

# Alternative to Federal Appropriations Federal Hydropower Rehab in the Southeast

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**Abstract.** Federal financial resources available for water projects and other discretionary spending are diminishing as mandatory expenditures on entitlement programs such as social security are increasing. Alternative sources of financing in the form of user fees are seen as a way to maintain Federal water projects and may be an option for financing other environmental projects with identifiable beneficiaries.

## INTRODUCTION AND BACKGROUND

Federal financial resources for water projects in Georgia and throughout the United States are subject to increasing competition from other Federal programs. This paper validates that over time mandatory programs are growing at the expense of discretionary programs and demonstrates that user fees may provide an alternative funding source for Federal water resource projects. The following provides a basic platform for understanding sources of Federal budget resources and the subsequent appropriations process. The paper concludes with several examples of projects that have successfully benefited from alternative sources of financing and a proposal for implementing a similar finance program for hydropower projects located in the Georgia, Alabama and South Carolina (GAS) system of projects.

Of the numerous sources of Federal financial resources income and withholding taxes are probably the most recognizable. In addition to state taxes, paychecks are reduced for income taxes, Social Security and Medicare (FICA) and so forth. Theoretically Social Security and Medicare are deposited into trust funds. Trust funds include funds collected for carrying out specific purposes and programs according to a trust agreement or statute. There are issues surrounding the operation of Federal trust funds that are beyond the scope of this paper and will not be addressed here. Other sources of financing

include user fees, which are fees charged to users of goods or services provided by the Federal Government. In levying or authorizing user fees, Congress determines whether the revenue should go into the Treasury as general receipts or should be made available to the agency providing the goods or services. Income taxes and user fees identified as general receipts are deposited into the Federal Treasury and provide funds to pay for Federal Programs.

Federal expenditures that fund programs are generally classified as mandatory or discretionary. Mandatory expenditures include Social Security, Medicare, Medicaid and interest on the national debt. This mandatory spending is about 2/3 of the total federal budget and accounts for approximately \$1.6 trillion out of a total \$2.4 trillion proposed in FY 2005. The remaining proposed discretionary amount, \$823 billion, funds all other government programs including water projects in Georgia.

Figure 1.

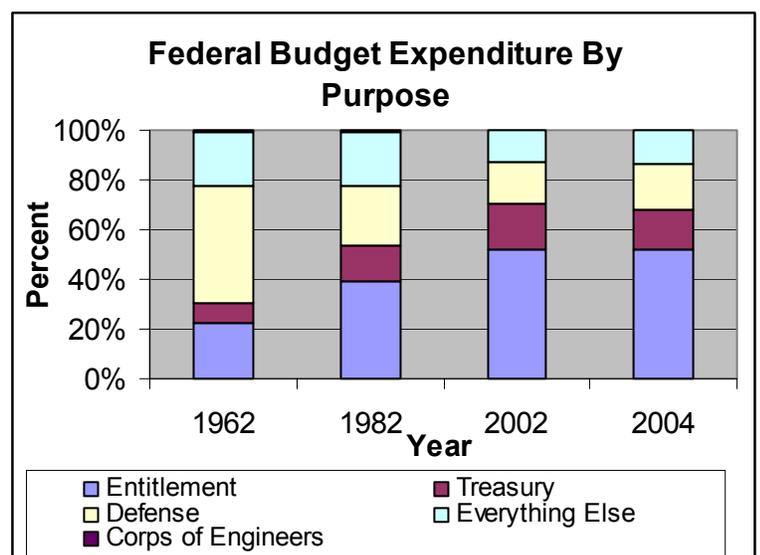


Table 1.

Total Outlays As Percent of Federal Budget				
Year	1962	1982	2002	2004
Entitlement	22.7	39.0	52.3	51.8
Treasury	7.9	14.7	18.4	15.9
Defense	46.9	24.2	16.5	18.8
Everything Else	21.6	21.7	12.6	13.3
Corps of Engineers	0.9	0.4	0.2	0.2

Figure 1. and Table 1. above depict the percentage growth in mandatory (entitlements) expenditures over the past 40 years.

### GROWTH OF ENTITLEMENTS

Against the backdrop of relatively static Federal receipts the overall demand for funds to support an aging infrastructure of public works, in particular multiple purpose water projects, is increasing. In 1984, it was demonstrated (North and Pless) that the point had been reached at which annual Corps of Engineers spending on Federal water project operation, maintenance and rehabilitation (OM&R) became greater than capital spending. From the point of view of total Federal appropriations, Corps of Engineers funding has decreased from .9 percent in 1962 to .4 percent in 1982 to .2 percent in 2002. Table 2.

Outlays as percent of Federal Budget					
Year	1962	1982	1992	2002	2004
Corps of Engineers	0.9	0.4	0.3	0.2	0.2

In nominal dollars annual OM&R spending in the southeast increased from approximately \$48 million per year in 1990 to \$66 million per year in 2002. When adjusted for inflation O&M spending for hydropower in the Southeast actually decreased moderately between 1990 and 2002. Over this time period a significant amount of capacity was rehabilitated in the Georgia-Alabama-South Carolina System of projects with funds that were forecast to be spent in the planning process in the 1980's.

