



State Water Resources Control Board



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Arnold Schwarzenegger
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TO: Kimberly Gonzalez,
Central Coast Regional Water Quality Control Board

FROM: Rafael Maestu,
Research Program Specialist
Office of Statewide Initiatives,
State Water Resources Control Board

DATE: April 12, 2005

SUBJECT: Economic Benefit of noncompliance. City of Santa Cruz Parks and Recreation
Department. De Laveaga Golf Course - NPDES Permit NO. CAS000002

The Effectiveness and Economics Unit of the State Water Resources Control Board has prepared the following analysis of economic benefit of noncompliance for the De Laveaga Golf course for the period of April 21, 2004 to April 30, 2005. The economic analysis was prepared following USEPA guidelines on calculation of economic benefit and following the procedures set forth in the Water Boards Enforcement Policy.

Summary and Conclusions

Based on the assumptions specified in this document, we conservatively estimate that De Laveaga Golf Course, as of April 12, 2005, derived the present value of economic benefit in the amount of \$130,500 by delaying the grading operations to the wet season when the number of golfers are lower and by not installing an adequate erosion control system to comply with the requirements set forth in NPDES Permit No. CAS000002. To reach this determination, we considered that the least cost alternative would have been to "complete work prior to the onset of the rainy season..." as specified in the De Laveaga Golf course Master Plan Initial Study/Mitigated Negative Declaration dated May 2003.

The estimated revenue based on the hypothetical compliance scenario is \$581,000 and the estimated revenue under the actual noncompliance scenario is \$711,500. Economic benefit is the difference between the after-tax net present values of the cash flows associated with the two scenarios: The economic benefit is estimated to be \$130,500.

In our calculations, we also took into consideration other compliance scenarios and costs. According to the Central Coast Water Board, the Discharger failed to implement adequate best management practices (BMPs), and the Stormwater Pollution Prevention Plan was not properly implemented and failed to implement erosion controls. However, we were not able to identify a specific economic benefit due to the use of inadequate BMPs. We assumed that, in order to prevent erosion and offsite transport of sediments, it might have required the Discharger to deploy more costly BMPs (e.g., such as hydroseeding with bonded fiber matrix, constructing temporary sediment basins, operating stormwater filtration systems, etc). These alternative BMPs would have been more costly than doing the grading during the dry season. In economic benefit analysis we assume that the compliance scenario would have been done under the least cost alternative. In this case we assume that doing the grading during the dry season would have been the least cost scenario compared to implementing more costly BMPs.

In addition, we believe our estimates are conservative because:

- The Discharger was not able to provide specific numbers on the number of golfers for the period under consideration. The Discharger estimated that during the dry session the average number of golfers was 200 per day and during the wet season may had been as many as 50 per day. Based on these higher numbers the economic benefit of noncompliance may have been as high as \$520,400. We have not recommended that amount because the number of golfers may include high school students that play for free.
- In our calculations and analysis we have not included other potential income generated from golfers besides golf fees such as golf cart rental fees (normally \$17 per rental), proshop and restaurant sales and driving range fees. We have also conservatively considered that holidays would have the same number of golfers as a regular weekday.
- We did not have information to evaluate whether De Laveaga Golf Course gained any other economic benefits.

Methodology and Assumptions

USEPA guidelines recommend separating the avoided cost from the delayed cost in calculating the economic benefit of noncompliance. The process of calculating the economic benefit may be summarized as:

“Economic benefit is the difference between the after-tax net present values of the cash flows (or change in asset values) associated with two scenarios: A) The hypothetical compliance scenario B) The actual noncompliance scenario...”

The California Water Boards' Water Quality Enforcement Policy establishes the methodology to estimate economic benefit of noncompliance. In cases where the violations occurred because the Discharger postponed improvements to a treatment system, failed to implement adequate control

measures or did not take other measures needed to prevent the violations, economic benefit should be estimated as follows:¹

- (a) Determine those actions required by an enforcement order or an approved facility plan, or that were necessary in the exercise of reasonable care, to prevent the violation.
- (b) Determine when and/or how often these actions should have been taken.
- (c) Estimate the delayed and avoided costs of these actions.
- (d) Calculate the present value of economic benefit using the BEN computer program.
- (e) Determine whether the Discharger has gained any other economic benefits.

