



**FIVE YEAR CAPITAL IMPROVEMENT PLAN**  
**2012—2016**

Approved September 26, 2011

**EL DORADO IRRIGATION DISTRICT  
FIVE-YEAR CAPITAL IMPROVEMENT PLAN  
2011-2015**

	2011 PLANNED	2012 PLANNED	2013 PLANNED	2014 PLANNED	2015 PLANNED	FIVE-YEAR PLAN TOTAL
<b>FERC</b>	\$1,860,836	\$1,599,001	\$765,201	\$816,437	\$2,717,710	\$7,759,185
<b>Water</b>	\$5,130,000	\$4,750,750	\$6,153,325	\$30,629,340	\$26,869,340	\$73,532,755
<b>Wastewater</b>	\$5,576,000	\$1,267,500	\$1,247,500	\$1,777,500	\$1,077,500	\$10,946,000
<b>Recycled Water</b>	\$555,000	\$0	\$100,000	\$1,500,000	\$0	\$2,155,000
<b>Hydroelectric</b>	\$4,170,000	\$10,635,000	\$11,100,000	\$4,500,000	\$6,050,000	\$36,455,000
<b>Recreation</b>	\$318,466	\$130,000	\$10,000	\$10,000	\$10,000	\$478,466
<b>General District</b>	\$2,218,500	\$1,315,000	\$3,640,000	\$4,139,000	\$100,000	\$11,412,500
<b>TOTAL</b>	<b>\$19,828,802</b>	<b>\$19,697,251</b>	<b>\$23,016,026</b>	<b>\$43,372,277</b>	<b>\$36,824,550</b>	<b>\$142,738,906</b>

**EL DORADO IRRIGATION DISTRICT  
FIVE-YEAR CAPITAL IMPROVEMENT PLAN  
2012-2016**

	2012 PLANNED	2013 PLANNED	2014 PLANNED	2015 PLANNED	2016 PLANNED	FIVE-YEAR PLAN TOTAL
<b>FERC</b>	\$1,059,000	\$446,200	\$622,436	\$873,709	\$4,210,020	\$7,211,365
<b>Water</b>	\$2,475,000	\$4,365,000	\$2,875,000	\$3,805,000	\$1,155,000	\$14,675,000
<b>Wastewater</b>	\$6,120,000	\$5,485,000	\$1,680,000	\$1,525,000	\$1,500,000	\$16,310,000
<b>Recycled Water</b>	\$40,000	\$10,000	\$200,000	\$200,000	\$50,000	\$500,000
<b>Hydroelectric</b>	\$8,310,000	\$5,265,000	\$10,550,000	\$8,950,000	\$4,950,000	\$38,025,000
<b>Recreation</b>	\$545,000	\$110,000	\$10,000	\$10,000	\$10,000	\$685,000
<b>General District</b>	\$3,170,000	\$1,165,000	\$1,385,000	\$1,280,000	\$2,150,000	\$9,150,000
<b>TOTAL</b>	<b>\$21,719,000</b>	<b>\$16,846,200</b>	<b>\$17,322,436</b>	<b>\$16,643,709</b>	<b>\$14,025,020</b>	<b>\$86,556,365</b>



## 2012 - 2016 Capital Improvement Plan FERC Projects

PROJECT NO.	PROJECT DESCRIPTION	PROG	PM	Priority	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2012-2016 Total
06021H	FERC C37.8 WATER TEMP	FERC	Deason	1	50,000	50,000	50,000	50,000	50,000	250,000
06022H	FERC C38.4A CAPLES FEASIBILITY	FERC	Deason	1	5,000	0	0	0	0	5,000
06086H	FERC:C33 LAKE ALOHA TROUT	FERC	Deason	1	12,000	*	*	*	*	12,000
06087H	FERC:C37.1 FISH MONITORING	FERC	Deason	1	65,000	0	0	0	70,000	135,000
06088H	FERC:C37.2 MACROINVERTEB	FERC	Deason	1	55,000	0	0	0	55,000	110,000
06089H	FERC:C37.3 AMPHIBIAN MON	FERC	Deason	1	27,000	*	*	*	85,000	112,000
06090H	FERC:C37.4 RIPARIAN SPEC	FERC	Deason	1	0	0	0	0	17,000	17,000
06091H	FERC:C37.5 RIPARN RECRUIT	FERC	Deason	1	0	0	0	0	8,000	8,000
06092H	FERC:C37.7 GEOMORPH EVAL	FERC	Deason	1	10,000	0	0	0	100,000	110,000
06096H	FERC:C56 HERITAGE RSRCE	FERC	Deason	1	10,000	25,000	25,000	25,000	25,000	110,000
07003H	FERC C37.9 WATER QUALITY	FERC	Deason	1	90,000	10,000	*	*	*	100,000
07010H	FERC C15 PESTICIDE USE	FERC	Deason	1	50,000	50,000	50,000	50,000	50,000	250,000
07011H	FERC C38 ADAPTIVE MGMT	FERC	Deason	1	75,000	75,000	75,000	75,000	75,000	375,000
08025H	FERC C44 Noxious Weed Implementation	FERC	Deason	1	30,000	30,000	30,000	30,000	30,000	150,000
06079H	FERC:C50.5 HWY 88 KIOSK	FERC	Downey	1	25,000	0	0	0	0	25,000
06080H	FERC:C50.6 MARTIN MEADOW	FERC	Downey	1	0	25,000	0	0	0	25,000
06097H	FERC C59 Facility Management Plan	FERC	Downey	1	15,000	100,000	0	0	10,000	125,000
07030H	FERC C57 Transportation Management Plan	FERC	Downey	1	10,000	0	0	0	10,000	20,000
06019H	FERC C35 OYSTER CREEK	FERC	Eymann	1	60,000	*	0	0	0	60,000
06020H	FERC C36 ESERALDA	FERC	Eymann	1	250,000	0	0	0	0	250,000
06076H	FERC:C38.4B CAPLES STABIL	FERC	Eymann	1	55,000	*	0	0	0	55,000
10007	FERC C51.2 RM Caples Boat Launch	FERC	Jaggers	1	10,000	10,000	10,000	10,000	10,000	50,000
06098H	FERC:C46-9 RECREATION RSC	FERC	Jaggers	1	20,000	20,000	20,000	20,000	20,000	100,000
07005H	FERC C51.3 RM ECHO TRAIL	FERC	Jaggers	1	5,000	5,000	5,000	5,000	50,000	70,000
07006H	FERC C51.5&C51.7 RM USFS	FERC	Jaggers	1	40,000	41,200	42,436	43,709	45,020	212,365
07009H	FERC C51.8 RM WOODS CREEK	FERC	Jaggers	1	5,000	5,000	5,000	5,000	0	20,000
06024H	FERC C40 Gaging Facility	FERC	Mackay	1	60,000	0	0	0	0	60,000
06025H	FERC C41 Canal Release point	FERC	Mackay	1	0	0	0	0	40,000	40,000
06023H	FERC C39 FISH SCREENS	FERC	Noel	1	25,000	0	0	0	0	25,000
06078H	FERC:C50.3 CAPLES DAM PRK Lot Improvements	FERC	Noel	1	0	0	0	80,000	360,000	440,000
NEW	FERC:C50.2 CAPLES LAKE CAMPGROUND	FERC	Noel	1	0	0	100,000	150,000	1,000,000	1,250,000
06081H	FERC:C50.8 Pacific Crest Trail Crossing	FERC	Noel	1	0	0	10,000	30,000	100,000	140,000
06082H	FERC:C50.1 SILVER LAKE EAST CG FS Upgrade	FERC	Noel	1	0	0	100,000	150,000	1,000,000	1,250,000
07008H	FERC C51.8 SILVER LAKE CG West Upgrade	FERC	Noel	1	0	0	100,000	150,000	1,000,000	1,250,000
<b>Total FERC Projects</b>					<b>1,059,000</b>	<b>446,200</b>	<b>622,436</b>	<b>873,709</b>	<b>4,210,020</b>	<b>7,211,365</b>



## 2012 - 2016 Capital Improvement Plan Water Projects

PROJECT NO.	PROJECT DESCRIPTION	PROG	PM	Priority	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2012-2016 Total
10022	Silva Valley Interchange (DOT)	WA	Brink/Rice	1	80,000	385,000	0	0	0	465,000
06004G	SMUD / El Dorado Agreement Water Rights	WA	Cumpston	1	235,000	235,000	235,000	0	0	705,000
89069E	Water Rights for 17,000 Acre Feet	WA	Cumpston	1	50,000	0	0	0	0	50,000
07033E	Sly Park Dam Evaluation	WA	Eymann	1	10,000	140,000	0	0	0	150,000
09006E	Blakely Reservoir Improvements	WA	Eymann	1	75,000	*	0	0	0	75,000
08029E	GHI Relocation at Tennessee Creek	WA	Noel	1	80,000	0	0	0	0	80,000
11017	Reservoir A WTP Chlorine conversion	WA	Rice	1	200,000	1,500,000	0	0	0	1,700,000
11033	Summerfield Ditch / Fannon Reservoir Fill System	WA	Rice	1	140,000	0	0	0	0	140,000
11046	Coon Hollow Waterline Replacement	WA	Rice	1	75,000	0	0	0	0	75,000
NEW	DOT Construction Projects - Water	WA	Rice	1	25,000	25,000	25,000	25,000	25,000	125,000
NEW	Ridgeview Tank No. 2	WA	Rice	1	0	50,000	350,000	0	0	400,000
NEW	Monte Vista Tank	WA	Rice	1	25,000	175,000	1,000,000	0	0	1,200,000
SDWL04	Reservoir Floating Cover Replacement Prog	WA	Rice	1	160,000	160,000	150,000	140,000	140,000	750,000
NEW	Patterson Intersection Improvements (DOT)	WA	Rice	1	185,000	0	0	0	0	185,000
04008E	Hwy 49 Intertie Improvements - (DSP)	WA	Sullivan	1	0	60,000	300,000	0	0	360,000
00006E	Rediversion of Ditch Water Rights	WA	Cumpston	2	20,000	50,000	50,000	0	0	120,000
NEW	Development Services Water Model	WA	Mackay	2	75,000	75,000	0	0	0	150,000
NEW	Water SCADA System Reliability Program	WA	McKinney	2	275,000	545,000	0	0	0	820,000
11032	Main Ditch - Forebay to Res 1	WA	Megerdigian	2	25,000	*	*	*	*	25,000
11015	AMR and Small Meter Replacement	WA	Pritchard	2	100,000	100,000	100,000	100,000	100,000	500,000
NEW	PRS Replacement Program	WA	Rice	2	25,000	25,000	25,000	25,000	25,000	125,000
NEW	2012 Waterline Replacement Program	WA	Rice	2	25,000	25,000	25,000	25,000	25,000	125,000
11035	Water Tank Recoating Program	WA	Rice	2	220,000	220,000	220,000	220,000	220,000	1,100,000
NEW	Pump Station Upgrade Program	WA	Rice	2	20,000	120,000	120,000	120,000	120,000	500,000
NEW	Moosehall Pump Station Upgrades	WA	Rice	2	0	0	25,000	150,000	500,000	675,000
10015	Water System Upgrades	WA	Strahan	2	0	100,000	50,000	0	0	150,000
11013	Corrosion Control Technologies	WA	Strahan	2	45,000	0	0	0	0	45,000
11026	Reservoir A Process Improvements	WA	Strahan	2	250,000	250,000	*	*	*	500,000
11040	Ditch Water Rights/SCADA	WA	Strahan	2	40,000	0	0	0	0	40,000
03006E	Sly Park Intertie Lining	WA	Sullivan	2	0	50,000	100,000	3,000,000	0	3,150,000
06069E	Outingdale WTP	WA	Sullivan	2	0	25,000	0	0	0	25,000
09007E	Update Design and Construction Standards	WA	Sullivan	2	15,000	0	0	0	0	15,000
NEW	Strawberry WTP Evaluation	WA	Sullivan	2	0	50,000	0	0	0	50,000
NEW	Main Ditch Remediation - Reservoir 1 to Blakeley Res	WA	Megerdigian	3	0	0	100,000	0	0	100,000
<b>Total Water Projects</b>					<b>2,475,000</b>	<b>4,365,000</b>	<b>2,875,000</b>	<b>3,805,000</b>	<b>1,155,000</b>	<b>14,675,000</b>



## 2012 - 2016 Capital Improvement Plan Wastewater Projects

PROJECT NO.	PROJECT DESCRIPTION	PROG	PM	Priority	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2012-2016 Total
11043	DOT Construction Projects - Wastewater	WW	Brink	1	25,000	25,000	25,000	25,000	25,000	125,000
06055E	DC/ML Collection System Corrective Action Plan	WW	Sullivan	1	75,000	75,000	75,000	75,000	75,000	375,000
06056E	EDH Collection System Corrective Action Plan	WW	Sullivan	1	75,000	75,000	75,000	75,000	75,000	375,000
11034	EDHWWTP Permit Renewal	WW	Wells	1	60,000	25,000	25,000	0	0	110,000
11036	DCWWTP Permit Revision	WW	Wells	1	200,000	50,000	25,000	25,000	0	300,000
10010	Lift Station Upgrades	WW	Brink	2	3,100,000	800,000	0	0	0	3,900,000
11028	Strolling Hills Sewer Pipeline	WW	Brink	2	135,000	2,050,000	0	0	0	2,185,000
NEW	2012 Lift Station Upgrades Program	WW	Brink	2	0	500,000	1,200,000	1,200,000	1,200,000	4,100,000
NEW	Wastewater SCADA System Reliability Program	WW	McKinney	2	545,000	1,085,000	0	0	0	1,630,000
09015E	Yates Lift Station Upgrades	WW	Sullivan	2	350,000	0	0	0	0	350,000
10017	Bridlewood Lift Station Upgrades	WW	Sullivan	2	0	170,000	0	0	0	170,000
11010	DCWWTP Regulatory Compliance	WW	Sullivan	2	300,000	0	0	0	0	300,000
11018	Generator Replacement Program	WW	Sullivan	2	100,000	100,000	100,000	100,000	100,000	500,000
11044	EDHWWTP Filter Covers	WW	Sullivan	2	350,000	0	0	0	0	350,000
NEW	DCWWTP Solids Processing Analysis	WW	Sullivan	2	0	60,000	0	0	0	60,000
NEW	EDHWWTP Solar	WW	Sullivan	2	250,000	0	0	0	0	250,000
08007E	Wastewater Master Plan and SSMP	WW	Wells	2	40,000	0	0	0	0	40,000
NEW	El Dorado Lift Station Upgrades	WW	Wells	2	475,000	280,000	130,000	0	0	885,000
04013E	DCWWTP Maintenance Building	WW	Sullivan	3	15,000	165,000	0	0	0	180,000
NEW	Wastewater Pipeline Replacement Program	WW			25,000	25,000	25,000	25,000	25,000	125,000
<b>Total Wastewater Projects</b>					<b>6,120,000</b>	<b>5,485,000</b>	<b>1,680,000</b>	<b>1,525,000</b>	<b>1,500,000</b>	<b>16,310,000</b>

### Recycled Water Projects

PROJECT NO.	PROJECT DESCRIPTION	PROG	PM	Priority	2012	2013	2014	2015	2016	2012-2016
10011	Recycled Water System Improvements - Model	RW	Brink	1	20,000	0	0	0	0	20,000
NEW	Recycle Tank Recoating Program	RW	Rice	2	20,000	10,000	200,000	200,000	50,000	480,000
<b>Total Recycled Water Projects</b>					<b>40,000</b>	<b>10,000</b>	<b>200,000</b>	<b>200,000</b>	<b>50,000</b>	<b>500,000</b>



## 2012 - 2016 Capital Improvement Plan Hydroelectric Projects

PROJECT NO.	PROJECT DESCRIPTION	PROG	PM	Priority	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2012-2016 Total
08005H	Spillway 47C	HY	Brink	1	1,550,000	250,000	0	0	0	1,800,000
04005H	Powerhouse Upgrade	HY	Downey	1	15,000	0	0	0	0	15,000
11002	El Dorado Diversion Dam Upgrades	HY	Eymann	1	30,000	810,000	0	0	0	840,000
11003	Caples Lake Dams Regulatory Improvements	HY	Eymann	1	50,000	0	0	0	0	50,000
11004	Lake Aloha Dam Regulatory Improvements	HY	Eymann	1	60,000	210,000	0	0	0	270,000
11005	Silver Lake Dam Regulatory Improvements	HY	Eymann	1	170,000	1,100,000	0	0	0	1,270,000
11023	Echo Conduit Replacement	HY	Eymann	1	10,000	75,000	200,000	3,500,000	0	3,785,000
03011H	Forebay Dam Upgrades	HY	Eymann	1	400,000	400,000	7,000,000	2,000,000	0	9,800,000
07013H	Echo Lake Dams Evaluations	HY	Eymann	1	30,000	0	0	0	0	30,000
NEW	Flume 52A Replacement	HY	Brink	2	0	200,000	0	0	1,000,000	1,200,000
06030H	Bridge Replacement at Camp 2	HY	Eymann	2	800,000	0	0	0	0	800,000
08013H	El Dorado County Hydroelectric Development Plan	HY	Megerdigian	2	20,000	0	0	0	0	20,000
11008	Flume 39-40 Replacement	HY	Noel	2	750,000	0	0	0	0	750,000
11009	Flume 45 Replacement	HY	Noel	2	0	150,000	200,000	0	3,100,000	3,450,000
11037	Flume 3 Replacement	HY	Noel	2	700,000	0	0	0	0	700,000
08003H	Flume 41 Replacement	HY	Noel	2	3,350,000	1,150,000	0	0	0	4,500,000
08004H	Flume 45A and 47 Replacement	HY	Noel	2	0	0	0	750,000	0	750,000
NEW	Canals and Flumes Upgrade	HY	Noel	2	100,000	300,000	500,000	100,000	500,000	1,500,000
NEW	El Dorado Canal Relining Program	HY	Noel	2	0	0	0	0	150,000	150,000
NEW	Flume 42-43 Replacement	HY	Noel	2	200,000	50,000	2,500,000	0	0	2,750,000
NEW	Flume 48 Replacement	HY	Noel	2	0	150,000	150,000	0	0	300,000
NEW	Flume 44 Replacement	HY	Noel	2	25,000	200,000	0	2,500,000	0	2,725,000
NEW	Flume 4 Replacement	HY	Noel	2	0	100,000	0	0	200,000	300,000
NEW	Diversion Dam Fish Screen	HY	Eymann	3	50,000	120,000	0	0	0	170,000
NEW	Penstock Assessment	HY	Eymann	3	0	0	0	50,000	0	50,000
NEW	Alder and Plum Siphon Assessments	HY	Eymann	3	0	0	0	50,000	0	50,000
<b>Total Hydroelectric Projects</b>					<b>8,310,000</b>	<b>5,265,000</b>	<b>10,550,000</b>	<b>8,950,000</b>	<b>4,950,000</b>	<b>38,025,000</b>



## 2012 - 2016 Capital Improvement Plan

### Recreation Projects

PROJECT NO.	PROJECT DESCRIPTION	PROG	PM	Priority	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2012-2016 Total
10002	Hazel Creek Campground Restoration	RE	Jaggers	2	250,000	0	0	0	0	250,000
10013	Vegetation Rehabilitation	RE	Jaggers	2	5,000	5,000	5,000	5,000	5,000	25,000
11006	Sly Park Day Use Parking Improvements	RE	Jaggers	2	50,000	0	0	0	0	50,000
11007	Sly Park Boundary and Border Fencing	RE	Jaggers	2	25,000	0	0	0	0	25,000
09011R	Pinecone Campground Tent Cabins	RE	Jaggers	2	15,000	0	0	0	0	15,000
09022R	Sly Park Master Plan Implementation	RE	Jaggers	2	30,000	0	0	0	0	30,000
NEW	Sly Park Trail Improvements	RE	Jaggers	2	25,000	5,000	5,000	5,000	5,000	45,000
NEW	Sly Park Entrance Improvements	RE	Jaggers	2	100,000	100,000	0	0	0	200,000
NEW	Pinecone Waterline Replacement	RE	Jaggers	2	45,000	0	0	0	0	45,000
<b>Total Recreation Projects</b>					<b>545,000</b>	<b>110,000</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>685,000</b>

### General District Projects

PROJECT NO.	PROJECT DESCRIPTION	PROG	PM	Priority	2012 Planned	2013 Planned	2014 Planned	2015 Planned	2016 Planned	2012-2016 Total
NEW	SCADA Radio Compliance	GD	Abercrombie	1	50,000	0	0	0	0	50,000
NEW	Paint Booth - Sand Blasting Facility	GD	Touey	1	165,000	0	0	0	0	165,000
NEW	2012-14 Cyber Security Enhancements	GD	Eberhard	2	400,000	150,000	15,000	0	0	565,000
NEW	SCADA System Reliability Program	GD	Ranstrom	2	205,000	50,000	200,000	50,000	80,000	585,000
NEW	Business IT Infrastructure Reliability Program	GD	Ranstrom	2	850,000	265,000	470,000	530,000	520,000	2,635,000
NEW	Business Application Software Reliability Program	GD	Ranstrom	2	300,000	300,000	300,000	300,000	1,150,000	2,350,000
11042	IT Business Continuity and Availability	GD	Ranstrom	2	700,000	0	0	0	0	700,000
NEW	2012 Equipment Replacement	GD	Touey	2	100,000	0	0	0	0	100,000
NEW	Business Software Application Enhancement Program	GD	Ranstrom	3	400,000	400,000	400,000	400,000	400,000	2,000,000
<b>Total General District Projects</b>					<b>3,170,000</b>	<b>1,165,000</b>	<b>1,385,000</b>	<b>1,280,000</b>	<b>2,150,000</b>	<b>9,150,000</b>

# FERC Projects



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number: 06019H**  
**Project Name: FERC: C35 Oyster Creek**  
**Project Category: Regulatory Requirements**

**Priority: 1 PM: Eymann Board Approval: 09/26/11**

**Project Description:**

This project is required by Condition 35 of the Settlement Agreement, and the USFS 4(e) Conditions part of the FERC License. The licensee shall be responsible for those portions of the plan that the FS, in cooperation with the licensee, determines to be Project-related by 2011. The District has conducted a channel assessment and prepared a stabilization plan as required by FS for the Oyster Creek channel. The FS and SWRCB are reviewing the proposed plan and the District is awaiting approval. The District revised its plan to meet FS concerns that the original plan is too ground-disturbing. Depending on the final project design, construction would be in 2012 or 2013.

**Basis for Priority:**

EID would not be able to comply with the Settlement Agreement and USFS 4(e) Condition requirements contained in the FERC License.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 154,368	<b>Expenditures through end of year:</b>	\$ 151,917
<b>Spent to Date:</b>	\$ 141,917	<b>2012-2016 Planned Expenditures:</b>	\$ 60,000
<b>Cash flow through end of year:</b>	\$ 10,000	<b>Total Project Estimate:</b>	\$ 211,917
<b>Project Balance</b>	\$ 2,451	<b>Additional Funding Required</b>	\$ 57,549

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 20,000					\$ 20,000
Design	\$ 40,000					\$ 40,000
Construction		*				\$ -
						\$ -
<b>TOTAL</b>	\$ 60,000	*	\$ -	\$ -	\$ -	\$ 60,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$30,501
Water Rates	47%	\$27,048
		\$0
<b>Total</b>	<b>100%</b>	<b>\$57,549</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06020H  
**Project Name:** FERC C36 Esmeralda Creek Restoration  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

Required by the Settlement Agreement, and the USFS 4(e) Condition 36 contained in the FERC License. The Esmeralda channel has been surveyed and a conceptual remediation plan developed. The conceptual plan was approved by FS. The remediation was required to be completed by 2011, however an extension was granted. The design is complete and private property approval has been granted for the work.

