

**NORTH LAS VEGAS CITY COUNCIL
AGENDA ITEM**

Number: **30**

SUBJECT: Approval of the Clean Water Coalition's (CWC) Annual Operating and Capital Budget for Fiscal Year 2008-2009

REQUESTED BY: David H. Bereskin, P.E., Director of Utilities

RECOMMENDATION OR RECOMMENDED MOTION:

It is recommended that the City Council approve the CWC's Annual Budget for fiscal year 2008-2009

FISCAL IMPACT: Amount: None
Explanation:
Approval of the CWC's Annual Budget does not fiscally impact the City.

ACCOUNT NUMBER:
N/A

STAFF COMMENTS AND BACKGROUND INFORMATION:

The CWC's Annual Operating and Capital Budget for Fiscal Year 2008-2009 is \$159,980,702. A public hearing was held and the tentative budget was approved on March 25, 2008. Pursuant to the CWC interlocal agreement with the City of North Las Vegas, the City of Las Vegas, the City of Henderson, and the Clark County Water Reclamation District, each board or council must subsequently approve the Operating and capital Budget each year.

LIST CITY COUNCIL GOAL(S): Responsible Financial Management, Quality Municipal Services and Planned, Quality Growth.

PREPARED BY:


David H. Bereskin, P.E.
Director of Utilities

RESPECTFULLY


Gregory E. Rose
City Manager

**CITY COUNCIL
MEETING DATE:**

May 7, 2008



Clean Water COALITION

*Solutions for
Clean Water
Management*

March 25, 2008

Nevada Department of Taxation
1550 East College Parkway, Suite 115
Carson City, NV 89706-7921

The Clean Water Coalition herewith submits the tentative budget for the fiscal year ending June 30, 2009.

This budget contains 0 funds, including Debt Service, requiring property tax revenues totaling \$ 0

This budget contains 0 governmental fund types with estimated expenditures of \$ 0 and
1 proprietary funds with estimated expenses of \$ 2,447,702

Copies of this budget have been filed for public record and inspection in the offices enumerated in NRS 354.596 (Local Government Budget and Finance Act).

CERTIFICATION

I Douglas W. Karafa
(Printed Name)
General Manager
(Title)

certify that all applicable funds and financial
operations of this Local Government are
listed herein

Signed D.W. Karafa

Dated: 3/25/08

APPROVED BY THE GOVERNING BOARD

SCHEDULED PUBLIC HEARING:

Date and Time: May 15, 2008 and 1:30 PM

Publication Date May 4, 2008

Place: 150 N Stephanie Street, Suite 130 Henderson NV 89074

REVENUES	GOVERNMENTAL FUND TYPES AND EXPENDABLE TRUST FUNDS				
	ACTUAL PRIOR YEAR 6/30/2007 (1)	ESTIMATED CURRENT YEAR 6/30/2008 (2)	BUDGET YEAR 6/30/2009 (3)	PROPRIETARY FUNDS BUDGET YEAR 6/30/2009 (4)	TOTAL (MEMO ONLY) COLUMNS 3+4 (5)
Property Taxes	\$	\$	\$	\$	\$
Other Taxes					
Licenses and Permits					
Intergovernmental Resources					
Charges for Services				42,352,984	42,352,984
Fines and Forfeits					
Miscellaneous				146,500,000	146,500,000
TOTAL REVENUES				\$ 188,852,984	\$ 188,852,984
EXPENDITURES-EXPENSES					
General Government					
Judicial					
Public Safety					
Public Works					
Sanitation				2,447,702	2,447,702
Health					
Welfare					
Culture and Recreation					
Community Support					
Intergovernmental Expenditures					
Contingencies					
Utility Enterprises					
Hospitals					
Transit Systems					
Airports					
Other Enterprises					
Debt Service - Principal					
Interest Cost					
TOTAL EXPENDITURES-EXPENSES				\$ 2,447,702	\$ 2,447,702
Excess of Revenues over (under)					
Expenditures-Expenses				186,405,282	186,405,282

	GOVERNMENTAL FUND TYPES AND EXPENDABLE TRUST FUNDS				
	ACTUAL PRIOR YEAR 6/30/2007 (1)	ESTIMATED CURRENT YEAR 6/30/2008 (2)	BUDGET YEAR 6/30/2009 (3)	PROPRIETARY FUNDS BUDGET YEAR 6/30/2009 (4)	TOTAL (MEMO ONLY) COLUMNS 3+4 (5)
OTHER FINANCING SOURCES (USES):					
Proceeds of Long-term Debt					
Sales of General Fixed Assets					
Operating Transfers (in)					
Operating Transfers (out)					
TOTAL OTHER FINANCING SOURCES (USES)				0	
Excess of Revenues and Other Sources over (under) Expenditures and Other Uses (Net Income)					XXXXXXXXXXXXXXXX
FUND BALANCE JULY 1, BEGINNING OF YEAR:					
Reserved				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
Unreserved				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
TOTAL BEGINNING FUND BALANCE				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
Prior Period Adjustments				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
Residual Equity Transfers				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
FUND BALANCE JUNE 30, END OF YEAR					
Reserved				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
Unreserved				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
TOTAL ENDING FUND BALANCE				XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX

FULL TIME EQUIVALENT EMPLOYEES BY FUNCTION

	ACTUAL PRIOR YEAR ENDING 6/30/2007	ESTIMATED CURRENT YEAR ENDING 6/30/2008	BUDGET YEAR ENDING 6/30/2009
General Government			
Judicial			
Public Safety			
Public Works			
Sanitation			
Health			
Welfare			
Culture and Recreation			
Community Support			
TOTAL GENERAL GOVERNMENT	0	0	0
Utilities			
Hospitals			
Transit Systems			
Airports			
Other - Joint Powers Authority	4	5	6
TOTAL	4	5	6
POPULATION (AS OF JULY 1)	1,892,391	1,981,798	2,079,802
SOURCE OF POPULATION ESTIMATE*	State Demographer	State Demographer	State Demographer
Assessed Valuation (Secured and Unsecured Only)			
Net Proceeds of Mines			
TOTAL ASSESSED VALUE			
TAX RATE			
General Fund			
Special Revenue Funds			
Capital Projects Funds			
Debt Service Funds			
Enterprise Fund			
Other			
TOTAL TAX RATE	0	0	0

Clean Water Coalition
(Local Government)

SCHEDULE S-2 - STATISTICAL DATA

SCHEDULE A-2 PROPRIETARY AND NONEXPENDABLE TRUST FUNDS

Budget for Fiscal Year Ending 6/30/2009

Budget Summary for Clean Water Coalition
(Local Government)