In calculating the economic benefit for De Laveaga Golf Course we made the following assumptions and used the following information:

- (a) The least cost alternative to comply with the permit requirements would have been to complete construction before the rainy season.
- (b) Before construction, we estimated 160 golfers per day on weekends and 80 on weekdays if construction is done during the dry season, and 80 on weekends and 40 on weekdays during the wet season. During construction we estimated 40 golfers per day on weekends and 20 on weekdays if construction is done during the dry season and 20 on weekends and 10 on weekdays during the wet season. We assumed that on weekdays half as many people golfed as on weekends. We also assumed that during the dry season the number of people golfing is double than during the wet season.
- (c) Construction will take less time during the dry season than during the wet season. We assumed that construction would have take 163 days if done during the wet season and that will take 223 days in wet season. The 223 days in the wet season is based on the actual expected day of completion.
- (d) Greens fees before construction are \$50 during weekends and \$40 during weekdays. During construction fees are reduced significantly to \$10 every day. After the construction project is done the green fees are predicted to increase to \$55 on weekends and \$45 on weekdays.
- (e) We have not considered any other impact on other revenue sources apart from the green fees.
- (f) For the compliance scenario, we assumed the initial construction date to be April 21, 2004. For the noncompliance date we used the actual construction commencement date of September 20, 2004.
- (g) Due to the short period of time (less than a year) we have not considered the time value of money in our calculations and we believe it is not significant to factor into our calculation the inflation rates.

¹ Water Quality Enforcement Policy, Section VII. F. (Pg 39.)

- (h) We have considered fixed costs for both alternatives; we assumed that variable costs are not significant since the use of the facilities by more or less golfers does not impact the variable and fixed costs. Therefore the difference in revenues will constitute the economic benefit,
- (i) The City of Santa Cruz Parks and Recreation Department is a non-profit organization and it is exempt from federal and state taxes.
- (j) We did not identify any other economic benefit derived from inactions to comply or any other gain in competitive advantage this may have provided the Discharger. Further research would be necessary to estimate this potential economic benefit.

State Water Board staff expended 8 hours in preparing this analysis.

Summary of Calculations and Tables

Revenues Hypothetical Compliance Scenario = \$581,000

Revenues Actual Noncompliance Scenario= \$711,500

Economic benefit of Noncompliance= \$130,500

Table 1: Fees and Number of Golfers Before, During and After Construction

Before Construction

	October - April		May - September	
	Weekend	Weekday	Weekend	Weekday
# Golfers:	80	40	160	80
Fees:	\$50	\$40	\$50	\$40

During Construction

	October - April		May - September	
	Weekend	Weekday	Weekend	Weekday
# Golfers:	20	10	40	20
Fees:	\$10	\$10	\$10	\$10

After Construction

	October - April		May - September	
	Weekend	Weekday	Weekend	Weekday
# Golfers:	80	40	160	80
Fees:	\$55	\$45	\$55	\$45

Table 2: Daily Revenue Calculations Compliance and Noncompliance scenarios

Date	Income from Green Fees		Comparison of starting construction in April vs September
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)	
21-Apr-04	\$100	\$1,600	Dry Season Construction
22-Apr-04	\$100	\$1,600	2
23-Apr-04	\$100	\$1,600	3
24-Apr-04	\$200	\$4,000	4
25-Apr-04	\$200	\$4,000	5
26-Apr-04	\$100	\$1,600	6
27-Apr-04	\$100	\$1,600	7
28-Apr-04	\$100	\$1,600	8
29-Apr-04	\$100	\$1,600	9
30-Apr-04	\$100	\$1,600	10
1-May-04	\$400	\$8,000	11
2-May-04	\$400	\$8,000	12
3-May-04	\$200	\$3,200	13
4-May-04	\$200	\$3,200	14
5-May-04	\$200	\$3,200	15
6-May-04	\$200	\$3,200	16
7-May-04	\$200	\$3,200	17
8-May-04	\$400	\$8,000	18
9-May-04	\$400	\$8,000	19
10-May-04	\$200	\$3,200	20
11-May-04	\$200	\$3,200	21
12-May-04	\$200	\$3,200	22
13-May-04	\$200	\$3,200	23
14-May-04	\$200	\$3,200	24
15-May-04	\$400	\$8,000	25
16-May-04	\$400	\$8,000	26
17-May-04	\$200	\$3,200	27
18-May-04	\$200	\$3,200	28
19-May-04	\$200	\$3,200	29
20-May-04	\$200	\$3,200	30
21-May-04	\$200	\$3,200	31
22-May-04	\$400	\$8,000	32
23-May-04	\$400	\$8,000	33
24-May-04	\$200	\$3,200	34
25-May-04	\$200	\$3,200	35
26-May-04	\$200	\$3,200	36
27-May-04	\$200	\$3,200	37
28-May-04	\$200	\$3,200	38

