

# INITIAL INSTALLATION COST COMPARISONS



Andy Knust's estimates provides two sets of hypothetical figures. At first glance the Stream Channel Scenario appears less expensive than the other. His figures are reflected below:

COMPARISON OF THE TWO OPTIONS FROM THE KNUST REPORT					
SCENARIO #1: <b>POND RENEWAL</b>			SCENARIO #2: <b>STREAM CHANNEL</b>		
POND	ACTION	ESTIMATED COST	POND	ACTION	ESTIMATED COST
Pond #3	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks, install sediment forebay in north end	\$121,000*	Pond #3, 4, & 5 as one project	Acquire engineer and necessary permits.	Unknown costs but estimate to be in "tens of thousands"
Pond #4	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	\$85,000		Convert 3 & 4 to streams by cutting thru weir between ponds 3 & 4. Redesign to create deep channel, reinforce banks for erosion control, landscape channel sides, install sediment forebay in pond #5	\$221,000
Pond #5	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	\$61,000		install sediment forebay in pond #5	\$67,000*
Pond #6	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	\$95,000	Pond #6	Dredge & deepen, install new liner, reinforce eroded banks, landscape bank	\$68,000
Pond #7	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks, install water recirculating equipment	\$127,000	Pond #7	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks, install water recirculating equipment	\$65,000
<b>Total \$489,000</b>			<b>Total \$421,000</b>		

\*\$10,000 maintenance expense was included in the original estimate and has been removed for more accurate comparison of installation costs.

These figures need to be scrutinized for possible savings. Note that the work to be done in ponds #6 and #7 is less in Knust's plan for Scenario #2 than in Scenario #1. When questioned he indicated it is appropriate to "pick and choose" from the items listed. Using his figures for P6 and P7 listed in Scenario #2 a new option can be configured. For the purposes of *The Practical Proposal*, this new configuration is entitled **OPTION B: POND RENEWAL**. The chart on the next page demonstrates **OPTION B: POND RENEWAL will cost less than the stream channel option.**

## Comparison of Practical Proposal OPTION B with the Knust Estimate

PRACTICAL PROPOSAL RECOMMENDATION <b>OPTION B: POND RENEWAL</b>			KNUST REPORT ESTIMATE FOR <b>SCENARIO #2: STREAM CHANNEL</b>		
POND	ACTION	ESTIMATED COST	POND	ACTION	ESTIMATED COST
Pond #3	Same as estimate for Knust Pond Renewal. Though there is evidence to believe this estimate is high.	\$121,000*	Pond #3, 4, & 5 as one project	Acquire engineer and necessary permits.	Unknown costs but estimate to be in "tens of thousands"  \$221,000 <del>\$67,000*</del>
Pond #4	Same as estimate for Knust Pond Renewal	\$85,000		Convert 3 & 4 to streams by cutting thru weir between ponds 3 & 4. Redesign to create deep channel, reinforce banks for erosion control, landscape channel sides, install sediment forebay in pond #5	
Pond #5	Same as estimate for Knust Pond Renewal	\$61,000			
Pond #6	Difference: Knust report Scenario #1 uses hydraulic vacuum and digs deeper. ( <del>\$95,000</del> )	\$68,000 Not \$95,000	Pond #6	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks	\$68,000
Pond #7	Difference: Knust report Scenario #1 uses hydraulic vacuum and digs deeper and requires the removal of riprap. ( <del>\$127,000</del> )	\$65,000 Not \$127,000	Pond #7	Dredge & deepen, install new liner, reinforce eroded banks, landscape banks, install water recirculating equipment	\$65,000
<b>Total: \$400,000</b>			<b>Total \$421,000</b>		

\*\$10,000 maintenance expense was included in the original estimate and has been removed for more accurate comparison of installation costs.

In reality, documents from previous WFCAs would indicate that less expensive options may actually be available. Current estimates are **hypothetical**. But for the sake of discussion, the figures from the Knust report are used as a foundation for this proposal. Specifically, **the estimates for OPTION B: POND RENEWAL are being employed to illustrate our recommendations**, acknowledging that any cost may be adjusted given more detailed information.

We are recommending **OPTION B: POND RENEWAL** (henceforth referenced as "**OPTION B**") to renovate Ponds 3–7, one-by-one over a period of what could be seven years. Though we think the cost estimates therein for dredging are higher than from other contractors, our proposal is informed by much of the valuable information in the report from Mr. Knust. Actual dredging estimates are needed for more accurate budget planning. Ted Boardman is currently waiting on some estimates from another contractor.

Preliminary research has unearthed concerns about ancillary expenses for the stream channel option that were not included in the Knust report. Details are provided.