In 2004 a different economic reality is evident due to the growth in entitlement and Federal debt. In 1992 entitlement spending accounted for 43.4 percent of the Federal outlays vs. over 52 percent in 2002. Adding interest on Federal debt pushes mandatory outlays beyond 70 percent of total Federal outlays in 2002. Although preliminary data indicates a dip in fiscal year '04 mandatory spending, forecasts indicate that

entitlements and debt will continue to grow into the long term. Short-term budgetary impacts will be realized via increased defense and security spending.

Table 3.

Outlays as percent of Federal Budget					
Year	1962	1982	1992	2002	2004
Entitlement	22.7	39.0	43.4	52.3	51.8
Treasury	7.9	14.7	21.1	18.4	15.9
Total	30.6	53.7	64.5	70.7	67.7

### ALTERNATIVE FINANCING OPTIONS

Even though appropriations for OM&R at Corps projects in the Southeast have remained flat in real dollars, outlays have not kept pace with funding that is actually needed to maintain an aging infrastructure. Mechanical equipment cannot operate indefinitely. Turbine blades, generator windings, switchgears and other high voltage equipment are ready for rehabilitation. Alternatives to the Federal appropriations process are necessary in order to deliver funds for OM&R.

Past proposals suggested placing revenue from power sales into a trust fund. The proposed fund would operate along the principals of a revolving fund. For a number of reasons, not the least of which being that revolving funds are politically difficult to establish, this proposal was unsuccessful. The following provides background information regarding various financing options used by the dominant Federal agencies that market hydropower.

The Tennessee Valley Authority and Bonneville Power Administration are financially self-sustaining. They are allowed to use their revenue to fund projects and have borrowing authority approved by Congress. Borrowing authority provides significant flexibility when it comes to financing capitalized projects and OM&R.

The relatively smaller Federal Power Marketing Administrations (PMAs) have developed variations of alternatives to finance hydropower OM&R. The Western Area Power Administration (Western) markets power from Bureau of Reclamation (Bureau) and US Army Corps of Engineers (Corps) projects throughout the west and owns and operates a large portion of the transmission grid. Most of Western's alternative financing is focused on transmission maintenance and repair.

Citing authority provided in Section 212 of the Water Resource Development Act (WRDA) of 2000

the Southwestern Power Administration (Southwestern) and Southeastern Power Administration (Southeastern) have developed memoranda of agreement (MOA) with their customers to finance maintenance and rehabilitation projects.

MOAs lie at the heart of alternative financing proposals and require some type of Federal legislative or statutory approval, no matter what the agency or purpose.

#### ALTERNATIVE FINANCING IMPLEMENTATION

Using WRDA 2000, the Southwestern multiple-year MOA among Southwestern, the Corps and Jonesboro, Arkansas provides for customer funding of non-routine maintenance items. On a bi-annual basis power customers, the Corps and Southwestern meet to prioritize maintenance projects, and discuss progress on projects that are underway. Maintenance items average around \$500,000 per project with a minimum of \$50,000. Over the past 5 years customers have provided approximately \$36 million in OM&R funding. The Corps division Commander has authority to approve projects up to \$3 million. Any project above \$3 million will go up the chain of command to the Deputy Commanding General for Civil Works for approval in Washington, DC.

Again, using authority provided in WRDA 2000 Southeastern's hydropower plant rehabilitation MOA for 2 projects in the Cumberland River System of projects consists of 4 parts, which include the body of the MOA with participant signature pages and 3 attachments. Attachment I is the Statement of Work, which defines the work items that will be accomplished, cost, and schedule. Attachment II, is the Funding Agreement, which defines the amount that each party will provide, when and where it will be delivered and other accounting details. Attachment III includes participant contact information. The MOA is a contractual agreement that defines the scope of work, financing, participants, and time frame.

The present Cumberland System MOA was implemented in FY 2004 for a total of \$5 million. Southeastern, the Corps and participating customers are presently developing an MOA for FY 2005 and FY 2006 to provide an additional \$15 million to the Corps for project rehabilitation.

The customers in the Georgia-Alabama-South Carolina (GAS) marketing area are presently negotiating an MOA. The GAS MOA will be slightly different and reflect the maintenance needs of the

system. Presently it is assumed that smaller maintenance items will be the focus in the GAS system.

The MOA process is not envisioned to provide for all of the hydropower related O&M. With increased competition for limited financial resources, MOA's are the necessary first step in the move away from traditional Federal appropriations based funding.

#### IMPLICATIONS FOR OTHER FEDERAL AGENCIES

Alternative financing options similar to the MOA's that have been discussed here are acceptable to beneficiaries of the output. Simply put, the beneficiaries are accustomed to paying for the power and implementation of an MOA does not add to the cost of the output unless customers consent to fund a project that costs more than present rates permit. The customers are involved in the decision making process and know ahead of time what to expect in terms of costs and benefits.

Many Federal services are paid for through user fees. If user fees do not cover the entire cost of delivering a service there may be less resistance to raising the fee. For a publicly provided good or service with no fee structure in place, say it is provided for everyone with no point of service user fee, implementing a new fee structure is politically difficult. Take the present issue of how to pay for upgrades to Hiway 316 between Athens and I-85. Asking users to pay for the upgrade via a toll has resulted in enormous public outcry.

The point is that there are many economic, political and social issues involved in alternative financing of publicly provided goods, especially those that deal with environmental issues. As the Federal budget becomes more constrained, creative approaches to alternative finance may be considered to capture funding for services that are traditionally not paid for at the point of service.