**Basis for Priority:**

EID would not be able to comply with the Settlement Agreement and USFS 4(e) Condition requirements contained in the FERC License.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 253,225	<b>Expenditures through end of year:</b>	\$ 208,352
<b>Spent to Date:</b>	\$ 208,352	<b>2012-2016 Planned Expenditures:</b>	\$ 250,000
<b>Cash flow through end of year:</b>		<b>Total Project Estimate:</b>	\$ 458,352
<b>Project Balance</b>	\$ 44,873	<b>Additional Funding Required</b>	\$ 205,127

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 250,000					\$ 250,000
						\$ -
<b>TOTAL</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 250,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$108,717
Water Rates	47%	\$96,410
		\$0
<b>Total</b>	<b>100%</b>	<b>\$205,127</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06021H  
**Project Name:** FERC C37.8 Water Temperature  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Funding is necessary to implement an annual water temperature monitoring program at project reservoirs and stream reaches. The data collected from this monitoring effort will be used to determine if the coldwater beneficial uses are being met in designated project reaches.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Sections 7 and 12 of the Settlement Agreement, USFS 4(e) conditions 37 and 42, and SWRCB Water Quality Certification condition 14.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 138,000	<b>Expenditures through end of year:</b>	\$ 122,796
<b>Spent to Date:</b>	\$ 92,796	<b>2012-2016 Planned Expenditures:</b>	\$ 250,000
<b>Cash flow through end of year:</b>	\$ 30,000	<b>Total Project Estimate:</b>	\$ 372,796
<b>Project Balance</b>	\$ 15,204	<b>Additional Funding Required</b>	\$ 234,796

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Monitoring	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$ 225,000
Reporting	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 25,000
						\$ -
						\$ -
<b>TOTAL</b>	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$18,442
Water Rates	47%	\$16,354
		\$0
<b>Total</b>	<b>100%</b>	<b>\$34,796</b>

**Funding Comments:** Annual monitoring is required until it can be demonstrated that operation of the project reasonably protects the cold freshwater beneficial use as determined by the SWRCB, FS, and ERC.

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06022H  
**Project Name:** FERC: C38.4a Caples Feasibility Study  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Funding is necessary to complete a feasibility study to determine whether the Caples spillway facility and / or Caples Lake main dam outlet works can be redesigned to convey adaptive management pulse flows (up to 600 cfs) into the Caples Creek natural channel. The feasibility study will include a cost estimate for facility modifications.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 8 of the Settlement Agreement, USFS 4(e) conditions 38.4a, and SWRCB Water Quality Certification condition 5.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 141,931	<b>Expenditures through end of year:</b>	\$ 115,841
<b>Spent to Date:</b>	\$ 105,841	<b>2012-2016 Planned Expenditures:</b>	\$ 5,000
<b>Cash flow through end of year:</b>	\$ 10,000	<b>Total Project Estimate:</b>	\$ 120,841
<b>Project Balance</b>	\$ 26,090	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ 5,000
						\$ -
						\$ -
						\$ -
<b>TOTAL</b>	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ 5,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06023H  
**Project Name:** FERC C39 Fish Screens  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Condition 39: Within 6 months of license issuance, the licensee shall develop a plan for screening Carpenter and Alder Creeks for all life stages of trout. The plan shall be approved by the FS and CDFG after consultation with the SWRCB and ERC prior to the licensee's implementing the plan. This is a mandatory requirement of the October 18, 2006 FERC Order Issuing New License. The installation of the Alder Creek Fish Screen was completed in 2011 and this requirement will be satisfied with removal of the Carpenter Creek Diversion Structure in 2012.

**Basis for Priority:**

This project is currently underway to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 303,200	<b>Expenditures through end of year:</b>	\$ 228,015
<b>Spent to Date:</b>	\$ 228,015	<b>2012-2016 Planned Expenditures:</b>	\$ 25,000
<b>Cash flow through end of year:</b>		<b>Total Project Estimate:</b>	\$ 253,015
<b>Project Balance</b>	\$ 75,185	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$25,000				\$ -	\$ 25,000
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 25,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06024H  
**Project Name:** FERC: C40 Gaging Facilities  
**Project Category:** Regulatory Requirements  
**Priority:** 1 **PM:** Mackay **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC license and the Settlement Agreement USFS 4(e) Conditions. Condition 40: The licensee shall, within 1 year after license issuance, develop and file for FERC approval a Streamflow and Reservoir Storage Gaging Plan (gaging plan) that meets United States Geological Survey (USGS) standards. The licensee shall implement the plan upon approval.

Gage improvements completed to date: A-6, A-13, A-24

Gage improvements currently in-progress: A-10, A-51

**To be completed in 2012:** No Name Cr below Diversion (A-50), Bull Cr Diversion (A-52), Ogilby Cr below Diversion (A-53)

**Basis for Priority:**

This project is required by the Project 184 FERC License and is on-going.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 165,000	<b>Expenditures through end of year:</b>	\$ 130,905
<b>Spent to Date:</b>	\$ 115,905	<b>2012-2016 Planned Expenditures:</b>	\$ 60,000
<b>Cash flow through end of year:</b>	\$ 15,000	<b>Total Project Estimate:</b>	\$ 190,905
<b>Project Balance</b>	\$ 34,095	<b>Additional Funding Required</b>	\$ 25,905

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$60,000					\$ 60,000
						\$ -
<b>TOTAL</b>	<b>\$ 60,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 60,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$13,730
Water Rates	47%	\$12,175
		\$0
<b>Total</b>	<b>100%</b>	<b>\$25,905</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06025H  
**Project Name:** FERC: C41 Canal Release Points  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** MacKay      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC license and the Settlement Agreement USFS 4(e) Conditions. Condition 41: The licensee shall, within 1 year after license issuance, develop and file for FERC approval a canal drainage structure and release point plan. The licensee shall implement the plan upon approval.

Scheduled to be completed by 2012 - SW 11  
 Scheduled to be completed by 2017 - SW 3 and SW20 A/B

**BASIS FOR PRIORITY:**

This project is required by the Project 184 FERC License and is on-going.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 29,497
<b>Spent to Date:</b>	\$ 26,997	<b>2012-2016 Planned Expenditures:</b>	\$ 40,000
<b>Cash flow through end of year:</b>	\$ 2,500	<b>Total Project Estimate:</b>	\$ 69,497
<b>Project Balance</b>	\$ 20,503	<b>Additional Funding Required</b>	\$ 19,497

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction					\$ 40,000	\$ 40,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ -	\$ 40,000	\$ 40,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06076H  
**Project Name:** FERC C38.4b Caples Spillway Channel Stabilization  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

This study is a requirement of the FERC license. Geomorphology monitoring conducted in 2009 and 2010 will provide a basis to determine maximum design flow capacity needed for the spillway channel stabilization plan. Design and permitting is planned for 2012 and construction for 2013.

**Basis for Priority:**

Compliance with the FERC license, Section 8 of the Settlement Agreement, USFS 4(e) conditions 38.4b, and SWRCB Water Quality Certification condition 5.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 190,304	<b>Expenditures through end of year:</b>	\$ 113,661
<b>Spent to Date:</b>	\$ 103,661	<b>2012-2016 Planned Expenditures:</b>	\$ 55,000
<b>Cash flow through end of year:</b>	\$ 10,000	<b>Total Project Estimate:</b>	\$ 168,661
<b>Project Balance</b>	\$ 76,643	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 5,000					\$ 5,000
Design	\$ 50,000					\$ 50,000
Construction		*				\$ -
<b>TOTAL</b>	<b>\$ 55,000</b>	<b>*</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 55,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06078H  
**Project Name:** FERC: C50.3 Caples Lake Dam Parking  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Condition 50.3: By 2012, the District must improve the Caples Lake Dam Parking area and shall be reconstructed and upgraded to meet the current FS design standards and the USDA Forest Service Region 5 access standards and the Americans with Disabilities Act. Construct a van-accessible parking space near the toilet, with required markings and signage.

The construction schedule shows that improvements to the Silver Lake East and West Campgrounds and the Caples Lake Dam Parking Project occurring at the same time to realize cost savings due to the close proximity, similarity of the work to be completed, and construction efficiencies. FERC and FS approved the Districts request to extend the project completion date to 2016.

**Basis for Priority:**

This project is required to comply with the FERC License Condition No. 50.3 and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 12,000	<b>Expenditures through end of year:</b>	\$ 840
<b>Spent to Date:</b>	\$ 840	<b>2012-2016 Planned Expenditures:</b>	\$ 440,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 440,840
<b>Project Balance</b>	\$ 11,160	<b>Additional Funding Required</b>	\$ 428,840

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design				\$ 80,000	\$ 360,000	\$ 440,000
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ 80,000	\$ 360,000	\$ 440,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

Project Number: **06079H**  
 Project Name: **FERC: C50.5 Hwy 88 Kiosk**  
 Project Category: **Regulatory Requirements**  
 Priority: **1** PM: **Downey** Board Approval: **09/26/11**

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Condition 50.5: Within 5 years of license issuance, the licensee shall construct an information kiosk to FS specifications, at a location agreed to by the FS. After construction, the licensee shall maintain the kiosk structure to meet FS Region 5 standards as set forth in Condition No. 51.

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
Funded to Date:	\$ 12,000	Expenditures through end of year:	\$ -
Spent to Date:	\$ -	2012-2016 Planned Expenditures:	\$ 25,000
Cash flow through end of year:	\$ -	Total Project Estimate:	\$ 25,000
Project Balance	\$ 12,000	Additional Funding Required	\$ 13,000

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Study/Planning						\$ -
Design						\$ -
Construction	\$25,000					\$ 25,000
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 25,000</b>

Funding Sources	Percentage	2012 Funding Amount
Water FCCs	53%	\$6,890
Water Rates	47%	\$6,110
		\$0
<b>Total</b>	<b>100%</b>	<b>\$13,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

Project Number: **06080H**  
 Project Name: **FERC: C50.6 Martin Meadow Campground**  
 Project Category: **Regulatory Requirements**  
 Priority: **1** PM: **Downey** Board Approval: **09/26/11**

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Condition 50.6: Within 5 years of license issuance, the licensee shall make the following improvement at the Martin Meadows Overflow Camping Area to address recreation impacts: Install barrier rocks to restrict uncontrolled vehicle travel. The FS will make available the barrier rocks from a site identified by the FS.

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
Funded to Date:	\$ 12,000	Expenditures through end of year:	\$ -
Spent to Date:	\$ -	2012-2016 Planned Expenditures:	\$ 25,000
Cash flow through end of year:		Total Project Estimate:	\$ 25,000
Project Balance	\$ 12,000	Additional Funding Required	\$ 13,000

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Study/Planning						\$ -
Design						\$ -
Construction		\$ 25,000				\$ 25,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000

Funding Sources	Percentage	2012 Funding Amount
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06081H  
**Project Name:** FERC: C50.8 Pacific Crest Trail Crossing  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Condition 50.8: Within 5 years, the licensee shall construct a crossing for the Pacific Crest National Scenic Trail across the Echo Conduit, to meet current FS design standards, at a location agreed to by the FS. Construction methods and types have not yet been determined, but may be a pedestrian bridge below Echo Tunnel or a simple graded trail at another location.

FERC and FS approved the Districts request to extend the project completion date to 2016.

**Basis for Priority:**

Project is required by Project 184 license, but the District has some discretion as to when construction occurs.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 12,000	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 140,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 140,000
<b>Project Balance</b>	\$ 12,000	<b>Additional Funding Required</b>	\$ 128,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction			\$ 10,000	\$ 30,000	\$ 100,000	\$ 140,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ 10,000	\$ 30,000	\$ 100,000	\$ 140,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06082H  
**Project Name:** FERC: C50.1 Silver Lake Campground East Re-Construction  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. By 2012 the District must reconstruct the paved surfaces, toilets, and water system at the 62-unit USFS Silver Lake Campground, including upgrade of this facility to meet the current FS design standards and the USDA Forest Service Region 5 accessibility standards requirements of the Americans with Disabilities Act (ADA). The construction schedule shows that improvements to the Silver Lake East and West Campgrounds and the Caples Lake Dam Parking Project occurring at the same time to realize cost savings due to the close proximity, similarity of the work to be completed, and construction efficiencies. FERC and FS approved the Districts request to extend the project completion date to 2016.

**Basis for Priority:**

This project is required to comply with the FERC License Condition No. 50.1 and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 42,135	<b>Expenditures through end of year:</b>	\$ 30,574
<b>Spent to Date:</b>	\$ 30,574	<b>2012-2016 Planned Expenditures:</b>	\$ 1,250,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 1,280,574
<b>Project Balance</b>	\$ 11,561	<b>Additional Funding Required</b>	\$ 1,238,439

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design			\$ 100,000	\$ 150,000		\$ 250,000
Construction					\$ 1,000,000	\$ 1,000,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ 100,000	\$ 150,000	\$ 1,000,000	\$ 1,250,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06086H  
**Project Name:** FERC C33 Lake Aloha Trout Removal  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Funding only necessary in years when a spill occurs over the auxiliary dams at Lake Aloha. If spill occurs, EID is required to manually remove trout from the pools downstream of the auxiliary dams to help reduce potential impacts to mountain yellow-legged frogs by trout predation.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 33, and SWRCB Water Quality Certification condition 4.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 75,000	<b>Expenditures through end of year:</b>	\$ 41,767
<b>Spent to Date:</b>	\$ 29,767	<b>2012-2016 Planned Expenditures:</b>	\$ 12,000
<b>Cash flow through end of year:</b>	\$ 12,000	<b>Total Project Estimate:</b>	\$ 53,767
<b>Project Balance</b>	\$ 33,233	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$12,000	*	*	*	*	\$ 12,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 12,000</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>\$ 12,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** Amphibian surveys also required if Lake Aloha spills; funding for amphibian surveys from CIP # 06089H

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06087H  
**Project Name:** FERC C37.1 Fish Monitoring  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. The objective of this monitoring effort is to evaluate the status of fish populations in selected stream reaches for comparison to the ecological resource objectives to help determine if ecological resource objectives are achievable and being met, as specified in the El Dorado Hydroelectric Project No. 184 Adaptive Management Program.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 37, and SWRCB Water Quality Certification condition 13.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 40,000	<b>Expenditures through end of year:</b>	\$ 105,278
<b>Spent to Date:</b>	\$ 35,278	<b>2012-2016 Planned Expenditures:</b>	\$ 135,000
<b>Cash flow through end of year:</b>	\$ 70,000	<b>Total Project Estimate:</b>	\$ 240,278
<b>Project Balance</b>	\$ (65,278)	<b>Additional Funding Required</b>	\$ 200,278

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Monitoring	\$ 55,000				\$ 60,000	\$ 115,000
Reporting	\$ 10,000				\$ 10,000	\$ 20,000
						\$ -
<b>TOTAL</b>	\$ 65,000	\$ -	\$ -	\$ -	\$ 70,000	\$ 135,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$69,047
Water Rates	47%	\$61,231
		\$0
<b>Total</b>	<b>100%</b>	<b>\$130,278</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06088H  
**Project Name:** FERC: C37.2 Macroinvertebrate Monitoring  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. The objective of this monitoring effort is to evaluate the status of macroinvertebrates in selected stream reaches for comparison to the ecological resource objectives to help determine if ecological resource objectives are achievable and being met, as specified in the El Dorado Hydroelectric Project No. 184 Adaptive Management Program.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 37, and SWRCB Water Quality Certification condition 13.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 15,000	<b>Expenditures through end of year:</b>	\$ 58,843
<b>Spent to Date:</b>	\$ 3,843	<b>2012-2016 Planned Expenditures:</b>	\$ 110,000
<b>Cash flow through end of year:</b>	\$ 55,000	<b>Total Project Estimate:</b>	\$ 168,843
<b>Project Balance</b>	\$ (43,843)	<b>Additional Funding Required</b>	\$ 153,843

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Monitoring	\$ 35,000				\$ 35,000	\$ 70,000
Reporting	\$ 20,000				\$ 20,000	\$ 40,000
						\$ -
						\$ -
<b>TOTAL</b>	\$ 55,000	\$ -	\$ -	\$ -	\$ 55,000	\$ 110,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$52,387
Water Rates	47%	\$46,456
		\$0
<b>Total</b>	<b>100%</b>	<b>\$98,843</b>

**Funding Comments:**



**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06089H  
**Project Name:** FERC: C37.3 Amphibian Monitoring  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Amphibian surveys are required June through September if at any time flows in the South Fork of the American River (SFAR) are 100 cfs or less and the diversion into the canal causes the flow in the South Fork to change 50 cfs or more in 1 day. The objective of these surveys is to assess the effects of flow fluctuations on foothill yellow-legged frog egg masses and tadpoles. Amphibian surveys for mountain yellow-legged frog and foothill yellow-legged frog are also required every five years at Project reservoirs and stream reaches as part of the Project 184 monitoring program. Amphibian surveys are also required in years when a spill occurs over the auxiliary dams at Lake Aloha. If spill occurs, EID is required to survey for mountain yellow-legged frogs in the pools downstream of the auxiliary dams.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 37, and SWRCB Water Quality Certification condition 13.

**Project Financial Summary:**

<b>Funded to Date:</b>	\$ 203,000	<b>Expenditures through end of year:</b>	\$ 221,453
<b>Spent to Date:</b>	\$ 123,453	<b>2012-2016 Planned Expenditures:</b>	\$ 112,000
<b>Cash flow through end of year:</b>	\$ 98,000	<b>Total Project Estimate:</b>	\$ 333,453
<b>Project Balance</b>	\$ (18,453)	<b>Additional Funding Required</b>	\$ 130,453

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Monitoring					\$ 85,000	\$ 85,000
SFAR flow fluctuations	\$ 5,000	*	*	*	*	\$ 5,000
Lake Aloha monitoring	\$ 12,000	*	*	*	*	\$ 12,000
Reporting	\$ 10,000					\$ 10,000
<b>TOTAL</b>	<b>\$ 27,000</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>\$ 85,000</b>	<b>\$ 112,000</b>

Funding Sources	Percentage	2012 Funding Amount
Water FCCs	53%	\$24,090
Water Rates	47%	\$21,363
		\$0
<b>Total</b>	<b>100%</b>	<b>\$45,453</b>

**Funding Comments:** Flow fluctuation monitoring only required if license criteria is triggered. Monitoring at Lake Aloha is only necessary in years when a spill occurs over the auxiliary dams.

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06090H  
**Project Name:** FERC: C37.4 Riparian Species Composition  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. The objective of this monitoring effort is to evaluate riparian species composition at selected stream reaches for comparison to the ecological resource objectives to help determine if ecological resource objectives are achievable and being met, as specified in the El Dorado Hydroelectric Project No. 184 Adaptive Management Program.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 37, and SWRCB Water Quality Certification condition 13.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 30,000	<b>Expenditures through end of year:</b>	\$ 19,414
<b>Spent to Date:</b>	\$ 2,414	<b>2012-2016 Planned Expenditures:</b>	\$ 17,000
<b>Cash flow through end of year:</b>	\$ 17,000	<b>Total Project Estimate:</b>	\$ 36,414
<b>Project Balance</b>	\$ 10,586	<b>Additional Funding Required</b>	\$ 6,414

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Monitoring					\$ 17,000	\$ 17,000
Reporting						\$ -
						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ -	\$ 17,000	\$ 17,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06091H  
**Project Name:** FERC: C37.5 Riparian Vegetation Recruitment  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. The objective of this monitoring effort is to evaluate riparian vegetation recruitment at selected stream reaches for comparison to the ecological resource objectives to help determine if ecological resource objectives are achievable and being met, as specified in the El Dorado Hydroelectric Project No. 184 Adaptive Management Program.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 37, and SWRCB Water Quality Certification condition 13.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 10,000	<b>Expenditures through end of year:</b>	\$ 9,504
<b>Spent to Date:</b>	\$ 1,504	<b>2012-2016 Planned Expenditures:</b>	\$ 8,000
<b>Cash flow through end of year:</b>	\$ 8,000	<b>Total Project Estimate:</b>	\$ 17,504
<b>Project Balance</b>	\$ 496	<b>Additional Funding Required</b>	\$ 7,504

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Monitoring					\$ 8,000	\$ 8,000
Reporting						\$ -
						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ -	\$ 8,000	\$ 8,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** Monitoring 2011, report 2012

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06092H  
**Project Name:** FERC: C37.7 Geomorphology Evaluation  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. The objective of this monitoring effort is to monitor representative stream channel areas for comparison to the ecological resource objectives to help determine if ecological resource objectives are achievable and being met, as specified in the El Dorado Hydroelectric Project No. 184 Adaptive Management Program.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 37, and SWRCB Water Quality Certification condition 13.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 10,000	<b>Expenditures through end of year:</b>	\$ 106,322
<b>Spent to Date:</b>	\$ 8,322	<b>2012-2016 Planned Expenditures:</b>	\$ 110,000
<b>Cash flow through end of year:</b>	\$ 98,000	<b>Total Project Estimate:</b>	\$ 216,322
<b>Project Balance</b>	\$ (96,322)	<b>Additional Funding Required</b>	\$ 206,322

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Monitoring					\$ 100,000	\$ 100,000
Reporting	\$ 10,000					\$ 10,000
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 10,000	\$ -	\$ -	\$ -	\$ 100,000	\$ 110,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$56,351
Water Rates	47%	\$49,971
		\$0
<b>Total</b>	<b>100%</b>	<b>\$106,322</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 06096H  
**Project Name:** FERC: C55 Heritage Resources  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Funding is necessary to complete and implement the Heritage Properties Management Plan (HPMP). The HPMP provides management protocols and mitigation measures for the ongoing protection of archaeological resources located within the FERC boundary.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license and USFS 4(e) conditions 55 and 56.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 274,580	<b>Expenditures through end of year:</b>	\$ 229,386
<b>Spent to Date:</b>	\$ 204,386	<b>2012-2016 Planned Expenditures:</b>	\$ 110,000
<b>Cash flow through end of year:</b>	\$ 25,000	<b>Total Project Estimate:</b>	\$ 339,386
<b>Project Balance</b>	\$ 45,194	<b>Additional Funding Required</b>	\$ 64,806

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$10,000	\$25,000	\$25,000	\$25,000	\$25,000	\$ 110,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 10,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 110,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** Finalize HPMP and implement upon approval

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 06097H  
**Project Name:** FERC: C59 Facility Management Plan  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Downey      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Condition 59: Within 1 year of license issuance, the licensee shall file with FERC a Facility Management Plan that is approved by the FS. The licensee shall implement the plan upon approval. Every 5 years, the licensee shall prepare a 5-year plan that will identify the maintenance, reconstruction, and removal needs for Project facilities within the FERC boundary and located on Forest Service property. The licensee shall file the plan with FERC after approval by the FS. Items remaining to be done include: remove buildings at SW 20A boathouse; and development of a plan for the structures across from the powerhouse, the winch house at the surge chamber, and the water tank shed.

**Basis for Priority:**

Project is required by Project 184 license and is on-going.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 70,000	<b>Expenditures through end of year:</b>	\$ 60,442
<b>Spent to Date:</b>	\$ 35,442	<b>2012-2016 Planned Expenditures:</b>	\$ 125,000
<b>Cash flow through end of year:</b>	\$ 25,000	<b>Total Project Estimate:</b>	\$ 185,442
<b>Project Balance</b>	\$ 9,558	<b>Additional Funding Required</b>	\$ 115,442

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning					\$ 10,000	\$ 10,000
Design	\$ 15,000					\$ 15,000
Construction		\$ 100,000				\$ 100,000
						\$ -
<b>TOTAL</b>	\$ 15,000	\$ 100,000	\$ -	\$ -	\$ 10,000	\$ 125,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$2,884
Water Rates	47%	\$2,558
		\$0
<b>Total</b>	<b>100%</b>	<b>\$5,442</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number: 06098H**  
**Project Name: FERC: C46 thru C49 Recreation Resource Mgmt**  
**Project Category: Regulatory Requirements**

**Priority: 1 PM: Jagers Board Approval: 09/26/11**

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Conditions 46-49: Condition No. 46 – Implementation Plan. A recreation implementation plan shall be developed by the licensee in coordination with the FS within 6 months of license issuance. Condition No. 47 - Recreation Survey. The licensee shall conduct a Recreational Survey and prepare a Report on Recreational Resources that is approved by the FS every 6 years from the date of license issuance. Condition No. 48 – Forest Service Liaison. The FS and the licensee shall each provide an individual for liaison whenever planning or construction of recreation facilities, other major Project improvements, and maintenance activities are taking place within the National Forest. Condition No. 49 - Review of Recreation Developments. The FS and the licensee shall meet at least every 6 years to review all recreation facilities and areas associated with the Project and to agree upon necessary maintenance, rehabilitation, construction, and reconstruction work needed and its timing, as described in Conditions No. 49 and 50. Following the review, the licensee shall develop a 6-year schedule for maintenance, rehabilitation, and reconstruction.

This is a mandatory requirement of the October 18, 2006 FERC Order Issuing New License

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 74,000	<b>Expenditures through end of year:</b>	\$ 56,712
<b>Spent to Date:</b>	\$ 56,712	<b>2012-2016 Planned Expenditures:</b>	\$ 100,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 156,712
<b>Project Balance</b>	\$ 17,288	<b>Additional Funding Required</b>	\$ 82,712

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$ 100,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 100,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$1,437
Water Rates	47%	\$1,275
		\$0
<b>Total</b>	<b>100%</b>	<b>\$2,712</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

**Project Number:** 07003H  
**Project Name:** FERC: C37.9 Water Quality  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Funding is necessary to implement the water quality monitoring program at project reservoirs and stream reaches. The data collected from this monitoring effort will be used to characterize water quality under current project operations and help determine if applicable water quality objectives/criteria are met and whether designated beneficial uses are protected.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 7 of the Settlement Agreement, USFS 4(e) conditions 37, and SWRCB Water Quality Certification condition 13.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 300,000	<b>Expenditures through end of year:</b>	\$ 192,623
<b>Spent to Date:</b>	\$ 192,623	<b>2012-2016 Planned Expenditures:</b>	\$ 100,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 292,623
<b>Project Balance</b>	\$ 107,377	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Monitoring	\$90,000		*		*	\$ 90,000
Reporting		\$ 10,000		*		\$ 10,000
						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 90,000</b>	<b>\$ 10,000</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>\$ 100,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** Monitoring in 2014 depends on agency review of first 3 years of monitoring data (2008, 2010, and 2012).