FUND NAME	OPERATING REVENUES (1)	OPERATING EXPENSES (2) **	NONOPERATING REVENUES (3)	NONOPERATING EXPENSES (4)	OPERATING TRANSFERS		NET INCOME (7)
					IN (5)	OUT(6)	
Clean Water Coalition	42,352,984	(2,447,702)	146,500,000	(3,000,000)			183,405,282
TOTAL	42,352,984	(2,447,702)	146,500,000	(3,000,000)	-	-	183,405,282

* FUND TYPES: E - Enterprise
I - Internal Service
N - Nonexpendable Trust

** Include Depreciation

PROPRIETARY FUND	(1)	(2)	(3) BUDGET YEAR ENDING 6/30/2009	
	ACTUAL PRIOR YEAR ENDING 6/30/2007	ESTIMATED CURRENT YEAR ENDING 6/30/2008	TENTATIVE APPROVED	FINAL APPROVED
OPERATING REVENUE				
Wastewater Connection Fees	11,885,189	34,387,484	35,000,000	
Wastewater Usage Fees		7,328,460	7,352,984	
Total Operating Revenue	11,885,189	41,715,944	42,352,984	-
OPERATING EXPENSE				
Salaries and Benefits	554,712	741,286	981,391	
Services and Supplies	654,103	864,960	1,431,311	
Depreciation/Amortization	21,364	35,000	35,000	
Total Operating Expense	1,230,179	1,641,246	2,447,702	-
Operating Income or (Loss)	10,655,010	40,074,698	39,905,282	-
NONOPERATING REVENUES				
Interest Earned	585,004	1,000,000	1,500,000	
Contributions From Member Entities				
City of Las Vegas	5,803,741	7,046,779		
City of North Las Vegas	1,319,947	2,348,926		
City of Henderson	2,490,807	3,288,497		
Clark County	8,184,079	10,805,061		
Debt Proceeds				
Short-Term Debt		3,750,000	145,000,000	
Total Nonoperating Revenues	18,363,578	28,239,263	146,500,000	-
NONOPERATING EXPENSES				
Interest Expense - Short Term Debt		75,000	3,000,000	
Total Nonoperating Expenses	-	75,000	3,000,000	-
Net Income before Operating Transfers	29,018,588	68,238,961	183,405,282	-
Operating Transfers (Schedule T)				
In				
Out				
Net Operating Transfers	-	-	-	-
NET INCOME	29,018,588	68,238,961	183,405,282	-

Clean Water Coalition
(Local Government)

SCHEDULE F-1 REVENUES, EXPENSES AND NET INCOME

FUND: Clean Water Coalition

PROPRIETARY FUND	(1)	(2)	(3) BUDGET YEAR ENDING 6/30/2009	
	ACTUAL PRIOR YEAR ENDING 6/30/2007	ESTIMATED CURRENT YEAR ENDING 6/30/2008	TENTATIVE APPROVED	FINAL APPROVED
A. CASH FLOWS FROM OPERATING ACTIVITIES:				
Wastewater Connection Fees	7,678,798	34,387,484	35,000,000	
Wastewater Usage Fees		7,328,460	7,352,984	
Salaries and Benefits	(532,945)	(741,286)	(981,391)	
Services and Supplies	(667,223)	(864,960)	(1,431,311)	
a. Net cash provided by (or used for) operating activities	6,478,630	40,109,698	39,940,282	
B. CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:				
b. Net cash provided by (or used for) noncapital financing activities				
C. CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:				
Debt Proceeds				
Short Term Debt		3,750,000	145,000,000	
Interest Expense				
Short Term Debt		75,000	3,000,000	
c. Net cash provided by (or used for) capital and related financing activities		3,825,000	148,000,000	
D. CASH FLOWS FROM INVESTING ACTIVITIES:				
Interest Income	565,004	1,000,000	1,500,000	
Contributions From Member Entities	19,318,677	23,489,263		
Capital Expenditures (SCOP)	(8,835,729)	(25,257,054)	(155,119,975)	
d. Net cash provided by (or used in) investing activities	11,047,952	(767,791)	(153,619,975)	
NET INCREASE (DECREASE) in cash and cash equivalents (a+b+c+d)	17,529,582	43,168,907	34,320,307	
CASH AND CASH EQUIVALENTS AT JULY 1, 20xx	6,074,949	23,601,531	66,768,438	
CASH AND CASH EQUIVALENTS AT JUNE 30, 20xx	23,601,531	66,768,438	101,088,745	

Clean Water Coalition
(Local Government)

SCHEDULE F-2 STATEMENT OF CASH FLOWS

FUND: Clean Water Coalition

LOBBYING EXPENSE ESTIMATE

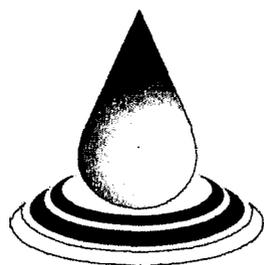
Pursuant to NRS 354.600 (3), **each** (emphasis added) local government budget must obtain a separate statement of anticipated expenses relating to activities designed to influence the passage or defeat of legislation in an upcoming legislative session.

Nevada Legislature: 75th Session; February 2, 2009 to June 1, 2009

1. Activity:	_____	
2. Funding Source:	_____	
3. Transportation		\$ _____ -
4. Lodging and meals		\$ _____ -
5. Salaries and Wages		\$ _____ -
6. Compensation to lobbyists		\$ _____ -
7. Entertainment		\$ _____ -
8. Supplies, equipment & facilities; other personnel and services spent in Carson City		\$ _____ -
Total		\$ _____ -

Entity: Clean Water Coalition

Budget Fiscal Year 2008-2009



CleanWater
C O A L I T I O N

*Solutions for
Clean Water
Management*

Capital Improvement Plan

Fiscal Years 2008–09 through 2013–14

March 2008

Clean Water Coalition 150 N Stephanie St, Suite 130 Henderson, NV 89074
(702) 319-4433 www.cleanwatercoalition.com

Clean Water Coalition, Nevada Capital Improvement Plan

Fiscal Years 2008-09 through 2013-14

Management Board

Chip Maxfield, Chairperson
Larry Brown, Vice Chairperson
Steven D. Kirk, Secretary
Michael Montandon, Member

Douglas W. Karafa,
General Manager

John Brumley
Deputy Administrator, Contracts and Finance

March 2008

Member Agencies

Clark County Water Reclamation District
City of Las Vegas
City of Henderson
City of North Las Vegas



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Capital Improvement Program

The Clean Water Coalition's Capital Improvement Program (CIP) is a five-year plan that is updated annually in conjunction with the preparation of the CWC's operating budget. The CIP identifies the activities of the various phases of the Systems Conveyance and Operations Program (SCOP), the anticipated cash flows for SCOP, and associated funding sources.

