls, share costs, increase efficiency and completeness. Appendix A details many of the PPPs listed by the GAO and National Council for Public-Private Partnerships.

Potential Partners with Federal or Non-Federal Governments:

1. Private profit-seeking entities

This partner is a company wanting profits such as The Carlyle Group, Cintra, HDR, Kiewitt, and others. Profit-seeking companies can be employed for a spectrum of possibilities from outsourcing to complete project ownership with little or no government involvement. They can work with any government on any level. The work must have full-cost recovery and profit-earning potential. The Corps has many private partners working through contracts. For example, twenty-five year site concessions are offered for marinas, restaurants, and other services on Corps lakes. A private company will often develop, maintain, operate, and manage a site.

2. Non-profit organizations

This partner is not concerned with profit. Some examples are: Ducks Unlimited, Jaycees, Disabled American Veterans, and charitable trusts. This type of organization is looking to help at any government level when they can advance their initiatives. These partners could provide technical assistance, data, land, volunteers, money, further public outreach and many more activities at reasonable or no costs to the government. Several non-profit partners currently assist the Corps on recreation, aquatic ecosystem restoration, and multi-purpose projects. Risks and benefits are being shared with these partners. For example, The Nature Conservancy has provided technical assistance on several ecosystem restoration projects.

3. Cooperatives

Cooperatives are an organization run by, and for, the users or suppliers of various goods. They are operated in a democratic fashion and members share the risks, costs, and rewards. This creates a cost-recovery system where members pay “at cost” prices. Members make decisions about activities that directly impact them and they have incentives to improve efficiency. This partnership creates more commitment, stability, and incentives for efficiency while limiting government resources and involvement. About four in ten Americans already belong to a cooperative (NCBA 2005). Some examples of cooperatives are: National Rural Water Association, National Rural Electric Cooperative Association, and Asbestos Cooperative Exchange.

Potential For Public-Private Partnerships in Corps Programs

This is an overview of how PPPs could be used to their nearly maximum extent in Corps programs. In most of these cases, the Corps would need to fulfill a regulatory role to ensure public safety, environmental compliance, and respond to emergencies. A more detailed discussion follows. Some believe that the Corps should not supplement its programs beyond appropriations. It is probable that the Office of Management and Budget (OMB) or Congress would reduce appropriations to offset potential gains in these scenarios. If this happens, there is no incentive for the Corps to spend all the time and effort it takes to engage and build partners. A PPP may also be harder to implement due to limitations of authorities.

Flood Risk Management: PPPs could substitute for the Federal role from studies to construction, operations, maintenance, and financing. Sharing risks is an important consideration. Some experts believe PPPs must be engaged to assist in national levee protection because the needs are too great for just the government to meet.

Navigation: The federal government could retain ownership of the infrastructure. PPPs could lease infrastructure facilities, locks, dams, channels, and other Corps structures. The private partner could be responsible for all new construction, operations, maintenance, user fee collection, management, etc.

Environment: The Corps is already using PPPs in Aquatic Ecosystem Restoration and Environmental Stewardship, but these organizations could play a larger role. Many non-profit organizations complete similar missions without the Corps. Currently, the Corps has the authority to cost-share with non-profit partners for aquatic ecosystem restoration, but the Corps could convert its role from co-financer and builder to consultant, regulator and project manager on these projects using private funds. However, this model might not work on large scale projects. Environmental stewardship already accepts material donations and volunteers from non-profit and community organizations. These partnerships could be expanded. Historical preservation, also included in this program, could be turned over to private hands or affiliated tribal organizations.

Recreation: This program is already offering concessions to private companies. The program is also accepting resource donations for trails, education, and related environmental activities. Further devolution of this resource would mean turning over all recreation and project development to partners.

Hydropower: The federal government could auction powerhouses and power rights at multi-purpose reservoirs. Alternatively, the government could lease out all facilities for operations, maintenance, rehabilitations, user fee collection, management, etc.

Water Supply: Any dams, water supply structures, and Corps functions could be auctioned or leased to a private entity.

Regulatory and Emergency Management: Both of these programs are inherently governmental and are not amenable for expanding PPPs outside of basic contracting.

Flood Risk Management and PPP Potential

Justifying projects in more affluent communities is typically easier than for poorer communities. Flood projects base their economic justification on damages prevented. Affluent communities tend to have higher-valued structures and contents. Given similar damage risks, affluent communities are likely to show higher benefits from flood projects. These communities could afford to participate in cost-share partnerships, and likely could afford their own projects with comparable engineering expertise. Some argue that many communities only tolerate the long Corps project delivery process to receive the federal cost-share and to overcome environmental hurdles.

Given this situation, it seems that a PPP could potentially offer an efficient arrangement. Investment companies have an abundance of retirement investment money; and, they are pursuing infrastructure funds and projects for capital gains. Local communities could hire these investors to fund, build, maintain, and operate the flood damage reduction projects in place of most government investments and roles. The federal government would fill a new role for setting standards, some consultation, and assessment. The company would in return collect a “flood fee” among benefiting properties targeted around 10 to 15 percent profit. The company would also have to provide some sort of deposit or bond to ensure their service quality.