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 07005H  
**Project Name:** FERC: C51.3 RM Echo Trailhead  
**Project Category:** Regulatory Requirements  
**Priority:** 1 **PM:** Jagers **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Conditions 51.3: The licensee shall be responsible for the following annual maintenance items for USFS Property on USFS Lands.

- a. Toilet pumping.
- b. Trash removal/litter pick-up within the site.

This is a mandatory requirement of the October 18, 2006 FERC Order Issuing New License

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 30,000	<b>Expenditures through end of year:</b>	\$ 4,633
<b>Spent to Date:</b>	\$ 4,633	<b>2012-2016 Planned Expenditures:</b>	\$ 70,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 74,633
<b>Project Balance</b>	\$ 25,367	<b>Additional Funding Required</b>	\$ 44,633

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$5,000	\$5,000	\$5,000	\$5,000	\$50,000	\$ 70,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 50,000	\$ 70,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number: 07006H**  
**Project Name: FERC: C51.5 and C51.7 RM USFS Payments**  
**Project Category: Regulatory Requirements**

**Priority: 1 PM: Jagers Board Approval: 09/26/11**

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Conditions 51.5 and C51.7: (5.) Special Use Administration Funding: The licensee shall annually pay, by October 1, the amount of \$4,800 (year 2002 cost basis) to provide for performing monitoring and permit compliance assurance for the campground concessionaire special use permits at Caples Lake Campground and Silver Lake East Campground. The costs shall be escalated based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP). (7.) Dispersed Area Patrol Funding on Lands Affected by the Project: The licensee shall annually pay, by October 1, \$25,000 (year 2002 cost basis). The cost shall be escalated based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP). These funds are to provide for patrol and operation of non-concessionaire developed and dispersed recreation facilities, as well as trails and other locations utilized by visitors to the Project, within and adjacent to the Project boundary. The licensee shall annually provide a boat and operator at least twice each season (time to be determined by mutual agreement between the licensee and the FS) on Caples Lake and Silver Lake to share with the FS in policing the shoreline along Silver Lake and Caples Lake, and to clean up litter.

This is a mandatory requirement of the October 18, 2006 FERC Order Issuing New License

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 181,718	<b>Expenditures through end of year:</b>	\$ 173,836
<b>Spent to Date:</b>	\$ 173,836	<b>2012-2016 Planned Expenditures:</b>	\$ 212,365
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 386,201
<b>Project Balance</b>	\$ 7,882	<b>Additional Funding Required</b>	\$ 204,483

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020	\$ 212,365
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 40,000</b>	<b>\$ 41,200</b>	<b>\$ 42,436</b>	<b>\$ 43,709</b>	<b>\$ 45,020</b>	<b>\$ 212,365</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$17,023
Water Rates	47%	\$15,095
		\$0
<b>Total</b>	<b>100%</b>	<b>\$32,118</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 07008H  
**Project Name:** FERC: C51.8 Silver Lake Campgrounds West Improvements  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License Settlement Agreement, and the USFS 4(e) Conditions, Condition 51.8: the District shall reconstruct the EID Silver Lake Campground, or equivalent location into compliance with accessibility standards for the Americans with Disabilities Act (ADA). Within 5 years of license issuance, the licensee shall bring the Silver Lake East recreation facilities up to Forest Service standards and ADA compliance. The construction schedule shows the improvements to the Silver Lake West Campground and the FERC:C50 Caples Lake Dam Parking Project occurring at the same time to realize cost savings due to the close proximity and similarity of the work to be completed and construction efficiencies. FERC and FS approved the Districts request to extend the project completion date to 2016.

**Basis for Priority:**

This project is required to comply with the FERC License Condition No. 51.8 and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 19,499
<b>Spent to Date:</b>	\$ 19,499	<b>2012-2016 Planned Expenditures:</b>	\$ 1,250,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 1,269,499
<b>Project Balance</b>	\$ 30,501	<b>Additional Funding Required</b>	\$ 1,219,499

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design			\$ 100,000	\$ 150,000		\$ 250,000
Construction					\$ 1,000,000	\$ 1,000,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ 100,000	\$ 150,000	\$ 1,000,000	\$ 1,250,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 07009H  
**Project Name:** FERC: C51.8 RM Woods Creek Fishing Access  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Conditions 51.8: Licensee Recreation Sites: Within 10 years of license issuance, the licensee shall bring the Ferguson Point, Sandy Cove, Woods Creek Fishing Access, and Silver Lake West recreation facilities or equivalent locations into compliance with accessibility standards for the Americans with Disabilities Act. These facilities, along with the Silver Lake Boat Ramp, shall continue to be operated and maintained by the licensee throughout the term of the license.

Woods Creek was erroneously listed in the license as EID Property, however this misstatement does not relieve EID from the obligation to maintain this facility.

This is a mandatory requirement of the October 18, 2006 FERC Order Issuing New License

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 24,500	<b>Expenditures through end of year:</b>	\$ 19,048
<b>Spent to Date:</b>	\$ 19,048	<b>2012-2016 Planned Expenditures:</b>	\$ 20,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 39,048
<b>Project Balance</b>	\$ 5,452	<b>Additional Funding Required</b>	\$ 14,548

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$5,000	\$5,000	\$5,000	\$5,000		\$ 20,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ -	\$ 20,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 07010H  
**Project Name:** FERC: C15 Pesticide Use  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Funding is requested to implement the integrated pest management plan (IPMP). The IPMP addresses pesticide use at EID facilities within the jurisdiction of the EI Dorado National Forest (ENF) and Lake Tahoe Basin Management Unit (LTBMU).

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license and USFS 4(e) condition 15.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 315,000	<b>Expenditures through end of year:</b>	\$ 328,533
<b>Spent to Date:</b>	\$ 278,533	<b>2012-2016 Planned Expenditures:</b>	\$ 250,000
<b>Cash flow through end of year:</b>	\$ 50,000	<b>Total Project Estimate:</b>	\$ 578,533
<b>Project Balance</b>	\$ (13,533)	<b>Additional Funding Required</b>	\$ 263,533

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Implementation	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$ 250,000
						\$ -
						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$33,672
Water Rates	47%	\$29,861
		\$0
<b>Total</b>	<b>100%</b>	<b>\$63,533</b>

**Funding Comments:**

Annual implementation requirements; costs may fluctuate annually depending on treatment locations

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 07011H  
**Project Name:** FERC: C38 Adaptive Mgmt Program  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Deason      **Board Approval:** 09/26/11

**Project Description:**

Mandatory requirement of the FERC license. Funding is requested for staff time to implement the adaptive management program (Condition 38) of the FERC license. This program requires coordination with the Ecological Resources Committee (ERC), implementation of the resource monitoring program, and evaluation of monitoring results to determine if resource objectives are achievable and being met.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 14 of the Settlement Agreement, and USFS 4(e) condition 38.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 350,000	<b>Expenditures through end of year:</b>	\$ 331,703
<b>Spent to Date:</b>	\$ 291,703	<b>2012-2016 Planned Expenditures:</b>	\$ 375,000
<b>Cash flow through end of year:</b>	\$ 40,000	<b>Total Project Estimate:</b>	\$ 706,703
<b>Project Balance</b>	\$ 18,297	<b>Additional Funding Required</b>	\$ 356,703

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Implementation	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$ 375,000
						\$ -
						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 375,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$30,053
Water Rates	47%	\$26,650
		\$0
<b>Total</b>	<b>100%</b>	<b>\$56,703</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **FERC**

Project Number: **07030H**  
 Project Name: **FERC: C57 Transportation System Management Plan**  
 Project Category: **Regulatory Requirements**  
 Priority: **1** PM: **Downey** Board Approval: **09/26/11**

**Project Description:**

Condition 57 states within 1 year of license issuance, the licensee shall file with FERC a transportation system management plan that is approved by the FS for roads on or affecting National Forest System lands. The plan shall establish the level of licensee responsibility for project-related roads. The licensee shall have primary responsibility for non-system roads and for maintenance level 1 and 2 roads. The plan has been prepared and approved by the FS. Implementation of the plan is now underway.

**Basis for Priority:**

Project is required by Project 184 license and is on-going.

<b>Project Financial Summary:</b>			
Funded to Date:	\$ 50,000	Expenditures through end of year:	\$ 105,079
Spent to Date:	\$ 30,079	2012-2016 Planned Expenditures:	\$ 20,000
Cash flow through end of year:	\$ 75,000	Total Project Estimate:	\$ 125,079
Project Balance	\$ (55,079)	Additional Funding Required	\$ 75,079

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Study/Planning	\$ 10,000				\$ 10,000	\$ 20,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 10,000	\$ -	\$ -	\$ -	\$ 10,000	\$ 20,000

Funding Sources	Percentage	2012 Funding Amount
Water FCCs	53%	\$34,492
Water Rates	47%	\$30,587
		\$0
<b>Total</b>	<b>100%</b>	<b>\$65,079</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number: 08025H**  
**Project Name: FERC C44 Noxious Weed Implementation**  
**Project Category: Regulatory Requirements**

**Priority: 1 PM: Deason Board Approval: 09/26/11**

**Project Description:**

Mandatory requirement of the FERC license. Funding is requested to implement the noxious weed plan for the prevention and control of noxious weeds at project facilities.

**Basis for Priority:**

If unfunded, EID would be out of compliance with the FERC license, Section 8 of the Settlement Agreement, and USFS 4(e) condition 44.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 107,828	<b>Expenditures through end of year:</b>	\$ 100,100
<b>Spent to Date:</b>	\$ 75,100	<b>2012-2016 Planned Expenditures:</b>	\$ 150,000
<b>Cash flow through end of year:</b>	\$ 25,000	<b>Total Project Estimate:</b>	\$ 250,100
<b>Project Balance</b>	\$ 7,728	<b>Additional Funding Required</b>	\$ 142,272

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Implementation	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$ 125,000
Reporting	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 25,000
						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 30,000</b>	<b>\$ 30,000</b>	<b>\$ 30,000</b>	<b>\$ 30,000</b>	<b>\$ 30,000</b>	<b>\$ 150,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Power Revenues	100%	\$22,272
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$22,272</b>

Funding Comments:



**2011 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** 10007  
**Project Name:** FERC C51.2 RM Caples Boat Launch  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. Condition 51.8: Within 10 years of license issuance, the licensee shall bring the Ferguson Point, Sandy Cove, Woods Creek Fishing Access, and Silver Lake West recreation facilities or equivalent locations into compliance with accessibility standards for the Americans with Disabilities Act. These facilities, along with the Silver Lake Boat Ramp, shall continue to be operated and maintained by the licensee throughout the term of the license.

This is a mandatory requirement of the October 18, 2006 FERC Order Issuing New License

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 70,000	<b>Expenditures through end of year:</b>	\$ 43,323
<b>Spent to Date:</b>	\$ 43,323	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 93,323
<b>Project Balance</b>	\$ 26,677	<b>Additional Funding Required</b>	\$ 23,323

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$ 50,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: FERC**

**Project Number:** NEW  
**Project Name:** FERC: C50.2 CaplesLake Campground Re-Construction  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

Required by the new FERC License, Settlement Agreement, and the USFS 4(e) Conditions. By 2012 the District must reconstruct the paved surfaces, toilets, and water system at the 36-unit USFS Caples Lake Campground, including upgrade of this facility to meet the current FS design standards and the USDA Forest Service Region 5 accessibility standards requirements of the Americans with Disabilities Act (ADA). The construction schedule shows that improvements to the Caples Lake Campground and the Caples Lake Dam Parking Project occurring at the same time to realize cost savings due to the close proximity, similarity of the work to be completed, and construction efficiencies. FERC and FS approved the Districts request to extend the project completion date to 2016.

**Basis for Priority:**

This project is required to comply with the FERC License Condition No. 50.1 and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 42,135	<b>Expenditures through end of year:</b>	\$ 30,574
<b>Spent to Date:</b>	\$ 30,574	<b>2012-2016 Planned Expenditures:</b>	\$ 1,250,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 1,280,574
<b>Project Balance</b>	\$ 11,561	<b>Additional Funding Required</b>	\$ 1,238,439

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design			\$ 100,000	\$ 150,000		\$ 250,000
Construction					\$ 1,000,000	\$ 1,000,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ 100,000	\$ 150,000	\$ 1,000,000	\$ 1,250,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

# Water Projects

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 00006E  
**Project Name:** Rediversion of Ditch Water Rights  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Cumpston      **Board Approval:** 09/26/11

**Project Description:**

The District has transferred four water rights associated with historical ditch operations and facilities to Folsom Reservoir, and executed a long-term Warren Act Contract with USBR for their use. Therefore, the District may now consider the abandonment or disposition of the ditch alignments and facilities, in accordance with Board direction given in 2003.

Funding in 2012 is to conduct legal research and begin planning any needed field studies or environmental work for this decision. Subsequent-year funding represents anticipated decommissioning costs.

**Basis for Priority:**

Unused ditch facilities pose potential liability risks to the District and are likely surplus to the District's needs.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 473,836	<b>Expenditures through end of year:</b>	\$ 472,110
<b>Spent to Date:</b>	\$ 471,610	<b>2012-2016 Planned Expenditures:</b>	\$ 120,000
<b>Cash flow through end of year:</b>	\$ 500	<b>Total Project Estimate:</b>	\$ 592,110
<b>Project Balance</b>	\$ 1,726	<b>Additional Funding Required</b>	\$ 118,274

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$20,000					\$ 20,000
Construction		\$50,000	\$50,000			\$ 100,000
						\$ -
<b>TOTAL</b>	<b>\$ 20,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 120,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	100%	\$18,274
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$18,274</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 03006E  
**Project Name:** Sly Park Intertie Lining  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

The Sly Park Intertie is a key component in alleviating shortages during drought conditions and provides operational flexibility between the Reservoir A and Reservoir 1 water treatment facilities. This project includes lining approximately 3.4 miles of 20-inch waterline. The existing waterline was constructed on a fast-track basis in 1977-78 with a bare steel interior that is now corroded. Preliminary design of the project was undertaken in 2004 to identify scope and potential costs. Design and construction has been deferred to delay expenses and is now planned for 2014-2015. The project will extend the life of the pipeline and provide the District greater reliability and operational flexibility to convey water between Reservoir 1 and Reservoir A. Lining the Sly Park Intertie will reduce pipe friction, reduce power costs and increase water delivery efficiency.

**Basis for Priority:**

Necessary to ensure continued water supply reliability as continuing corrosion degradation will eventually lead to failures of the pipeline.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 500,000	<b>Expenditures through end of year:</b>	\$ 211,520
<b>Spent to Date:</b>	\$ 211,520	<b>2012-2016 Planned Expenditures:</b>	\$ 3,150,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 3,361,520
<b>Project Balance</b>	\$ 288,480	<b>Additional Funding Required</b>	\$ 2,861,520

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning		\$ 50,000				\$ 50,000
Design			\$100,000			\$ 100,000
Construction				\$3,000,000		\$ 3,000,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 50,000	\$ 100,000	\$ 3,000,000	\$ -	\$ 3,150,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** The project extends the life of a facility and restores the intended design capacity, therefore project is funded by 100% water rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 04008E  
**Project Name:** Highway 49 Intertie Improvements - (DSP)  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1 **PM:** Sullivan **Board Approval:** 09/26/11

**Project Description:**

The Highway 49 Intertie serves as an important means to transmit water from the northern El Dorado Main (EDM) system to the southern Diamond Springs Main (DSM) system. The Highway 49 Intertie is mostly comprised of 12" waterline, however a segment of the Intertie is 6" and 8" diameter. This reduction in pipe diameter creates a bottleneck that significantly reduces the capacity of the Intertie. This project replaces the bottleneck in the Highway 49 Intertie to improve the flow of water through the transmission system. The project involves the replacement of approximately 2,000 ft of 6-inch waterline with a new 12-inch waterline in Highway 49 near Diamond Springs. Increasing water demands require increased transmission capacity to provide adequate service. The Highway 49 Intertie is a crucial transmission main used to supplement the DSM during high flow periods. Increasing the capacity of the line will improve the reliability and redundancy of the overall transmission system. The project schedule needs to be coordinated with, and completed prior to the DOT/Caltrans Diamond Springs Parkway improvements which are currently anticipated in 2014.

**Basis for Priority:**

Limited system reliability and transmission capacity, with increased risk of water outages in the event of line breaks. Project will be scheduled by DOT work requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 50,000
<b>Spent to Date:</b>	\$ 31,144	<b>2012-2016 Planned Expenditures:</b>	\$ 360,000
<b>Cash flow through end of year:</b>	\$ 18,856	<b>Total Project Estimate:</b>	\$ 410,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 360,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design		\$60,000				\$ 60,000
Construction Costs			\$300,000			\$ 300,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 60,000	\$ 300,000	\$ -	\$ -	\$ 360,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	50%	\$0
Water rates	50%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** This project increases transmission capacity and improves reliability of the existing water transmission system, therefore funding is split between water FCCs and rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number: 06004G**  
**Project Name: SMUD / El Dorado Agreement Water Rights**  
**Project Category: Regulatory Requirements**

**Priority: 1 PM: Cumpston Board Approval: 09/26/11**

**Project Description:**

The Sacramento Municipal Utility District and El Dorado County interests, including EID, signed an agreement that allows for the use of SMUD's UARP reservoirs for county water storage. The agreement did not include water rights. The transfer of City of Sacramento's or related water rights is the most logical source and application has been made to the SWRCB for that change. The SMUD/El Dorado Agreement provides EID with 30,000 acre feet of storage annually up to 2030. Thereafter, 40,000 acre feet of storage annually is provided. Additionally the agreement allows for the banking of up to 15,000 acre feet for drought carryover storage in dry year conditions.

EID is a party to a cost share agreement with the El Dorado Water and Power Authority (EDWPA) to pursue the water rights for the SMUD/El Dorado Agreement. Projected annual costs under this agreement are \$225,000, plus \$10,000 in internal staff costs. Existing fund balances for this project at EDWPA may reduce the 2012 costs. Any costs associated with one-time acquisition of up to 15,000 acre-feet of drought storage are not included in this request, although efforts to do so are ongoing, because of the uncertain timing and cost of such an

**Basis for Priority:**

The Board of Directors approved the EDWPA cost share agreement in 2007 and its commitment of funding (2007 - 2014)..

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 1,910,000	<b>Expenditures through end of year:</b>	\$ 1,870,003
<b>Spent to Date:</b>	\$ 1,865,003	<b>2012-2016 Planned Expenditures:</b>	\$ 705,000
<b>Cash flow through end of year:</b>	\$ 5,000	<b>Total Project Estimate:</b>	\$ 2,575,003
<b>Project Balance</b>	\$ 39,997	<b>Additional Funding Required</b>	\$ 665,003

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$235,000	\$235,000	\$235,000	\$ -		\$ 705,000
Design						\$ -
Construction						\$ -
15,000 af acquisition						\$ -
<b>TOTAL</b>	<b>\$ 235,000</b>	<b>\$ 235,000</b>	<b>\$ 235,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 705,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	100%	\$195,003
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$195,003</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 06069E  
**Project Name:** Outingdale WTP Improvements  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

The project involves the evaluation of the Outingdale water treatment plant water diversion facilities for compliance with existing and future regulations and identification of capital improvements. The evaluation will include the permitting process to upgrade the existing raw water diversion facilities. Planning an upgrade of the plant SCADA system will also be included.

**Basis for Priority:**

CDPH has noted various reliability concerns with the water treatment plant.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 50,000
<b>Spent to Date:</b>	\$ 11,076	<b>2012-2016 Planned Expenditures:</b>	\$ 25,000
<b>Cash flow through end of year:</b>	\$ 38,924	<b>Total Project Estimate:</b>	\$ 75,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 25,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning		\$ 25,000				\$ 25,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** The project at this time is replacement and upgrade of an existing facility with no planned increase in capacity, therefore funding is 100% water rates. SRF funding may be available.



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 07033E  
**Project Name:** Sly Park Dams Evaluation  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

DSOD requires that the District evaluate Sly Park Dams to determine if a "Finding of Safety" (FOS) can be made. The District submitted the FOS report in March 2008 determining that the dams are safe for unrestricted use. EID is waiting for DSOD to complete their review of the FOS report. DSOD agrees with the FOS report and requires that new piezometers be installed in the Main Dam and the Auxiliary Dam. Staff is working on a piezometer installation plan.

**Basis for Priority:**

Non-compliance with DSOD requirements, thus no certification issued.

**Project Financial Summary:**

<b>Funded to Date:</b>	\$ 120,000	<b>Expenditures through end of year:</b>	\$ 110,893
<b>Spent to Date:</b>	\$ 100,893	<b>2012-2016 Planned Expenditures:</b>	\$ 150,000
<b>Cash flow through end of year:</b>	\$ 10,000	<b>Total Project Estimate:</b>	\$ 260,893
<b>Project Balance</b>	\$ 9,107	<b>Additional Funding Required</b>	\$ 140,893

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Study/Planning						\$ -
Design	\$ 10,000					\$ 10,000
Construction		\$ 140,000				\$ 140,000
						\$ -
<b>TOTAL</b>	\$ 10,000	\$ 140,000	\$ -	\$ -	\$ -	\$ 150,000

Funding Sources	Percentage	2012 Funding Amount
Water Rates	100%	\$893
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$893</b>

**Funding Comments:** This project is an evaluation of an existing facility for compliance with regulatory requirements, therefore funding is 100% water rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 08029E  
**Project Name:** GHI Relocation at Tennessee Creek  
**Project Category:** State/County Road Projects  
**Priority:** 1 **PM:** Noel **Board Approval:** 09/26/11

**Project Description:**

El Dorado County Department of Transportation (DOT) is replacing the Tennessee Creek Bridge, which includes widening and realigning Green Valley Road between Kenworth Drive and Rose Springs Lake. Approximately 940 feet of the Gold Hill Intertie (GHI) and a 6-inch distribution pipeline must be removed and replaced within the realigned roadway due to grade conflicts. DOT and the District have entered into a reimbursement agreement to share the cost of relocating the two waterlines. The entire length of the 6-inch distribution pipeline and 300 linear feet of the GHI will be paid for by DOT because the District has prior land rights. Approximately 640 linear feet of the GHI will be paid by the District because it is located within the county right-of-way.

**Basis for Priority:**

El Dorado County DOT bridge replacement project requires that District facilities must be relocated at District expense to maintain water service to our existing customers. The project is currently under construction.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 387,064	<b>Expenditures through end of year:</b>	\$ 330,450
<b>Spent to Date:</b>	\$ 70,450	<b>2012-2016 Planned Expenditures:</b>	\$ 80,000
<b>Cash flow through end of year:</b>	\$ 260,000	<b>Total Project Estimate:</b>	\$ 410,450
<b>Project Balance</b>	\$ 56,614	<b>Additional Funding Required</b>	\$ 23,386

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 80,000					\$ 80,000
						\$ -
<b>TOTAL</b>	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ 80,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$23,386
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$23,386</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 09006E  
**Project Name:** Blakeley Reservoir Improvements  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

Annual cycling of the outlet works at Blakeley reservoir are required by DSOD, and by best dam safety management practices. The channel downstream of the outlet works has not been maintained as it is part of the unused ditch system and is accordingly no longer adequate to convey normal operational releases. ROV inspections in 2010 found deficiencies in the outlet pipe that require remediation as well. In order to cycle the release valve without conveying significant volumes of water, a downstream valve and slip lining of the outlet conduit may be required.