CAPITAL BUDGET PROCESS

The CIP is a multi-year plan for financing government facility construction, improvements, and equipment acquisition. The goals of the program are as follows:

- Assess capital needs
- Identify funding sources for the capital projects/programs, which ultimately will provide the greatest return on investment while meeting the increasing demand for infrastructure, public facilities and services.
- Improve financial planning through disclosure of future bond sales and assess fiscal impact.

Needs Assessment

In conjunction with the CWC's operational plan and preparation of the annual budget, the SCOP project is examined as to the current completion schedule regarding pre-design, final design and construction. Milestone deliverables are consistently updated with the most recent estimations to ensure capital authority and timely funding is available to maintain the pace of the project. Funding is anticipated to be derived from the following sources:

1. Proceeds from debt-the CWC has the legal authority to issue debt through both the Nevada State Bond Bank and the Clark County Bond Bank. All debt would be backed by revenue generated through regional wastewater usage and connection surcharges. Initial debt will be short-term, paid off through the issuance of long-term debt.
2. Revenues generated through regional wastewater usage and connection surcharges not required for debt service, fund balance or operational expenses.
3. Proceeds from state or Federal grants, or revenues derived from special legislation. Even though revenues received from grants are not anticipated to be significant, every effort will be made to maximize federal and state participation and, therefore, reduce local funding requirements.

Capital Budget Preparation

The preparation and refinement of the CIP is an ongoing process that begins with identifying the various critical paths for deliverables for the SCOP project. Once all updated information is entered into the model, estimates of expenditures for future years are developed and included within both the annual budget and the revised CIP.

Once the revisions have been made by the CWC, the draft information is presented to each member agency's financial manager for review and comments. All comments are received and evaluated, and modifications to the CIP are made accordingly. The final CIP is approved by the CWC Board and each CWC member agency's board or council. Per the Nevada Revised Statutes (NRS), final approval is required prior to the end of the previous fiscal year.

Modification of the Capital Plan

During the design stages of the SCOP project, new technologies may become available that would improve the final outcome of the project, increase the life expectancy of the project, or otherwise reduce the overall cost of the project. Such technologies will be reviewed by experts in the field and approved through various committees before inclusion into the CIP. Any changes from the prior CIP will be specifically identified in a separate section to create a document that is as transparent as possible for public information. Modifications or amendments to the CIP require CWC Board and CWC member agency board/council's approval.

Capital Improvement Plan - Scope

The CIP represents the lifespan of the SCOP project, with particular emphasis on the five-year planning horizon, FY 2008-2009 through FY 2013-2014. Information concerning expenses incurred in earlier years is displayed as a note to present a comprehensive view of the total project cost.

OVERVIEW OF CAPITAL IMPROVEMENT PLAN

Sources and Uses of Funds

Sources and uses of funds for the Clean Water Coalition's five-year CIP are shown in the following table (Table 1-1). The information includes sources and uses of funds for the active project for a five-year planning horizon, FY 2008-2009 through FY 2013-2014. Prior years' activities and FY 2007-2008 estimates are included to present a comprehensive view of the total project cost.

A total of \$828 million in funding sources are identified. The CWC's primary sources of capital funding are from bond proceeds, regional wastewater connection and usage surcharges, and member agency contributions. The CWC's CIP identifies approximately \$828 million in project costs.

Table 1-1

Capital Improvement Program - Sources and Uses of Funds (\$ millions)

	Prior FYs	Est. FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	Total	%t
Beginning Balances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	N/A
Funding Sources:										
Debt Proceeds	\$ -	\$ -	\$145.00	\$232.24	\$213.11	\$155.79	\$ -	\$ -	\$ 746.14	90.1%
Connection/Usage Surcharges	\$ -	\$ -	\$ 11.21	\$ 1.68	\$ 1.68	\$ 1.68	\$ 4.64	\$ 0.18	\$ 21.07	2.5%
Entity Contributions	\$ 30.82	\$ 27.23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 58.05	7.0%
Interest Earnings/Misc	\$ 0.03	\$ 0.03	\$ 1.50	\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30	\$ -	\$ 2.76	0.3%
Total Revenues*	\$ 30.85	\$ 27.26	\$157.71	\$234.22	\$215.09	\$157.77	\$ 4.94	\$ 0.18	\$ 828.02	
Total Resources*	\$ 30.85	\$ 27.26	\$157.71	\$234.22	\$215.09	\$157.77	\$ 4.94	\$ 0.18	\$ 828.02	
Uses by Activity:										
Pre-Design/EIS	\$ 27.60	\$ 3.86	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31.46	3.8%
Final Design	\$ 0.16	\$ 15.28	\$ 10.89	\$ 2.18	\$ 1.48	\$ 0.99	\$ -	\$ -	\$ 30.98	3.7%
Construction	\$ -	\$ 6.01	\$141.74	\$227.49	\$208.99	\$152.07	\$ 0.34	\$ -	\$ 736.64	89.0%
Other Capital	\$ -	\$ -	\$ 0.18	\$ 0.18	\$ 0.18	\$ 0.18	\$ 0.18	\$ 0.18	\$ 1.08	0.1%
Administration	\$ 3.10	\$ 2.10	\$ 4.90	\$ 4.37	\$ 4.44	\$ 4.52	\$ 4.42	\$ -	\$ 27.85	3.4%
Total Costs*	\$ 30.85	\$ 27.26	\$157.71	\$234.22	\$215.09	\$157.77	\$ 4.94	\$ 0.18	\$ 828.02	
Ending Balances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Operating Impact**										
Est. Start-Up Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (0.79)	\$ (0.05)	\$ -	\$ (0.84)	
Est. Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (4.65)	\$ (4.79)	\$ (9.44)	
Hydroelectric Power Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5.00	\$ 5.00	\$ 10.00	
"Green" Credit Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1.00	\$ 1.00	\$ 2.00	
Net Operating Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (0.79)	\$ 1.30	\$ 1.21	\$ 1.72	

* Totals may vary due to rounding - Administrative expenses increase in FY 2009 due to federal requirements of testing and monitoring.

