




The State of New Hampshire  
Department of Environmental Services

FIS 18-194 *com*  
Replacement  
 *U3*

Robert R. Scott, Commissioner

September 14, 2018

The Honorable Neal M. Kurk, Chairman  
Fiscal Committee of the General Court  
State House  
Concord, New Hampshire 03301

His Excellency, Governor Christopher T. Sununu  
and The Honorable Council  
State House  
Concord, New Hampshire 03301

*[Signature]*  
Approved by Fiscal Committee Date *10/19/18*

**REQUESTED ACTION**

Pursuant to RSA 14:30-a, VI, authorize the New Hampshire Department of Environmental Services (NHDES) to budget and expend prior year carry forward funds, in the amount of \$240,000, for engineering consultant services related to major repairs at Murphy Dam in Pittsburg, NH, effective upon Governor and Council approval through June 30, 2019. 100% Connecticut-Coos Project Funds. Funding is to be budgeted as follows:

Connecticut-Coos Project  
03-44-44-442010-3812  
FY 2019

Class	Title	Current Budget	Requested Change	Revised Budget
<b>Revenues</b>				
005-402263	Private Local Funds	(457,514)	(240,000)	(697,514)
<b>Expenditures</b>				
010-500100	Personal Services Perm	42,749	0	42,749
018-500106	Overtime	4,000	0	4,000
020-500200	Current Expenses	21,620	0	21,620
022-500257	Rents-Leases Other than State	13,700	0	13,700
023-500291	Heat Electricity Water	10,497	0	10,497
024-500225	Maint Other Than Build-Grn	6,300	0	6,300
027-582703	Transfers to DOIT	4,948	0	4,948
030-500311	Equipment	20,300	0	20,300
039-500188	Telecommunications	2,696	0	2,696
040-500800	Indirect Costs	13,658	0	13,658
042-500620	Additional Fringe Benefits	5,695	0	5,695
046-500463	Consultants	14,349	240,000	254,349
047-500240	Own Forces Build-Grn	10,000	0	10,000
048-500226	Contractual Maint Build-Grn	2,000	0	2,000
049-584990	Transfer to Other Agencies	28	0	28
050-500109	Personal Service Temp	48,317	0	48,317
059-500117	Temp Full Time	11,139	0	11,139
060-500601	Benefits	51,296	0	51,296
066-500546	Employee Training	2,100	0	2,100
070-500705	In-State Travel	4,750	0	4,750
080-500710	In-State Travel	1,550	0	1,550
103-502664	Contracts for Op Services	1,500	0	1,500
302-500834	Dam Projects	164,322	0	164,322
	<b>TOTAL</b>	<b>457,514</b>	<b>240,000</b>	<b>697,514</b>

**EXPLANATION**

The purpose of this request is to budget additional Water User Fees from the Connecticut-Coos Project (i.e. Murphy Dam) for FY 2019. The funds appropriated in the FY19 operating budget are not sufficient to meet expenses to be incurred in FY 2019 that were unanticipated at the time the budget was prepared.

Murphy Dam is among the largest state-owned dams in New Hampshire and a failure could result in significant loss of life and damage to infrastructure in several towns along the Connecticut River. Murphy Dam was constructed in 1938, and NHDES has identified several issues that need to be addressed in this 80-year-old structure:

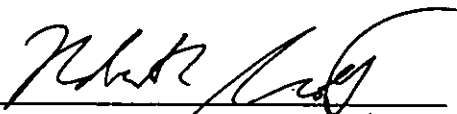
- On the Broome Gate, which is used to shut off flow into the penstock of the dam, the rollers in the vertical tracks that guide the gate when it is being lowered or raised are not rotating freely and bind when the gate is operated.
- The Dow valves, which are the only means of making controlled releases from the dam, currently vibrate notably during operation. The Dow valve cowlings, linkages and related components are in need of repair or replacement.
- The penstock thickness is in question after 80 years of service.
- The original mercury manometers, used to measure flows through the bifurcated piping upstream of each Dow valve, are no longer functional, and a new means of flow measurement, not requiring the use of mercury, is required.

An engineering assessment of the condition of these critical elements is needed to direct repair and replacement strategies. The gate components to be assessed are different in operational nature and scale compared to those designed, installed, and repaired by the NHDES Dam Bureau engineering staff, and so outside engineering professionals with specialized expertise and specific experience with these components are needed to perform the work.

The following class is being increased as described below:

Class 046 - Consultants is being increased by \$240,000 to fund an engineering conditions assessment of the outlet works at Murphy Dam.

We respectfully request your approval.



Robert R. Scott, Commissioner