**Basis for Priority:**

The remediation is required by DSOD in order to safely convey outlet works discharges.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 43,815
<b>Spent to Date:</b>	\$ 39,815	<b>2012-2016 Planned Expenditures:</b>	\$ 75,000
<b>Cash flow through end of year:</b>	\$ 4,000	<b>Total Project Estimate:</b>	\$ 118,815
<b>Project Balance</b>	\$ 6,185	<b>Additional Funding Required</b>	\$ 68,815

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$ 75,000					\$ 75,000
Construction		*				\$ -
						\$ -
<b>TOTAL</b>	\$ 75,000	*	\$ -	\$ -	\$ -	\$ 75,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$68,815
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$68,815</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 09007E  
**Project Name:** Update Design and Construction Standards  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

This project will update the Water, Sewer and Recycled Water Design & Construction Standards including the technical specifications. Formatting, text updates and drawing revisions will be performed. The current Water, Sewer and Recycled Water Design & Construction Standards including the technical specifications were last completely updated in 1999. Acceptable products and methodology change constantly. Changes to drawings are being submitted by EID staff on a continuous basis to be included in the ongoing update. The standards are a "living" document which means that they will always be in constant revision to maintain currency with industry standards. To save distribution costs and to ensure the public has the latest version, the standards are now exclusively available online at the EID website.

**Basis for Priority:**

In an effort to protect and preserve the health and safety of customers, employees and the public, EID must utilize and require current construction methodologies to ensure increased service reliability.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 80,000	<b>Expenditures through end of year:</b>	\$ 80,000
<b>Spent to Date:</b>	\$ 66,222	<b>2012-2016 Planned Expenditures:</b>	\$ 15,000
<b>Cash flow through end of year:</b>	\$ 13,778	<b>Total Project Estimate:</b>	\$ 95,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 15,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 15,000					\$ 15,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 15,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	50%	\$7,500
Wastewater FCCs	50%	\$7,500
		\$0
<b>Total</b>	<b>100%</b>	<b>\$15,000</b>

**Funding Comments:** Water and wastewater FCCs since the standards serve new developer projects.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 10015  
**Project Name:** Water System Upgrades  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2 **PM:** Strahan **Board Approval:** 09/26/11

**Project Description:**

Capital improvements to water distribution infrastructure. These improvements help meet regulatory compliance and water use accountability. In 2010, this includes the purchase of a remote water fill station as part of a 50/50 grant with USBR. This station will improve water system security and protection from cross contamination by temporary water customers. Stage 2 of the Disinfectants/Disinfection By-Product Rule (Stage 2) establishes new health goals for the reduction and control of disinfection by-product (DBP) formation. To meet these health goals, distribution operators determine through water quality testing where in the distribution system water age has resulted or could result in elevated DBP formation and then conduct routine manual flushing to reduce water age. Auto flushers will reduce staff time and enable staff to have better control over routine flushing, resulting in better accountability and conservation of water used for routine water quality system flushing while ensuring compliance with water regulations. Installed cost estimate is \$5,000 to \$10,000 each depending on location. A goal of 5 to 10 auto flush stations per year is desired.

**Basis for Priority:**

Improve reliability and service level in the water distribution system. Work force efficiency.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 120,000	<b>Expenditures through end of year:</b>	\$ 100,713
<b>Spent to Date:</b>	\$ 100,713	<b>2012-2016 Planned Expenditures:</b>	\$ 150,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 250,713
<b>Project Balance</b>	\$ 19,287	<b>Additional Funding Required</b>	\$ 130,713

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction		\$100,000	\$50,000			\$ 150,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 100,000	\$ 50,000	\$ -	\$ -	\$ 150,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Reserves	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 10022  
**Project Name:** Silva Valley Interchange (DOT)  
**Project Category:** State/County Road Projects  
**Priority:** 1      **PM:** Brink/Rice      **Board Approval:** 09/26/11

**Project Description:**

The new Silva Valley Interchange at Hwy 50 has been in the planning stages for many years. El Dorado County DOT plans to complete the design by mid 2012 to allow construction to start in the Fall of 2012. EID has existing water, recycled water and sanitary sewer utilities in the public right-of-way that must be relocated at EID's cost. The design will be performed by the same consultant DOT is using for the design of the interchange, and the relocations performed by DOT's contractor under a new reimbursement agreement with DOT. The project will also impact an existing recycled water line that is located in a private easement. DOT will pay the full cost of the design and relocation of this facility.

**Basis for Priority:**

Since we have utilities in the public right of way, EID must relocate them to make way for DOT's project.

**Project Financial Summary:**

<b>Funded to Date:</b>	\$ 62,872	<b>Expenditures through end of year:</b>	\$ 22,965
<b>Spent to Date:</b>	\$ 17,965	<b>2012-2016 Planned Expenditures:</b>	\$ 465,000
<b>Cash flow through end of year:</b>	\$ 5,000	<b>Total Project Estimate:</b>	\$ 487,965
<b>Project Balance</b>	\$ 39,907	<b>Additional Funding Required</b>	\$ 425,093

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Study/Planning						\$ -
Design	\$ 80,000	\$ 35,000				\$ 115,000
Construction		\$ 350,000				\$ 350,000
						\$ -
<b>TOTAL</b>	<b>\$ 80,000</b>	<b>\$ 385,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 465,000</b>

Funding Sources	Percentage	2012 Funding Amount
Water Rates	70%	\$28,065
Wastewater Rates	20%	\$8,019
Recycled Water Rates	10%	\$4,009
<b>Total</b>	<b>100%</b>	<b>\$40,093</b>

**Funding Comments:** Funding split is proportional to impacted utilities

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11013  
**Project Name:** Corrosion Control Technologies  
**Project Category:** Regulatory Requirements  
**Priority:** 1 **PM:** Strahan **Board Approval:** 09/26/11

**Project Description:**

Current corrosion control treatment technology (CCTT) employed by EID to protect the drinking water system infrastructure and control potential lead and copper levels within household plumbing systems was evaluated in 2009. The evaluation resulted in a recommendation to change the current CCTT to a practice that will eliminate zinc residuals within the system while still protecting the interior infrastructure of EID's pipes and storage system. In order to assess the effectiveness of CCTT alternatives, a bench study is underway to determine what potential impacts could be experienced before deploying the preferred technology to the drinking water system.

**Basis for Priority:**

Regulatory compliance.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 169,857	<b>Expenditures through end of year:</b>	\$ 75,083
<b>Spent to Date:</b>	\$ 83	<b>2012-2016 Planned Expenditures:</b>	\$ 45,000
<b>Cash flow through end of year:</b>	\$ 75,000	<b>Total Project Estimate:</b>	\$ 120,083
<b>Project Balance</b>	\$ 94,774	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 45,000					\$ 45,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ 45,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11015  
**Project Name:** AMR and small meter replacement - Phase III  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Pritchard      **Board Approval:** 09/26/11

**Project Description:**

This project replaces old, inaccurate, or broken small meters and adds automated meter read capability to new and existing meters. The project is MISSION REQUIRED because it provides for replacement of inaccurate and non-working meters and enables all meters to be read in time for billing. The LIABILITY/RISK to the District if this project is not implemented includes increased likelihood of employee injury, increased labor expenses for manually reading the meters and inputting manual data into the computer system, and loss of customer confidence due to inaccurate and estimated reads. REGULATORY: Continued implementation of meter replacement and AMR technology keeps the District in compliance with the CUWCC's MOU BMP# 4. SAFETY/SECURITY: This project reduces employee exposure to injury caused by scaling uneven and unsafe terrain; bending and stooping; raising heavy lids; and exposure to dangerous pets, snakes, spiders, and hazards on private property.

As of August 18, 2010 there are 19,563 meters that are equipped with radio read devices. There are currently 23,035 5/8", 3/4" and 1" meters that require upgrading to radio read. Projected funding for 2011 should allow the District to install approximately 300 additional radio read meters completing 47.5% of the District. Funding for 2012 should achieve 48% completion, 2013 69% and 2014 90%.

**Basis for Priority:**

Hiring of additional personnel, collection of inaccurate data, reduced customer satisfaction, increased likelihood of employee injuries, and non-compliance with BMP #4.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 94,155	<b>Expenditures through end of year:</b>	\$ 50,432
<b>Spent to Date:</b>	\$ 50,432	<b>2011-2015 Planned Expenditures:</b>	\$ 500,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 550,432
<b>Project Balance</b>	\$ 43,723	<b>Additional Funding Required</b>	\$ 456,277

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Implementation	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$ 500,000
						\$ -
						\$ -
						\$ -
<b>TOTAL</b>	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Replacement Reserves	100%	\$56,277
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$56,277</b>

Funding Comments:



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11017  
**Project Name:** Reservoir A WTP Chlorine conversion  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

This program consists of conversion of existing gaseous chlorination storage and feed facilities to a safer alternative disinfection system. The existing facility does not include containment or neutralization equipment to mitigate a chlorine gas leak. Proposed modifications are required for compliance with 2003 International Fire Code and 2003 Uniform Fire Code requirements for scrubbing or fully containing gaseous chlorine leaks and protection of public health and safety. Project feasibility reviews are currently being completed by an outside consultant. The proposed budget will cover alternative disinfection facility design and construction of the selected alternative disinfection system.

**Basis for Priority:**

The project mitigates continued liability associated with large scale delivery, handling, and storage of chlorine gas.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 49,955
<b>Spent to Date:</b>	\$ 16,655	<b>2012-2016 Planned Expenditures:</b>	\$ 1,700,000
<b>Cash flow through end of year:</b>	\$ 33,300	<b>Total Project Estimate:</b>	\$ 1,749,955
<b>Project Balance</b>	\$ 45	<b>Additional Funding Required</b>	\$ 1,699,955

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$200,000					\$ 200,000
Construction Costs		\$1,500,000				\$ 1,500,000
						\$ -
<b>TOTAL</b>	<b>\$ 200,000</b>	<b>\$ 1,500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,700,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$199,955
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$199,955</b>

**Funding Comments:** Project involves no planned increase in capacity, therefore funding is 100% water rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11026  
**Project Name:** Reservoir A Process Improvements  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Strahan      **Board Approval:** 09/26/11

**Project Description:**

Funding will be utilized for planned rehabilitation of three drying beds beginning in 2011.

**Basis for Priority:**

Water treatment solids residuals are dewatered utilizing gravity drying beds that have failed and are in need of redesign and rebuild.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 800,000	<b>Expenditures through end of year:</b>	\$ 1,870
<b>Spent to Date:</b>	\$ 1,870	<b>2012-2016 Planned Expenditures:</b>	\$ 500,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 501,870
<b>Project Balance</b>	\$ 798,130	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design		\$250,000				\$ 250,000
Construction Costs	\$250,000		*	*	*	\$ 250,000
						\$ -
<b>TOTAL</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	*	*	*	<b>\$ 500,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11032  
**Project Name:** Main Ditch Assessment - Forebay to Reservoir 1  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Megerdigian      **Board Approval:** 09/26/11

**Project Description:**

The Main Ditch is approximately three miles long and conveys a maximum of 15,080 acre-feet of raw water annually at a maximum rate of 40 cubic feet per second from Forebay Reservoir to the Reservoir 1 water treatment plant. Because the Main Ditch is an unlined earthen canal, a portion of the flow is lost to seepage and evaporation. Also, the quality of the water is degraded as the water travels through the ditch; this presents a challenge in meeting drinking water regulations. Previous studies of the ditch have shown that water losses could be as high as 1,300 acre-feet a year, depending on flow rates and weather conditions. This water could be made available for drinking water or annual power generation of about 2,000 MWh. The evaluation will prepare alternatives for the Main Ditch to conserve water and protect public health. In 2011, the District was awarded a grant from the EDCWA in the amount of \$40,000 to perform preliminary environmental and feasibility work to pipe the ditch.

**Basis for Priority:**

Improves water quality, conserves water supply and protects health and safety of service.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 1,000	<b>Expenditures through end of year:</b>	\$ 572
<b>Spent to Date:</b>	\$ 572	<b>2012-2016 Planned Expenditures:</b>	\$ 25,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 25,572
<b>Project Balance</b>	\$ 428	<b>Additional Funding Required</b>	\$ 24,572

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$25,000					\$ 25,000
Design		*	*	*		\$ -
Construction Costs				*	*	\$ -
Land Procurement						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	*	*	*	*	<b>\$ 25,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$24,572
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$24,572</b>

**Funding Comments:** Staff is seeking grant funding for this project as a water conservation project.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11033  
**Project Name:** Summerfield Ditch / Finnon Reservoir  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

This District has a legal obligation to provide water to Finnon Lake upon restoration of the dam by the Mosquito Volunteer Fire Department, which is scheduled for completion by 2012. This obligation was conveyed to the District with the annexation of the Mosquito Area and transfer of the Slab Creek water rights to Folsom Lake. Staff has reviewed multiple options for delivery of either raw or treated water to supplement filling the reservoir. The simplest and most economical options involve conveying treated water to the reservoir. The proposed budget includes environmental review of utilizing treated water to supplement the reservoir plus design and construction of the piping and swale system to fill the lake.

**Basis for Priority:**

The project is required by contract with the Mosquito Volunteer Fire District.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 10,000	<b>Expenditures through end of year:</b>	\$ 21,308
<b>Spent to Date:</b>	\$ 1,308	<b>2012-2016 Planned Expenditures:</b>	\$ 140,000
<b>Cash flow through end of year:</b>	\$ 20,000	<b>Total Project Estimate:</b>	\$ 161,308
<b>Project Balance</b>	\$ (11,308)	<b>Additional Funding Required</b>	\$ 151,308

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$20,000					\$ 20,000
Construction Costs	\$120,000					\$ 120,000
						\$ -
<b>TOTAL</b>	<b>\$ 140,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 140,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$151,308
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$151,308</b>

**Funding Comments:** Project involves no planned increase in capacity or new service connections, therefore funding is 100% water rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11035  
**Project Name:** Water Tank Recoating Program  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

The District operates over 30 steel storage tanks, many of which have not been thoroughly inspected inside for coating and corrosion issues or failures for more than 15 years. Coating systems of the period 10 to 15 years ago were typically recommended to be inspected annually and recoated every 7 to 10 years. Insufficient inspection and coating system maintenance can lead to excessive maintenance, small leaks, major repairs, or the need for complete replacement.

The proposed budget is based on coating one tank interior paint system each year along with minor exterior touch up work. Funding for 2012 is for actual construction and painting and will continue with a new tank each year thereafter. Multiple tanks were inspected in 2011 to help prioritize coating repairs and upgrades. The proposed first tank to be recoated is the Salmon Falls tank which has suffered some structural concerns due to corrosion and requires minor tank piping upgrades to balance flows with the new Promontory Tank. The piping upgrade will allow a simple gravity balance between the two tanks and eliminate operator requirements to continually adjust control valves based on changing system demands.

The proposed subsequent tanks to have their interiors recoated are Oak Ridge #2 and Ridgeview.

**Basis for Priority:**

Project purpose is to maintain existing assets and prolong their useful service life and reliability.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 21,000	<b>Expenditures through end of year:</b>	\$ 5,736
<b>Spent to Date:</b>	\$ 736	<b>2012-2016 Planned Expenditures:</b>	\$ 1,100,000
<b>Cash flow through end of year:</b>	\$ 5,000	<b>Total Project Estimate:</b>	\$ 1,105,736
<b>Project Balance</b>	\$ 15,264	<b>Additional Funding Required</b>	\$ 1,084,736

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 100,000
Construction Costs	\$200,000	\$200,000	\$200,000	\$ 200,000	\$ 200,000	\$ 1,000,000
						\$ -
<b>TOTAL</b>	<b>\$ 220,000</b>	<b>\$ 220,000</b>	<b>\$ 220,000</b>	<b>\$ 220,000</b>	<b>\$ 220,000</b>	<b>\$ 1,100,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$204,736
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$204,736</b>

**Funding Comments:** Project involves no planned increase in capacity, therefore funding is 100% water rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11040  
**Project Name:** Ditch Water Rights SCADA Upgrades  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Strahan      **Board Approval:** 09/26/11

**Project Description:**

In August 2010, the District and USBR executed a Warren Act Contract for the Rediversion of the Ditch Water Rights. A requirement of that contract is to report diversions at several gaging stations to the USBR on a regular basis. In order to provide accurate and reliable diversion data, the gage stations known as S42, H2, W5, and W4 require upgrading to automation. The automation upgrades consist of installation of telemetry equipment and SCADA. Each station is estimated to cost \$15,000 to install.

**Basis for Priority:**

Since the Warren Act has been signed, the District is required to report to the USBR. Upgrading the SCADA at the gage stations will provide reliable and accurate reporting.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 40,000	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 40,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 40,000
<b>Project Balance</b>	\$ 40,000	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 10,000					\$ 10,000
Design						\$ -
Construction	\$ 30,000					\$ 30,000
						\$ -
<b>TOTAL</b>	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 40,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 11046  
**Project Name:** Coon Hollow Waterline Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2 **PM:** Rice **Board Approval:** 09/26/11

**Project Description:**

This project consists of replacing four sections of previously private 2-inch galvanized sections of waterlines with new pipe in accordance with District design guidelines and material standards. The project will improve service reliability and flows to 13 service connections currently experiencing severe low flow conditions. The new waterline will consist of 550 lf of 6-inch pipe, plus 820 lf of 4-inch pipe.

**Basis for Priority:**

Project was funded in 2011 and will be constructed in early 2012.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 80,000	<b>Expenditures through end of year:</b>	\$ 1,300
<b>Spent to Date:</b>	\$ 1,300	<b>2012-2016 Planned Expenditures:</b>	\$ 75,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 76,300
<b>Project Balance</b>	\$ 78,700	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 75,000					\$ 75,000
						\$ -
<b>TOTAL</b>	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** The project improves service reliability to existing services.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** 89069E  
**Project Name:** Water Rights for 17,000 Acre Feet  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1 **PM:** Cumpston **Board Approval:** 09/26/11

**Project Description:**

The State Water Resources Control Board awarded 17,000-acre feet of new water rights to EID on August 16, 2001 with numerous conditions. The District challenged the Term 91 condition and won a 2006 court decision overturning it. A long-term Warren Act contract with USBR is needed to use Folsom Reservoir as a point of diversion for this supply. The application for this contract has been pending for several years. Presently, staff is working to complete contract negotiations, NEPA/CEQA analysis, and Endangered Species Act compliance by the end of 2011. Once these steps are complete, USBR must sign the contract and EID must complete a successful validation action in El Dorado County Superior Court.

**Basis for Priority:**

The District made application to the USBR in July 2004 for a 40-year Warren Act Contract. Approval by the USFWS has occurred. NOAA Fisheries approval is near. Final approval of the contract by USBR may depend upon the status of Delta litigation and environmental issues. Final approval of the Warren Act Contract is being sought in 2011, but funding is requested for 2012 to cover the validation action in court and any delays in federal actions that must be completed for contract approval.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 2,989,414	<b>Expenditures through end of year:</b>	\$ 2,974,940
<b>Spent to Date:</b>	\$ 2,909,940	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ 65,000	<b>Total Project Estimate:</b>	\$ 3,024,940
<b>Project Balance</b>	\$ 14,474	<b>Additional Funding Required</b>	\$ 35,526

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$50,000					\$ 50,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	100%	\$35,526
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$35,526</b>

**Funding Comments:**



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number: NEW**  
**Project Name: Development Services Water Model**  
**Project Category: Reliability & Service Level Improvements**

**Priority: 3 PM: Mackay Board Approval: 09/26/11**

**Project Description:**

The District's existing water model consists of several models that are essentially "stitched" together across the District service and pressure zones. The model was developed several years ago and has gone through many alterations and additions by staff. This project would develop a new hydraulic model by utilizing the accurate information in the current model and bring in new, missing information to develop a complete hydraulic water model that staff can rely upon for analysis of our water distribution system. The engineering staff process many requests for pressure and flow as required for the design of fire sprinkler systems on a weekly basis. In addition, the model is utilized to determine if the District can supply adequate flow and pressure for new development. When staff is processing facility improvement letters and facility plan reports, it is often the water modeling that consumes the most staff time. If we had a fully developed and calibrated water model, we could improve efficiency and respond to developers in a shorter timeframe.

**Basis for Priority:**

This project would accomplish the following: improved reliability of our water distribution system model, improved staff efficiency, improved response time to developers and customers when processing fire flow requests, FILs and FPRs, improved data for our GIS program

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 150,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 150,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 150,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 75,000	\$ 75,000				\$ 150,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 150,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Water rates	100%	\$75,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$75,000</b>

**Funding Comments:** This project will provide a hydraulic model of our existing facilities; therefore, funding will be through water rates

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** 2012 Waterline Replacement Program  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

This program consists of targeted replacement of leaking waterlines, including formerly private lines within the District. This multi-year program provides funding to replace problem waterlines in the distribution system, bringing them up to District standards, increasing reliability and reducing maintenance liabilities and water losses. The proposed budget currently includes construction inspection of improvements to the Point View Drive extension and upgrade to three Coon Hollow Rd extensions. The Coon Hollow Rd upgrade will improve capacity and pressure to numerous services and open potential service to new parcels.

**Basis for Priority:**

Continued line breaks that affect the supply and quality of water to our customers and increased maintenance costs to continuously repair these lines. This project is required to protect and preserve the health and safety of customers, employees and the public.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 10,000	<b>Expenditures through end of year:</b>	\$ 9,445
<b>Spent to Date:</b>	\$ 9,445	<b>2012-2016 Planned Expenditures:</b>	\$ 125,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 134,445
<b>Project Balance</b>	\$ 555	<b>Additional Funding Required</b>	\$ 124,445

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Water Rates	100%	\$24,445
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$24,445</b>

**Funding Comments:** The project improves service reliability to existing services.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** DOT Construction Projects - Water  
**Project Category:** State/County Road Projects

**Priority:** 1      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

The Board has directed staff to streamline contracting procedures with the El Dorado County Department of Transportation (DOT) and City of Placerville for the two agencies' joint projects. EID has many water and sewer lines in roads maintained by the El Dorado County Department of Transportation (DOT). From time to time, DOT initiates a road project where either the EID water, wastewater or recycled waterlines need to be relocated or upgraded, which presents opportunities to join forces with DOT in the project by simultaneously upgrading and/or relocating our facilities. EID and DOT staff have identified several methods to improve mutual cooperation in conducting County road construction projects that impact EID facilities. Individual projects identified under this program will be broken out and funded as a separate CIP project as needed.

**Basis for Priority:**

Projects are required by law, regulation, contract, agreement or license. This includes projects required to meet requirements imposed by federal, State, or local governments. This also includes relocation of District facilities necessitated by State or County road improvements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>		<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>		<b>2012-2016 Planned Expenditures:</b>	\$ 125,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 125,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 125,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning						\$ -
Design	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$ 125,000
Construction Costs						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 125,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$25,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$25,000</b>

**Funding Comments:** Typically work involves replacement or relocation of existing facilities. However, funding split will be further evaluated for each project.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Patterson Intersection Improvements (DOT)  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 1      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

DOT improvements scheduled for 2012 at the intersection at Patterson Rd and Pleasant Valley Rd require relocation of the existing Patterson PRS plus lowering of an existing 200 LF section of waterline with insufficient cover. DOT has issued preliminary plans along with a mandate to relocate utilities in conflict prior to September, 2012.

The Patterson PRS is contained within an underground vault that due to topography is continuously partially flooded and as a result the pipe and valving system has corroded to the point that it no longer will be serviceable when the next maintenance is required. The Patterson PRS serves approximately 240 connections for which there is no alternative loop supply.

The proposed budget includes construction of a new above-ground pressure regulating station adjacent to the existing station, plus lowering of approximately 200 LF of 12-inch waterline.

The relocated station and waterline will be designed and constructed by District staff. Design will be completed in 2011 using existing Patterson funding. The budget for 2012 will be to manage and construct the new pressure regulating station, demo the old station, plus lower the existing waterline.

**Basis for Priority:**

DOT project requires District facilities within DOT Right of Way to be relocated.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 185,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 185,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 185,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$27,000					\$ 27,000
Construction Costs	\$158,000					\$ 158,000
						\$ -
<b>TOTAL</b>	<b>\$ 185,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 185,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$ 185,000
Water FCCs	0%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$185,000</b>

**Funding Comments:** Project involves relocation and upgrade of existing facilities and no planned increase in capacity, therefore funding is 100% water rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Main Ditch Remediation - Reservoir 1 to Blakeley Reservoir  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 3      **PM:** Megerdigian      **Board Approval:** 09/26/11

**Project Description:**

A consultant prepared a "Main Ditch Abandonment Feasibility Report" as a result of the extent of erosion on the Main Ditch downstream of the Reservoir 1 Water Treatment Plant. This study identified and prioritized all sections of the Main Ditch from Reservoir 1 to Blakely Reservoir and provided recommendations for remediation options, developed budgetary cost estimates, a timescale for the remediation work, and determined sections which may be suitable for formal abandonment. The next step is implementation in a phased plan over several years. Phase 1 will consist of preparing the construction design and bid documents and environmental documentation for the entire project. Phase 2 will consist of remediation work that has been identified as high and medium priority. Phase 3 will be the remediation work for the remaining portions of the Main Ditch to provide complete abandonment.