** Operating Impact of the SCOP project will be positive once on-line in FY 2013, due to the hydroelectric generation of the plant

SCOP Timeline

A Gantt chart is used to identify the phases of the SCOP lifecycle:

Figure 1-1

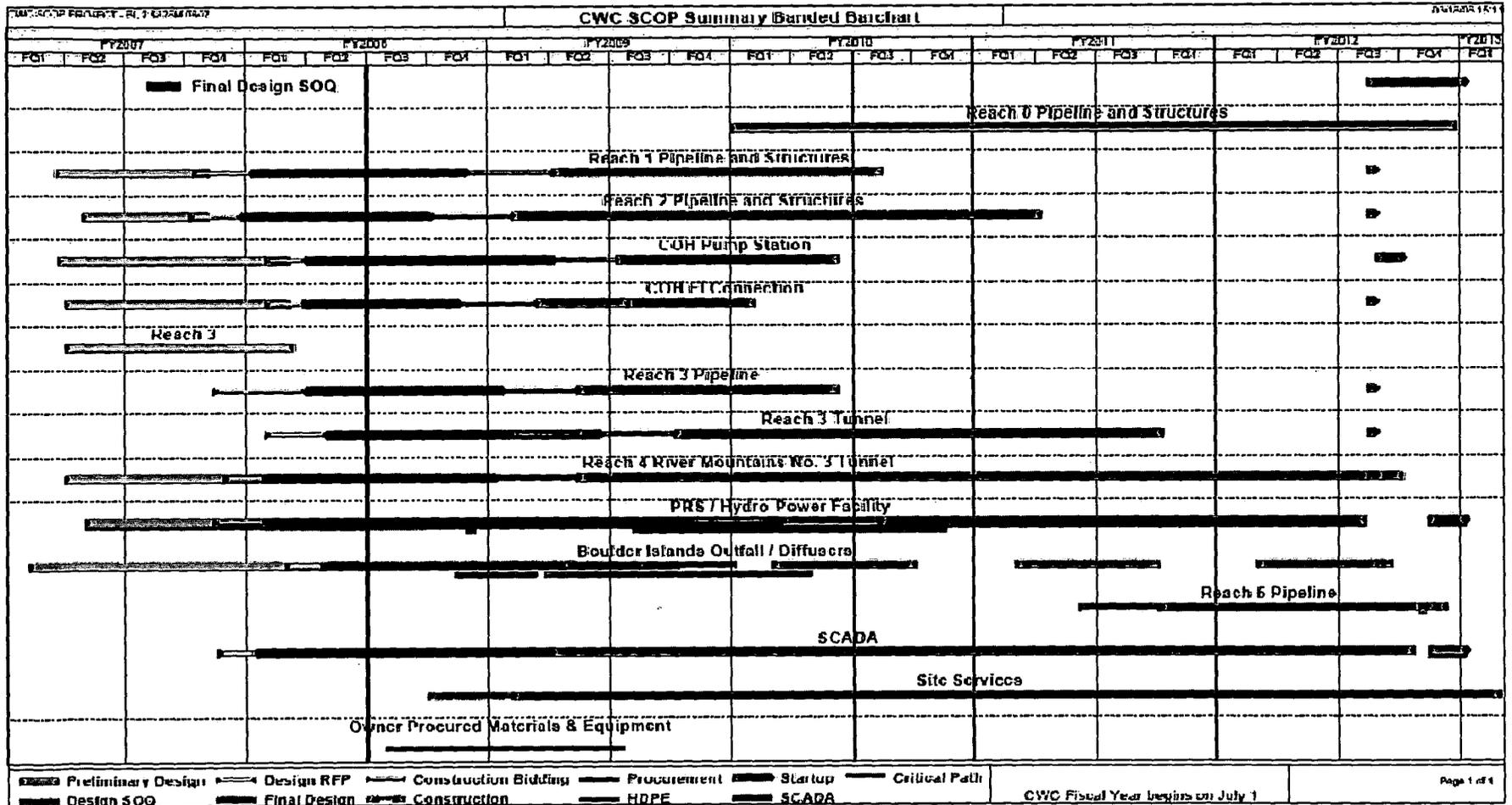
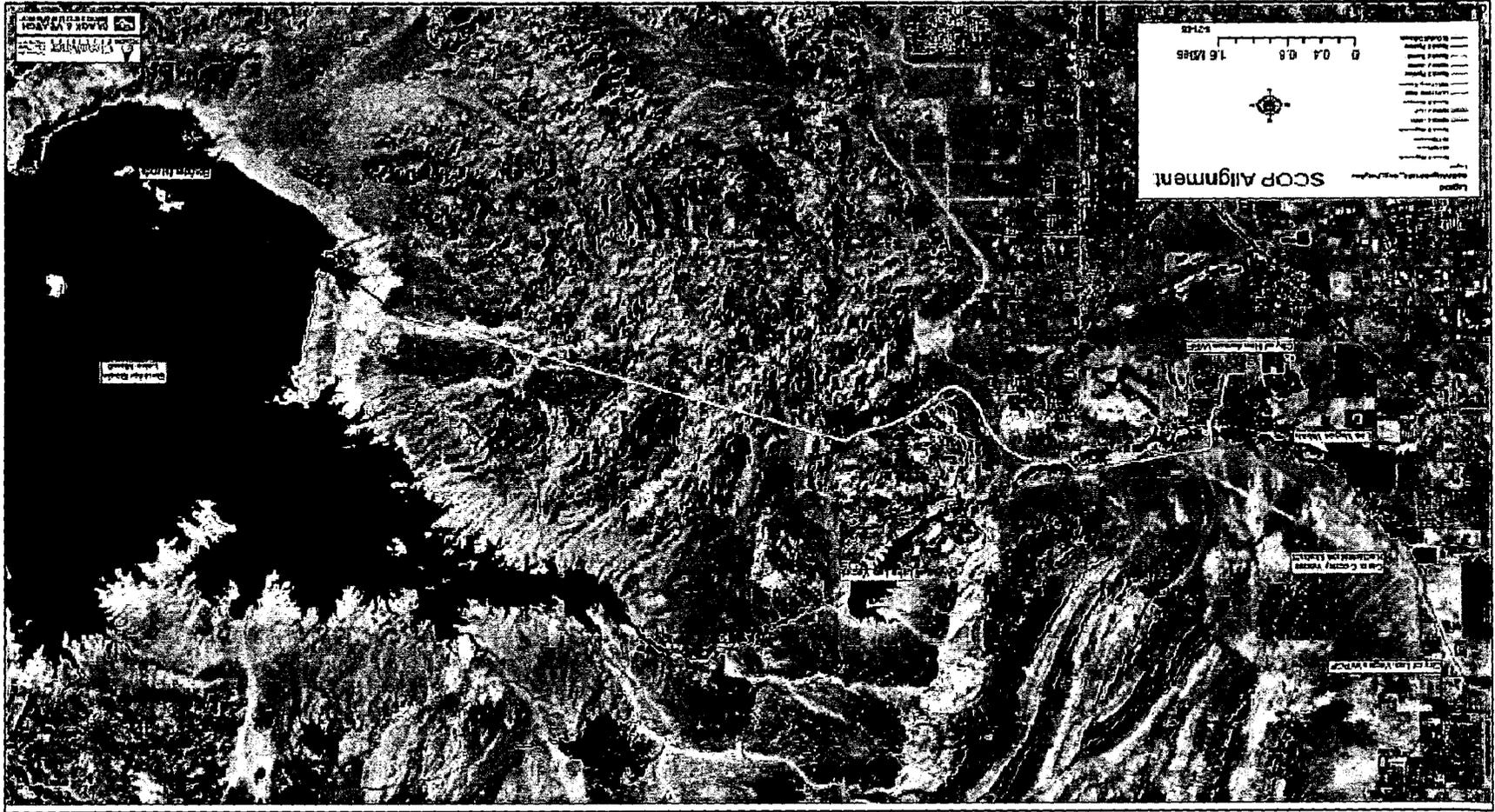