The Paterno case in California raises some complex issues. The State was a non-federal sponsor for a Corps-incorporated levee system in Yuba County, and the local district took over the operations and maintenance. Various problems led to levee failure below its design level; although, the levee had held greater flows previously. The Paterno ruling, determined twenty years after the flood, said that the state was liable for this damage costing the state over \$500 million. This responsibility diffusion raises questions and concerns for future PPPs and other arrangements.

Overall, PPP cost would be greater for communities as compared to upfront and timely federal appropriations because of the targeted 10 to 15 percent return on investment, higher private borrowing rates, and additional insurance requirements. On the other hand, the community would likely get its project faster than the Federal appropriations process would allow. Moreover, this PPP creates a user fee that forces property owners to pay the full cost of flood protection. It could also lead homeowners and business to reassess their locations to avoid “flood fees.” Such relocations to avoid potential damages or fees could hurt a local tax base.

This PPP would not be for everyone. Smaller and/or poorer communities may be unable to afford this service. However, larger communities could potentially afford this and avoid the federal funding. The Corps could redirect these large funds to smaller/poorer communities. However, the Corps watershed and risk management approach and execution may be incompatible with PPP activities. This alternative has many implications and assumptions that should be examined.

Case Study

Pro: Three Rivers Levee Improvement Authority (TRLIA), Yuba County, California

Taking matters into their own hands after several costly floods, the Three Rivers Levee Improvement Authority (TRLIA), a joint powers agency that was formed in May 2004 through the Yuba County and Reclamation District 784. TRLIA finances and constructs levees improvements along the Feather and Yuba Rivers. The goal is protect the community against the “200-year” flood event. The federal government is not providing study or construction money. The Corps is acting as a consultant through inspections, permit processing, and some technical assistance. Interestingly, this organization has an appointed board of directors and accepts various funding sources. \$78 million dollars is being financed through an innovative private developer contribution fund. Approximately \$200 million is, or will be, mostly funded with state bonds for infrastructure and flood protection (www.trlia.org). The project was expected to be completed in 2008. A greater Corps basin study also considers this area in a larger watershed and risk management approach.

Case Study

Con: Three Rivers Levee Improvement Authority (TRLIA), Yuba County, California

Some Corps concerns are that this project shouldn’t be built and be regulated better. The levees are protecting a low-lying bowl area that would have more than 15 feet of flooding if levees fail. The levees are inducing development that wouldn’t exist without the levee protection. The Corps is unlikely to justify a project like this because future development is assumed to be safe from the “100-year” flood event. The Corps could potentially justify a smaller project from existing homes. The state and private sector took it upon themselves to do this project regardless. Projects like these increase work for Corps Regulators who ensure private projects don’t negatively impact flooding and systems elsewhere. The Corps must communicate loss of life and other risks associated with non-Corps projects. TRLIA has also been criticized as not providing a comprehensive flood risk management approach that the Corps would pursue. As of December 2008, TRLIA hasn’t been complete due to the credit crunch and foreclosure problem.

Case Study: Sutter County, California (Across the River)

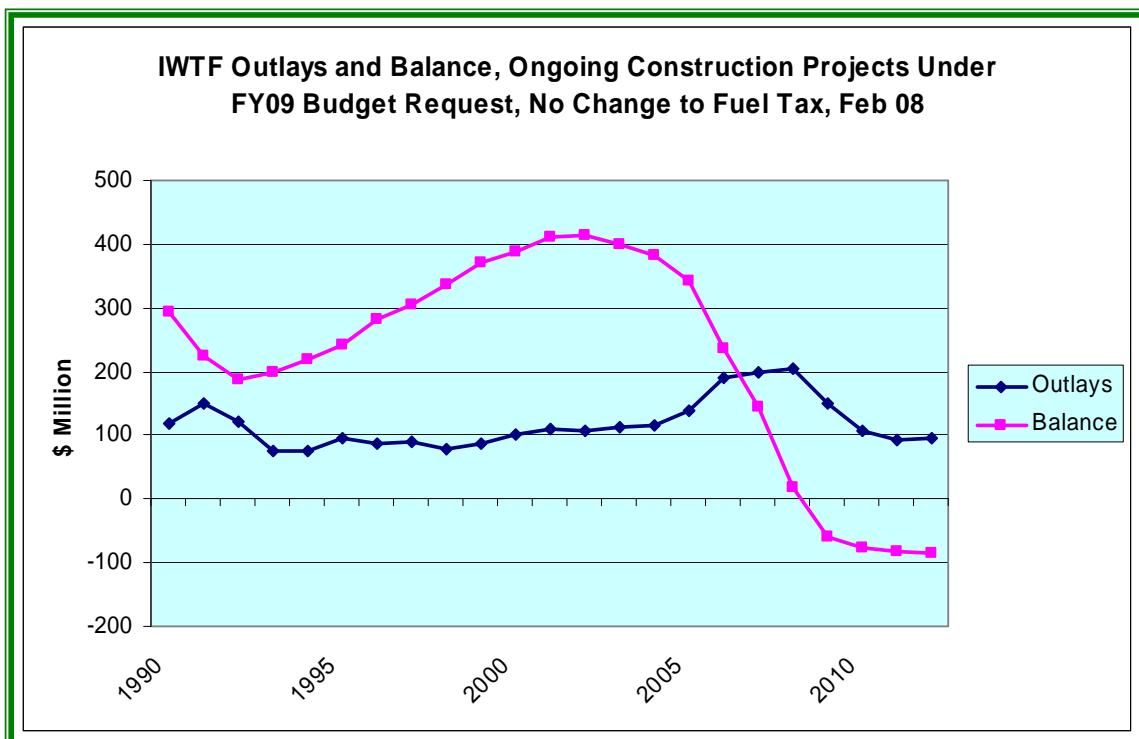
Sutter County is just on the other side of the Feather and Yuba Rivers from TRLIA. Sutter County is a traditional cost-sharing partner with the Corps and also being studied as part of a larger watershed project. Project scoping was finished in October 2004. The feasibility study is currently underway and will end in 2010. Currently, the flood protection is expected to be similar to TRLIA at the “200-year” flood event. However, the entire project construction is not estimated to complete until 2016. This community is waiting longer, but some argue they have better risk management.