The Main Ditch downstream of Reservoir 1 Water Treatment Plant has been eroding since being constructed in the late 1800's. It has eroded to an extent where it is jeopardizing neighboring properties and limiting access to the properties. Property owners have requested that EID remediate the ditch to control the future erosion and restore access to certain properties. Some sections of this ditch are no longer used but still are a maintenance burden. Formal abandonment procedures may need to be started for some sections after completion of the remediation process.

**Basis for Priority:**

This project is anticipated to be needed, but does not yet have a defined scope or schedules and which we have a significant level of control over schedule.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 100,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 100,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 100,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design			\$100,000			\$ 100,000
Construction Costs				*		\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Monte Vista Water Tank  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1 **PM:** Rice **Board Approval:** 09/26/11

**Project Description:**

This project involves construction of a replacement water storage tank for the Zone 2 service area. The existing tank has a capacity of 130,000 gallons and its condition is severely deteriorated, reducing the reliability of future service. The 2002 Storage Evaluation Report indicated a current need for 155,000 gallons storage plus an ultimate build out need for 600,000 gallons storage. The program for this storage site is to build one new 300,000 gallon tank and demolish the old 130,000 gallon tank. As local system demands increase the second 300,000 gallon tank would be constructed to provide storage and redundancy. The proposed budget involves environmental study and permitting, design, road improvements to allow access to the site, and construction of a new 300,000 gallon tank at the existing site along with demolition of the old tank.

**Basis for Priority:**

To ensure service reliability and satisfy a DPH compliance order for this facility.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 1,200,000
<b>Cash flow through end of year:</b>		<b>Total Project Estimate:</b>	\$ 1,200,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 1,200,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$25,000					\$ 25,000
Design		\$175,000				\$ 175,000
Construction Costs			\$1,000,000			\$ 1,000,000
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ 175,000</b>	<b>\$ 1,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,200,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	95%	\$23,750
Water FCCs	5%	\$1,250
		\$0
<b>Total</b>	<b>100%</b>	<b>\$25,000</b>

**Funding Comments:** Constructing the new 50% build out capacity tank will provide storage to serve additional new services.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Moosehall Pump Station Upgrade  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

This project consists of replacement of the District's existing Moosehall Pump Station which was quickly constructed as an emergency after the Cleveland Fire of 1992. The pumps and control valves utilized were the best fit immediately available for emergency service at the time, but have remained in place for 19 years of permanent service. Installation and operating conditions for the multistage high lift vertical turbine pumps results in very low efficiency and high incidence of difficult repairs. The station operates each year to provide treated water to Pollock Pines during the El Dorado Canal and treatment facility shutdowns. The turbine pumps are approaching the end of their service life. The proposed budget includes design of a new pump station on the existing site, a small wetwell for the pumps and demolition of the existing covered reservoir. The existing reservoir cover requires extensive repairs or complete replacement that will be avoided by construction of a new pump station wetwell.

**Basis for Priority:**

Reliability of potable water service to Pollock Pines area during winter shutdowns of the Reservoir 1 WTP.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 675,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 675,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 675,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning			\$25,000			\$ 25,000
Design				\$150,000		\$ 150,000
Construction Costs					\$500,000	\$ 500,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ 25,000	\$ 150,000	\$ 500,000	\$ 675,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** This project improves reliability of existing capacities.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Pressure Reducing Station Replacement Program  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

An annual program to remove, replace or upgrade deteriorating pressure reducing stations to maintain service reliability throughout the District. For 2012, improvements for the Cold Springs and Hess Extension pressure regulating stations are scheduled. The Cold Springs and Hess Extension stations have suffered extensive corrosion and will be difficult to maintain in the future.

**Basis for Priority:**

Existing stations are causing restrictions of pressure and flow in an areas where it is not needed and continued maintenance costs on equipment that do not provide any additional service reliability due to other system improvements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 217,250	<b>Expenditures through end of year:</b>	\$ 56,959
<b>Spent to Date:</b>	\$ 56,959	<b>2012-2016 Planned Expenditures:</b>	\$ 125,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 181,959
<b>Project Balance</b>	\$ 160,291	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$25,000	\$25,000	\$25,000	\$25,000	\$ 25,000	\$ 125,000
Design						\$ -
Construction Costs						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 125,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$40,000
Water FCCs	0%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$40,000</b>

**Funding Comments:** Projects involve upgrade of existing facilities and no planned increase in capacity, therefore funding is 100% water rates.



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Pump Station Upgrade Program  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2 **PM:** Rice **Board Approval:** 09/26/11

**Project Description:**

The District has several small to medium sized pump stations throughout the service area that operate to increase pressures to customers at higher elevations. This is an annual program to upgrade pump stations that have deteriorated or reached the end of their service life. Pump stations at Reservoir 8 and Swansboro Tank are planned for initial upgrades to supply the necessary pressure and flow to their respective service areas, and to comply with fire flow requirements where needed. Replacement components include pumps, pressure tank, pressure switches, valves, yard piping, SCADA equipment and possibly building upgrades to accommodate larger equipment. Proposed funding includes initial feasibility level study and prioritization of pump stations for replacement and upgrades which will begin in 2013.

**Basis for Priority:**

Potential interruption to service throughout the District in the event of failures and continued use of expiring equipment that may pose a threat to the health and safety of customers, employees, and the public.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 46,804
<b>Spent to Date:</b>	\$ 46,804	<b>2011-2015 Planned Expenditures:</b>	\$ 500,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 546,804
<b>Project Balance</b>	\$ 3,196	<b>Additional Funding Required</b>	\$ 496,804

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$20,000					\$ 20,000
Design		\$20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 80,000
Construction Costs		\$100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 400,000
						\$ -
<b>TOTAL</b>	<b>\$ 20,000</b>	<b>\$ 120,000</b>	<b>\$ 120,000</b>	<b>\$ 120,000</b>	<b>\$ 120,000</b>	<b>\$ 500,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$16,804
		\$0
<b>Total</b>	<b>100%</b>	<b>\$16,804</b>

**Funding Comments:** Work involves upgrade to existing facilities for reliability of service and not increased capacity.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Ridgeview Tank No. 2  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

This project involves correction of deficiencies noted in a DPH compliance order, including modifications to vents, coating replacements and protective enclosure for the existing pumping station to extend its reliable service life.

**Basis for Priority:**

To ensure service reliability and satisfy a DPH compliance order for this facility.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 400,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 400,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 400,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design		\$50,000	\$350,000			\$ 400,000
Construction Costs						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ 50,000	\$ 350,000	\$ -	\$ -	\$ 400,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number:** NEW  
**Project Name:** Strawberry WTP Evaluation  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

Numerous deficiencies have been identified by operations staff. Evaluation and planning work will be performed to determine the improvements and environmental requirements. Design work will follow in preparation for improvements in future years. A partial list includes: repair or replace the backwash tank, replace existing river intake pumps, install generator containment area.

**Basis for Priority:**

Project maintains the existing assets and improves water quality and reliability of supply.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 50,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 50,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning		\$25,000				\$ 25,000
Design		\$25,000				\$ 25,000
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** This project improves the existing plant with no increase in capacity, therefore funding is 100% Rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number: NEW**  
**Project Name: Water SCADA System Reliability Program**  
**Project Category: Reliability & Service Level Improvements**

**Priority: 2 PM: McKinney Board Approval: 09/26/11**

**Project Description:**

Maintain the reliability and performance of the current SCADA process control infrastructure through upgrades to aging critical infrastructure including PLCs, radio repeaters, network switches, servers, data storage systems, and operator HMI panels.

2012 and 2013 assume a significant catch up effort to address deferred upgrades of legacy PLCs used extensively for process control in the water system. These PLCs are now about 30 years old and 10 years beyond their expected useful life. Additionally, these legacy PLCs only provide 10-20% of the monitoring capabilities compared to current standard PLCs (3 to 5 monitoring points versus 30) meaning these facilities have no ability to report pump failures. Also, they can go up to 24 hours before alerting of a communications or control issue, while current standard PLCs will alert within 5 minutes (a 288% increase in time to detect issues proactively).

Legacy PLCs operate about 20 drinking water locations and increase the risk of service outages. This two year effort assumes funding to upgrade 1/3 of the legacy PLC equipment in 2012 and the other 2/3 in 2013 and add several critical instrumentation elements for monitoring at each site. It also includes professional services funding to augment staff for installation and integration of the PLCs into the facilities and integration with the SCADA systems for Res 1, Res A, and Camp 5.

**Basis for Priority:**

Maintains the reliability and performance of the current SCADA system used to perform automated operations and regulatory reporting functions of the district. About 15% of PLCs controlling the water system are 10 years beyond end of life and represent significant risks to the service reliability and regulatory compliance due to their extremely limited monitoring and control capabilities compared to current standard PLCs.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 820,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 820,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 820,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Process Control	\$ 275,000	\$ 545,000				\$ 820,000
						\$ -
<b>TOTAL</b>	<b>\$ 275,000</b>	<b>\$ 545,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 820,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water rates	100%	\$275,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$275,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Water**

**Project Number: SDWL04**  
**Project Name: Reservoir Floating Cover Replacement Program**  
**Project Category: Regulatory Requirements**

**Priority: 1 PM: Rice Board Approval: 09/26/11**

**Project Description:**

This project consists of upgrades to the District's reservoirs currently fitted with floating covers. The District has completed a study that evaluated the condition of the existing floating covers and identified current deficiencies and repairs required to extend their useful life until such time as full replacement or capacity increases are needed. Maintenance of these reservoir covers is required by CDPH to ensure public health and safety. Funding includes necessary repairs plus installation of various improvements to the existing floating covers to extend their life until replacement and proceeding with design and environmental work for the overall program. Existing cover maintenance will occur each year and in 2015 design for replacement covers will be evaluated and implemented as required. Minimal District staff labor will be required to coordinate outside vendors performing the repair work. In 2015 planning will begin to reevaluate cover conditions, verification of replacement order and initiate planning for complete new covers or steel tank replacements. The priority and estimated repair costs for the floating covers are as follows:

Year 2012: Reservoir 1 Cover = \$155,000; Year 2013: Reservoir 11 Cover = \$155,000; Year 2014: Dolomite Cover = \$ 145,000; Year 2015: Pollock Pines Cover = \$ 125,000; Year 2016 = Res B Cover = \$125,000.

**Basis for Priority:**

Maintaining integrity of the floating covers is critical to ensuring water quality and protection of public health and safety.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 400,000	<b>Expenditures through end of year:</b>	\$ 166,536
<b>Spent to Date:</b>	\$ 151,536	<b>2012-2016 Planned Expenditures:</b>	\$ 750,000
<b>Cash flow through end of year:</b>	\$ 15,000	<b>Total Project Estimate:</b>	\$ 916,536
<b>Project Balance</b>	\$ 233,464	<b>Additional Funding Required</b>	\$ 516,536

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning				\$10,000	\$10,000	\$ 20,000
Design	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$ 25,000
Construction Costs	\$155,000	\$155,000	\$145,000	\$125,000	\$125,000	\$ 705,000
						\$ -
<b>TOTAL</b>	\$ 160,000	\$ 160,000	\$ 150,000	\$ 140,000	\$ 140,000	\$ 750,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** Project involves no planned increase in capacity, therefore funding is 100% water rates.

# Wastewater Projects

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 04013E  
**Project Name:** Deer Creek Wastewater Treatment Plant Maintenance Building  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

The current maintenance building is under sized and does not meet current needs for proper plant maintenance. The current building also does not allow for hot work, has improper ventilation, and insufficient lighting. Operations staff plans to convert an old belt filter press building to maintenance shop. The conversion will require electrical, HVAC, lighting, and other modifications that shall be done by staff.

**Basis for Priority:**

Reliable maintenance may not be possible without sufficient facilities. OSHA compliance issues for workplace safety.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 124,305	<b>Expenditures through end of year:</b>	\$ 109,583
<b>Spent to Date:</b>	\$ 89,583	<b>2012-2016 Planned Expenditures:</b>	\$ 180,000
<b>Cash flow through end of year:</b>	\$ 20,000	<b>Total Project Estimate:</b>	\$ 289,583
<b>Project Balance</b>	\$ 14,722	<b>Additional Funding Required</b>	\$ 165,278

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$ 15,000	\$ 15,000				\$ 30,000
Construction		\$ 150,000				\$ 150,000
						\$ -
<b>TOTAL</b>	\$ 15,000	\$ 165,000	\$ -	\$ -	\$ -	\$ 180,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$278
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$278</b>

**Funding Comments:** Project replaces existing maintenance building for current plant capacity.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 06055E  
**Project Name:** Deer Creek/Motherlode Collection System (CAP)  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

The objective of this project is to reduce sanitary sewer overflows and sources of inflow and infiltration (I/I). This CIP will target replacement of air relief valves, repair/rehabilitation of manholes and cleanouts and minor repairs at the lift stations.

**Basis for Priority:**

Reduction of sanitary sewer overflows is a high-priority for the district. If this project is not approved spills may continue and expose the district to mandatory fines.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 250,000	<b>Expenditures through end of year:</b>	\$ 250,000
<b>Spent to Date:</b>	\$ 163,696	<b>2012-2016 Planned Expenditures:</b>	\$ 375,000
<b>Cash flow through end of year:</b>	\$ 86,304	<b>Total Project Estimate:</b>	\$ 625,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 375,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$75,000	\$75,000	\$75,000	\$75,000	\$ 75,000	\$ 375,000
						\$ -
<b>TOTAL</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 375,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$75,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$75,000</b>

**Funding Comments:** Funding is 100% wastewater rates as no new capacity is being added.



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 06056E  
**Project Name:** El Dorado Hills WWTP Corrective Action Plan (CAP)  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

The objective of this project is to reduce sanitary sewer overflows and sources of inflow and infiltration (I/I). This CIP will target replacement of air relief valves, repair/rehabilitation of manholes and cleanouts and minor repairs at the lift stations.

**Basis for Priority:**

Reduction of sanitary sewer overflows is a high-priority for the district. If this project is not approved spills may continue and expose the district to mandatory fines.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 200,000	<b>Expenditures through end of year:</b>	\$ 200,000
<b>Spent to Date:</b>	\$ 107,122	<b>2012-2016 Planned Expenditures:</b>	\$ 375,000
<b>Cash flow through end of year:</b>	\$ 92,878	<b>Total Project Estimate:</b>	\$ 575,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 375,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$ 375,000
						\$ -
<b>TOTAL</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 375,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$75,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$75,000</b>

**Funding Comments:** Project funding is 100% replacement reserves for rehabilitation work.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 08007E  
**Project Name:** Wastewater Master Plan and SSMP  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1 **PM:** Wells **Board Approval:** 09/26/11

**Project Description:**

The District's most recent wastewater master plan was completed in November 2001. Typically, master plans are updated every 5-6 years. The purpose of the master plan is to take a 20 year planning view of wastewater treatment and collection system treatment needs, future flows, facility needs and costs. This project includes a condition assessment of 10 of the District's lift stations. In addition, the project includes developing a dynamic model of the sewer collection system. The sewer model is a requirement of the new collection system Waste Discharge Requirement and Sewer System Management Plan. Our consultant has completed the model and will soon be training staff to run the model.

The WWMP is currently underway and will be mostly complete in 2011. The collection system model is being refined with some additional flow monitoring information that was gathered in the winter months of 2011. The lift station condition assessment will be expanded to include most of the District's wastewater lift stations. The condition assessment work will be completed by in-house engineering staff.

The Sewer System Management Plan (SSMP) must be audited and updated every two years. In-house staff will analyze the collection system performance and update the SSMP document.

**Basis for Priority:**

This projects provides measurable progress toward achieving the District's goals. Maintaining a sewer capacity model and updating the SSMP is a regulatory requirement of our collection system permits.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 670,229	<b>Expenditures through end of year:</b>	\$ 622,821
<b>Spent to Date:</b>	\$ 577,821	<b>2012-2016 Planned Expenditures:</b>	\$ 40,000
<b>Cash flow through end of year:</b>	\$ 45,000	<b>Total Project Estimate:</b>	\$ 662,821
<b>Project Balance</b>	\$ 47,408	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 40,000					\$ 40,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 40,000	\$ -	\$ -	\$ -	\$ -	\$ 40,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
WW FCC's	40%	\$0
Wastewater rates	60%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** The master planning portion of the work shall be funded with FCC's and the model and lift station condition assessment shall be funded with wastewater rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 09015E  
**Project Name:** Yates Lift Station Upgrade  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

The project involves the replacement of the Yates Lift Station. Currently the lift station has an old steel corroded wet well with a high maintenance and call out history. Spills have occurred at this lift station. The controls, wet well, and building are corroded beyond repair. Existing valves and piping present a high liability due to improper materials used for past repair and replacement. The new wet well will allow for planned future capacity increases and will also increase operational efficiency and reliability.

The design will be performed in-house in conjunction with specialty outside design work. The project potentially can be out to bid for construction in early 2012 and should take approximately two months to build.

**Basis for Priority:**

The lift station will continue to degrade increasing the risk of potential failures in the future which could result in hazards to the public and regulatory fines.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 50,000
<b>Spent to Date:</b>	\$ 3,623	<b>2012-2016 Planned Expenditures:</b>	\$ 350,000
<b>Cash flow through end of year:</b>	\$ 46,377	<b>Total Project Estimate:</b>	\$ 400,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 350,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 350,000					\$ 350,000
						\$ -
<b>TOTAL</b>	<b>\$ 350,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 350,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$350,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$350,000</b>

**Funding Comments:** 100% rates, project replaces an existing lift station for current customers.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 10010  
**Project Name:** Lift Station Upgrades  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2 **PM:** Brink **Board Approval:** 09/26/11

**Project Description:**

This project is for the replacement/repair of the Business Park 1, Summit 1 and Timberline Lift Station projects as part of the program level CIP to address issues of safety and reliability within the District's system of sewer lift stations. As part of the 2010 Master Plan, consulting engineers performed condition assessments at ten separate lift stations. Results of these assessments along with staff input and analysis was used to identify these lift stations for replacement or repairs. On October 12, 2010 the Board approved award of the design contract to HydroScience Engineers. Design will completed in late 2011. Construction is scheduled to commence in late 2011 and be completed in 2012.

**Basis for Priority:**

This project provides life-cycle replacement of sewer lift stations thereby providing safe, reliable collection system assets.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 480,048	<b>Expenditures through end of year:</b>	\$ 355,337
<b>Spent to Date:</b>	\$ 280,337	<b>2012-2016 Planned Expenditures:</b>	\$ 3,900,000
<b>Cash flow through end of year:</b>	\$ 75,000	<b>Total Project Estimate:</b>	\$ 4,255,337
<b>Project Balance</b>	\$ 124,711	<b>Additional Funding Required</b>	\$ 3,775,289

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design/CM/Inspection	\$ 100,000	\$ 100,000				\$ 200,000
Construction Costs	\$3,000,000	\$700,000				\$ 3,700,000
						\$ -
<b>TOTAL</b>	<b>\$ 3,100,000</b>	<b>\$ 800,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,900,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$2,975,289
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$2,975,289</b>

**Funding Comments:** 100% rates

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 10017  
**Project Name:** Bridlewood Lift Station Upgrades  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2 **PM:** Sullivan **Board Approval:** 09/26/11

**Project Description:**

The project involves the replacement of the Bridlewood Lift Station wet well, pumps and piping which have been in service for 30 years. Currently the lift station has a high maintenance history, potential reliability and safety issues. The piping and wet well access assembly are severely corroded. Existing valves are incorrect for the type of service required and are not serviceable. Incorrect provisions for by passing the lift station present significant challenges during major maintenance and repair events.

**Basis for Priority:**

Improvements are necessary to ensure reliability within the collection system.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ 80,000
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 170,000
<b>Cash flow through end of year:</b>	\$ 80,000	<b>Total Project Estimate:</b>	\$ 250,000
<b>Project Balance</b>	\$ (80,000)	<b>Additional Funding Required</b>	\$ 250,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design		\$ 50,000				\$ 50,000
Construction		\$ 120,000				\$ 120,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 170,000	\$ -	\$ -	\$ -	\$ 170,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$80,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$80,000</b>

**Funding Comments:** 100% rates, project replaces an existing lift station for current customers.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 11010  
**Project Name:** DCWWTP Regulatory Compliance  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

The DCWWTP recycled water tank was converted over to an influent equalization Tank 1 in 2006-2007 during the DCWWTP Regulatory Compliance Improvements project. A second equalization tank was also constructed during this project but was originally designed for the highly corrosive atmosphere, where the recycled water tank was retrofitted for this new use. Equalization Tank 1 experienced two unexpected corrosion issues over the past four years. The roof rafters are not sealed and are corroding and the floor coating system was not flexible enough to withstand the daily fill and empty cyclic pressures which cause the floor to expand and contract against the ground. This project will perform corrective painting and seal welding to the roof and also replace the floor grout with a flexible waterproof coating.

The tertiary disk filters require covers to reduce algal growth within the filter tanks. Removable covers need to be designed and installed in order to reduce sunlight striking the process water. Growth of algae can result in increased backwashing, reduced filter efficiency and potential violations.

The UV disinfection cover requires a wall cover to reduce heat from direct sunlight during summer afternoon periods. The direct sunlight has caused the UV units to overheat. Currently a wall along the west side of the structure is under design and will require installation.

**Basis for Priority:**

The improvements will greatly increase the operational efficiency of the DCWWTP and aid in meeting regulatory compliance.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 671,462	<b>Expenditures through end of year:</b>	\$ 100,815
<b>Spent to Date:</b>	\$ 40,815	<b>2012-2016 Planned Expenditures:</b>	\$ 300,000
<b>Cash flow through end of year:</b>	\$ 60,000	<b>Total Project Estimate:</b>	\$ 400,815
<b>Project Balance</b>	\$ 570,647	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 300,000					\$ 300,000
						\$ -
<b>TOTAL</b>	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ 300,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** This project is required to reliably operate the plant and protect District assets.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 11018  
**Project Name:** Generator Replacement Program  
**Project Category:** Regulatory Requirements  
**Priority:** 2 **PM:** Sullivan **Board Approval:** 09/26/11

**Project Description:**

The District currently has 54 permanently located (stationary) generators. Thirteen are larger than 200 Kw and are emergency standby power at the waste water and water treatment plants as well as pumping stations. Some of the sewer lift stations also have either diesel or propane generators for emergency power. This program is to replace these aging assets to ensure reliable service and safe operations at our facilities.

**Basis for Priority:**

Replace failing assets to ensure operation of collection system lift stations.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 258,442	<b>Expenditures through end of year:</b>	\$ 252,320
<b>Spent to Date:</b>	\$ 6,395	<b>2012-2016 Planned Expenditures:</b>	\$ 500,000
<b>Cash flow through end of year:</b>	\$ 245,925	<b>Total Project Estimate:</b>	\$ 752,320
<b>Project Balance</b>	\$ 6,122	<b>Additional Funding Required</b>	\$ 493,878

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$ 500,000
						\$ -
<b>TOTAL</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 500,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$93,878
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$93,878</b>

**Funding Comments:** Project replaces existing assets to ensure reliability in collection system.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 11028  
**Project Name:** Strolling Hills Sewer Pipeline  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Brink      **Board Approval:** 09/26/11

**Project Description:**

The Strolling Hills Sewer pipeline is located at the end of the Mother Lode forcemain within the Strolling Hills residential development. It consists of approximately 1/2-mile of 12-inch asbestos cement forcemain located primarily in easements in private property and approximately 1-mile of 12 gravity PVC sewer line. Visual observations indicate the gravity lines are surcharging in the manholes during peak flow events. Flow monitoring equipment was placed within the manholes to collect flow data. This data will be evaluated in the model. The gravity manholes are in poor condition due to hydrogen sulfide corrosion. If modeling results confirm the visual observations, the project will be designed in 2012 and constructed in 2013.

**Basis for Priority:**

If the pipe is not replaced, subsequent sewer spills may occur. If sewer spills occur, the District may be subject to regulatory fines.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 17,721
<b>Spent to Date:</b>	\$ 2,721	<b>2012-2016 Planned Expenditures:</b>	\$ 2,185,000
<b>Cash flow through end of year:</b>	\$ 15,000	<b>Total Project Estimate:</b>	\$ 2,202,721
<b>Project Balance</b>	\$ 32,279	<b>Additional Funding Required</b>	\$ 2,152,721

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design/CM/Inspection	\$ 135,000	\$ 50,000				\$ 185,000
Construction		\$ 2,000,000				\$ 2,000,000
						\$ -
<b>TOTAL</b>	\$ 135,000	\$ 2,050,000	\$ -	\$ -	\$ -	\$ 2,185,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
WW Rates	65%	\$66,769
WW FCC	35%	\$35,952
		\$0
<b>Total</b>	<b>100%</b>	<b>\$102,721</b>

**Funding Comments:**



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 11034  
**Project Name:** EDHWWTP Permit Renewal  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Wells      **Board Approval:** 09/26/11

**Project Description:**

The Regional Water Quality Control Board (RWQCB) issues a new NPDES permit every 5 years. Staff will submit a report of waste discharge (ROWD) to the RWQCB in late 2011. The current EDHWWTP permit expires in July of 2012. The RWQCB will issue the District a new permit near the permit expiration date. Funding is needed for staff time to prepare a ROWD, review the permit, analyze effluent limits, provide comments on the draft permit, and meet with RWQCB staff.