Date	Income from Green Fees		
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)	
29-May-04	\$400	\$8,000	39
30-May-04	\$400	\$8,000	40
31-May-04	\$400	\$8,000	41
1-Jun-04	\$200	\$3,200	42
2-Jun-04	\$200	\$3,200	43
3-Jun-04	\$200	\$3,200	44
4-Jun-04	\$200	\$3,200	45
5-Jun-04	\$400	\$8,000	46
6-Jun-04	\$400	\$8,000	47
7-Jun-04	\$200	\$3,200	48
8-Jun-04	\$200	\$3,200	49
9-Jun-04	\$200	\$3,200	50
10-Jun-04	\$200	\$3,200	51
11-Jun-04	\$200	\$3,200	52
12-Jun-04	\$400	\$8,000	53
13-Jun-04	\$400	\$8,000	54
14-Jun-04	\$200	\$3,200	55
15-Jun-04	\$200	\$3,200	56
16-Jun-04	\$200	\$3,200	57
17-Jun-04	\$200	\$3,200	58
18-Jun-04	\$200	\$3,200	59
19-Jun-04	\$400	\$8,000	60
20-Jun-04	\$400	\$8,000	61
21-Jun-04	\$200	\$3,200	62
22-Jun-04	\$200	\$3,200	63
23-Jun-04	\$200	\$3,200	64
24-Jun-04	\$200	\$3,200	65
25-Jun-04	\$200	\$3,200	66
26-Jun-04	\$400	\$8,000	67
27-Jun-04	\$400	\$8,000	68
28-Jun-04	\$200	\$3,200	69
29-Jun-04	\$200	\$3,200	70
30-Jun-04	\$200	\$3,200	71
1-Jul-04	\$200	\$3,200	72
2-Jul-04	\$200	\$3,200	73
3-Jul-04	\$400	\$8,000	74
4-Jul-04	\$400	\$8,000	75
5-Jul-04	\$200	\$3,200	76
6-Jul-04	\$200	\$3,200	77
7-Jul-04	\$200	\$3,200	78
8-Jul-04	\$200	\$3,200	79

**Comparison of starting
construction in
April vs September**

Date	Income from Green Fees		
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)	
9-Jul-04	\$200	\$3,200	80
10-Jul-04	\$400	\$8,000	81
11-Jul-04	\$400	\$8,000	82
12-Jul-04	\$200	\$3,200	83
13-Jul-04	\$200	\$3,200	84
14-Jul-04	\$200	\$3,200	85
15-Jul-04	\$200	\$3,200	86
16-Jul-04	\$200	\$3,200	87
17-Jul-04	\$400	\$8,000	88
18-Jul-04	\$400	\$8,000	89
19-Jul-04	\$200	\$3,200	90
20-Jul-04	\$200	\$3,200	91
21-Jul-04	\$200	\$3,200	92
22-Jul-04	\$200	\$3,200	93
23-Jul-04	\$200	\$3,200	94
24-Jul-04	\$400	\$8,000	95
25-Jul-04	\$400	\$8,000	96
26-Jul-04	\$200	\$3,200	97
27-Jul-04	\$200	\$3,200	98
28-Jul-04	\$200	\$3,200	99
29-Jul-04	\$200	\$3,200	100
30-Jul-04	\$200	\$3,200	101
31-Jul-04	\$400	\$8,000	102
1-Aug-04	\$400	\$8,000	103
2-Aug-04	\$200	\$3,200	104
3-Aug-04	\$200	\$3,200	105
4-Aug-04	\$200	\$3,200	106
5-Aug-04	\$200	\$3,200	107
6-Aug-04	\$200	\$3,200	108
7-Aug-04	\$400	\$8,000	109
8-Aug-04	\$400	\$8,000	110
9-Aug-04	\$200	\$3,200	111
10-Aug-04	\$200	\$3,200	112
11-Aug-04	\$200	\$3,200	113
12-Aug-04	\$200	\$3,200	114
13-Aug-04	\$200	\$3,200	115
14-Aug-04	\$400	\$8,000	116
15-Aug-04	\$400	\$8,000	117
16-Aug-04	\$200	\$3,200	118
17-Aug-04	\$200	\$3,200	119
18-Aug-04	\$200	\$3,200	120