Navigation and PPP Potential

The inland navigation system is funded through appropriations from two sources: the General Fund, and the Inland Waterways Trust Fund. This fund is meant to collect money from users based on fuel consumption. Half of the costs of inland waterway construction are from this source and the other half of construction funding are from the General Fund. However, the Inland Waterways Fund (see Figure 8) is facing insolvency and General Funds are constrained. This makes new investments problematic. In April 2008, the Bush Administration proposed a new fee collection system which could increase the amount of money available. It would replace the current fuel fees with a lock user fee. However, the future of this tax is still speculative.

Corps Operations and Maintenance Appropriations come from the General Fund. Aging infrastructure is expensive. It is difficult to adequately maintain locks, dams, and other facilities within current appropriations. The consequences are seen in Figure 6; there is an increase in lock closures due to maintenance requirements. Inadequate maintenance increases risks to the transportation industry, affordable goods, and safety.

Figure 8



The current government funding is not sufficient to keep up with navigational needs. Public-private partnering may be an alternative for maintaining and improving the inland waterways.

The government could engage a private organization to solve this problem. The organization would collect user fees at locks and channels that cover the inland waterway system costs in return for investing, maintaining, and operating the system. Government oversight would ensure safety, water levels, environmental compliance, etc. Alternately, a PPP could be set up with a cooperative. All inland waterway system users could jointly fund or set fees, maintain, and operate the lock system in partnership with the Corps. The users could decide together how to best run the system to reduce costs and improve efficiency. This could be more acceptable than utilizing a profit-seeking company because profit margins would not be an objective. Additionally, stakeholders may be most knowledgeable of potential efficiencies. This partnership would help bring stakeholders into a joint solution rather than top-down approach.

These PPP alternatives raise many good questions that need to be answered prior to moving in this direction. Are the waterways supposed to be open and free to the public? Can the system remain viable? How would this impact the greater transportation? Can the private sector be relied upon to sustain the system? Will this really help the public? Will costs be reduced or transferred disproportionately?

Recreation and Environmental PPP

These programs already take advantage of many partnerships. The Corps has several programs that allow private citizens or non-profit organizations to partner with the Corps (EP 1130-2-500). The Corps Volunteer Program, authorized by Public Law 98-63, can accept volunteer services and also provide reimbursement for incidentals if necessary. The Contribution Program allows the Corps “*to accept contributions from groups and individuals in connection with carrying out water resources projects for environmental protection and restoration or for recreation.*”

The Challenge Partnerships Program or also called the ‘Challenge Cost-Share Program’

Existing MOU agreements can be found at:
<http://www.hq.usace.army.mil/cemp/cn/MOAListing.html>
and
<http://corpslakes.usace.army.mil/employees/cecwon/mou.html>

authorizes “*opportunities for public and non-Federal groups and individuals to contribute to and participate in the operation and/or management of recreation facilities and natural resources at Corps water resource development projects*” per Section 225 in WRDA 1992 (EP 1130-2-500). Corps Headquarters has also put together a Handshake Partnership Program, which provides “seed money” as an incentive for Corps facilities to use Challenge Partnership agreements. This program provided \$125,000 to 14 facilities in 2008. These locations received up to \$10,000 each to utilize with appropriated funds and partner contributions (in-kind services, supplies, volunteers, etc.) to accomplish a partnership project. This seed money has helped create more partnerships as they build on one another and inspired others (Hosey and Stokes 2008). Additional government funds in this program could further benefit the Corps and greatly offset the government costs relative to the seed money amount.