The funding in 2013 and 2014 are estimates of studies and reports that are typically required in NPDES permits. These funding estimates will be refined once we have our final permit.

**Basis for Priority:**

The District is required to maintain compliance with effluent limitations in our discharge permits. Staff will review, analyze and negotiate the permit effluent limitations such that when the permit is adopted, it is a fair and reasonable permit that does not contain unnecessary effluent limitations.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 49,836	<b>Expenditures through end of year:</b>	\$ 49,226
<b>Spent to Date:</b>	\$ 3,226	<b>2012-2016 Planned Expenditures:</b>	\$ 110,000
<b>Cash flow through end of year:</b>	\$ 46,000	<b>Total Project Estimate:</b>	\$ 159,226
<b>Project Balance</b>	\$ 610	<b>Additional Funding Required</b>	\$ 109,390

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 60,000	\$ 25,000	\$ 25,000			\$ 110,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 60,000	\$ 25,000	\$ 25,000	\$ -	\$ -	\$ 110,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater rates	100%	\$59,390
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$59,390</b>

This project is associated with a permit renewal of our existing facility. Therefore, the funding requested is 100% wastewater rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 11036  
**Project Name:** DCWWTP Permit Renewal  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Wells      **Board Approval:** 09/26/11

**Project Description:**

The District currently has an effluent limit for zinc at the DCWWTP that we cannot comply with. We have a Time Schedule Order (TSO) that extends our compliance date until 12/1/2013. Staff intends to complete a water-effects-ratio (WER) for zinc in 2011/2012. The WER should allow the District to obtain compliance with our zinc effluent limitation. The WER will need to be a multi-metal WER since the District has already completed a copper WER. Funding is needed to complete the WER and for staff time.

The Regional Water Quality Control Board (RWQCB) issues a new NPDES permit every 5 years. Staff will submit a report of waste discharge (ROWD) to the RWQCB in late 2012. The current DCWWTP permit expires in July of 2013. The RWQCB will issue the District a new permit near the permit expiration date. Funding is needed to prepare a ROWD, review the permit, analyze effluent limits, provide comments on the draft permit, and meet with RWQCB staff.

Staff is also exploring the opportunity to apply for a change of use permit with the State Board to reduce the 1 million gallon discharge into Deer Creek.

The funding in 2014 and 2015 are estimates of studies and reports that are typically required in NPDES permits. These funding estimates will be refined once we have our final permit.

**Basis for Priority:**

The District is required to maintain compliance with effluent limitations in our discharge permits. Staff will review, analyze and negotiate the permit effluent limitations such that when the permit is adopted, it is a fair and reasonable permit that does not contain unnecessary effluent limitations.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 40,000	<b>Expenditures through end of year:</b>	\$ 39,842
<b>Spent to Date:</b>	\$ 10,342	<b>2012-2016 Planned Expenditures:</b>	\$ 300,000
<b>Cash flow through end of year:</b>	\$ 29,500	<b>Total Project Estimate:</b>	\$ 339,842
<b>Project Balance</b>	\$ 158	<b>Additional Funding Required</b>	\$ 299,842

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 200,000	\$ 50,000	\$ 25,000	\$ 25,000		\$ 300,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 200,000</b>	<b>\$ 50,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ 300,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater rates	100%	\$199,842
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$199,842</b>

**Funding Comments:** This project is associated with a permit renewal of our existing facility. Therefore, the funding requested is 100% wastewater rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 11043  
**Project Name:** DOT Construction Projects - Wastewater  
**Project Category:** State/County Road Projects  
**Priority:** 1 **PM:** Brink **Board Approval:** 09/26/11

**Project Description:**

The Board has directed staff to streamline contracting procedures with the El Dorado County Department of Transportation (DOT) for the two agencies' joint projects. EID has many water and sewer lines in roads maintained by the DOT. From time to time, DOT initiates a road project where either EID water, wastewater or recycled waterlines need to be relocated or upgraded, which presents opportunities to join forces with DOT in the project by simultaneously upgrading and/or relocating our facilities. EID and DOT staffs have identified several methods to improve mutual co-operation in conducting County road construction projects that impact EID facilities.

This CIP is for District funds that would be needed to relocate our wastewater or recycle water facilities that conflict with a County road project. This CIP is intended for staff coordination with DOT throughout the year and for minor projects. The large utility relocation projects will have a specific CIP that identifies all the work associated with that project.

**Basis for Priority:**

Projects are required by law, regulation, contract, agreement or license. This includes projects required to meet requirements imposed by federal, State, or local governments. This also includes relocation of District facilities necessitated by State or County road improvements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2011-2015 Planned Expenditures:</b>	\$ 125,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 125,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 125,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning						\$ -
Design/Inspection	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$ 125,000
Construction Costs						\$ -
						\$ -
<b>TOTAL</b>	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$25,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$25,000</b>

**Funding Comments:** Funding is 100% rates. Typically work involves replacement or relocation of existing facilities. However, funding split will be further evaluated for each project.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** 11044  
**Project Name:** EDHWWTP Filter Covers  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2 **PM:** Sullivan **Board Approval:** 09/26/11

**Project Description:**

Currently, there are six media filters at the EDHWWTP. The filters are utilized to meet our discharge requirements and to produce Title 22 tertiary treated recycled water. With the installation of the UV disinfection system, plant operations has completely eliminated the use of chlorine within the plant process. However, elimination of chlorine allows for algae production within the plant process areas that are exposed to sunlight. Currently the top of the filters are uncovered and are exposed to direct sunlight. The purpose of this project is to construct filter covers on all six filters to eliminate direct sunlight exposure which will reduce algal growth. Algae can cause turbidity which reduces the effectiveness of the UV system to disinfect coliform bacteria which can lead to permit violations.

In addition, the plant has two secondary clarifiers that are also experiencing high algae growth along the weirs. The clarifiers will require the construction of a perimeter cover over the effluent launder to eliminate direct sunlight exposure which will reduce algal growth. The cover will be removable for maintenance and be constructed from a corrosion resistant material.

**Basis for Priority:**

The new covers are needed to reduce exposure to sunlight and reduce algae production in the filters. Installation of the covers will reduce the risk of bacteria production and violation of our NPDES permit.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ 10,066
<b>Spent to Date:</b>	\$ 66	<b>2011-2015 Planned Expenditures:</b>	\$ 350,000
<b>Cash flow through end of year:</b>	\$ 10,000	<b>Total Project Estimate:</b>	\$ 360,066
<b>Project Balance</b>	\$ (10,066)	<b>Additional Funding Required</b>	\$ 360,066

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 350,000					\$ 350,000
						\$ -
<b>TOTAL</b>	<b>\$ 350,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 350,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater rates	100%	\$360,066
<b>Total</b>	<b>100%</b>	<b>\$360,066</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** New  
**Project Name:** 2012 Lift Station Upgrades Program  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Brink      **Board Approval:** 09/26/11

**Project Description:**

This program level project continues to address issues of safety and reliability within the District's system of sewer lift stations. As part of the 2010 Master Plan, consulting engineers performed condition assessments at ten separate lift stations. Results of these assessments along with staff input and analysis will be used to schedule lift station upgrades and repairs, pump replacements, wet-well repairs or improvements, electrical, back-up power, and remediation of any structural or capacity deficiencies. It is anticipated that the design of two replacement projects will be completed in 2012, followed by construction of those projects in 2013. The same design/construction cycle will be used in the following years for subsequent projects.

**Basis for Priority:**

This program provides life-cycle replacement of sewer lift stations thereby providing safe, reliable collection system assets.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>		<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>		<b>2012-2016 Planned Expenditures:</b>	\$ 4,100,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 4,100,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 4,100,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning		\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 100,000
Design/CM/Inspection	\$ -	\$ 175,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 700,000
Construction Costs		\$300,000	\$1,000,000	\$1,000,000	\$1,000,000	\$ 3,300,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 500,000	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	\$ 4,100,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** 100% wastewater rates, since this program CIP is for the repair and/or replacement of existing facilities.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** NEW  
**Project Name:** DCWWTP Solids Processing Analysis  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 3 **PM:** Sullivan **Board Approval:** 09/26/11

**Project Description:**

Each year the District spends approximately \$270,000 in hauling and disposal costs for sludge removal from Deer Creek and El Dorado Hills WWTPs. The sludge thickening process at El Dorado Hills has recently been improved with the addition of a new digester. That plant has the ability to produce a thick, dry sludge that has a low water content. Producing sludge with a low water content is critical in keeping hauling and disposal costs low. However, the solids processing at Deer Creek utilizes an aerobic digester along with an older belt filter press. The water content in the sludge at Deer Creek is much higher and results in higher sludge hauling and disposal costs. The purpose of this study is to investigate improvements to the existing solids processing and investigate other forms of solids processing that may result in a better life cycle cost and reduction in operation and maintenance costs. This study will also include the investigation of energy producing systems that operate in conjunction with biosolids process.

**Basis for Priority:**

The basis for this study is to review the biosolids process at DCWWTP with the goal of reducing disposal and hauling costs, reduce operation and maintenance costs and to investigate the potential for energy generation with the solids processing process.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ 15,000
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 60,000
<b>Cash flow through end of year:</b>	\$ 15,000	<b>Total Project Estimate:</b>	\$ 75,000
<b>Project Balance</b>	\$ (15,000)	<b>Additional Funding Required</b>	\$ 75,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning		\$ 60,000				\$ 60,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ 60,000	\$ -	\$ -	\$ -	\$ 60,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Wastewater Rates	100%	\$15,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$15,000</b>

**Funding Comments:** Project improves operations efficiency of existing facilities.

**Project Number:** NEW  
**Project Name:** EDHWWTP Solar  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Sullivan      **Board Approval:** 09/26/11

**Project Description:**

A number of power systems were moved to the new headworks feed to prevent the current blower meter from being overloaded by the new equipment loads and to allow for future loads coming from the next phase's aeration basins, and other equipment in that area. The blower meter could not be upsized per the solar power contract with PG&E. The equalization system has essentially leveled the flow going through the plant and has enhanced the efficiency of the power usage at the blowers. High hourly diurnal power demands during the day no longer exist. Solar power is generated during the day at the highest payback rate and the district pulls power off the grid at the lowest cost period at night. The cost between the two rates is about 3:1 in favor of solar credits. With the elimination of the high hourly flows the payback credits have greatly increase to the point where the net meter usage has gone from an expenditure to a credit. The theoretical credit for 2010-2011 was 66,826, however PG&E only refund a small fraction of the credit, roughly about 10%.

Potentially three project options:

- "As is" – Leave solar meter power on Blower MCC (Blower A6 rate, headworks E19 rate)
- Move power loading – Move some equipment from the headworks meter over to the blower meter. (Blower A6 rate, headworks E19 rate)
- Move Partial solar power over to headworks – There are four versions of this table which move power in 25% increments over to the headworks meter. (Blower meter A6 rate, headworks A6 rate)

**Basis for Priority:**

Optimize system efficiency.

Project Financial Summary:			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 250,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 250,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 250,000

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 250,000					\$ 250,000
						\$ -
<b>TOTAL</b>	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 250,000

Funding Sources	Percentage	2011 Funding Amount
	100%	\$250,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$250,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** New  
**Project Name:** El Dorado Lift Station Improvements  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Wells      **Board Approval:** 09/26/11

**Project Description:**

The El Dorado Lift Station is the main pumping facility that pumps the collected wastewater from the motherlode (eastern area) of the District to the DCWWTP via the Motherlode forcemain. The El Dorado Lift Station is a critical District facility located in the town of El Dorado. The facility was constructed in 1975 and is in need of repair to some of the key components to increase reliability, increase security and facilitate operations. The project will be phased over a few years. The electrical components are original and their reliability in question. In addition replacement components are no longer available. The first priority will to replace the switch gear with new equipment. The headworks provide the first level of treatment by removing large debris before flows enter the wetwell. This debris removal is critical to protect the pumps and miles of forcemain. The existing headworks have a wide-width screen that allows debris to enter the wetwell. In addition, the automatic bar rake is prone to jamming which could result in overflows if the screen clogs. In 2013 the bar rack and washer/compactor will be replaced with equipment similar to what was recently installed at DCWWTP which has proven to be very reliable and effective. In subsequent years, replacement of existing slide gates and security gates are planned.

**Basis for Priority:**

This project provides replacement of failing components at this critical facility; thereby providing safe, reliable collection system assets.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 885,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 885,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 885,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design/CM/Insp	\$ 150,000	\$ 30,000	\$ 30,000			\$ 210,000
Construction	\$ 325,000	\$ 250,000	\$ 100,000			\$ 675,000
						\$ -
<b>TOTAL</b>	<b>\$ 475,000</b>	<b>\$ 280,000</b>	<b>\$ 130,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 885,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
WW Rates	100%	\$475,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$475,000</b>

**Funding Comments:** This project is for the repair and rehabilitation of an existing facility. Therefore, the project will be funded with 100% rates



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number:** NEW  
**Project Name:** Wastewater pipeline replacement program  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Brink      **Board Approval:** 09/26/11

**Project Description:**

This project is for the replacement/repair of failing pipelines in the wastewater collection system. This CIP will be for staff time associated with the investigation of pipelines that are in need of repair/replacement in the collection system, collection system modeling updates, and design work associated with improving the assets in the collection system. As individual pipeline replacement projects are identified, a separate CIP project will be developed with construction cost estimates.

**Basis for Priority:**

This project provides life-cycle replacement of failing sewer pipelines thereby providing safe, reliable collection system assets.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 125,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 125,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 125,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 125,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Wastewater rates	100%	\$25,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$25,000</b>

**Funding Comments:** Repair/replacement of existing assets

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Wastewater**

**Project Number: NEW**  
**Project Name: Wastewater SCADA System Reliability Program**  
**Project Category: Reliability & Service Level Improvements**

**Priority: 2 PM: McKinney Board Approval: 09/26/11**

**Project Description:**

Maintain the reliability and performance of the current SCADA process control infrastructure through upgrades to aging critical infrastructure including PLCs, radio repeaters, network switches, servers, data storage systems, and operator HMI panels.

2012 and 2013 assume a significant catch up effort to address deferred upgrades of legacy PLCs used extensively for process control in the collections systems. These PLCs are now about 30 years old and 10 years beyond their expected useful life. Additionally, these legacy PLCs only provide 10-20% of the monitoring capabilities compared to current standard PLCs (3 to 5 monitoring points versus 30) meaning these facilities have no ability to report pump failures or incrementally report on wet well levels before reaching the high water limit. Also, they can go up to 24 hours before alerting of a communications or control issue, while current standard PLCs will alert within 5 minutes (a 288% increase in time to detect issues proactively).

In collections, nearly 50% of lift stations (30 of 64) are running on legacy equipment that greatly increases the risk of SSOs. This two year effort assumes funding to upgrade 1/3 of the legacy PLC equipment in 2012 and the other 2/3 in 2013 and add several critical instrumentation elements for monitoring at each site. It also includes professional services funding to augment staff for installation and integration of the PLCs into the facilities and integration with the SCADA systems for Collections.

**Basis for Priority:**

Maintains the reliability and performance of the current SCADA system used to perform automated operations and regulatory reporting functions of the district. About 50% of PLCs controlling wastewater collections are 10 years beyond end of life and represent significant risks to the service reliability and regulatory compliance due to their extremely limited monitoring and control capabilities compared to current standard PLCs.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 1,630,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 1,630,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 1,630,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Process Control	\$ 545,000	\$ 1,085,000				\$ 1,630,000
						\$ -
<b>TOTAL</b>	\$ 545,000	\$ 1,085,000	\$ -	\$ -	\$ -	\$ 1,630,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
		\$0
Wastewater rates	100%	\$545,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$545,000</b>

**Funding Comments:**

# Recycled Water Projects

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Recycled Water**

**Project Number:** 10011  
**Project Name:** Recycled Water System Improvements  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1 **PM:** Brink **Board Approval:** 09/26/11

**Project Description:**

The project involves the continued refinement of a recycled water model in compliance with the settlement agreement with CSPA. Per the agreement the District is obligated to make repairs to the distribution system before the settlement agreement can be terminated. As identified by the model and staff, improvements to the recycled water system will be made to improve its performance, reduce pipe breaks and recycled water spills.

**Basis for Priority:**

Required per our settlement agreement with CSPA.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 106,000	<b>Expenditures through end of year:</b>	\$ 58,520
<b>Spent to Date:</b>	\$ 48,520	<b>2012-2016 Planned Expenditures:</b>	\$ 20,000
<b>Cash flow through end of year:</b>	\$ 10,000	<b>Total Project Estimate:</b>	\$ 78,520
<b>Project Balance</b>	\$ 47,480	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$ 20,000					\$ 20,000
Construction	*	*	*			\$ -
						\$ -
<b>TOTAL</b>	\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ 20,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Recycled Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:** This project does not add any new capacity to the recycled water system, so the funding source is 100% recycled water rates.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recycled Water**

**Project Number:** NEW  
**Project Name:** Recycled Tank Recoating Program  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Rice      **Board Approval:** 09/26/11

**Project Description:**

The District operates four recycled water storage tanks. Since construction, two of these tanks have not been inspected for a condition assessment of the exterior and interior coatings. These are the Bridlewood and Village C welded steel storage tanks. This project would allow for an interior and exterior inspection of the tank coatings.  
 The proposed budget involves a survey of both welded steel tanks, identification and prioritization of recoating and upgrade needs, and bidding for coating remediation services if required. Emphasis will be placed on inspection of interior coatings which are difficult to access and schedule downtimes for repairs.

**Basis for Priority:**

Project purpose is to maintain existing assets and prolong their useful service life and reliability.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 480,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 480,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 480,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 20,000					\$ 20,000
Design	\$ -	\$ 10,000				\$ 10,000
Construction Costs		*	\$200,000	\$200,000	\$ 50,000	\$ 450,000
						\$ -
<b>TOTAL</b>	\$ 20,000	\$ 10,000	\$ 200,000	\$ 200,000	\$ 50,000	\$ 480,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
RW rates	100%	\$20,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$20,000</b>

**Funding Comments:** Project involves no planned increase in capacity, therefore funding is 100% recycled water rates.

# Hydroelectric Projects

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 03011H  
**Project Name:** Forebay Dam Upgrades  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

The reservoir is currently restricted 3 feet below the spillway crest by DSOD and FERC. DSOD requires that the dam's stability be improved to minimum standards. Reservoir sediments under the reservoir restriction negatively impact El Dorado Project operations and have reached concerning levels. The spillway outfall requires remediation as well as the two unused penstocks within the dam which require permanent abandonment. To mitigate these deficiencies and to optimize power generation and increase emergency water storage, the District plans to buttress and raise the dam 10 feet.

**Basis for Priority:**

DSOD/FERC dam safety mandate. Currently have operational limitations, decrease in power generation income, decrease in drinking water reliability.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 2,952,858	<b>Expenditures through end of year:</b>	\$ 2,032,358
<b>Spent to Date:</b>	\$ 1,682,358	<b>2012-2016 Planned Expenditures:</b>	\$ 9,800,000
<b>Cash flow through end of year:</b>	\$ 350,000	<b>Total Project Estimate:</b>	\$ 11,832,358
<b>Project Balance</b>	\$ 920,500	<b>Additional Funding Required</b>	\$ 8,879,500

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$100,000					\$ 100,000
Design	\$ 300,000	\$ 400,000				\$ 700,000
Construction			\$ 7,000,000	\$ 2,000,000		\$ 9,000,000
						\$ -
<b>TOTAL</b>	\$ 400,000	\$ 400,000	\$ 7,000,000	\$ 2,000,000	\$ -	\$ 9,800,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 04005H  
**Project Name:** Powerhouse Upgrades  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1      **PM:** Downey      **Board Approval:** 09/26/11

**Project Description:**

The following powerhouse upgrade projects are proposed: 1 - Install upper level emergency egress

**Basis for Priority:**

These are needed safety improvements

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 427,556	<b>Expenditures through end of year:</b>	\$ 381,663
<b>Spent to Date:</b>	\$ 381,663	<b>2012-2016 Planned Expenditures:</b>	\$ 15,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 396,663
<b>Project Balance</b>	\$ 45,893	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$15,000					\$ 15,000
						\$ -
<b>TOTAL</b>	<b>\$ 15,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	100%	\$0
Water Rates		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:



**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Hydroelectric**

Project Number: **06030H**  
 Project Name: **Bridge Replacement at Camp 2**  
 Project Category: **Reliability & Service Level Improvements**  
 Priority: **1** PM: **Eymann** Board Approval: **09/26/11**

**Project Description:**

The District owned Bridge which serves Camp 2 has been de-rated to pedestrians and small ATV traffic only due to structural and age related deficiencies. To safely construct and protect the new bridge from boulder slides, the currently unstable rock slope immediately above the bridge requires scaling and stabilization. The Board has awarded a design contract and the design work is underway.

**Basis for Priority:**

Bridge replacement and rock scaling/stabilization is necessary in order to maintain the safety and reliability of the El Dorado Canal system and our employees.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 434,786	<b>Expenditures through end of year:</b>	\$ 130,265
<b>Spent to Date:</b>	\$ 60,265	<b>2012-2016 Planned Expenditures:</b>	\$ 800,000
<b>Cash flow through end of year:</b>	\$ 70,000	<b>Total Project Estimate:</b>	\$ 930,265
<b>Project Balance</b>	\$ 304,521	<b>Additional Funding Required</b>	\$ 495,479

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design		*				\$ -
Construction	\$ 800,000					\$ 800,000
						\$ -
<b>TOTAL</b>	<b>\$ 800,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 800,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$262,604
Water Reserves	47%	\$232,875
		\$0
<b>Total</b>	<b>100%</b>	<b>\$495,479</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Hydroelectric**

**Project Number:** 07013H  
**Project Name:** Echo Lake Dam Evaluation  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

FERC Part 12D studies are underway for Echo Lake Dam: the studies include performing new hydrologies and stability analyzes. A supplemental Flood Operations plan was developed to mitigate potential dam overtopping in the design storm. These evaluations have been completed and are currently under FERC/DSOD and FERC Part 12D Independant Consultant Review. FERC requested additional information on these studies and responses are currently being prepared. These studies have been mandated by the Division of Safety of Dams and the Federal Energy Regulatory Commission.

**Basis for Priority:**

FERC and DSOD compliance

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 371,951	<b>Expenditures through end of year:</b>	\$ 156,394
<b>Spent to Date:</b>	\$ 131,394	<b>2012-2016 Planned Expenditures:</b>	\$ 30,000
<b>Cash flow through end of year:</b>	\$ 25,000	<b>Total Project Estimate:</b>	\$ 186,394
<b>Project Balance</b>	\$ 215,557	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$30,000	*	*			\$ 30,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 30,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 30,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Hydroelectric**

**Project Number:** 08003H  
**Project Name:** Flume 41 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, several flumes remaining that are near or beyond the estimated 50-year service life of wooden flumes with additional flumes require various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace Flume 41 which consists of 700 feet of wooden flume with a new concrete flume and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. In addition, the project scope will include access road improvements to reduce construction costs by reducing helicopter use and for canal and flume maintenance. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation. Road and staging area improvements and are scheduled for the summer of 2012, ahead of the Flume 41 replacement scheduled for the outage of 2012.

**Basis for Priority:**

The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and water into environmentally sensitive areas.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 763,433	<b>Expenditures through end of year:</b>	\$ 866,606
<b>Spent to Date:</b>	\$ 516,606	<b>2012-2016 Planned Expenditures:</b>	\$ 4,500,000
<b>Cash flow through end of year:</b>	\$ 350,000	<b>Total Project Estimate:</b>	\$ 5,366,606
<b>Project Balance</b>	\$ (103,173)	<b>Additional Funding Required</b>	\$ 4,603,173

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 3,350,000	\$ 1,150,000				\$ 4,500,000
						\$ -
<b>TOTAL</b>	<b>\$ 3,350,000</b>	<b>\$ 1,150,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,500,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$1,830,182
Water Reserves	47%	\$1,622,991
		\$0
<b>Total</b>	<b>100%</b>	<b>\$3,453,173</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 08004H  
**Project Name:** Flume 46A and 47 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes requiring various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace Flumes 46A and 47 which consist of 140 feet of wooden flume with a new wood or concrete flume by District crews or a contractor and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation.

