

Practice: 397 - Aquaculture Pond

Scenario: #4 - Aquaculture Split Pond

Scenario Description:

Typical practice is 7 to 10 acre pond surface area, 3:1 side slopes, average 5' depth that will be split with a cross levee. The construction of a aquaculture split pond is to facilitate the efficient processing of nutrients, increase efficient use of water, increase energy use efficeincy and the maintenance of water quality. The resorce concerns addressed include excess nutrients in surface and ground waters, inefficient water use, inefficient energy use, and habitat degradation. Costs include all equipment necessary to excavate, grade and shape an cross levee for an aquaculture spilt pond. Water Control Structure, pumping plant, and Seeding not included.

Before Situation:

In the before situation, an aquaculture producer has an aquaculture pond system that one or more of the following concerns: excessive seepage or frequent release of nutrient laden aquaculture water, excessive energy consumption, excessive groundwater demand, and/or poor growing conditions for the current aquaculture species.

After Situation:

Aquaculture pond is typically 7 to10 acre in surface area, 5 feet deep with 3:1 side slopes with a ~330 ft cross levee constructed to split the pond (80/20). The practice is installed using a dozer or dirt buckets. Water control structure, Pumps, and Access Roads may also be needed and will be installed using those standards as appropriate.

Scenario Feature Measure: Acre of Aquaculture Pond

Scenario Unit: Acre

Scenario Typical Size: 7

Scenario Cost: \$9,011.83

Scenario Cost/Unit: \$1,287.40

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Equipment/Installation						
Excavation, common earth, large equipment, 150 ft	1223	Bulk excavation of common earth including sand and gravel with dozer >100 HP with average push distance of 150 feet. Includes equipment and labor.	Cubic Yard	\$3.55	2383	\$8,459.65
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$35.54	2	\$71.08
Mobilization						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$481.10	1	\$481.10