At Lake Ouachita in Arkansas, the Handshake Agreement helped inspire our partners to leverage the seed money into \$800,000 in contributions. The volunteers will have completed over 20 miles of trail, miles of route placement, sign and bench placements, and initial trail maintenance. This also morphed into other volunteer activities, grants, and contributions (Persio 2008).

Environmental

New Water Resources Development Act (WRDA 2007) provisions, Section 2015 and 2003, benefit this program. Combined, these provisions allow non-profit organizations with wetlands restoration expertise to design and construct authorized projects for the Corps and become cost-sharing partners on Continuing Authorities Projects (Section 1135 and 206 studies) and now, General Investigation Studies. Non-profit sponsors will act similarly as the Corps current sponsors: providing in-kind services, lands, easements, rights-of-way, relocations, and disposal areas for construction, the non-Federal cost share, operations and maintenance. Like any sponsor, the non-profit organization would retain land ownership (Ware 2008). WRDA Section 5135 also allows non-profit organizations to partner in debris removal and sustainable groundwater management in specified regions.

The Corps could use other agencies PPPs as models for expanding Corps PPPs. The National Park Service, U.S. Fish and Wildlife Service (FWS), and U.S. Forest Service have additional partnership authorizations. Their authority allows more established foundations to contribute, raise money, do projects, and furthering PPPs. *“The National Park Service in particular, uses its local and national partners extensively to perform various functions including providing visitor and concession services and leading fund raising for capital building campaigns”* (Stokes 2008).

The National Fish and Wildlife Foundation (NFWF) Establishment Act (15 U.S.C. 3701 *et. seq.*) is a federally chartered charitable, non-profit corporation to manage monetary and resource donations. These donations go to the programs and activities mainly for the Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA), but also the Forest Service, Bureau of Land Management (BLM), National Resources Conservation Services (NRCS), and the Environmental Protection Agency (EPA). The Secretary of the Interior appoints the Foundation’s board and the FWS Director is also a non-voting board member. The foundation has corporate partners such as Anheuser-Busch, Bass Pro Shops, Wal-Mart and several oil companies. The foundation has leveraged \$400 million in federal funds as seed money and turned it into \$1.3 billion for conservation (NFWF 2008).

Recreation PPP

Recreation features, such as marinas, restaurants, campgrounds, and other recreation-related items, are already leased or sub-leased on Corps property to profit-seeking entities. The Corps conducts a market and/or feasibility study to establish the property needs and availability prior to leasing. Then a “Notice of Availability” is issued for competitive proposals. The leases are usually around 25 years and all developments are approved by the Corps. Private-companies operate, maintain, develop, and improve these facilities.

The Corps will also typically lease land to state and local governments who in turn lease to, or partner with, private entities. These “Public Park and Recreation Leases” are approved by the Corps; however, they do not have to be advertised competitively. The state and local governments can also collect part of the profits for reinvestment in other government activities. The Fort Worth District found local and state leases to be more advantageous to taxpayers than the Corps leases (Cox 2008). Corps lease regulations could be modified to match local and state leases or turned over into these leases to have more efficient federal PPPs.

Contribution Program in Action:

Lake Sidney Lanier near Atlanta has about 7.5 million visitors every year, many whom fish and support the local economy. When droughts hit the area, the existing boat ramps were not long enough. Local guides, bait shops, organizations, and private citizens donated supplies worth tens of thousands of dollars to extend three boat ramps reopening the lake to recreation. The Contributions Program made a significant impact at this site and could impact many more sites if properly applied (Lapina 2008).

Hydropower

Historically, hydropower plants began as PPPs. They were built at navigation dams jointly with electric utility companies. The companies would build the dam and the Corps would build the navigation lock. Congress later authorized the Corps to build plants where dams were being built for flood risk management, navigation and other purposes; these were finished around the mid-1940s. In the 1970s, non-federal hydropower was allowed at Corps project sites totaling nearly 40 completed by municipalities, electric utilities, and independent power producers. The Corps continues to help as consultant and regulator on non-Corps dams (Corps 2001).

The Corps produces 25% of all hydroelectric power at 75 hydropower plants; meaning, that other entities are responsible for the remaining hydropower plants as of 2005.

(Corps 2005)

PPPs are nothing new on hydropower plants. Many countries have privatized hydropower facilities such as Canada, Macedonia, Honduras, Nepal, and the United

States. Naturally, the operations and leasing of Corps dam facilities have been discussed for years. This program is already highly regulated and any PPP would have to continue to follow regulations, and comply with project master plans. Public transparency would be very important in this arrangement like many PPPs,

The Bagnell Dam in Missouri is an example of a privately built and operated dam. The dam was finished in 1931. Approximately 650 million gallons are held in the 2,543-feet dam. AmerenUE has a license to operate the dam. A license can dictate certain environmental and other regulations. Previously, the company paid compensation in lawsuits over fish kills and other environmental impacts. They have also been required to install more efficient turbines and pay yearly environmental mitigation fees in response (Missouri Attorney General 2005).

