

US ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL FINANCIAL ADVISORY BOARD
 SAMPLE MODEL: CHESAPEAKE BAY

(User input variables in **BLUE**) (All \$ = 2018 USD)

FUND LEVEL OUTPUTS/INPUTS

KEY FUND INDICATORS, AFTER FEES & EXPENSES:

NOMINAL INVESTOR IRR, AFTER FEES & EXPENSES	15.0%
NOMINAL MANAGER IRR, AFTER FEES & EXPENSES	61.2%
TOTAL EQUITY CONTRIBUTIONS BY INVESTORS (A)	\$12,399,750
TOTAL EQUITY CONTRIBUTIONS BY MANAGER	\$125,250
TOTAL DISTRIBUTIONS TO INVESTORS (B)	\$18,873,543
TOTAL DISTRIBUTIONS TO MANAGER	\$822,658
TOTAL ASSETS UNDER MANAGEMENT	\$50,000,000
INVESTOR CASH MULTIPLE (B / A)	1.5 X

KEY INPUTS:

TOTAL ASSETS UNDER MANAGEMENT	\$50,000,000	INFLATION	2.00%
TOTAL EQUITY COMMITMENT	\$12,525,000	FUND EXPENSES	
MANAGER EQUITY CONTRIBUTION	1.0%	FUND FORMATION & DEAD DEAL EXPENSES	\$250,000
INVESTOR EQUITY CONTRIBUTION	99.0%	MISC ANNUAL ADMINISTRATION EXPENSES	\$125,000
PROMOTE STRUCTURE (SINGLE TIER WATERFALL W/NO CLAWBACK)		FUND CASH RESERVE REQUIREMENT, MINIMUM	\$25,000
HURDLE RATE	10.0%	FUND TERM	
MANAGER CARRIED INTEREST	20.0%	FUND START DATE (12/31/XX)	2018
ASSET MANAGEMENT FEE (AS % OF ASSETS UNDER MANAGEMENT)	2.00%	FUND LENGTH (YEARS)	5

PROJECT LEVEL OUTPUTS/INPUTS

	PROJECT A Wet Ponds and Wetlands (New)	PROJECT B Urban Tree Planting	PROJECT C Dry Detention Ponds (New)	PROJECT D Permeable Pavement w/ Sand, Veg. (New)	PROJECT E Bios retention (Retrofit Highly Urban)
NOMINAL IRR, PROJECT LEVEL (PRE-LEVERAGE)	10.0%	10.0%	10.0%	10.0%	10.0%
NOMINAL IRR, PROJECT LEVEL (POST-LEVERAGE)	30.0%	29.9%	30.0%	29.9%	29.9%
INITIAL INVESTMENT	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000
NET REVENUE	\$17,215,906	\$16,110,222	\$17,205,136	\$16,194,632	\$16,167,198
ACCUMULATED CASH REQUIREMENTS (A)	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
NET FREE CASH FLOW (B)	\$5,227,153	\$5,228,961	\$5,228,590	\$5,228,818	\$5,229,275
CASH MULTIPLE (B / A)	2.1 X	2.1 X	2.1 X	2.1 X	2.1 X
PEAK CAPITAL OUTSTANDING	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
TOTAL GROSS REVENUE GENERATED FROM CREDIT SALES	\$21,715,576	\$17,712,828	\$21,672,380	\$18,017,869	\$17,917,488

PROJECT LEVEL INPUTS:

YEAR PROJECT ACQUIRED (12/31/XX)	2018	2018	2019	2019	2019
PROJECT DISCOUNT RATE (TO CALCULATE RESIDUAL VALUE)	10.0%	10.0%	10.0%	10.0%	10.0%
PROJECT LENGTH (YEARS)	5 year(s)	5 year(s)	5 year(s)	5 year(s)	5 year(s)
MONITORING LENGTH (YEARS)	20 year(s)	20 year(s)	20 year(s)	20 year(s)	20 year(s)

REVENUE INPUTS:

# TOTAL CREDITS GENERATED / PROJECT	322	51	192	24	45
BEGINNING CREDIT INVENTORY	0	0	0	0	0
ENDING CREDIT INVENTORY (@END OF PROJECT)	0	0	0	0	0
% OF RELEASED CREDITS SOLD / YEAR	100.0%	100.0%	100.0%	100.0%	100.0%
% OF TOTAL CREDITS RELEASED IN YEAR ONE	20.0%	20.0%	20.0%	20.0%	20.0%
% OF TOTAL CREDITS RELEASED ANNUALLY THEREAFTER	20.0%	20.0%	20.0%	20.0%	20.0%
S / CREDIT	\$63,525	\$327,150	\$104,240	\$693,300	\$367,700
ANNUAL REAL CREDIT PRICE ESCALATOR (ON TOP OF INFLATION)	0.0%	0.0%	0.0%	0.0%	0.0%
SALES COMMISSION (% OF GROSS CREDIT REVENUE)	2.0%	2.0%	2.0%	2.0%	2.0%
TRANSACTION FEE (% OF GROSS CREDIT REVENUE)	2.0%	2.0%	2.0%	2.0%	2.0%
OTHER TOTAL REVENUE / YEAR	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000

