

APPENDIX G  
NAVIGATION  
COST SHARING EXAMPLE

1. Without Project Condition. Where practiced, overdepth dredging becomes part of the without project condition, necessary for the efficient maintenance of the existing project. The removal of material within the dimensions of the "old" existing project, including material in the overdepth zone should be treated as part of the O&M for the existing project. This principle applies only to that portion of the channel where advance overdepth dredging has historically been required to economically maintain the "old" existing project.

2. Cost Sharing Percentages Applicable to Various Project Depths. The policy for the sharing of construction cost of the general navigation features of a project or separable element is as follows;

- a. No deeper than twenty feet: 10 percent non-Federal;
- b. Deeper than twenty feet, but no deeper than forty-five feet: 25 percent non-Federal; and
- c. Deeper than forty-five feet: 50 percent non-Federal.

In addition, the non-Federal sponsor must agree to pay 10 percent of the cost of the general navigation facilities within 30 years of the project's completion and 50 percent of the incremental cost of operation and maintenance over 45 feet.

3. Unless the project to be constructed is confined within one of the three depths the cost of the project must be determined at each boundary depth. Where overdepth dredging is practiced, the cost of the project relates to the depth of the authorized project, including the overdepth dredging.

4. Cost Sharing Example. Figure 1 represents a channel cross-section. The area shown (a, c, d, f, a) represents an existing 40' channel. The example assumes a 50' project is authorized for construction. The problem is to determine the appropriate non-Federal cost for the increase in project depth from 40' to 50'.

5. Since the Channel in Figure 1 is in need of routine maintenance, the first order of business is to estimate the cost to bring the channel to its fully maintained state. This cost to

ER 1165-2-131  
15 Apr 89

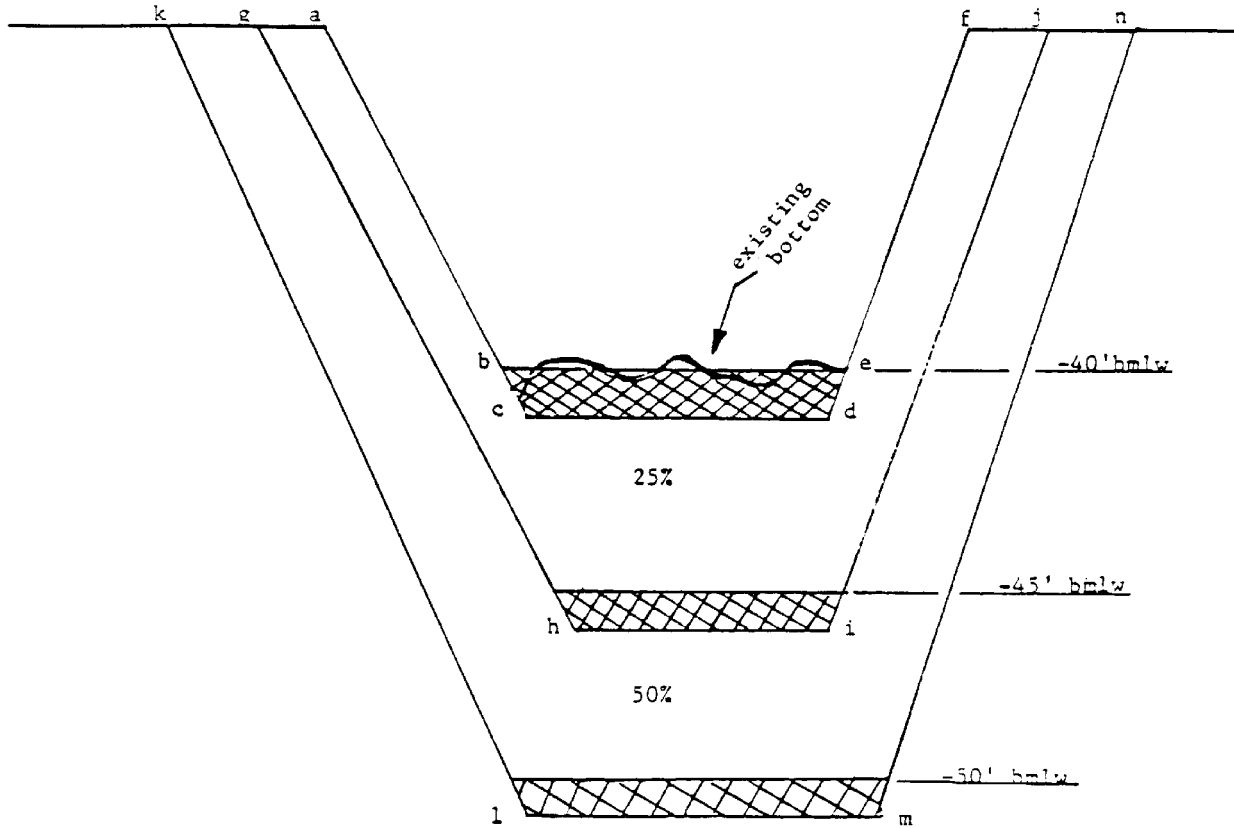
dredge the area (a, c, d, f, a), including the overdepth (b, c, d, e, b), is a maintenance cost; cost sharing for this maintenance would be in accordance with the O&M cost sharing for the existing project.

6. The next step is to determine the cost of a forty-five foot channel. It is, in this example, determined that overdepth dredging is required (the cross-hatched area in Figure 1). The 25 percent cost sharing would apply to the cost to dredge the area (g, h, i, j, f, d, c, a, g). Please note that overdepth dredging below 45 feet is determined as a design criteria for the 45 foot project, and cost shared accordingly.


7. The final calculation is to determine the incremental cost of dredging a 50' channel from the previously defined, fully maintained, 45' channel. The 50 percent construction cost sharing would apply to the area (k, l, m, n, j, i, h, g, k). The sum of the two non-Federal cost increments represents the amount the non-Federal sponsor must provide during the period of construction of such a project.

8. An additional 10 percent of the total cost of construction of the general navigation features of the project assigned to commercial navigation must be repaid (with interest) to the Federal Government within 30 years following completion of the project. The Secretary of the Army must permit a non-Federal sponsor to include towards such sums to be reimbursed the value of lands, easements, rights-of-way, relocations (including utility relocations), and dredged material disposal areas.

Figure 1  
 Existing Project 40" Authorized Depth  
 New Project 50' Authorized Depth



O & M = acdf  
 25% Cost Sharing = acdfjihga  
 50% Cost Sharing = ghijnmlkg

 = Overdepth dimensions