

Lake Dredging Project Supplemental Information on Cost Allocation
City of Delafield
revised 5/1/09

Methods and revisions in allocating costs:

- Consider revised cost estimate following bidding
- Consider cost allocation for small channels in West channel area
- Consider cost allocation for bay as shown in Fig 7A.
- Consider cost allocation of entry channels to NW channels
- Consider recommendation of LWC to allocate flat fees to properties including non-dredged Lake properties
- Consider 5 subareas or consider whole project
- by front foot of shoreline length
- by dredged volume
- 50-50 split on Bark River

Lake properties grouped by Assessor's shoreline length (original approach)

Cost by Assessor's front foot ranged from \$1,566 to \$79,231

	no. of owners
from 0 to 49 feet =	57
equal to 50' length =	64
from 51 to 99 =	85
from 100 to 200 =	43
from 210 to 417 =	7
condos (34) and NE channels (7) =	41
total =	297

Note: No. of Lake properties =	441
Proposed dredged (Delafield incl. Condos) =	264
Total property owners incl. common ownership =	297
Non-dredged properties =	177
Vill. Nashotah dredged properties =	20

Project Costs:	Low End Cost Estimate		High End Cost Estimate	
Shoreline dredging =	\$2,560,000	\$2,560,000	\$3,229,000	\$3,229,000
Bark River sediment trap and common channels =	\$884,000	\$884,000	\$1,326,000	\$1,326,000
Engr., permitting, legal, admin. costs =	\$523,000		\$775,205	
Total estimated project costs =	\$3,967,000	\$3,444,000	\$5,330,205	\$4,555,000
Total dredged volume (CY) =	109,000	100.00%		
Shoreline volume (CY) =	77,275	70.89%		
Bark R. Sediment Trap volume (CY) =	31,275	28.69%		
Total Dredged Shoreline length per Assessor's records =	16,430			

Distribution of all City properties per Assessor's records

Property class	No. of Properties	Value	% of Total Value
Residential	2500	\$984,792,108	75.80%
Commercial	235	\$311,899,800	24.01%
Agriculture	26	\$259,000	0.02%
Undeveloped	5	\$1,300	0.00%
Productive Forest	1	\$46,100	0.00%
Others, Ag homes & bldgs.	8	\$1,726,200	0.13%
Forest Cropland	1	\$463,000	0.04%
Tax-exempt	10	\$0	0.00%
Total parcels =	2786	\$1,299,187,508	100.00%

Alternate 1A - Allocate whole project cost to all properties in City

	Low end cost estimate	High end cost estimate
Total Estimated Project Cost =	\$3,443,000	\$4,555,000
Total No. of properties =	2,786	2,786
Ave. Cost per property =	\$1,236	\$1,635

	\$1,299,187,508			\$1,299,187,508
Total tax base value =				
Property class	Value	% of total	Cost allocation	Cost allocation
Residential	\$984,792,108	75.80%	\$2,609,815	\$3,452,718
Commercial	\$311,899,800	24.01%	\$826,571	\$1,093,532
Agriculture	\$259,000	0.02%	\$686	\$908
Undeveloped	\$1,300	0.00%	\$3	\$5
Productive Forest	\$46,100	0.00%	\$122	\$162
Others, Ag homes & bldgs.	\$1,726,200	0.13%	\$4,575	\$6,052
Forest Cropland	\$463,000	0.04%	\$1,227	\$1,623
Tax-exempt	\$0	0.00%	\$0	\$0
Total parcels =	\$1,299,187,508	100.00%	\$3,443,000	\$4,555,000

Calculation of cost allocation via City property tax:

Total assessed value =	\$1,323,333,208	per City staff	\$1,323,333,208	per City staff
2008-2009 Tax levy =	\$5,362,017		\$5,362,017	
Property tax rate per \$1,000 value=	\$4.05190		\$4.05190	
Total estimated project cost =	\$3,443,000		\$4,555,000	
Assume project cost is levied in 10 years				
one-tenth of estimated project cost =	\$344,300		\$455,500	
Assume interest is charged on balance:				
5.00%	\$17,215		\$0	
Total levy plus interest =	\$361,515		\$455,500	
Total City levy + 1/10 project cost =	\$5,723,532		\$5,817,517	
Est. Property tax rate per \$1,000 value=	\$4.32509		\$4.39611	
Change in property tax rate =	\$0.27319	6.74%	\$0.34421	8.49%