COST INPUTS:

TOTAL PROJECT VALUE	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000
CASH RESERVE REQUIREMENT, MINIMUM	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
TOTAL PROJECT ACRES	322.3	51.2	192.3	24.1	45.2
TOTAL LAND ACQUISITION COSTS	\$663,894	\$7,902,995	\$990,346	\$0	\$139,701
BASE LAND ACQUISITION COST (PER ACRE)	\$2,000	\$150,000	\$5,000	\$0	\$3,000
OTHER LAND-RELATED COSTS DUE AT ACQUISITION (PER ACRE)	\$0	\$0	\$0	\$0	\$0
CLOSING & ORIGATION COST (% OF BASE ACQUISITION COST)	3.0%	3.0%	3.0%	3.0%	3.0%
TOTAL PRE-CONSTRUCTION COSTS	\$1,793,482	\$153,456	\$1,730,703	\$734,559	\$2,373,566
SOFT COSTS (PER ACRE)	\$5,565	\$3,000	\$9,000	\$30,492	\$52,500
MISC. OTHER SOFT COSTS (PER ACRE)	\$0	\$0	\$0	\$0	\$0
TOTAL CONSTRUCTION COSTS	\$7,532,624	\$1,933,548	\$7,268,951	\$9,255,441	\$7,476,733
CONSTRUCTION COSTS (PER ACRE)	\$18,550	\$30,000	\$30,000	\$304,920	\$131,250
CONSTRUCTION MANAGEMENT (% OF TOTAL CONS. COST EXC CONTINGENCY)	5.0%	5.0%	5.0%	5.0%	5.0%
CONSTRUCTION CONTINGENCY (% OF CONSTRUCTION COST)	20.0%	20.0%	20.0%	20.0%	20.0%

TOTAL CAPITALIZATION

FINANCING A (SENIOR DEBT)					
LOAN-TO-COST	75.0%	75.0%	75.0%	75.0%	75.0%
PRINCIPAL	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000
TERM (YRS)	5 year(s)	5 year(s)	5 year(s)	5 year(s)	5 year(s)
RATE	2.0%	2.0%	2.0%	2.0%	2.0%
FINANCING B (MEZZANINE OR BRIDGE DEBT OR PREFERRED EQUITY)					
PRINCIPAL	\$0	\$0	\$0	\$0	\$0
TERM (YRS)	5 year(s)	5 year(s)	5 year(s)	5 year(s)	5 year(s)
RATE	10.0%	10.0%	10.0%	10.0%	10.0%
TOTAL EQUITY	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
TOTAL CAPITALIZATION	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000

O & M ENDOWMENT

TOTAL PROJECT ENDOWMENT SIZE	\$4,039,044	\$1,016,649	\$4,005,731	\$1,247,400	\$1,171,281
ANNUAL ENDOWMENT FUNDING	16.8%	5.2%	16.7%	6.3%	5.9%
ASSUMED ENDOWMENT REAL GROWTH RATE	3.0%	3.0%	3.0%	3.0%	3.0%
ESTABLISH O & M ENDOWMENT? (USE PULL-DOWN MENU)	YES	YES	YES	YES	YES
TOTAL ANNUAL O & M COSTS	\$270,489	\$68,083	\$260,394	\$81,088	\$76,139
ANNUAL MAINTENANCE COST (PER ACRE)	\$763	\$1,210	\$1,231	\$3,060	\$1,531
ANNUAL MONITORING COST (PER ACRE)	\$0	\$0	\$0	\$0	\$0
ANNUAL MARKETING COST (PER ACRE)	\$0	\$0	\$0	\$0	\$0
ANNUAL MISCELLANEOUS COST (PER ACRE)	\$76.30	\$121.00	\$123.10	\$306.00	\$153.10
ANNUAL REAL COST ESCALATOR, TYP.	1.0%	1.0%	1.0%	1.0%	1.0%
ANNUAL PROJECT MANAGEMENT FEE (% OF PROJECT VALUE)	5.0%	5.0%	5.0%	5.0%	5.0%
ANNUAL ASSET MANAGEMENT FEE	3.0%	3.0%	3.0%	3.0%	3.0%