Comparison of starting
construction in
April vs September

Date	Income from Green Fees		Comparison of starting construction in April vs September
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)	
19-Aug-04	\$200	\$3,200	121
20-Aug-04	\$200	\$3,200	122
21-Aug-04	\$400	\$8,000	123
22-Aug-04	\$400	\$8,000	124
23-Aug-04	\$200	\$3,200	125
24-Aug-04	\$200	\$3,200	126
25-Aug-04	\$200	\$3,200	127
26-Aug-04	\$200	\$3,200	128
27-Aug-04	\$200	\$3,200	129
28-Aug-04	\$400	\$8,000	130
29-Aug-04	\$400	\$8,000	131
30-Aug-04	\$200	\$3,200	132
31-Aug-04	\$200	\$3,200	133
1-Sep-04	\$200	\$3,200	134
2-Sep-04	\$200	\$3,200	135
3-Sep-04	\$200	\$3,200	136
4-Sep-04	\$400	\$8,000	137
5-Sep-04	\$400	\$8,000	138
6-Sep-04	\$200	\$3,200	139
7-Sep-04	\$200	\$3,200	140
8-Sep-04	\$200	\$3,200	141
9-Sep-04	\$200	\$3,200	142
10-Sep-04	\$200	\$3,200	143
11-Sep-04	\$400	\$8,000	144
12-Sep-04	\$400	\$8,000	145
13-Sep-04	\$200	\$3,200	146
14-Sep-04	\$200	\$3,200	147
15-Sep-04	\$200	\$3,200	148
16-Sep-04	\$200	\$3,200	149
17-Sep-04	\$200	\$3,200	150
18-Sep-04	\$400	\$8,000	151
19-Sep-04	\$400	\$8,000	152
20-Sep-04	\$200	\$200	153
21-Sep-04	\$200	\$200	154
22-Sep-04	\$200	\$200	155
23-Sep-04	\$200	\$200	156
24-Sep-04	\$200	\$200	157
25-Sep-04	\$400	\$400	158
26-Sep-04	\$400	\$400	159
27-Sep-04	\$200	\$200	160
28-Sep-04	\$200	\$200	161

Actual Construction

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Date	Income from Green Fees		Comparison of starting construction in April vs September	
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)		
29-Sep-04	\$200	\$200	162	10
30-Sep-04	\$200	\$200	163	11
1-Oct-04	\$1,800	\$100		12
2-Oct-04	\$4,400	\$200		13
3-Oct-04	\$4,400	\$200		14
4-Oct-04	\$1,800	\$100		15
5-Oct-04	\$1,800	\$100		16
6-Oct-04	\$1,800	\$100		17
7-Oct-04	\$1,800	\$100		18
8-Oct-04	\$1,800	\$100		19
9-Oct-04	\$4,400	\$200		20
10-Oct-04	\$4,400	\$200		21
11-Oct-04	\$1,800	\$100		22
12-Oct-04	\$1,800	\$100		23
13-Oct-04	\$1,800	\$100		24
14-Oct-04	\$1,800	\$100		25
15-Oct-04	\$1,800	\$100		26
16-Oct-04	\$4,400	\$200		27
17-Oct-04	\$4,400	\$200		28
18-Oct-04	\$1,800	\$100		29
19-Oct-04	\$1,800	\$100		30
20-Oct-04	\$1,800	\$100		31
21-Oct-04	\$1,800	\$100		32
22-Oct-04	\$1,800	\$100		33
23-Oct-04	\$4,400	\$200		34
24-Oct-04	\$4,400	\$200		35
25-Oct-04	\$1,800	\$100		36
26-Oct-04	\$1,800	\$100		37
27-Oct-04	\$1,800	\$100		38
28-Oct-04	\$1,800	\$100		39
29-Oct-04	\$1,800	\$100		40
30-Oct-04	\$4,400	\$200		41
31-Oct-04	\$4,400	\$200		42
1-Nov-04	\$1,800	\$100		43
2-Nov-04	\$1,800	\$100		44
3-Nov-04	\$1,800	\$100		45
4-Nov-04	\$1,800	\$100		46
5-Nov-04	\$1,800	\$100		47
6-Nov-04	\$4,400	\$200		48
7-Nov-04	\$4,400	\$200		49
8-Nov-04	\$1,800	\$100		50