Other PPP potential

The Contributions and Challenge Partnership Programs specifically could be expanded across the board. This would allow the other Corps programs to accept additional volunteers, expertise, and resources. The Cooperation with Department of Defense and National Guard Units allows military units to assist on construction on federal lands. This has been used on some recreation features and could be further utilized in other programs.

The current authorities and agreements could be communicated better through devoted Corps resources on all levels. The Volunteer Program has potential for many offices if there is an actively committed person to manage and pursue opportunities. Additionally, the District, Division, and field offices could be actively searching for potential partnerships within current agreements. As current agreements gain success, more partnerships will follow, and then the natural progression towards expanding and adding agreements could occur. Engaging the community to be involved takes time and effort. Additional resources and training opportunities must be found to support the expansion of these programs.

Nuggets from Castle Forum IV – December 11, 2007

Topic: The Federal Government in 2050

- Public-private partnerships are not like an ATM machine where you punch buttons and the money comes out. In partnerships you have to give up some control, and they only work if there are shared goals.
- If private land trusts become involved in flood plain management, flood prone lands can be protected without political interference.
- Concerns were raised about long term maintenance of private land trusts; this could ultimately fall back to governments.
- In public-private partnerships the government does not give away sovereignty; it is more a devolution of function than devolution of authority.
- The idea of involving private entities in the educational aspects of risk communications was introduced.
- Moving towards the arena of “social marketing” was also proposed as a means to modify behavior and get people to stop moving into dangerous areas.

Other Considerations

PPPs are not a cure-all. Potential negative aspects, private financing, OMB and Corps implications could impact many PPPs. Additionally, when Congress does not provide sufficient funds to successfully complete Corps missions, are the missions still valid or is it the will of Congress to curtail these activities? Many Corps programs are not being funded efficiently which essentially increases costs, causes delays and other problems. Should Congress de-authorize missions to simplify matters, or should PPPs be explored to successfully fulfill Corps missions?

Two large risks exist in expanding partnerships: financial and public safety. First, the sub-prime mortgage crisis leading to a credit crunch is an example of one potential financial risk. Some PPPs have been successful, but private agencies have gone bankrupt and/or the government has bailed them out in the past. History repeating itself is a fear. For example, the government took over the roads, bridges, and canals in the first half the in the 19th Century when private ownership went bankrupt (Goldstein 2006).

Second, some PPPs may be too risky for the public's comfort. Actual versus perceived public risk may be vastly different; however, concerns over safety remain. Profit-seeking and other motives could jeopardize safety and quality. These concerns can be addressed through regulations and performance measures. Expanding PPPs poses greater private responsibilities and liabilities. The public and private sector should evaluate the responsibility balance and regulations for an "acceptable level of risk." Rigorous upfront analysis should address concerns and examine potential watershed and system impacts. The federal government could limit private sector responsibilities.

Existing Partnerships: Many Corps existing agreements with other governmental and non-profit organizations have gone to the wayside because of poor communication, lack of creativity in using agreements, or having no responsible project manager. Better upkeep of agreements and communication would inspire more partnerships and government efficiency (Cann 2008).

Choosing Partners: Partnerships with non-profit organizations were not allowed previously, because these partnerships were not believed to represent the 'public interest'. This argument still applies to any non-public entity.

Private Partner Financing Implications: Private partners get their investment money from various sources including borrowed funds. Unlike profit-seeking entities, non-profit organizations and cooperatives would have the option to raise money from their members without borrowing. However, with the possible exception of non-profit organizations, most organizations will require financing at private borrowing rates, which would be more expensive than federal government borrowing. Finding financing could be difficult, and would be especially difficult for complicated projects like the Corps typically undertakes. Lately, lenders have been hesitant to loan money during this mortgage crisis, which creates a liquidity problem. Any partner would need liability insurance (the government insures itself). Financing fees, insurance, the added profit

margin, and other costs contribute to higher public costs and user fees. A recent GAO report estimated that PPPs with profit-seeking entities cost 25 to 35 percent more than upfront and timely government appropriations (Henn 2008). The private sector will argue that timely and upfront appropriations are a rare treasure, and that PPPs provide cost savings in efficiency and receiving project benefits earlier (NCPPP 2008).

The following list provides **potential reasons for not pursuing PPPs**, of which, all or some may not be true for a given project. Not all are discussed in this paper and some could be avoided through greater government oversight.

- Laws, Corps policies and regulations may prohibit PPPs
- Net benefits unknown
- Questionable financial sustainability
- Less government control
- Liability and risk issues (public vs. private)
- Selected partner may choose poor sub-contractors, workers, investors, or other poor affiliates
- No or fewer subsidies to historically provided industries (Fewer federal cost-sharing funds and/or private companies may now charge for traditionally government-provided goods or services.)
- Potential price gouging, monopolistic control
- Lower standards compare to government standards; Lower environmental hurdles on private activities
- Incentives to cut corners for profit
- PPP's may look to use some public funding, which defeats the purpose
- Difficulties finding an acceptable economic return and responsibility balance
- Highly criticized, publicized, and potentially disruptive
- Long contracting processes and more disputed awards
- Shift in government jobs to contractor jobs
- Impacts to system and watershed management
- Project could not have as vendible good as first thought
- Empower the private lobbying and excessive government contract spending; thus, reducing the total government savings
- Additional government resources are necessary to support partnering opportunities