Table 1-2 displays the summary costs for the SCOP construction and associated design phases (detailed costs by contract are displayed in the Appendix).

TABLE 1-2

**Systems Conveyance and Operations Program
Cost Summary Expenditure Year Dollars**

Description	Cost
City of North Las Vegas Connection - Reach 0	\$ 35,000,000
City of Las Vegas Pipeline/Diversion Structure - Reach 1	\$ 19,854,000
Clark County Reclamation District -Reach 2	\$ 43,588,000
Reach 3 Tunnel	\$ 31,008,000
Reach 3 Pipeline	\$ 14,064,000
City of Henderson Connection -Wash Crossing	\$ 13,780,000
City of Henderson Pump Station	\$ 5,717,000
River Mountains Tunnel #3 - Reach 4	\$ 175,103,000
Reach 5 Pipeline	\$ 19,573,000
Hydroelectric Power Generating Facility	\$ 51,662,000
Boulder Islands Outfall	\$ 189,983,000
SCADA (Automated System Control)	\$ 1,111,000
Site Services (Clean-up and Restoration)	\$ 6,708,000
Total	\$ 607,151,000
<hr style="border-top: 1px dashed black;"/>	
Contingency (13.0%)	\$ 79,087,000
Construction Mgt.	\$ 52,394,000
Preliminary Design	\$ 12,899,000
Final Design	\$ 20,444,000
LDE Services During Final Design	\$ 10,142,000
CWC Administration	\$ 17,426,000
CWC Capital - Other	\$ 920,000
Additional Services	\$ 27,618,000
Grand Total	\$ 828,081,000



SCOP Cost Summary

SCOP Project Map

Detail Data by Section

The Systems Conveyance and Operations Program (SCOP) project is divided into three segments: the Effluent Interceptor, the Lake Conveyance System, and the Boulder Island Outfall. The Effluent Interceptor consists of a series of diversion structures and a conveyance pipeline to collect and convey highly treated wastewater (effluent) from all of the member agencies' treatment facilities to the Lake Conveyance System. The Lake Conveyance System includes a large diameter tunnel constructed through the River Mountains and a pressure reducing / power generating station which will reduce the hydraulic pressure of the effluent and generate electricity before discharge through the outfall diffusers. The Boulder Island Outfall is comprised of a diffuser control structure and five diffuser pipelines which will transport and diffuse the effluent at various deep water locations in Lake Mead. Each segment of the SCOP project is interconnected and will be operated as a single effluent conveyance and discharge system.

The Effluent Interceptor consists of effluent diversion facilities and conveyance pipeline including: effluent diversion structures at the City of Las Vegas Water Pollution Control Facility and the Clark County Water Reclamation Department (CCWRD) Central Plant and Advanced Wastewater Treatment (AWT); an effluent interceptor control structure to facilitate system control; a diversion structure, pumping station and forcemain at the City of Henderson Water Reclamation Facility; a large effluent pipeline; and a large diameter tunnel crossing the Las Vegas Wash. In the future, an interceptor may be extended upstream to capture flows from the City of North Las Vegas treatment facility. The diversion structures located at each plant will enable effluent to be diverted either to the Las Vegas Wash or to the effluent interceptor for conveyance to Lake Mead. The large diameter effluent interceptor pipeline roughly parallels the Las Vegas Wash from Desert Inn Road to a point one mile southwest of Lake Las Vegas near the Three Kids Mine Wash. The large diameter wash crossing tunnel connects the effluent interceptor pipeline to the Lake Conveyance System tunnel.

The Lake Conveyance System begins southwest of the Las Vegas Wash at the connection to the Las Vegas Wash tunnel crossing and continues to a point east of River Mountains, one mile west of Saddle Island, within the Lake Mead National Recreation Area. The Lake Conveyance System includes a large diameter tunnel through the River Mountains and a pressure reducing / power generating station (PR/PGS). The pressure reducing station will primarily use hydropower turbines to reduce pressure and generate electric power as a secondary benefit to the SCOP operations.

The final segment is referred to as the Boulder Island Outfall. This segment begins at the PR/PGS and carries the effluent into Lake Mead to be discharged through a series of five deep-water diffusers.

Segment Lengths

The length of each of the segments is as follows:

Effluent Interceptor (EI)	
City of Las Vegas WPCF to Lake Conveyance System	33,000 feet
City of Henderson WRF to Effluent Interceptor	6,500 feet
Lake Conveyance System (LCS)	
Effluent Interceptor to PR/PGS	44,000 feet
Boulder Island Outfall	
Reach 5 Pipeline (PR/PGS to outfall diffuser: cumulative length 5 pipes)	5,280 feet
Outfall Diffuser (5 diffuser pipelines: cumulative length)	53,000 feet

Description of Project Elements

Effluent Interceptor

Reach 0 Reach 0 will collect effluent from the planned City of North Las Vegas water reclamation facility. It may consist of a pipeline or flood channel improvements. The CWC Board approved the addition of a not-to-exceed amount of \$35 million for this reach.