**Basis for Priority:**

These are projects that provide measurable progress toward achieving the District's goals, but over which the District has a moderate level of control as to when they should be performed.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 130,025	<b>Expenditures through end of year:</b>	\$ 66,012
<b>Spent to Date:</b>	\$ 66,012	<b>2012-2016 Planned Expenditures:</b>	\$ 750,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 816,012
<b>Project Balance</b>	\$ 64,013	<b>Additional Funding Required</b>	\$ 685,987

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction				\$750,000		\$ 750,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ 750,000	\$ -	\$ 750,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$0
Water Reserves	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 08005H  
**Project Name:** Spillway 47C Upgrades  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1 **PM:** Brink **Board Approval:** 09/26/11

**Project Description:**

In 2007, staff visited spillway locations with the USFS to evaluate each site and develop a plan as required by 4(e) Condition C41. The approved plan requires the evaluation of Spillway 47C to determine its structural integrity and determine methods of remediation of the deteriorated structure and channel. By agreement, the improvements to SW47C must be completed by 2012. Canal and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation. SW47C was identified as requiring improvements to the spill channel before being put into service as a preferred spillway. Staff has determined that channel improvements are not practical and have identified other improvements that meet the project objectives. Those improvements include: improvements to SW46 to provide for a full capacity automated canal release, construction of a new wider trash rack at the 14-Mile Tunnel entrance, and followed by abandonment of SW47C. Land acquisitions will be required associated with the 14-Mile tunnel work, and a new PG&E service with associated easements required for the automated spillway at SW46. The work at SW 47C will be completed by District crews following completion of SW46.

**Basis for Priority:**

EID would not be able to comply with the FERC License, Settlement Agreement and USFS 4(e) Condition requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 465,655	<b>Expenditures through end of year:</b>	\$ 228,735
<b>Spent to Date:</b>	\$ 153,735	<b>2012-2016 Planned Expenditures:</b>	\$ 1,800,000
<b>Cash flow through end of year:</b>	\$ 75,000	<b>Total Project Estimate:</b>	\$ 2,028,735
<b>Project Balance</b>	\$ 236,920	<b>Additional Funding Required</b>	\$ 1,563,080

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design/CM/Inspection	\$350,000	\$50,000				\$ 400,000
Construction	\$1,200,000	\$200,000				\$ 1,400,000
						\$ -
<b>TOTAL</b>	<b>\$ 1,550,000</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,800,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$695,932
Water Rates	47%	\$617,148
		\$0
<b>Total</b>	<b>100%</b>	<b>\$1,313,080</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 08013H  
**Project Name:** El Dorado County Hydroelectric Development Plan  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 3      **PM:** Megerdigian      **Board Approval:** 09/26/11

**Project Description:**

In coordination with the EDC Water Agency, this project is to review the potential of new hydroelectric projects within El Dorado County which are capable of self funding through power revenues and would provide new water supply infrastructure. EID and EDCWA jointly funded, 50/50, a contract with EN2 Resources to prepare a county-wide plan that identified potential new hydroelectric generation sites. That report is complete and through the course of the study, a grant opportunity to study more generation projects throughout the county was received from the California Energy Commission.

**Basis for Priority:**

Project is underway with the grant declaration approved by the Board and the grant awarded by the CEC.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 475,000	<b>Expenditures through end of year:</b>	\$ 330,626
<b>Spent to Date:</b>	\$ 330,626	<b>2012-2016 Planned Expenditures:</b>	\$ 20,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 350,626
<b>Project Balance</b>	\$ 144,374	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$20,000					\$ 20,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 20,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 20,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Rates	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 11002  
**Project Name:** El Dorado Diversion Dam Upgrades  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

Project includes: 1- The screen forebay needs to be pinned to the foundation to resist buoyancy. 2- The fish ladder will be improved by re-configuration and extension per CDFG fish passage requirements. 3 - Protection of air storage tanks to reduce the frequency of freezing the fish screens during blow-down. The fish ladder aspect of the project is awaiting approval by DFG with construction planned for summer/fall 2013.

This item includes support from EID's Camp 5 Operations and Maintenance crews including labor, materials and equipment to complete the required modifications and repairs to the Diversion structure facilities.

**Basis for Priority:**

Non-compliance with FERC and DFG requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 152,288	<b>Expenditures through end of year:</b>	\$ 4,828
<b>Spent to Date:</b>	\$ 828	<b>2012-2016 Planned Expenditures:</b>	\$ 840,000
<b>Cash flow through end of year:</b>	\$ 4,000	<b>Total Project Estimate:</b>	\$ 844,828
<b>Project Balance</b>	\$ 147,460	<b>Additional Funding Required</b>	\$ 692,540

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$30,000					\$ 30,000
Construction		\$810,000				\$ 810,000
						\$ -
<b>TOTAL</b>	\$ 30,000	\$ 810,000	\$ -	\$ -	\$ -	\$ 840,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Hydroelectric**

**Project Number:** 11003  
**Project Name:** Caples Lake Dam Regulatory Improvements  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

Further Part 12D studies and remediations are required for Caples Lake Main and Auxiliary Dams: the studies include performing new hydrologies, stability analyzes, structural analyzes. These studies are under FERC/DSOD and the 2009 Part 12D Independent Consultant. A piezometer evaluation report has been prepared and will be submitted to FERC and DSOD for review. An additional piezometer is required at the Auxiliary Dam. These studies and repairs have been mandated by the Division of Safety of Dams and the Federal Energy Regulatory Commission. Additional geotechnical research has been required by the 2009 IC which is currently underway.

This project continues the work of the previously approved and funded PN 07012H.

**Basis for Priority:**

Non-compliance with FERC and DSOD requirements

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 303,034	<b>Expenditures through end of year:</b>	\$ 88,308
<b>Spent to Date:</b>	\$ 18,308	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ 70,000	<b>Total Project Estimate:</b>	\$ 138,308
<b>Project Balance</b>	\$ 214,726	<b>Additional Funding Required</b>	\$ -

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$50,000	*	*			\$ 50,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:



**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Hydroelectric**

**Project Number:** 11004  
**Project Name:** Lake Aloha Dam Regulatory Improvements  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

Part 12D studies and remediation are required for Lake Aloha Dams: the studies included new hydrologies, stability analyzes and outlet tower reinforcement. The new hydrology and stability analysis has been completed and submitted to FERC for their review. The outlet tower reinforcement design is 90% complete. Maintainance to the Main and auxiliary dams is also planned. It is likely that construction will be in 2013 due to lengthy regulatory review periods. These studies and repairs have been mandated by FERC.

This project continues the work of the previously approved and funded PN 04002H.

**Basis for Priority:**

Non-compliance with FERC dam safety regulations.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 276,583	<b>Expenditures through end of year:</b>	\$ 35,781
<b>Spent to Date:</b>	\$ 17,781	<b>2012-2016 Planned Expenditures:</b>	\$ 270,000
<b>Cash flow through end of year:</b>	\$ 18,000	<b>Total Project Estimate:</b>	\$ 305,781
<b>Project Balance</b>	\$ 240,802	<b>Additional Funding Required</b>	\$ 29,198

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$ 25,000					\$ 25,000
Design	\$ 35,000					\$ 35,000
Construction		\$ 210,000				\$ 210,000
						\$ -
<b>TOTAL</b>	\$ 60,000	\$ 210,000	\$ -	\$ -	\$ -	\$ 270,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 11005  
**Project Name:** Silver Lake Dam Regulatory Improvements  
**Project Category:** Regulatory Requirements  
**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

Part 12D studies and remediation work are required for Silver Lake Dam: the studies include performing new hydrologies, stability analyzes, and structural analyzes. FERC and the 2009 Part 12D Independent Consultant are reviewing the flood study and stability study. The District is preparing an initial response to FERC's questions on these studies. Significant further studies are anticipated. Due to age related degradation of the upstream face of the dam, re-facing is planned for 2013.

This project continues the work of the previously approved and funded PN 06017H.

**Basis for Priority:**

Non-compliance with FERC license and DSOD dam safety program requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 554,234	<b>Expenditures through end of year:</b>	\$ 79,670
<b>Spent to Date:</b>	\$ 39,670	<b>2012-2016 Planned Expenditures:</b>	\$ 1,270,000
<b>Cash flow through end of year:</b>	\$ 40,000	<b>Total Project Estimate:</b>	\$ 1,349,670
<b>Project Balance</b>	\$ 474,564	<b>Additional Funding Required</b>	\$ 795,436

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$170,000					\$ 170,000
Design						\$ -
Construction		\$1,100,000				\$ 1,100,000
						\$ -
<b>TOTAL</b>	\$ 170,000	\$ 1,100,000	\$ -	\$ -	\$ -	\$ 1,270,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 11008  
**Project Name:** Flume 39-40 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes require various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace a total of 550 feet of old elevated and ground level wooden flume with a new wooden flume that includes hazardous tree and rock removal to reduce the potential for future flume damage. This is the third and final year of the three year flume replacement project performed by District crews with the final section to be replaced consisting of 200 feet of elevated wooden flume.

**Basis for Priority:**

The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and torrents of water into environmentally sensitive areas.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 838,931	<b>Expenditures through end of year:</b>	\$ 441,198
<b>Spent to Date:</b>	\$ 66,198	<b>2012-2016 Planned Expenditures:</b>	\$ 750,000
<b>Cash flow through end of year:</b>	\$ 375,000	<b>Total Project Estimate:</b>	\$ 1,191,198
<b>Project Balance</b>	\$ 397,733	<b>Additional Funding Required</b>	\$ 352,267

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$750,000					\$ 750,000
						\$ -
<b>TOTAL</b>	<b>\$ 750,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 750,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$186,702
Water Reserves	47%	\$165,565
		\$0
<b>Total</b>	<b>100%</b>	<b>\$352,267</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 11009  
**Project Name:** Flume 45 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes requiring various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace Flume 45, which consist of 1000 feet of wooden flume, with new concrete flumes and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation.

**Basis for Priority:**

The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and torrents of water into environmentally sensitive areas.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 11,062
<b>Spent to Date:</b>	\$ 11,062	<b>2012-2016 Planned Expenditures:</b>	\$ 3,450,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 3,461,062
<b>Project Balance</b>	\$ 38,938	<b>Additional Funding Required</b>	\$ 3,411,062

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning		\$150,000				\$ 150,000
Design			\$ 200,000			\$ 200,000
Construction Costs					\$ 3,100,000	\$ 3,100,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 150,000	\$ 200,000	\$ -	\$ 3,100,000	\$ 3,450,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water reserves	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 11023  
**Project Name:** Echo Conduit Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 1      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

The Echo conduit is a 36-inch steel pipe that is situated above grade directly above Highway 50 and delivers water from Echo Lake to an open ditch, the tunnel, and ultimately to the South Fork of the American River for diversion into the El Dorado Canal. The conduit is the sole means of bringing 1,890 acre-feet of pre-1914 water rights and direct diversion water to the SFAR for District uses. The water also constitutes substantial annual power generation. In 2005, the tunnel portion of the Echo Lake water conveyance system was slip-lined under an emergency project due to multiple cave-ins. The conduit portion of the conveyance and its supporting timber foundation has reached the end of its useful life. Snow loading has crushed the conduit at several locations and, in conjunction with corrosion, has caused cracking at the joints. One of the conduit sections failed in 2003 and in 2009 new failures were observed requiring the District to decrease the flow in the conduit by 1/3 until the conduit can be replaced. Various conduit replacement alternatives need to be evaluated. In the meantime, before replacement, the conduit will continue to be "band-aided" and operated at a reduced flow rate.

**Basis for Priority:**

FERC has requested a plan and schedule to replace or repair the conduit. This project will maintain existing assets and provide increased water delivery safety, reliability, and power generation.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 50,000	<b>Expenditures through end of year:</b>	\$ 7,865
<b>Spent to Date:</b>	\$ 3,865	<b>2012-2016 Planned Expenditures:</b>	\$ 3,785,000
<b>Cash flow through end of year:</b>	\$ 4,000	<b>Total Project Estimate:</b>	\$ 3,792,865
<b>Project Balance</b>	\$ 42,135	<b>Additional Funding Required</b>	\$ 3,742,865

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Total</b>
Study/Planning	\$10,000					\$ 10,000
Design		\$75,000	\$200,000	\$3,500,000		\$ 3,775,000
Construction Costs				*	*	\$ -
						\$ -
<b>TOTAL</b>	\$ 10,000	\$ 75,000	\$ 200,000	\$ 3,500,000	\$ -	\$ 3,785,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Reserves	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** 11037  
**Project Name:** Flume 3 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes require various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace Flume 3 which consist of 125 feet of wooden flume with a new wooden flume and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation.

**Basis for Priority:**

These are projects that provide measurable progress toward achieving the District's goals, but over which the District has a moderate level of control as to when they should be performed.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 277,565	<b>Expenditures through end of year:</b>	\$ 3,530
<b>Spent to Date:</b>	\$ 3,530	<b>2012-2016 Planned Expenditures:</b>	\$ 700,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 703,530
<b>Project Balance</b>	\$ 274,035	<b>Additional Funding Required</b>	\$ 425,965

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 700,000					\$ 700,000
						\$ -
<b>TOTAL</b>	<b>\$ 700,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 700,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$225,761
Water Reserves	47%	\$200,204
		\$0
<b>Total</b>	<b>100%</b>	<b>\$425,965</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number: NEW**  
**Project Name: Alder and Plum Siphon Assessment**  
**Project Category: Master Planning**

**Priority: 2 PM: Eymann Board Approval: 09/26/11**

**Project Description:**

FERC regulations and our standard operating procedures require the siphons to be inspected and assessed at regular intervals. This project is to perform a large scale assessment of each siphon and determine if any upgrades or replacements need to be made for continued reliability of water supply.

**Basis for Priority:**

The project will allow continued water supply reliability for power generation and provides measurable progress toward achieving the District's goals, but over which the District has a moderate level of control as to when they should be performed.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 50,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 50,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning				\$ 50,000		\$ 50,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Water FCCs	53%	\$0
Water Rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** NEW  
**Project Name:** Canals & Flumes Upgrades  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes require various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. Projects anticipated include flume repair/replacement of transitions at flume 42/43 and 48; spillway 42; and construct a bridge at Camp M. Also included is labor, materials, lumber, helicopter contract work, and equipment for support from Camp 5 crews. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply.

**This project continues the work of the previous Project No. 10008**

At the El Dorado Canal Spillway 2, all the existing hydraulic operated spillways need to be converted to hydraulic accumulators in order to improve reliability. Currently the hydraulic rams are operated by a 12V DC motor/pump. The opening energy is stored in the batteries. With remote generators and cold temperatures, and no AC power, the reliability of this system is compromised. By using hydraulic accumulators, the stored energy is in the compressed gas/over oil accumulator, and only a small amount of DC energy is needed to open the porting valves.

**Basis for Priority:**

These are projects that provide measurable progress toward achieving the District's goals, but over which the District has a moderate level of control as to when they should be performed.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 1,500,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 1,500,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 1,500,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$100,000	\$300,000	\$500,000	\$100,000	\$500,000	\$ 1,500,000
<b>TOTAL</b>	<b>\$ 100,000</b>	<b>\$ 300,000</b>	<b>\$ 500,000</b>	<b>\$ 100,000</b>	<b>\$ 500,000</b>	<b>\$ 1,500,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$53,000
Water Reserves	47%	\$47,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$100,000</b>

Funding Comments:



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** New  
**Project Name:** Diversion Dam Fish Screen  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 3      **PM:** Eymann      **Board Approval:** 09/26/11

**Project Description:**

The existing fish screens on the El Dorado Diversion Dam are susceptible to ice and debris plugging. The existing fish screens and air supply manifolds are also reaching the end of their useful life as spot failures have occurred. The fish screen blow down system is currently functioning at a significantly reduced capacity due to air loss in the manifolds. This will be investigated in the fall 2011 Project outage when the facility is de-watered and a determination on the level of the repairs will be made then. If conditions warrant, additional funding may be required in 2012 to complete this work. Investigations and trial installations of alternate screening methods will begin in 2012. If it is determined that the alternate method is superior to the existing, the existing will be replaced. If the alternate is not superior, an in-kind replacement will occur.

**Basis for Priority:**

Anticipated maintenance need and the opportunity to improve the efficiency and reliability of the fish screen system.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 170,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 170,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 170,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design	\$50,000					\$ 50,000
Construction Costs		\$120,000				\$ 120,000
						\$ -
<b>TOTAL</b>	<b>\$ 50,000</b>	<b>\$ 120,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 170,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Reserves	100%	\$50,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$50,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** NEW  
**Project Name:** El Dorado Canal Lining  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID will conduct annual assessments of the El Dorado Canal between the diversion dam on the South Fork of the American River and Forbay in Pollock Pines to identify structural deficiencies. The findings of the annual assessment would be prioritized and incorporated into the CIP for repair and or replacement. Associated costs of this activity include planning, permitting, design and construction. Canal, flume, and spillway maintenance and replacements are imperative to the safe reliable operation of the Districts hydroelectric facility, power generation revenue, and water supply.

**Basis for Priority:**

These are projects that provide measurable progress toward achieving the District's goals, but over which the District has a moderate level of control as to when they should be performed.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 150,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 150,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 150,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs					\$150,000	\$ 150,000
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 150,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$0
Water Reserves	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**

**Project Number:** NEW  
**Project Name:** Flume 4 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes require various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace Flume 4 which consist of 400 feet of wooden flume with a new concrete flume, and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Also SW 5 will be upgraded and automated. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation.

**Basis for Priority:**

The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and torrents of water into environmentally sensitive areas.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 300,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 300,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 300,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning						\$ -
Design		\$100,000			\$ 200,000	\$ 300,000
Construction Costs						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ 100,000	\$ -	\$ -	\$ 200,000	\$ 300,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water Reserves	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** NEW  
**Project Name:** Flume 42-43 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes requiring various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace 432 feet of wooden flume with a new concrete flume and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation.

**Basis for Priority:**

The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and torrents of water into environmentally sensitive areas.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 2,750,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 2,750,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 2,750,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 200,000	\$ 50,000	\$ 2,500,000			\$ 2,750,000
						\$ -
<b>TOTAL</b>	<b>\$ 200,000</b>	<b>\$ 50,000</b>	<b>\$ 2,500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,750,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$106,000
Water Reserves	47%	\$94,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$200,000</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Hydroelectric**

**Project Number:** NEW  
**Project Name:** Flume 44 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes requiring various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace 473 feet of old wooden flume with a new concrete flume and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation.

**Basis for Priority:**

The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and torrents of water into environmentally sensitive areas.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 2,725,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 2,725,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 2,725,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$25,000					\$ 25,000
Design		\$200,000				\$ 200,000
Construction Costs				\$2,500,000		\$ 2,500,000
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ 2,500,000</b>	<b>\$ -</b>	<b>\$ 2,725,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCC's	53%	\$13,250
Water Reserves	47%	\$11,750
		\$0
<b>Total</b>	<b>100%</b>	<b>\$25,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number:** NEW  
**Project Name:** Flume 48 Replacement  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Noel      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes with additional flumes requiring various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace 448 feet of wooden flume with a new concrete flume and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation.

**Basis for Priority:**

The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and torrents of water into environmentally sensitive areas.

**Project Financial Summary:**

<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 300,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 300,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 300,000

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Study/Planning						\$ -
Design		\$ 150,000	\$ 150,000			\$ 300,000
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ 150,000	\$ 150,000	\$ -	\$ -	\$ 300,000

Funding Sources	Percentage	2012 Funding Amount
Water FCC's	53%	\$0
Water Reserves	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Hydroelectric**

**Project Number:** NEW  
**Project Name:** Flume 52A Replacement  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Brink      **Board Approval:** 09/26/11

**Project Description:**

EID staff has reviewed recommendations stated in the Flume Conditions Evaluation Report prepared by Carlton Engineering. According to the report, thirteen flumes are near or beyond the estimated 50-year service life of wooden flumes, with additional flumes that require various levels of repair. Additionally, numerous existing canal sections need to be upgraded or replaced to increase the reliability of the water conveyance system. After dynamic flow testing was completed on the canal in November 2003, priorities were established for flume and canal replacement. This project will replace Flume 52A, which consist of 400-feet of wooden flume, with new flumes and remove hazardous trees and rocks from the hillside to reduce the potential for future flume damage. Canal, flume, and spillway replacements are necessary in order to maintain reliability of the water supply. In addition this project will help ensure reliability of power generation. The CIP assumes the flumes will be replaced by District crews in-kind with wooden flumes.

**Basis for Priority:**

Removal of SW47C addresses a FERC license requirement. The flume system will continue to deteriorate potentially causing flume failures that can spill sediment and torrents of water into environmentally sensitive areas and resulting water outages.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 1,200,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 1,200,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 1,200,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning						\$ -
Design						\$ -
Construction		\$ 200,000			\$ 1,000,000	\$ 1,200,000
						\$ -
<b>TOTAL</b>	\$ -	\$ 200,000	\$ -	\$ -	\$ 1,000,000	\$ 1,200,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water FCCs	53%	\$0
Water rates	47%	\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Hydroelectric**

**Project Number: NEW**  
**Project Name: Penstock Assessment**  
**Project Category: Reliability & Service Level Improvements**

**Priority: 2 PM: Eymann Board Approval: 09/26/11**

**Project Description:**

Water is provided from Forebay Reservoir to the El Dorado Powerhouse through a 60-inch diameter penstock for power generation. FERC regulations and our standard operating procedures require the penstock to be inspected and assessed at regular intervals. This project is to perform a large scale assessment of the penstock and determine if any upgrades or replacements need to be made for continued reliability.

**Basis for Priority:**

The project will maintain that the penstock can continue water supply reliability for power generation and provides measurable progress toward achieving the District's goals, but over which the District has a moderate level of control as to when they should be performed.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 50,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 50,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning				\$ 50,000		\$ 50,000
Design						\$ -
Construction						\$ -
						\$ -
<b>TOTAL</b>	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Water FCCs	100%	\$0
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$0</b>

**Funding Comments:**



# Recreation Projects

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** 09011R  
**Project Name:** Pinecone Campground Tent Cabins  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

The Sly Park Master Plan includes a provision for tent platforms to be constructed in campsites 19-38 within the Pinecone Campground at Jenkinson Lake. These campsites are sloped. The slope is continually degraded by campers attempting to create a level spot for their tents. During periods of heavy rain the degraded ground is further eroded by the groundwater run-off. The scope of work for this project includes: Installing ten tent platforms and cabins in campsites 19 -38. The platforms will be constructed using blocks and fill which will provide a longer asset life and less maintenance than wood construction. Tent cabins, which have a higher per night rate than the unimproved campsite, could pay for themselves and the platforms within one year.

**Basis for Priority:**

Campsites 19-38 will continue to sustain environmental damage. Project is discretionary but improves campground and eliminates potential for continued erosion.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 33,750	<b>Expenditures through end of year:</b>	\$ 32,202
<b>Spent to Date:</b>	\$ 17,202	<b>2012-2016 Planned Expenditures:</b>	\$ 15,000
<b>Cash flow through end of year:</b>	\$ 15,000	<b>Total Project Estimate:</b>	\$ 47,202
<b>Project Balance</b>	\$ 1,548	<b>Additional Funding Required</b>	\$ 13,452

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$15,000					\$ 15,000
						\$ -
<b>TOTAL</b>	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 15,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Property Tax	100%	\$13,452
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$13,452</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** 09022R  
**Project Name:** Sly Park Master Plan Implementation  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

The scope of this project will be to analyze and implement financially feasible park improvements as described in the Sly Park Master Plan. The addition of these new facilities could generate more income, protect the environment, and provide facilities that enhance the visitors experience. Scope of work for 2011 includes facility improvements needed to incorporate the now separate camping areas for Boy and Girl Scouts into one location at Scout Hill. Currently Scout Hill has no restroom facilities or water spigots. In 2009 the Boy Scouts organized a successful volunteer effort to install a waterline to the site. 2011 site improvements will include waterless toilets, water spigots, road and grounds improvements. The existing Girl Scout camp is located between two areas whose primary use is celebratory activities and large group camping, resulting in a crowded party atmosphere verses a nature experience. The master plan designates the existing Girl Scout Camp as cabin camping for the event center. Additional revenue could be realized by allowing event center visitors to participate in outdoor camping in the former Girls Scout camp prior to the construction of the future cabins.