OMB and Legislative Implications: The Office of Management and Budget (OMB) and Congress play interesting roles. Congress can appropriate upfront and timely funding anytime it would like; however, it has chosen not to in many cases. Some believe that Congress is allocating enough money and agencies are spending it poorly. Some believe that Congress does not want to fund these missions. Some believe that Congress does not understand Corps needs. Whatever the case may be, PPPs could substitute for appropriated funds to meet missions. However, this action would have a negative effect. If there is a reduction in the appropriated budget by the amount gained by using

partnerships, there is no incentive to engage in partnering activities. In the past OMB, has opposed certain PPPs, such as lease-purchases of buildings; however, OMB may be amenable to private management options. However, OMB and legislatures could also decide the money spent in PPPs is best invested in other non-governmental activities.

Internal Corps Challenges: Although the Corps participates in many PPPs within the several activities and programs, expanding PPPs has its challenges. Areas with fewer PPPs have been reluctant to enter into community engagement for a variety of reasons. Some have privatization fears, misunderstandings about authorities, or are resistant to change in general. The current practices in those areas would need further maturation and evolution along with other supporting public agency practices. Currently, “no” is an easier answer than finding the proper authority. Many Corps leaders have met internal resistance to expanding PPPs. Across the Corps, there have been different interpretations of authorities and rules. Some offices have been reluctant to implement existing authorities despite explicit policy guidance (Stokes 2008).

Several factors can contribute to having a successful PPP:

- Healthy competition
- Shared interests and incentives; shared objectives
- Reliable funding stream
- Good communication; Understanding Each Agency’s Role
- Commitment on all levels
- Choosing good partners
- Plan in place
- Minimal bureaucracy
- Focusing on specific projects for partnerships (not all projects are good for PPPs)
- Statutory Authority and regulation agreement
- Leadership, policies, and motivation to support; supportive environment; supportive employees, union, the private entity, end users, and other stakeholders
- Hiring, promoting, rewarding and training Corps employees with partnering competencies
- Framework for enforcing, and resolving contract issues

Three important considerations in working with Non-Profit Organizations:

- 1) *Shared vision:* Non-profits have their own priorities and will only pursue projects within their mission or interest areas. They can be wonderful partners to work with when the Corps is operating in their areas of interests.
- 2) *Organizational Differences:* Non-profits are all organized differently and it is important to understand these differences in any PPP. A nationwide PPP may not be appropriate for an organization broken out by state or regions. Leadership and workforce are composed differently and may require different communications.
- 3) *Funding and Volunteers:* Non-profits are funded and operated through philanthropy. This can lead to leveraging great resources, volunteers, etc. However, resources may be inconsistent across time and regions (Morales 2008).

The Next Steps . . .

The Corps has some homework to do. The status quo is not sustainable, and decisions needs to be made based an educated guesses and leadership direction.

Step 1: Future budgets for the next 5 to 15 years should be contemplated. Of course, budgets are highly speculative. However, realistic government affordability based on current spending should be estimated. The Fiscal Year 2009 five-year budget is gloomy. Aging infrastructure and reduced budgets are cutting into Corps activities. The trend is not likely to improve, but should be examined nonetheless. If the trend is going downward and estimated work is going upwards, then action needs to be taken.

Step 2: If budgets are not keeping up with work, evaluate alternatives and choose a path:

- A) Do nothing and allow slow painful, unmanaged cuts and delays
- B) Improve Corps efficiency to reduce our costs
- C) Plan which Corps activities should be cut in an organized fashion
- D) Modify cost-sharing regulations to make sponsors pay a larger share which could lead sponsors to pursue more PPPs
- E) Consider creative solutions that we have not thought of yet
- F) Pursue PPPs as an attempt to do more with less or allow greater flexibility for cost-sharing partners to pursue their own PPPs
- G) Some combination of the solutions above

Path A raises the question that if OMB does not allow various activities to meet missions and Congress does not fund them: Does Congress still want the Corps missions met or is this by proxy de-authorization? Most paths are not easy and will require coordination with other agencies and congressional involvement.

No matter the path chosen, the Corps role in PPPs outside of the federal sphere should be re-evaluated. The Corps may need to reconsider their role through setting national standards, and regulatory expansion. The Corps also needs to facilitate PPP transparency, risk communication, and encourage responsible state/local land-use management and emergency planning. In Path E, existing PPPs should be reviewed. Authorities and policies for opportunities and constraints should be reviewed. Adjust business processes and move ahead.

Step 3: Follow through with one of the chosen plans in Step 2 and layout a plan early for future years, not just the next 5 years. Some alternatives will take years to implement and should be done before funding is too low to create better plans.