Reach 1 Reach 1 includes the effluent diversion structure at the City of Las Vegas Water Pollution Control Facility (CLV WPCF) and the Effluent Interceptor pipeline from the diversion structure to the Effluent Interceptor (EI) Control Structure near the CCWRD Central Plant. The effluent pipeline from the City of Las Vegas WPCF to the EI Control Structure is comprised of 8,000 feet of 96-inch diameter pipe. This pipeline section includes a wash crossing tunnel at the upper portion of Reach 1.

Reach 2 Reach 2 consists of the EI Control Structure, effluent diversion structures at the CCWRD Central Plant and AWT, the Wash Return Structure at the EI Control Structure, and the EI pipeline from the EI Control Structure to Reach 3. The pipeline from the EI Control Structure to the Reach 3 connection point is comprised of 13,500 feet of 114-inch diameter pipe.

Reach 3 Reach 3 consists of an open cut pipeline and a large diameter tunnel crossing. The cut-and-cover portion of Reach 3 begins at the connection to Reach 2 and includes approximately 6,350 feet of pipeline to the Reach 3 Tunnel. The Reach 3 Tunnel is comprised of 5,280 feet of 120-inch diameter tunnel which crosses under the Las Vegas Wash. Reach 3 connects the EI with the Lake Conveyance System at Reach 4 (River Mountains Tunnel No. 3).

City of Henderson Pumping Station and Forcemain This section includes a 77 MGD pumping station at the COH Water Reclamation Facility, 4,700 feet of 60-inch diameter forcemain, 1,000 feet of 48-inch wash crossing tunnel section, and an isolation valve structure. The isolation valve structure connects to Reach 3, just downstream of Reach 2, near the Pabco Weir.

Lake Conveyance System

Reach 4 (River Mountains Tunnel No. 3) Reach 4 consists of the River Mountains Tunnel No. 3, which extends from Reach 3 to the Pressure Reducing/Power Generation Station (PR/PGS) located on the east side of River Mountains, one mile west of Saddle Island. This section is comprised of a 44,000-foot long, 120-inch minimum diameter tunnel. The east shaft location connects to the PR/PGS facility located adjacent to the Alfred Merritt Smith Water Treatment Facility (AMSWTF).

Pressure Reducing/Power Generation Station This facility will consist of a hydroelectric power station with two hydroelectric turbines capable of generating 16 megawatts of electricity and three sleeve valves configured to allow the full effluent flow to bypass the hydroelectric turbines and flow through the pressure regulating sleeve valves. The generation of “clean” electric power is a secondary benefit to the SCOP project.

Diffuser Control Structure This structure is located downstream and adjacent to the PR/PGS. The structure will provide the necessary backpressure for the turbines, remove entrained air in the effluent, and control flows to the five individual pipelines in Reach 5.

Boulder Island Outfall

Reach 5 Pipeline Reach 5 is comprised of five parallel cut-and-cover pipelines connecting the Diffuser Control Structure to the Outfall Diffuser. Each pipeline will be 63-inch in diameter and 6,100 feet in length.

Outfall Diffuser This section is comprised of five 63-inch diameter pipes connecting Reach 5 locations near Boulder Island, conveying and diffusing effluent in deep-water sections of Lake Mead. The pipes run in a dredged-and-cover section to the 1,000-foot contour in Lake Mead and then to a sub-aqueous pipeline that is anchored to the bottom of the lake. The diffuser pipes vary in length between 7,900 feet to 13,900 feet. The length of the pipe section is 2,900 feet for the dredged portion of each pipeline; and 5,000 to 11,000 feet for each sub-aqueous section. Each pipe will end with a discharge port located approximately 1,000 feet apart. The effluent flow will discharge into the lake on the northeast side of the Boulder Islands. The effluent released through the ports will be set specific angles that, depending on lake conditions, will allow the effluent to remain below the thermocline during the stratified period and not break the surface of the lake during the de-stratified period and mix well with existing water strata.

Operations and Controls

SCADA System System Control and Data Acquisition - A system-wide, computer control operations for the SCOP project. The SCADA system will include communication, monitoring and control functions to all of the SCOP systems. The system status will be available to the CWC headquarters and all member agency facilities.

Construction Support

Sites Services The Site Services contract includes remediation and reclamation of disturbed sites within the area of SCOP activities, including Reach 4 - River Mountains Tunnel No. 3 lake side operations, PR/PGS construction, Reach 5 Pipeline, and Outfall Diffuser System activities.

Operating Impact

The estimated expenditures for operations and maintenance of the SCOP are comprised of the following (FY 2012 dollars):

* Estimated cost for general maintenance – materials -	\$ 750,000 annually
* Estimated cost of member agency personnel utilized to operate and maintain power generation plant -	\$ 1,500,000 annually
* Estimated cost of member agency personnel utilized to operate and maintain City of Henderson pump station -	\$ 250,000 annually
* Estimated cost of member agency personnel to maintain connection structures/pipelines -	\$ 500,000 annually
* Estimated cost of materials for replacement or damaged/worn parts -	\$ 1,650,000 annually

The estimated costs for operation and maintenance of the SCOP are based on industry estimates, taking into account maximum anticipated costs at start-up. Operating costs displayed above do not include replacement of major components, such as turbines. Replacement of major components is included in the long-range forecast for revenue requirements. It is anticipated turbines will need to be replaced on a 20-year basis, while the pumping station equipment at the City of Henderson will require rebuilds on a 10-year cycle. Since equipment at the pump station has redundancy, no total replacement of equipment is anticipated in current forecast models.