**Basis for Priority:**

Continued increased risk to the environment (no restrooms), health and safety risk for scout campers, and revenue generation. The project is discretionary, but improves camping for visitors which is one of the goals of the Master Plan.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 60,000	<b>Expenditures through end of year:</b>	\$ 89,733
<b>Spent to Date:</b>	\$ 59,733	<b>2012-2016 Planned Expenditures:</b>	\$ 30,000
<b>Cash flow through end of year:</b>	\$ 30,000	<b>Total Project Estimate:</b>	\$ 119,733
<b>Project Balance</b>	\$ (29,733)	<b>Additional Funding Required</b>	\$ 59,733

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$5,000					\$ 5,000
Design						\$ -
Construction Costs	\$25,000					\$ 25,000
						\$ -
<b>TOTAL</b>	<b>\$ 30,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 30,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Property tax	100%	\$59,733
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$59,733</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** 10002  
**Project Name:** Hazel Creek Campground Restoration  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

Re-vegetate and restore Hazel Creek corridor to reduce erosion and sedimentation into Jenkinson Lake. Reconfigure campsite providing a 50 foot buffer from the creek. Rehabilitate Hazel camp sites with new vegetation - trees, shrubs, and groundcover. Install new bridges at the trail crossing of Hazel Creek and crossing of Unnamed Creek. The start date for this project is subject to approval of grant funding. The current campground contains 15 sites, the re-design reduces the number to 12. However the current redesign calls for 2 wood cabins, the additional revenue for these cabins makes up all but about \$4,000 in annual revenue lost by the reduction in sites.

**Basis for Priority:**

This project is in outlined in the Sly Park Master Plan.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 153,466	<b>Expenditures through end of year:</b>	\$ 153,466
<b>Spent to Date:</b>	\$ 1,866	<b>2012-2016 Planned Expenditures:</b>	\$ 250,000
<b>Cash flow through end of year:</b>	\$ 151,600	<b>Total Project Estimate:</b>	\$ 403,466
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 250,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning	\$20,000					\$ 20,000
Design						\$ -
Construction Costs	\$230,000					\$ 230,000
						\$ -
<b>TOTAL</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 250,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water Reserves	100%	\$250,000
Current Grant funding		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$250,000</b>

**Funding Comments:** Grant application will be submitted to fund the full cost of the project construction.

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** 10013  
**Project Name:** Vegetation Rehabilitation  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

Sly Park Recreation Area is an extremely popular regional destination attracting nearly 300,000 visitors annually. Due to the high visitor use, uncontrolled access, and beetle infestation many areas are now void of vegetation. Winter storms wash the soil from these areas into streams and the lake, resulting in further erosion and water quality concerns. Visitor conflicts occur at a higher percentage in the areas with decreased vegetation, increasing staff time and health and safety of the visitors. The El Dorado County special use permit for the implementation of the Sly Park Master Plan includes "Objective 7.4.4: Forest and Oak Woodland Resources. Protect and conserve forest and woodland resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products, and aesthetic values". Planting and protecting native trees and shrubs with fencing and barrier rocks will reduce environmental damage by stabilizing soils. To reduce costs, small trees and shrubs will be transplanted from heavily vegetated locations whenever possible.

**Basis for Priority:**

Environmental damage will continue resulting in negative effects on recreation grounds, water quality, wildlife, fisheries, visitor experience and revenue.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 30,000	<b>Expenditures through end of year:</b>	\$ 29,650
<b>Spent to Date:</b>	\$ 17,650	<b>2012-2016 Planned Expenditures:</b>	\$ 25,000
<b>Cash flow through end of year:</b>	\$ 12,000	<b>Total Project Estimate:</b>	\$ 54,650
<b>Project Balance</b>	\$ 350	<b>Additional Funding Required</b>	\$ 24,650

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$ 25,000
						\$ -
<b>TOTAL</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 25,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Property Tax	100%	\$4,650
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$4,650</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** 11006  
**Project Name:** Sly Park Day Use Parking Improvements  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

The Sly Park Master Plan includes a provision for improved day use parking throughout the grounds. Sly Park Recreation Area continues to see increased use. In 2010 the recreation area day use filled to capacity on 3 consecutive weekends in July and 7 consecutive weekends in 2011 beginning in June and ending in August. The majority of the visitor-preferred day use areas provide undefined parking on dirt surfaces. Vegetation needed to prevent soil erosion and water quality degradation is being destroyed rapidly. Improving the day use parking would result in improved vegetation, water quality, and revenue. Requested funding is for required CEQA review and materials. Ground preparation would be done by in-house labor.

**Basis for Priority:**

Improving the day use parking would result in improved vegetation, water quality, and revenue.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 45,000	<b>Expenditures through end of year:</b>	\$ 25,000
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ 25,000	<b>Total Project Estimate:</b>	\$ 75,000
<b>Project Balance</b>	\$ 20,000	<b>Additional Funding Required</b>	\$ 30,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$50,000					\$ 50,000
						\$ -
<b>TOTAL</b>	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Property Tax	100%	\$30,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$30,000</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** 11007  
**Project Name:** Sly Park Boundary and Border Fencing  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

A large portion of the south side of Sly Park Recreation Area along Mormon Immigrant Trail is currently fenced with barbed wire. The barbed wire is dangerous to authorized visitors and ineffective in excluding unregistered guests in group areas. Complaints from group area registered guests about intruding unregistered guests are numerous. Unregistered guest use traffic has created trails which are confused as official trails. Registered guests have been injured by the use of the unofficial trails. For example, a bicycle injury occurred last year when a 7-year old bicyclist followed a trail which ended leaving her into coming traffic on Mormon Immigrant Trail. Sly Park also needs improved border fencing between selected camping areas. Border fencing would reduce visitor conflict and protect natural resources.

**Basis for Priority:**

Fencing is needed for the protection and safety of Sly Park Recreation Area visitors and natural resources.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 45,000	<b>Expenditures through end of year:</b>	\$ 44,463
<b>Spent to Date:</b>	\$ 20,463	<b>2012-2016 Planned Expenditures:</b>	\$ 25,000
<b>Cash flow through end of year:</b>	\$ 24,000	<b>Total Project Estimate:</b>	\$ 69,463
<b>Project Balance</b>	\$ 537	<b>Additional Funding Required</b>	\$ 24,463

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$25,000					\$ 25,000
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 25,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Property Tax	100%	\$24,463
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$24,463</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **Recreation**

**Project Number:** NEW  
**Project Name:** Pinecone Campground Water System  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

The waterline along the Pinecone strip, campsites 19 - 38, is only a few inches in the ground in some places resulting in multiple line breaks each year. The project involves relocating/replacing the water line to increase reliability and decrease erosion from future line breaks.

**Basis for Priority:**

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 45,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 45,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 45,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 45,000					\$ 45,000
						\$ -
<b>TOTAL</b>	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ 45,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Property Tax	100%	\$45,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$45,000</b>

Funding Comments:



**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** NEW  
**Project Name:** Sly Park Entrance Improvements  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

Complete Sly Park main entrance improvements as described in the master plan using a phased approach. The improvements are needed to decrease traffic congestion and opportunity for accidents both at the gatehouse and on Sly Park Road while increasing safety for vehicles, pedestrians and recreation staff. 2012: Realign main boat launch entrance and relocate dump station as described in the Sly Park Master Plan. This phase can be completed largely by District Staff without interruption to visitors. 2013: relocate gate house and remove old dump station.

**Basis for Priority:**

Recommended to reduce visitor and staff safety risks.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 200,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 200,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 200,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Study/Planning	\$ 10,000	\$ 5,000				\$ 15,000
Design	\$ 10,000	\$ 5,000				\$ 15,000
Construction	\$ 80,000	\$ 90,000				\$ 170,000
						\$ -
<b>TOTAL</b>	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 200,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Property Tax	100%	\$100,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$100,000</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: Recreation**

**Project Number:** NEW  
**Project Name:** Sly Park Trail Improvements  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2      **PM:** Jagers      **Board Approval:** 09/26/11

**Project Description:**

The Sly Park Master Plan includes a provision for many trail improvements within the Sly Park Recreation Area. The 2012 funding request includes required CEQA review and materials for improvements.

**Basis for Priority:**

Adequate trails are needed for visitor safety, and protection of natural resources.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ 15,000	<b>Expenditures through end of year:</b>	\$ 10,000
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 45,000
<b>Cash flow through end of year:</b>	\$ 10,000	<b>Total Project Estimate:</b>	\$ 55,000
<b>Project Balance</b>	\$ 5,000	<b>Additional Funding Required</b>	\$ 40,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction Costs	\$25,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 45,000
						\$ -
<b>TOTAL</b>	<b>\$ 25,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 45,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Property Tax	100%	\$20,000
		\$0
		\$0
<b>Total</b>	<b>100%</b>	<b>\$20,000</b>

**Funding Comments:**

# General District Projects

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **General District**

**Project Number:** **New**  
**Project Name:** **Business Continuity & Availability**  
**Project Category:** **Reliability & Service Level Improvements**

**Priority:** **2**      **PM:** **Ranstrom**      **Board Approval:** **09/26/11**

**Project Description:**

Implement technology and processes that will limit business disruption to acceptable levels of risk in the event of a disaster and ensure the reasonable continuity of critical and essential business processes that rely on information technology. This includes implementing redundant designs of critical IT services in the backup El Dorado Hills datacenter in the event of the potential loss of the HQ datacenter. Critical business processes have been evaluated for the IT services they require to perform, and an incremental recovery strategy developed that maps out IT services needing recovery within 1 hour, 1 day, 1 month, and beyond to minimize risk to the District mission while controlling expenses related to this investment in risk mitigation. The most urgent IT services for recovery include internet, VPN and terminal services used by operators to respond to SCADA alarms during and after hours, VOIP phone system used by staff at all facilities to service customers and coordinate work, and servers to host critical software and databases such as the finance system, utility billing and customer service system, and email system. An open solution design allows for the quick expansion of capacity if needed to address longer-running disasters - such as recovery from a fire in the HQ building.

**Basis for Priority:**

Recent business decisions, including the reduction of 30% of district employees, elimination of 24 hour staffing at plants, and retirement of the legacy finance system have significantly increased the district's reliance on information technology services over the past several years, including to perform remote after-hours SCADA incident response, automate regulatory sampling and report generation, automate utility billing, perform accounting, and perform payroll. The loss of use of these IT systems and services due to a disaster spanning several days would have significant effects on district services and finances due to rampant overtime costs to make up for the loss of automation. An extended loss of use for weeks or months would additionally subject the district to fines and penalties from the IRS and regulators in the hundreds of thousands of dollars. Business continuity provisions are a best practice, and mandated in many business segments. Waiting to develop a plan once a disaster strikes is inadequate due to lead times of 3-6 months or longer to acquire and implement the underlying IT infrastructure required to provide the critical IT services. Numerous government and private sector studies show that 50-80% of business that do not have a viable disaster response plan and experience a disaster that causes them to lose their data or information systems for an extended period of time will close or file bankruptcy within 2-5 years.

**Project Financial Summary:**

<b>Funded to Date:</b>		<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>		<b>2012-2016 Planned Expenditures:</b>	\$ 700,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 700,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 700,000

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Server/Virtualization System Replication	\$ 200,000					\$ 200,000
Network Redundancy	\$ 305,000					\$ 305,000
Storage	\$ 195,000					\$ 195,000
						\$ -
<b>TOTAL</b>	<b>\$ 700,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 700,000</b>

Funding Sources	Percentage	2012 Funding Amount
Water Reserves	60%	\$420,000
Wastewater Reserves	40%	\$280,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$700,000</b>

**Funding Comments:**

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **General District**

**Project Number:** NEW  
**Project Name:** 2012 Equipment Replacement  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Price      **Board Approval:** 09/26/11

**Project Description:**

Purchase of additional equipment and vehicles for District Operations. As in previous years, the District will assess and replace equipment that has met its useful life.

**Basis for Priority:**

Maintain and upgrade fleet of vehicles and equipment to meet regulatory requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>		<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>		<b>2012-2016 Planned Expenditures:</b>	\$ 100,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 100,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 100,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Equipment	\$ 100,000					\$ 100,000
						\$ -
						\$ -
						\$ -
<b>TOTAL</b>	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water rates	60%	\$60,000
Wastewater rates	40%	\$40,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$100,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: General District**

**Project Number:** New  
**Project Name:** 2012-14 Cyber Security Enhancements  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 1      **PM:** Eberhard      **Board Approval:** 09/26/11

**Project Description:**

This project will enhance and implement technology, plans, policies, and procedures identified by the 2011 Enterprise Security Assessment Report and required to ensure the ongoing cyber security of District data and IT assets. Findings targeted for improvement include funding for consultants to aid in the development of IT Security plans, policies and procedures which are currently immature at best; implementation of a Security Information and Event Management (SEIM) system; implementation of a network access control (NAC) system. Cyber security technology maintenance actions include the upgrade of the 7 year old internet firewall and the upgrade of 13 end-of-life video surveillance servers providing intrusion detection services at critical drinking water infrastructure, recreation facilities, and equipment yards which are 6 years old and have reached end of life.

**Basis for Priority:**

If this project is not approved the District may not be able to effectively safeguard information against unauthorized use, disclosure, modification, damage, or loss. These projects address elevating concerns from government agencies to adequately protect utility information technology assets from cyber attack.

**Project Financial Summary:**

<b>Funded to Date:</b>	\$ 250,000	<b>Expenditures through end of year:</b>	\$ 191,296
<b>Spent to Date:</b>	\$ 191,296	<b>2012-2016 Planned Expenditures:</b>	\$ 565,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 756,296
<b>Project Balance</b>	\$ 58,704	<b>Additional Funding Required</b>	\$ 506,296

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Program development	\$50,000	\$50,000				\$ 100,000
Prevention Measures (firewall, NAC)	\$150,000					\$ 150,000
Detection Measures (surveillance servers, SEIM)	\$200,000	\$100,000	\$15,000			\$ 315,000
						\$ -
<b>TOTAL</b>	<b>\$ 400,000</b>	<b>\$ 150,000</b>	<b>\$ 15,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 565,000</b>

Funding Sources	Percentage	2012 Funding Amount
Water Reserves	60%	\$204,778
Wastewater Reserves	40%	\$136,518
		\$0
<b>Total</b>	<b>100%</b>	<b>\$341,296</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: General District**

**Project Number:** NEW  
**Project Name:** Business Software Application Enhancement Program  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 3      **PM:** Ranstrom      **Board Approval:** 09/26/11

**Project Description:**

Design and integrate enterprise databases and end user software applications that improve the data quality and efficiency of current business processes. Over 100 enterprise and departmental software applications and databases are used daily to perform functions including enterprise asset management, maintenance management, customer information management, employee information management, records management, email, financial management, procurement, and geospatial information management. Scores of departmental databases supplement these core databases and are largely stand-alone at this time, requiring duplicate sets of data to be maintained in multiple places and causing inefficiency to manage and locate the data, plus confusion and potentially poor decisions when attempting to use data where quality is poor or inconsistent.

**Basis for Priority:**

Improve the speed and accuracy of critical business processes used to perform operations, customer service, billing, financial management, regulatory reporting, and other key functions of the district.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-20165 Planned Expenditures:</b>	\$ 2,000,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 2,000,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 2,000,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Enterprise DB	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 1,500,000
Departmental DB integrations	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000
						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 400,000</b>	<b>\$ 400,000</b>	<b>\$ 400,000</b>	<b>\$ 400,000</b>	<b>\$ 400,000</b>	<b>\$ 2,000,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water rates	60%	\$240,000
Wastewater rates	40%	\$160,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$400,000</b>

**Funding Comments:** Replaces IT Master Plan - Business Efficiency Improvements from prior years

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: General District**

**Project Number:** NEW  
**Project Name:** Business Software Application Reliability Program  
**Project Category:** Reliability & Service Level Improvements  
**Priority:** 2 **PM:** Ranstrom **Board Approval:** 09/26/11

**Project Description:**

Maintain the reliability and performance of the current business software applications and databases through upgrades to aging software programs including enterprise asset management system, maintenance management system, customer information system, employee information system, records management system, email system, financial system, geospatial information system, and scores of departmental databases to keep them current and supportable.

Software maintenance generally only provides the ability to upgrade software to minor version upgrades and patches. Major upgrades, such as upgrading from version 6.x to 7.x of a software product is not usually covered under software maintenance, but it required over time to maintain the product under supported levels. Typically a software manufacturer will only support current version plus one or two prior versions.

**Basis for Priority:**

Maintain the reliability and performance of the current business IT databases and applications used to perform operations, customer service, billing, financial management, regulatory reporting, and other key functions of the district.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-20165 Planned Expenditures:</b>	\$ 2,350,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 2,350,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 2,350,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Enterprise databases	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,000,000	\$ 1,600,000
Departmental DBs	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 750,000
						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 300,000</b>	<b>\$ 300,000</b>	<b>\$ 300,000</b>	<b>\$ 300,000</b>	<b>\$ 1,150,000</b>	<b>\$ 2,350,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water rates	60%	\$180,000
Wastewater rates	40%	\$120,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$300,000</b>

**Funding Comments:** Replaces IT Master Plan - Business Efficiency Improvements from prior years



**2012 CAPITAL IMPROVEMENT PLAN**

Program: **General District**

**Project Number:** NEW  
**Project Name:** Business IT Infrastructure Reliability Program  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Ranstrom      **Board Approval:** 09/26/11

**Project Description:**

Maintain the reliability and performance of the current business IT infrastructure through upgrades to aging critical infrastructure including network switches and routers, servers, and data storage systems.

Major actions in 2012 include:

Upgrade of the 6 year old datacenter server farm hosting all of the district's databases (precautionary amount of \$250,000 in the event that project 11030 is delayed from occurring in late 2011)

The addition of a second data storage SAN in the HQ datacenter to address capacity. The "access pipe" to the current SAN is at 80% of capacity and can not be further expanded. The increased demand is mostly due to the expansion to virtual desktops over the past 2 years.

Upgrade of end-of-life desktop workstation computers to thin client devices. Moving to virtual desktops has allowed the District to stretch the life of 95% of the District's desktops to 7+ years, but they are now at an age where failures are increasing and the cost to repair exceeds the cost to replace with new thin client technology that will have a longer service life due to no moving parts.

Upgrade of end-of-life VOIP telephone server hardware that is 6 years old and inadequate to run current supported versions of the telephone system software.

**Basis for Priority:**

Maintain the reliability and performance of the current business IT network used to perform operations, customer service, billing, financial management, regulatory reporting, and other key functions of the district.

**Project Financial Summary:**

<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-20165 Planned Expenditures:</b>	\$ 2,635,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 2,635,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 2,635,000

Description of Work	Estimated Annual Expenditures					
	2012	2013	2014	2015	2016	Total
Servers / Storage	\$ 530,000	\$ 75,000	\$ 40,000	\$ 40,000	\$ 380,000	\$ 1,065,000
User systems	\$ 215,000	\$ 20,000	\$ 135,000	\$ 20,000	\$ 20,000	\$ 410,000
Network equipment	\$ 105,000	\$ 170,000	\$ 295,000	\$ 470,000	\$ 120,000	\$ 1,160,000
						\$ -
<b>TOTAL</b>	<b>\$ 850,000</b>	<b>\$ 265,000</b>	<b>\$ 470,000</b>	<b>\$ 530,000</b>	<b>\$ 520,000</b>	<b>\$ 2,635,000</b>

Funding Sources	Percentage	2012 Funding Amount
Water Reserves	60%	\$510,000
Wastewater Reserves	40%	\$340,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$850,000</b>

**Funding Comments:** This CIP replaces IT - Server and Storage Reliability from previous years.

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **General District**

**Project Number:** NEW  
**Project Name:** Paint Booth - Sand Blasting Facility  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Touey      **Board Approval:** 09/26/11

**Project Description:**

This project is to upgrade District's paint and sand blasting facilities located at Bass Lake. Currently, paint and sand blasting work is done in an open environment and needs to be performed in a controlled environment in order to meet El Dorado County permitting requirements. The current permit states that blasting shall not exceed 2 hours per day, 3 days per week for 45 weeks per calendar year. Outdoor blasting operations shall be allowed only on objects that exceed 8 feet in any dimension

**Basis for Priority:**

Compliance with El Dorado County permitting requirements.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 165,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 165,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 165,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Study/Planning						\$ -
Design						\$ -
Construction	\$ 165,000	\$ -				\$ 165,000
						\$ -
<b>TOTAL</b>	<b>\$ 165,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 165,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2011 Funding Amount</b>
Water rates	60%	\$99,000
Wastewater rates	40%	\$66,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$165,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

**Program: General District**

**Project Number:** NEW  
**Project Name:** SCADA Radio Network Compliance  
**Project Category:** Regulatory Requirements

**Priority:** 1      **PM:** Abercrombie      **Board Approval:** 09/26/11

**Project Description:**

Upgrade of two hilltop repeaters and reprogramming of 143 radios to meet FCC mandated conversion of District's radio network to narrowband by 2013. Two of four ( 50%) of the existing hilltop repeaters are not compatible with narrowband broadcasting and will require replacement.

Project funding assumes \$15,000 to replace repeater equipment, and \$35,000 in professional services to augment staff to perform extensive reprogramming tasks. Project tasks include:

reprogram 143 radios = 1 FTE for 2 months including travel at \$105/hr

Program and test new repeaters = 1 FTE for 2 days at \$105/hr

Assumes no legacy non-programmable V100 ICOM or Kenwood radios are still in service. If any legacy radios are found to still be in service, they will need to be replaced by the departments using them under operating expenses.

**Basis for Priority:**

If this project is not approved the District would be out of licensing compliance with FCC regulation, and could lead to fines or orders to shut down transmission of the radio network. The radio network is the primary communications system for most SCADA devices, and also provides voice communications for field staff across the District. The repeaters that must be changed in this project are also beyond their useful life of 20 years, so failure to perform the project could also affect the reliability of the District's radio communication infrastructure that supports the SCADA systems and field employees.

**Project Financial Summary:**

<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 50,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 50,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 50,000

Description of Work	Estimated Annual Expenditures					Total
	2012	2013	2014	2015	2016	
Equipment costs	\$15,000					\$ 15,000
Professional services	\$ 35,000					\$ 35,000
						\$ -
						\$ -
<b>TOTAL</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,000</b>

Funding Sources	Percentage	2012 Funding Amount
Water Rates	60%	\$30,000
Wastewater Rates	40%	\$20,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$50,000</b>

Funding Comments:

**2012 CAPITAL IMPROVEMENT PLAN**

Program: **General District**

**Project Number:** NEW  
**Project Name:** SCADA System Reliability Program  
**Project Category:** Reliability & Service Level Improvements

**Priority:** 2      **PM:** Ranstrom      **Board Approval:** 09/26/11

**Project Description:**

Maintain the reliability and performance of the current SCADA infrastructure used to monitor, alarm, and respond to process control issues through upgrades to aging critical infrastructure including communication PLCs, radio repeaters, network switches, servers, data storage systems, and operator HMI panels.

Priority actions include:  
 upgrading SCADA server enclosures at 8 facilities to provide cooling and air filtration necessary for the plant environment they operate in to ensure they remain reliable and achieve their full useful life expectancy in 2012.  
 upgrading end-of-life SCADA operator workstations at 8 facilities to ensure continued reliability and supportability in 2012  
 conducting a best practices assessment of plant SCADA network design in 2013

**Basis for Priority:**

Maintains the reliability and performance of the current SCADA system used to perform automated operations and regulatory reporting functions of the district. About 15% of PLCs controlling the water system and 50% controlling wastewater collections are 10 years beyond end of life and represent significant risks to the service reliability and regulatory compliance due to their extremely limited monitoring and control capabilities compared to current standard PLCs.

<b>Project Financial Summary:</b>			
<b>Funded to Date:</b>	\$ -	<b>Expenditures through end of year:</b>	\$ -
<b>Spent to Date:</b>	\$ -	<b>2012-2016 Planned Expenditures:</b>	\$ 585,000
<b>Cash flow through end of year:</b>	\$ -	<b>Total Project Estimate:</b>	\$ 585,000
<b>Project Balance</b>	\$ -	<b>Additional Funding Required</b>	\$ 585,000

<b>Description of Work</b>	<b>Estimated Annual Expenditures</b>					<b>Total</b>
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	
Network						\$ -
Data Acquisition	\$ 180,000	\$ 50,000	\$ 200,000	\$ 20,000	\$ 50,000	\$ 500,000
HMI, Alarm, Historian	\$ 25,000			\$ 30,000	\$ 30,000	\$ 85,000
						\$ -
<b>TOTAL</b>	<b>\$ 205,000</b>	<b>\$ 50,000</b>	<b>\$ 200,000</b>	<b>\$ 50,000</b>	<b>\$ 80,000</b>	<b>\$ 585,000</b>

<b>Funding Sources</b>	<b>Percentage</b>	<b>2012 Funding Amount</b>
Water rates	60%	\$123,000
Wastewater rates	40%	\$82,000
		\$0
<b>Total</b>	<b>100%</b>	<b>\$205,000</b>

**Funding Comments:** Replaces SCADA-related elements of IT - Server and Storage Reliability from prior years