Date	Income from Green Fees	
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)
9-Nov-04	\$1,800	\$100
10-Nov-04	\$1,800	\$100
11-Nov-04	\$1,800	\$100
12-Nov-04	\$1,800	\$100
13-Nov-04	\$4,400	\$200
14-Nov-04	\$4,400	\$200
15-Nov-04	\$1,800	\$100
16-Nov-04	\$1,800	\$100
17-Nov-04	\$1,800	\$100
18-Nov-04	\$1,800	\$100
19-Nov-04	\$1,800	\$100
20-Nov-04	\$4,400	\$200
21-Nov-04	\$4,400	\$200
22-Nov-04	\$1,800	\$100
23-Nov-04	\$1,800	\$100
24-Nov-04	\$1,800	\$100
25-Nov-04	\$1,800	\$100
26-Nov-04	\$1,800	\$100
27-Nov-04	\$4,400	\$200
28-Nov-04	\$4,400	\$200
29-Nov-04	\$1,800	\$100
30-Nov-04	\$1,800	\$100
1-Dec-04	\$1,800	\$100
2-Dec-04	\$1,800	\$100
3-Dec-04	\$1,800	\$100
4-Dec-04	\$4,400	\$200
5-Dec-04	\$4,400	\$200
6-Dec-04	\$1,800	\$100
7-Dec-04	\$1,800	\$100
8-Dec-04	\$1,800	\$100
9-Dec-04	\$1,800	\$100
10-Dec-04	\$1,800	\$100
11-Dec-04	\$4,400	\$200
12-Dec-04	\$4,400	\$200
13-Dec-04	\$1,800	\$100
14-Dec-04	\$1,800	\$100
15-Dec-04	\$1,800	\$100
16-Dec-04	\$1,800	\$100
17-Dec-04	\$1,800	\$100
18-Dec-04	\$4,400	\$200
19-Dec-04	\$4,400	\$200

**Comparison of starting
construction in
April vs September**

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Date	Income from Green Fees		Comparison of starting construction in April vs September
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)	
20-Dec-04	\$1,800	\$100	92
21-Dec-04	\$1,800	\$100	93
22-Dec-04	\$1,800	\$100	94
23-Dec-04	\$1,800	\$100	95
24-Dec-04	\$1,800	\$100	96
25-Dec-04	\$4,400	\$200	97
26-Dec-04	\$4,400	\$200	98
27-Dec-04	\$1,800	\$100	99
28-Dec-04	\$1,800	\$100	100
29-Dec-04	\$1,800	\$100	101
30-Dec-04	\$1,800	\$100	102
31-Dec-04	\$1,800	\$100	103
1-Jan-05	\$4,400	\$200	104
2-Jan-05	\$4,400	\$200	105
3-Jan-05	\$1,800	\$100	106
4-Jan-05	\$1,800	\$100	107
5-Jan-05	\$1,800	\$100	108
6-Jan-05	\$1,800	\$100	109
7-Jan-05	\$1,800	\$100	110
8-Jan-05	\$4,400	\$200	111
9-Jan-05	\$4,400	\$200	112
10-Jan-05	\$1,800	\$100	113
11-Jan-05	\$1,800	\$100	114
12-Jan-05	\$1,800	\$100	115
13-Jan-05	\$1,800	\$100	116
14-Jan-05	\$1,800	\$100	117
15-Jan-05	\$4,400	\$200	118
16-Jan-05	\$4,400	\$200	119
17-Jan-05	\$1,800	\$100	120
18-Jan-05	\$1,800	\$100	121
19-Jan-05	\$1,800	\$100	122
20-Jan-05	\$1,800	\$100	123
21-Jan-05	\$1,800	\$100	124
22-Jan-05	\$4,400	\$200	125
23-Jan-05	\$4,400	\$200	126
24-Jan-05	\$1,800	\$100	127
25-Jan-05	\$1,800	\$100	128
26-Jan-05	\$1,800	\$100	129
27-Jan-05	\$1,800	\$100	130
28-Jan-05	\$1,800	\$100	131
29-Jan-05	\$4,400	\$200	132