Summary

Local, State and Federal Budgets are being squeezed tighter. This squeeze will continue to impact the Corps Civil Works program over the next 50 years. The Corps missions are difficult to sustain without appropriate funding; therefore, Public-Private Partnerships (PPPs) are being considered. PPPs could reduce the government's role, improve efficiency, provide additional resources, and a means to meet missions. The Corps already participates in many PPPs throughout each program. Each program could be devolved further to allow non-profit organizations, cooperatives and profit-seeking entities to take greater responsibility. PPPs offer creative and flexible arrangements varying from contracting to complete private ownership of a public resource.

PPPs do not come without strings attached. Partners have expectations and implications to consider such as financing, incentives, goals, liability, risk, and responsibility balance. OMB, Congress, the Corps, state, and local governments also have different standards, expectations, and authorities that may conflict with certain arrangements. Some argue that the Corps should work within its budget, while others argue that Congress has given the Corps a mission that must be fulfilled. The federal budget process can be long and difficult to complete any project. This makes PPPs appealing to state and local sponsors looking for results sooner.

The Corps has several successful programs that could be further expanded. These programs are the Contributions, Challenge Partnership, and Handshake Programs. These programs only apply to restoration and recreation; however, almost all programs could benefit. The Corps has authority to participate in many PPPs, but further authority expansion would allow greater flexibility and more efficient PPP options. Despite if the Corps expands PPPs or not, the Corps needs to reconsider its role in PPPs that are occurring without federal assistance. Currently, private developers are involved in rehabilitating levees that could induce further development in risky areas. The Corps has a responsibility to permit these projects, but current authorities may not go far enough to prohibit risky behaviors, or allow more public communication on these projects.

PPPs are one option to ease budget constraints. Congress, OMB, and the Corps need to evaluate if these should be pursued and re-evaluate the Corps role in PPPs. Further PPP expansion will challenge existing frameworks and responsibilities. Any transition would require care, a supportive framework, good communication, leadership and management. PPPs can be successful in fulfilling missions, but whether they are the best choice for the public interest is still undecided.

Appendix A: PPP Types

The below definitions were extracted from "Public-Private Partnerships: Terms Related to Building and Facility Partnerships", Government Accounting Office, April 1999. The National Council for Public-Private Partnerships was a resource used in developing the GAO report. (<http://ncppp.org/howpart/ppptypes.shtml>)

Build/Operate/Transfer (BOT) or Build/Transfer/Operate (BTO)

The private partner builds a facility to the specifications agreed to by the public agency, operates the facility for a specified time period under a contract or franchise agreement with the agency, and then transfers the facility to the agency at the end of the specified period of time. In most cases, the private partner will also provide some, or all, of the financing for the facility, so the length of the contract or franchise must be sufficient to enable the private partner to realize a reasonable return on its investment through user charges.

At the end of the franchise period, the public partner can assume operating responsibility for the facility, contract the operations to the original franchise holder, or award a new contract or franchise to a new private partner. The BTO model is similar to the BOT model except that the transfer to the public owner takes place at the time that construction is completed, rather than at the end of the franchise period.

Build-Own-Operate (BOO)

The contractor builds and operates a facility without transferring ownership to the public sector. Legal title to the facility remains in the private sector, and there is no obligation for the public sector to purchase the facility or take title. A BOO transaction may qualify for tax-exempt status as a service contract if all Internal Revenue Code requirements are satisfied.

Buy-Build-Operate (BBO)

A BBO is a form of asset sale that includes a rehabilitation or expansion of an existing facility. The government sells the asset to the private sector entity, which then makes the improvements necessary to operate the facility in a profitable manner.

Contract Services

Operations and Maintenance

A public partner (federal, state, or local government agency or authority) contracts with a private partner to provide and/or maintain a specific service. Under the private operation and maintenance option, the public partner retains ownership and overall management of the public facility or system.

Operations, Maintenance, & Management

A public partner (federal, state, or local government agency or authority) contracts with a private partner to operate, maintain, and manage a facility or system proving a service. Under this contract option, the public partner retains ownership of the public facility or system, but the private party may invest its own capital in the facility or system. Any

private investment is carefully calculated in relation to its contributions to operational efficiencies and savings over the term of the contract. Generally, the longer the contract term, the greater the opportunity for increased private investment because there is more time available in which to recoup any investment and earn a reasonable return. Many local governments use this contractual partnership to provide wastewater treatment services.

Design-Build (DB)

A DB is when the private partner provides both design and construction of a project to the public agency. This type of partnership can reduce time, save money, provide stronger guarantees and allocate additional project risk to the private sector. It also reduces conflict by having a single entity responsible to the public owner for the design and construction. The public sector partner owns the assets and has the responsibility for the operation and maintenance.

Design-Build-Maintain (DBM)

A DBM is similar to a DB except the maintenance of the facility for some period of time becomes the responsibility of the private sector partner. The benefits are similar to the DB with maintenance risk being allocated to the private sector partner and the guarantee expanded to include maintenance. The public sector partner owns and operates the assets.