Clean Water Coalition – Capital Improvement Plan

SCOP Cash Flow by Fiscal Year

Fiscal Year	SCOP Component	% of Contract	Contract Total	Estimated Costs	CONTINGENCIES		TOTAL
					%	Adj. Est. Cost	
2008-09							2008-09
	Final Design						\$7,887,000
	COH Pump Station	27.7%	\$545,000	\$135,000	10.5%	\$16,000	\$151,000
	Reach 3 Pipeline	7.8%	\$701,000	\$49,000	11.5%	\$6,000	\$55,000
	Reach 3 Tunnel	42.4%	\$2,898,000	\$1,093,000	11.0%	\$135,000	\$1,228,000
	Reach 4 River Mountains #3 Tunnel	5.5%	\$1,982,000	\$88,000	18.1%	\$20,000	\$108,000
	PRS/Hydroelectric Generation Facility	63%	\$4,668,000	\$2,710,800	7.8%	\$230,200	\$2,941,000
	Boulder Islands Outfall/Diffuser	50.2%	\$5,903,000	\$2,620,000	11.6%	\$345,000	\$2,965,000
	Reach 5 Pipeline	20.0%	\$55,000	\$11,000	0%	\$0	\$11,000
	Geotech Investigations	26.6%	\$88,000	\$21,000	9.1%	\$2,000	\$23,000
	SCADA	46.1%	\$878,000	\$363,000	10.3%	\$42,000	\$405,000
	Construction						\$132,359,000
	Reach 1 Pipeline and Structures	67.9%	\$21,838,000	\$1,347,300	9.1%	\$1,346,000	\$14,819,000
	Reach 2 Pipeline and Structures	38.2%	\$47,624,000	\$16,739,000	8.0%	\$1,465,000	\$18,204,000
	COH Pump Station	46.3%	\$6,515,000	\$2,650,000	12.2%	\$369,000	\$3,019,000
	COH Connection to EI Pipeline	97.6%	\$15,156,000	\$13,450,000	9.1%	\$1,344,000	\$14,794,000
	Reach 3 Pipeline	75.2%	\$15,469,000	\$10,579,000	9.1%	\$1,056,000	\$11,635,000
	Reach 3 Tunnel	8.3%	\$33,366,000	\$2,689,000	2.9%	\$81,000	\$2,770,000
	Reach 4 River Mountains #3 Tunnel	19.7%	\$218,075,000	\$35,016,000	18.5%	\$7,950,000	\$42,966,000
	PRS/Hydroelectric Generation Facility	6.0%	\$56,903,000	\$3,410,000	0%	\$0	\$3,410,000
	Boulder Islands Outfall/Diffuser	9.1%	\$206,164,000	\$17,236,000	8.6%	\$1,617,000	\$18,853,000
	SCADA	21.0%	\$1,222,000	\$234,000	9.1%	\$23,000	\$257,000
	Site Services	22.1%	\$7,377,000	\$1,484,000	9.1%	\$148,000	\$1,632,000
	Related Services						\$12,390,000
	LDE Services During Design/Construction	30.8%	\$9,756,000	\$3,007,000	0%	\$0	\$3,007,000
	Construction Management	19.3%	\$48,562,000	\$9,383,000	0%	\$0	\$9,383,000
	Additional Services and Miscellaneous Costs						\$4,897,000
	CWC Administration			\$2,413,000			\$2,413,000
	Professional Service Contracts -Legal	14.7%	\$2,375,000	\$350,000	0%	\$0	\$350,000
	Environmental Mitigation	35.1%	\$3,132,000	\$1,100,000	0%	\$0	\$1,100,000
	Water Quality Modeling/Monitoring	19.2%	\$4,435,000	\$850,000	0%	\$0	\$850,000
	Other Capital			\$184,000			\$184,000
2008-09	YEARLY TOTALS			\$141,338,000		\$16,195,000	\$157,533,000

Totals may not equal due to rounding

Clean Water Coalition – Capital Improvement Plan

Fiscal Year	SCOP Component	% of Contract	Contract Total	Estimated Costs	CONTINGENCIES		TOTAL
					%	Adj. Est. Cost	Adj. Est. Cost
2009-10							2009-10
	Final Design						\$88,000
	PRS/Hydroelectric Generation Facility	1.9%	\$4,668,000	\$39,000	55.2%	\$49,000	\$88,000
	Construction						\$212,285,000
	Reach 0 Pipeline and Structures	33.5%	\$35,000,000	\$11,729,000	0%	\$0	\$11,729,000
	Reach 1 Pipeline and Structures	32.1%	\$21,838,000	\$6,377,000	9.1%	\$638,000	\$7,015,000
	Reach 2 Pipeline and Structures	56.8%	\$47,624,000	\$24,709,000	8.7%	\$2,358,000	\$27,067,000
	COH Pump Station	53.7%	\$6,515,000	\$3,067,000	12.3%	\$429,000	\$3,496,000
	COH Connection to EI Pipeline	2.3%	\$15,156,000	\$324,000	9.1%	\$32,000	\$356,000
	Reach 3 Pipeline	24.8%	\$15,469,000	\$3,485,000	9.1%	\$348,000	\$3,833,000
	Reach 3 Tunnel	30.1%	\$33,366,000	\$9,371,000	6.6%	\$666,000	\$10,037,000
	Reach 4 River Mountains #3 Tunnel	29.1%	\$218,075,000	\$50,722,000	20.0%	\$12,680,000	\$63,402,000
	PRS/Hydroelectric Generation Facility	28.0%	\$56,903,000	\$14,875,000	6.5%	\$1,038,000	\$15,913,000
	Boulder Islands Outfall/Diffuser	32.6%	\$206,164,000	\$62,003,000	7.9%	\$5,284,000	\$67,287,000
	SCADA	28.2%	\$1,222,000	\$313,000	9.1%	\$31,000	\$344,000
	Site Services	24.5%	\$7,377,000	\$1,642,000	9.1%	\$164,000	\$1,806,000
	Related Services						\$17,296,000
	LDE Services During Design/Construction	21.4%	\$9,756,000	\$2,089,000	0%	\$0	\$2,089,000
	Construction Management	30.1%	\$50,555,000	\$15,207,000	0%	\$0	\$15,207,000
	Additional Services and Miscellaneous Costs						\$4,373,000
	CWC Administration			\$2,498,000			\$2,498,000
	Professional Service Contracts -Legal	14.7%	\$2,375,000	\$350,000	0%	\$0	\$350,000
	Environmental Mitigation	16.0%	\$3,132,000	\$500,000	0%	\$0	\$500,000
	Water Quality Modeling/Monitoring	19.2%	\$4,435,000	\$850,000	0%	\$0	\$850,000
	Other Capital			\$184,000			\$184,000
2009-10	YEARLY TOTALS			\$210,325,000		\$23,717,000	\$234,042,000