Date	Income from Green Fees		Comparison of starting construction in April vs September
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)	
30-Jan-05	\$4,400	\$200	133
31-Jan-05	\$1,800	\$100	134
1-Feb-05	\$1,800	\$100	135
2-Feb-05	\$1,800	\$100	136
3-Feb-05	\$1,800	\$100	137
4-Feb-05	\$1,800	\$100	138
5-Feb-05	\$4,400	\$200	139
6-Feb-05	\$4,400	\$200	140
7-Feb-05	\$1,800	\$100	141
8-Feb-05	\$1,800	\$100	142
9-Feb-05	\$1,800	\$100	143
10-Feb-05	\$1,800	\$100	144
11-Feb-05	\$1,800	\$100	145
12-Feb-05	\$4,400	\$200	146
13-Feb-05	\$4,400	\$200	147
14-Feb-05	\$1,800	\$100	148
15-Feb-05	\$1,800	\$100	149
16-Feb-05	\$1,800	\$100	150
17-Feb-05	\$1,800	\$100	151
18-Feb-05	\$1,800	\$100	152
19-Feb-05	\$4,400	\$200	153
20-Feb-05	\$4,400	\$200	154
21-Feb-05	\$1,800	\$100	155
22-Feb-05	\$1,800	\$100	156
23-Feb-05	\$1,800	\$100	157
24-Feb-05	\$1,800	\$100	158
25-Feb-05	\$1,800	\$100	159
26-Feb-05	\$4,400	\$200	160
27-Feb-05	\$4,400	\$200	161
28-Feb-05	\$1,800	\$100	162
1-Mar-05	\$1,800	\$100	163
2-Mar-05	\$1,800	\$100	164
3-Mar-05	\$1,800	\$100	165
4-Mar-05	\$1,800	\$100	166
5-Mar-05	\$4,400	\$200	167
6-Mar-05	\$4,400	\$200	168
7-Mar-05	\$1,800	\$100	169
8-Mar-05	\$1,800	\$100	170
9-Mar-05	\$1,800	\$100	171
10-Mar-05	\$1,800	\$100	172
11-Mar-05	\$1,800	\$100	173

Date	Income from Green Fees	
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)
12-Mar-05	\$4,400	\$200
13-Mar-05	\$4,400	\$200
14-Mar-05	\$1,800	\$100
15-Mar-05	\$1,800	\$100
16-Mar-05	\$1,800	\$100
17-Mar-05	\$1,800	\$100
18-Mar-05	\$1,800	\$100
19-Mar-05	\$4,400	\$200
20-Mar-05	\$4,400	\$200
21-Mar-05	\$1,800	\$100
22-Mar-05	\$1,800	\$100
23-Mar-05	\$1,800	\$100
24-Mar-05	\$1,800	\$100
25-Mar-05	\$1,800	\$100
26-Mar-05	\$4,400	\$200
27-Mar-05	\$4,400	\$200
28-Mar-05	\$1,800	\$100
29-Mar-05	\$1,800	\$100
30-Mar-05	\$1,800	\$100
31-Mar-05	\$1,800	\$100
1-Apr-05	\$1,800	\$100
2-Apr-05	\$4,400	\$200
3-Apr-05	\$4,400	\$200
4-Apr-05	\$1,800	\$100
5-Apr-05	\$1,800	\$100
6-Apr-05	\$1,800	\$100
7-Apr-05	\$1,800	\$100
8-Apr-05	\$1,800	\$100
9-Apr-05	\$4,400	\$200
10-Apr-05	\$4,400	\$200
11-Apr-05	\$1,800	\$100
12-Apr-05	\$1,800	\$100
13-Apr-05	\$1,800	\$100
14-Apr-05	\$1,800	\$100
15-Apr-05	\$1,800	\$100
16-Apr-05	\$4,400	\$200
17-Apr-05	\$4,400	\$200
18-Apr-05	\$1,800	\$100
19-Apr-05	\$1,800	\$100
20-Apr-05	\$1,800	\$100
21-Apr-05	\$1,800	\$100

**Comparison of starting
 construction in
 April vs September**

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Date	Income from Green Fees	
	Compliance Scenario (hypothetical)	Noncompliance Scenario (estimated actual revenue)
22-Apr-05	\$1,800	\$100
23-Apr-05	\$4,400	\$200
24-Apr-05	\$4,400	\$200
25-Apr-05	\$1,800	\$100
26-Apr-05	\$1,800	\$100
27-Apr-05	\$1,800	\$100
28-Apr-05	\$1,800	\$100
29-Apr-05	\$1,800	\$100
30-Apr-05	\$4,400	\$200

**Comparison of starting
 construction in
 April vs September**

215
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 Expected end date

Total
Revenues: **\$581,000** **\$711,500**

Benefit: **\$130,500**