Design-Build-Operate (DBO)

A single contract is awarded for the design, construction, and operation of a capital improvement. Title to the facility remains with the public sector unless the project is a design/build/operate/transfer or design/build/own/operate project. The DBO method of contracting is contrary to the separated and sequential approach ordinarily used in the United States by both the public and private sectors. This method involves one contract for design with an architect or engineer, followed by a different contract with a builder for project construction, followed by the owner's taking over the project and operating it.

A simple design-build approach creates a single point of responsibility for design and construction and can speed project completion by facilitating the overlap of the design and construction phases of the project. On a public project, the operations phase is normally handled by the public sector under a separate operations and maintenance agreement. Combining all three passes into a DBO approach maintains the continuity of private sector involvement and can facilitate private-sector financing of public projects supported by user fees generated during the operations phase.

Developer Finance

The private party finances the construction or expansion of a public facility in exchange for the right to build residential housing, commercial stores, and/or industrial facilities at the site. The private developer contributes capital and may operate the facility under the oversight of the government. The developer gains the right to use the facility and may receive future income from user fees. While developers may in rare cases build a facility, more typically they are charged a fee or required to purchase capacity in an existing

facility. This payment is used to expand or upgrade the facility. Developer financing arrangements are often called capacity credits, impact fees, or extractions. Developer financing may be voluntary or involuntary depending on the specific local circumstances.

Enhanced Use Leasing (EUL)

A EUL is an asset management program in the Department of Veterans Affairs (VA) that can include a variety of different leasing arrangements (e.g. lease/develop/operate, build/develop/operate). EULs enable the VA to long-term lease VA-controlled property to the private sector or other public entities for non-VA uses in return for receiving fair consideration (monetary or in-kind) that enhances VA's mission or programs

Lease/Develop/Operate (LDO) or Build/Develop/Operate (BDO)

Under these partnerships arrangements, the private party leases or buys an existing facility from a public agency; invests its own capital to renovate, modernize, and/or expand the facility; and then operates it under a contract with the public agency. A number of different types of municipal transit facilities have been leased and developed under LDO and BDO arrangements.

Lease/Purchase

A lease/purchase is an installment-purchase contract. Under this model, the private sector finances and builds a new facility, which it then leases to a public agency. The public agency makes scheduled lease payments to the private party. The public agency accrues equity in the facility with each payment. At the end of the lease term, the public agency owns the facility or purchases it at the cost of any remaining unpaid balance in the lease. Under this arrangement, the facility may be operated by either the public agency or the private developer during the term of the lease. Lease/purchase arrangements have been used by the General Services Administration for building federal office buildings and by a number of states to build prisons and other correctional facilities.

Sale/Lesseeback

This is a financial arrangement in which the owner of a facility sells it to another entity, and subsequently leases it back from the new owner. Both public and private entities may enter into a sale/leaseback arrangement for a variety of reasons. An innovative application of the sale/leaseback technique is the sale of a public facility to a public or private holding company for the purposes of limiting governmental liability under certain statutes. Under this arrangement, the government that sold the facility leases it back and continues to operate it.

Tax-Exempt Lease

A public partner finances capital assets or facilities by borrowing funds from a private investor or financial institution. The private partner generally acquires title to the asset, but then transfers it to the public partner either at the beginning or end of the lease term. The portion of the lease payment used to pay interest on the capital investment is tax exempt under state and federal laws. Tax-exempt leases have been used to finance a wide variety of capital assets, ranging from computers to telecommunication systems and municipal vehicle fleets.

Turnkey

A public agency contracts with a private investor/vendor to design and build a complete facility in accordance with specified performance standards and criteria agreed to between the agency and the vendor. The private developer commits to build the facility for a fixed price and absorbs the construction risk of meeting that price commitment.

Generally, in a turnkey transaction, the private partners use fast-track construction techniques (such as design-build) and are not bound by traditional public sector procurement regulations. This combination often enables the private partner to complete the facility in significantly less time and for less cost than could be accomplished under traditional construction techniques.

In a turnkey transaction, financing and ownership of the facility can rest with either the public or private partner. For example, the public agency might provide the financing, with the attendant costs and risks. Alternatively, the private party might provide the financing capital, generally in exchange for a long-term contract to operate the facility.

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Water Resources Outlook

IWR Future Directions

IWR's Future Directions program activities include the identification of emerging water challenges and opportunities and the tactical engagement of USACE senior leaders on these issues. Such critical thinking is seen as an essential prerequisite to strategy development and planning.

IWR employs a variety of approaches to encourage strategic thinking, including the development of Water Resources Outlook papers and the conduct of topic specific provocation sessions with senior leaders.

Other tools IWR has recently developed to engage senior leaders strategically are the Castle Forum and the Lunch Roundtable. The Castle Forum is an off-site event where senior leaders and external thought leaders can engage in out-of-the-box thinking regarding subjects not usually addressed by them. The Lunch Roundtable brings in water experts from outside the Corps to provide different perspectives on issues familiar to senior leaders.

Future Directions activities include:

- Water Resources Outlook papers
- Castle Forum
- Lunch Roundtables
- Strategic Planning
- Policy Development

For more information about the Future Directions program, contact:

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