Additional property taxes are determined on various property values:

\$100,000	\$27.32 per year (over 10 yrs)	\$34.42 per year (over 10 yrs)
\$200,000	\$54.64 per year (over 10 yrs)	\$68.84 per year (over 10 yrs)
\$300,000	\$81.96 per year (over 10 yrs)	\$103.26 per year (over 10 yrs)
\$400,000	\$109.27 per year (over 10 yrs)	\$137.68 per year (over 10 yrs)
\$500,000	\$136.59 per year (over 10 yrs)	\$172.10 per year (over 10 yrs)
\$750,000	\$204.89 per year (over 10 yrs)	\$258.15 per year (over 10 yrs)
\$1,000,000	\$273.19 per year (over 10 yrs)	\$344.21 per year (over 10 yrs)

Alternate 1B - Allocate sediment trap/ common areas cost to all properties in City

	Low end cost estimate	High end cost estimate
Total Estimated Project Cost =	\$900,000	\$1,326,000
Total No. of properties =	2,776	2,776
Ave. Cost per property =	\$324	\$478

Total tax base value =	per year (over 10 yrs)			
Property class	Value	% of total	Cost allocation	Cost allocation
Residential	\$984,792,108	75.80%	\$682,206	\$1,005,116
Commercial	\$311,899,800	24.01%	\$216,066	\$318,337
Agriculture	\$259,000	0.02%	\$179	\$264
Undeveloped	\$1,300	0.00%	\$1	\$1
Productive Forest	\$46,100	0.00%	\$32	\$47
Others, Ag homes & bldgs.	\$1,726,200	0.13%	\$1,196	\$1,762
Forest Cropland	\$463,000	0.04%	\$321	\$473
Tax-exempt	\$0	0.00%	\$0	\$0
Total parcels =	\$1,299,187,508	100.00%	\$900,000	\$1,326,000

Calculation of cost allocation via City property tax:

Total assessed value =	\$1,323,333,208 per City staff	\$1,323,333,208 per City staff
2008-2009 Tax levy =	\$5,362,017	\$5,362,017
Property tax rate per \$1,000 value=	\$4.05190	\$4.05190
Total estimated project cost =	\$900,000	\$1,326,000
Assume project cost is levied in 10 years		
one-tenth of estimated project cost =	\$90,000	\$132,600
Assume interest is charged on balance:		
5.00%	\$4,500	\$0
Total levy plus interest =	\$94,500	\$132,600
Total City levy + 1/10 project cost =	\$5,456,517	\$5,494,617
Est. Property tax rate per \$1,000 value=	\$4.12331	\$4.15210
Change in property tax rate =	\$0.07141	\$0.10020
	1.76%	2.47%

Additional property taxes are determined on various property values:

\$100,000	\$7.14 per year (over 10 yrs)	\$10.02 per year (over 10 yrs)
\$200,000	\$14.28 per year (over 10 yrs)	\$20.04 per year (over 10 yrs)
\$300,000	\$21.42 per year (over 10 yrs)	\$30.06 per year (over 10 yrs)
\$400,000	\$28.56 per year (over 10 yrs)	\$40.08 per year (over 10 yrs)
\$500,000	\$35.71 per year (over 10 yrs)	\$50.10 per year (over 10 yrs)
\$750,000	\$53.56 per year (over 10 yrs)	\$75.15 per year (over 10 yrs)
\$1,000,000	\$71.41 per year (over 10 yrs)	\$100.20 per year (over 10 yrs)

Alternate 2A - Divide total project cost by no. of Lake Properties

	Low end cost est.	High end cost est.
Total estimated project cost =	\$2,560,000	\$3,229,000.00
Dredged, single-owner Lake properties =	226	226
Shared access (multiple owners) =	4	4
NE Condos =	34	34
Non-dredged Lake properties =	177	177
No. of Lake properties =	441	441
Cost per property =	\$5,805	\$7,322

Alternate 3A - Allocation by Lake property owner

Total low end estimated project cost =		\$2,560,000		
Property type	No. or properties	Cost Share(%)	Cost portion	\$ per property
Dredged, single-owner Lake properties =	226	91.40%	\$2,339,840	\$10,353
Shared access (multiple owners) =	33	1.60%	\$40,960	\$1,241
NE Condos =	34	2.00%	\$51,200	\$1,506
Non-dredged Lake properties =	177	5.00%	\$128,000	\$723
No. of Lake property owners =	470			