Totals may not equal due to rounding

Clean Water Coalition – Capital Improvement Plan

Fiscal Year	SCOP Component	% of Contract	Contract Total	Estimated Costs	CONTINGENCIES		TOTAL
					%	Adj. Est. Cost	Adj. Est. Cost
2010-11							2010-11
	Construction						\$195,692,000
	Reach 0 Pipeline and Structures	33.5%	\$35,000,000	\$11,729,000	0%	\$0	\$11,729,000
	Reach 2 Pipeline and Structures	4.9%	\$47,624,000	\$2,129,000	9.1%	\$213,000	\$2,342,000
	Reach 3 Tunnel	61.6%	\$33,366,000	\$18,948,000	7.8%	\$1,611,000	\$20,559,000
	Reach 4 River Mountains #3 Tunnel	29.1%	\$218,075,000	\$50,722,000	20.0%	\$12,680,000	\$63,402,000
	PRS/Hydroelectric Generation Facility	38.0%	\$56,903,000	\$19,029,000	12.1%	\$2,615,000	\$21,644,000
	Boulder Islands Outfall/Diffuser	33.7%	\$206,164,000	\$64,088,000	7.7%	\$5,371,000	\$69,459,000
	Reach 5 Pipeline	20.5%	\$21,528,000	\$4,008,000	9.1%	\$399,000	\$4,407,000
	SCADA	28.2%	\$1,222,000	\$313,000	9.1%	\$31,000	\$344,000
	Site Services	24.5%	\$7,377,000	\$1,642,000	9.1%	\$164,000	\$1,806,000
	Related Services						\$14,778,000
	LDE Services During Design/Construction	16.2%	\$9,098,000	\$1,476,000	0%	\$0	\$1,476,000
	Construction Management	28.3%	\$46,965,000	\$13,302,000	0%	\$0	\$13,302,000
	Additional Services and Miscellaneous Costs						\$4,468,000
	CWC Administration			\$2,584,000			\$2,584,000
	Professional Service Contracts -Legal	14.7%	\$2,375,000	\$350,000	0%	\$0	\$350,000
	Environmental Mitigation	16.0%	\$3,132,000	\$500,000	0%	\$0	\$500,000
	Water Quality Modeling/Monitoring	19.2%	\$4,435,000	\$850,000	0%	\$0	\$850,000
	Other Capital			\$184,000			\$184,000
2010-11	YEARLY TOTALS			\$191,854,000		\$23,084,000	\$214,938,000

Totals may not equal due to rounding

Clean Water Coalition – Capital Improvement Plan

Fiscal Year	SCOP Component	% of Contract	Contract Total	Estimated Costs	CONTINGENCIES		TOTAL
					%	Adj. Est. Cost	Adj. Est. Cost
2011-12							2011-12
	Construction						\$142,758,000
	Reach 0 Pipeline and Structures	33.0%	\$35,000,000	\$11,543,000	0%	\$0	\$11,543,000
	Reach 4 River Mountains #3 Tunnel	22.2%	\$218,075,000	\$38,645,000	20.0%	\$9,661,000	\$48,306,000
	PRS/Hydroelectric Generation Facility	23.1%	\$56,903,000	\$11,553,000	12.1%	\$1,588,000	\$13,141,000
	Boulder Islands Outfall/Diffuser	24.5%	\$206,164,000	\$46,654,000	7.7%	\$3,910,000	\$50,564,000
	Reach 5 Pipeline	79.5%	\$21,528,000	\$15,565,000	9.1%	\$1,556,000	\$17,121,000
	SCADA	22.7%	\$1,222,000	\$252,000	9.1%	\$25,000	\$277,000
	Site Services	24.5%	\$7,377,000	\$1,642,000	9.1%	\$164,000	\$1,806,000
	Related Services						\$10,309,000
	LDE Services During Design/Construction	12.6%	\$7,858,000	\$994,000	0%	\$0	\$994,000
	Construction Management	22.9%	\$40,752,000	\$9,315,000	0%	\$0	\$9,315,000
	Additional Services and Miscellaneous Costs						\$4,558,000
	CWC Administration			\$2,674,000			\$2,674,000
	Professional Service Contracts -Legal	14.7%	\$2,375,000	\$350,000	0%	\$0	\$350,000
	Environmental Mitigation	16.0%	\$3,132,000	\$500,000	0%	\$0	\$500,000
	Water Quality Modeling/Monitoring	19.2%	\$4,435,000	\$850,000	0%	\$0	\$850,000
	Other Capital			\$184,000			\$184,000
2011-12	YEARLY TOTALS			\$140,649,000		\$16,976,000	\$157,625,000

Fiscal Year	SCOP Component	% of Contract	Contract Total	Estimated Costs	CONTINGENCIES		TOTAL
					%	Adj. Est. Cost	Adj. Est. Cost
2012-13							2012-13
	Construction						\$315,000
	Site Services	4.3%	\$7,377,000	\$315,000	0%	\$0	\$315,000
	Related Services						\$24,000
	Construction Management	4.3%	\$569,000	\$24,000	0%	\$0	\$24,000
	Additional Services and Miscellaneous Costs						\$4,477,000
	CWC Administration			\$2,768,000			\$2,768,000
	Professional Service Contracts -Legal	14.7%	\$2,375,000	\$175,000	0%	\$0	\$175,000
	Environmental Mitigation	16.0%	\$3,132,000	\$500,000	0%	\$0	\$500,000
	Water Quality Modeling/Monitoring	19.2%	\$4,435,000	\$850,000	0%	\$0	\$850,000
	Other Capital			\$184,000			\$184,000
2012-13	YEARLY TOTALS			\$4,816,000		\$0	\$4,816,000

Totals may not equal due to rounding

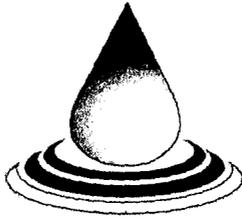
Clean Water Coalition – Capital Improvement Plan

Fiscal Year	SCOP Component	% of Contract	Contract Total	Estimated Costs	CONTINGENCIES		TOTAL
					%	Adj. Est. Cost	Adj. Est. Cost
2013-14							2013-14
	Additional Services and Miscellaneous Costs						\$184,000
	Other Capital			\$184,000			\$184,000
2013-14	YEARLY TOTALS			\$184,000		\$0	\$184,000

Fiscal Year	SCOP Component	% of Contract	Contract Total	Estimated Costs	CONTINGENCIES		TOTAL
					%	Adj. Est. Cost	Adj. Est. Cost
2008-09	YEARLY TOTALS			\$141,338,000		\$16,195,000	\$157,533,000
2009-10	YEARLY TOTALS			\$210,325,000		\$23,717,000	\$234,042,000
2010-11	YEARLY TOTALS			\$191,854,000		\$23,084,000	\$214,938,000
2011-12	YEARLY TOTALS			\$140,649,000		\$16,976,000	\$157,625,000
2012-13	YEARLY TOTALS			\$4,816,000		\$0	\$4,816,000
2013-14	YEARLY TOTALS			\$184,000		\$0	\$184,000
PROGRAM TOTALS				\$689,166,000		\$79,972,000	\$769,138,000

Note: Periods prior to FY 2008-09 are not reflected in totals.

Totals may not equal due to rounding



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