Total **high** end estimated project cost = \$3,229,000

Property type	No. or properties	Cost Share(%)	Cost portion	\$ per property
Dredged, single-owner Lake properties =	226	91.40%	\$2,951,306	\$13,059
Shared access (multiple owners) =	33	1.60%	\$51,664	\$1,566
NE Condos =	34	2.00%	\$64,580	\$1,899
Non-dredged Lake properties =	177	5.00%	\$161,450	\$912
No. of Lake property owners =	470			

Alternate 3B - Allocation by Lake property owner

Total **low** end estimated project cost = \$2,560,000

Property type	No. or properties	\$ per property	Cost portion	Sediment trap
Dredged, single-owner Lake properties =	226	\$9,988	\$2,257,250	
Shared access (multiple owners) =	33	\$1,750	\$57,750	
NE Condos =	34	\$2,000	\$68,000	
Non-dredged Lake properties =	177	\$1,000	\$177,000	
No. of Lake property owners =	470		\$2,560,000	

Total **high** end estimated project cost = \$3,229,000

Property type	No. or properties	\$ per property	Cost portion	Sediment trap
Dredged, single-owner Lake properties =	226	\$12,598	\$2,847,133	
Shared access (multiple owners) =	33	\$2,207	\$72,842	
NE Condos =	34	\$2,523	\$85,770	
Non-dredged Lake properties =	177	\$1,261	\$223,255	
No. of Lake property owners =	470		\$3,229,000	

Alternate 10 - Allocation by 50% flat fee and 50% linear front foot

Low End Cost Estimate

Total estimated project cost =	\$2,560,000	
Portion by flat fee =	\$1,280,000	50%
Portion by volume or frontage =	\$1,280,000	50%

Flat Fee calculation	No. or properties	Flat Fee \$ per property	Cost portion
Property type			
Dredged, single-owner Lake properties =	226	\$4,324	\$977,250
Shared access (multiple owners) =	33	\$1,750	\$57,750
NE Condos =	34	\$2,000	\$68,000
Non-dredged Lake properties =	177	\$1,000	\$177,000
No. of Lake property owners =	470		\$1,280,000

Examples of Frontage basis	100% front foot	50-50 method	flat fee portion	frontage portion
Dannenfelser	\$79,230.88	\$43,324	\$4,324	\$39,000
Maier	\$47,983.13	\$28,324	\$4,324	\$24,000
typical 50-foot lot in NW Channels	\$9,500.11	\$9,074	\$4,324	\$4,750
Price (Bark R. area) - 55 feet wide	\$4,306.65	\$5,374	\$4,324	\$1,050
Fischer (Zastrow's Bay area)	\$18,182.42	\$13,324	\$4,324	\$9,000
NE condo	\$1,928.10	\$2,950	\$2,000	\$950
NW channel shared ownership	\$1,357.16	\$2,425	\$1,750	\$675

High End Cost Estimate (+26.13%)

Total estimated project cost =	\$3,229,000	
Portion by flat fee =	\$1,614,500	50%
Portion by volume or frontage =	\$1,614,500	50%

Flat Fee calculation	No. or properties	Flat Fee \$ per property	Cost portion
Property type			
Dredged, single-owner Lake properties =	226	\$5,454	\$1,232,633
Shared access (multiple owners) =	33	\$2,207	\$72,842
NE Condos =	34	\$2,523	\$85,770
Non-dredged Lake properties =	177	\$1,261	\$223,255
No. of Lake property owners =	470		\$1,614,500

Examples of Frontage basis	100% front foot	50-50 method	flat fee portion	frontage portion (approx.)
Dannenfelser	\$79,230.88	\$54,594	\$5,454	\$49,140
Maier	\$47,983.13	\$35,694	\$5,454	\$30,240
typical 50-foot lot in NW Channels	\$9,500.11	\$11,439	\$5,454	\$5,985
Price (Bark R. area) - 55 feet wide	\$4,306.65	\$6,777	\$5,454	\$1,323
Fischer (Zastrow's Bay area)	\$18,182.42	\$16,794	\$5,454	\$11,340
NE condo	\$1,928.10	\$3,720	\$2,523	\$1,197
NW channel shared ownership	\$1,357.16	\$3,058	\$2,207	\$851